# LANDSCAPE RESTORATION

CONSERVATION INTERNATIONAL

## Six Transformative Changes for Bringing Life Back to Land

Avoiding catastrophic climate change requires that we, as a human society, reach net zero emission by 2050. While it is crucial that we stop emissions as quickly as possible, avoiding a climate tipping point will also require the massive removal of $CO_2$ from the atmosphere.

**Restoration, regrowing degraded areas of land, is the only cost-effective way of removing atmospheric carbon at scale. What's more, restoration—when done correctly—can help local communities adapt to climate change while delivering substantial biodiversity benefits. Restoration gives us an opportunity to build a world that uplifts people, protects species, and heals the planet.**

### OUR WORLD TODAY

**3.2 BILLION PEOPLE ARE** impacted by land degradation worldwide[1]

**100-1000 GIGATONNES OF $CO_2$ MUST BE REMOVED FROM THE ATMOSPHERE** by 2100 to avoid catastrophic climate change impacts[2]

**10% OF GLOBAL GDP** is lost every year due to land degradation[1]

**LESS THAN 30 MILLION HECTARES** of land have been put under restoration since 2011[4]

### OUR WORLD RESTORED

Restoration can **DIRECTLY BENEFIT RURAL COMMUNITIES** by increasing their resilience to climate change, building their resource base, and even addressing gender disparities[1]

**RESTORATION COULD REMOVE 400 GIGATONNES OF $CO_2$** by 2100[3]

Every $1 invested in restoration generates, on average, **10 TIMES THAT AMOUNT IN BENEFITS**[1]

**OVER 1 BILLION HECTARES** are available to restore without impacting food security[5]

### HERE'S WHAT WE NEED TO DO TO GET THERE:

1. Center and support **RURAL AND INDIGENOUS PEOPLES** in securing land tenure by committing long-term finance and technical assistance
2. Use the **LATEST SCIENCE** to optimize land uses, while minimizing conflict and leveraging the potential of nature to provide food, habitat, and carbon storage
3. Build long-term, landscape-level, cross-sectoral **COALITIONS** to coordinate implementation and governance
4. Recognize and prioritize **NATURE'S INHERENT ABILITY** to restore itself
5. **FACILITATE, FUND, AND LEGISLATE** for the development of regenerative livelihoods and economies
6. Grow the **GLOBAL POOL OF CAPITAL** available for restoration

# THE FOLLOWING SIX STEPS WILL HELP PUT US ON TRACK TO HEAL THE PLANET AND THE PEOPLE WHO LIVE WITH IT.

### 1. Center and support rural and indigenous peoples in securing land tenure by committing long-term finance and technical assistance

Our ability to successfully restore the planet is dependent upon the centering of indigenous peoples and rural communities. Rural and indigenous peoples are the original stewards of the Earth, and their knowledge and proximity to the land is key to successful restoration. These communities manage a majority of the planet, and thus they are best positioned to lead restoration efforts—provided they receive proper recognition and support. Many such communities are confronted with challenges that arise from centuries of systematic oppression, imperial exploitation, and abandonment. Yet these communities continue to manage their land and, often, to resist ongoing exploitation. As such, government and NGOs must prioritize support for the existing restoration efforts of these communities in a way that proactively addresses the legacies of colonization. Such support can come in the form of the development of land stewardship tools that incorporate both scientific and traditional knowledge, the provisioning of legal support to secure land tenure, and investments in regenerative livelihoods.

### 2. Use the latest science to optimize land uses, while minimizing conflict and leveraging the potential of nature to provide food, habitat, and carbon storage

Over 50 countries have made pledges to restore 170 million hectares of land by 2020. Yet, very few of these pledges are backed by robust scientific analyses and the planning necessary to balance all land-use needs. Instead, restoration plans are developed opportunistically, with no or insufficient scientific analyses that bring social and ecological variables. But, the science and the tools exist to do all of this. Innovations in spatial assessments can help identify the degree to which an ecosystem has been degraded, the kinds of species that are likely to survive there under a changing climate, and the types of ecosystem services that could return to the landscape with different restoration techniques. Such assessment must then be paired with community-led stakeholder planning sessions to ensure community needs, as well as traditional and local knowledge, are properly centered. Final plans must then be publicly communicated, and incentivized, so as to crowd in the resources necessary for operationalization.

### 3. Build long-term, landscape-level, cross-sectoral coalitions to coordinate implementation and governance

Ecosystem restoration requires long-term collaboration between local and national governments, local businesses, multinational companies, non-profits, funders, and local communities. Right now, there are few functioning coalitions that reflect such collaboration, and those that do exist have not successfully delivered on the scale of their ambition. Governments need to provide the regulatory certainty for such a coalition to form and survive over project lifetimes (10-15 years). Funders need to move beyond three-to-four-year funding periods and be willing to stand beside implementors for the long-term. The private sector must build the reality of climate change into their business models

by supporting restoration investments in their supply chains while working to create net positive climate impacts through their operations. NGOs can play a convening role for all relevant actors, to ensure that proper science and social safeguards are used, and to help shape the enabling conditions required for positive outcomes. And local communities must be the ones leading the vision development and implementing on the ground.

### 4. Recognize and prioritize nature's inherent ability to restore itself

All ecosystems have the potential to "bounce back," or regenerate from low-level disturbances. Encouraging this, what ecologists call natural regeneration, is the cheapest and most effective way of bringing ecosystems back to life. Enabling natural regeneration can cost 3 to 6 times less than traditional methods of tree planting. Around 238 million hectares are available globally for natural regeneration, if the threats impeding regrowth are controlled. Unfortunately, only a very small portion of this areas (less than 10%) have successfully been restored, primarily because these areas have historically not been properly identified nor the factors inhibiting regrowth controlled. We now have the science necessary to predict where natural regeneration can occur and the degree of management it will require to be successful. Decision-makers can use that information to develop restoration plans that remove threats to those areas and only actively plant trees in sites that do not have the capacity to come back on their own.

### 5. Facilitate, fund, and legislate for the development of regenerative livelihoods and economies

At least half of the area we need to restore will require direct human stewardship via restoration practices such as agroforestry, silvopasture and improved forest management systems – all of which can deliver strong ecological and social benefits. Local communities are crucial allies in restoration endeavors, but governments must create the right conditions and incentives for them to build livelihoods from restoration practices. Such policies must include the creation of enabling conditions for regenerative land management (including direct economic support for restoration businesses and socially appropriate, high-quality investments in rural education, infrastructure, and health care), but also the removal of policies that disincentivize regenerative land management (including the removal of laws that do not allow for sustainable use of secondary forests).

### 6. Grow the global pool of capital available for restoration

Rising to the global restoration need will cost hundreds of billions of US dollars over the next decade. While the costs of restoration can be driven down using many of the practices above, there is still an urgent need to grow the pool of money available. Perverse subsidies around industrial agriculture and oil must be removed and channeled instead to supporting businesses and communities that play an active role in growing human and natural capital. Carbon taxes should have specific windows earmarked for investments in cost-effective restoration projects with robust social safeguards. The private sector must develop specific operational, philanthropic and investment strategies to ensure that their businesses are net climate-positive (not simply low or net-zero impact), and restoration will be a crucial piece of such strategies. Lastly, philanthropic sectors can support growing the pool of capital by helping to de-risk long-term blended financing schemes.


# THE FUTURE OF RESTORATION

## at Conservation International

Over the past 10 years, Conservation International (CI) has contributed to refining best practices for bringing ecosystems back to life in ways that respect the needs of local communities while supporting biodiversity and removing carbon from the atmosphere. Through this process, Conservation International has developed high-impact partnerships with governments, corporations, other NGOs, and community cooperatives, conducted cutting-edge scientific research, and developed innovative restoration finance mechanisms.

During the next 10 years, we will focus on scaling our work from several hundred-hectare projects to 10,000+ hectare landscape-scale projects in ways that respond to the global need. Conservation International's Restoration Strategy has a two-pronged approach: demonstration and policy. Conservation International is investing in restoration in a number of landscapes across the globe, to showcase how science, community leadership, multistakeholder coalitions, and innovative finance need to work together to deliver restoration impacts at scale. In parallel, we are working with country governments to help them identify key policy mechanisms that can be used to unlock the most cost-effective and socially appropriate restoration strategies at a national scale.

### References

[1] IPBES. 2018. The IPBES assessment report on land degradation and restoration.

[2] IPCC. 2018. Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.

[3] Griscom et al. 2017. Natural climate solutions. PNAS. Vol 114, issue 44, p. 11645-11650.

[4] NYDF Assessment Partners. (2019). Protecting and Restoring Forests: A Story of Large Commitments yet Limited Progress. New York Declaration on Forests Five-Year Assessment Report. Climate Focus (coordinator and editor).

[5] Bastin et al. 2019. The global tree restoration potential. Science. Vol 365, Issue 6448, pp. 76-79

For more on how Conservation International is working to deliver on the promises of restoration, visit **WWW.CONSERVATION.ORG/RESTORATION**

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