FRONTIERS OF CHANGE

SCALING UP ECOSYSTEM RESTORATION FINANCE STOCK-TAKE REPORT ON SCALING UP **ECOSYSTEM RESTORATION FINANCE**





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WHITE PAPER







Humanity is embedded in nature and depends profoundly on the goods and services it generates. Future economic development and well-being hinge on healthy and resilient ecosystems that provide our food and raw materials, drinking water and clean air, and stabilise the climate system. More than half of the world's gross domestic product is generated in sectors such as construction and agriculture that depend on ecosystem services (WEF 2020), making nature relevant not only to policymakers, but also business and financial leaders.

Humanity's demands on nature far exceed its ability to regenerate. This gap is widening (GFN 2022), leaving vast areas of the planet degraded and threatening provision of key

ecosystem services. Three-quarters of Earth's ice-free land surface and two-thirds of its marine environment had been significantly altered as of 2019 and at least 20% of land surface is now degraded. Biodiversity is also in steep decline, with nearly 1 million animal and

plant species (of 8 million recorded species) threatened with extinction (IPBES 2019). This has taken a toll on nature's ability to provide goods and services. Since 1970, 14 of the 18 assessed categories of ecosystem services, particularly regulating services, have been declining (IPBES 2019).

Bringing back the services of oncedegraded ecosystems – for example, by restoring forests and agricultural soils or giving fisheries space to recover – benefits both people and the planet. Restoration is "the process of halting and reversing degradation, resulting in improved provision of ecosystem services, and recovered biodiversity" (UN Decade 2021).

Ultimately, restoration reverses the decline in the quantity and quality of the stock of natural assets. Loss of these assets can reverse development gains, aggravate fragility and conflict, and exacerbate climate



change and climate impacts. Conversely, recovering ecosystem functionality through investments in restoration of degraded natural, semi-natural, production and urban ecosystems is necessary to meet both the Sustainable Development Goals and the targets set in the Paris Agreement.

Why scaling up investments in restoration is critical

The importance of restoration is increasingly recognized – not least due to the challenges posed by climate change – but more action and funding are urgently needed to scale up restoration. As climate change accelerates, healthy ecosystems will serve as a critical buffer against climate impacts. For example, the soil on a farm that has switched from conventional to regenerative farming practices will hold more water, helping mitigate the impacts of both flooding and drought on crops. Likewise, a healthy mangrove can reduce the impacts on communities and infrastructure of a tropical cyclone.

Awareness about the value of nature and commitments to restore it by governments and the private sector is increasing. This is especially evident as the world prepares for the post-2020 global biodiversity framework to be agreed upon at the CBD COP15. Governments, financial institutions and businesses have committed/pledged themselves to increased restoration efforts through several high-level global commitments, such as the Bonn Challenge. However, as of 2021, land restoration initiatives represent a small fraction of the area of degraded land thought to be suitable for restoration, and further areas continue to be degraded (UNCCD 2022).

Importantly, many pledges remain unfunded and how to finance restoration at scale remains a challenge. Most of the financing for restoration comes from public sources. It will not be sufficient to meet the amounts required to address the scale of the challenge. Moreover, large financial flows, including subsidies, continue to drive environmental degradation (Deutz et al. 2020) and are at least an order of magnitude greater than those that are beneficial (OECD 2020; World Bank Group 2020, 2021; Koplow and Steenblik 2022).

Mapping and monitoring private sector investment in restoration is hindered by definition and data challenges. However, this funding is clearly low in relation to public spending and overall need. Finance needs to be mobilised across the full restoration continuum both through 'greening finance' (ensuring that financing does not flow to activities that degrade nature) and 'financing green' (directing capital towards direct investments in restoration (see Figure ES-1).¹





Figure ES-1. The Restoration Continuum Source: adapted from Gann et al. (2019).

Restoration has enormous potential to generate market and non-market benefits for different types of investors. It is estimated that for every dollar spent on ecosystem restoration, between USD 7–110 in economic benefit (a calculation based on a series of studies).² derived from ecosystem services gained.² Restoration can generate market benefits in the form of financial returns or savings, as well as social and environmental non-market benefits to public, private and philanthropic investors (see Figure ES-2).







Figure ES-2. The benefits of restoration by investor sector





2. Key drivers of underinvestment

The economic and business case for different types of restoration projects has not been **convincingly made**. This stems from the concern that restoration is mostly an up-front cost, with long-term social and environmental benefits that cannot be easily monetised. Key drivers of underinvestment include: insufficient awareness about the critical role of •

- ecosystem services in the economy and society
- lack of a taxonomy of restoration activities and ٠ standardised frameworks and institutions for managing a portfolio of restoration projects
- inadequate knowledge and data on the costs ٠ and benefits of restoration
- the structure and timing of the costs and benefits of restoration, which make the riskreturn profiles of investments less competitive than other types of investments
- lack of knowledge about bankable business • models for restoration projects





- difficulty monetising the benefits of some types of restoration
- taxes and subsidies that drive degradation and fail to incentivise restoration
- lack of sectoral and financial policy and regulation that incentivise private sector investment in restoration
- land and sea tenure uncertainty or insecurity and unequal distribution of derived benefits, preventing sound governance and management of the natural assets

3. Emerging solutions

Now is the time to act - and solutions do exist as market and regulatory dynamics are increasing the potential for recognizing nature's benefits. The fall in supply of ecosystem services coincides with growth in the global population, incomes, and consumption, as well as climate change, and contributes to potentially higher monetary values for ecosystem services. Monetizing the value of these benefits is key to unlocking more sources of private investment, in various ways. For example, while the extent of these interventions is still quite small, governments and the private sector are taking steps to develop and deepen payment for ecosystem services (PES) programmes and markets. This includes PES for carbon storage and sequestration, water provision and biodiversity credits, which can improve returns. Other sources of revenue, such as from ecotourism services and sustainably manufactured products, are also on an upward trajectory.

Cost savings and life cycle benefits from restoration are being integrated into project finance. Meanwhile, insurance markets are also taking steps to better account for increased resilience from restoration. This can result in reduced insurance premiums and, ultimately, cost savings. However, there is a need for actors in the public, private and non-profit sectors to take steps to accelerate the shift in the economics of restoration and address the barriers described above. Actors from across sectors can contribute to improving awareness about the important role of ecosystem services in our economies and communities. Additionally, these actors can take steps to design, expand or improve the environmental and social impact of PES programmes and markets. For example, biodiversity could be better integrated into the voluntary carbon market and equitable benefit sharing could be improved. Additionally, countries can develop and implement national water PES programmes.

Governments must urgently develop and implement nature-positive policy and regulation. To that end, they could reform fiscal programmes both to incentivise investment and restoration and to provide



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disincentives for activities contributing to degradation. Governments can also pursue sectoral regulation that mandates restoration, and financial sector regulation that encourages financial institutions to shift to more nature-positive portfolios.

Restoration involves a wide range of activities, including agroforestry, silvopasture, reforestation, mixed species plantations, riverbank restoration, natural regeneration,⁴ assisted natural regeneration and farmermanaged natural regeneration.⁵ While many actions can improve the economics of restoration across the full spectrum, there is a need for financing approaches, standards and best practices for each category of restoration activities. Projects and businesses operating in each category can then be aggregated within a given geography to increase the size of investment, diversify risk and reduce the cost of capital. An agreedupon taxonomy or classification of restoration

activities and associated investment opportunities could better enable this.

Developing and publishing information on restoration costs, benefits, business moand **best practices is critical to scaling** investment in restoration. This information, aligned with the taxonomy described above, is needed to make a compelling investment case to the range of different actors, including governments, that can contribute to restoration. Cost and benefit data should be as localised as possible, providing information specific to countries and bioregions.

There is urgency for these data for lowand middle-income countries, where the need for restoration investment is greatest and costs tend to be lower. Tools that enable governments, investors and project developers to apply these data, and analytics that map out investment opportunities, could support restoration investment.

The World Bank's analysis of the costs and benefits of large-scale mangrove restoration in Indonesia provides a good example of such a tool.⁵ Analysis of benefits should apply a broad lens to provide a holistic picture of the impact of restoration. It may include granular data and local knowledge, including from Indigenous Peoples and local communities. Additionally, there is a need to develop case studies demonstrating business models and best practices for developing "Bankable Nature Solutions."

Once these steps are complete, public, private and non-profit actors can collaborate to link investment needs and opportunities with appropriate funding sources. For example:

Corporations represent an important • potential source for restoration finance through investment in resilient supply chains for food and fibre-based products (Bancilhon et al. 2018).



- Institutional investors are looking for opportunities with market returns that are compatible with or contribute to their net zero and sustainability goals and commitments.
- Impact investors and philanthropic • finance weight environmental and social impacts more highly than traditional investors, and may be willing to pay for impact.
- Public and concessional finance can be blended with the sources detailed above to de-risk or credit enhance.

A key challenge is enabling locally led initiatives to access capital from large financial institutions and donors. Local actors are implementing many of the most impactful restoration interventions through small projects. Thus, financing restoration at scale often requires a coalition of investors and donors that support a consortium

of actors working on the ground.⁸ It is critical to improve the efficiency and standardisation of portfolio management so such financing can be scaled up. Lessons and best practices can be drawn from programmes such as Initiative 20x20, AFR100 and the Great Green Wall Initiative.

These actors can also collaborate on developing investment vehicles for standardisation that enables replication and aggregation to reduce the cost of capital for restoration projects. Standards and labels will be critical to enabling the flow of capital to often small-scale projects. Compared with the engineering standards used for infrastructure, restoration projects are likely to have more process-focused standards or labels; by definition, restoration will require unique practices that will have a distinct impact in each bioregion.

The role of the UN Decade Finance Task Force (FTF) is to catalyze actions that can contribute to unlocking the capital needed to meet the Decade's goals. The FTF will coordinate catalytical research, tools, datasets, projects and partnerships. It will also take steps to increase awareness and foster political will in the public or private sectors to support scaling up of investment in ecosystem restoration. This Stock-take report is the first in a series of FTF outputs that will chart the course of the Task Force efforts through 2030. Based on the Stock-take, a Roadmap will lay out FTF work in the coming years. It will cover the primary research of the FTF conducted through its members and also showcase the work of others relevant to the financial sector. The Roadmap will be structured around the four key pillars (Table ES1) with initial workshops covering these topics kicking off in early 2023.



Table ES1. FTF Roadmap Pillars (to be further developed)

PILLARS	FTF OUTPUTS	P
PILLAR 1: GOVERNMENT AND SECTORAL POLICY LEVERS	 Identification and promotion of relevant work by partners 	•
PILLAR 2: KNOWLEDGE, DATA, AND TOOLS	 Taxonomy of restoration activities Restoration cost/benefit database,analytics, tools, and training Restoration trade-offs assessment guide 	•
PILLAR 3: FINANCIAL SECTOR REGULATION, AND INITIATIVES	 Review of key financial sector regulation guidance, and analytical tools to ensure restoration is appropriately accounted for (i.e. taxonomies, credit rating methodologies, risk assessment approaches, etc.) 	•
PILLAR 4: FINANCIAL MARKETS AND INVESTMENT INSTRUMENTS	 Templates for replicable or scalable investment structures (typology of restoration investments) Publication assessing Monitoring, Reporting and Verification (MRV) cost reduction trends and barriers 	•

PARTNER OUTPUTS

- Research on how to create a supportive enabling environment for restoration
- Case studies on successful subsidy reform/PES programs, frameworks, or regulation
- Case studies on successful landscape-scal e integrated planning
- Presentation of key restoration data sets to a group of relevant private sector actors and collect feedback on additional data needs
- Tracking and analysis of restoration investment flows
- Approach for integrating credits for co-benefits with carbon credits (i.e. biodiversity, water, etc.)
- Publications, guidance, and/or support for countries and the private sector on natural capital accounting
- Workshops exploring how to bener integrate restoration bener integrate restoration into financial sector regulation, guidance, and analytical tools
- Analytical papers assessing potential to bener integrate restoration
- Case studies showcasing restoration investment and regenerative business models
- Provide input or technical assistance to investment platforms
- Support standardization of investment contracts
- Standards/label for NbS projects building on FAST Infra's Sustainable Infrastructure Label
- Cooperation with the UN Decade Best Practices Task Force to implement the Capacity, Knowledge and Leaming Action Plan
- Guidance to UN Decade partners leading Restoration Challenge for Finance



Sources

- 1. World Bank 2020. Mobilizing Private Finance for Nature. Washington, DC: World Bank. https://pubdocs.worldbank.org/ en/916781601304630850/Finance-for-Nature-28-Sep-web-version.pdf
- 2. Groot et al. 2013; Blignaut et al. 2014; Verdone and Seidl 2017; WRI 2017; UNEP et al. 2018; FAO and UNEP 2021.
- 3. Castro M. 21 July 2022. The secret behind ecological developments that meet new sustainable tourism standards. *Forbes*. https://www.forbes. com/sites/forbesbusinesscouncil/2022/07/21/the-secret-behindecological-developments-that-meet-new-sustainable-tourismstandards/?sh=6d27bb887144
- 4. Stanturf JA, Palik BJ, Kasten R. 2017. Contemporary forest restoration: A review emphasizing function, *Forest Ecology Management,* 23 August. https://daneshyari.com/article/preview/86466.pdf
- 5. World Bank. 2022. The economics of large-scale mangrove conservation and restoration in Indonesia. Washington, DC: World Bank. https://thedocs.worldbank.org/en/ doc/89fd7ff87561a4a913ed3371278e7933-0070062022/ original/The-Economics-of-Large-scale-Mangrove-Conservation-andRestorationin-Indonesia-Technical- Report-Interactive-220603.pdf 7
- 6. WWF. 2022. Bankable Nature Solutions. Gland, Switzerland: World Wildlife Fund. https://wwf.panda.org/discover/our_focus/finance/ bankable_nature_solutions/

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GLOBAL LANDSCAPES FORUM

The Global Landscapes Forum (GLF) is the world's largest knowledge-led platform on integrated land use, dedicated to achieving the Sustainable Development Goals and Paris Climate Agreement. The Forum takes a holistic approach to create sustainable landscapes that are productive, prosperous, equitable and resilient and considers five cohesive themes of food and livelihoods, landscape restoration, rights, finance and measuring progress. It is led by the Center for International Forestry Research (CIFOR), in collaboration with its co-founders UNEP and the World Bank and Charter Members.

Charter Members: CIAT, CIFOR-ICRAF, CIRAD, Climate Focus, Conservation International, Crop Trust, Ecoagriculture Partners, The European Forest Institute, Evergreen Agriculture, FAO, FSC, GEF, GIZ, ICIMOD, IFOAM - Organics International, The International Livestock Research Institute, INBAR, IPMG, IUFRO, Rainforest Alliance, Rare, Rights and Resources Initiative, SAN, TMG-Think Tank for Sustainability, UNCCD, UNEP, Wageningen Centre for Development Innovation part of Wageningen Research, World Farmer Organization, World Bank Group, World Resources Institute, WWF International, Youth in Landscapes Initiative (YIL)

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