



Food and Agriculture
Organization of the
United Nations



Sustainable financing for forest and landscape restoration

KEY MESSAGES

Forest and landscape restoration (FLR)

An active process that brings people together to identify, negotiate and implement practices that restore an agreed optimal balance of the ecological, social and economic benefits of forests and trees within a broader pattern of land uses

Costs of degradation

Forest loss
USD 2–5 trillion
each year*

Landscape degradation
3–16%
of agricultural GDP

* TEEB data

FOREST AND LANDSCAPE RESTORATION (FLR)

What it costs



Bonn Challenge
2011–2020
 150 million ha
 USD 36 billion/year

New York Declaration on Forests
2014–2030
 350 million ha
 USD 49 billion/year

Land degradation neutrality
 (SDG Target 15.3)
2015–2030
 2 billion ha
 USD 318 billion/year

A rough estimation for key targets, based on an estimated cost of USD 2 390 per hectare

Why invest in FLR?

BENEFITS OF FLR INVESTMENT

Socio-economic benefits

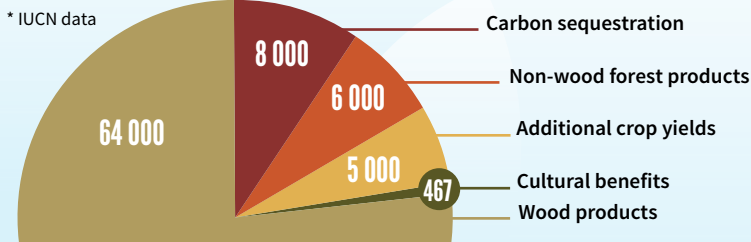
- Job and income creation through restoration economy
- Wood and non-wood forest products
- Enhanced crop yields and food security
- Resilience of livelihoods of local communities
- Cultural/recreational benefits

Environmental benefits

- Restoration of degraded land/ecosystems
- Soil conservation
- Climate change mitigation and adaptation
- Disaster risk reduction
- Improved habitats and biodiversity
- Enhanced freshwater supplies

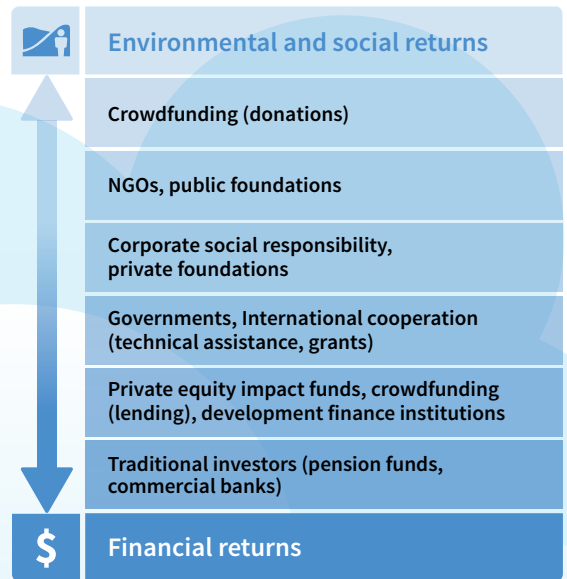
Include both in cost-benefit assessment!

A rough assessment of the benefits delivered by the Bonn Challenge (million USD/year)*



From the estimated overall annual benefits (USD 84 billion) and the estimated yearly budget required for FLR (USD 36 billion), it appears that the global benefits of FLR are more than twice the costs.

DIFFERENT INVESTORS EXPECT DIFFERENT RETURNS



COSTS, BENEFITS AND RATE OF RETURN OF FLR

\$	Cost (USD/ha)
✓	Benefits (USD/ha)*
◀	Returns **
📊	Benefit-cost ratio

* Net present value of benefits over 40 years
 ** Internal rate of return

Tropical forests

\$ 3 450
 ✓ 148 700
 ◀ 50%
 📊 37.3

Lakes/rivers

\$ 4 000
 ✓ 69 700
 ◀ 27%
 📊 15.5

Other forests

\$ 2 390
 ✓ 26 300
 ◀ 20%
 📊 10.3

Woodland/shrubland

\$ 990
 ✓ 32 180
 ◀ 42%
 📊 28.4

Inland wetlands

\$ 33 000
 ✓ 171 300
 ◀ 12%
 📊 5.4

from TEEB data

Who is investing in FLR?

FUNDING SOURCES

Climate finance

Voluntary carbon markets; REDD+; CBR; small grants; adaptation funds; Green Climate Fund; national climate funds

Private sector

Corporate social responsibility; private impact funds; institutional investors

Development cooperation

Development finance institutions; technical cooperation agencies

Non-governmental funding

International, national and local NGOs and foundations

Environmental funds

Extrabudgetary funding; private, public, national, international sources

State budgets and resources

FLR integrated in budgeting system; public incentives for FLR (e.g. payments for ecosystem services)

Non-traditional funding

Crowdfunding; green bank cards

DIFFERENT TYPES OF CAPITAL

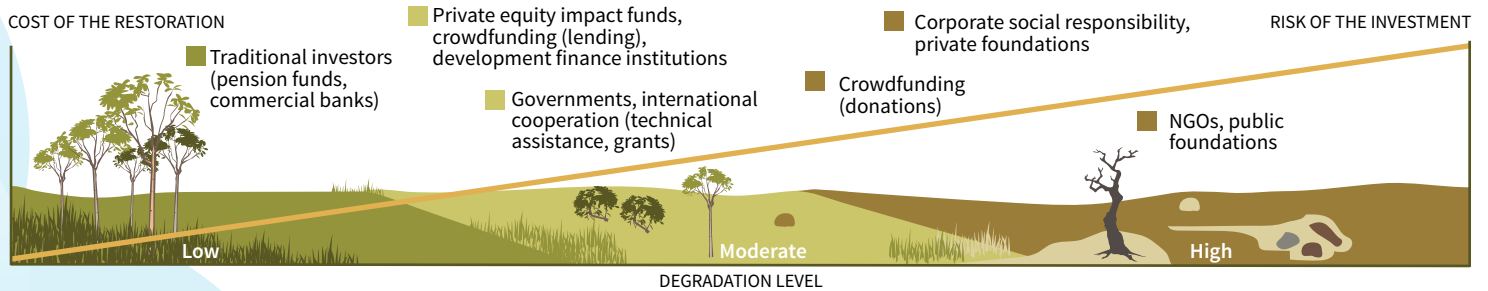
Three investment steps

Different forms of assets and capital types



Risks and barriers for FLR investment

The more degraded the landscape, the higher the cost of restoration and the higher the risk of the investment. Different investors are willing to accept different levels of risk.



SOME SUCCESSFUL RISK COVERAGE MECHANISMS

CAF and the Regional Initiative 20x20

The Development Bank of Latin America (CAF) is setting up a partial risk guarantee mechanism offering coverage of risks taken by private equity impact funds engaged in the Regional Initiative 20x20.

USAID and the Althelia Climate Fund

Through its Development Credit Authority, the United States Agency for International Development (USAID) provides a risk-sharing loan guarantee that will enable Althelia Climate Fund to finance hundreds of forest-based businesses in developing countries that rely on sustainably managed land use for their livelihoods.

MIGA and EcoPlanet Bamboo

The Multilateral Investment Guarantee Agency (MIGA) provides EcoPlanet Bamboo with a USD 48.8 million guarantee against its current investment in Nicaragua and a USD 8.6 million guarantee against one of its current investments in South Africa, covering the project against expropriation, war and civil disturbance for up to 15 years.

Coastal

- \$ 232 700
- ✓ 935 400
- ◀ 11%
- 📊 4.4

Grasslands

- \$ 260
- ✓ 22 600
- ◀ 79%
- 📊 75.1

Mangroves

- \$ 2 880
- ✓ 86 900
- ◀ 40%
- 📊 26.4

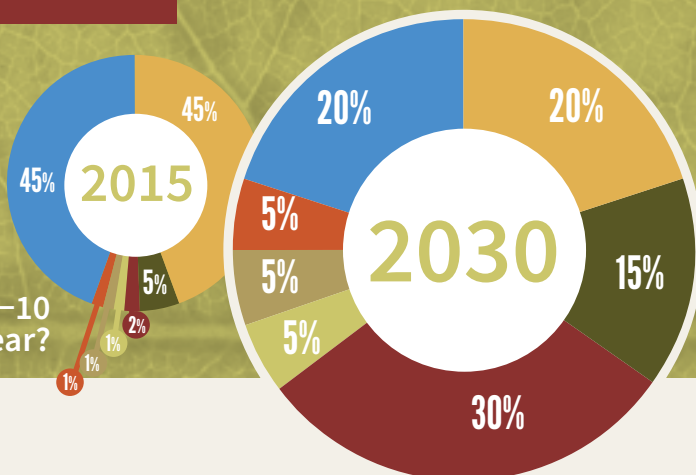
Who might be investing in the future?

USD 35–300 billion per year?

DISTRIBUTION OF CURRENT AND FUTURE FLR INVESTMENT: A ROUGH ESTIMATE

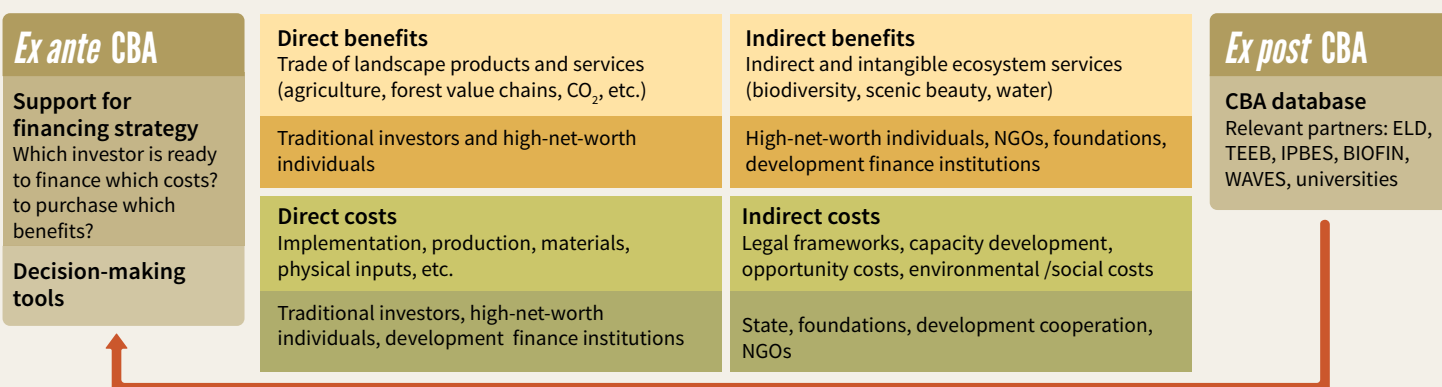
- Traditional investors
- Corporate social responsibility
- Non-governmental funding
- Crowdfunding
- Development cooperation (technical assistance and financial cooperation) and climate finance
- Private equity impact funds
- National environmental funds and State budgets

USD 5–10 billion per year?



Enabling FLR financing

INVESTORS REQUIRE SUPPORT TO COST-BENEFIT ANALYSIS

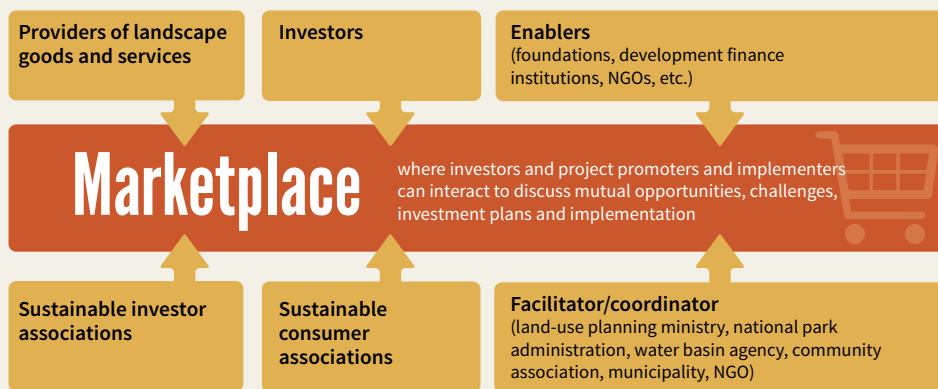


ELD: The Economics of Land Degradation Initiative; TEEB: The Economics of Ecosystems and Biodiversity; IPBES: Intergovernmental Platform on Biodiversity and Ecosystem Services; BIOFIN: Biodiversity Finance Initiative; WAVES: Wealth Accounting and the Valuation of Ecosystem Services

CREATING MARKETPLACES FOR FLR

Possible levels

- Global
- National
- Regional
- Landscape



Possible forms

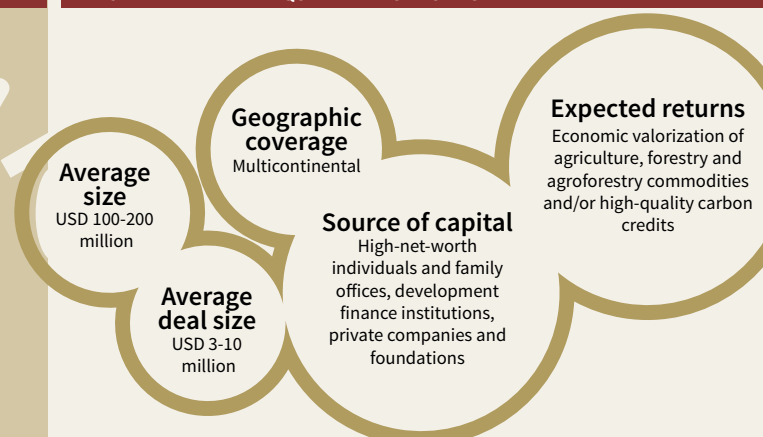
- Platforms and alliances
- Fairs
- Physical agencies/organizations/administrations

INNOVATIONS FOR FLR FINANCE

Restoration bonds

- Build on the concept of green bonds
- Are linked to environmentally friendly investments
- Provide long-term financing opportunities for large-scale projects
- May provide incentives for small-scale landowners and farmers to restore land on a large scale, e.g. through aggregation

INNOVATIVE PRIVATE EQUITY IMPACT FUNDS



Some examples:

- Althelia Climate Fund
- Moringa Fund
- Terra Bella Fund
- Permian Global
- Livelihoods Carbon Fund
- Livelihoods Fund for Family Farming Landscape Fund*
- Land Degradation Neutrality Fund*
- EcoBusiness Fund
- Arbaro Forest Fund*
- EcoEnterprises II
- Commonland
- Global Environment Fund

* Under design

This information product is based on the discussion paper *Sustainable financing for forest and landscape restoration – Opportunities, challenges and the way forward*, published by FAO and the Global Mechanism of the UNCCD (2015). The sources of all the information and data presented here are referenced in that publication.

Ash Leaf cover image, © Richard Wanderman

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