

EDITORIAL ESSAY: PROTECTED AREAS AND THE SUSTAINABLE DEVELOPMENT GOALS

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Next year IUCN will celebrate its 70th anniversary and the World Commission on Protected Areas will celebrate its 60th birthday. During this long history there have been many conservation initiatives and creation of new conventions designed to address biodiversity loss and promote more sustainable development. Most recently countries agreed the Sustainable Development Goals (SDGs). The 2030 Agenda for Sustainable Development will be the driving force behind much of the global work on sustainable development and conservation over the next decade (United Nations, 2015). The Goals are universally applicable, but will be led through governmental commitments the to sustainable development agenda. Although the content of the SDGs has been the subject of considerable debate (e.g., The Economist, 2015), they are now fixed, and 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. Failure to do so will leave protected areas increasingly marginalised, as governments, donors and members of civil society scramble to fulfil the SDGs and conservation priorities get pushed to one side.

SDG targets 14 and 15 are consciously modelled on the Convention on Biological Diversity's (CBD) Aichi Biodiversity Targets (www.cbd.int/sp/targets/) and the timeline for delivery of these two targets is clearly linked to attainment of the Aichi Targets. Yet, the relationship between the SDGs and protected areas is not always clear cut.

SDG 14, focused on the future of the ocean, provides the clearest message, in that it consciously repeats the Aichi Biodiversity Target 11 call for the conservation of costal and marine areas and efforts to expand the global marine protected areas (MPA) network.

SDG 14.5 states: "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". However, many marine ecologists believe that the eventual MPA coverage will need to be much larger, with 30 per cent of the global ocean protected and another 50 per cent under sustainable management. Other targets of SDG 14 are aimed at increasing the resilience of marine ecosystems, reducing the impacts of ocean acidification, addressing overfishing and implementing international law to protect oceans, all of which directly relate to MPAs and their various benefits. Indeed, SDG 14 probably has the strongest direct fit with existing protected area strategies.

SDG 15, which focuses on protecting, restoring and promoting sustainable use of terrestrial ecosystems to halt biodiversity loss, is less directly linked to the protected area agenda. Target 15.1 states: "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". This does not repeat Aichi 11's call for at least 17 per cent of terrestrial ecosystems to be in protected areas; indeed, the term "protected area" does not appear at all in the SDGs. Furthermore, the critical detail in Aichi Target 11 that protected areas should be "effectively and equitably managed, ecologically representative and well-connected..." is absent. Nevertheless SDG 15.1 notes that conservation should be "in line with obligations under international agreements", which is frequently interpreted as support for the existing terrestrial component of Aichi 11. Arguably it also refers to other existing agreements including the CBD's Programme of Work on Protected Areas, contracting Parties' commitments to the Convention on Wetlands (Ramsar Convention) and obligations for sites listed for their natural values under the UNESCO World Heritage Convention and UNESCO Biosphere Reserves.

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Given the tacit understanding that the "environmental" SDGs will be revised in line with whatever supersedes the Aichi targets after 2020, the time is right for the protected areas community to communicate the value of protected areas and the contribution that they can make to the sustainable development agenda.

The role of protected areas is by no means confined to just a few targets within SDGs 14 and 15. Well-managed, properly valued protected areas contribute in concrete ways to many of the Sustainable Development Goals (Kettunen and ten Brink, 2013; ten Brink et al., 2016). Moreover other SDGs may have important implications for the ways in which protected areas are selected,

managed and relate to surrounding communities and wider society.

In line with other SDG targets protected areas can contribute to human welfare and wellbeing including poverty alleviation, food and water security, health, disaster risk reduction, sustainable cities and climate change strategies. Building on this, they can even play a role in sustaining peaceful societies and mitigating the risks for conflicts. Some of the clearest opportunities are outlined in Table 1; a more complete listing is available in Dudley et al. (2017). The challenge for the protected area community is to ensure that these contributions are fully recognised and reflected in government planning, policies and reporting.

Table 1. Key links between SDGs and protected areas

Potential responses from the protected SDG Targets relevant to protected areas area community 1.5: By 2030, build the resilience of the poor and those in Highlighting the role of protected areas as tools for vulnerable situations and reduce their exposure and adaptation to climate change (Dudley et al., 2009). vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters. 2.4: By 2030, ensure sustainable food production Protected areas enhancing food security through: systems and implement resilient agricultural practices 1. Basic supporting services such as soil production and that increase productivity and production, that help stabilisation of water supplies maintain ecosystems, that strengthen capacity for 2. Buffering against climate-related shocks adaptation to climate change, extreme weather, drought, 3. Promoting sustainable agriculture such as organic flooding and other disasters and that progressively production within Category V protected landscapes improve land and soil quality. (Phillips, 2002) 4. Securing fish stocks in marine protected areas. 2.5: By 2020, maintain the genetic diversity of seeds, Using protected areas to conserve crop wild relatives, cultivated plants and farmed and domesticated animals land races and livestock wild relatives to help build and their related wild species, including through soundly agricultural resilience (Meilleur & Hodgkin, 2004; managed and diversified seed and plant banks at the Stolton et al., 2006). national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilisation of genetic resources and associated traditional knowledge, as internationally agreed. 3.4: By 2030, reduce by one third premature mortality Developing the Healthy Parks Healthy People concept in from non-communicable diseases through prevention promoting the role of protected areas as green gyms and and treatment and promote mental health and wellplaces for treatment of mental health and addiction being. issues (Stolton & Dudley, 2010).

SDG Targets relevant to protected areas	Potential responses from the protected area community
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.	Using protected areas near urban centres (Trzyna, 2014), to provide basic knowledge of ecosystem functioning, and to address nature-deficit problems in people of all ages.
6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.	Promoting protected areas as water towers (Dudley & Stolton, 2003) in collaboration with major suppliers of municipal drinking water, by promoting these links particularly.
6.6: By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.	Expanding protected areas as a key tool for conservation of inland waters, some of the least protected habitats on Earth.
8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.	Providing important opportunities for nature tourism, the quickest growing tourism sector, in well-managed 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.	Recognising and planning the role of protected areas as buffers for cities, both as important urban and periurban green space and for wetlands, coastal vegetation and mountain forests to provide an important disaster risk reduction 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	Arguing for more urban protected areas, particularly in rapidly growing cities (Trzyna, 2014).
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	Using 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.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products.	Providing 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.	Using natural ecosystems in protected areas to provide mitigation of and adaptation to climate change (Gross et al., 2016).

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Krka National Park in Croatia supplies Šibenik-Knin County with water and is home to the first commercial hydropower plant in Europe © Equilibrium Research

The SDGs also highlight some additional obligations for protected areas. Site managers are invited to make provisions for human livelihoods through protected area establishment and management, to help meet gender targets, increase participatory approaches, reduce waste and engage fully with a wider range of stakeholders within sustainable approaches to rural development. All of these things are already actively being addressed within protected areas, although many still struggle to meet social expectations with little knowledge about where to access support and tools to deliver towards the sustainable development agenda.

For 60 years WCPA has been a leader in promoting the establishment and effective management of protected areas to conserve biodiversity and ecosystem services. Given the critical importance of the SDGs in development planning, now is the time for WCPA to communicate the importance, value and potential of the world's protected area network in helping governments to meet their global commitments for both conservation and development and a sustainable planet.

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