

Nature restoration for green recovery and beyond: principles and best practice from BirdLife's experience

The degradation of nature is causing ecological breakdown, exacerbating climate change and driving the emergence of zoonotic diseases. We urgently need solutions which tackle the climate crisis, biodiversity loss and societal challenges together. Nature restoration is critical to this effort and 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. We have the potential to develop a global restoration movement 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, helping to create the transformational change we desperately 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, alongside 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 **4Cs** outcomes below): enhancing **ecological integrity** (aiming to restore a site's biological and ecological attributes 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 a range of ecosystems – terrestrial, freshwater, coastal and marine.

What, why and how: the 4Rs, 4Cs and 3Es

To achieve our restoration goals, we need to focus on both **process (what to do)** and **outcomes (what we want to achieve)**. In terms of process, in the context of forest ecosystem restoration, this should follow the **4Rs**: the **Right trees** (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), with the **Right stakeholders** (e.g. working with and for Indigenous Peoples and local communities, IPLCs) using the **Right means** (i.e. considering capacity, funding and sustainability). In terms of outcomes, we must focus on the **4Cs**: expanding ecosystem **Cover**, improving its **Condition** (covering ecosystem integrity and biodiversity) and **Carbon**, and supporting **Communities** that depend on or benefit from it. Finally, in terms of **how we work**, equitable representation and participation is critical, which can be achieved through the **3Es**: **Engaging, Enabling** and **Empowering** stakeholders and fully incorporating scientific, local and Indigenous knowledge.

2. DO IT THE RIGHT WAY

In order to achieve quality outcomes for nature, climate and people, restoration must be done **in the right way**, following the **4Rs** described in the box above: the right plants, in the right place, with the right stakeholders and the right means.

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 local communities differ, we need to consider the dynamics of social differences such as class, ethnicity, religion, culture, gender, age and spatial distribution, and the way it can impact both processes and outcomes. To ensure equitable representation and 'full and effective' participation in restoration efforts, to deliver the **3Es** we need to ask **who** participates, **when** they participate (ensuring participation throughout, from the beginning of restoration planning to implementation and monitoring), and **how** they participate (ensuring local stakeholders are empowered and genuinely able to influence decision-making).

BirdLife International is the world's largest nature conservation partnership, with 115 partners. Through our unique local-to-global approach, we deliver high impact and long-term conservation for the benefit of nature and people.

For more information see www.birdlife.org/post-2020 or contact:

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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 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 4Rs, 4Cs 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**. By delivering multiple benefits and sustainable income streams through high quality restoration, we can retain ecosystems for future generations, tackling the biodiversity and climate crises, 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 promote better planning and the sustainable management of [Key Biodiversity Areas](#). BirdLife Partners in the Sahel region have been actively involved in the implementation of the GGW initiative. For example, [Nature Mauritanie](#) has been advocating for mainstreaming biodiversity across a mosaic of ecosystem types (grasslands, wetlands, forests, agro-forestry) and focusing on environmental awareness and participation of local communities for successful restoration outcomes.
- 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 Argentinas](#), 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 targets and adequately-financed actions on the ground.