

SDGs at the halfway mark



Biodiversity directly and indirectly contributes to all 17 of the UN's Sustainable Development Goals. Making meaningful progress towards achieving these goals in the next seven years will require embracing their interdependencies.

Back in September 2015, the 2030 Agenda for Sustainable Development was launched at a United Nations (UN) summit in New York, USA, and introduced the world to the 17 Sustainable Development Goals (SDGs), within which are 169 associated sub-targets. Seven years on, in September 2023, world leaders once again convened to take stock on progress at the midpoint of the agenda and decide on priorities for action in the remaining seven years, and beyond.

Of the 17 SDGs, only two specifically mention biodiversity: SDG14 ('Life below water'), which focuses on marine ecosystems, and SDG15 ('Life on land'), which is focused on terrestrial and freshwater ecosystems. However, the contributions of biodiversity to the other goals are wide-ranging. A recent review estimated that biodiversity contributes directly to ten SDGs, and indirectly to the remaining seven¹. For example, crop pollination services contribute to a third of global food production (SDG2 ('Zero hunger')) and in some regions women act as key knowledge holders of crops and wild food sources, which strengthens their societal roles and [contributes to SDG2 as well as SDG5](#) ('Gender equality').

Unfortunately, progress on achieving the SDGs has been slow. By the time of the upcoming UN summit, only some 12% of targets look set to be on track and none of the 17 goals are likely to be met. For the biodiversity-related SDGs, the [2022 progress chart](#) for SDG14 indicates that the target of increasing the proportion of sustainable fish stocks is very far from its mark (and deteriorating), whereas for SDG15 all global targets are still a moderate distance from being achieved and show limited or no progress since their baseline year.

The question arises of what now needs to be done to accelerate progress towards achieving the goals. In this issue, we ask 16 researchers from around the world working across science,

conservation, policy and implementation for their reflections on biodiversity and the SDGs, and their personal views on priorities for progress towards [SDG14](#) and [SDG15](#) up until 2030. Although not intended as a comprehensive review of all targets within these two goals, the responses highlight frustrations at lost opportunities for meaningful progress. Simultaneously, they underscore the need for a greater focus on the interdependencies of the SDGs and their targets, as well as the importance of implementing national and international plans to safeguard biodiversity, such as the recent Kunming-Montreal Global Biodiversity Framework (KMGBF). As David Cooper, acting executive secretary of the Convention on Biological Diversity, outlines "It will be impossible to halt biodiversity loss without climate action, for example – or without progress on gender equity, reducing inequalities, and building peace and institutions, among other SDGs". Similarly, Jane Lubchenco, Deputy Director for Climate and Environment at the White House Office of Science and Technology Policy, says of progress towards SDG14 "Only through more holistic approaches, the incorporation of new science, adequate funding and attention to incentives will adequate progress be possible".

The increasing recognition that the climate and biodiversity crises are two sides of the same coin is a theme that runs through many of the responses, from enhancing the protection of coral reefs from warming (Emma Camp, University of Technology Sydney) to connecting policies on the effects of atmospheric CO₂-driven ocean acidification with those derived from other sources such as pollution (Cristian Vargas, Universidad de Concepción). In the terrestrial realm, authors highlight the need to protect and restore ecosystems that are crucial stores of both carbon and biodiversity, such as mangrove wetlands (Musonda Mumba, Convention on Wetlands) and forest ecosystems more broadly (Shalini Dhyani, CSIR-NEERI) – alongside the importance of these ecosystems for local livelihoods that depend on them. In China, ensuring both no net loss of biodiversity and no land-use change has become a national strategy under the ecological conservation redline designation (Xiaoli Shen and Keping Ma, Institute of Botany, CAS). Effective conservation action,

however, will ultimately rely on the development of new tools to aid decision-makers at all levels, argues Jon Paul Rodríguez (IUCN Species Survival Commission).

Although the past year has seen some cause for hope (for example, through the signing of the KMGBF and the High Seas Treaty, which both contribute directly to achieving SDG14 and SDG15), there is still much work to be done. Major investments are still required to implement the KMGBF, and – as Harriet Harden-Davies of the Nippon Ocean Voices Programme notes – the minimum number of UN member states required to ratify the High Seas Treaty has not yet been met. It has previously been suggested that roadblocks such as this may be being driven by competing priorities within nations, especially when it comes to fisheries reforms². Writing in the SDG14 Viewpoint, both Dyhia Belhabib (EcoTrust Canada) and Zuzy Anna (SDGs Center, Universitas Padjadjaran) express their frustrations at a lack of meaningful action from actors that could contribute more to ocean sustainability, especially when it comes to ending fisheries subsidies – for example, although a landmark World Trade Organization agreement was reached in 2022, less than 10% of members have so far deposited documents to officially accept its terms.

Similarly, concerns over the effects of industrial deep-sea mining are raised by Diva Amon (University of California, Santa Barbara) and Anna Metaxas (Dalhousie University), who caution that critical baseline research is still required if we are really going to understand its impact on the health of deep-sea ecosystems. However, they also highlight how this should not come at the expense of capacity building or benefits for local communities. Indeed, focusing on SDG15 target 15.6, Rachel Wynberg (University of Cape Town) and Sarah Laird (People and Plants International) argue that a radical rethinking of access and benefit sharing is required, in which funds can be redirected from sectors that are most responsible for biodiversity loss to address inequalities and historical imbalances in who benefits most from biodiversity-based trade.

The question of equity pervades much of the discourse around the SDGs, including in relation to biodiversity (which is concentrated in the Global South but disproportionately

affected by consumption in the Global North). There has been a recent call to apply the concept of 'loss and damage' to biodiversity finance, as already exists under climate change agreements³. Analysis of global research publications also points towards a widening gap in priorities focused on SDGs, in which high-income countries are producing a declining share of SDG-related content compared to low- and middle-income countries – the latter of which will be more likely to be affected

by inaction or slowed progress towards the SDGs⁴. Correcting systemic imbalances not only in the consequences of inaction on sustainable development but also in the power structures that influence international decisions should be a key focus of the UN summit.

This will be a crucial time for member states to move on from the good intentions outlined in previous summits and get down to the business of strong and rapid implementation of changes to policies and action to bring the

SDG targets back on track – not just among the biodiversity-relevant SDGs, but across all 17 goals.

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