



Global
Landscapes
Forum



Photo by Daniel Murdiyasa/CIFOR

White Paper

6 June 2016, Royal Society, London

Removing barriers for investing in forest landscape restoration

What works where?



This White Paper was produced by AMATA, Symbiosis Investimentos, FONERWA, Clarmondial and IUCN, with support from Norad and UKaid

Building the case for investment in forest landscape restoration

Improved ecological integrity and enhanced human well-being can be achieved by restoring degraded and deforested lands. This process – forest landscape restoration (FLR) – aims to best serve the needs of local, regional and global communities by balancing environmental, social and economic benefits, including: increased productivity on formerly degraded land, new livelihood opportunities for forest-dependent communities, protection from natural disasters, the return of functioning ecosystems and connectivity, access to clean water and more.

FLR, when implemented correctly, can decrease poverty, increase economic benefits, enhance rural livelihood development and strengthen resilience among rural communities. This significant role can only be fully realized if we are able to pursue and deliver a balanced package of locally defined forest goods and services – accommodating different land uses, and recognizing and effectively addressing stakeholders varying needs and different legitimate claims.

A continuing challenge is combating the myth that restoration is costly and does not deliver benefits over a long-term period. An economic analysis of the potential benefits of restoration carried out by the International Union for Conservation of Nature (IUCN) demonstrated that the returns on restoration are much quicker than often assumed: in many restoration initiatives, carbon sequestration begins

right away, the engagement of local communities can bring almost immediate improvements in income and important ecosystem functions can start to return after two to three years.

A critical gap exists in financing for FLR needs in order to meet commitments to action. Funding for FLR will need to come from a portfolio of public and private sector sources, but in order to attract private sector investment, public investment in pilot experiences must be facilitated, reinforced and scaled up. Unlocking private finance requires the right architecture including innovative financing instruments and an appropriate regulatory environment within national strategies.

Recent IUCN work supported by multiple partners examined the potential for closing this gap through improved mobilization of private investment into FLR. This work also looked at the relationship between asset investments and enabling investment flows through the investigation of specific investment cases in Brazil, Ghana, Guatemala, Mexico and Rwanda, and identified barriers limiting investment in FLR. These countries are currently developing strategies related to FLR and are actively seeking innovative and sustainable sources of finance, particularly through mobilizing private sector investment. This paper highlights case studies from this recent work that demonstrate how FLR implementation can be structured to achieve the multiple goals of FLR.

Investment cases

In exploring the case studies, three questions were identified as critical challenges that need to be addressed for successful implementation of FLR – it is within these questions that the case studies have been discussed:

1. **How can we close the gap between the scale of commitments and the level of funding for FLR?** To close this gap there is the need to blend public finance for FLR with private investment. For example, public funds can help address some of the main barriers to mobilizing private investment such as the setup of aggregation entities, the execution of operational agreements between partners, the development of financial projections for financial returns and the development of operational and financing management and expertise.
2. **How can we generate a clearer definition of revenue-generating activities for FLR?** Practitioners need to be able to better define commercially viable revenue-generating activities within FLR. This includes finding the specific value chain activities in a geographic region that are already being implemented at scale and which have the potential to attract new sources of finance. Also, FLR practitioners seeking finance need to shift their mindset from grant-recipient to investee.
3. **What enabling investments are required to overcome barriers to FLR?** Besides asset investments, enabling investments and alternative investment structures are necessary to support investees to engage with investors. This encompasses improving policies to attract investment at national and local levels, capacity-building throughout the value chain, as well as support to establish management and reporting systems to ensure the success of the investment and identify new business opportunities, expanding best practices.

Key definitions

Forest landscape restoration (FLR): The ongoing process of regaining ecological functionality and enhancing human well-being across deforested or degraded forest landscapes. FLR is more than just planting trees – it is restoring a whole landscape “forward” to meet present and future needs and to offer multiple benefits and land uses over time, using a variety of ways: new tree plantings, natural regrowth, improved land management and more.

Enabling investment: Investments made to create public goods, and thus the conditions for productive investments in assets.

Asset investment: An investment that aims to create tangible value, thus creating private assets.

Investor: Range of players who facilitate financing for FLR through asset and enabling investments.

Investee: Organizations and/or individuals engaged in FLR activities, also known as practitioners. See below for overview of the potential investees and relevance for FLR:

Type of actors (investees)	Potential relevance to FLR
Smallholders / individuals	<ul style="list-style-type: none"> informal or formal users of forest resources subsistence or semi-commercial agriculture at forest boundaries producers of commodities for formal or informal markets, e.g. charcoal, cocoa
Community groups	As above
Cooperatives / associations	As above – likely to be involved in commercial activities, typically agriculture or existing tree crops
SMEs	<ul style="list-style-type: none"> concessions / ownership / lease of land trading or production companies
Large international companies	As above – likely for production and trading (exports)

1. Closing the gap between commitments and funding for FLR

While countries may have extensive regulations to encourage large-scale FLR activities, wide funding gaps exist between the scale of policy commitments or legal requirements for FLR and the level of funding available for FLR in the field. A number of factors contribute to these gaps. Some relate to the geographical location of FLR opportunities, such as the country's regulatory and investment climate, as well as the impact orientation of national investors. Many of the countries where the largest FLR opportunities are situated have nascent capital markets and limited appetite for corporate social responsibility and sustainability investing, and challenging policy environments create significant barriers to investment of any sort. Others relate to a mismatch in investor-investee needs and therefore in the supply and demand of FLR opportunities, a mismatch arising from the challenges of investing in the lesser proven and less understood field of FLR.

While knowledge of the local situation is an essential prerequisite for determining what is likely to succeed (and fail) for the development of FLR investments, changing some of the factors related to the geographical location of FLR opportunities may not be possible or would be, in some instances, a long-term endeavor requiring action on multiple fronts and from a variety of players. In terms of more immediate actions for closing the gap between commitments and funding for FLR, the opportunity space lies in addressing supply and demand issues.

There is clear investment potential in specific FLR value chains. However, financing sources need to be aligned with the appropriate producer value chain investment opportunities. In order for this to happen, investees need support to enhance structuring and mapping of the commercial opportunities of FLR-related activities onto the investment appetites of different investors. Establishing aggregation approaches that will deliver scale is also very important. On the investor side, more

support is needed to improve the level of technical, market and management information of FLR investments. Financial models that estimate financial, environmental and social returns of FLR investments are also needed.

Investment Case 1: Rwanda's National Climate and Environment Fund

Rwanda has committed to planting two million hectares of trees using an FLR approach. However, current official development assistance and government funding levels cannot meet the financing needs of Rwanda's FLR. Thus, for Rwanda to meet its goal, it will require attracting new sources of finance, including private investors.

In 2013, the Government of Rwanda (GoR) established the National Climate and Environment Fund (FONERWA) to emphasize the country's environmental priorities and commitments as well as to support financing for environmental projects. This fund is now the primary financing mechanism for environmental and climate change projects in Rwanda. By centralizing all funding for environment and climate change initiatives through this fund, the GoR can ensure consistency of such initiatives with national priorities and targets. The fund began with a demand-led approach to investment and is progressively transitioning to project selection for funding more strategic/programmatic work. This creates an opportunity for the fund to focus investments in FLR.

The private sector, public sector and NGOs are eligible for funding through different financial instruments. For instance, the private sector can apply in two different ways: (i) through the innovation fund, which provides financing for one

year to support business innovation in the environmental and climate fields. Proponents are required to provide 25 percent equity; and (ii) through a line of credit from the Rwandan Development Bank for carrying out due diligence. So far FONERWA has carried out eight calls for proposals and granted funds to 31 projects. The projects cover a number of sustainability aspects, including integrated watershed management (land, water and forest management), energy and green villages and cities. Most of the projects on watershed management involve FLR and relate to restoring degraded lands. About 60 percent of the projects that have been funded to date include some form of forest management.

Capacity-building and learning are important elements in the FONERWA fund and an integral part of the application and implementation processes. FONERWA also holds regular sessions for implementation partners to come together and share experiences and learning.

Interventions and activities linked to Rwanda's national FLR priorities include:

- **permanent forest estate keeping**, with special attention given to permanence of forests in Rwanda and the lack of classification and other data critical to implementing effective FLR activities
- **forest-based industries promotion**, emphasizing biophysical inventories, due diligence on forest tenure issues and promotion of sustainable industry practices
- **capacity-building in the forestry sector**, including strengthening institutions, forest research and enhancement of forestry training
- **urban and peri-urban forest development**, beginning with the inclusion of forests in urban planning and effectively demonstrating the added value of urban forests
- **farm forestry enhancement**, including mainstreaming agroforestry and cultivation of non-timber forest products in the policy arena, and supporting different community groups in the farm forestry process
- **promotion of profitable, productive forest plantation business**, including legal mechanisms to encourage private sector investment, and innovative financing mechanisms through the National Forestry Fund
- **establishment, rehabilitation and conservation of watershed-protecting forests**, including environmental assessments of major watersheds and the development of regulations and guidelines for measuring riparian zone forests.

2. Defining revenue-generating activities for FLR

On the one hand, FLR investees need to define possible revenue-generating activities for FLR to better articulate opportunities to investors. On the other hand, FLR investees need support to map these FLR activities and funding needs onto investor requirements in order to communicate the range of revenue streams to generate return on investment for FLR investors, over explicit timeframes.

Under this area, there are several challenges and barriers that need to be overcome to enhance FLR investment potential. First, due to a prevalent donor culture, FLR practitioners may struggle to shift their mindset from that of a grant recipient to an investee. Second, there are few professional counterparts (i.e. cooperatives and associations with track records and business skills) to liaise with investors. Often FLR practitioners lack experience in approaching and negotiating with professional investors and have a limited understanding of finance itself. Third, the lack of technical capacity in FLR interventions and incentives for longer term management could limit the ability of investees to generate sustainable financial returns and thus erode the interest of private investors to invest in FLR. Finally, national value chains for FLR products are often underdeveloped, fragmented and informal. As such, smaller-scale FLR practitioners may fail to secure loans from rural banks due to collateral security and average deposit required.

Investment Case 2: Symbiosis Investimentos

Symbiosis Investimentos was established in 2008 as a privately owned investment and operating company, focused on the development of a financially sustainable business model for the cultivation of native species and the restoration of the Atlantic Forest. The company controls and manages the complete cycle of wood production, from the selection of tree species, mother trees, seeds, seedling, sapling, young trees and forest management, to harvesting, processing and distribution of the final product to consumers.

Overview of revenue-generating products and services

There are a variety of products and services that could boost revenue of FLR opportunities and make these more appealing to investors. While these need to be further examined and defined, and their feasibility will vary from case to case, a list is provided for further discussion:

- sustainable timber harvesting
- green charcoal production
- non-timber forest products
- agroforestry systems, especially for internationally traded commodities such as cocoa, coffee and rubber, and possible premiums if certification is in place
- tree nurseries, especially with knowledge and expertise on native species
- offsets – carbon, including REDD+ and biodiversity
- ecosystem services, including payments for ecosystem service schemes, value derived from improved connectivity in landscapes, etc.
- ecotourism

Diverging from the exotic monoculture industry that has been standard practice in the tropics, Symbiosis adopted a multi-species approach using 30 high-value Atlantic Forest species that are now rare or commercially unavailable. Symbiosis also eliminated clearcutting in order to further benefit local fauna and to improve insect control on their land. Symbiosis has been collecting seeds from the remnants of the Atlantic Forest since 2009, and established seed production areas on their farms in 2012. This ensures a genetically robust genetic pool and the opportunity to establish an “ex situ” genetic reserve of each selected species. The company views this as a potential business asset, as a genetic database of local species combined with a nursery does not currently exist despite demand. The company’s core business is the sale of wood. The species that have been selected by Symbiosis constitute some

of the most durable and beautiful tropical wood, which can be used for furniture, floors, windows, decks and internal architecture and engineering. The portfolio of species covers all colors in the wood spectrum, adding diversification to the commercial activity and value to the internal rate of return.

The creation of this innovative company was possible because its visionary founders succeeded in attracting a select group of private investors willing to take the risk and test the key business model assumptions over a five-year period. These private investors have been committed to conservation of the Brazilian environment for more than thirty years, were already active in philanthropy and had their own private reforestation initiatives before joining the company. They believe that by changing the Brazilian wood production paradigm, producing close to consumer centers in a sustainable, cheaper and uniform way, they can discourage the destruction of what is left of the Amazon and Atlantic Forest.

Investment Case 3: AMATA

AMATA is a private company established in 2009, engaged in sustainable forestry. Vertically integrated, the company manages its own plantations of native species, eucalyptus and pine, and sells certified solid wood and sawn timber directly to end consumers, and also sells wood for processing.

The AMATA project in Pará is located in a region considered one of the most critical for the conservation of the Amazon – the Belem Centre of Endemism (BCE). This specific area was severely deforested – now with less than 70 percent of the

original coverage – and still suffers from competing land-use pressures. The BCE contains the greatest number of threatened plant and animal species in the Amazon, therefore the area is monitored by the state and is under federal legislation to protect the endangered species.

AMATA works to avoid further deforestation and to recover the land that has been degraded by cattle. In particular, AMATA has undertaken reforestation with native species, which began at the end of 2008 and has since planted more than 7.2 million native trees (approximately 50 species, represented mainly by the Paricá).

AMATA has 20,655 hectares of farms of native species distributed throughout the municipalities of Castanhal, Paragominas and Ipixuna do Pará. Of this, only 4,264 ha (21 percent) are effectively used for planting – the rest is under conservation at a level higher than required by law. Overall, AMATA aims to achieve the development of forestry technology for native species, as well as the production of certified wood, generating social and environmental benefits integrated with the economic viability of the plantations.

And it has had a positive impact on local social capital: employing 52 people, and being 99 percent contracted in the municipalities of influence and 18 percent in local communities. In 2015, the total value spent on local suppliers was 4,875,000 Brazilian reais (approximately USD 1,400,000), representing 61 percent of the total amount invested in the operation.

3. Enabling investments to overcome barriers

Experience from the ground suggests that enabling investments are essential to overcome barriers to investment in FLR. Such investments help to tackle the aforementioned barriers, particularly with regards to defining revenue generating FLR activities and reducing investment risk, helping bridge the gap between investors and investees. Examples of these include:

- **Technical and business capacity for FLR investees.** Investees need more support to identify, prepare and market good deal flow, including through the provision of technical and commercial capacity. In Brazil, technical knowledge and information availability are considered key barriers affecting investees and preventing participation of smallholders in restoration activities. The Association of Smallholder Agroforestry Producers' Reça project is an example of an enabling investment that addresses this barrier through actions targeted at improving technical capacities in agroforestry techniques and value-addition in business processes. In Ghana, technical assistance, capacity-building and business incubation facilitated by donors and NGOs are important components of many agroforestry and restoration investments.
- **Initiatives and incentives to finance FLR opportunities.** Effective micro-finance initiatives linked to outgrower schemes and mandates/incentives for rural banks to lend to the agriculture and forest sectors are needed. The partnership between Fibria Celulose, a Brazilian forestry company, and ABN AMRO offering financial incentives for rural producers to plant eucalyptus in Southern Brazil is an example of the former. FIRA/FONAFOR, a credit fund established by the Mexican forestry commission, seeks to overcome important barriers to forestry investment by covering commercial lenders' requirements for interest payments in the early stages of investment and acting as a guarantee fund when planters are unable to repay loans.
- **Risk management products and solutions.** Governments, donors and development finance institutions need to support de-risking of FLR investments through targeted credit guarantee programs, dedicated FLR risk management products and other initiatives. Risk could also be shared through co-investment and taking a larger portion of the loss if returns are not as expected. Examples of existing guarantee facilities are the Multilateral Investment Guarantee Agency (MIGA) and USAID's participation in the Althelia Ecosphere Fund. In Ghana, the IFC is looking to set up a risk-sharing facility for the private investment tranche of the Forest Investment Program's funds.
- **Structuring FLR investments to achieve scale.** The collateralization of FLR projects and ventures through promoting aggregation across FLR groups and projects will help channel financing to restoration. Examples of this are bond issuances through development capital certificates in Mexico that can be traded on the stock exchange. Financing small-scale opportunities through cooperatives would be another option as demonstrated in Guatemala where a federation of pine growers, Fedecovera, has been able to establish a sustainable forestry and agroforestry business that appeals to investors due to its scale, track record and product versatility.
- **The need to optimize the benefits and reduce the costs of FLR.** Investment to develop a research and technology platform is critical to increase the cost-benefit of forest restoration and reforestation with native species for economic use and attract investments (public and private) to increase the scale of FLR.

Investment Case 4: Clarmondial

Over the past few years, Clarmondial has worked with a number of primarily African businesses related to sustainable land management, providing business development support to enable access to resources, including equity, debt and grants. One entity that Clarmondial has been working with is Sasumua Holdings Limited (SHL), which manages a large area of farmland in Tanzania in close collaboration with surrounding local communities, according to best practices.

SHL has primarily been producing fruits and vegetables for local markets, and has recently begun commercial beef production. SHL eventually intends to export regionally and internationally, and to add value through processing (e.g. fruit juice). In addition, in recognition of rising local demand and insufficient produce quality, SHL and Clarmondial initiated the development of an innovative regional fresh produce marketing concept: East African Farmers Markets (EAFM), with a pilot due to start in Dar es Salaam.

SHL and EAFM have primarily been capitalized by their founders and private capital. Businesses such as these (i.e. those that want to prove new markets, or work to exceptional social and environmental standards) often require significant upfront, patient capital. In addition to 'normal' costs associated with greenfield projects, there are also often additional costs associated with market innovation as these companies explore new ways of doing business (e.g. establishing EAFM to create more 'pull' from local and regional markets, which are significant in size and could be catalytic for regional smallholder farmers).

Despite SHL and EAFM having been successful in raising funds for various initiatives, the challenge remains to raise sufficient capital for this startup phase. The founders and managers of SHL understand the local and regional situation well, and are highly competent land managers, but benefit from having access to international business development support and exposure to catalyze further funding.



Moving forward: Solutions for scaling up FLR investments

The above case studies provide practical examples of how potential investments into FLR can work within varying investment and country contexts. The functioning and potential drivers for FLR investment differ markedly depending on the local investment context, as well as the experience of local investees, investors and the existence of enabling investments and policies. Therefore, a one-size-fits-all approach will not succeed in scaling up investment in FLR.

It is clear that bridging the gap between investors and investees and making the case to both groups to engage in FLR investments is a vital ingredient for achieving scale. In addition, refined strategies that promote commercially viable FLR options and enhance opportunities for private public partnerships with a keen focus on benefits to land owners and particularly smallholder farmers would be beneficial.

This GLF case study session aims to examine barriers to investing in FLR and explore solutions for scaling up this type of investment. By delving into investment cases from around the globe and building on the examples in this paper, the session will look at what is needed to close the gap between commitments and funding for landscape restoration, discuss how to better define revenue generating activities for landscape restoration and determine the factors which enable investment. The experience and different perspectives of investors and investees will be highlighted throughout the session and will help chart a path forward for mainstreaming landscape restoration investments.

Background documents

- Elson D. 2012. *Guide to investing in locally controlled forestry*. Growing Forest Partnerships in association with FAO, IIED, IUCN, The Forest Dialogue and the World Bank. London: IIED.
- Huwyler F, Käppeli J and Tobin J. 2016. *Conservation Finance – From Niche to Mainstream: The Building of an Institutional Asset Class*. In association with Credit Suisse, McKinsey & Company, IUCN, Gordon and Betty Moore Foundation and Rockefeller Foundation. Zurich, Switzerland: Credit Suisse Group AG and McKinsey Center of Business and Environment.
- [IUCN] International Union for Conservation of Nature. 2015. *Rwanda's Green Well: Finding Opportunities to Engage Private Sector Investors in Rwanda's Forest Landscape Restoration*. Gland, Switzerland: IUCN.
- IUCN and [WRI] World Resources Institute. 2014. *A guide to the Restoration Opportunities Assessment Methodology (ROAM): Assessing forest landscape restoration opportunities at the national or sub-national level*. Working Paper (Road-test edition). Gland, Switzerland: IUCN.



Global Landscapes Forum | London

The Investment Case

6 June 2016, Royal Society, London

landscapes.org

Coordinating partners



Strategic partners



Funding partners



Authors



Supported by

