The degradation of nature is causing ecological breakdown, exacerbating climate change and driving the emergence of zoonotic diseases. With the launch of the UN Decade on Ecosystem Restoration, there is no better time to work together to prevent, halt and reverse ecosystem degradation to help achieve the climate targets of the Paris Agreement, the Sustainable Development Goals and the proposed targets of the Global Biodiversity Framework, supporting an equitable, carbon-neutral and nature-positive future. This must be central to a green and just post-COVID economic recovery and the transformational change we need. The work of BirdLife and our Partners on the ground can provide important lessons for best practice. Here we describe eight key principles for effective and equitable nature restoration, and some examples of BirdLife’s work in action.

1. FOCUS ON QUALITY AS WELL AS QUANTITY TO ACHIEVE MULTIPLE BENEFITS FOR NATURE, CLIMATE AND PEOPLE

Ecosystem restoration, when implemented effectively and sustainably, contributes to protecting birds and biodiversity, improving human health and wellbeing, increasing food and water security and quality, delivering goods, services, and economic prosperity, and supporting climate change mitigation, resilience and adaptation. For this to occur, we need to focus on ‘quality’ as well as ‘quantity’ (following the 5Cs outcomes below): enhancing ecological integrity (aiming to restore a site’s biological and ecological attributes - including biodiversity - to or close to its natural state) and connectivity (restoring habitat corridors or a network of sites to sustain wide-ranging or migratory species and wider ecological processes) across all ecosystems – terrestrial, inland waters, coastal and marine. To halt and reverse biodiversity loss towards a global goal of being nature-positive by 2030, we must restore, buffer and reconnect priority ecosystems, including Key Biodiversity Areas (KBAs) and other areas of importance for biodiversity.

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<th>Why, what and how: the 5Cs, 3Rs and 3Es</th>
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<td>To achieve our restoration goals, we need to focus on outcomes (why we want to restore) and process (what and how to do it – the ways and means). In terms of outcomes, we propose a focus on the 5Cs: expanding ecosystem Cover (or area), improving its Condition (akin to ecological integrity), re-establishing Connectivity, addressing Climate change (including carbon storage and sequestration and supporting adaptation and resilience), and supporting Communities that depend on or benefit from it. In terms of process, taking the example of forest ecosystem restoration, this should follow the 3Rs: planting the Right species (replanting or natural regeneration of native trees including rare/endangered species), in the Right place (prioritising connecting and expanding standing natural forest over ‘afforestation’, particularly monoculture plantations where they are not naturally found), in the Right way (working with and for those most affected such as Indigenous Peoples and local communities, IPLCs). Here, equitable representation and participation is critical, which can be achieved through the 3Es: Engaging, Enabling and Empowering stakeholders, including through protecting, respecting and fulfilling human rights, building capacity, providing funding, and fully incorporating scientific, local and Indigenous knowledge.</td>
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2. DO IT THE RIGHT WAY

In order to achieve quality outcomes for nature, climate and people, restoration must be done right, following the 3Rs described in the box above: the right species, in the right place, in the right way.

3. PUT PEOPLE AT THE CENTRE

Restoration needs to be carried out with and for local people to make it both equitable and effective. For this, we need to ensure more meaningful involvement, particularly of IPLCs. As communities differ, we must consider the dynamics of social differences such as class, ethnicity, religion, culture, gender, age and spatial distribution, and how it can impact both processes and outcomes. To ensure full, equitable and effective participation in restoration efforts, to deliver the 3Es (see box above) we need to ask who participates, when (ensuring participation throughout, from the beginning of restoration planning to implementation and monitoring), and how (ensuring local stakeholders are empowered and genuinely able to influence decision-making).
4. TRACK PROGRESS THROUGH CONCRETE TARGETS AND MEASURABLE INDICATORS

We need a robust monitoring framework to track success. We need to plan and undertake monitoring and evaluation, and incorporate adaptive management and learning throughout the restoration process. Restoration needs to be assessed against clear goals and objectives using SMART (Specific, Measurable, Achievable, Relevant, and Time-bound) indicators. A range of monitoring tools and methods can be used to identify, map and track recovery progress. This can also help to recognise and assess any gap between restoration commitments and implementation, including commitments on funding and resources.

5. THINK GLOBAL, ACT LOCAL

Restoration is important at every scale and ecosystem worldwide (from global to regional to local and vice versa). We need to set global priorities based on benefits to nature, climate and people, and then hone this to local realities. While restoration actions must be tailored to the local context, we need to consider larger landscapes or seascapes and socio-ecological and cultural settings, and ensure these actions collectively add up to global commitments, to achieve transformative change.

6. INTEGRATE ACROSS SECTORS AND SOCIETY

We must mainstream policies and governance so that restoration is carried out across society and different sectors. Most importantly, we need to scale up funding and finance from both the public and private sector: restoration and green recovery on a global scale requires sustained investments to embed practice but more than pays for itself in the long run.

7. PRIORITISE ACTIONS: RETAIN AND THEN RESTORE NATURAL ECOSYSTEMS, AND ADDRESS DEGRADATION

Ecosystem restoration is part of a continuum of conservation and nature-based solutions that environmental organisations like BirdLife and its Partners are undertaking and advocating. Therefore, we must prioritise these actions, and be clear where restoration fits in. The highest priority – and the cheapest, most effective action we can take – is to first retain and restore remaining carbon- and biodiversity-rich ecosystems. Then, we need to focus on restoring fragmented and degraded ecosystems, improving ecological integrity and connectivity – either by natural regeneration or active restoration, as needed. We also need to address the drivers of ecosystem degradation, and safeguard or sustainably manage non-protected ecosystems (including agricultural landscapes and agroforestry) and reforest/afforest where feasible and necessary, following the 5Cs, 3Rs and 3Es.

8. SUSTAIN EFFORTS

The outcomes and benefits of restoration must be sustained beyond the UN Decade’s 2030 timeline (in terms of finance, capacity, legal reforms and tenure) to ensure nature’s full recovery by 2050. Evidence shows that involving local people is necessary to deliver lasting benefit, at scale, long term. By delivering multiple benefits and sustainable income streams through high quality restoration, we can retain ecosystems for future generations, tackling the biodiversity and climate emergencies, and supporting livelihood needs.

Examples of BirdLife and our Partners’ work on restoration around the world

- BirdLife and the Pan-African Agency of the Great Green Wall (GGW) have been working together since 2019 through a Memorandum of Understanding to support implementation of the Great Green Wall Initiative by 2030 and undertake: a) restoration of landscapes and ecosystems within the GGW corridor; b) development of capacities of national and local biodiversity conservation organisations; c) collection and dissemination of information on the status and trends of birds and their habitats; d) technical and scientific support for the development and application of inventory and assessment frameworks and tools; and e) support of awareness building and advocacy to support better planning and the sustainable management of KBAs. BirdLife Partners in the Sahel region have been actively involved. For example, Nature Mauritanie has been advocating for mainstreaming biodiversity across a mosaic of ecosystem types (grasslands, wetlands, forests, agroforestry) and focusing on environmental awareness and participation of local communities for successful restoration.
- Experience from the Atlantic Forest project shows that it is important to understand local socio-ecological contexts and focus on nature restoration through popular participation. While Nature Paraguay’s work has highlighted the need to locally tailor restoration efforts through the use of citizen science and natural methods, in the case of Aves Argentinenses, creation of protected areas and ecological corridors has been an important aspect of restoration.
- The Asia-Pacific Forest Governance project demonstrates the importance of involving a range of non-state actors for improved forest conservation, restoration and monitoring. Trillion Trees (a joint venture between BirdLife, the Wildlife Conservation Society and WWF to protect and restore one trillion trees by 2050) also highlights prioritising forest retention, ending deforestation, improving protection and advancing restoration (applying a right trees, right places’ approach).
- The work of the Bird Conservation Society of Thailand (BCST) on salt pan management and restoration in Thailand shows how local authorities can support restoration activities through joint planning with conservation groups.
- Nigerian Conservation Foundation (NCF)’s work has highlighted the need to enhance joined-up activities between civil societies, governments and the private sector and scale up finance for restoration. NCF has been working with BirdLife in a joint project to show how nature restoration can drive sustainable development in Africa, and the role that the EU can play.
- BirdLife is also working on a range of projects in Europe to advance restoration and has been advocating for legally-binding, time-bound targets and adequately-financed actions on the ground, including through the EU nature restoration law.
- A joint $3 billion, 10+ year Regional Flyway Initiative with the Asian Development Bank aims to restore 50 priority wetlands across the East Asian-Australasian Flyway, working with local communities to deliver goals for nature, climate and people.