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CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY

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Item 10 of the provisional agenda*

CONTRIBUTION OF AICHI BIODIVERSITY TARGET 11 TO THE SUSTAINABLE DEVELOPMENT GOALS:

Potential impacts of national priority actions identified in the regional capacity-building workshops

Note by the Executive Secretary

I. INTRODUCTION

1. At its tenth meeting, held in Nagoya, Japan, in October 2010, the Conference of the Parties to the Convention on Biological Diversity adopted the Strategic Plan for Biodiversity 2011-2020, including 20 Aichi Biodiversity Targets under five strategic goals (decision X/2). Strategic goal C, on improving the status of biodiversity by safeguarding ecosystems, species and genetic diversity, includes Aichi Biodiversity Target 11 on protected areas and Target 12 on threatened species. At its eleventh meeting, held in Hyderabad, India, in October 2012, the Conference of the Parties further invited Parties to undertake major efforts, with appropriate support and consistent with national circumstances, to achieve all elements of Aichi Biodiversity Target 11 (decision XI/24). It also invited Parties to continue to conduct assessments of the governance of protected areas; strengthen the recognition of and support for community-based approaches; renew efforts to establish multi-sectoral committees; align protected area projects in action plans for the programme of work on protected areas (PoWPA) with the fourth, fifth and sixth replenishment periods of the Global Environment Facility (GEF); and to report on the implementation of actions, including incorporation of results of implementation of projects funded by GEF and other donors, in order to track progress towards achieving Aichi Biodiversity Target 11.

2. In the midterm evaluation of the status of progress in the achievement of the Aichi Biodiversity Targets assessed in the fourth edition of the *Global Biodiversity Outlook* (GBO-4, 2014), Aichi Biodiversity Target 11 showed a promising picture, suggesting that with more focus and systematic efforts, many elements of the target could be achieved by 2020. The quantitative element, expansion of terrestrial and marine protected areas, is on track, while the qualitative elements still need more attention and efforts to speed up their progress and achieve Aichi Biodiversity Target 11 by the target date.

3. Sustainable development has been defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs.¹ The harmonization of economic growth, social inclusion, and environmental protection is crucial to the Sustainable Development Goals (SDGs). In their own way, protected areas also provide social, economic and environmental benefits that are crucial for the survival and overall well-being of society when they are effectively managed and have appropriate institutional and governance framework and equity measures.

* UNEP/CBD/COP/13/1.

¹ <http://www.un.org/sustainabledevelopment/development-agenda/>.

Hence, protected areas have a lot to contribute to the SDGs. The question is, how is Aichi Biodiversity Target 11 linked to the SDGs? And how would the implementation of the elements of Aichi Biodiversity Target 11, through strategic and coherent actions by countries, contribute to the targets of the SDGs?

4. National priority actions (road maps) to facilitate the achievement of Aichi Biodiversity Targets 11 and 12 by 2020 were developed by Parties following six regional capacity-building workshops organized by the Secretariat of the Convention on Biological Diversity between September 2015 and July 2016. Based on these national priority actions and a review of literature for evidence of contributions of Aichi Biodiversity Target 11, the present document attempts to show that, when fully implemented, these national priority actions would, indeed, not only speed up the achievement of Aichi Biodiversity Target 11, but also contribute to numerous targets of the SDGs. The document first provides a brief background on the strategy used by the Secretariat to secure submissions of the matrices on the status of Target 11 and the national priority actions (road maps), for each element of Aichi Biodiversity Target 11, to be undertaken in the next four years to achieve this target by 2020. This is followed by a description of the approach used to identify the links between these priority actions and the targets of the SDGs to showcase possible substantial contributions of protected areas to various SDG targets. The last sections present the main results and conclusions.

II. BACKGROUND

5. Protected areas are cornerstones of long-term biodiversity conservation, serving to efficiently maintain healthy ecosystems that provide a wide range of goods and services for the well-being of society, and protect our natural and cultural heritage for current and future generations. As highlighted in the Hawai'i Commitments in September 2016,² “Connected systems of protected areas, whether on land or sea, when effectively managed and governed, provide sanctuary for biodiversity and generate an extraordinary range of benefits for people. Ecosystem services from these protected areas contribute to human health and wellbeing.” Protected areas represent an essential strategy for the preservation of natural resources, adaptation and resilience of communities to changing socioeconomic and climatic conditions, and sustainable development of nations, including poverty eradication. They are tried and tested as an approach and have been applied for centuries for conservation of nature and associated cultural and spiritual resources by local communities, indigenous peoples, government and other organizations. They are often established with laws and policies, management and governance strategies, knowledge (including traditional), staff and capacity.

6. The programme of work on protected areas (PoWPA), adopted at the seventh meeting of the Conference of the Parties to the Convention on Biological Diversity in 2004, is the most comprehensive global plan of action – the defining blueprint – for protected areas, and the most implemented of the CBD programmes. Endorsed by 192 Parties to the Convention on Biological Diversity in 2010, and further reaffirmed in the outcome document of the United Nations Conference on Sustainable Development (Rio+20) adopted by the United Nations General Assembly in 2012, the Strategic Plan for Biodiversity 2011-2020 with its 20 Aichi Biodiversity Targets is a globally accepted overarching framework on biodiversity, not only for the biodiversity-related conventions, but also for the entire United Nations system and other international organizations. In 2015, 193 Member States of the United Nations adopted also the 2030 Agenda for Sustainable Development with its 17 SDGs and 169 targets addressing the most important social, economic, environmental and governance challenges of our time. The Strategic Plan for Biodiversity 2011-2020 and the SDGs are two of the most important environment and sustainable development commitments ever made by governments in international forums. They both recognize the crucial role of protected areas as a key strategy for biodiversity conservation and sustainable development (e.g., Aichi Biodiversity Targets 11 and 12, and SDGs 14 and 15).

7. Protected areas conserve the biodiversity which underpins all ecosystem goods and services on which society depends for survival. In general, protected areas are a proven, vital, and cost-effective nature-based solution to deal with complex and pressing global challenges, including water quality and provision (e.g. they are the primary source of drinking water for over a third of the world's largest cities),

² <https://portals.iucn.org/congress/hawaii-commitments>.

food security, human health and well-being (e.g. in some Asian and African countries, 80% of the population depend on traditional medicines for primary health care. Over 50% of synthetic medicines originate from natural sources), and climate change mitigation (e.g. through carbon sequestration), disaster-risk reduction, control of disease outbreaks, supporting nutrient cycling,³ as well as adaptation and resilience (e.g. by buffering impacts of climate change and serving as risk management tools). They also have very important spiritual, cultural, recreational (e.g. ecotourism), research and educational functions and benefits to society. Hence, recognizing the critical and important role of protected areas not only for biodiversity conservation but also for securing ecosystem goods and services for achieving sustainable development, as well as the effective implementation of the protected areas agenda and achievement of Aichi Biodiversity Target 11, will be crucial. Evidence indicates that protected areas can also help diversify economies, in addition to their contribution to adaptation and resilience to changing socioeconomic and environmental conditions.⁴ Furthermore, expenditures in protected areas generally are far outweighed by the multiple benefits, which include considerable values, a substantial multiplier effect across the economy, income, consumption, spending, employment, and cost-savings,⁵ among many others.

8. Hence, demonstrating the important social, economic and environmental benefits of protected areas can enhance understanding, political and stakeholder support, resolve conflicts between different interest groups, encourage integration and synergy of activities, help secure alternative and sustainable sources of funding, generate income for communities, and pave the path to positive changes in policies and decision-making to facilitate sustainable development. Insights on benefits from protected areas (qualitative and quantitative) can help identify actions and land use practices that best support the sustainable and equitable utilization of these benefits, while retaining the conservation goals for the areas.⁶

III. APPROACH

9. In order to facilitate the achievement of Aichi Biodiversity Target 11, the CBD Secretariat developed a two-phase strategy. In phase I, the Secretariat renewed partnerships and commitments from partner organizations, and, using baseline data/information dossiers prepared for each country and numerous preparatory communications with partners and country representatives, held six regional capacity-building workshops on achieving Aichi Biodiversity Targets 11 and 12 during 2015-2016 to secure submissions of questionnaires, status matrices, and priority actions (road maps) to be undertaken in the next four years. These workshops were for countries in Africa, Asia-Pacific, Central and Eastern Europe, and Latin America and the Caribbean. Governments of Japan, Germany and the Republic of Korea provided financial support, and the Governments of host countries (Belarus, Brazil, China, Fiji, India and Uganda) provided logistical and other support for the organization of these workshops. During these workshops, participants worked on various items, and identified the status, gaps, and opportunities related to these targets in their countries, and also developed the national priority actions (road map) that their country will undertake in the next four years in order to meet Aichi Biodiversity Targets 11 and 12 by 2020.

10. When fully implemented, effectively managed and governed global protected area systems will be proven solutions for conserving species, their habitats, and the ecosystem goods and services they underpin, achieving a significant reduction in the current rate of biodiversity loss and facilitating sustainable development, including poverty eradication. In phase I, the CBD Secretariat's efforts helped Parties determine the status of Aichi Biodiversity Targets 11 and 12 and develop their national priority actions (road map) to dedicate their efforts to implementation and achievement of Aichi Biodiversity Targets 11 and 12 by 2020. Over 1,400 priority actions were developed to enable the achievement of the various elements of Aichi Biodiversity Targets 11 and 12 within the next 4 years. As the elements of

³ <https://www.cbd.int/doc/newsletters/development/news-dev-2015-2013-03-en.pdf>.

⁴ http://cpaws.org/uploads/pubs/report_economic-benefits-of-protected-areas.pdf.

⁵ http://procurement-notice.undp.org/view_file.cfm?doc_id=31744.

⁶ <http://www.publish.csiro.au/pid/7240.htm>.

Aichi Biodiversity Target 11 encompass the scope of the programme of work on protected areas (PoWPA), the effective implementation of this target is key to the achievement of the Strategic Plan for Biodiversity 2011-2020.

11. The analysis of the priority actions submitted by countries following six regional capacity-building workshops⁷ reveals that when implemented, these actions will not only contribute to the achievement of the elements of Aichi Biodiversity Target 11, but due to the multiple benefits, including goods and services, and interlinkages of protected areas, they will also contribute to other Aichi Biodiversity Targets (e.g. 5, 6, 9, 10, 12, 13, 14, 15, 18 and 20 directly, and 1, 2, 3 and 19 indirectly)⁸ and to numerous SDG targets, including for example 14.5, 15.1, 15.2 and 15.5, directly, and 1.2, 12.2, 15.7 and 15.8 indirectly. The actions will also contribute to adaptation and resilience to climate change and Article 5.1 of the Paris Agreement, and to the Sendai Framework for Disaster Risk Reduction 2015-2030, as well as to the synergistic implementation of the requirements of other multilateral environmental agreements (MEAs), including UNESCO MAB (Man and the Biosphere) Programme, UNESCO World Heritage, the Ramsar Convention, and the Convention on the Conservation of Migratory Species of Wild Animals (CMS).

12. The approach used by the present study is very simple. The SDGs and related targets were reviewed and only the most relevant targets were selected for consideration. A literature review helped identify some supporting evidence on the contribution of protected areas to the different targets of the SDGs. The term direct link is used when a protected area related action is identified as having a straightforward impact on an SDG target, and indirect link when the impact is through other channels and not direct. Examples were then taken from the over 1,400 national priority actions identified by the CBD Parties for the different elements of Aichi Biodiversity Target 11, and matched with the different SDG targets selected as relevant to protected areas activities, i.e. to which the implementation of given Aichi Biodiversity Target 11 actions will contribute.

IV. RESULTS

13. Effectively managed terrestrial protected areas (PAs) and marine protected areas (MPAs), with appropriate institutional, governance and equity framework and well mainstreamed and integrated into various sectors (production, consumption, health, education...), strategies and programmes (such as poverty eradication) and development plans and policies at all levels, represent an essential strategy not only for preserving natural resources for the benefit of current and future generations, but also for socioeconomic development, poverty eradication and, in general, sustainable development of nations. The benefits for the well-being of society as a whole further increase where there is regional and global cooperation to effectively handle connectivity and corridors, as well as transboundary conservation issues (including for peace and resolution of conflicts), and where effective mechanisms are put in place for the exchange of resources, including information, good practices, knowledge and technology, among others.

14. The results from the present analysis indicate that the national priority actions developed by the CBD Parties for each element of Aichi Biodiversity Target 11, to be undertaken in the next four years to achieve Aichi Biodiversity Target 11 by 2020, are also relevant for the achievement of many targets of the SDGs. Even by matching only a few of the priority actions to the targets of the SDGs, it can be observed that when implemented, the national priority actions could substantially contribute to numerous targets of the 17 SDGs, directly (e.g. 1.5, 2.4, 2.5, 8.9, 12.2, 12.8, 12.b, 13.1) and indirectly (e.g. 16.3, 16.6-16.8, 3.4, 3.9 and 3.d). This is an important finding. For instance, SDG target 1.5, to which Aichi Biodiversity Target 11 directly contributes, is about building the resilience of the poor and those in vulnerable situations and reducing their exposure and vulnerability to climate-related extreme events and other economic social and environmental shocks and disasters.

⁷ The outputs from the six regional capacity-building workshops have been analysed and the results are presented to COP 13 as UNEP/CBD/COP/13/INF/17 and UNEP/CBD/COP/13/INF/18.

⁸ Efforts were also made to link the National Priority Actions to other Aichi Biodiversity Targets. The results are presented in UNEP/CBD/COP/13/INF/20.

15. The complete results are presented in the annex below. The annex indicates SDG targets with direct or indirect link to the elements of Aichi Biodiversity Target 11; a brief description of these SDG targets; the most relevant elements of Aichi Biodiversity Target 11, with the corresponding number of priority actions set by Parties for that element; examples of national priority actions that could potentially contribute to the targets of each SDG; and some supporting evidence from the literature. The overall indication is that the contribution of Aichi Biodiversity Target 11 to the SDGs could be very substantial and much more than expected so far. In turn, there are also many SDG targets that could benefit Aichi Biodiversity Target 11. This, indeed, opens room for further integration and synergy between activities to achieve the SDGs and Aichi Biodiversity Target 11.

V. CONCLUSIONS

16. The importance of Aichi Biodiversity Target 11 to the SDGs is highlighted by the simple fact that biodiversity is the foundation of ecosystem services to which human well-being is intimately linked, and on which it absolutely depends for survival on earth. The main purpose of this very short study was to attempt to link national priority actions, identified by the CBD Parties for the elements of Aichi Biodiversity Target 11, to be undertaken in the next four years in order to achieve Aichi Biodiversity Target 11 by 2020, with the targets of each SDG. Direct links between the SDGs and Aichi Biodiversity Target 11 were already well established through SDGs 14 and 15, and to some extent 6 and 13. The results from the present analysis indicate an even more promising picture by showing that the national priority actions, when implemented, would indeed contribute to more SDG targets directly (e.g. 1.5, 2.4, 8.9, 12.8), and to numerous targets under each SDG indirectly (e.g. 3.9; 16.6-16.8). As more and more effort is invested in the implementation of the priority actions set by the Parties, it is highly likely that we would find more links and contributions, even to the targets of the SDGs with which no visible link was noticed at the present time.


17. The next phase of the Secretariat's important strategy is to develop the capacity of Parties to make the implementation of their national road maps a reality on the ground in a synergistic, coherent and effective manner. The CBD Secretariat will facilitate this by taking the Parties' and regional needs into consideration in phase II (2017-2018).

18. The present study is preliminary, as it is the first attempt to link all of the 169 targets of the SDGs to the national priority actions for the elements of Aichi Biodiversity Target 11. As implementation of the national priority actions starts, more research and evaluation will be needed to perfect the links between Aichi Biodiversity Target 11 and the SDG targets considered in this study, and to re-evaluate those that were not considered. It would also be useful to map the SDG targets that have the potential to contribute to the elements of Aichi Biodiversity Target 11, and to revise the corresponding indicators to facilitate tracking and monitoring progress in the future. All this would help Parties align and undertake activities in a synergistic and effective manner. Overall, harmonization of environmental protection, social inclusion, and economic growth is also crucial to Aichi Biodiversity Target 11 on protected areas as it is to the SDGs, for the benefit and well-being of society for current and future generations.

Annex

LINKS BETWEEN THE SUSTAINABLE DEVELOPMENT GOALS AND AICHI BIODIVERSITY TARGET 11

The effective implementation of national road maps can help achieve not only Aichi Biodiversity Target 11 but also relevant targets of the SDGs. Over 100 CBD Parties have already developed their national priority actions (road maps) to enhance the elements of Aichi Biodiversity Targets 11 and 12 and achieve these targets by 2020. The remaining countries are gradually sending their road maps and joining the regional implementation efforts.

Agenda 2030 - Sustainable Development Goals	SDG target links to Aichi Targets 11&12		Short description of the SDG targets ¹	Contribution of Aichi Biodiversity Target 11 to SDG targets, and national priority actions identified by Parties to implement the elements of Aichi Biodiversity Targets 11 and 12 and achieve the Targets by 2020 following six capacity-building workshops held during 2015 and 2016	Contribution of Aichi Biodiversity Targets 11&12: evidence from the literature
	Direct	Indirect			
 <p>1. End poverty in all its forms everywhere</p>	1.5	1.1-1.4; 1.a-1.b	<p>1.1 – 1.4 are about eradication of extreme poverty; reducing at least by half the proportion of men, women and children living in poverty; implementing nationally appropriate social protection systems; ensuring 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...;</p> <p>1.5 is about building the resilience of the poor and those in vulnerable situations and reducing their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters;</p> <p>1.a – b are about ensuring significant mobilization of resources from a variety of sources...in order to end poverty in all its dimensions; creating sound policy frameworks based on pro-poor and gender-sensitive development strategies to support accelerated investment in poverty eradication actions...</p>	<p>1.1–1.4: Effectively managed terrestrial protected areas (PAs) and marine protected areas (MPAs), with appropriate institutional, governance and equity framework, well mainstreamed and integrated into poverty eradication and gender equality strategies and programmes in particular, and other sectors (production, health), in general, can help substantially reduce poverty. Evidence indicates that the world's richest and most diverse habitats are found in places where poverty is also a real and pressing issue, and where a large number of people live. 1.5: PAs and MPAs help buffer the impacts of climate change, sequester carbon for climate change mitigation, help prevent risks of natural disasters, serve as risk management tools, and provide options for adaptation and resilience. 1.a -1.b: PAs and MPAs can generate resources for current and future generations; e.g. income for further mobilization towards maintenance of natural resources, alleviation of poverty (e.g. payment for ecosystems services (PES), other offsets, ecotourism...) and overall well-being of society at all levels (local, national, global).</p> <div style="border: 2px solid green; border-radius: 15px; padding: 10px; text-align: center; margin: 10px 0;"> <p>Key elements of Aichi Biodiversity Target 11 and priority actions Effective management: 234 actions by 92 Parties Equity and governance: 159 actions by 78 Parties Integration: 83 actions by 49 Parties</p> </div> <p>Examples of national priority actions²</p> <ul style="list-style-type: none"> ❖ Develop a strategy to improve governance through the establishment of an institutional framework (office type structure of protected areas including the private sector and local authorities) (Mali) – Integration of benefits arising from PAs into poverty alleviation and overall national development plans (Ethiopia) (Africa) ❖ Conduct a systematic analysis of the areas and sites of importance for ecosystem services (Ukraine) – Developing a strategy to optimize benefits for local communities from the establishment and management of protected areas; improvement of local livelihoods in protected areas (Montenegro) (CEE) ❖ Strengthen local participation programmes of rural communities in protected areas (Cuba) – Develop innovative schemes of equitable governance in selected PAs, including market and non-market approaches (Mexico) (GRULAC) ❖ Explore opportunities for biodiversity trust funds (Tonga) – Map priority areas important for biodiversity and for ecosystems services (Solomon Islands) (Pacific) ❖ Research on the effectiveness of marine protected areas in terms of biodiversity conservation (Japan) – Ecological gap assessment, management effectiveness assessment, sustainable financing assessment and implementation, capacity needs assessment, policy environment assessment, PA integration and mainstreaming PA valuation (Philippines) – (ESE Asia) ❖ Microcredit programme (biodiversity and compatible livelihoods) (Kazakhstan) – Providing compensation to the wildlife victim people (Bangladesh) – Integrate the governance structure of PAs in the legal framework of the country (United Arab Emirates) (SCW Asia) 	<p>Examples of evidence</p> <ul style="list-style-type: none"> • To alleviate poverty, biodiversity conservation is critical.³ 80% of biodiversity loss has a direct impact on the well-being of 2.4 billion people living on less than \$2 per day;⁴ and protecting endangered species helps reduce poverty.⁵ • At a global level, millions of people depend on protected areas as a means of subsistence, benefiting directly through consumption of food produced or obtained in or around protected areas or indirectly through employment and income that contribute to sustaining livelihoods.⁶ • Protected areas provide a single coherent unit with which to negotiate access, contracting and management issues such as Payment for Ecosystem Service (PES).⁷ • Pollination, erosion control, water supply, and other ecosystem services provide benefits worth an estimated US\$ 1 trillion per year to poor communities.⁸ • Markets and financial mechanisms that compensate local populations who take on the responsibility of protecting and sustainably managing nature at its source — such as Payments for Ecosystem Services (PES) or Reducing Emissions from Deforestation and Forest Degradation (REDD+) — have the potential to provide a 50 percent increase in benefits to poor communities, delivering up to an additional US\$ 500 billion per year to the people who need it most, many of whom earn less than one dollar a day.⁹ • At the Bi Duop National Park in Lam Dong Province of Viet Nam local households receive payments worth nearly 80% of their annual income (US\$ 410) PES from the provincial government, paid mainly by the hydro-power plants operating in its watershed.¹⁰

¹ For complete details about each SDG and its targets, reference should be made to the adopted [SDGs and Targets](https://sustainabledevelopment.un.org/?menu=1300) (https://sustainabledevelopment.un.org/?menu=1300).

² Identified during and after 2015-2016 workshops held for Africa; Central and Eastern Europe (CEE); Latin America and the Caribbean (GRULAC); the Pacific; East Asia and Southeast Asia (ESE Asia); and South, Central and West Asia (SCW Asia).

³ <http://blog.conservation.org/2012/01/to-alleviate-poverty-biodiversity-conservation-is-critical/>.

⁴ <http://www.afd.fr/webdav/site/afd/shared/PUBLICATIONS/THEMATIQUES/AFD-aieres-protgees-VA.pdf>.

⁵ <https://www.sciencedaily.com/releases/2006/03/060322175455.htm>.


⁶ <http://www.fao.org/3/a-i4198e.pdf>.

⁷ https://www.iucn.org/sites/dev/files/import/downloads/natural_solutions_pas_health_and_well_being.pdf.

⁸ <http://blog.conservation.org/2012/01/to-alleviate-poverty-biodiversity-conservation-is-critical/>.

⁹ <http://blog.conservation.org/2012/01/to-alleviate-poverty-biodiversity-conservation-is-critical/>.

¹⁰ <http://www.fao.org/3/a-i4198e.pdf>.

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	Direct	Indirect			
 <p>2. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture</p>	2.4; 2.5	2.1; 2.a	<p>2.1 is about ending hunger and ensuring access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round;</p> <p>2.4 and 2.5 are about ensuring 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; and about maintaining the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species...promoting access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge (TK);</p> <p>2.a is about increasing investment, including through enhanced international cooperation in rural infrastructure.... and plant and livestock gene banks to enhance agricultural productive capacity.</p>	<p>2.4-2.5: PAs and MPAs can contribute substantially to these SDG targets where there is integration into wider land and seascapes, sectors (agricultural production/consumption...) by encouraging ecosystem-based approaches (EBA); in situ and ex situ conservation; accounting for gender perspective, ensuring appropriate governance, equity measures (e.g. enhancing access and benefit-sharing mechanisms; appropriate use of traditional knowledge (TK), participation of women and indigenous peoples and local communities, among others, including in decision-making processes; encouraging strategic zoning and protection, synergy of activities with measures to mitigate climate change and land degradation, and reducing any negative direct or indirect impacts and externalities in such a way to benefit all members of society.</p> <p>2.a: Effectively managed and well governed PAs and MPAs can not only generate income to local communities but also for their own maintenance. It is also more and more established that the return on investment in PAs and MPAs is generally very high.</p> <div style="border: 2px solid #00a6c9; border-radius: 15px; padding: 10px; text-align: center; margin: 10px 0;"> <p>Key elements of Aichi Biodiversity Target 11 and priority actions Effective management: 234 actions by 92 Parties Equity and governance: 159 actions by 78 Parties Integration: 83 actions by 49 Parties</p> </div> <p>Examples of national priority actions</p> <ul style="list-style-type: none"> ❖ Establishing conservancies around the Gorongosa PA complex, bringing sustainable land and forest management benefits, restoring degraded ecosystems and generating livelihoods (Mozambique) – Ensure that income generated by conservation benefits local populations of interest (Gabon) (Africa) ❖ Developing a strategy for the consultation and participation of different stakeholder groups in the establishment process (Montenegro) – Evaluate and improve the effectiveness of PAs management and ensure financial stability of PAs and national and regional systems of PAs (Serbia) (CEE) ❖ Adoption of sectoral plans in critical sectors (agriculture, mining etc.) to reduce their pressure on forests and biodiversity. Also restore ecosystems and reduce emissions (Colombia) – Protection of main ecosystems and fisheries regulation; integrated management between local governments and communities in coastal zones (Cuba) (GRULAC) ❖ Clarify PA categories in Fisheries Act, Forestry Act, PA act, Provincial Ordinances (Solomon Islands) – Initiate collaborative management arrangement for fisheries reserves between villages (Samoa) – Continue to support the agriculture with best practices guidance and techniques and protects biodiversity and water catchment areas management (Vanuatu) (Pacific) ❖ Research into the possibility of using Payment for Ecosystems Services (PES) as a direct incentive into environmental protection (Mongolia) – Plan to conduct clear zoning and demarcation for PAs and develop management plans (Cambodia) (ESE Asia) ❖ Integration of indigenous and community conserved areas and private reserves in national protected areas systems; Promote community-based conservation using sui-generis tools for community owned land (Sri Lanka) – Implement conservation-oriented community welfare programmes (Oman) – Achieve higher coordination among governments, relevant agencies and indigenous people (Iraq) (SCW Asia) 	<p>Examples of evidence</p> <ul style="list-style-type: none"> • Achieving food security for all is intrinsically linked to the maintenance of biodiversity.¹¹ • Food production depends largely on biodiversity and the ecosystem services that it underpins. About 100,000 species of insects, as well as birds and mammals, pollinate more than two-thirds of food plants and are responsible for 35% of the world's crop production...Fish provides about 3 billion people with almost 20% of their intake of animal protein.¹² • The biodiversity of terrestrial and aquatic ecosystems has provided food, including fish, plants, seeds, honey, fruits, mushrooms and insects as important components of the diets of local inhabitants for thousands of years.¹³ • MPAs, for instance, shape the social well-being and political power of fishing communities; they represent a viable strategy for enhancing food security and empowering local communities.¹⁴ • If treated as an economic asset, the minimum asset value of the natural infrastructure provided by the Mississippi delta would be US\$ 330 billion to US\$ 1.3 trillion (at 2007 values) in terms of hurricane and flood protection, water supply, water quality, recreation and fisheries...¹⁵ • In the marine area, Quirimbas National Park in Mozambique has implemented co-management and control mechanisms which helped reduce drastically illegal exploitation of fisheries resources and created sanctuaries to ensure the renewal of these resources, with a significant increase in catches by local fishermen. Local fishermen replicate this system, thus effectively contributing to the preservation of natural resources while enhancing peoples' incomes and food security in the poorest areas of Mozambique.¹⁶ • Protected areas have the potential to contribute to all three pillars of sustainable development: environmental, economic and social, and are already making important and far-reaching contributions to food security.¹⁷ • A study in Indonesia valued mangroves at US\$ 600 per household per year based on their ability to control erosion.¹⁸

¹¹ <http://www.fao.org/biodiversity/en/>.

¹² <https://www.cbd.int/doc/newsletters/development/news-dev-2015-2013-07-en.pdf>.

¹³ <http://www.fao.org/3/a-i4198e.pdf>.


¹⁴ <http://www.ncbi.nlm.nih.gov/pubmed/20507354>.

¹⁵ <https://www.cbd.int/development/doc/sdg-feb2014-factsheet-en.pdf>.

¹⁶ <http://www.afd.fr/webdav/site/afd/shared/PUBLICATIONS/THEMATIQUES/AFD-aires-protgees-VA.pdf>.

¹⁷ <http://www.fao.org/3/a-i4198e.pdf>.

¹⁸ Ruitenbeek, J. (1992). The rainforest supply price: a tool for evaluating rainforest conservation expenditure, *Ecological Economics* 6(1):57-78.

Agenda 2030 - Sustainable Development Goals	SDG target links to Aichi Targets 11&12		Short description of the SDG targets ¹	Contribution of Aichi Biodiversity Target 11 to SDG targets, and national priority actions identified by Parties to implement the elements of Aichi Biodiversity Targets 11 and 12 and achieve the Targets by 2020 following six capacity-building workshops held during 2015 and 2016	Contribution of Aichi Biodiversity Targets 11&12: evidence from the literature
	Direct	Indirect			
 <p>3. Ensure healthy lives and promote well-being for all at all ages</p>		3.4; 3.9; 3.d	<p>3.4 and 3.9 are about reducing premature mortality from non-communicable diseases through prevention and treatment, and promoting mental health and well-being; reducing the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination;</p> <p>3.d is about strengthening the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks.</p>	<p>3.4; 3.9 and 3.d: As protected areas are located in ecosystem-rich areas, their protection, effective management, mainstreaming and integration into all types and levels of sectors (including the health sector) and poverty eradication strategies is important. Regional cooperation for transboundary biodiversity conservation can additionally contribute to peace and risk reduction as well.</p> <p>PAs and MPAs are vital and contribute to physical, mental and spiritual health and well-being of society¹⁹ through their aesthetic quality and scenic beauty (for recreational and learning, art activities), and their functions as sources of modern and traditional medicine, and ecosystem services that sustain life, among others. By buffering the impacts of climate change, PAs and MPAs can also reduce health crises and socioeconomic losses and repercussions associated with disasters that affect people's lives and mental health and lead to premature death.</p> <div style="border: 2px solid red; border-radius: 15px; padding: 10px; text-align: center; margin: 10px 0;"> <p>Key elements of Aichi Biodiversity Target 11 and priority actions</p> <p>Effective management: 234 actions by 92 Parties</p> <p>Equity and governance: 159 actions by 78 Parties</p> <p>Integration: 83 actions by about 50 Parties</p> <p>Connectivity/ corridors: 166 actions by 87 Parties</p> <p>Areas important for biodiversity: 198 by 88 Parties</p> <p>Ecosystem services: 40 actions by 35 Parties</p> </div> <p>Examples of national priority actions</p> <ul style="list-style-type: none"> ❖ Many incentive programmes being implemented to improve the livelihood of local communities in the protected areas, and at the same time to conserve biodiversity resources (Egypt) – Assists PAs neighbouring communities to develop Botanical Gardens and Cultural Sites to gain ecotourism benefits from conservation of species and cultural heritage (GEF 6 funding) (Lesotho) (Africa) ❖ Ensuring management effectiveness of PAs through the implementation of Management Plans (already elaborated and approved) that will contribute to the conservation of species and habitats, by piloting governance and equity actions, and with the involvement of local governments and communities (Albania) – Creating and maintaining environmental centres in protected areas (Belarus) (CEE) ❖ Application of a standardized methodology for the development of conservation projects in public and private protected areas (Chile) – Strengthen and expand preventive protection and surveillance programmes (Dominican Republic) (GRULAC) ❖ Developing simple and relevant guides to build capacity in environmental monitoring for PA local management committees (Vanuatu) – Establish management plan for the 9 islands (Tuvalu) – Strengthen the role of CBD and biodiversity related treaty focal points to formalize and empower technical working group for biodiversity assessment and monitoring (Pacific) ❖ Maintaining connectivity across landscapes by reducing fragmentation, recovering lost habitats, expanding PAs networks and establishing ecological corridors (Timor-Leste) – Plan to conduct management effectiveness of 30% of PAs every year (Bangladesh) (ESE Asia) ❖ Promote and support transboundary management and regional partnership initiatives (Bhutan) – Spatial and management integration of 30% of the identified corridors by 2020 (India) – By 2020 the MoE will be able to protect the mountain peaks, natural areas, coastal zones, green spaces, and agricultural lands after the preparation of a master plan for their protection (Lebanon) (SCW Asia) 	<p>Examples of evidence</p> <ul style="list-style-type: none"> • In some Asian and African countries, 80% of the population depends on traditional medicines for primary health care. Over half of synthetic medicines originate from natural sources, including drugs like aspirin, digitalis and quinine.²⁰ • Trees clean the air, provide oxygen, cool streets and cities, shield children from ultraviolet rays, and bring diverse groups of people together...²¹ • Bioprospecting in protected areas has already turned up compounds that are being used, or are in the process of development, for combating high blood pressure, cancer, leukaemia, HIV, enlarged prostate, malaria, and anti-bacterial and antifungal treatments.²² • Natural aesthetic beauty is soothing to people and stimulates both the senses and the mind, improving mental cognition and performance, memory retention (up to 20%) and concentration. People who keep ornamental flowers in their home feel happier, less stressed and anxious, and more relaxed; in the office they accomplish higher quality work and complete assignments with a higher accuracy rate...²³ • Natural settings lower stress.²⁴ Doctors and spiritual leaders mention the benefits of spending time in nature. • Kenya: provides an example of a PHE (population-health-environment) project in Kiunga Marine National Reserve, which aims to integrate health and family planning with conservation activities.²⁵

¹⁹ https://www.iucn.org/sites/dev/files/import/downloads/natural_solutions_pas_health_and_well_being.pdf.

²⁰ <https://www.cbd.int/doc/newsletters/development/news-dev-2015-2013-06-en.pdf>.


²¹ <https://www.treepeople.org/resources/tree-benefits>.

²² https://www.iucn.org/sites/dev/files/import/downloads/natural_solutions_pas_health_and_well_being.pdf.

²³ <http://ellisonchair.tamu.edu/health-and-well-being-benefits-of-plants/#.VzD7WeSafP8>.

²⁴ <http://www.straitstimes.com/singapore/education/natural-settings-lower-stress-applying-the-science-of-environmental-psychology>.

²⁵ Oglethorpe, J. et al. (2010). Population-health-environment approaches in Kiunga Marine National Reserve. In: *Argument for Protection series – Vital Sites: The contribution of protected areas to human health*. A research report by WWF and Equilibrium Research.

Agenda 2030 - Sustainable Development Goals	SDG target links to Aichi Targets 11&12		Short description of the SDG targets ¹	Contribution of Aichi Biodiversity Target 11 to SDG targets, and national priority actions identified by Parties to implement the elements of Aichi Biodiversity Targets 11 and 12 and achieve the Targets by 2020 following six capacity-building workshops held during 2015 and 2016	Contribution of Aichi Biodiversity Targets 11&12: evidence from the literature
	Direct	Indirect			
 <p>4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</p>		4.4; 4.5; 4.7	<p>4.4 is about substantially increasing the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship; 4.5 is about eliminating gender disparities...;</p> <p>4.7 is about ensuring that all learners acquire the knowledge and skills needed to promote sustainable development...</p>	<p>4.4; 4.5: PAs and MPAs can contribute to research, education, art and other types of learning at all levels, from local to global. Appropriate institutional, governance and equity aspects of PAs and MPAs can help reduce gender disparities and facilitate participation of indigenous peoples and local communities, women and youth; as well as the appropriate preservation and sharing of knowledge including indigenous and traditional knowledge...</p> <p>4.7: PAs and MPAs also provide opportunities for raising awareness about the environment, skill development, employment opportunities and decent jobs within protected areas and in surrounding communities.</p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center; margin: 10px 0;"> <p>Key elements of Aichi Biodiversity Target 11 and priority actions</p> <p>Effective management: 234 actions by 92 Parties Equity and governance: 159 actions by 78 Parties Integration: 83 actions by about 50 Parties</p> </div> <p>Examples of national priority actions</p> <ul style="list-style-type: none"> ❖ Enhance implementation through collaborative and participatory planning, knowledge management and conduct capacity-building for all stakeholders; create awareness to address the underlining causes of biodiversity loss by mainstreaming biodiversity across government, institutional levels and the greater society (Liberia) – Build the capacity and awareness of stakeholders and interest groups to achieve recognition and participate effectively in equity negotiations (Kenya) – Develop education and outreach programmes of activities generating income and local development around PAs (Cameroon) (Africa) ❖ Creation of the database on species and habitats, according to the Bern Convention (Republic of Moldova) – Improvements in education on biological diversity and public participation in decision-making processes (Montenegro) (CEE) ❖ Promote the development of training plan for the control, monitoring and research applied to the management of marine protected areas within national jurisdiction (Argentina) – Implementation of a new information platform for the national system of protected areas (Chile) (GRULAC) ❖ Conduct socioeconomic assessment for PAs – what benefits did communities derive from PAs. Governance and Social Assessments of PAs (Solomon Islands) – Undertake assessment of equity and effectiveness of governance (Samoa) (Pacific) ❖ Increase METT index minimum 70% for 260 PAs, develop capacity-building as well as improve METT guidance and extent of implementation of Resort-Based Management (RBM) (Indonesia) – 70% of terrestrial PAs and 70% of MPAs will be evaluated, up from the current 40% and 20% respectively (Republic of Korea) (ESE Asia) ❖ Enhance local community participation in the management of PAs (Bhutan) – Contribution of public awareness to conserve threatened species in PAs (Iraq) – Develop environmental education and curriculum and teacher training and a national programme of biodiversity education and awareness; promote public awareness through schools, mosques and media; establish a resource centre for environmental information and best practice, enhance public awareness about biodiversity and sustainable use (including government processes) and increase media (Afghanistan) (SCW Asia) 	<p>Examples of evidence</p> <ul style="list-style-type: none"> • Nature is the best way to nurture pupils with special education needs.²⁶ • Meaningful integration of traditional ecological knowledge (TEK), practices, and beliefs in conservation projects has emerged as a significant determinant of conservation success.²⁷ • As part of the global revival of traditional knowledge in conservation, indigenous peoples in Venezuela are being called on to share their knowledge of fire management to help conserve an iconic national park and its surrounding area...; indigenous peoples around the world are mobilizing to ensure that their ancient practices based on a profound knowledge of the natural world are recognized as a mainstay of global conservation.²⁸ • About 2.5 million locals and tourists use and enjoy the Wet Tropics World Heritage Area every year – The area offers a treasure trove of genetic diversity and a wonderful resource for research, education and art.²⁹ • Protected Areas Learning and Research Collaboration (PALRC) aims to foster excellence in governance and management in the Asia Pacific and Oceania regions.³⁰ • In Bolivia's Amboró-Carrasco National Parks, an education strategy is being carried out to increase awareness about the environmental benefits generated by the parks. Organizations of women and youth are among the audiences being targeted since they are considered more receptive to environmental issues.³¹

²⁶ <http://www.theguardian.com/teacher-network/2016/may/01/nature-nurture-pupils-special-educational-needs-outdoor-education>.


²⁷ https://www.google.ca/search?q=protected+areas+and+traditional+knowledge&ie=utf-8&oe=utf-8&gws_rd=cr&ei=xvTnV6uLIYbCmwH-gqqADO#q=protected+areas+and+traditional+knowledge+and+2015.

²⁸ http://www.iucn.org/backup_iucn/iucn.org/knowledge/focus/respecting_indigenous_and_traditional_knowledge/index.html.

²⁹ <http://www.wettropics.gov.au/wet-tropics-world-heritage-values>.

³⁰ <http://www.palrc.com>.

³¹ <https://www.cbd.int/doc/pa/tools/Gender%20in%20the%20conservation%20of%20protected%20areas.pdf>.

Agenda 2030 - Sustainable Development Goals	SDG target links to Aichi Targets 11&12		Short description of the SDG targets ¹	Contribution of Aichi Biodiversity Target 11 to SDG targets, and national priority actions identified by Parties to implement the elements of Aichi Biodiversity Targets 11 and 12 and achieve the Targets by 2020 following six capacity-building workshops held during 2015 and 2016	Contribution of Aichi Biodiversity Targets 11&12: evidence from the literature
	Direct	Indirect			
 <p>5. Achieve gender equality and empower all women and girls</p>		5.1; 5.5; 5.a; 5.c	<p>5.1 is about ending all forms of discrimination against all women and girls everywhere; 5.5 is about ensuring women's full and effective participation and equal opportunities for leadership at all levels of decision-making...; 5.a is about women equal rights to economic resources...; 5.c is about adopting and strengthening sound policies and enforceable legislation for the promotion of gender equality...</p>	<p>5.1; 5.5; 5.a and 5.c: Appropriate governance and institutional framework, equity measures and effective management of PAs and MPAs can contribute to these targets by enabling full participation, engaging and empowering surrounding indigenous peoples and local communities, women, and youth...; allowing gender perspective and fair and equitable benefit-sharing.</p> <p>Indigenous women are well known custodians of traditional knowledge with a responsibility to pass it to next generations. Their knowledge includes an awareness of the structure of and symbiotic relations with ecosystems, functionality of species, understanding of wild ancestors and geographic ranges of plant and animal species that could help avoid genetic erosion and adapt to the impacts of climate change. Of the 1.3 billion people living in poverty, 70% are women and 60% of the chronically hungry people are women and girls.³² These SDG targets could also contribute to PAs and MPAs by enforcing gender equality measures to help facilitate the eradication of poverty.</p> <div style="border: 1px solid blue; border-radius: 15px; padding: 10px; text-align: center; margin: 10px 0;"> <p>Key elements of Aichi Biodiversity Target 11 and priority actions</p> <p>Effective management: 234 actions by 92 Parties</p> <p>Equity and governance: 159 actions by 78 Parties</p> <p>Other area-based conservation measures: 152 actions by 81 Parties</p> </div> <p><u>Examples of national priority actions</u></p> <ul style="list-style-type: none"> ❖ Creation of income-generating activities for local populations of PAs (Guinea) – Creation of green jobs and income-generating activities for the poorest, especially women (Burkina Faso) – Created new PAs in key connectivity areas; designated any sites for restoration of degraded areas and integrated PAs into poverty reduction strategies, changed awareness of stakeholders in key connectivity areas (Egypt) (Africa) ❖ Promote equity and benefits sharing, development of guide or criteria for effective governance (Serbia) – Develop and implement pilot projects to involve local communities in the management of PAs (Ukraine) (CEE) ❖ Develop and implement MoU's between all stakeholders and management authorities (Saint Vincent) – Strengthen the local participation programmes of rural communities in PAs (Cuba) (GRULAC) ❖ Strengthen incorporation of traditional knowledge into management practices and provide better guidance for addressing benefit-sharing arrangements (Solomon Islands) – Community consultation on effective management of PAs (Tonga) (Pacific) ❖ Strengthen the involvement of community in biodiversity management, highlighting the involvement of and benefits to the communities living in buffer zones (Viet Nam) – Researchers will conduct investigations on good governance and multi-layered governance (Japan) (ESE Asia) ❖ Intervention on gender and social inclusion (Nepal) – Develop incentive for effective biodiversity conservation (e.g. at provincial and community levels among user groups etc. (Afghanistan) – Intervention on Gender and Social Inclusion and implementation of conservation-oriented community welfare programmes (Oman) (SCW Asia) 	<p><u>Examples of evidence</u></p> <ul style="list-style-type: none"> • Gender inequality in biodiversity conservation and management restricts women's access to benefits at all levels, perpetuating poverty and undermining sustainable resource use and management ... Global conservation treaties have also begun to embrace the goal of gender equality, recognizing that men and women should have equal access to resources and decision-making spheres and that costs and benefits of conserving resources should be equally distributed.³³ • As primary custodians of traditional knowledge of biodiversity, for which they are recognized for centuries, women should be involved in the decision-making process in the use of nature and biodiversity resources.³⁴ • In Thailand, research on 60 home gardens revealed 230 different species, many of which had been rescued by women from forests before being cleared. In Sierra Leone, women could name 31 uses of trees on fallow land and in the forest, while men named eight different uses.³⁵ • Inclusion of a gender-equitable perspective in the design, monitoring, and evaluation of conservation initiatives will have a positive impact on the social fabric of communities living in protected areas. This, in turn, will enhance conservation outcome.³⁶


³² <https://www.cbd.int/doc/newsletters/development/news-dev-2015-2013-08-en.pdf>.

³³ <https://portals.iucn.org/union/sites/union/files/doc/ramsar-wh-report-april2016.pdf>.

³⁴ http://www.aseanbiodiversity.org/index.php?option=com_content&view=article&id=32:women-as-custodians-of-biodiversity&catid=1:news&Itemid=109.

³⁵ http://www.birdlife.org/sites/default/files/attachments/iucn_fact_sheet_linking_gender_and_biodiversity.pdf.

³⁶ <https://www.cbd.int/doc/pa/tools/Gender%20in%20the%20conservation%20of%20protected%20areas.pdf>.

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	Direct	Indirect			
 <p>6. Ensure availability and sustainable management of water and sanitation for all</p>	6.5; 6.6	6.1; 6.3; 6.4; 6.a; 6.b	<p>6.1 is about achieving universal and equitable access to safe and affordable drinking water for all; 6.3 is about improving water quality ...; 6.4 is about water-use efficiency across all sectors and ensuring sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity; 6.5 is about implementing integrated water resources management at all levels, including through transboundary cooperation as appropriate; 6.6 is about protecting and restoring water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes;</p> <p>6.a is about expanding international cooperation and capacity-building support in water related issues; 6.b is about supporting and strengthening the participation of local communities in improving water and sanitation management.</p>	<p>6.5; 6.6, 6.1; 6.3; 6.4; 6.a; 6.b: Nearly 1 billion people in the developing world don't have access to clean water.³⁷ Protection, conservation, sustainable and efficient use of resources including water; regional cooperation for transboundary conservation, connectivity and corridors, governance, and equity (participation of all members of communities: indigenous peoples and local communities, women, youth...), effective management, mainstreaming and integration into wider land and seascapes and sectors are elements of PAs and MPAs that can contribute to integrated water resources management at all levels, sustainable management and use of water, and sanitation.</p> <div style="border: 2px solid orange; border-radius: 15px; padding: 10px; text-align: center; margin: 10px 0;"> <p>Key elements of Aichi Biodiversity Target 11 and priority actions Terrestrial quantitative: 184 actions by 88 Parties Effective management: 234 actions by 92 Parties Integration: 83 actions by about 50 Parties Connectivity and corridors: 166 actions by 87 Parties Other area-based conservation measures: 152 actions by 81 Parties</p> </div> <p>Examples of national priority actions</p> <ul style="list-style-type: none"> ❖ Massive afforestation, terracing hillsides, SLM/SFM water development and use, promotion and dissemination of alternative energy sources, income generating activities will be promoted widely (Eritrea) – For terrestrial connectivity, freshwater ecosystems will be connected by a series of bird's important area protection over the Nile to provide the protection of MB (Sudan) (Africa) ❖ Adapt proposed Natura 2000 sites and establish the ecological network in accordance with the laws on nature (Bosnia and Herzegovina) – Development and approval of the National Ecological Network (Belarus) (CEE) ❖ Biological corridor protection in the Mediterranean ecosystems of Chile through the GEF Corridors project by applying at a pilot scale the law on soil conservation districts, waters, and forests (Chile) – Improve surveillance, enforcement and management of freshwater bodies and rivers identified as under-represented within the national protected areas system; implement or endorse recently developed environmental resource management policies and plans, including National Integrated Water Resources Management Policy (Belize) (GRULAC) ❖ IWRM (Implementing Sustainable Water Resource and Wastewater Management) project worked at the watershed level looking at the holistic management of water (successful pilot projects testing innovative solutions involving linking ICM and IWRM and climate change adaptation (Palau) – Improve understanding Funafuti area ecological connectivity and human impacts (ballast water from cargo ship, sewage runoff) (Tuvalu) (Pacific) ❖ Develop integrated watershed management in 180 prioritized watersheds (Indonesia) – Maintain connectivity across landscapes by reducing fragmentation, recovering lost habitats, expanding PAs networks and establishing ecological corridors (Timor-Leste) (ESE Asia) ❖ Development of management plans with the account of area-based value of ecological resources; gradation of regimes of conservation and nature use (Tajikistan) – Water resources protection (Islamic Republic of Iran) (SCW Asia) 	<p>Examples of evidence</p> <ul style="list-style-type: none"> • The protection and sustainable use of mountain ecosystems is crucial as mountains are water towers not only to low lands but also to the world.³⁸ • Desert cactus purifies contaminated water for aquaculture, drinking and more;³⁹ trees save water, help prevent water pollution and conserve energy.⁴⁰ • Wetlands clean and recharge our water supply, provide critical fish and wildlife habitat, and protect our communities from floods;⁴¹ wetlands and forests also function in the detoxification of water, saving billions of dollars in water purification.⁴² • Water from protected areas is important for domestic use and subsistence agriculture as well as for large-scale irrigation, industrial use, and hydroelectric power and as a source of municipal drinking water...⁴³ • In Ecuador, about 80% of Quito's 1.5 million residents receive drinking water from two protected areas in the Andes; in the Dominican Republic, the Madre de las Aguas Conservation Area protects the source of 17 rivers that provide water for domestic use and irrigation to over half of the country's population⁴⁴ • Protected areas are not a universal solution to managing water resources, but they can help to secure high quality water supplies, and to address problems of both scarcity and excess – both likely to increase as a result of climate change and increasing population.⁴⁵

³⁷ <https://thewaterproject.org/water-scarcity/>.

³⁸ http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/SDGs_and_mountains_water_EN.pdf.

³⁹ http://www.em.com/topics/top_stories/browse/?=&page=7.

⁴⁰ <https://www.treepeople.org/resources/tree-benefits>.

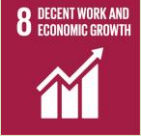
⁴¹ <http://wetlandsconservancy.org/>.

⁴² http://web.mit.edu/12.000/www/m2015/2015/benefits_humans.html.

⁴³ https://www.iucn.org/sites/dev/files/import/downloads/natsols_water_flyer_final.pdf.

⁴⁴ https://www.iucn.org/sites/dev/files/import/downloads/natsols_water_flyer_final.pdf.

⁴⁵ https://cmsdata.iucn.org/downloads/natsols_water_flyer_final.pdf.

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	Direct	Indirect			
 <p>8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p>	8.9	8.3; 8.4; 8.5	<p>8.3 is about development-oriented policies that support productive activities, decent job creation...;</p> <p>8.4 is about improving progressively, through 2030, global resource efficiency in consumption and production and endeavouring to decouple economic growth from environmental degradation...; 8.5 is about achieving full and productive employment and decent work for all women and men...; 8.9 is about devising and implementing policies to promote sustainable tourism that creates jobs and promotes local culture and products.</p>	<p>Effectively managed and governed PAs and MPAs with appropriate integration with other sectors have a lot to offer to these targets, to sustainable economic growth and development, generation of employment, and revenue, among other things. The goods and services support many sectors, including tourism, energy, water, agriculture, and infrastructure as well as disaster risk reduction. The values generated by PAs have further a substantial multiplier effect across the economy.⁴⁶ Numerous Parties have set priority actions for socioeconomic evaluations highlighting the importance of PAs and MPAs to their society and economy.</p> <div style="border: 2px solid green; border-radius: 15px; padding: 10px; margin: 10px 0;"> <p>Key elements of Aichi Biodiversity Target 11 and priority actions Effective management: 234 actions by 92 Parties Equity and governance: 159 actions by 78 Parties Ecological representation: 169 actions by 90 Parties Areas important for biodiversity: 198 by 88 Parties Ecosystem services: 40 actions by 35 Parties Integration: 83 actions by 49 Parties Connectivity and corridors: 166 actions by 87 Parties Other area-based conservation measures: 152 actions by 81 Parties</p> </div> <p>Examples of national priority actions</p> <ul style="list-style-type: none"> ❖ Evaluation of the social and economic values of PAs (Mali) – Economic valuation of 57% of eco-regions for the benefits of communities and government (Botswana) – Strengthen the capacity of stakeholders in the field of economic evaluation of ecosystems; develop a national TEEB Senegal and publish widely among decision makers (Senegal) (Africa) ❖ Developing a strategy to optimize benefits for local communities from the establishment and management of protected areas (Montenegro) – Development of a mechanism for economic stimulation given a need to involve a spatial planning mechanism into sectorial planning (Republic of Moldova) (CEE) ❖ Equitable distribution management in terms of costs and benefits: Promoting incentives and national certifications (Argentina) – Review and quantify the major ecological services provided by the Federal PAs, not only in ecological terms but adding to economic and social benefits (Mexico) (GRULAC) ❖ Conduct socioeconomic assessment for PAs. What benefits did communities derive from PAs? Governance and Social Assessments of PAs (Solomon Islands) – To conduct a spatial assessment of these sectors (agriculture, waste pollution, sedimentation, tourism, etc.) can help provide better understanding of the benefits and threats they pose to the sustainability of the land/seascapes (Tuvalu) (Pacific) ❖ Establish routine monitoring of biodiversity impacts and management effectiveness in PAs as well as socioeconomic conditions in local communities by developing a harmonized reporting system (Timor-Leste) – Conduct research on natural and economic values of PA system and biodiversity and feasibility assessment on potential ecosystem services and its payment, PA ecotourism development and NTFPs for effective PAs management (Cambodia) (ESE Asia) ❖ Link human and socioeconomic development with the conservation of biodiversity through specific legislation (Syrian Arab Republic) – Proactively manage/develop ecotourism in PAs NGOs and private sector (Oman) (SCW Asia) 	<p>Examples of evidence</p> <ul style="list-style-type: none"> • The coral reefs, seagrass, mangroves, beaches, intertidal areas, and marine waters of the Bohol Marine Triangle (BMT) in the Philippines provide ecosystem goods and services from fisheries, gleaning, seaweed farming, tourism, research, and education.⁴⁷ • Ecotourism: Protected nature areas around the world receive 8 billion visits per year very conservatively and generate US\$ 600 billion per year (vs. less than US\$ 10 billion per year in direct spending on safeguarding and managing these areas).⁴⁸ The indirect economic impacts (economic multipliers), include benefits to the local economy through creation of employment, revenue to local businesses (hotels, shops...) • The World Travel and Tourism Council (WTTC) estimates that the contribution of travel and tourism to gross domestic product is expected to rise from US\$ 5,751 billion in 2010 to US\$ 11,151 billion by 2020.⁴⁹ • In 2010, the quantified value of PAs equated to some 2.2% of GDP or economic benefits of €106 generated per capita of Montenegro’s population. In Biogradska Gora National Park, 229 sport fishing permits were issued in 2010 at a price of €20 each, generating revenues for the PA authorities of €4,580.⁵⁰ • Protected areas provide opportunities for rural entrepreneurship. The management of protected areas generates activity and direct and indirect employment for both men and women in the areas of conservation revitalization, monitoring, education and maintenance.⁵¹ • In the case of ecotourism, visitors are in general willing to pay well for their recreation activities (relaxing, learning etc. in nature), which benefits local communities.⁵²

⁴⁶ http://procurement-notice.undp.org/view_file.cfm?doc_id=31744.

⁴⁷ <http://coralreef.noaa.gov/aboutcrp/strategy/reprioritization/wgroups/resources/climate/resources/econvalue.pdf>.


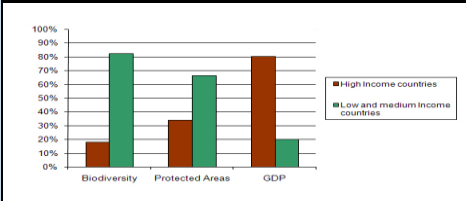
⁴⁸ <http://www.treehugger.com/green-investments/how-much-ecotourism-worth-worldwide.html>.

⁴⁹ <http://www.paprpjproject.com/>.

⁵⁰ https://www.researchgate.net/publication/269098968_The_economic_value_of_protected_areas_in_Montenegro.

⁵¹ <http://www.europarc.org/wp-content/uploads/2016/01/Mujeres-y-al-reas-protogidas-ing.pdf>.

⁵² <http://www.ccsenet.org/journal/index.php/jsd/article/viewFile/3029/2795>.


Agenda 2030 - Sustainable Development Goals	SDG target links to Aichi Targets 11&12		Short description of the SDG targets ¹	Contribution of Aichi Biodiversity Target 11 to SDG targets, and national priority actions identified by Parties to implement the elements of Aichi Biodiversity Targets 11 and 12 and achieve the Targets by 2020 following six capacity-building workshops held during 2015 and 2016	Contribution of Aichi Biodiversity Targets 11&12: evidence from the literature
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<p>10 REDUCED INEQUALITIES</p>  <p>10. Reduce inequality within and among countries</p>	10.1	10.1 is about progressively achieving and sustaining income growth of the bottom 40% of the population at a rate higher than the national average.	<p>Effectively managed PAs and MPAs with appropriate governance and institutional framework and equity measures, and integrated into various sectors can assist in the achievement of this SDG target, as for SDG target 1. The fact that many of the world's richest and most diverse habitats are found in places where poverty is a real and pressing issue applies here too. It is also well understood that the countries that are very rich in biodiversity are often developing countries or countries with economies in transition which require assistance (funding, resources, technology...) to protect this vast biodiversity wealth for the benefits of society around the world for the current and future generations (figure 1).</p> <div style="border: 2px solid blue; border-radius: 15px; padding: 10px; text-align: center; margin: 10px 0;"> <p>Key elements of Aichi Biodiversity Target 11 and priority actions</p> <p>Terrestrial quantitative: 184 actions by 88 Parties Marine quantitative: 64 actions by 49 Parties Ecological representation: 169 actions by 90 Parties Effective management: 234 actions by 92 Parties Areas important for biodiversity: 198 by 88 Parties Ecosystem services: 40 actions by 35 Parties Equity and governance: 159 actions by 78 Parties Integration: 83 actions by 49 Parties Connectivity and corridors: 166 actions by 87 Parties Other area-based conservation measures: 152 actions by 81 Parties</p> </div> <p>Examples of national priority actions</p> <ul style="list-style-type: none"> ❖ Establishment of micro-credit funds for the implementation of income generating activities 2016-2020 (Mali) – Equitable sharing of resources and income from PA operations with local people (Niger) – Integration of benefits arising from PAs into poverty alleviation and overall national development plans (Ethiopia) (Africa) ❖ Promote equity and sharing and progress in assessing PAs governance (Serbia) – Awareness raising of the local governments and communities on governance and equity issues (Albania) (CEE) ❖ By 2020 creation of conservation incentives in minimal use zones of PAs (Uruguay) – Provide appropriate mechanisms for the participation of resource users, institutional partners and local communities in the sustainable use, development and management of resources (PSEPA) (Saint Lucia) (GRULAC) ❖ To review existing EPC Act and National Parks Act to adequately address national relevant PA governance systems (community governance and government governance) (Vanuatu) – Provide better guidance for addressing benefits sharing arrangements (Solomon Islands) (Pacific) ❖ The number of villages that assisted in buffer of protected areas increase 77 villages (Indonesia) – Conduct research on institutional structures to propose a model for one single management authority for protected areas, highlighting the involvement of and benefits to the communities living in the buffer zones (Viet Nam) (ESE Asia) ❖ By 2020, the protected areas in Lebanon have effective business plans and are implementing regular income generating activities (Lebanon) – Dependence of surrounding inhabitants will be reduced through incentives and alternate sources of income (Bangladesh) (SCW Asia) 	<p>Examples of evidence</p> <ul style="list-style-type: none"> • Protected areas play an appreciable role in the national economy and development: In 2010, the quantified value of PAs equated to some 2.2% of GDP, or economic benefits of €106 generated per capita of Montenegro's population...Values of protected areas accrued to multiple sectors at different levels of scale and generated a substantial multiplier effect across the economy (income, consumption, spending, employment and cost-savings...).⁵³ This can facilitate growth and reduce inequality among nations. • In Guatemala, the Maya Biosphere Reserve generates an annual income of approximately US\$ 47 million while creating employment for 7000 people.⁵⁴ • The main issue is disproportionate distribution of income and biodiversity⁵⁵. However, given the very high rate of return to investment (US\$ 25:1 to US\$ 100:1) in protected areas,⁵⁶ developing countries can benefit substantially through such strategy. Hence, enhanced capacity-building and funding from various sources can help establish and effectively manage protected areas which in turn can tremendously reduce inequality especially among the bottom 40% of the population. <div style="text-align: center; margin-top: 10px;">  </div> <p>Source: Gutman and Davidson, 2007.</p> <p>Figure 1: Distribution of income and biodiversity in developed and developing countries.</p>	

⁵³ Emerton, L. et al. (2011). The economic value of protected areas in Montenegro. GEF/UNDP PIMS 4279: Catalyzing Financial Sustainability of Protected Areas in Montenegro. http://procurement-notice.undp.org/view_file.cfm?doc_id=31744.

⁵⁴ <https://www.cbd.int/doc/publications/cbd-ts-36-en.pdf>.

⁵⁵ Gutman, P. and S. Davidson. 2007. *A Review of Innovative International Financial Mechanisms for Biodiversity Conservation with a Special Focus on the International Financing of Developing Countries' Protected Areas*. A contribution to COP9 of the CBD. WWF-MPO.

⁵⁶ TEEB – *The Economics of Ecosystems and Biodiversity for National and International Policy Makers*. 2009: Chapter 9: Recognizing the value of protected areas.


Agenda 2030 - Sustainable Development Goals	SDG target links to Aichi Targets 11&12		Short description of the SDG targets ¹	Contribution of Aichi Biodiversity Target 11 to SDG targets, and national priority actions identified by Parties to implement the elements of Aichi Biodiversity Targets 11 and 12 and achieve the Targets by 2020 following six capacity-building workshops held during 2015 and 2016	Contribution of Aichi Biodiversity Targets 11&12: evidence from the literature
	Direct	Indirect			
 <p>11. Make cities and human settlements inclusive, safe, resilient and sustainable</p>	11.4	11.5; 11.6; 11.7; 11.a; 11.b	<p>11.4 is about strengthening efforts to protect and safeguard the world's cultural and natural heritage;</p> <p>11.5 is about significantly reducing the number of deaths and the number of people affected and substantially decreasing the direct economic losses relative to global GDP caused by disasters, including water-related disasters...; 11.6 is about reducing the adverse per capita environmental impact of cities...; 11.7 is about providing universal access to safe, inclusive and accessible, green and public spaces...; 11.a is about supporting positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning; 11.b is about increasing the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters...</p>	<p>Mainstreaming, integration and synergy of activities of PAs and MPAs into the wider land and seascapes, diverse sectors (e.g., housing, transportation), infrastructure, urbanization, sustainable human settlement ..., to avoid negative impacts and externalities on areas that need protection, and on existing PAs and MPAs, so that protected areas also contribute to these activities in return.</p> <p>Effectively managed PAs and MPAs buffer the impacts of climate change and reduce risks of disasters, and assist in adaptation and resilience as well as supporting economic, social and environmental links, among many other benefits.</p> <div style="border: 2px solid #0070C0; border-radius: 15px; padding: 10px; text-align: center; margin: 10px 0;"> <p>Key elements of Aichi Biodiversity Target 11 and priority actions</p> <p>Terrestrial quantitative: 184 actions by 88 Parties</p> <p>Ecological representation: 169 actions by 90 Parties</p> <p>Effective management: 234 actions by 92 Parties</p> <p>Integration: 83 actions by 49 Parties</p> <p>Connectivity and corridors: 166 actions by 87 Parties</p> <p>Other area-based conservation measures: 152 actions by 81 Parties</p> </div> <p>Examples of national priority actions</p> <ul style="list-style-type: none"> ❖ Bring unprotected IBAs under protection by expanding existing PAs or establishing new PAs. This will include 7 IBAs in danger from impact by agriculture/aquaculture, human disturbance (Kenya) – Promote participatory development of master plans for planning and urban development, particularly in the northern regions and the Southwest to avoid conflict with other land uses (Cameroon) (Africa) ❖ Announcement of the biosphere reserve Pripyat Polecie, 2016 (Belarus) – To integrate protected areas into broader land- and seascapes and sectors so as to maintain ecological structure and function (Serbia) (CEE) ❖ Strengthening of a body (una instancia) for the articulation of territorial planning instruments; implementation of the Green Growth as defined in the National Development Plan 2014-2018 (Colombia) – Greater involvement of land owners and developers in conservation of biological corridors, exploring possible incentives for securing them (Belize) (GRULAC) ❖ Areas being managed for special interest need to be better described and demarcated (Vanuatu) – Conduct stakeholder learning and best practices forums (Solomon Islands) (Pacific) ❖ Continuous efforts to identify Other Effective Conservation Measures (OECMs) (DPR Korea) – Establish new forest city and biodiversity Garden in the remaining province (Indonesia) – Establish the botanical garden and herbarium as the ex-situ conservation (Cambodia) – Exploring urban nature parks, private PAs, development restricted area, studying Other Effective Conservation Methods OECM (Republic of Korea) (ESE Asia) ❖ Apply global tools such as KBA, EBSA, urban biodiversity index, green listing, ecosystem red listing to evaluate the status of urban and natural ecosystems; establish ex situ conservation facilities such as botanic gardens, zoos, aquaria, wetland parks, arboreta, medicinal gardens, urban parks, natural history museums, plant herbaria etc., in each bioclimatic zones for recreation, education and research (Sri Lanka) – Proposing for more protection on the areas important for BD (Islamic Republic of Iran) (SCW Asia) 	<p>Examples of evidence</p> <ul style="list-style-type: none"> • The approach of setting up urban protected areas has demonstrated its social and economic usefulness in many countries.⁵⁷ • Hong Kong (pop. 7 million): Hong Kong Country Parks (Category V, 44,000 ha of land; 1,430 ha of marine parks). Mountainous parks cover 40 percent of Hong Kong otherwise intensively developed territory. Administered by the Government of the Hong Kong Special Administrative Region of China.⁵⁸ • Nairobi, Kenya (pop. 3 million): Nairobi National Park (Category II, 11,700 ha). The protected corner of a large savanna ecosystem; an impressive array of wildlife species includes the black rhinoceros (IUCN Critically Endangered), lion, leopard, buffalo, and hippopotamus. Managed by the Kenya Wildlife Service.⁵⁹ • Green infrastructure, a cost-effective, resilient approach to managing wet weather impacts, reduces and treats storm water at its source while delivering environmental, social, and economic benefits to many communities.⁶⁰

⁵⁷ <http://www.sciencedirect.com/science/article/pii/S1878029616001407>.

⁵⁸ <http://www.thenatureofcities.com/2014/10/08/urban-protected-areas-important-for-urban-people-important-for-nature-conservation-globally/>.

⁵⁹ <http://www.thenatureofcities.com/2014/10/08/urban-protected-areas-important-for-urban-people-important-for-nature-conservation-globally/>.

⁶⁰ <https://www.americanrivers.org/threats-solutions/clean-water/green-infrastructure/what-is-green-infrastructure/>.

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<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>  <p>12. Ensure sustainable consumption and production patterns</p>	12.2; 12.8; 12.b	12.1; 12.4; 12.c	<p>12.1 is about implementing the 10-year framework of programmes on sustainable consumption and production...; 12.2 is about achieving the sustainable management and efficient use of natural resources; 12.4 is about achieving the environmentally sound management of chemicals and all wastes ...; 12.8 is about ensuring that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature; 12.b is about developing and implementing tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products; 12.c is about harmful subsidies.</p>	<p>Integration of PAs and MPAs with the production sector (agriculture, fisheries, forestry...) and raising consumer awareness will be important. This SDG target will be very hard to meet without effectively managed PAs and MPAs that facilitate sustainable use of natural resources (water, soil, pollination...). Activities in the production sector should also be undertaken in synergistic manner with PAs in order to avoid negative impacts and externalities on PAs (e.g. chemical run-off, water contamination that can affect various species of biodiversity...); reform of subsidies, for instance, can help the fisheries sector and help avoid overexploitation of resources.</p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center; margin: 10px 0;"> <p>Key elements of Aichi Biodiversity Target 11 and priority actions Effective management: 234 actions by 92 Parties Integration: 83 actions by 49 Parties Connectivity and corridors: 166 actions by 87 Parties Other area-based conservation measures: 152 actions by 81 Parties</p> </div> <p>Examples of national priority actions</p> <ul style="list-style-type: none"> ❖ Promoting sustainable forestry by effective support for implementation of the principles of “Community Forestry” in the DR of the Congo – Establish a mapping of all terrestrial, aquatic and marine areas important for the conservation of biodiversity to ensure the sustainable use of biological resources (Togo) (Africa) ❖ Develop programmes and continuous professional development courses in the public and private sectors on matters related to biodiversity conservation and sustainable management of state protected natural areas (Republic of Moldova) – To ensure that scientific knowledge contributes to the establishment and effectiveness of protected areas and protected area systems (Serbia) (CEE) ❖ By 2020 creation of standards for agricultural development and conservation in order to achieve sustainable use of the resource (El Salvador) – By 2020 joint development of agro-economic standards and conservation in order to achieve sustainable use of the resource (Honduras) – Provide appropriate mechanisms for the participation of resource users, institutional partners and local communities in the sustainable use, development and management of resources (PSEPA) (Saint Lucia) (GRULAC) ❖ Continue to support the agriculture with best practices guidance and techniques and protects biodiversity and water catchment areas management. Draft fisheries policy (Vanuatu) – To conduct a spatial assessment of these sectors (agriculture, waste pollution, sedimentation, tourism, etc.) can help provide better understanding of the benefits and threats they pose to the sustainability of the land/seascapes (Tuvalu) (Pacific) ❖ Construction of a Community-based Protected Area has been successfully implemented, integrating agriculture and sustainable development within local biodiversity conservation and community-based reserve management through habitat restoration of the red-crowned crane (DPR of Korea) – Establishment of ecological red line focusing on important marine biodiversity areas (China) (ESE Asia) ❖ Establish sustainable use programmes (Islamic Republic of Iran) – Development and implementation of guidelines for sustainable management of grasslands, wetlands and other important habitats located outside PAs (Nepal) (SCW Asia) 	<p>Examples of evidence</p> <ul style="list-style-type: none"> • Viable and lasting partnerships between protected areas and other sectors and strong local community involvement in management and benefit-sharing are vital.⁶¹ • Sectors such as agriculture, mining, wood production, water management and fisheries... exert direct pressures by depending on biodiversity and ecosystems in various ways to provide food, fibre, wood, bioenergy, fish and clean water... for the growing world population...⁶² Achieving Aichi Biodiversity Targets 11 and 12 and these SDG targets would require major and transformative changes, integration and synergy of activities. • MPAs, as a group, are an important component of the management programme for sustainable fisheries and conserving marine biodiversity off Alaska.⁶³ • Fish provides about 3 billion people with almost 20% of their intake of animal protein. About 30% of major marine stocks are overexploited, producing lower yields than their biological and ecological potential and in need of strict management plans to restore their full and sustainable productivity. Effectively managed MPAs are crucial.⁶⁴ • Supporting the conservation and sustainable use of biodiversity, including through local knowledge and the traditional management practices associated with them, is necessary to enable farming systems to continue to evolve and meet future needs.⁶⁵ • Approximately 33% of the food consumed by humans is dependent, either directly or indirectly, on honey bee pollination. The worldwide economic value of the pollination service provided by insects in 2005 was estimated to be US\$ 190 billion for the main crops that feed the world.⁶⁶

⁶¹ <http://www.fao.org/3/a-i4198e.pdf>.


⁶² <https://www.cbd.int/doc/publications/cbd-ts-79-en.pdf>.

⁶³ https://www.researchgate.net/publication/49466923_Application_of_Marine_Protected_Areas_for_Sustainable_Production_and_Marine_Biodiversity_off_Alaska.

⁶⁴ <https://www.cbd.int/doc/newsletters/development/news-dev-2015-2013-07-en.pdf>.

⁶⁵ <https://www.cbd.int/doc/newsletters/development/news-dev-2015-2013-07-en.pdf>.

⁶⁶ <https://www.cbd.int/development/doc/sdg-feb2014-factsheet-en.pdf>.

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	Direct	Indirect			
 <p>13. Take urgent action to combat climate change and its impacts</p>	13.1	13.3; 13.a; 13.b	<p>13.1 is about strengthening resilience and adaptive capacity to climate-related hazards and natural disasters in all countries; 13.3 is about improving education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning; 13.a is about implementation of commitment to UNFCCC... to address issues of meaningful mitigation actions...; 13.b is about promotion mechanisms for raising capacity for effective climate change-related planning, management ...</p>	<p>Efforts to combat climate change need an integrated approach with, where applicable, synergy of activities with PAs and MPAs. PAs have (a) a mitigation role, storing carbon that is present in vegetation and soils and sequestering carbon from the atmosphere in natural ecosystems; and (b) an adaptation role, through protection/maintenance of ecosystem integrity, buffering local climate change impact, reducing risks and impacts from extreme events such as storms, droughts and sea-level rise.</p> <p>By buffering the impacts of climate change, effectively managed PAs and MPAs strengthen adaptive capacity and resilience to climate related hazards and natural disasters, and serve as risk management tools... In turn, actions that mitigate climate change will also tremendously benefit protected areas.</p> <div data-bbox="758 456 1457 711" style="border: 2px solid red; border-radius: 15px; padding: 10px; text-align: center;"> <p>Key elements of Aichi Biodiversity Target 11 and priority actions</p> <p>Terrestrial quantitative: 184 actions by 88 Parties</p> <p>Marine quantitative: 64 actions by 49 Parties</p> <p>Effective management: 234 actions by 92 Parties</p> <p>Equity and governance: 159 actions by 78 Parties</p> <p>Integration: 83 actions by 49 Parties</p> <p>Connectivity and corridors: 166 actions by 87 Parties</p> <p>Other area-based conservation measures: 152 actions by 81 Parties</p> </div> <p>Examples of national priority actions</p> <ul style="list-style-type: none"> ❖ Undertake a vulnerability assessment and develop relevant adaptation measures to enhance climate change resilience for 4 priority ecosystems (critical headwaters) which are important for ecosystem services to the country (Zambia) – Implement a national inventory programme of biological resources in priority sites. Ensure regular monitoring of ecosystems and species to better appreciate their dynamics in a changing climate (Senegal) –Build climate resilience ecosystems through effective management of protected areas network (Liberia) (Africa) ❖ Bringing unprotected IBA under protection either by expanding existing PAs or establishing new PAs and improving management effectiveness through addressing threats are potential further actions (Montenegro) – Conduct research and single out group of ecosystems that provide essential services and make an assessment of the state of such ecosystems (Bosnia and Herzegovina) (CEE) ❖ Implement projects to increase coral resilience (Bahamas) – Improve management of marine resources and strengthen resilience to climate change. This is being done through the implementation of a National replenishment Zone Expansion Project (Belize) (GRULAC) ❖ Successful pilot projects testing innovative solutions involving linking ICM and IWRM and CC adaptation (Palau) – Development of protected areas to integrate the various conservation measures adopted for identified site and the use of sites (Nauru) (Pacific) ❖ Prepare and implement a management plan for each protected and conservation area, integrating climate change, connectivity and promotion of equity and benefit-sharing; standards for the preparation and approval of said plans should be issued (Timor-Leste) – Improve the protection on habitat of the prioritized species on the 5 partially protected/have yet not protected KBAs (Indonesia) (ESE Asia) ❖ Assess impact of climate change on protected areas especially on climate sensitive zones (Nepal) – Comprehensive programme of measures to mitigate the effects of the Aral Sea disaster, rehabilitation and socioeconomic development of the Aral Sea region in the 2015-2018 envisages the creation of 10 new protected areas with a total area of 3.7 million ha. (Uzbekistan) (SCW Asia) 	<p>Examples of evidence</p> <ul style="list-style-type: none"> • Protected areas should be considered as a complementary form of anthropogenic environmental intervention geared towards restoring its balance by removing the causes of its visible degradation.⁶⁷ • 39 national parks in Canada combined sequestered approximately 4.43 gigatonnes of carbon in various pools. If society had to replace this stored carbon, it would cost between \$72 to 78 billion. This value could also range \$11 billion to \$2.2 trillion depending upon society's valuation of the carbon sequestration function.⁶⁸ • Carbon mitigation can be a co-benefit of management for ecological integrity – Healthy coastal habitat is not only important for recreation and habitat for fish and marine organisms, it also plays an important role in reducing climate change – Studies indicate that coastal wetlands annually sequester carbon at a rate two to four times greater than mature tropical forests and store three to five times more carbon per equivalent area than tropical forests – However, when not protected they change from being net carbon sinks to net carbon emitters.⁶⁹ • Community forest governance in Nepal does not only play an essential role in enhancing the climate resilience of this mountainous and highly landslide-prone country, but it also contributes significantly to a broad range of SDGs including SDG 1 (poverty eradication), 2 (ending hunger), 5 (empowering women), 6 (access to clean water), 7 (sustainable energy), 8 (decent work), 10 (reducing inequalities), 12 (sustainable production and consumption), 13 (climate change) and 15 (conserving biodiversity).⁷⁰ • In Viet Nam, for example, nearly 12,000 hectares of mangroves, planted at a cost of \$1.1 million, led to savings of an estimated \$7.3 million per year in dyke maintenance while providing protection against a typhoon that devastated neighboring areas (Reid and Huq, 2005).⁷¹ • Access to clean drinking water, recently declared a basic human right by the United Nations and rendered increasingly precarious by climate change, is also facilitated through protected areas.⁷²

⁶⁷ <http://www.sciencedirect.com/science/article/pii/S1878029616001407>.


⁶⁸ https://www.researchgate.net/publication/267427303_ECONOMIC_VALUE_OF_STORED_CARBON_IN_PROTECTED_AREAS_A_CASE_STUDY_OF_CANADIAN_NATIONAL_PARKS.

⁶⁹ <https://adaptationcanada2016.ca/wp-content/uploads/2016/04/Th3C-Pellat1.pdf>.

⁷⁰ <https://intercontinentalcry.org/protected-areas-threat-sustainable-development-goals/>.

⁷¹ http://www.unep.org/forests/Portals/142/docs/CBD-UNEP_Issue_Paper_Protected_Areas_n_CC.pdf.

⁷² http://www.unep.org/forests/Portals/142/docs/CBD-UNEP_Issue_Paper_Protected_Areas_n_CC.pdf.

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	Direct	Indirect			
 <p>14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development</p>	14.1 to 14.6	14.7, 14.a-c	<p>14.1-14.5 are related to the protection of marine and coastal ecosystems; 14.6 is on subsidies; 14.7 is about increasing the economic benefits to small island developing States and least developed countries from sustainable use of marine resources...; 14.a is about scientific knowledge, research capacity and transfer of marine technology...; 14.b is about access for small-scale artisanal fishers to marine resources and markets.</p>	<p>This SDG is directly related to MPAs. Effectively managed MPAs with appropriate governance, institutional and equity framework can help sustainable use of marine resources, generate large benefits to society for the current and future generations, and contribute to the well-being of society in general.</p> <p>MPAs provide a range of benefits for the marine environment, fisheries and local economies, including conservation of biodiversity and ecosystem services; prevention, even reversing declines in fish populations and productivity and increasing profitability for fishermen, attracting marine tourism and broadening the economic options for local communities, creating jobs, providing opportunities for education, training, heritage and culture, among many others.</p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center; background-color: #f4a460; color: white; margin: 10px 0;"> <p>Key elements of Aichi Biodiversity Target 11 and priority actions</p> <p>Marine quantitative: 64 actions by 49 Parties Ecological representation: 169 actions by 90 Parties Effective management: 234 actions by 92 Parties Equity and governance: 159 actions by 78 Parties Integration: 83 actions by 49 Parties</p> </div> <p>Examples of national priority actions</p> <ul style="list-style-type: none"> ❖ Selection and identification of priority marine conservation area and creation of the network marine protected area (Equatorial Guinea) – Create new marine protected areas in biodiversity hotspots and fragile ecosystems (United Republic of Tanzania) (Africa) ❖ Designation of new marine protected areas (MPAs) (Albania) – Establishment of marine protected areas, make and adopt management plans for them (Montenegro) (CEE) ❖ Promote the development of training plan for the control, monitoring and research applied to the management of marine protected areas within national jurisdiction (Argentina) – To successfully create 2 new projected marine PAs (of 33,493,362 ha and 1,182,563 ha respectively) in order to increase to 10.98% of the marine territory of the country (Mexico) – Increase the percentage of protected areas in marine environment (Peru) (GRULAC) ❖ Recognize, register and gazette the existing WMAs and LMMAs that meet the IUCN criteria (Papua New Guinea) – Develop the National Marine Spatial planning framework (Tonga) (Pacific) ❖ Creation of 5 new marine protected areas, more than 30 million hectares - to strengthen MPAs-specific actions include improving the number, area and percentage of marine and coastal NRS, strengthening the conservation of mangroves, coral reefs and other ecosystems (China) – Necessary to move forward with identifying and managing regions as well as data collection for the ongoing conservation of important regions based upon the thinking behind ecological networks and the selection of important marine areas (Japan) (ESE Asia) ❖ Marine and Coastal Protected Area coverage will be expanded from 3.28% (3968 sq. km) to about 7% (8500 sq. km) by declaring rest of the Sundarbans (IUCN category VI) under Protected Area network (Bangladesh) – Enhancing Coastal and Marine PAs coverage by 5000 km² (India) (SCW Asia) 	<p>Examples of evidence</p> <ul style="list-style-type: none"> • The total ecosystem service benefits of achieving 10% coverage of MPAs is estimated in the range US\$ 622-923 billion over the period 2015-2050; and for 30% coverage, the benefits range between US\$ 719-1,145 billion (coastal protection, fisheries, tourism, recreation and carbon storage provided by coral reefs, mangroves and coastal wetland). The rates of return were estimated to range between 3:1 and 20: 1 for 10% and 30% protection respectively.⁷³ • One of the few studies analysing the impact of MPAs on local economies shows that MPAs in southern Europe generate an estimated €640,000 per MPA in income to industries providing services to non-resident recreational users...⁷⁴ • The CBD HLP (II) reported that in Fiji and Vanuatu costs of community based MPAs are between US\$ 15 and US\$ 100 per ha of protected area per year, compared with economic benefits of between US\$ 1,100 and US\$ 5,300 per ha of protected area per year. All of the MPAs studied produced positive cost-benefit ratios. • It has also been estimated that designating 20 to 30 percent of the oceans as Marine Protected Areas could create 1 million jobs and still sustain a marine fish catch worth US\$ 70-80 billion annually (Economics of Ecosystems, 2009).⁷⁵ • The United States of America maintains nearly 1,800 marine protected areas, which contain some of the country's most spectacular reefs, archaeological sites, and diving sites.⁷⁶ • Although coral reefs are estimated to provide US\$ 30 billion per year in goods and services to the world, the annual investment in research, monitoring and management is probably less than US\$ 100 million.⁷⁷


⁷³ http://assets.wfn.nl/downloads/mpa_rapport_volledig.pdf.

⁷⁴ <http://ec.europa.eu/environment/nature/natura2000/marine/docs/Socio%20-Economic%20Benefits%20of%20EU%20MPAs.pdf>.

⁷⁵ http://web.mit.edu/12.000/www/m2015/2015/benefits_humans.html.

⁷⁶ <http://greenpagebd.net/obama-announces-plan-to-create-worlds-largest-ocean-reserve/#.WBKktMklm5I>.

⁷⁷ <http://awsassets.panda.org/downloads/50j185costbenefitsrap.pdf>.

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	Direct	Indirect			
 <p>15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</p>	<p>15.1; 15.2; 15.4-15.8; 15.a-c</p>	<p>15.3; 15.9</p>	<p>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; 15.2 is about implementing sustainable management of all types of forests; 15.3 is about combating desertification, restoration of degraded land and soil...; 15.4 is about conservation of mountain ecosystems...; 15.5 is about reducing degradation of natural habitats... and preventing extinction of threatened species; 15.6 is about access and benefit-sharing; 15.7 is about taking action to end poaching and trafficking of protected species of flora and fauna and addressing both demand and supply of illegal wildlife products; 15.8 is about preventing introduction and reducing impacts of invasive alien species (IAS); 15.9 is about integrating ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts; 15.a – b are about mobilizing and increasing financial resources from all sources to conserve and sustainably use biodiversity and ecosystems; 15.c is about enhancing global support for efforts to combat poaching and trafficking of protected species.</p>	<p>This SDG is also directly related to terrestrial PAs. Effectively managed PAs with appropriate, governance, institutional and equity framework can help sustainable use of the ecosystem goods and services provided by protected areas, generate larger benefits to society for the current and future generations, and contribute to the well-being of society in general. The overall multiple benefits are varied, and range from spiritual, cultural, and religious values to aesthetic value for recreational purposes, to socioeconomic values (income, health, risk management...), among many others. Most of the elements of Aichi Biodiversity Target 11 are relevant to this SDG.</p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; background-color: #f08080; margin: 10px 0;"> <p align="center">Key elements of Aichi Biodiversity Target 11 and priority actions</p> <p>Terrestrial quantitative: 184 actions by 88 Parties Effective management: 234 actions by 92 Parties Ecological representation: 169 actions by 90 Parties Equity and governance: 159 actions by 78 Parties Integration: 83 actions by 49 Parties Connectivity and corridors: 166 actions by 87 Parties Other area-based conservation measures: 152 actions by 81 Parties</p> </div> <p>Examples of national priority actions</p> <ul style="list-style-type: none"> ❖ Conduct management effectiveness assessments for all protected forest areas and heritage sites designated for exclusive protection by law (Zambia) – Build capacity on the Nagoya Protocol and access and benefit-sharing to legislators, policymakers and judiciary in Kenya for effective implementation and fair and equitable sharing of benefits arising from the use of biodiversity (Kenya) (Africa) ❖ In order to extend and create areas with forest vegetation and ecological network, documents and policies have been elaborated, the main one being the National Programme for the Creation of the National Ecological Network for 2011-2018 (Republic of Moldova) – It is needed to ensure financial resources in order to implement strategy and action plans for biodiversity protection (Bosnia and Herzegovina) (CEE) ❖ Continue mangroves restoration; improve capacity for forest management; IAS management and control (Bahamas) – Develop and implement appropriate risk management strategies and interventions for IAS and GMOs (Saint Lucia) – By 2020 new financial uptake mechanisms and management for effective management of areas of interest for biodiversity are implemented (Honduras) (GRULAC) ❖ Implement possible actions to ensure there are forest corridors available to sustain the population of Samoa’s endangered birds (Samoa) – Development of protected areas to integrate the various conservation measures adopted for identified site and the use of sites (Nauru) – Capacity-building for resource mobilization (Tonga) (Pacific) ❖ The contribution of Reservoir Forest Reserves to biodiversity conservation will be assessed. Regarding valuation of the ecosystem service, it will be evaluated focusing on disaster risk reduction, food security etc. (DPR of Korea) (ESE Asia) ❖ Restoration of degraded forests through assisted natural regeneration and improvement plantation (Bangladesh) – Develop a national ecosystem (terrestrial, coastal and marine) conservation plan to identify the best possible strategies for afforestation, enhancement, restoration and establishing connectivity (Sri Lanka) (SCW Asia) 	<p>Examples of evidence</p> <ul style="list-style-type: none"> • A study in Costa Rica showed increases in overall landscape beauty through protection, and that protection of biodiversity are recognized by more than 80% of locals as key environmental benefits provided by their surrounding PAs – List of perceived benefits (84%), protect soil from erosion (73%), purify the air and sequester carbon (71.2%), generate and protect water (68%); environmental average (77%); overall socioeconomic benefits was on average 54.3% (better socio economic opportunities, space for recreation, development of infrastructure, source of employment, community development activities, public services...)⁷⁸ • The protected areas of the Amazon bring in about three times as much money as would extensive cattle ranching, the most likely alternative use of the areas...⁷⁹ • Wetlands improve the quality of community life, reduce flooding, improve water quality, and also increase hunting, fishing and recreation spending; protecting and sustainably using wetlands is important.⁸⁰ • Mangrove forests provide coastal protection, tropical mangroves and peat swamp forests provide numerous ecosystem services, including nutrient cycling, sediment trapping, protection from cyclones and tsunamis, habitat for numerous organisms (economically important) and wood for lumber and fuel (Ellison 2008) and most importantly carbon (C) storage.⁸¹

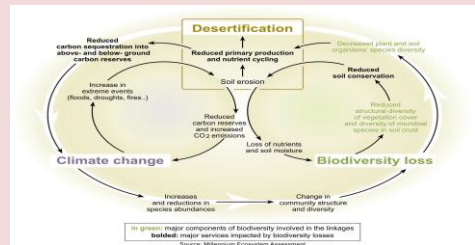


Figure 2: Simplified vicious cycle of cross-effects of desertification, climate change and biodiversity loss. Adapted from Safriel (2011) citing Millennium Ecosystem Assessment.⁸²


⁷⁸ http://parksjournal.com/wp-content/uploads/2016/03/PARKS-22-1-Molina-Murillo-et-al-10.2305IUCN.CH_2016.PARKS-22-ISAM-M.en_.pdf Costa Rica Molina-Murillo, S.A. et al. (2016).

⁷⁹ http://web.mit.edu/12.000/www/m2015/2015/benefits_humans.html.

⁸⁰ <http://www.wisconsinwetlands.org/HowWetlandsBenefitYourCommunity.pdf>.

⁸¹ http://www.cifor.org/publications/pdf_files/WPapers/WP48Murdiyaso.pdf.

⁸² Safriel, U. (2011). Achieving zero net land degradation: Impacts on climate change issues. Land degradation and climate change - turning vicious to a virtuous cycle. Center for Environmental Conventions, Blaustein Institutes for Desert Research and Silberman Institute of Life Sciences, Hebrew University of Jerusalem, Israel. UNFCCC – COP17, 28 Nov. - 9 Dec. 2011, Durban, South Africa.

Agenda 2030 - Sustainable Development Goals	SDG target links to Aichi Targets 11&12		Short description of the SDG targets ¹	Contribution of Aichi Biodiversity Target 11 to SDG targets, and national priority actions identified by Parties to implement the elements of Aichi Biodiversity Targets 11 and 12 and achieve the Targets by 2020 following six capacity-building workshops held during 2015 and 2016	Contribution of Aichi Biodiversity Targets 11&12: evidence from the literature
	Direct	Indirect			
 <p>16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</p>		<p>16.3; 16.6; 16.7; 16.8; 16.10; 16.a-b</p>	<p>16.3 is about the rule of law and equal access to justice for all; 16.6 is about effective, accountable and transparent institutions at all levels; 16.7 is about inclusive participatory and representative decision-making at all levels; 16.8 is about participation of developing countries in the institutions of global governance; 16.10 is about public access to information... in accordance with national legislation and international agreements; 16.a is about strengthening relevant national institutions, including through international cooperation for building capacity ... to prevent violence and combat terrorism and crime; 16.b is about non-discriminatory laws and policies for sustainable development.</p>	<p>Many of these SDG targets indirectly impact or are impacted by activities related to PAs and MPAs. Where there is an appropriate institutional, governance and equity framework and where protected areas are effectively managed, tracked and monitored, they could contribute a lot to these SDG targets, by helping avoid situations that provoke conflicts (inequalities, unfair distribution of benefits...), through transboundary protected areas for peace, regional cooperation, appropriate connectivity and corridors etc. Protected areas can safeguard global biodiversity and build peace in conflict hotspots.⁸³ The Peace and Biodiversity Dialogue initiative – Transboundary Protected Areas, initiated by the Republic of Korea and welcomed at COP 12, will also be extremely helpful towards the achievement of these SDG targets, as will many other initiatives also facilitated by the CBD Secretariat.</p> <div style="border: 1px solid green; border-radius: 15px; padding: 10px; background-color: #e0f0e0; margin: 10px 0;"> <p>Key elements of Aichi Biodiversity Target 11 and priority actions</p> <p>Terrestrial quantitative: 184 actions by 88 Parties Marine quantitative: 64 actions by 49 Parties Effective management: 234 actions by 92 Parties Equity and governance: 159 actions by 78 Parties Integration: 83 actions by 49 Parties Connectivity and corridors: 166 actions by 87 Parties Other area-based conservation measures: 152 actions by 81 Parties</p> </div> <p>Examples of national priority actions</p> <ul style="list-style-type: none"> ❖ Strengthen the functioning of PAs in the country through improved conservation management and operational support by undertaking at least 8 capacity-building programmes on PA management, planning, administration, marketing, customer care, conflict resolution, reporting, monitoring, policing and enforcement in PAs (Swaziland) – Take forward negotiations, action agreement and plan for the Gola Forest National Park Liberia and Gola Forest Park in Sierra Leone Peace Park and enhance coordination for effective management of the Gola Forest reserve (Sierra Leone) (Africa) ❖ Improving the skills of managers and employees of the GPU, carrying out management of protected areas, the territorial bodies of employees Ministry of Natural Resources in 2016, 2018, 2020 (Belarus) – Developing a strategy for the consultation and participation of different stakeholder groups in the establishment process (Montenegro) (CEE) ❖ Analyse the legal and regulatory framework for the integration of corridors in territorial planning with the native forest law (Argentina) – Develop strategies to incorporate other categories of officially protected areas such as Permanent Protection Areas, legal reserves, and indigenous lands with native vegetation into the PAs system (Brazil) (GRULAC) ❖ Undertake boundary surveys for government protected areas (Samoa) – Strengthen the existing governing mechanism for compliance and enforcement (Tonga) (Pacific) ❖ The contributions of Reservoir Forest Reserves to biodiversity conservation will be assessed. Regarding valuation of the ecosystem service, it will be evaluated focusing on disaster risk reduction, food securing, etc. (DPR of Korea) – Implement major projects on biodiversity conservation (China) (ESE Asia) ❖ Local people engagement and satisfaction for less conflict with PAs (Islamic Republic of Iran) – By 2020 legislation is in place in to recognize different categories of PAs including community conservation areas, and to recognize the establishment of PAs on private lands (Lebanon) (SCW Asia) 	<p>Examples of evidence</p> <ul style="list-style-type: none"> • Good governance of natural resources is vital for post-conflict recovery.⁸⁴ • Natural resource wealth can catalyze social conflict, among other related unintended consequences, and by so doing create barriers to progressive policies, security, and peace;⁸⁵ effectively managed protected areas would help solve such conflicts. • Protected area governance incorporates both social and ecological concerns by addressing the who, why and how of decision-making.⁸⁶ • It is becoming increasingly clear that Transboundary Conservation Areas (TBCAs) do much more than improve biodiversity conservation: they help promote reconciliation in border conflicts, re-unite families and ethnic groups divided by political boundaries, and provide social benefits - such as secure land tenure - to people living in the area.⁸⁷


⁸³ <http://www.conservation.org/NewsRoom/pressreleases/Pages/Protected-Areas-Can-Safeguard-Global-Biodiversity-and-Build-Peace-in-Conflict-Hotspots.aspx>.

⁸⁴ http://www.un.org/apps/news/story.asp?NewsID=53849#_VzGtLGNCKT8.

⁸⁵ <http://www.sciencedirect.com/science/article/pii/S0006320714000391>.

⁸⁶ <http://www.ahs.uwaterloo.ca/~eagles/documents/Eaglesetal.JOST2012.pdf>.

⁸⁷ http://www.itto.int/news_releases/id=2330000.

Agenda 2030 - Sustainable Development Goals	SDG target links to Aichi Targets 11&12		Short description of the SDG targets ¹	Contribution of Aichi Biodiversity Target 11 to SDG targets, and national priority actions identified by Parties to implement the elements of Aichi Biodiversity Targets 11 and 12 and achieve the Targets by 2020 following six capacity-building workshops held during 2015 and 2016	Contribution of Aichi Biodiversity Targets 11&12: evidence from the literature
	Direct	Indirect			
<p>17 PARTNERSHIPS FOR THE GOALS</p>  <p>17. Strengthen the means of implementation and revitalize the global partnership for sustainable development</p>	17.9	<p>17.2; 17.3; 17.6; 17.7; 17.8; 17.14; 17.15; 17.16; 17.18; 17.19</p>	<p>17.2 is about implementing official development assistance commitments and other commitments by developing countries; 17.3 is about mobilizing additional financial resources for developing countries from multiple sources; 17.6 is about enhancing North-South and South-South cooperation and triangular regional and international cooperation on access to science, technology, innovation and knowledge sharing...; 17.7 is on promotion of the development, transfer, dissemination and diffusion of environmentally sound technologies...; 17.8 is about operationalizing the technology bank and science, technology and innovation capacity-building mechanism... and enabling technology...; 17.9 is about enhancing support for implementing effective and targeted capacity-building...; 17.14 is about enhancing policy coherence for sustainable development; 17.15 is about respecting each country's policy space and leadership to establish and implement policies for poverty reduction and sustainable development; 17.16 is about enhancing global partnership for sustainable development complemented by multi-stakeholder partnerships that mobilize and share knowledge... 17.18 is on availability of disaggregated data, useful for MPAs and PAs; 17.19 is about building on existing initiatives to develop measurements of progress on sustainable development that complement gross national product, and support statistical capacity-building in developing countries.</p>	<p>Effectively managed PAs and MPAs can tremendously contribute to these SDG targets which can also contribute, in turn, to Aichi Biodiversity Targets 11 and 12.</p> <p>The most relevant elements of Aichi Biodiversity Targets 11 and 12 are connectivity and corridors, transboundary and regional cooperation, partnership and cooperation at the international level can help enhance North-South, South-South and triangular regional and international cooperation; Protected areas can also generate a substantial amount with a very high rate of return, income that can be reinvested for further improvement. The Bio-Bridge Initiative by the Republic of Korea, welcomed at COP 12, will also be extremely helpful towards the achievement of these SDG targets, as will many other initiatives also facilitated by the CBD Secretariat.</p> <div style="border: 2px solid #800000; border-radius: 15px; padding: 10px; background-color: #e0ffe0; text-align: center;"> <p>Key elements of Aichi Biodiversity Target 11 and priority actions</p> <p>Terrestrial quantitative: 184 actions by 88 Parties</p> <p>Marine quantitative: 64 actions by 49 Parties</p> <p>Effective management: 234 actions by 92 Parties</p> <p>Equity and governance: 159 actions by 78 Parties</p> <p>Integration: 83 actions by 49 Parties</p> <p>Connectivity and corridors: 166 actions by 87 Parties</p> <p>Other area-based conservation measures: 152 actions by 81 Parties</p> </div> <p>Examples of national priority actions</p> <ul style="list-style-type: none"> ❖ Improve cross-border cooperation and collaboration in the management of trans-border protected areas and ecological processes, such as wildlife migrations (Kenya) – Promote regional cooperation on protection and conservation of transboundary terrestrial and marine protected areas (United Republic of Tanzania) (Africa) ❖ To improve criteria for establishing the ecological network (Serbia) – Work on the integration of natural areas of the Republic of Belarus in the Emerald network created within the framework of the Convention on the Conservation of Wild Flora and Fauna and Natural Habitats in Europe (Belarus) (CEE) ❖ Complete legislation and policies currently in revision (Wildlife Protection Act, National Parks System Act, Forest Policy, National Protected Areas Policy and System Plan) (Belize) – Promote national implementation of the Strategic Plan 2011-2020 and the national action plan in strategic areas for conservation (Venezuela) (GRULAC) ❖ Develop and apply policies for biodiversity management planning, monitoring and reporting, natural and cultural resource management, and law enforcement of the Protected Area (Papua New Guinea) – Centralization of database for a sharing hub for all stakeholders on protected areas (Kiribati) (Pacific) ❖ Opportunities for ecological gap assessment, management effectiveness assessment, sustainable financing assessment and implementation, capacity needs assessment, policy environment assessment, PA integration and mainstreaming, and PA valuation (Philippines) – Ministry of Land and Environmental Protection and State of Academic Science in cooperation with various universities have carried out some researches on ecological representation. Expecting to further cooperation with international organizations (DPR Korea) (ESE Asia) ❖ Harmonization of biodiversity-related international conventions (Nepal) – Develop a scientific inventory of flora and encourage national and international scholars to develop a comprehensive flora Afghanistan, drawing particularly on Afghan collection in herbaria in Europe, America and Russia (Afghanistan) (SCW Asia) 	<p>Examples of evidence</p> <ul style="list-style-type: none"> • Saint Lucia is soon to start a regional sustainable financing project for protected areas and assistance can be sought from South countries in the development and implementation of such sustainable financing mechanisms.⁸⁸ • MedPAN, network of managers of Marine Protected Areas (MPA) in the Mediterranean, has over 40 members, and 25 partners that contribute to the strengthening of the network – MedPAN represents more than 80 MPAs. The MedPAN organization being heavily involved with developed European countries in the Northern part of the Mediterranean, this case study also presents a Triangular North-South-South Cooperation that is certainly beneficial to the MPAs and to the managers in the South considering the greater experience gathered in the North.⁸⁹ • The Latin American Technical Cooperation Network on National Parks, other Protected areas and Wildlife (REDPARQUES) is a technical mechanism consisting of public and private institutions and specialists from the member countries of the region working in the realm of protected areas and wildlife. The results activities has contributed to the development and technical capacity...⁹⁰ • South-South cooperation has proved to be a valuable complement to North-South development cooperation, particularly when addressing emerging development challenges, like climate change, food security, social protection and public security.⁹¹ • Identifying and indicating the benefits can help secure financing for the management of the PAs from alternative and sustainable sources...Protected areas should be considered as alternate economic land-use with the potential to stimulate the local housing development sector, encourage local business growth, and sustain local government finances.⁹²

⁸⁸ <https://www.cbd.int/doc/meetings/ssc/emssc-02/presentation/Saint-Lucia-Gaspard-Michel-Andrew-en.pdf>.

⁸⁹ <http://www.unep.org/south-south-cooperation/case/casedetails.aspx?csno=112>.

⁹⁰ <http://redparques.com/quienes-somos/?lang=en#>.

⁹¹ <https://www.oecd.org/dac/effectiveness/TT-SSC%20Policy%20Recommendations.pdf>.

⁹² <http://www.publish.csiro.au/pid/7240.htm>.