

NATURAL SOLUTIONS



Protected areas helping to meet the Sustainable Development Goals

The Sustainable Development Goals (SDGs) will be the driving force behind much of the global work on sustainable development and conservation for the next decade, until 2030. It is important to align protected area policies and the work of the IUCN World Commission on Protected Areas (WCPA) as far as possible within their framework.

Fortunately, this is easy: the SDGs reflect many 2017-2020 policy objectives of WCPA, which include: (1) Catalyzing and supporting global efforts to expand and effectively manage systems of protected areas to achieve the Aichi Targets for halting biodiversity loss, in particular through meeting Aichi Target 11; and (2) Recognising and mainstreaming protected areas as natural solutions to global challenges, such as climate change, land

degradation, food and water security, health and well-being; The briefing considers each SDG and identifies targets that provide *opportunities* for the further development of protected areas or have *implications* for the ways in which protected areas will be managed in the future. Links can be identified in all 17 SDGs: 34 opportunities and 12 implications.

The two strongest links are with SDGs 14 and 15, where marine and terrestrial protected areas contribute directly to the goals. Other SDG targets provide opportunities to underscore the contribution that PAs can make to human welfare and wellbeing including poverty alleviation, food and water security, health, disaster risk reduction, sustainable cities and climate change strategies.

SUSTAINABLE DEVELOPMENT GOALS



The matrix is a first attempt to identify those specific targets and actions stemming from the Sustainable Development Goals that have implications for protected areas and the work of the IUCN World Commission on Protected Areas. In some cases the SDG goals and targets provide *opportunities*; in other cases

they have *implications* and infer additional obligations on protected area managers to ensure that their sites meet and support the wider aims of the SDGs. Both cases are addressed below. **Highlights in green** are where WCPA could have a particularly significant role.

SDG	Targets relevant to protected areas	Links to IUCN WCPA
	<p>1.3: Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable</p> <p>1.4: By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance</p> <p>1.5: By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters</p>	<p><i>Implication:</i> protected areas in several countries are already expected to report on their contribution to poverty reduction targets.¹ While this is wholly to be supported, it carries risks, for example from pressure to increase money-making activities such as tourism beyond sustainable limits.</p> <p><i>Implication:</i> there will be growing pressure to ensure that protected areas do not undermine the livelihoods of the more socially and economically vulnerable, and more attention when this is perceived to be the case. This should be welcomed, but it does imply that WCPA needs to have its own position very clear and to have mechanisms and policies in place to respond when these issues emerge.</p> <p>One clear step that WCPA could take would be to identify best practices for treatment of rangers and other staff (wages, living accommodation etc) both from governments and private enterprises (e.g., eco-lodges) in protected areas</p> <p>WCPA's existing work in developing principles for equitable distribution of ecosystem services from protected areas² could provide valuable input to this debate</p> <p><i>Opportunity:</i> for the WCPA PA Climate Change Specialist Group to promote the role of protected areas in protection against climate-related events, droughts, sandstorms and other environmental shocks – in collaboration with the IUCN Commission on Ecosystem Management (CEM) disaster risk reduction group.³</p>
	<p>2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality</p>	<p><i>Opportunity:</i> to identify the role of protected areas in food security through:</p> <ol style="list-style-type: none"> 1. Providing basic supporting services such as soil production and stabilisation of water supplies 2. Providing buffering against climate-related shocks as in 2.3 above 3. Highlighting the role of protected landscapes (IUCN category V) in promoting sustainable agriculture such as organic production⁴ <p>Marine protected areas can have a key role to play in securing food supplies.</p>

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	2.5: By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed	<i>Opportunity:</i> to develop further the role of protected areas in the conservation of crop wild relatives, land races and livestock wild relatives to help build agricultural resilience against invasive species, climate change, novel diseases etc. ^{5,6} Collaborative work needed with the IUCN Species Survival Commission
	2.A: Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries	<i>Opportunity:</i> as in 2.5 to promote the role of in situ seed banks
	3.4: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	<p><i>Opportunity:</i> to develop the Healthy Parks Healthy People concept⁷ further, in promoting the role of protected areas as green gyms and places for treatment of those with mental health and addiction issues, with the Health and Well-being Specialist Group</p> <p>This could involve explicit links with institutions such as the World Health Organisation and with national medical authorities.</p>
	4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development	<p><i>Opportunity:</i> to use protected areas, particularly those near urban centres,⁸ to provide basic knowledge of ecosystem functioning, and to address nature-deficit problems in people of all ages.</p> <p>The <i>Nature for All</i> initiative,⁹ which forms a key part of WCPA's programme, is a major contributor to this target.</p>
	5.A: Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws	<i>Implication:</i> protected areas will be expected to meet gender targets in their workforce; additionally participatory approaches with local communities will need to ensure full access to all members of society regardless of background or gender
	6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	<i>Opportunity:</i> for the WCPA Natural Solutions specialist group to build on the existing work on protected areas as water towers ¹⁰ and with major supplies of safe municipal drinking water, by promoting these links particularly with rapidly urbanizing areas, water management companies and institutions, relevant UN agencies and with civil society. Clear, easily digestible information with techniques for costing benefits and best management.
	6.5: By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate	<i>Opportunity:</i> for the WCPA freshwater specialist group and IUCN water programme to promote whole catchment plans for water management, including protection of natural vegetation and minimization of industrial and agricultural waste. ¹¹

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	6.6: By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	<i>Opportunity:</i> protection of water towers, cloud forests, forested catchments for water, and natural floodplains for disaster risk reduction. Work for the WCPA freshwater specialist group in providing additional advice about site selection and reserve management
	6.B: Support and strengthen the participation of local communities in improving water and sanitation management	<i>Implication:</i> participatory stakeholder approaches to water management will be increasingly expected and will need to be factored into management of protected areas with freshwater resources.
	7.2: By 2030, increase substantially the share of renewable energy in the global energy mix	<i>Implication:</i> there will be growing pressure for additional hydropower schemes, already threatening protected areas in many countries: effective responses including whole catchment planning of hydropower schemes to avoid disruption will become increasingly important; a role for the freshwater specialist group
	8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services	<i>Opportunity:</i> protected areas are minor employers and income generators compared with major industry; but in rural areas they are often disproportionately important; and if local politicians recognize this they can become important champions. Stakeholder assessments of PA benefits can help.
	8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products	<i>Opportunity:</i> nature tourism is the quickest growing tourism sector, providing important opportunities also linked to 8.3 above. <i>Implication:</i> over-use of protected areas for nature tourism, badly planned developments and large tourism companies that undermine local initiatives can conversely undermine many of the potential advantages. Key role for the WCPA tourism specialist group. ¹²
	9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	<i>Implication:</i> protected areas will also be under increasing scrutiny to be resource efficient; there is a potential need for technical guidance on resource saving. The infrastructure group under the connectivity specialist group has the opportunity to intervene on this issue.
	10.1: By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average	<i>Implication:</i> there will likely be an increased focus on treatment of people living in and around protected areas, and of rangers working for protected areas.
	11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations	<i>Opportunity:</i> a role for protected areas as buffers for cities, both as important urban and peri-urban green space and for wetlands, coastal vegetation and mountain forests to provide an important DRR function.
	11.7: By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	<i>Opportunity:</i> to argue for more urban protected areas, particularly in rapidly growing cities. A key role for the urban protected area specialist group. ¹³

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	11.A: Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning	<i>Opportunity:</i> to develop strong rural-urban links, through the urban specialist group, avoiding loss of natural habitat to city sprawl through planned green space, and Payment for Ecosystem Services schemes so municipalities can support surrounding ecosystem services.
	11.B: By 2020, substantially increase 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, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels	<i>Opportunity:</i> use of natural ecosystems in protected areas to provide mitigation of and adaptation to climate change, including urban nature reserves to provide cooling and absorption for flood water
	12.2: By 2030, achieve the sustainable management and efficient use of natural resources	<i>Opportunity:</i> protected landscapes and MAB biosphere reserves in particular can act as testing and demonstration areas for a landscape/seascape approach to sustainable development.
	12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	<i>Implication:</i> all protected areas will be expected to show a lead in efficient resource use and recycling
	12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products	<i>Opportunity:</i> this is unusual in being such a specific target linked directly to the aims of WCPA. It could be a project of the WCPA tourism specialist group, to provide a monitoring framework in collaboration with relevant UN agencies and as a contribution to the SDGs.
	13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	<i>Opportunity:</i> use of natural ecosystems in protected areas to provide mitigation of and adaptation to climate change. A core aim of both the WCPA PA Climate Change specialist group and the WCPA Natural Solutions specialist group. ¹⁴
	13.2: Integrate climate change measures into national policies, strategies and planning	<i>Opportunity:</i> integrating climate change policies in protection of natural ecosystems, increasing carbon storage in soils. There are opportunities to work with UNDP and the NBSAP process and to continue making efforts to integrate natural solutions into UNFCCC strategies and thinking.
	13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.	<i>Opportunity:</i> promotion of protected areas as tools to mitigate and adapt to climate change by the PA Climate Change specialist group and the Natural Solutions specialist group.
	14.1: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution	<i>Implication:</i> this is a critical threat to many MPAs; including the Great Barrier Reef. WCPA should liaise with other IUCN commissions and with partners to ensure that this SDG does not get forgotten, ignored or over-ruled.
	14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans	<i>Opportunity:</i> several of the marine SDGs implicitly provide extra arguments for MPAs; making the wider case for MPAs as providers of sustainable fishing, coastal protection and carbon storage is important to identify them with target 14.2 and others in this goal.

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	14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels	<i>Opportunity:</i> MPAs play a (medium term) role in protecting refugia and slowing the impact of acidification
	14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics	<i>Opportunity:</i> much more effective promotion of the role of MPAs in fishery protection, nurseries and breeding grounds is needed
	14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information	<i>Opportunity:</i> a core aim of the marine specialist group. WCPA contributions here might be to enhance systematic conservation planning to identify the best sites, argue for more use of the stricter categories and more detailed advice on management. IUCN WCPA plays a key role in monitoring this target Note that the target is only to 2020, unlike most other SDGs, to match the timing of the Aichi targets and will likely to be renegotiated after 2020. The work of the WCPA Post-2020 targets task force could help craft this later target.
	14.c Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the United Nations Convention on the Law of the Sea, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of “The future we want	<i>Opportunity:</i> this provides a direct link to high seas marine protection.
	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	<i>Opportunity:</i> this is the major reference that can be interpreted as a call for protected areas in land and freshwater ecosystems (although see also 15.2, 15.4 and 15.5 below). A potential contribution from WCPA could be a briefing note on this explicit target (or perhaps the whole of goal 15) pointing out the role of protected areas in delivering successful outcomes. IUCN WCPA will play a key role in monitoring this target. Like target 14, the current timeline is to 2020 only and will likely be renegotiated – WCPA should have a central role in this debate.
	15.2: By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally	<i>Opportunity:</i> the role of protected areas in reducing deforestation, and promoting restoration
	15.3: By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world	<i>Opportunity:</i> to work with the UN Convention to Combat Desertification in promoting protected areas as tools for desertification control, soil stabilisation in drylands and suppliers of dryland ecosystem services.
	15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development	<i>Opportunity:</i> to promote the role of protected areas in mountain conservation, making particular links to water towers. IUCN WCPA can play a key role in monitoring this target

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	15.5: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	<i>Opportunity:</i> maintain and expand protected areas, and increase other effective area based conservation measures. There is no area target as for marine protected areas, or any explicit mention of protected areas. The case for use of PAs as tools to achieve 15.5 may need to be stressed. KBAs also provide an important way of prioritising the most useful areas for protection. Possibly a joint statement with the IUCN Species Survival Commission is needed. Like target 14, the current timeline is to 2020 to match Aichi 11 and will be renegotiated – WCPA should have a central role in this debate.
	15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products	<i>Opportunity:</i> a major focus on reducing poaching in protected areas, both through more effective enforcement (e.g. roll-out of SMART patrolling) and work with communities in terms of community monitoring, softer approaches to bushmeat poaching etc.
	15.8: By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species	<i>Implication:</i> there will be a major focus on control of invasive species, which the protected area community needs to embrace. Capacity building is important, with a role for the WCPA Invasive Alien Species task force and the Species Survival Commission.
	15.9: By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts	<i>Opportunity:</i> to build protected areas into wider ecosystem approaches, natural solutions to climate change etc. The WCPA guidelines on system planning are now very old, and the long-promised new guide will not address wider ecosystem issues; there is an argument for new guidance, even if brief, on integration of protected areas into wider land-use plans.
	16.7 Ensure responsive, inclusive, participatory and representative decision making at all levels	<i>Implication:</i> participatory approaches, including FPIC ¹⁵ and consultation on management approaches, will increasingly be the expected norm in protected areas: most protected area managers remain woefully under-equipped to carry this out.
	17.14: Enhance policy coherence for sustainable development	<i>Opportunities:</i> to introduce landscape approaches to management that combine protection, sustainable management and restoration into an effective whole
	17.6: Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries	<i>Opportunities:</i> increasing recognition of the need for a coordinated effort to improve land management over the next two decades. The WCPA connectivity specialist group can have a role in ensuring that well-connected protected area networks are seen as one part of meeting this challenge.
	17.17: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships	<i>Opportunities:</i> working with multiple stakeholders within a landscape, to achieve sustainable development at site and landscape level.

Summing up: priorities for IUCN WCPA

Protected areas have realistic and non-trivial links to all the SDGs, but clearly some are more significant than others. SDG 14 and 15 are closely and consciously linked to Aichi target 11, and it is important that WCPA tracks progress towards these goals and, importantly, seeks to influence the revised targets after 2020. Many other links relate to ecosystem services such as crop wild relatives (SDG 2.5); Healthy Parks, Healthy People (SDG 3.4); water (SDGs 6.3 and 6.6); ecotourism (SDG 8.9 and SDG 12.B); and mitigation of and adaptation to climate change (SDG 13.1).

Other strong complementarities exist in the areas of linking people to nature, through the Nature for All initiative (SDG 4.7); and the work on urban protected areas (SDG 11.7).

SDGs will be a major touchstone of progress in environmental and social fields over the next decade or more. WCPA could usefully consider publishing occasional reports on how protected areas, and how the Commission's work, are contributing to achievement of the Sustainable Development Goals.

This briefing has been prepared by Nigel Dudley, Natasha Ali and Kathy MacKinnon, October 2017. With thanks to Tom Brooks, Dan Laffoley and Cyriaque Sendashonga for comments on an earlier draft

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