

1. The Mangrove Breakthrough

How to achieve our goal for people, planet, and biodiversity

The Mangrove Breakthrough brings together technical experts, civil society organizations, financial institutions, governments, Indigenous Peoples and local communities and funding agencies to accelerate a comprehensive, coordinated, global approach to mangrove conservation and restoration at a scale that matters. Through a Community of Action, endorsers commit to ambitious but achievable contributions toward a goal of securing the future of 15 million hectares of mangrove globally by 2030. This will be achieved by halting mangrove losses, restoring half of recent losses, and doubling protection of mangroves globally, all supported by raising USD \$4 billion in sustainable finance. The following Principles¹ serve as guardrails, so endorsers can contribute to the Breakthrough in meaningful and productive ways that make sense for them.

The Mangrove Breakthrough Principles		
1. Safeguard nature and maximize biodiversity	2. Employ the best information and practices	3. Empower people
4. Align to the broader context – <i>operate locally and contextually</i>	5. Design for sustainability	6. Mobilize high-integrity capital

Guiding Principle 1: Safeguard Nature and Maximize Biodiversity

Protecting the remaining intact mangrove ecosystems, enhancing their resilience, and implementing science-based ecological restoration protocols

At the bare minimum, negative impacts for nature need to be understood and avoided: no planting in valuable mudflats or seagrass beds or on top of naturally regenerating saplings. Restoration and conservation actions should purposefully strive for positive biodiversity impacts. Instead of hoping that an area and services can be fully restored later, conserve what is there now. When you do need to restore, instead of planting monocultures, aim for restoring a mangrove ecosystem with multiple species, natural hydrological flows, and natural zonation. A biodiverse mangrove ecosystem has greater variety in root types, tree sizes, foliage, and fruits, thus fulfilling different functions and attracting diverse fauna. This results in the provisioning of multiple goods (timber, fodder, honey, fruits, and fish) and services (enhanced coastal protection, carbon storage, water purification, fisheries enhancement). Such mangroves are also likely to be more resilient to climate change.

¹ These Principles were developed to align with the definition of high quality as outlined here: <https://merid.org/high-quality-blue-carbon/>

Principle 2: Employ the Best Information and Practices

Using the best available science-based knowledge, including indigenous, traditional, and local knowledge, for mangrove interventions

Make use of the best available science, including lab and field-based measurements as well as traditional and local knowledge and experiences that has often been developed and refined over centuries. Convene a multi-disciplinary and multi-sectoral team to help integrate biophysical as well as socio-economic aspects and to ensure different stakeholder perspectives are represented and addressed. System understanding at all these levels is needed to get to the root causes of mangrove loss and degradation, so that interventions can be tailored accordingly. Given that mangroves depend on water and sediment coming from the land as well as the sea, such connections need to be understood and accommodated at the land and seascape scale for mangroves to thrive. These dynamic environments require a 'learning by doing attitude' adaptive management approach to be successful. Therefore, scientific and historical knowledge of the local landscape should be paired with traditional knowledge as well as proven conservation and restoration methods to optimize project outcomes and longevity.

Principle 3: Empower People

Implementing, in all aspects of project design, social safeguards to protect and enhance community member rights, knowledge, and leadership to achieve fair and equitable benefit sharing

Mangroves provide essential services to protect and sustain coastal communities, including ensuring water quality, food provision, livelihoods, climate mitigation, and climate adaptation. Local actors – and their representative institutions – need to be capacitated to meaningfully engage and advocate for their needs in all aspects of a project including design, implementation, and policy dialogues. The project governance structure needs to facilitate participation and decision making as well as fair and equitable benefit sharing. Mangroves can offer many tangible benefits to local communities, some of which can be monetized such as ecotourism, wild capture fisheries and provision of food and fodder. Restoration and conservation could aim to create a mangrove-based economy that optimizes such mangrove benefits while avoiding over-exploitation and introducing alternative livelihoods that do not degrade mangroves. Wealth acquisition should be aligned with nature's capacity, and it needs to take into consideration the aspirations of equitable societies. Power dynamics must be transformed to enable marginalized communities access to resources through political systems characterized by good governance, high levels of local participation, and transparency. The safety of all people, but especially vulnerable and marginalized populations such as women, children, Indigenous Peoples, and other minority groups should be prioritized in all aspects.

Principle 4: Align to the Broader Context - *operate locally and contextually*

Operating in the local context, including cultural customs, resource use, management and ownership regimes, while taking a land and seascape approach and aligning to international trends and their local implications

Operating in the local context includes cultural customs, gender and power dynamics, resource use, management, and ownership regimes, and social, policy and governance structures. Problems and opportunities should be tackled and pursued at all levels, based on the recognition that local resource concerns are impacted by decisions and trends emanating from local, national, and international levels. Additionally, given their position between land and sea, there are typically several government departments involved from local to national level, each with different mandates and targets. One ministry may strive to protect the mangrove for carbon storage and coastal protection while the other may want to advance aquaculture for food security and yet another may seek to develop a national highway or waterfront city along the coast. Additionally, the communities along coastlines are often small and operating independently of one another, rather than in a coordinated or homogeneous fashion. For these reasons, the land and resource ownership, use rights and management regimes as well as cultural considerations are a patchwork and sometimes unclear in mangroves. Thus, different perspectives need to be aligned in a shared vision and plan.

Principle 5: Design for Sustainability

Creating sustainable mangrove projects and programs needs to be inclusive of how these initiatives will last into the future, including financing, threat abatement, community stewardship, and climate change

Any effort to conserve and restore nature comes with risks pertaining to sustainability beyond the project lifetime. Risks related to changes in political priorities, long-term financing of interventions, changes in societal needs, and climate change all pose concerns. Mitigation measures should be put in place to address risk of reversal and ensure durability for the longest timescale possible. Some options include social and livelihood improvements to reduce pressures on the ecosystem resources, creating local ownership in mangrove projects as well as creating an enabling policy environment and designing solutions that address biophysical and socio-economic root causes of loss and degradation. Implementation of restoration does not automatically mean restoration is successful, and it is suggested that it takes at least 5-years to assess the success of a restoration project. In developing restoration projects, an intermediary marker which would suggest a positive trend towards restoration can come after the first year. Large scale trends in socio-political dynamics and human activities (such as increased migration of people to the coast) can also impact the success of a project. Additional biodiversity loss or species movement might deliver cumulative or accelerated negative impacts. While these forces are outside the immediate control of the project, they should be accounted for and addressed in adaptive management plans.

Principle 6: Mobilize High Integrity Capital

Ensuring capital flows at the scale needed and allowing funding to be distributed to ready-to-scale projects

There is currently a gap between global ambition for mangrove protection and restoration and the reality on the ground, where finance to jumpstart new projects and programs, and long-term finance to maintain current efforts, is insufficient. Reverting the trend of loss and degradation requires transformational societal changes as well as large-scale restoration for those mangroves that are not irretrievably lost. Philanthropic and public financing alone cannot foot the bill with the urgency needed. Private sector funding must be mobilised at scale and at speed alongside. However, finance needs to be tailored to the context, support high-quality projects and programs (that adhere to these principles), and ensure fair and equitable disbursement. On the other side, funders need to also be held accountable. If they are funding climate mitigation strategies in mangroves, they also need to be reducing their own emissions, investments in mangroves need to have clear and fair terms that all impacted communities and stakeholders agree to, and risks need to be shared.