

# Financing Strategies for Integrated Landscape Investment

1111

ĥ

Review of Financing Institutions and Mechanisms

Margot Hill Clarvis

# Financing Strategies for Integrated Landscape Investment

Review of Financing Institutions and Mechanisms

Margot Hill Clarvis, Associate, Earth Security Initiative



www.earthsecurity.org

Available online at landscapes.ecoagriculture.org/global review/institutionanalysis



The Landscapes for People, Food and Nature Initiative is a collaborative initiative to foster cross-sectoral dialogue, learning and action. The partners aim to understand and support integrated agricultural landscape approaches to simultaneously meet goals for food production, ecosystem health and human wellbeing.

Find out more at: www.landscapes.ecoagriculture.org

#### Financial Support Provided by



## **Copyright Information**

© 2014 EcoAgriculture Partners, on behalf of the Landscapes for People, Food and Nature Initiative.

EcoAgriculture Partners 1100 17th St. NW Suite 600 Washington, DC 20036 USA



All or portions of this report may be used, reprinted or distributed, provided the source is acknowledged. No use of this publication may be made for resale or other commercial purposes.

## **Suggested Citation**

Margot Hill Clarvis. "Review of Financing Institutions and Mechanisms," in *Financing Strategies for Integrated Landscape Investment*, Seth Shames , ed. Washington, DC: EcoAgriculture Partners, on behalf of the Landscapes for People, Food and Nature Initiative. 2014.

## **Design and Formatting**

Cover and publication design and formatting by Louis Wertz, EcoAgriculture Partners. Figure design by Wenceslao Alamazan.

## **Cover Photo**

World Bank building, Washington, DC. Photo by Shiny Things on Flickr | CC license

## Correspondence

Please contact Seth Shames at sshames@ecoagriculture.org

## **Acknowledgements**

The Earth Security Initiative is grateful for the time and insights provided by a number of individuals in the finance, corporate and public sectors, which included people from the following organizations: Earth Capital Partners, Global Mechanism of the United Nations Convention to Combat Desertification, World Bank, Agro-Ecological Investment Management, People and Planet Holdings, Visible Earth Real Asset Management, World Economic Forum, PwC, United Nations Environment Programme-Finance Initiative, The Livelihoods Fund, Bunge Environmental Markets, Netafim, Consultative Group on International Agricultural Research (CGIAR), GADCO, World Wildlife Foundation, Althelia Ecosphere, Moringa, EcoEnterprises Fund, World Bank BioCarbon Fund, Global Environmental Facility, Rabobank, TIAA CREF, Fauna and Flora International, European Investment Bank, EcoPartners LLC.

We are also grateful to the insightful comments and time provided by the members of the Landscapes for People, Food and Nature Initiative finance working group.

Co-chairs - Mohamed Bakarr (GEF), Melinda Kimble (UN Foundation), Sara Scherr and Seth Shames (EcoAgriculture Partners).

Members: Elsie Attafuah (UNDP), Kwame Awere-Gyekye (Global Mechanism), Cordula Epple (UNEP-WCMC), Iain Henderson (UNEP FI), Elwyn Grainger-Jones (IFAD), Sarah Lowery (Forest Trends), Aisha Nazario (IFAD), Joel Paque (TNC), Leo Soldaat (HIVOS), David Tepper (Forest Trends), David Treguer (The World Bank), Lieske Vansanten (WEF)

## Summary

Integrated landscape management (ILM) approaches are key to addressing the interdependent resource governance and management challenges that a range of stakeholders face (small holders and farmers, agribusiness, local communities, utility operators, regional and local governments) within a given landscape. ILM refers to long-term collaboration among different groups of land managers and stakeholders to achieve the multiple objectives required from the landscape, reducing tradeoffs and strengthening synergies among the different landscape objectives. There is concern that there are major barriers to sources of funding and finance for such ILM initiatives due to the misalignment between such multi-benefit and multi-actor approaches and the siloed financial mechanisms for specific sectors or policy goals (e.g. agriculture, renewable energy, food security, climate adaptation, climate mitigation, catchment management).

ILM finance refers to both the financing of integrated landscape initiatives, and targeted land based investments that have multiple financial, economic, environmental and social benefits at different landscape scales.

The report tracks innovations in ILM finance across the public and private sector. Public sector finance (mainly through grants, subsidies and credit) can enable landscape actors to collaborate on projects that integrate multiple landscape objects. Private sector investment (loans, equity, credits) and partnership models for ILM ranged from those that channel finance into whole landscapes to those that support and are designed to coordinate with landscape objectives. Cases showed how investment in projects or businesses can finance on/off farm activities as a catalyst to develop and coordinate longer term sustainable economic activities that are supportive of environmental and social landscape objectives. Few funds were identified that were structured to integrate and coordinate financing for ILM within one composite financial mechanism, yet often private investors supported the integration and coordinating component as part of their own costs.

ILM provides opportunities for businesses and investors to respond to a number of emerging trends and opportunities, including the increasing need for a sustainable intensification of agricultural output and the increasing appetite for sustainable commodities and greener supply chains. In order for public finance to help private investors move beyond niche opportunities and increase the quantity and quality of private capital into ILM, public sector finance institutions must:

- Aggregate and coordinate ILM finance: Increased coordination across public sector finance should gather pace, while increased funding access is needed for integration and co-ordination of landscape actors. Public and private sector finance institutions should also look beyond just aligning siloes of finance for multi-benefit or multi-focal projects, and further explore portfolio approaches to better manage risks and access larger pools of capital from the mainstream credit markets.
- Improve the risk profile of ILM: Public sector finance institutions should explore how to most strategically provide risk capital in order to better the up-front financing needs of landscape supportive projects. Donors and multi-lateral development banks should therefore support the evaluation of risk instruments (credit guarantees, conditioned subsidies, insurance, purchase commitments, standards and principles) for ILM supportive initiatives.
- 3. Mainstream the ILM business case: Increase recognition for ILM approaches as a means of risk management and revenue diversification. Policy makers must not reinforce thematic siloes in structuring climate finance and green growth strategies. Public finance should also ensure ILM is supported through acceleration capital, funds for the technical demonstration of pilot projects, and small-holder credit mechanisms.

## Contents

Acronyms	vi
Introduction	1
Why finance 'Integrated Landscape Management' (ILM)	1
Mapping ILM Finance	3
ILM Finance Case Studies	13
Finance Innovations	13
Barriers to ILM finance	19
Structuring public investments to mobilize commercial ca	apital 26
Leveraging commercial capital	26
Breaking through public sector siloes	30
Next steps: Improving public-private capital for ILM	32
Aggregate and coordinate ILM finance	33
Improve the risk profile ILM	34
Mainstream the ILM business case	35
Conclusion	37
References	39
Appendix	42
Glossary	60

#### List of case studies

Get overviews or Download them at landscapes.ecoagriculture.org

- 1. Althelia Climate Fund
- 2. Moringa
- 3. EcoEnterprises Fund
- 4. World Bank BioCarbon Fund Initiative for Sustainable Forest Landscapes (WB ISFL)
- 5. Global Environmental Facility (GEF)
- 6. Bunge Environmental Markets (BEM)
- 7. Norway's International Climate and Forest Initiative (NICFI)
- 8. Agricultural and farmland finance (Rabobank, TIAA CREF, United States Agency for International Development [US AID], International Fund for Agricultural Development [IFAD], Agro-Ecological Investment Management, Nestlé, Brazil's Rural Credit).

List of	Boxes
Box 1.	ILM Finance1
Box 2.	Brazilian Rural Credit
Box 3. Desertif	Global Mechanism of the United Nations Convention to Combat ication (UNCCD)
Box 4.	Althelia Ecosphere: Asset management approaches to ILM9
Box 5. Manage	SAB Miller: Enabling Investments in Sustainable Water ment
Box 6.	Livelihoods Fund10
Box 7.	Benefits of supporting landscape approaches17
Box 8. bottom	Broadening agricultural finance to account for landscape effects at the and top of the pyramid
Box 9.	ForestRE
Box 10. potentic	VCS: Moving to nested approaches for REDD+ that Illy support ILM23
Box 11.	EcoEnterprises Fund
Box 12.	Savory Institute
Box 13. investm	Landscape Fund: Structuring standardized financing schemes for wide ent in sustainable land use29

## **List of Figures**

Figure 1. Motivations across the supply chain. Adapted from Dalberg (2012)
Figure 2. Mapping the flow of ILM finance from the source of finance to the revenue stream. Framework developed from Buchner et al. (2011)
Figure 3. Four way matrix mapping out key examples of public or private mechanisms for enabling investments or asset investment identified in the scoping stage
Figure 4. Range of ILM finance innovation across public and private sectors, enabling and asset investments. Figures within the circle represent the level of finance available where known. Within the circles figures in brackets indicate the target fund size where it has not yet been reached10
Figure 5. Different scales of investors and lenders according to the size of the deal, level of risk and horizon for investment return for asset investments (Dalberg, 2012). USD figures within relevant boxes depict the average range of individual investment commitment into private equity in 2012 (with an assumption that individual investments can account for between 3-10% of fund size) (WEF, 2013). The text to the right hand side of the graph highlights the core

## **List of Tables**

Table 1. Overview of case studieswithin the enabling investmentcategory, detailing investment sizewhere available, a brief descriptionand the range of ILM entry pointsaddressed by the institution ormechanism.14

Table 2. Overview of case studieswithin the asset investmentcategory, detailing investment sizewhere available, a brief descriptionand the range of ILM entry pointsaddressed by the institution ormechanism.15

# Acronyms

Acronym	Definition
ACF	Althelia Climate Fund
BEM	Bunge Environmental Markets
CER	Certified Emissions Reductions
CSO	Civil Society Organization
СОР	Conference of the Parties
CSR	Corporate Social Responsibility
DLDD	Desertification, Land Degradation and Drought
EIB	European Investment Bank
GEF	Global Environment Facility
GCF	Green Climate Fund
ISFL	Initiative for Sustainable Forest Landscape
IFS	Integrated Financing Strategies
ILM	Integrated Landscape Management
IFC	International Finance Corporation
IFAD	International Fund for Agricultural Development
LULUCF	Land use, land-use change and forestry
LatAm	Latin America
NGO	Non-governmental Organisation
NICFI	Norway's International Climate and Forest Initiative
NORAD	Norwegian Agency for Development Cooperation
PES	Payment for Ecosystem Services
PPP	Public Private Partnership
REDD	Reducing Emissions from Deforestation and Forest Degradation
REDD+	Reducing Emissions from Deforestation and Forest Degradation in Developing Countries
SME	Small and Medium Enterprises
SRI	Socially Responsible Investing
SWF	Sovereign Wealth Fund
SFM	Sustainable Forest Management
SLM	Sustainable Land Management
TIAA-CREF	Teachers Insurance and Annuity Association – College Retirement Equities Fund
UNCCD	United Nations Convention to Combat Desertification
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development

## Introduction

## Why finance Integrated Landscape Management

## Aligning finance for integrated approaches

Integrated landscape management (ILM) initiatives are gaining traction and momentum around the world as stakeholders within a landscape face multiple interdependent challenges that cannot be addressed through siloed, single sector or resource approaches (EcoAgriculture Partners, 2013). As such there is growing recognition of the need for more integrated management of different landscape components (water resources, crop lands, forest lands, grazing lands, species) and to design land-use to meet multiple needs (agriculture, energy, forest products, water provision, conservation, development) (EcoAgriculture Partners, 2013). Despite this, there is concern that such approaches are hampered by the fact that these 'landscape components' are often governed in siloes, meaning that the funds for agricultural development, food security, climate mitigation, climate adaptation, conservation and catchment management come from heavily siloed sources, despite their inextricable inter-linkages (FAO, 2010; Shames et al., 2012).

The case for ILM is gaining traction at multiple scales of environmental governance. Most recently, at this year's United Nations Framework

Convention on Climate Change (UN-FCCC COP19) meeting in Warsaw, 'Agriculture Day' and 'Forests Day' was supplanted by the inaugural Global Landscapes Forum', which for the first time sought to link the landscape approach (previously seen to be the domain of water, forest and biodiversity management) to agricultural management, policies and institutions, as well as the climate change community (Scherr, 2013). However, this growing recognition of the need for more integrated approaches to address multiple competing challenges across landscape has not been balanced with an understanding of the finance case for investing in ILM as well as the

#### Box 1. ILM Finance

ILM finance refers to both the financing of integrated landscape initiatives and funds required to support on-farm and off-farm investments that deliver ILM's multiple objective, i.e. financial, economic, environmental and social benefits at different landscape scales.

It encompasses both individual and blended financial instruments that are available for land investments to drive multi-goal improvements in ecological, agriculture, developmental and social aspects of a particular land unit, thus leading to more resilient economic- and eco-systems.

ILM activities can include sustainable agricultural management activities such as agroforestry, conservation tillage and rotational grazing that are coordinated with other activities within the landscapes, as well landscape-scale interventions related to ecosystem protection and restoration. Financing of the institutions that enable landscape coordination and create incentives for ILM is also relevant. These include the development of stakeholder planning platforms, supportive policy and the development of product and ecosystem markets to support ILM activities. current finance landscape available for ILM initiatives.

## Why invest in integrated landscape management?

ILM offers valuable and prudent opportunities to better manage a range of challenges relating to natural resource use, management and conservation for both public (donors, government agencies and local authorities) and private (private sector, civil society, NGOs) stakeholders. For the public sector, integration across inter-linked social and ecological systems can create financing efficiencies across often siloed institutions and pre-emptively manage interdependent resource, economic and social pressures. For the private sector, ILM offers opportunities to better manage a range of growing risks relating to ecological and social impacts of ecosystem degradation, climate change, competition for scarce resources, poverty and food insecurity (Kissinger et al. 2013). Furthermore, as the economic impacts of climate related risks grow (MunichRE, 2013) and the limitations of public and state finance to address climate adaptation and mitigation are ever more apparent, both the risk burden and investment requirements for climate smart investment are increasingly transferring from the public to the private sector, yet there remains a lack of private finance to fill this gap (IFC, 2013; McFarland, 2013). It is therefore important to position the ILM finance agenda within the

broader context of the debate on structuring available and emerging finance for climate change adaptation and mitigation. In turn, this will also drive policy priorities in developing countries and send signals to finance institutions and private sector stakeholders<sup>1</sup> involved in a range of landscape relevant activities.

Considering the scale of emissions from land-use change (GM, 2008) and the role of agriculture in driving deforestation and forest degradation (Kissinger et al., 2012), it is clear that synergistic investments in landscape approaches at scale are vital to overcome limitations of single-sector approaches to addressing diverse objectives and needs across the stakeholders managing different components of landscapes (Milder et al., 2014). Such single sector approaches, focused on conservation, agricultural development, or climate mitigation (Milder et al., 2014), have been seen as leading to small scale, fragmented and high risk projects, often reliant on a single (and potentially uncertain) revenue stream (WB, 2013b). Furthermore, fragmentation of single-goal projects in relation to sector-focused mechanisms (e.g. agricultural production, watershed management, forestry, biodiversity, bio-energy, community development) has been seen to lead to inefficiency and insufficient access to financing for climate-smart development (FAO, 2010), higher transaction costs in applying for different funds from different sources and lost

<sup>1.</sup> Inter alia, agribusiness, water and energy utilities, small holders, land funds, carbon funds, agricultural and farmland lending, impact investors.

economic, environmental and social benefits (WB, 2013b).

A more integrated landscape level approach (from inclusive agro-forestry projects of 5,000-15,000 hectares, to large scale landscape and jurisdictional level approaches at 100,000 ha+) are seen as having both local and global benefits, including (Althelia, 2012; GM, 2008; Moringa, 2012; WB, 2012):

- Local enhancement of ecosystem services (more fertile soils, higher productivity, enhanced water retention); watershed regulation (water provision and flood protection); micro-climate improvement/stabilization.
- Local social and economic benefits: increased productivity and employment; enhanced climate resilience; increased socio-economic resilience from diversified livelihoods.
- Global environmental benefits: enhanced climate resilience (reduced emissions from reduced deforestation with beneficial implications for local and regional weather patterns); biodiversity protection.

However, in order to harmonize activities across multiple sectors and stakeholders, on both temporal and spatial scales, a mix of up-front and long-term funding (for pilot projects, coordination, monitoring and evaluation) is required to ensure that ILM supporting ventures can be economically sustainable over the longer term (Milder et al., 2014). This is also a pre-requisite to generating investable opportunities to mobilize private sector investment in landscape approaches that can directly contribute to a range of climate, development, and environmental goals through investments in sustainable agriculture, agro-forestry and bio-energy, inclusive and responsible value chain financing, efficient agriculture and food markets, and fostering stronger business climates and local investment markets.

These challenges and opportunities point to the need to better understand what it means to finance landscapes, how public and private finance institutions are investing in landscapes, what mechanisms are currently employed, and how public-private partnerships are currently being used to mobilize private finance in landscape initiatives to leverage private sector investment.

## **Mapping ILM Finance**

In order to provide a more nuanced understanding of the current landscape for ILM finance, a scoping exercise sought to identify a range of financial mechanisms used to support different components of ILM, identify the broad levels of finance available, and map public and private innovation in ILM supporting mechanisms. ILM offers valuable and prudent opportunities to better manage a range of challenges relating to natural resource use, management and conservation for both public and private stakeholders.



FIGURE 1. Motivations across financial actors. Adapted from Dalberg (2012).

## The finance landscape

The finance sector is comprised of both public and private sector institutions that offer both the incentives and means for different activities to be undertaken, with diverse motivations for finance and investment. Figure 1 elucidates the shift from the prioritization of financial return for private investors, including social and environmental impact investors to the more blended priorities of development finance institutions and governments for enhancing social and environmental benefits. In impact investment, while the expected return might be lower, a return on investment is still expected. Furthermore some public sector finance might also be profit seeking, but not profit maximizing, such as certain development finance institutions (e.g. IFC). There is, however, growing evidence that increasingly the motivations of investors taking a more long term perspective align with environment objectives, leading to 'win-win' situations (i.e. private agricultural investors) (Kissinger et al., 2013).

Another important distinction to make is the difference between enabling investments and asset investments (Elson, 2012). While the distinction between these two forms of investment and the different mechanisms and outputs associated with them is useful, it is also important to note that financial institutions can be involved in both enabling and asset investments.<sup>2</sup>

- Enabling Investments: Funding for the generation of the **incentive** to invest money for a particular activity. Funding helps to prepare the ground for commercial success and improve competitiveness against conventional investment alternatives, usually with no expectation of financial rewards (Elson, 2012; Henderson, 2013).
- Asset Investments: This represents the means to undertake an activity, or an investment that aims to create tangible value, thus creating private assets. Asset investments are likely to be made by banks, government sovereign wealth funds, private equity funds and pension funds

<sup>2.</sup> For a more detailed review of the different vehicles, goals, mechanisms and outputs for enabling investments and asset investments, please refer to the ILM Scoping document (Hill Clarvis et al, 2013).

mostly through debt (often loans) and equity investments (Elson, 2012; Henderson, 2013).

ILM finance encompasses both such enabling investments (funding the generation of the incentive to invest, often by financial institutions with no expectation of financial reward) as well as asset investments (finance for an activity that creates tangible value, mostly through loans and equity investments) (Elson, 2012).

#### **Mapping ILM Finance**

There are a broad range of available institutions and mechanisms for financing different activities and components of ILM at different scales, and a few examples of innovative ILM supporting mechanisms across both the public and private sectors. The scoping exercise investigated a wide range of public and private institutions that provide both funding (grants, concessional loans, technical capacity, policy incentives, tax credits, guarantees) and financing or investment (i.e. investment capital, equity, market rate loans, micro-finance) from a broad range of different financial institutions (public and private donors, asset owners, public sector and commercial banks, impact investors, portfolio funds, agribusiness, charities and NGOs). To be considered for the review, funding and finance instruments needed to address integration of landscape actors and institutions or multiple components of landscape management, rather than just single

elements (e.g. agricultural production, climate adaptation, mitigation, conservation, water resources management) uniquely.

An initial desktop review and expert consultations enabled an identification of over 250 different financial institutions and mechanisms that support various components of ILM, as well as a smaller number that aim to support ILM through a more blended approach and multi-objective financing strategies (Hill Clarvis et al., 2013).<sup>3</sup> The database of ILM finance is intended to provide a comprehensive, if not exhaustive, overview of the range of finance available for ILM in its entirety or in its discrete components.

The following section highlights the general trends and key examples for the public sector, private sector and public-private partnerships to demonstrate which elements of ILM are being financed by which types of financing institution or mechanism. Figure 2 demonstrates that the key 'entry points' for ILM finance relate to agricultural productivity and food security, agro-forestry and renewable energy projects for climate mitigation, and ecosystem services (flood protection, water provision, hazard protection) for climate adaptation, and sustainable development increasingly related to the 'Green Economy'. By 'entry points' we are referring to the primary objective of the finance mechanism. While the primary objective may be food secu-

<sup>3.</sup> Appendix A provides a comprehensive (if not exhaustive) overview of the current range of financial institutions and mechanisms currently funding or financing different components of a landscape. For access to the spreadsheet please contact the authors of this report.

rity, this can also include supporting objective relating to water management, conservation or climate resilience. Figure 2 also provides an overview of ILM financial flows, including sources of capital, financial intermediaries, the range of instruments used to deploy finance, the ILM entry points into which this finance is channeled



**FIGURE 2.** Mapping the flow of ILM finance from the source of finance to the revenue stream. Framework developed from Buchner et al. (2011).

and the range of revenue streams flowing back to investors. Financial intermediaries are the financial institutions that channel funds from asset owners (sources of capital) to those requiring the finance (borrowers). Financial intermediaries generally refer to banks, private equity or venture capital funds, insurance and pension funds, and micro-credit

#### Box 2. Brazilian Rural Credit

In Brazil rural credit, distributed by banks or other financial intermediaries (and subsidized by the Brazilian government), is a vital source of funding for small to medium scale farmers (providing about 30% of finance, while 70% comes from the producer's own resources and other agents of agribusiness, e.g. trading companies, and other market mechanisms (Assunção et al., 2013). Rural credit is loaned according to rules and conditions established in the Brazilian Central Bank's Manual of Rural Credit, which can act as a policy instrument to encourage more environmentally sustainable agricultural practices amongst rural borrowers in the Amazon biome and thus achieve forest conservation outcomes. The Climate Policy Institute suggests that the Brazilian Central Bank Resolution 3,545 (implemented in 2008), which conditioned the concession of rural credit in the Amazon Biome upon proof of compliance with legal and environmental regulations, was an effective policy instrument to condition rural credit, thereby tightening credit constraints, changing farmers' production decisions, and thus channelling finance into activities that had a beneficial effect for reducing deforestation (potentially up to 15% over the observation periods) (Assunção et al., 2013).

## Box 3. Global Mechanism of the United Nations Convention to Combat Desertification (UNCCD)

The Global Mechanism of the UNCCD is a financing (rather than financial as it is not endowed with capital) mechanism in that it has not been endowed with capital, but instead acts as a financial advisory, as a broker and advisor to both the supply and demand side of investing in sustainable land management (SLM). It provides country parties with specialised advice on how to access finance for SLM from a range of public and private sources, both domestic and international. Given the significance of land-use change for climate resilience (mitigation and adaptation), the UNCCD occupies an important interface between rural development, sustainable livelihoods, food security and economic growth (GM, 2008). The integrated investment framework aims to better realise synergies across different components of SLM (UNCCD, 2007), As part of this, the Global Mechanism and its partners have developed the concept of integrated financing strategies (IFS), which is a structured process that supports countries to mobilise a mix of financial resources to fund projects and programmes related to SLM (internal, external and innovative financing sources, instruments and mechanisms) (GM, 2008). In order to address IFS challenges in member countries, through its programmatic activities the Global Mechanism is attempting to mainstream SLM within the development strategies, development programmes and corporate investments in member country processes. As such it provides technical and financial support for the identification of sustainable land management investment opportunities. It also facilitates the identification and mobilization of innovative sources of finance, including the private sector actors that promote SLM and combat desertification, land degradation and drought (DLDD), thus supporting affected countries in addressing financial gaps and elaborating viable investment plans, projects and programmes that address DLDD. It also supports the development and implementation of the economic valuation of land as a tool for maximizing the potential benefits of investing in SLM.



**FIGURE 3.** Four way matrix mapping out key examples of public or private mechanisms for enabling investments or asset investment identified in the scoping stage.

providers, international finance institutions or public sector banks within the range of contexts (climate finance, development finance, agriculture finance) pertinent to ILM.

Figure 3 presents the scoping results in an alternative manner, demonstrating the relative concentration on the discrete ILM components per sector and the general focus of the investment. It shows the relative concentration on carbon mitigation, adaptation and agro-ecology or agro-forestry as the key entry points for ILM finance.

### **Public Sector Investments**

Public finance is fundamental for enabling investments; therefore much of the public sector financing is deployed through grants and concessional loans. The majority of mechanisms in this category relate to the disbursement of funds committed by donor governments and foundations according to different UN conventions or other inter-governmental processes. For the majority of the instruments, financial returns are not expected (i.e. issuance of grants, subsidies, tax breaks), and significant investment is deployed to enhance the enabling environment (policy, institutional frameworks, technical capacity, loan guarantee programs, seed capital finance facilities and accelerators) to leverage larger volumes of finance for asset investments and private sector finance.

## Box 4. Althelia Ecosphere: Asset management approaches to ILM

Althelia Ecosphere, launched in 2011, is set up to manage financial assets by investing globally in sustainable land-use projects that deliver multiple blended social, environmental and economic returns. As part of this asset management platform 2013, Althelia announced the first closing of its Althelia Climate Fund (ACF), an investment fund that will focus on sustainable land use, namely certified sustainable agriculture with landscape level benefits from ecosystem services (EIB, 2013). Althelia aims raise USD 200 million, and is on track to achieving its funding goals with a capitalisation of USD 90 million at its first close in 2013 (EIB, 2013; Zwick, 2013). Althelia aims to manage investments with simultaneous positive impacts by: investing in climate resilience (mitigation, adaptation, preservation of ecosystems); investing in food security, local development and poverty alleviation; returning competitive and fair profit to investors, aligning stakeholder interests; and developing new investment models to help shape national and international policies on climate change and natural capital.

While many of the public sector finance institutions have a broad remit across multiple ILM components, the mechanisms through which funds are disbursed are often siloed (i.e. food security and agricultural productivity, climate mitigation or adaptation focused, water supply and sanitation, biodiversity, disaster risk response, poverty reduction and development) according to which convention or policy commitment they are aligned. Others such as the Global Mechanism provide brokering services (partnership approaches, dialogue platforms, investment structuring) to build capacity for more integrated financing of sustainable land management (SLM), as well as link credit and capital needs with finance providers to mainstream SLM.

## Box 5. SAB Miller: Enabling Investments in Sustainable Water Management

As a brewer, for SAB Miller, ILM is approached through the perspective of sustainable use and management of water at the watershed level, which features as one of their top ten priorities in relation to sustainable development. As such, SAB Miller adopts a partnership approach with local public and private actors and institutions to address water scarcity issues (i.e. risk mapping, water foot-printing, ecological protection, reduction, reuse and recycling of water resources at the plant and farm levels, and local wastewater treatment improvements etc.) in areas where water security represents a challenge to its business (e.g. Strategic Water Partners Network in South Africa; Water Futures Partnership in Tanzania).

## Box 6. Livelihoods Fund

The Livelihoods fund is a public-private partnership (Danone, CDC Climat, La poste, Crédit Agricole, Schneider Electric, Hermès, Voyageurs du monde, SAP, with institutional partners IUCN, Ramsar Convention; World Agro-forestry Centre, FFEM). It is a carbon fund (target size: EUR 30 million to EUR 40 million; current size: EUR 26.3million), providing a return on investment in the form of high quality carbon offsets. The Fund invests in projects (agroforestry, rural energy, ecosystem restoration) over an investment period of 3 to 4 years, and then co-manages the projects with its local partners over a period of up to 20 years. It targets areas of more than 35,000 ha for restoration in 5 different areas (India, Indonesia, DRC, Senegal, Kenya), with the aim of generating more than 7 million tons of carbon offsets. The fund aims to scale up the next generation of projects to a large landscape level in Kenya (up to and beyond 100,000 ha).

#### **Private Sector Investments**

Private finance sources and intermediaries are extremely diverse. The private sector engages in components of ILM through a range of instruments that vary over the lifecycle of the enterprise. This might include: equity and debt investments to cover some of the upfront investment requirements; carbon finance or other off-take agreements (an agreement between a producer and a buyer to buy or sell a certain amount of future production in order to guarantee a market for future production and improve financing options); financial services such as insurance and reinsurance products (e.g. crop insurance or underwriting green bonds); and direct investments from the balance sheets of companies into sustainable agriculture, small-holder livelihoods, conservation and community development as a means of risk management and corporate social responsibility (CSR).

Furthermore, farmland itself as a real asset (as opposed to agricultural commodities) has attracted increasing investment from institutional investors. As some investors have become more aware of the broader landscape risks and opportunities, they have begun to integrate environmental and sustainability criteria into the management of farmland portfolios and thus support more sustainable land management practices (Hopper, 2012). Given the complexity and potential contentiousness of land investments (Litovsky, 2013), ILM can provide responsible and sustainable investments in farmland assets<sup>4</sup> with a valuable framework and process to take other landscape components and actors directly into account.

<sup>4.</sup> See <u>http://www.unpri.org/areas-</u> of-work/implementation-support/ <u>the-principles-for-responsible-in-</u> <u>vestment-in-farmland/</u>

Likewise, clients of major public and private finance institutions are also required to take environmental and social factors and risks into account through targeted investment policies within the credit review process.<sup>5</sup> Evidence for the scale of direct investment in more integrated and landscape-based approaches varied significantly, from relatively small projects of 5-10,000 hectares to up to 400,000 hectares. The upper limit is mostly constrained due to the increasing levels of complexity (institutional, economic) as the number of stakeholders and landscape size increase.

#### **Public-Private Partnerships**

Public-private partnerships bring together a broad range of combinations of governments, private companies, CSOs and development organizations. Initiatives identified range from a handful of `Debt for Nature Swaps' (i.e., WWF, Conser-

vation International, Citibank), to investment funds for carbon offset or REDD+ (Reducing Emissions from Deforestation and Forest Degradation in Developing Countries) projects (i.e., Livelihoods Fund, Macquarie BioCarbon Group Pte, Deutsche Bank's AATIF, Bunge Environmental Markets), to biodiversity offset payments (i.e., AngloAmerican and SAB Miller), to Green Corridor coordination of ILM relevant investments (e.g. Southern Agricultural Growth Corridor of Tanzania). These arrangements enable public and philanthropic actors to more effectively leverage private sector investment for scale, while also providing private sector partners an opportunity to reduce environmental and social risks in their supply chain (Kissinger et al. 2013), fulfil corporate social responsibility goals, maintain a 'license to operate,' and sometimes to access new markets by raising their profile in emerging economies.

> 5. The IFC's own Performance Standards now require that regional water security be taken into account in investment planning, at times requiring companies to effect risk mitigation strategies given local and regional vulnerabilities; The Equator Principles also provide a risk management framework for determining, assessing and managing environmental and social risk in projects, yet are voluntary.



World Bank Building, Washington, DC. Photo by Shiny Things on <u>Flickr</u>.

## **Finance Innovations**

- » Public finance institutions are enhancing national and regional governments' ability to finance multi-focal area strategies and develop integrated finance strategies for SLM in a manner that addresses synergies and trade-offs across programs at landscape and sub-national jurisdictional levels.
- » Private sector finance is providing capital to companies, communities and projects supportive of landscape approaches (often in partnership with the public and civil sector).
- » Some companies and investors are aligning investments in commodities and real assets with broader landscape actors and benefits (carbon, adaptation and conservation), in order to better manage context-specific and value -chain risks and develop more resilient supply chains.

Although the majority of capital is directed through siloed and single-focus funds, a range of innovative institutions and mechanisms were identified across the public and private sector that are taking a more coordinated approach to financing the inter-linked components of a landscape, realizing the synergies between land management, social stability and climate resilience.6 There are also a handful of private sector investors and businesses engaging with existing local landscape initiatives, utilizing carbon finance or equity instruments to develop longer term sustainable economic options that are supportive of ILM approaches. In depth case studies were conducted on this range of public and private sector institutions and, to varying degrees, all are attempting to move beyond siloed entry points to either seek out more

robust, long-term financial returns based on ecosystem or social investment, or directly target ecological or social benefits in addition to financial returns.

## ILM Finance Case Studies

Full cases studies include Althelia Climate Fund (ACF), Moringa, EcoEnterprises Fund, World Bank BioCarbon Fund's Initiative for Sustainable Forest Landscapes (ISFL), Global Environmental Facility (GEF), Bunge Environmental Markets (BEM), Norway's International Climate and Forest Initiative (NICFI) of the Norwegian Agency for Development Cooperation (NORAD), and a broader review of different ILM entry points across agricultural and farmland finance (Rabobank, TIAA CREF, United States Agency for International

 E.g. diversified revenue streams across natural assets at larger landscape levels with explicit and measured social and environmental benefits; integrated multi-benefit projects blending public funds from climate, biodiversity and land-management funds.

Finance Mechanism / Institution	Investment Available (USD)	Description	ILM Entry Points
Nestle	-	Rural Development Framework is a monitoring tool to quantify the im- pacts of Nestlé's sustainable sourcing and social impact programs at the landscape level.	Sustainable & climate resilient agri- culture, sustainable water resources management, supply chain security, livelihoods.
World Bank BioCarbon Fund ISFL	280,000,000	Public-private sector initiative (carbon fund) to develop integrated land- scape-level programs for emission reductions generated from the LULUCF sector.	Emissions reductions, REDD+, cli- mate smart agriculture, sustainable livelihoods.
Global Environment Facility	2.096,000,000	Public financing fund with a mandate to serve as the financial mechanism of several major environmental conven- tions.	Multi-focal programs to address synergies and trade-offs between land use, climate and conservation issues at the landscape or jurisdic- tional levels.
Global Mechanism	-	Financial advisory to support devel- oping countries prioritize SLM and access finance from public and private sources for SLM.	Sustainable land management, climate mitigation, adaptation.
Norad NICFI	480,000,000 (109,000,000 CSO)	Development aid providing grants for clean energy, environmental protec- tion and REDD programming and research in developing countries.	REDD+, climate adaptation, clean energy.

**TABLE 1.** Overview of case studies within the enabling investment category, detailing investment size where available, a brief description and the range of ILM entry points addressed by the institution or mechanism.

Development (USAID), International Fund for Agricultural Development (IFAD), Agro-Ecological Investment Management, Nestlé, Brazil's Rural Credit). Shorter cases studies include insights from a range other financial mechanisms and vehicles including the Global Mechanism, Inari Fund and the Livelihoods Fund. Full case studies can be found in the appendix, while the following sections will provide an overview of key insights from the range of financial mechanisms and vehicles analyzed. The review revealed distinct activities financed through the framework of

enabling and asset investments from public and private finance.

**Enabling Investments** related to the use of public and some private funding (often through grants, subsidies and credit) to support more integrated planning and programming at national and jurisdictional levels.

Asset investments often related to the use of a business, sector or thematic goal to finance on/off farm activities as a catalyst to scale up, community-led landscape initiatives by developing longer term sustain-

Finance Mechanism / Institution	Investment Available (USD)	Description	ILM Entry Points
Althelia Climate Fund	90,000,000 (first close)	Closed end fund developing multiple revenue streams from forest protection and sustainable land use in Africa, LatAm and Asia. PPP approach through a private equity investment vehicle.	Sustainable land use, adaptation, sustainable livelihoods, REDD+.
Moringa	70,000,000 (first close)	Closed end fund making direct equity and quasi-equity investments in Portfolio Com- panies in Africa and LatAm. PPP approach through a private equity investment vehicle.	Sustainable agro-forestry, adap- tation, sustainable livelihoods, carbon, REDD+.
EcoEnterprises Fund	35,000,000 (EcoE II)	Provides venture capital to small-scale and community-based companies (organic agriculture, non-timber forest products, sustainable forestry, or ecotourism) in Lat- Am. PPP approach through venture capital/ private equity vehicle.	Sustainable livelihoods, mitigation, adaptation, conservation.
Global Mechanism	-	Financial advisory to support developing countries prioritize SLM and access finance from public and private sources for SLM.	Sustainable land management, climate mitigation, adaptation.
Agro-Ecological Fund	-	Fund to invest in ecological farmland and agriculture delivering financial benefits from improved profitability by reduced input costs and enhanced resilience.	Ecological organic farm manage- ment across a portfolio of farms.
Bunge Environmental Markets	1600 (AUM)	Major asset manager of emission reduction projects in established and emerging mar- kets. PPP approach.	Emissions reductions projects, sustainable land use, supply chain development & adaptation, sustain- able livelihoods.
TIAA-CREF Global Agriculture	2500	The institutional investor's investment fund makes direct investments in land used for agricultural production.	Sustainable agriculture (integrating environmental stewardship into investment approach).
Livelihoods fund	36	Investment fund providing investors with returns in the form of high quality carbon offsets. PPP approach.	Agroforestry, rural energy, live- lihoods, large scale ecosystem restoration.
USAID (multiple com- ponents)	-	Development Credit Authority (DCA) supports lending to underserved credit worthy borrowers. Feed the Future initiative supports sustainable and inclusive agricul- tural growth.	Food security, livelihoods, cli- mate-smart, sustainable agriculture.
Rabobank (multiple components)	-	Through various initiatives, funds and partnerships, it finances rural development and sustainable agriculture along the value chain.	Sustainability of food supply, inclu- sive food strategies, rural coopera- tives.
Brazilian Central Bank Resolutions	-	Conditions the concession of rural credit in the Amazon Biome upon proof of compli- ance with legal and environmental regula- tions.	Sustainable agriculture, forest conservation.

**TABLE 2.** Overview of case studies within the asset investment category, detailing investment size where available, a brief description and the range of ILM entry points addressed by the institution or mechanism.



**FIGURE 4.** Range of ILM finance innovation across public and private sectors, enabling and asset investments. Figures within the circle represent the level of finance available where known. Within the circles figures in brackets indicate the target fund size where it has not yet been reached.

able economic activities that are coordinated to better support multiple environmental and social benefits.

The case studies reveal a broad range of motivations for investing in ILM activities and initiatives. Figure 4 shows the range of public and private sector financing institutions and mechanisms that were investigated as case studies, covering both enabling and asset investments. Cases revealed a variety of drivers for and benefits from either financing ILM approaches or multi-focal initiatives. Public sector institutions were in part motivated to take a landscape approach in order to reduce the fragmentation of projects with multiple objectives implemented within a given area. Taking a landscape approach enables a more synergistic implementation of multi-lateral environmental conventions (see Table 1).

For the private sector, ILM investments present an opportunity to generate multiple positive benefits or address multiple sources of risk alongside the core revenue streams or supply chains. A broad range of motivations for private sector commercial and financial institutions were identified for engaging more directly in ILM, as revealed through the interview and desk-top research process. These included:

- Increasing investment value of arable and fertile land (due to annual loss of productive areas).
- Rising demand for sustainable and certified commodities.
- Potential new markets for payments for ecosystem services (PES) beyond just the regulated and voluntary carbon markets (i.e. CCB Standard, Gold Standard, FSC FORces, reciprocal water arrangements).
- Better response to context specific risks and creation of efficiencies from ecological management.

Box 7. Benefits of supporting landscape approaches Blended value investments in small and medium sized enterprises (SMEs) increase social and environmental resilience in areas rich in cultural and biological diversity, often working in partnership with community and government leadership (or even building on existing landscape initiatives) to fortify good environmental and social governance.

Reduced transaction costs and increased synergistic positive impacts (socially and environmentally) at the landscape level by implementing projects at a greater scale.

Diversified revenue streams from diversifying mono-culture approaches or unsustainable land management practices to community led agro-forestry ventures that diversify stakeholder income (promising more than carbon returns), enhance ecological functioning, and lead to on and off conservation and environmental benefits.

Partnership approaches for integration, coordination and connecting to landscape actors (from 1005 -1000s small-holders, local and regional governments, on the ground NGOs) to finance activities and institutions that help improve risk management along sustainable and secure supply chains.

PPPs to promote medium to large-scale restoration of landscapes through holistic management practices, which aims for ecologically regenerative, economically viable and socially sound management of on- and off-farm/site activities.

Improved predictability of finance for landscape scale strategies through institutional processes that better enable countries to design more integrated projects and access multiple sources of finance across individual convention objectives.

- Risk management and strengthened business model through diversified revenue streams beyond just carbon or land and single commodity values.
- Holistic and diversified risk management through environmental and social risk awareness, monitoring and long term management (supply chain security).

- Shifting global and national legal and market conditions.
- Growing interest in and regulatory requirements for green growth.

For a number of private sector investors, landscape ventures (investing in real assets or commodities, working with community initiatives to foster longer term sustainable economic activities, improving market access, etc.) also provided a strengthened business case to demonstrate the feasibility of engaging in the REDD+ and adaptation agenda. Box 7 summarizes the expected and realized benefits of supporting landscape approaches referred to by both private and public sector case studies. A diverse range of investments in ILM were identified through the private sector cases analyzed. Agro-Ecological and EcoEnterprises Fund represented specific on farm or company investments, whereby positive environmental and social benefits flowed off the invested unit (i.e. benefits for surrounding biodiversity, soil productivity, water resources) in support of a landscape approach. Agro-forestry investments at landscape scales (Althelia, Moringa and BEM), supply chain risk management approaches (Nestle) and value chain investments (Rabo Development) incorporate multiple stakeholders and small-holders in larger scale landscapes (from a few thousand to 100,000 ha).

## Box 8. Broadening agricultural finance to account for landscape effects at the bottom and top of the pyramid.

Most investors have not participated in farmland investment due to high capital requirements, long lock-up periods, and required specialised knowledge and low liquidity in the secondary market. However, in recent years, there has been growing interest in real assets amidst concerns over pressure of inflation, focus on portfolio diversification and increasing land values as demands in food, fibre and fuel from limited land resources grow (Hopper, 2012; Or, 2012). Of the few funds dedicated specifically to agriculture, TIAA CREF has raised USD 2.5 billion for its agricultural investment company TIAA-CREF Global Agriculture LLC, NCH Capital raised USD 1.2 billion for its 2007 NCH Agribusiness Partners fund, and Teays River Investments LLC raised USD 478 million for their Ag Real Value Fund in July 2010 (Or, 2012). The even smaller niche sector of organic and ecological farmland is an even more novel asset class where an understanding of the ecological and financial benefits of taking a more integrated whole system approach is scarce, creating barriers to raising investment from the capital markets at scale (AgroEcological, 2011). However, at the bottom of the pyramid, small holders already face multiple barriers to accessing credit for investing in on- and off-farm activities, where land rights are often obscure, yet the majority of agricultural investment occurs directly through farmers themselves (Assunção et al., 2013). Furthermore, there is concern that changes to the regulatory scheme for remittance transfers in relation to Basle III will further constrict capital to small holders in developing countries (Kyte, 2013). Given the pressures and incentives to invest in land from the top to the bottom of the pyramid, it is vital that large and small scale investors fully engage with the ILM agenda in order to avoid exacerbating tensions and challenges across different socio-economic activities and ecological systems that form part of resilient landscapes (Litovsky, 2013).

The case studies also demonstrate the range of different entry points for investing in farmland or lending to small-holder farmers (see full case studies and Box 9) in a manner that either has landscape benefits or encourages and supports ILM approaches. The cases show the range of challenges stakeholders face, including in promoting more integrated and sustainable initiatives; improving access to finance for small-holders in emerging and frontier economies; raising capital for integrative and innovative organic and whole system agricultural practices in developed and developing economies; and addressing sustainability challenges across the supply chain. The diversity

in approaches also demonstrates the challenges of crossing from the agricultural productivity, farmland and food security financing siloes to financing windows for ecological and whole system approaches in a way that engages private capital and mobilizes enterprise.

## **Barriers to ILM finance**

Across these entry points to ILM finance, the cases and interviews highlighted a range of mismatches in public-private capital and capacities that are currently hindering a greater level of ILM focused investment. It is clear that current channels of finance to ILM initiatives and activities face

Case Studies	Key Challenges	Opportunities
Private Sector Invest- ments	<ul> <li>Market uncertainty &amp; complexity</li> <li>Limitations of carbon and REDD+ as a secure, long term value driver, lack of policy signals</li> <li>Access to up-front financing &amp; risk capital</li> <li>Track record &amp; unfamiliar business case</li> <li>Lack of investable deals</li> <li>Exits/Illiquidity</li> <li>Finance for technical assistance</li> <li>Lack of co-ordination and aggregation, high transaction costs</li> </ul>	<ul> <li>Economic and risk diversification</li> <li>Advanced commitments, guarantees, price incentives</li> <li>Partnerships; leverage PPP networks; field presence &amp; aggregating partners</li> <li>Project, rather than company, approach</li> <li>Mezzanine instruments, long-term risk capital to accelerate</li> <li>Grant funding for technical assistance</li> <li>Innovating with alternative composite financing structures</li> </ul>
Public Sector Invest- ments	<ul> <li>Siloed conventions and governance frame- works</li> <li>Predictability of financing across-conven- tions</li> <li>Uncertainties in demand and market for land-based carbon and forest finance</li> <li>Complex methodologies and fragmented accounting</li> <li>Leveraging private sector finance</li> </ul>	<ul> <li>Predictability and simplicity of financing for countries to plan in a more integrated way</li> <li>Capacity building and integrated finance frameworks and economic instruments for programming SLM</li> <li>Simplified yet robust carbon accounting at the landscape level</li> <li>Innovative financing approach (e.g. bond financing, guarantees, price support); linking to other financial mechanisms (e.g. climate finance)</li> </ul>



a number of limitations and barriers, many of which restrict the effectiveness of public finance to leverage the private capital necessary for ILM ventures.

In particular for private sector finance in landscapes, key barriers to relate to the lack of favorable environment for investment and market development, including good governance, supportive policies and institutions, clear land tenure, stable macro-economic environment and well-designed national policies for ILM components (i.e. forestry, agriculture, water, mining, as well as investment and markets) (Boscolo et al., 2007). Unpacking and addressing these bottlenecks and barriers will be fundamental to developing a clearer strategy to scale up ILM from both a financial and landscape perspective. Table 3 summarizes the broad lessons learnt from case studies in terms of the key challenges public and private sector institutions have had to address in order to finance ILM activities and initiatives.

The following section focuses on distilling the wide range of ILM finance challenges identified within the case studies and interviews according to three core themes: the lack of aggregating forces to manage ILM complexity and integrate across ILM components; the high and uncertain risks in ILM finance for investors; and the need for early stage, up-front finance and patient capital.

#### Challenge of integrating and coordinating finance across siloed, policy frameworks and institutions.

The dispersion of finance for ILM across a range of conventions, institutions and financial mechanisms can increase the complexity for funders and investors to manage funds for ILM and stakeholders and initiatives of ILM to access funds. To overcome this disaggregation, the case studies of enabling investments showed that multi-focal and multi-benefit projects provided integration and coordination for ILM often at national or jurisdictional levels. Certain multi-focal projects of the GEF did provide evidence for how GEF grants are supporting efforts to consolidate initiatives across municipalities for more integrated land management practices (e.g. grants to support the development of a coordination mechanisms across 30 municipalities in a Chilean project, and implement 100,000 hectares of pilot areas as 'Integrated Conservation Districts' for soils, forests and water<sup>7</sup>).

Structured financial mechanisms that integrate finance for multiple ILM components in one fund (e.g. a fund for sustainable coffee and watershed investments in the same catchment) were not identified. Integration across actors within a landscape (i.e. smallholders, cooperative, local NGOs, local and regional governments) was identified in a number of asset investment cases,

7. Protecting Biodiversity and Multiple Ecosystem Services in Biological Mountain Corridors in Chile's Mediterranean Ecosystem: <u>http://www.thegef.org/gef/</u> <u>project\_detail?projID=5135</u> where private sector investors often supported the integration and coordinating component as part of their own costs. Currently, frameworks for directing finance to catalyze ILM (e.g. North American Wetlands Conservation Act, which provided a public policy framework for wetlands banking, conservation banks and offsetting; the policy framework for bundling compensation for ecosystem services in Mexico and Costa Rica; PINFPOR in Guatemala, including forestry incentives backed by the World Bank) have not led to aggregations of finance or activity at the landscape scale (Paul, 2013).

Part of the challenge of structuring funds to invest in a coordinated manner across one landscape is the limited deal flow, with few investment-ready enterprises and a lack of commercial opportunities in frontier and emerging economies, which comprise many REDD+ countries, let alone within a specific landscape in these geographies. A major driver for financing approaches at a landscape scale (i.e. moving from project to 100,000 ha landscape or jurisdictional scale<sup>8</sup>) has been the alleviation of higher transaction costs associated with verifying and monitoring multiple projects with separate goals, as well as enhancing risk through diversification (Dalberg, 2012). However, in emerging and frontier markets, identifying investable projects and companies remains a challenge for both public and private investors.

The scale of ILM projects financed ranges from a few thousand hectares to a few hundred thousand to the massive scale of often government-led green corridor projects. For the smaller investment managers operating in this space, ILM projects fall between the 10,000 to 400,000 ha range due to their ability to manage assets (i.e. land, rights-holders, farmers, institutions, proving the business case of more sustainable land management activities to farmer and land owners). Green corridors tend to be at too large and complex a scale for companies and investors, and tend to be government-led and coordinated with private investors participating in discrete components. The case studies further show that there is a lack of financing focused on the integration elements of ILM initiatives (i.e. the costs of stakeholders convening and then institutionalizing multi-stakeholder bodies to resolve landscape scale challenges). Instead, private investors are more likely to engage in a specific community-led initiative, to finance sustainable landscape interventions with carbon benefits (i.e. BEM, Macquarie BioCarbon Group<sup>9</sup>, Livelihoods Fund).

There is also a lack of cross-sector business planning and extended cost benefit analysis of total impacts on economies (local to national), developed, emerging and frontier that could not only provide a better business case for ILM, but also enhance coordination for its financing and

- i.e. BioCarbon Fund is scaling up to beyond 100,000 ha, but returns are carbon based, while blended funds such as Althelia and Moringa would not look beyond ventures of 5-10,000 ha with an average investment of 5-10 USD million and fund size of USD 100-200 million, the Bunge Environmental Markets' case covers 46,000 ha with an enabling investment of USD 200,000 (but overall AUM is USD 1 billion).
- 9 Macquarie BioCarbon Group are investing in the sustainable development of the Brazil nut market in a project in the Peruvian Amazon. The project comprises ~300,000 hectares of native forest managed by 400 families of local concession holders. Carbon finance is being used to invest in improving access to export markets (i.e. developing harvesting and processing facilities), thus creating longer term economic options that reduces the viability of forest clearance.

#### Box 9. ForestRE

A gap persisted in financing for forest investments to protect and restore the natural infrastructure that served and protected the Panama Canal, since Panama's government was in debt, had a poor credit rating and borrowing was expensive. Investments in the canal would limit the economic costs suffered from closure of the canal due to impairment of the watershed's functioning (Economist, 2005). ForestRe, a forestry insurance company, planned to implement a deal whereby a number of companies dependent on the canal would underwrite a 25 year bond that would then pay for the forest to be replanted. The deal has not yet been completed, demonstrating the challenge of innovation in this field. However, it does suggest that there is expertise and appetite for exploring alternative models to leverage ILM finance at scale.

 Financial resources available for subnational jurisdictions come from a variety of sources, including the 'REDD Early Movers – Rewarding Pioneers in Forest Conservation', KfW, the <u>GCF</u> <u>Fund</u>, the Amazon Fund (for Brazilian states, except Acre), Norad's NICFI: <u>http://www. gcftaskforce.org/knowledge\_network/blogs/2013/q2/jnr\_workshop</u> implementation across sectors and scales (GM, 2013; PwC, 2013; Webb, 2013). Furthermore, focal points for potentially integrative initiatives such as REDD+ tend to sit in forestry or environment ministries, limiting the ability to clarify the broader benefits of ILM-based approaches or the economic justifications to finance ministries. Instead, a piecemeal- and siloed-approach remains with respect to broader benefits, leading to pockets of projects for diverse issues such as flood defense (mangroves), farmer livelihoods, and rural energy for the poor (Webb, 2013).

Many of these challenges are reflected in the issues concerning land tenure and forest governance for REDD+ readiness (Naughton-Treves and Day, 2012), where lessons can be drawn from the challenges international donors face in financing REDD+ readiness at the subnational and project level where avoided deforestation projects will take place. Donors, investors and certifiers within the carbon markets are trying to improve the opportunities for financing to flow directly to subnational jurisdictions in order to avoid the current disconnect between international/national levels and sub-jurisdictional/project levels, as well as provide small scale, mainly voluntary, projects with clear rules and integrated accounting standards for nested projects within jurisdictional frameworks in the absence of an internationally agreed framework.<sup>10</sup>

#### **Risk/reward profiles**

Risk guarantees (for credit, market, operational, reputational and legal risks) are crucial for incentivizing new market innovation where there is a limited track record. Instruments such as first-loss protection and partial guarantees that shield investors from a pre-defined amount of financial loss are required to enhance credit worthiness and improve the financial profile of ILM investments (Hervé-Mignucci et al., 2013). For ILM projects sourced from frontier markets, the risk factors tend to be high in both market (price of credit issued) and operational terms (lack of purchase commitments), due to the lack of an enabling environment (national development bank, chamber of commerce, land tenure/rights, weak international policy signals), leading to the difficulty of raising finance for sustainable investment in emerging and more developed economies. Another constraint is the limited exit options that many

investors face in a number of frontier economies for equity investments in ILM projects, meaning a clear ability to sell their shares once the funded enterprise has achieved the desired stage of capitalization and maturity (Dalberg, 2012).

#### Investment horizon and scale

In general, ILM projects require investors to forgo immediate returns and adopt longer time horizons for their return of capital. ILM projects also tend to be far longer in lifespan than other commercial ventures (investment can be required for up to 20 years, while different ecosystems are restored, commercial ventures developed, etc.), which requires up-front financing and early deployment of capital. Investors might be required to commit to an investment from 3-5 years to over 10 years before they start seeing returns, which requires patient and quality capital that is one of the most significant barriers to raising financing for ILM investments. The BEM case shows the challenges private sector partners can face in terms of the expected speed of implementation and generation of long term sustainable revenues in comparison to public sector partners. Furthermore, in the Althelia, Moringa, BEM and BioCarbon Fund cases, although carbon credits and REDD+ were initial entry points to the projects, it rapidly became clear that REDD+ is too complex and uncertain to engage with both local stakeholders

## Box 10. VCS: Moving to nested approaches for REDD+ that potentially support ILM

Verified Carbon Standard's Jurisdictional and Nested REDD+ (JNR) Framework was generated in response to the challenges of overcoming gaps from the increase in REDD+ projects and the current lack of guidance on robust and transparent accounting and verification approaches at the jurisdictional level together with lack of certainty in international climate policy, which has served to prevent the integration and scaling up of government-led and project-level REDD+ activities. The framework is being implemented in a number of jurisdictions (Brazil, Chile, and the DRC) to provide governments with a comprehensive, integrated accounting and crediting framework for harmonizing emissions reductions across national REDD+ programmes as well as subnational and/or project activities. Likewise, the Gold Standard, is also exploring developments in their methodologies and strategic partnerships that would allow for enhanced integration of other landscape components within its own land use programme/standard in order to address the challenges of increased transaction costs for smaller scale forestry projects. In 2012, it acquired CarbonFix with an aim of developing to support Improved Forest Management (IFM) and climate smart agriculture projects as well as announced an MOU with the Forest Stewardship Council in order to leverage their respective approaches to social and environmental safeguards and carbon certification.

and global investors. Instead, targeted interventions in the value chain for economic and revenue diversification have provided the business case to support the development of projects' REDD+ components.

A number of the case studies represent private equity and fund vehicles (often fixed term funds of up to 10 years), which are a widely understood and established investment vehicle more aligned with the timescale of ILM activities. However, institutional investors often find the average direct deal sizes in impact enterprises to be too small<sup>11</sup> and the total fund size incompatible with their maximum stake percentage

#### Box 11. EcoEnterprises Fund

EcoEnterprises Fund deploys expansion capital that would otherwise be unavailable to growth-stage sustainable ventures in unique business niches such as organic agriculture, non-timber forest products, sustainable forestry, or ecotourism. Through its first fund under management, EcoEnterprises Fund deployed USD 6.3 million in risk capital in 23 small and growing mission-driven, financially viable businesses in 10 countries in Latin America that could demonstrate positive environmental and social returns (TNC and UNDP, 2010). EcoE II, launched in December 2011, now has a capitalization level of USD 35 million (EF, 2013). EcoE II will focus on taking the Fund's activities to scale, by providing expansion capital to the strongest business models for sustainable resource management and livelihoods. Investments are expected to return real carbon, climate-change, and biodiversity benefits captured through a monitoring and evaluation tool, that measures the Fund against a 'triple bottom line' of financial, environmental, and social returns, which requires prospective companies to meet the following criteria: work to protect vital ecosystems; encourage the sustainability of the natural resource base and biodiversity; provide employment for local people; and bring social and economic benefits to surrounding communities. Additionally, the use a certification regime such as organic and fair-trade is desired.

 While average growth capital deals of traditional private equity firms are estimated at USD 36 million, average impact investment deals are estimated at USD 2 million (WEF, 2013). Within the private equity case studies, investments in portfolio enterprises ranged between USD 2-15 million. and minimum capital commitment (WEF, 2013). A further challenge is that many long-term investors are unlikely to finance the relatively small deal sizes that the majority of ILM projects currently occupy. Time-frames are extended for ILM projects, not just due to the length of time it takes for investments to 'bear fruit', but also due to the high transaction costs associated with relatively lengthy periods and complex processes of due diligence (e.g. several site visits, lack of a track record and proven business case, coordination and integration transaction costs, requirements of local on-the-ground knowledge).

The cases and broader analysis show that many of the innovative investments available are small scale investments and projects with high transaction costs and long-term, up-front financing requirements. Furthermore, these often operate in complex, high risk frontier and emerging markets with little track record of the business model in highly uncertain markets (both environmental markets and local capital markets). The fact that many of these small funds are in an early stage is a challenge to raising institutional investment, because there is the perception that these funds generate less than market-rate returns. This view is reinforced by the lack of track record and lack of scalable deals and products (WEF, 2013). In emerging and frontier economies, the lack of liquid public markets and lack of investment funds (Groh et al., 2013), both impact-oriented and traditional commercial funds, further limits the volume of capital that can be raised globally and domestically (Dalberg, 2012).

Despite these major challenges, funds such as Moringa, Althelia, EcoEnterprises Fund and the Landscape Fund (see Box 13) provide useful instruction as to the value of private-public-NGO partnerships to develop robust pipelines of projects that are consistent with landscape objectives but are simultaneously attractive and marketable to a range of investors. To do this, these cases have shown the importance of demonstrating reliable short and long term returns from a range of revenues, including annual crops and agro-forestry revenues, long term business value generation at exit (including reducing costs relating to environmental and social risks), and the potential for supplementary revenue streams through conservation activities that bear payment for ecosystem services.

19	46.00	4.30	9	00.0	16	55.69	Diese	<u>_</u>	Vite	23	
10	10.01	+3.01	UC	2015	11	29817	212'88	- 39	824	四里	
.18	-1.35	-457	GL	12.08	9	178.90	10%	51	5%	22	
<b>R</b> 4	-7.00	1.01	87	86.53	6	400.00 400.00	3017	8	33	31	
	1.00	-3.72	114	1319		100.00	12.88	72	5274	<b>安</b> 西	
32	+9.03	+3.96	90	10 00		10.35	86.53	- %	32	1	
<b>E</b> 11	100.00	13.50		10.10	4	58.92	1319		<b>10</b>	139	Ξ
DT.	+11.58	+2.54	252	54.32	73	99,16	1531	Ħ	迎	<b>安</b> 將	
<b>Ø</b> 9	-11.32	-2.13	86	98.65	8	34.18	98.79	19	19819		
-	10.00	11 00	15	843	15	458.04	5.87	21	88		
76	+5,15	T1.00	70	276	19	38732	32.87	- 18	316	NO.C	
co.	+835	+3.32	C1	2,10	7	67354	47.95	21	101 101	SCORE OF STREET	
00	10.00	+1.03	- 39	65.12	-	PR C33	1329	略	11	100	
92	+6.29	11.00	54	17.6		10176	45.96	8	23	-	
10	-13.84	-3.45	0	1531	5	HOL LO	38.94	K	\$117 CBT		

# Structuring public investments to mobilize commercial capital

- » Commercial capital will be vital for later stages of scaling up proven (and therefore de-risked) approaches to ILM. It will be crucial broaden the appeal beyond niche socially responsible investment (SRI) and Impact investors, given the fraction of capital controlled by such investors in comparison to that controlled by mainstream investors.
- » Target investors for ILM and innovative instruments and PPPs need to be defined according to a framework that accounts for the investment horizons and risk appetite of the target investors.
- » The opportunity to structure climate finance to catalyze more integrated and synergistic financing for climate resilience needs to be taken, rather than reinforcing thematic and sector siloes.

ILM approaches provide opportunities for businesses and investors to respond to a number of emerging trends and opportunities. ILM can also reduce transaction costs of developing, evaluating and verifying multiple smaller projects and interventions, and increase synergistic positive economic, social and environmental returns. Despite this, the following section discusses the key pathways to realizing these benefits at a landscape and financial scale.

## Leveraging commercial capital

Clearer strategies and innovative instruments are needed for these large scale pools of public and private capital to more effectively engage in and mobilize private sector investments that directly contribute to sustainable land and resource management for enhanced climate and social resilience. If the aim is to enable access to larger pools of capital for ILM initiatives and projects, then closer attention must be given to the interventions in structure, risk/return profile and liquidity of the asset that will enable finance from larger, more conservative and mainstream investors, who currently do not participate in financing ILM investments. It will be crucial for ILM stakeholders to broaden its appeal beyond SRI and Impact investors (Munden et al., 2012), given the fraction of capital controlled by such investors in comparison to that controlled by mainstream investors (Burton, 2011; WEF, 2013).

Figure 5 provides a framework to understand the mismatch relating to investment risk, return and horizon, and could serve as a framework to shape the key interventions required to scale up ILM finance. Although the large, conservative financial institutions (i.e. institutional investors such



**FIGURE 5.** Different scales of investors and lenders according to the size of the deal, level of risk and horizon for investment return for asset investments (Dalberg, 2012). USD figures within relevant boxes depict the average range of individual investment commitment into private equity in 2012 (with an assumption that individual investments can account for between 3-10% of fund size) (WEF, 2013). The text to the right hand side of the graph highlights the core challenges and potential pathways available to the range of investors for scaling up ILM supportive investments.

as pension funds, sovereign wealth funds, donors, and development finance institutions) are seen as being increasingly interested in investing in the innovative funds (EIB, 2013) explored in this report, their ability to invest faces a range of barriers, primarily in relation to challenges of investment size, horizon, and the risk/return profile.<sup>12</sup> It is estimated that USD 100 billion in SRI investments across all sectors are still tiny compared with the USD 7 trillion invested in all stock mutual funds and exchange-traded funds (Burton, 2011). Furthermore, a World Economic Forum report (2013) estimates that pension funds and insurance companies combined control 87 percent of global asset ownerships<sup>13</sup>, with family offices, high net worth individuals (HNWIs) and

12 Investment horizons and deal sizes vary by investor, for example the threshold for project finance at an investment bank would be around USD 50 million, while a development bank might have a threshold of USD 5-10 million. The average range of individual investment commitment into private equity (2012) ranges from USD 46-118M for sovereign wealth funds; USD 17-53 M for public pension funds; USD 15-39M for asset managers; USD 15-33M for private sector ... continued on p. 28

#### Box 12. Savory Institute

The Savory Institute's mission is to promote large-scale restoration of the world's grasslands, through the 'holistic management practice' which aims for ecologically regenerative, economically viable and socially sound management of the world's grasslands. As such, the Savory Institute has formed a partnership with impact investors, Armonia, LLC and Level 3 Capital Advisors, LLC to create Grasslands, LLC. At present Grasslands identifies attractive ranch real estate investments, raises investor capital to purchase the assets, and then engages in long-term management contracts on the acquired properties, but eventually the aim is to develop a 'ranch real estate fund', with ecological benefits (enhanced ecosystem resilience, biodiversity, sequestered carbon), solid financial returns (competitive annual cash dividends and low-risk, long term capital storage in the form of a productive grassland) and the long-term economic and environmental stability for rural communities. Total land under management at present is nearly 81,000 ha.

continued from p. 27... pension funds: USD 13-28M for insurance companies; USD 7-23M for family offices; USD 6-12M for endowment plans. The assumption is that individual investments account for between 3-10% of fund size, which means that often the funds themselves are too small for them to hold a small enough % of the fund, and often the direct deals executed are also too small (WEF, 2013).

13. Institutional investors have been estimated by OECD to have USD 71 trillion in assets under management, and thus have a major role to play in meeting climate investment challenge (OECD, 2012). Foundations (from which the majority of funds are sourced for impact investment) control approximately 3.5 percent. Given this understanding that the impact investment sector can only realise its full potential if other types of asset owners and managers begin to allocate additional capital towards impact investments, the ILM agenda will need to have a clearer path way to unlocking these larger pools capital.

The cases have shown that a few investors are exploring portfolio and blended-return approaches through familiar investment vehicles (i.e. private equity funds, venture capital funds) that strip some of the complexity out of the underlying assets and value drivers. However, these cases also show current gaps in the enabling environment for investing in these ventures, and thus the requirement for greater provision of risk capital and guarantees, as well as up-front financing, and seed accelerators that could be provided by public sector investors (development banks, international donors, foundations) to catalyze further

market innovation. Furthermore, the size of these vehicles is still too small for even the most conservative of institutional investors to be able to invest. From a lending perspective, in the case of REDD+ financing, many forest enterprises are SMEs, that may be too big for local finance sources but too small for international sources of finance (Henderson, 2013). But even so, lending policies often favor short-term options with low risks, with banks eager to minimize administrative costs through economies of scale (i.e. favoring larger loans) (Boscolo et al., 2007).

This calls for a greater focus on identifying potentially suitable aggregating forces, trusted intermediaries, more innovative products and vehicles (for more scalable deals) to simplify the complexity of ILM ventures and encourage mainstream capital to invest in engaging with the ILM market and agenda. CGIAR and The Munden Project is thinking critically about how to structure investments in sustainable land use in a manner that provides a more familiar investment vehicle and more adequate risk
### Box 13. Landscape Fund: Structuring standardized financing schemes for wide investment in sustainable land use

The proposed structure for the Landscape Fund is built on the premise that current for investing in smallholder agriculture, forestry and REDD+ are constrained by the risk embedded in current market-based mechanisms to providing capital for longer-term investments. Mechanisms such as the forest carbon market (i.e. as other the counter derivatives) are poorly designed to attract private capital at scale, reduce barriers to capital in credit delivery to smallholders, and achieve the environmental or developmental objectives due to certain core challenges: the un-favorability of commodities markets to producers; high risk and uncertainty (in both carbon markets, the complexity of land tenure issues and the unstable political and economic conditions of the frontier economies in which most projects must operate); the complex revenue streams of forest carbon (MP, 2011a); and the lack of affordable and effective credit delivery systems to provide up-front capital to transition to sustainable land use practices (Alforte et al., 2013). Thus, the Landscape Fund proposes an alternative, networked financing approach to investing in sustainable small-holder agriculture and forestry that would better align financial structure with the multiple conservation and development goals through a diversification of operational risks, target markets, customers, and home currencies (MP, 2011b), thus enabling investors and producers to participate in sustainable land use initiatives (Alforte et al., 2013). It proposes a portfolio-based approach to finance sustainable land use to reduce the risk from a single or limited set of projects and smooth the overall portfolio cash flow. It also aims to target large pools of capital in the credit markets, as opposed to generating a new asset class (i.e. PES). For small holders, the credit mechanism will need to provide low interest rates, longer maturities and context-specific, flexible repayment schedules. The proposed mechanism aims to provide a vehicle with purely financial appeal to more conventional and conservative investors to support the sustainable land use in both developed and developing countries (Munden et al., 2012).

guarantees to mainstream investors by masking the complexity of an unfamiliar and uncertain asset (i.e. presenting a composite asset more familiar to mainstream investors) and reducing risk exposure through a portfolio approach.

While commercial capital will be vital for later stages of scaling up proven approaches to ILM, foundations provide a potentially significant source of funding for early stages of innovation for landscape based approaches, thus allowing philanthropy to not only address market failures but also potentially catalyze markets (Bannick and Goldman, 2012). In the US market for example, pioneering in-

vestments in for-profit organizations delivering social (and environmental) impacts (e.g. Gates, Rockefeller, Hewlett, and Skoll) represented only one percent of capital deployed by foundations in 2009 (most of this was invested in low-risk debt instruments) (Bannick and Goldman, 2012). While it is recognized that tapping into foundation endowments in this way could require a shift in mind set and endowment objectives and strategy,<sup>14</sup> investors are interested in how they could better engage with foundations and donors to catalyze innovation in these blended vehicles that support ILM.

<sup>14.</sup> Although lessons could be drawn from experiences where foundations provided early stage investment into impact investing funds, as Rockefeller did with Acumen.

## Breaking through public sector siloes

The past few years has seen the concept of the green economy take hold and partnerships develop in a number of 'green growth corridors'. Over the next few years, the financing instruments and modalities of the Green Climate Fund<sup>15</sup> (GCF) will be hammered out, including the structure of the private sector facility. Public sector mechanisms have to break through convention and governance siloes in order to finance integrated landscape or multi-focal area projects, and even then might not be catalyzing private sector innovation in the ILM agenda. Here, the work of the Global Mechanism (on building agreement between national and international partners on how to package finance for sustainable land management from a broad range of sources) and the GEF (on fostering national governments to develop multi-focal area (MFA) projects that can consolidate and develop integrated landscape initiatives) should feed into the post-2015 debate in order to ensure that further siloes are not adding additional variables to an already complex challenge. Equally, Althelia, Moringa and BEM have all illustrated the limitations of the stand-alone business case for carbon and REDD+ based ILM entry points.

These challenges suggest that public sector finance institutions could ensure that climate finance catalyzes a more integrated and synergistic

financing across a broad range of landscape challenges and actors. Given the current lack of carbon market demand (CI, 2013), calls for dedicated facilities for REDD+ under existing multi-lateral climate funds are understandable. However, the creation of yet another silo with REDD+ should be avoided, and its limitations as a means to ensure long-term sustainable economic activities on its own should be fully recognized. As such, ILM approaches are key for moving from 'offsetting' to 'paying-for-impact' in REDD+ projects. Furthermore, jurisdictional REDD+ approaches should not be considered landscape approaches per se (though nested projects may take place within a given landscape), as landscape and administrative territories most often do not overlap. Further investigation is needed to understand whether the move to create a structure to nest REDD+ projects within jurisdictional accounting frameworks is appropriate for addressing ILM challenges or further exacerbates them.

Green growth strategies (potentially funded by the GCF) will need to be supported by a clearer business case of the benefits of coherently investing in ILM components. Instruments in the GCF could therefore be structured so that GCF grants and concessional lending can capture ILM relevant institutions within existing accredited national, regional and international intermediaries and implementing entities. Public

15. The Green Climate Fund was established at the 16th session of the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) to support adaptation and mitigation projects, programmes, policies and other activities. The World Bank will initially serve as Interim Trustee for the GCF, subject to a review three years after the GCF comes into operation. finance mechanisms such as the GEF and IFAD have made progress in enabling countries to receive funding for multi-focal projects that target landscape-scale challenges and mainstream climate risk into sector specific funders.<sup>16</sup> These lessons should be carried across to the design of the GCF. Furthermore, climate finance could complement sector specific funds in order to realize landscape benefits (e.g. providing finance for integration across a broader set of ILM components for climate and landscape resilience). Here, lessons can be drawn from the GEF efforts to improve the guarantee of financing across separate objectives to allow finance recipients (governments, CSOs, and research institutions) to better address multiple convention objectives within one project or initiative. Likewise, the deep involvement in the private sector in the design of the BioCarbon Fund's Initiative for Sustainable Forest Landscapes (ISFL) could provide a prototype for the private sector facility of the GCF.

View the full GEF case study for evidence of how GEF grants are supporting efforts to consolidate efforts across municipalities for more integrated land management practices.

### Next steps: Improving publicprivate capital for ILM

- » Public finance can help private investors increase the quantity and quality of private capital available for ILM through a more strategic deployment of risk capital.
- » Public finance institutions should more clearly define and engage with the requisite private and commercial target group.
- » Position and showcase ILM as core to managing emerging market, environmental and social risks and opportunities.

Public sector finance (mainly through grants, subsidies and credit) can enable landscape actors to collaborate on projects that integrate multiple landscape objects. Private sector investment (loans, equity, PES credits) and partnership models for ILM ranged from those that channel finance into whole landscapes (such as the World Bank's ISFL and certain MFAs of the GEF ) to those that support and are designed to coordinate with landscape objectives (such as Althelia, Moringa, EcoEnterprises Fund).

The innovative investment and partnership models explored in this report need strong support to effectively catalyze growing investment for ILM. Both asset and enabling ILM investment have supported criticism concerning the lack of correlation between the private sector, voluntary projects and the allocation of public sector funding (Cl, 2013). Public-private capital and capacities therefore needs to be strategically sequenced so that enabling investments can more effectively support asset investments. Engaging with a broader range of private investors up front, could help public sector institutions to identify the target investor group for maximum economic, environmental and social impact. Funding strategies should define how to leverage private sector funds from the target group. To better support existing innovations in partnership approaches, strategic dialogue should be undertaken to bridge the expectation gaps between public and private stakeholders, avoid the recreation of siloes in green growth strategies, and more effectively leverage commercial investment.

Investors are beginning to understand how ILM approaches have the potential to address many of the emerging interdependent challenges that will drive and undermine investments relating to food security, agricultural intensification, climate adaptation and mitigation, REDD+, conservation and water resources management. In order to better support innovation for ILM finance, three priority areas have been identified for public finance to help private inves-

<sup>17.</sup> See <u>http://siteresources.</u> worldbank.org/EXTCARBON-<u>FINANCE/Resources/CF1112</u> <u>p19.pdf</u>

tors increase the quantity and quality of private capital into ILM.

#### Aggregate and coordinate ILM finance

Integrate and coordinate finance for ILM. The challenge of financing the integration or coordination component of ILM needs to be addressed. This means looking beyond pockets of finance for multi-benefit or multi-focal projects, to exploring possible fund structures that could finance multiple components within one fund in pilot regions. Or, ILM initiatives could be better supported by public sector institutions to identify finance available for discrete elements of their initiatives.

Aggregate diverse and complex underlying assets to access commer-

cial capital. Private investors are primarily interested in clear and proven business models, with reliable revenue streams. They are less familiar with the multitude of actors and interventions that underlie landscape based assets or projects, and even less able to provide capital for the up-front finance require to transition to more sustainable land-use practices or foster collaboration between a range of stakeholders. Althelia, Moringa and CGIAR's Landscape Fund all provide innovative models and arguments for aggregating a portfolio of agricultural or agro-forestry based projects or companies in order to access larger pools of capital from the mainstream credit markets

(Alforte et al., 2013). These portfolio approaches provide investors with a recognizable investment vehicle and reduce risk from any single project. These approaches could help further inform the frameworks developed by public sector institutions (i.e. the Global Mechanism of the UNCCD and the GEF) to integrate finance across a range policy frameworks and funding sources for sustainable land-use in a way that aligns with landscape objectives.

Support aggregation points and coordinating platforms. Investors aiming for blended financial, environmental and social objectives need to engage with stakeholders in order to achieve this at a landscape scale (often through partnerships with respected local and on-the-ground partners). Public finance for enabling investments has a stronger role to play in supporting enterprising ILM initiatives through financing and institutionalizing ILM partnerships and collectives and creating the right policy incentives for coordination and integration that can link actors across separate ministry or sector foci. This includes assistance for the costs of demonstrating the value of ILM approaches to local stakeholders. Furthermore, the BioCF ISFL underlines the brokering role that multilateral development banks can play to strengthen dialogue on sustainability and investment between private investors and companies operating in a landscape and jurisdictional governments.

#### Improve the risk profile ILM

Public sector finance institutions must evaluate vehicles for strategically providing risk capital in order to better support early stage ILM innovations. While carbon benefits and finance are catalysts for sustainable landscape interventions, most landscape-based REDD+ initiatives overwhelm the risk profile of private sector investors, leading to a very few niche opportunities for which capital remains lacking. A more conducive enabling environment is required to better support integrated approaches to scale up and address the gaps between the level of investment available for integrated approaches and the accessibility of investment capital from mainstream investors.

Donors have a large role to play in supporting the engagement of the private sector to achieve public goods and provide incentives for the private sector to form partnerships larger strategic alliances along specific value chains (GDP, 2013). As such, donors are driving the development of innovative financial instruments (e.g. ISFL, Partnership for Market Readiness<sup>17</sup>) and supporting improved integration of funding strategies for sustainable land management (i.e. Global Mechanism).

Donors, foundations and development banks should consider their ability to take on the type and level of risk that could catalyze commercial finance for ILM. While programmatic grant giving is absolutely vital, the cases show that there is a real need to evaluate and define appropriate risk instruments for project level initiatives and enterprises (credit guarantees, conditioned subsidies, insurance, credit purchasing mechanisms in order for the public sector to better support longer term private sector interest in the ILM agenda. This could be a crucial allocation of enabling investments to improve the ease of doing business in many of the challenging market environments these innovative ILM investments are taking place.

Explore and evaluate risk instruments for ILM. Public finance must continue to lay the groundwork for improved governance frameworks, guaranteed funds and partnerships to support private sector investment into ILM activities and initiatives. However public financial institutions have an opportunity to better address some of the structural challenges that private investors face in accessing private capital to scale up ILM ventures in difficult economic and political conditions. Risk quarantees and credit purchase mechanisms are required for credit, market, operational, reputational, legal risks and price incentives to improve long term investment prospects and attract investment in this space where there is a limited track record. Instruments such as first-loss protection and partial guarantees that shield investors from a pre-defined amount of financial loss can enhance credit worthiness and improve the financial profile of ILM investments.

Risks (notably relating to carbon market uncertainty) can also be mitigated through a mix of diversification, certification, and the provision of advanced market commitments (AMCs), as well as applying Environmental Social and Governance (ESG) management and performance criteria for risk avoidance and risk management.<sup>18</sup> Existing risk management instruments have traditionally focused on political and counterparty risk yet face a limited uptake in products to cover a broader range of landscape risks<sup>19</sup> including REDD+, mitigation and low carbon development (CI, 2013). Extending risk insurance could be vital to better supporting some of the uncertainties landscape initiatives face. Finally, investment agreements offer a potential tool for governments to incorporate the ILM agenda as a compliance issue, potentially positioning it as a sustainability priority of the government.

Strategic support through risk and protection mechanisms. Any form of insurance or protection fund would require highly rated international entities (e.g. public institutions, credit insurance institutions or possibly even sovereign wealth funds) to ensure an adequate quality level of the default insurance to cover the risk of non-payment and external credit enhancement to

ensure the timeliness of repayment (Munden et al., 2012). In relation to the GCF, the strategic use of guarantees could be considered one of its financial instruments, in addition to grants and concessional loans (CDKN, 2013). Furthermore, given the criticism the risk-aversion of other multi-lateral facilities (Kyte, 2013) it should consider how its private sector facility can be structured to be supportive of catalytic investments private the catalytic investments needed for many landscape investments. Aggregating platforms and dedicated protection funds as a means of stripping away the complexity and addressing the transaction costs of financing ILM should therefore be a key component of donor strategies going forward.

## Mainstream the ILM business case

Private sector ILM ventures also need to scale up in order to access capital from mainstream investors eager to align their investment practices with the underlying risks of climate change and resource challenges (Mercer, 2013).

Mainstream the ILM business case as core to managing emerging market risks and opportunities. The value drivers for private sector ILM investment demonstrate the positioning of integrated, diversified interventions and revenue streams as a source of revenue maximization, risk diversification and supply chain security

- 18. Performance standards and principles have an important role to play in shifting capital to more integrated approaches by broadening the focus of investment practice and risk management tools to include ILM factors related to land and community engagement (The International Finance Corporation's Performance Standards), the legitimacy of land tenure rights (UN Food and Agricultural Organisation (FAO) Voluntary Guidelines on the Responsible Governance of Tenure and the current negotiations of the Responsible Agricultural Investment (RAI) Principles at the Committee on World Food Security) and social and environmental issues within farmland investment (The Principles for Responsible Investment in Farmland).
- For example: Overseas Private Investment Corporation (OPIC), World Bank Group's Multilateral Investment Guarentee Agency (MIGA), USAID's Development Credit Agency (DCA).

management. While some of these investments may have started as pure play REDD+ or carbon funds, a broader, more diverse and stable range of returns (i.e. set of commodities, land values, etc.) are required in order to present a more long-term, viable business model to investors. ILM has a strong potential therefore to better manage localized social and environmental risks, diversify returns, and capture value from potentially growing markets for sustainability-based certified commodities, investment in real assets such as farmland, and credits relating to both carbon as well as other ecosystem services. In order to do this, policy makers structuring climate finance and green growth strategies must not reinforce thematic siloes, which would increase the transaction costs of financing ILM through both public and private interventions. Initiatives to enhance small-holder access to credit should be further encouraged to integrate other landscape components through conditions for accessing finance (e.g. requiring co-ordination for climate resilience and ecosystem conservation in agricultural finance) in order

to maximize multiple benefits and minimize climate related risks.

Credit, acceleration capital and funds for technical capacity and pilot projects. A number of important facilities exist for the provision of acceleration and seed capital for early stage agriculture and renewable energy ventures (e.g. UNEP's Seed Capital Assistance Facility and AgDevCo amongst others, PPP incubator funds). The private sector cases studies all referenced challenges of proving the business case for ILM ventures in challenging market contexts. As such, the role of public finance for providing acceleration capital and funds for technical demonstration of pilot projects should be explored in more detail. Philanthropy also has a role in accelerating this innovation phase of ILM, so that additional commercial investment, not just public funding and finance, can be catalyzed. Public institutions must integrate the ILM agenda into efforts to scale up initiatives by commercial banks to enhance small-holder access to credit in a manner that integrates a broader range of ILM issues into its conditions.

### Conclusion

This report has reviewed the different ways in which ILM is being financed. Within the overarching architecture of enabling and asset investments from public and private finance, the review revealed two main modes of ILM finance: Enabling investments, related to the use of public and some private funding (often through grants, subsidies and credit) to support more integrated planning and programming at national and jurisdictional levels, and asset investments, often related to the use of a business, sector or thematic goal to finance on/off farm activities as a catalyst to scale, community led landscape initiatives by developing longer term sustainable economic activities that are coordinated to better support multiple environmental and social benefits. Although funds that were structured to integrate and coordinate financing for ILM within one composite financial mechanism were not identified, often private investors supported the integration and coordinating component as part of their own costs. Further work is therefore required to better structure finance for the integrating component for ILM at community and sub-jurisdictional levels.

There is growing investor and donor interest in a range of ILM activities and components. Debate continues on the structure and size of the Green Climate Fund, while the United Kingdom, United States and Norway have recently committed USD 280 million to the ISFL to be managed by the World Bank's BioCarbon Fund (WB, 2013a). In the private sector, a niche group of investors explored in this report show growing interest in how manage climate risks, and invest in agricultural commodities and real assets such as agricultural land in an ecologically and socially sustainable manner. The scale of this investment is significant to ILM. In addition to the many private sector case studies in this report, Credit Suisse is raising USD 500 million 'fund of funds' that will invest in agricultural opportunities in Africa, the Aqvance Africa Fund (in which the African Development Bank provided a USD 100 million anchor to catalyze further investment).<sup>20</sup> The cases have discussed how institutional investors are raising capital for agricultural funds in the USD 1-2 billion range. In order to avoid exacerbating the convergence of climate, agricultural and forest based risks, integrated and holistic landscape approaches that engage the broad range of relevant actors will need to play a defining role.

While REDD+ has opened an opportunity for bridging adaptation, mitigation and broader sustainable development requirements, ILM will often need to be at the center of sector or goal specific activities. ILM initiatives and multi-objective

African Development Bank Group (May 22, 2013): AfDB Sponsors Fund of Funds for Agribusiness in Africa – Board Approves Equity Investment of USD 100 Million in Agvance Africa.

investments hold the potential to direct finance to diversified and integrated landscape-level interventions that address a range of key developmental challenges including climate change mitigation and adaptation, food security, sustainable agricultural intensification, poverty reduction, and conservation. It is also clear that private investment in ILM initiatives and ventures must be mobilized to address the scale of the challenge, but in a manner that will not further exacerbate existent issues. However, amidst the pockets of innovation in financing ILM, this study clarifies the significant barriers that remain to disbursing international public funding into integrated ventures and initiatives as well as the challenge of financing the integration component of ILM.

Despite the growing call to mobilize private finance, there still remains a lack of clarity as to which private sector investors and what type of private sector investment is desired to direct investments to the scale of integrated climate-environment-development challenges, or how best to use public funding to catalyze a shift to climate resilience and green growth. Given the contrasting profiles of private sector investors, this report has presented a more nuanced framework with which to understand the range of public and private investments, motivations and ability to invest in the ILM agenda. As negotiations continue around the structuring of emerging climate finance mechanisms, this level of nuance is required to ensure that public sector policies and public mechanisms or funds actually encourage a transformational level of private sector investments in ILM rather than just a small fragment of global capital.

#### References

- AgroEcological, 2011. The Investment Advantages of Organic Agriculture. AgroEcological, Available online: <u>http://www.agro-ecological.com/research-papers/the-investment-advantages-of-organic-agriculture.pdf</u>. [Accessed 01.10.2013].
- Alforte, A., D. Matias, L. Munden and J. Perron. 2013. Financing sustainable agriculture and mitigation: Smallholders and the Landscape Fund. CGIAR Research Program on Climate Change, Agriculture and Food Security, Working Paper No. 52. Available at: <u>http://ccafs.cgiar.org/publications/financing-sustainable-agriculture-and-mitigation#.UyQ9xvldXeK</u>.
- Althelia. 2012. Althelia Climate Fund Sustainable land use investment fund: Aligning the Economy with the Ecology Althelia Ecosphere, Available at: <u>http://www.nyenrode.nl/FacultyResearch/LSE/CS/International%20Sustainable%20Business/conferences/2012conferenceBoostingInvestments/Documents/Althelia%20Climate%20Fund%20-%20Sylvain%20Coupille.pdf</u>. [accessed on: 2 November 2013].
- Assunção, J., Gandour, C., Rocha, R. and Rocha, R. 2013. Does Credit Affect Deforestation? Evidence from a Rural Credit Policy in the Brazilian Amazon. Climate Policy Initiative, Available online: <u>http://climatepolicyinitiative.org/wp-content/uploads/2013/01/Does-Credit-Affect-Deforestation-Evidence-from-a-Rural-Credit-Policy-in-the-Brazilian-Amazon-Technical-Paper-English.pdf</u>. [accessed on 22 November 2013].
- Bannick, M. and P. Goldman. 2012. Impact Investing: Gaps in the Impact Investing Capital Curve. Stanford Social Innovation Available online: <u>http://www.ssireview.org/blog/entry/gaps in the impact investing capital curve</u>. [Accessed 20.11.2013].
- Boscolo, M., A. Whiteman, H. Savenije and K. van Dijk. 2007. Financing sustainable forest management. Forest Policy Service of the Food and Agriculture Organisation, Available at: <u>http://www.fao.org/forest-ry/16559-0325ac13168b9c3d84d0279e2f8adc798.pdf</u>. [accessed: 15 August 2013].
- Buchner, B., L. Brown, and J. Corfee-Morlot. 2011. Monitoring and Tracking Long-Term Finance to Support Climate Action. OECD, COM/ENV/EPOC/IEA/SLT(2011) 3.
- Burton, J. 2011. Investing with Principles: Socially responsible ETFs are multiplying, with a variety of approaches, The Wall Street Journal, New York, U.S.A., p. Available online: <u>http://online.wsj.com/news/</u> articles/SB10001424052748704425804576220462961462024.
- CDKN. 2013. Addressing the barriers to climate investment. Climate and Development Knowledge Network, Available online: <u>http://cdkn.org/wp-content/uploads/2013/11/CDKN\_GuideFinancialInstruments\_final\_web-res.pdf</u>. [accessed on: 13 November 2013].
- CI, 2013. REDD+ Market: Sending out an SOS. Near-term REDD Credit Supply/Demand Imbalance Threatens to Undermine the Future of Avoided Deforestation Projects. Conservation International, Arlington, U.S.A.
- Dalberg, 2012. Assessment of Impact Investing Policy in Senegal. Dalberg.
- EcoAgriculture Partners, 2013. Defining Integrated Landscape Management for Policy Makers, ecoagriculture Policy Focus. No.10. EcoAgriculture Partners Partners, Available online: <u>http://ecoagriculture.org/documents/files/doc\_547.pdf</u>. [Accessed 10.11.2013].
- Economist, 2005. Are you being served? The Economist, April 21, 2005, Available at: <u>http://www.economist.</u> <u>com/node/3886849</u>. [Accessed on 10.08.2013].
- EF, 2013. EcoEnterprises Fund: Facts and Figures. Information provided by Tammy Newmark at EcoEnterprises Fund.
- EIB, 2013. EIB supports Althelia Climate Fund to save tropical forests. European Investment Bank, Available online: <u>http://europa.eu/rapid/press-release\_BEI-13-86\_en.htm</u>. [Accessed on 01.11.2013].
- Elson, D., 2012. Guide to investing in locally controlled forestry. Growing Forest Partnerships in association with FAO, IIED, IUCN, The Forests Dialogue and the World Bank, IIED, London, UK.
- FAO, 2010. "Climate-Smart" Agriculture Policies, Practices and Financing for Food Security, Adaptation and Mitigation. Food and Agriculture Organisation of the United Nations (FAO), Rome, Italy. Available online: <u>http://www.afcconference.com/images/the-hague-conference-fao-paper.pdf</u>. [Accessed on 13.08.2013].
- GDP, 2013. On Common Ground: Donor Perspectives on Agriculture & Rural Development and Food Security & Nutrition. Global Donor Platform, Published online: <u>http://www.donorplatform.org/private-sector-co-operation/on-common-ground.html</u>. [Accessed on: 13.09.2013].

- GM, 2008. Integrated Financing Strategies for Sustainable Land Management. The Global Mechanism of the United Nations Convention to Combat Desertification, Rome, Italy.
- GM, 2013. Climate Change Financing Opportunities for Sustainable Land Management in Africa: Lessons Learned and the Way Forward. Global Mechanism of the UNCCD, Rome, Italy.
- Groh, A., H. Liechtenstein and K. Lieser. 2013. The Venture Capital and Private Equity Country Attractiveness Index: 2013 Annual. IESE Business School, University of Navarra, Available at: <u>http://blog.iese.edu/vcpeindex/</u>. [accessed 19.08.2013].
- Henderson, I. 2013. REDD+ Results-based Finance. A Private Sector Perspective from UNEP-FI, UNFCCC, Bonn.
- M. Hervé-Mignucci, G. Frisari, V. Micale, F. Mazza. 2013. Risk Gaps: First-Loss Protection Mechanisms. Climate Policy Initiative, San Franciso, U.S.A.
- Hill Clarvis, M., A. Litovsky and S. Shames. 2013. Finance Case and Financial Strategies for Integrated Landscape Management: Scoping and Mapping ILM Finance Working Document. Earth Security Iniative and EcoAgriculture Partners, on behalf of the Landscapes for People, Food and Nature Initiative, Washington, DC.
- Hopper, T. 2012. Farmland Investing: Cultivating a Diversification Opportunity. TIAA CREF, Available online at: https://www.tiaa-cref.org/public/advice-planning/market-commentary/market-commentary/investment\_insight\_articles/comm\_063.html. [accessed:30.08.2013].
- IFC. 2013. Mobilizing Climate Finance. International Finance Corporation, Available online: <u>http://www.ifc.org/wps/wcm/connect/Topics\_Ext\_Content/IFC\_External\_Corporate\_Site/CB\_Home/Mobilizing+Climate+Finance/</u>. [accessed on: 14.06.2013].
- Kissinger, G., A. Brasser and L. Gross. 2013. Scoping study. Reducing Risk: Landscape Approaches to Sustainable Sourcing. Landscapes for People, Food and Nature Initiative., Washington, DC.
- Kissinger, G., M. Herold and V. De Sy. 2012. Drivers of Deforestation and Forest Degradation: A Synthesis Report for REDD+ Policymakers. Lexeme Consulting, Vancouver, Canada.
- Kyte, R., 2013. Investing in sustainable landscapes in forests and on farms, Global Landscapes Forum, Warsaw, Poland.
- Litovsky, A. 2013. Land in investment: Navigating the risks and opportunities of a challenging agenda. Earth Security Initiative and CDC Group plc, London, United Kingdon. Available online: <u>http://earthsecurity.org/reports/land-resource-security-collaboration-uk-governments-cdc-group-plc/</u>. [accessed: 11.10.2013].
- McFarland, W. 2013. The private sector in REDD+ and green economies from convening and coordinating, to pushing and pulling. UN REDD Programme Blog, Available online: <u>http://unredd.wordpress.</u> <u>com/2013/06/19/the-private-sector-in-redd-and-green-economies-from-convening-and-coordinating-topushing-and-pulling/</u>. [Accessed 20.06.2013].
- Mercer. 2013. Global Investor Survey on Climate Change: 3rd Annual Report on Actions and Progress. Commissioned by the Networks of the Global Investor Coalition on Climate Change, Available online: <u>http:// globalinvestorcoalition.org/wp-content/uploads/2013/08/2013%20Global%20Investor%20Survey%20</u> <u>Report%20Final.pdf</u>. [accessed 26.11.2013].
- Milder, J.C., A.K. Hart, P. Dobie, J. Minai and C. Zaleski. 2014. Integrated Landscape Initiatives for African Agriculture, Development, and Conservation: A Region-Wide Assessment. World Development 54, 68-80.
- Moringa. 2012. Moringa A Sustainable Agroforestry Fund: Sustainable, Profitable Large Scale Agro Forestry Projects Working Conference 'Boosting Investments in Sustainable Forestry, Forest Carbon and Renewable Energy', Accra, Ghana.
- MP. 2011a. REDD and Forest Carbon: Market-Based Critique and Recommendations. The Munden Project, Available online: <u>http://www.redd-monitor.org/wordpress/wp-content/uploads/2011/03/Munden-Project-2011-REDD-AND-FOREST-CARBON-A-Critique-by-the-Market.pdf</u>. [accessed: 15.10.2013].
- MP. 2011b. A Response to CMIA: Towards a Broader Approach to Achieving REDD The Munden Project, Available online: <u>http://www.redd-monitor.org/wordpress/wp-content/uploads/2011/12/CMIA-Response\_Final.pdf</u> [accessed 12.10.2013].
- Munden, L., P. Holmgren, R. Reeve, P. Riggs, R. Prabhu, B. Bowie, B. Deljurie, S. Subbakrishna and E. Cheney. 2012. INARI: A Proposal for Financing Sustainable Land Use at Scale, Available online: <u>http://www.fao.org/docrep/016/ap076e/ap076e.pdf</u>. [accessed: 09.10.2013].

- MunichRE. 2013. Natural catastrophes 2012: Analyses, assessments, positions. Münchener Rückversicherungs-Gesellschaft, Münich, Germany. Available at: <u>http://www.munichre.com/publications/302-07742\_en.pdf</u>. [accessed on: 30.09.2013].
- Naughton-Treves, L. and C. Day. 2012. Lessons about Land Tenure, Forest Governance and REDD+: Case Studies from Africa, Asia and Latin America. Land Tenure Centre, Available online: <u>http://www.nelson.wisc.edu/ltc/docs/Lessons-about-Land-Tenure-Forest-Governance-and-REDD.pdf</u>. [accessed on: 10.10.2013].
- Or, A. 2012. TIAA-CREF Raises \$2 Billion for Agriculture Investments, The Wall Street Journal, Available online: <u>http://online.wsj.com/news/articles/SB10001424052702304192704577404453866115604</u>. [Accessed 10.11.2013], p. online.
- Paul, S. 2013. Interview & Correspondance. People and Planet Holdings 28.08.2013.
- PwC. 2013. Measuring and managing total impact: A new language for business decisions. Pricewaterhouse-Coopers, Available online: <u>http://www.pwc.com/gx/en/sustainability/publications/total-impact-measurement-management/assets/pwc-timm-report.pdf</u>. [Accessed on 10.11.2013].
- Scherr, S.J.. 2013. Recognizing Common Ground: Finding Meaning in Integrated Landscape Management. Landscapes Blog for People, Food and Nature. EcoAgriculture Partners Partners, Available online: <u>http://blog.ecoagriculture.org/2013/11/13/recognizing-common-ground-finding-meaning-in-integrat-ed-landscape-management/</u>. [accessed 22.11.2013].
- Shames, S., S.J. Scherr, R. Friedman. 2012. From Climate-Smart Agriculture to Climate-Smart Landscapes. Agriculture and Food Security 1.
- TNC and UNDP. 2010. EcoEnterprises Fund Case Study: Investing in SEM Success. The Nature Conservancy and United Nations Development Programme
- WB. 2012. BioCarbon Fund Next Generation: Executive Summary World Bank Carbon Finance Unit, Washington, DC. Available at: https://wbcarbonfinance.org/docs/BioCF\_Tranche\_Three\_Concept\_ Note\_04.12.12.pdf. [accessed on 23.10.2013].
- WB. 2013a. BioCarbon Fund Launches \$280 Million Initiative for Sustainable Forest Landscapes. World Bank Carbon Finance Unit, Available at: <u>http://www.worldbank.org/en/news/feature/2013/11/20/biocarbon-fund-initiative-promote-sustainable-forest-landscapes</u>. [accessed on: 20.11.2013].
- WB. 2013b. Results-based finance for REDD-plus: Lessons learned from the Forest Carbon Partnership Facility and the BioCarbon Fund. World Bank Carbon Finance Unit, Washington DC. Available online: https://www.forestcarbonpartnership.org/sites/fcp/files/2013/August2013/Results-based-finance-for-<u>REDD-Plus.pdf</u>. [accessed on: 20.10.2013].
- Webb, C., 2013. Interview. PWC, 14.08.2013.
- WEF. 2013. From the Margins to the Mainstream Assessment of the Impact Investment Sector and Opportunities to Engage Mainstream Investors. World Economic Forum Investors Industries Prepared in collaboration with Deloitte Touche Tohmatsu, Geneva, Switzerland. Available online: <u>http://www3.weforum.org/docs/WEF\_II\_FromMarginsMainstream\_Report\_2013.pdf</u>. [accessed on 01.10.2013].
- Zwick, S. 2013. Althelia Raises \$80 Million For REDD And Ecosystem Services. Ecosystem Marketplace, Available online: <u>http://www.ecosystemmarketplace.com/pages/dynamic/article.page.php?page\_id=9774</u>. [accessed on: 01.11.2013].

# Appendix

# Overview of 235 ILM mechanisms reviewed for the mapping analysis of ILM financial mechanisms

The full description of the ILM mechanisms can be found in the ILM database spreadsheet (on request from Earth Security Initiative and EcoAgriculture Partners). The table below provides a high level overview of the range of mechanisms, detailing the intermediary through which it is deployed, the type of instrument used (grants, loans, equity, etc.), the source of finance (public or private), whether it represents enabling or asset investments, the primary ILM entry point, and then level of finance available.

Name of fund/ mechanism	Intermediary	Instrument	Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
Canadian fund for Afri- can Climate resilience	Bilateral aids and development agency	grants	public	enabling	adaptation	21.9
FFEM - adaptation	Multilateral/region- al development banks	grants	public	enabling	adaptation	22.3
Blue Moon Fund	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	adaptation	23
NEFCO - Nordic cli- mate facility for CC	Multilateral/region- al development banks	grants	public	enabling	adaptation	24.4
Climate finance inno- vation facility	UN Convention fund	advisory services and financial support	public	enabling	adaptation	35.2
Fonerwa	Public national/ regional banks	grants	public/ PPP	enabling	adaptation	35.7
Swiss agency for development and co- operation - adaptation	Bilateral aids and development agency	grants	public	enabling	adaptation	59.7
Africa Adaptation programme	UN Convention fund	technical and financial support	public	enabling	adaptation	92.1
ADB - Climate for development in Africa initiative	Multilateral/region- al development banks	capacity enhance- ment and advisory services	public	enabling	adaptation	144
AusAID - adaptation	Bilateral aids and development agency	advisory services, financial and tech- nical assistance	public	enabling	adaptation	168.5
GEF-Least Developed country fund	Multilateral finance facility	grants	public	enabling	adaptation	180

Name of fund/ mechanism	Intermediary	Instrument	Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
Global climate change alliance	Multilateral/region- al development banks	advisory services and financial support	public	enabling	adaptation	272
GEF-Adaptation fund	Multilateral finance facility	grants	public	enabling	adaptation	324.4
GEF-Special climate change fund	Multilateral finance facility	grants	public	enabling	adaptation	368.2
Program for Scal- ing-Up Renewable Energy in Low Income Countries	UN Convention fund	grants and loans	public	enabling	adaptation	505
Pilot program on climate resilience	UN Convention fund	grants and loans	public	enabling	adaptation	1300
International climate fund	Bilateral aids and development agency	grants and loans	public	enabling	adaptation	6147
KfW development and climate finance	Public national/ regional banks	grants and loans	public	enabling	adaptation	6559
USAID - Global climate change initiative	Bilateral aids and development agency	advisory services, financial and tech- nical assistance	public	enabling	adaptation	
Green climate fund	UN Convention fund		public	enabling		
BMU - International climate initiative	Bilateral aids and development agency	knowledge trans- fer, technology cooperation, policy advice and invest- ment measures	public	enabling	adaptation/ mitiga- tion-energy	160.7
Landcare Australia	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	blended	3.4
Brazilian Environmen- tal and Social Stock Exchange	Advisory Guidance Coordination Facil- itation		private	enabling	blended	4.74
Global Green Growth Institute	Advisory Guidance Coordination Facil- itation		public/ PPP	enabling	blended	10.7
Christensen Fund	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	blended	17
Mosaic	agribusiness/min- ing companies		private	asset	blended	23.6

Name of fund/ mechanism	Intermediary	Instrument	Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
GEF-Earth fund	Multilateral finance facility	advisory services and grants	public/ PPP	enabling	blended	50
People and planet holdings	Portfolio investors (asset managers/ carbon, green and REDD funds)/ impact investors	loans and equity	private	asset	blended	50
Althelia	Portfolio investors (asset managers/ carbon, green and REDD funds)/ impact investors	loans	private/ PPP	asset	blended	80
Climate and land use alliance	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	blended	104
World Bank Biocarbon fund	Multilateral/region- al development banks	grants and loans	public/ PPP	asset/en- abling	blended	280
Environment and Sus- tainable Management of Natural Resources Thematic Programme	Multilateral/region- al development banks	grants	public	enabling	blended	629.8
FSC	Standards	certification	private		blended	
Topan	Advisory Guidance Coordination Facil- itation		private	enabling	blended	
Bunge Environmental markets	agribusiness/min- ing companies	PPP - impact investment	private	asset	blended	
Danish International dvlpt agency	Bilateral aids and development agency	grants	public	enabling	blended	
GEF-managed small grants program	Multilateral finance facility	grants	public	enabling	blended	
Nature Conservancy Trust for Public Land conservation fund	Philanthropic foundations/NGOs/ CSOs	grants (PPP/offset- ting/conservation fund)	private	enabling	blended	
Overseas landcare fund	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	blended	
Bio-logical capital	Portfolio investors (asset managers/ carbon,green and REDD funds)/ im- pact investors		private	asset	blended	

Name of fund/ mechanism	Intermediary	Instrument	Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
Gold Standard	Standards	certification	private		blended	
Voluntary Certification Standard (VCS)	Standards	certification	private		blended	
Climate, Community and Biodiversity Stan- dards (CCB Standards)	Standards	certification	private		blended	
UN convention to combat desertification (global mechanism)	UN Convention fund	advisory services	public	enabling	blended	
Indian Land Tenure Foundation	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	conservation	0.322
John Ellerman Foun- dation	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	conservation	0.455
Weeden Foundation	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	conservation	1.15
Mohamed bin Zayed Species Conservation Fund	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	conservation	1.5
biobanking trust fund	Public national/ regional banks	biodiversity offset- ting	public	enabling	conservation	2.4
Japan fund for global environment	Bilateral aids and development agency	grants and techni- cal support	public	enabling	conservation	3.4
Mitsubishi Corpora- tion Fund for Europe and Africa and for the Americas	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	conservation	7
FFEM - conservation	Multilateral/region- al development banks	grants	public	enabling	conservation	7.9
Darwin initiative	Bilateral aids and development agency	grants	public	enabling	conservation	11.1
GEF-Nagoya Protocol Implementation Fund	Multilateral finance facility	grants and techni- cal support	public/ PPP	enabling	conservation	15
McKnight Foundation International Pro- gramme	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	conservation	16.15

Name of fund/ mechanism	Intermediary	Instrument	Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
Fauna & Flora Interna- tional	Philanthropic foundations/NGOs/ CSOs	grants	public/ PPP	enabling	conservation	25.24
North American Wet- lands Conservation Act Program (NAWCA) Payment for Ecosys- tem Services	Public national/ regional banks	grants	public	enabling	conservation	65.1
NEFCO - Nordic envi- ronmental develop- ment fund	Multilateral/region- al development banks	concessional finance	public	enabling	conservation	80.4
International Union for Conservation of Nature	Philanthropic foundations/NGOs/ CSOs		public	enabling	conservation	123.3
Critical Ecosystem Partnership Fund	Philanthropic foundations/NGOs/ CSOs	grants	private/ PPP	enabling	conservation	161
MAVA Foundation	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	conservation	162.3
Brazilian states tax incentives	Public national/ regional banks	tax incentives	public	enabling	conservation	191.1
French agency devel- opment - environment	Bilateral aids and development agency	grants	public	enabling	conservation	518.1
AusAID - environment	Bilateral aids and development agency	advisory services, financial and tech- nical assistance	public	enabling	conservation	603.6
Nestle	agribusiness/min- ing companies		private	Asset / enabling	conservation	
AngloAmerican (BBOP/Forest Trends)	agribusiness/min- ing companies		private	asset	conservation	
African Conservation Foundation	Philanthropic foundations/NGOs/ CSOs		private	enabling	conservation	
The Rufford Founda- tion	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	conservation	
Conservation interna- tional debt for nature swaps	Philanthropic foundations/NGOs/ CSOs	debt for nature swaps		enabling	conservation	

Name of fund/ mechanism	Intermediary	Instrument	Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
Beartooth capital	Portfolio investors (asset managers/ carbon,green and REDD funds)/ im- pact investors	capital investment	private	asset	conservation	
Special purpose fund (government of Indo- nesia)	Public national/ regional banks	grants	public	enabling	conservation	
Sabah State Govern- ment Malua biobank	Public national/ regional banks	conservation certif- icates	public/ PPP	enabling	conservation	10
Foundation for Sus- tainable Development	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	develop- ment	0.632
CDC Fund Asia	Multilateral/region- al development banks	equity, debt, mez- zanine, finance	public	asset/en- abling	develop- ment	30
Oak Foundation	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	develop- ment	32.7
BNDES - development	Multilateral/region- al development banks	financial support	public	enabling	develop- ment	43.8
Gastby charitable foundation	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	develop- ment	72
CDC Fund africa	Multilateral/region- al development banks	equity, debt, mez- zanine, finance	public	asset/en- abling	develop- ment	123.2
NEFCO investment fund	Multilateral/region- al development banks	loans, capital investments	public	asset/en- abling	develop- ment	152
Oxfam	Philanthropic foundations/NGOs/ CSOs	grants	public	enabling	develop- ment	429.3
PROPARCO (French governments' private sector financing arm) and CDC climate	Public national/ regional banks	equity, loans and guarantees	public	asset	develop- ment	991
German Federal Ministry for Eco- nomic Cooperation and Development - bilateral development cooperation	Bilateral aids and development agency	grants and conces- sional loans	public	enabling	develop- ment	4020

Name of fund/ mechanism	Intermediary	Instrument	Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
CDC Equity invest- ment	Multilateral/region- al development banks	equity	public	asset/ enabling	develop- ment	32.5
CDC Debt and struc- tured finance	Multilateral/region- al development banks	equity, debt, mez- zanine, finance	public	asset/ enabling	develop- ment	87.9
Swiss investment fund for emerging market	Multilateral/region- al development banks	long term finance	public	asset	develop- ment	517
Swedish international development cooper- ation agency	Bilateral aids and development agency	development finance and techni- cal assistance	public	enabling	develop- ment	2749
Islamic development bank - LMDC	Multilateral/region- al development banks	loans	public	asset/en- abling	develop- ment	3100
German agency for international cooper- ation	Bilateral aids and development agency	grants	public	enabling	develop- ment	
Cooperation Andina de Fomento	Multilateral/region- al development banks	credit operations; grants; technical support; and finan- cial consulting	public	asset	develop- ment	
SHARE Agriculture Foundation	Philanthropic foundations/NGOs/ CSOs		private	enabling	develop- ment-AG	0.58
Poverty Environment initiative	UN Convention fund	advisory services and financial support	public	enabling	develop- ment-AG	15.7
Devco	Multilateral/region- al development banks	financial support	public	enabling	develop- ment-AG	33.45
Action against hunger	Philanthropic foundations/NGOs/ CSOs	grants	public	enabling	develop- ment-AG	44
DFID impact fund	Multilateral/region- al development banks	capital investment	public	enabling	develop- ment-AG	75
Swiss agency for development and cooperation - devel- opment	Bilateral aids and development agency	grants	public	enabling	develop- ment-AG	129.3
Development Co-op- eration Instrument	Multilateral/region- al development banks		public	enabling	develop- ment-AG	22646

Name of fund/ mechanism	Intermediary	Instrument	Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
Asia DB - Poverty and environment fund	Multilateral/region- al development banks	loans, grants and advisory services	public	enabling	develop- ment-cli- mate	3.6
Seed capital assistance facility	UN Convention fund	advisory services and seed capital	public	enabling	mitiga- tion-energy	10.5
Nordic Development Fund - EEP	Multilateral/region- al development banks	grants	public	enabling	mitiga- tion-energy	10.6
Nordic Development Fund - Proclimate guarantee facility	Multilateral/region- al development banks	long term grants	public	enabling	mitiga- tion-energy	13.4
Fonds capitale car- bonne Maroc	Multilateral/region- al development banks	carbon credits purchase	public	enabling	mitiga- tion-energy	24.12
IADB - SECCI	Multilateral/region- al development banks	grants and conces- sional loans	public	enabling	mitiga- tion-energy	40
Korea international cooperation agency	Bilateral aids and development agency	grants, loans and technical assis- tance	public	enabling	mitiga- tion-energy	49.8
Asia DB - Climate change fund	Multilateral/region- al development banks	loans, grants and advisory services	public	enabling	mitiga- tion-energy	50
Danish climate invest- ment fund	Bilateral aids and development agency		public	enabling	mitiga- tion-energy	50.15
Carbon fund for Europe	Multilateral/region- al development banks	CERs	public	enabling	mitiga- tion-energy	67
Trading emissions plc	Portfolio investors (asset managers/ carbon,green and REDD funds)/ im- pact investors	structured debt and equity invest- ments/ emission reduction	private	asset	mitiga- tion-energy	91.9
Asia DB - CEFPF	Multilateral/region- al development banks	loans, grants and advisory services	public	enabling	mitiga- tion-energy	94
Asia DB - Future car- bon fund	Multilateral/region- al development banks	loans, grants and advisory services	public	enabling	mitiga- tion-energy	112.8
NORAD - Clean energy for development fund	Bilateral aids and development agency	grants	public	enabling	mitiga- tion-energy	112.9

Name of fund/ mechanism	Intermediary	Instrument	Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
Community develop- ment carbon fund	Multilateral/region- al development banks	grants	Public	enabling	mitiga- tion-energy	128.6
EIB KfW	Multilateral/region- al development banks	carbon finance	public	enabling	mitiga- tion-energy	134
Carbon partnership facility	Multilateral/region- al development banks	emission reduction programs/carbon credits	public	asset/en- abling	mitiga- tion-energy	147
ClimateWorks foun- dation	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	mitiga- tion-energy	150
Asia DB - Asia pacific carbon fund	Multilateral/region- al development banks	loans, grants and advisory services	public	enabling	mitiga- tion-energy	150.8
Post 2012 carbon credit fund	Multilateral/region- al development banks	carbon finance	public	enabling	mitiga- tion-energy	167
Prototype carbon fund	Multilateral/region- al development banks	CERs	public	enabling	mitiga- tion-energy	180
European carbon fund	Portfolio investors (asset managers/ carbon,green and REDD funds)/ im- pact investors	carbon finance	private	asset	mitiga- tion-energy	191.2
EBRD EIB - Multilateral carbon credit fund	Multilateral/region- al development banks	carbon finance	public	enabling	mitiga- tion-energy	221
NEFCO carbon fund	Multilateral/region- al development banks	carbon finance	public	asset/en- abling	mitiga- tion-energy	221.5
IFC - Blended Conces- sional Finance	Multilateral/region- al development banks	risk sharing prod- ucts, lower interest rates, longer ten- ors, subordinated rank in loans, or lower returns for equity investments	public	asset/en- abling	mitiga- tion-energy	600
First climate	Portfolio investors (asset managers/ carbon, green and REDD funds)/ impact investors	CERs	private	asset	mitiga- tion-energy	670

Name of fund/ mechanism	Intermediary	Instrument	Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
Climate change capi- tal carbon fund	Portfolio investors (asset managers/ carbon, green and REDD funds)/ impact investors	equity and debt investments	private	asset	mitiga- tion-energy	850
French agency devel- opment - energy	Bilateral aids and development agency	grants, loans, guarantees, equity shareholdings, co-financing	public	enabling	mitiga- tion-energy	1216.3
Netherlands develop- ment cooperation	Bilateral aids and development agency	grants	public	enabling	mitiga- tion-energy	1340
Multilateral invest- ment guarantee facility	Multilateral/region- al development banks	investment guar- antees	public	enabling	mitiga- tion-energy	2800
EBRD - Sustainable Energy Initiative	Multilateral/region- al development banks	loans; equity investments; guarantees; leasing facilities; and assistance through financial interme- diaries	public	asset/en- abling	mitiga- tion-energy	3055
Clean Technology fund	UN Convention fund	grants and loans	public	enabling	mitiga- tion-energy	5200
Bank of America - En- vironmental business initiative	Private sector banks/investment banks	loans	private	asset/en- abling	mitiga- tion-energy	8000
UBS Dutch green fund	Private sector banks/investment banks	loans	private	asset	mitiga- tion-energy	9112
Gold Standard	Advisory Guidance Coordination Facil- itation	certification		enabling	mitiga- tion-energy	
Climate Community and conservation standard	Advisory Guidance Coordination Facil- itation	certification		enabling	mitiga- tion-energy	
UNEP Renewable Energy Enterprise Development	Multilateral finance facility	seed capital	public	enabling	mitiga- tion-energy	
Africa green fund	Multilateral/region- al development banks	grants	public	enabling	mitiga- tion-energy	

Name of fund/ mechanism	Intermediary	Instrument	Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
Eko asset manage- ment	Portfolio investors (asset managers/ carbon,green and REDD funds)/ im- pact investors	private sector investment	private	asset	mitiga- tion-energy	
WestLB (project finance)	Private sector banks/investment banks	private sector investment	private	asset	mitiga- tion-energy	
Citigroup venture capital international	Private sector banks/investment banks	private equity investment	private	asset	mitiga- tion-energy	
Clean development mechanism	UN Convention fund	CERs	public	enabling	mitiga- tion-energy	
MDG carbon facility	UN Convention fund	advisory services	public	enabling	mitiga- tion-energy	
Japan fund for global environment	Bilateral aids and development agency	grants and techni- cal support	public	enabling	mitiga- tion-land use	0.8
Tree Aid	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	mitiga- tion-land use	2.4
FONAFIFO	Public national/ regional banks	loans	public	enabling	mitiga- tion-land use	5.6
PINFOR	Public national/ regional banks	forest fund (forest- ry incentives)	public	enabling	mitiga- tion-land use	13.9
CARE International Sustainable Land- scapes Partnership	Philanthropic foundations/NGOs/ CSOs	grants	Private/ PPP	enabling	mitiga- tion-land use	20
AusAID - mitigation	Bilateral aids and development agency	advisory services, financial and tech- nical assistance	public	enabling	mitiga- tion-land use	23.1
Macquarie BioCarbon Group Pte	Private sector banks/investment banks	loans	Private/ PPP	asset	mitiga- tion-land use	25
Rainforest Alliance	Advisory Guidance Coordination Facil- itation		public	enabling	mitiga- tion-land use	38
Fundesnap	Public national/ regional banks	forest fund	public	enabling	mitiga- tion-land use	40

Name of fund/ mechanism	Intermediary	Instrument	Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
Amazon fund	Multilateral/region- al development banks	forest fund (Non-reimbursable direct financing)	public	enabling	mitiga- tion-land use	76.7
GEF Africa Sustainable Forestry Fund	Portfolio investors (asset managers/ carbon,green and REDD funds)/ im- pact investors	private equity forest fund	private	asset	mitiga- tion-land use	83.8
AXA Real Estate - For- est Investment	Pension, sovereign wealth Funds, insurance	asset management	private	asset	mitiga- tion-land use	92.4
PROFONANPE	Public national/ regional banks	forest fund	public	enabling	mitiga- tion-land use	134.3
ADB - Congo Basin Forest Fund`	Multilateral/region- al development banks	grants	public	enabling	mitiga- tion-land use	170
UN-REDD Programme	Multilateral finance facility/UN Collabo- rative programme	advisory services and financial support	public	enabling	mitiga- tion-land use	173.3
Readiness fund	Multilateral/region- al development banks	grants	public	enabling	mitiga- tion-land use	185
Carbon fund	Multilateral/region- al development banks	grants	public	enabling	mitiga- tion-land use	200
Forest investment program	UN Convention fund	grants and loans	public	enabling	mitiga- tion-land use	639
ForestTrends	Advisory Guidance Coordination Facil- itation		public	enabling	mitiga- tion-land use	
FSC	Advisory Guidance Coordination Facil- itation	certification		enabling	mitiga- tion-land use	
Global Canopy Pro- gramme	Advisory Guidance Coordination Facil- itation				mitiga- tion-land use	
Guayaki	agribusiness/min- ing companies	grants	private	asset	mitiga- tion-land use	
EcoMadera	agribusiness/min- ing companies		private	asset	mitiga- tion-land use	

Name of fund/ mechanism	Name of fund/ mechanism		Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
Tropical forest alliance 2020	Bilateral aids and development agency	Technical Assis- tance and Volun- tary Actions	public	enabling	mitiga- tion-land use	
ForestRe- forest bonds	Pension, sovereign wealth Funds, insurance	forest bonds			mitiga- tion-land use	
International Tree Foundation	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	mitiga- tion-land use	
Canopy capital Portfolio investors (asset managers/ carbon,green and REDD funds)/ im- pact investors		equity	private	asset	mitiga- tion-land use	
CASCADe	UN Convention fund	advisory services	public	enabling	mitiga- tion-land use	
Livelihoods fund (Da- none and others)	agribusiness/min- ing companies	carbon finance	private	asset	mitiga- tion-land use/energy	35.2
Japan fund for global environment	Bilateral aids and development agency	grants and techni- cal support	public	enabling	sustainable AG	0.99
Farm foundation	Philanthropic foundations/NGOs/ CSOs	advisory services	public	enabling	sustainable AG	1.27
BNDES - sustainable AG	Multilateral/region- al development banks	financial support	public	enabling	sustainable AG	4.25
Grassland reserves program	Public national/ regional banks		public	enabling	sustainable AG	4.6
WTO - Trust funds	Multilateral/region- al development banks	grants	public	enabling	sustainable AG	13
Verde ventures	Portfolio investors (asset managers/ carbon,green and REDD funds)/ im- pact investors	loans	private	asset	sustainable AG	22.6
Organic agriculture fund	Portfolio investors (asset managers/ carbon,green and REDD funds)/ im- pact investors	Private equity for a fund; HNWI; Direct Deals	private	asset	sustainable AG	41.4

Name of fund/ mechanism	Intermediary	Instrument	Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
Africa Agriculture and Trade Investment Fund (Deutsche Bank & KfW)	Private sector banks/investment banks	Investment capital	РРР	asset/en- abling	sustainable AG	45
Root capital	Portfolio investors (asset managers/ carbon,green and REDD funds)/ im- pact investors	loans	private	asset/en- abling	sustainable AG	54
ResponsAbility	Portfolio investors (asset managers/ carbon,green and REDD funds)/ im- pact investors	loans	private	asset	sustainable AG	58.8
Moringa	Portfolio investors (asset managers/ carbon,green and REDD funds)/ im- pact investors	equity	private	asset	sustainable AG	68.9
IDB regional fund of agricultural technol- ogy	Bilateral aids and development agency	grants, co-financ- ing	public	enabling	sustainable AG	82.8
Alliance for a green revolution in Africa (Bill and Melinda Gates foundation)	Philanthropic foundations/NGOs/ CSOs	grants	public	enabling	sustainable AG	83
Acumen	Portfolio investors (asset managers/ carbon,green and REDD funds)/ im- pact investors	equity	private	asset	sustainable AG	83
Rockefeller foundation	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	sustainable AG	142
USAID Agricultural development fund	Multilateral/region- al development banks	grants and loans	public	enabling	sustainable AG	150
Global Agriculture Food Security Program private window	Multilateral finance facility	loans	public	enabling	sustainable AG	152.9
Farmland protection program	Public national/ regional banks	grants	public	enabling	sustainable AG	200

Name of fund/ mechanism	Name of fund/ mechanism		Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
French agency devel- opment - agriculture and food security	Bilateral aids and development agency	grants, loans, guarantees, equity shareholdings, co-financing	public	enabling	sustainable AG	264.3
African agriculture fund	Portfolio investors (asset managers/ carbon,green and REDD funds)/ im- pact investors	equity	private	asset	sustainable AG	300
Visible earth - agricul- tural fund	Portfolio investors (asset managers/ carbon,green and REDD funds)/ im- pact investors	equity	private	asset	sustainable AG	321.6
IFAD	UN Convention fund	grants and loans	public	enabling	sustainable AG	330
AusAID - sustainable AG	Bilateral aids and development agency	advisory services, financial and tech- nical assistance	public	enabling	sustainable AG	374.9
Aga Khan Foundation	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	sustainable AG	625
Islamic development bank - food security	Multilateral/region- al development banks	loans	public	asset/en- abling	sustainable AG	732.4
Global Agriculture Food Security Program public window	Multilateral finance facility	grants	public	enabling	sustainable AG	807
CGIAR	Advisory Guidance Coordination Facil- itation		public	enabling	sustainable AG	860
Conservation steward- ship program	Public national/ regional banks	PES/Offsetting	public	enabling	sustainable AG	972.1
Food Security Themat- ic Programme	Multilateral/region- al development banks		public	enabling	sustainable AG	1239
Food facility	Multilateral/region- al development banks		public	enabling	sustainable AG	1340
Environmental quality incentive program	Public national/ regional banks	financial and tech- nical assistance	public	enabling	sustainable AG	1400
USAID Feed the future	Multilateral/region- al development banks	financial and tech- nical assistance	public	enabling	sustainable AG	2500

Name of fund/ mechanism	Intermediary	Instrument	Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
TIAA CREF	Pension, sovereign wealth Funds, insurance	direct investment	private	asset	sustainable AG	2500
Robabank Farm and Rural Lending	Private sector banks/investment banks	loans	private	asset	sustainable AG	121404
Roundtable on Sustainable Palm Oil standard	Advisory Guidance Coordination Facil- itation	certification		enabling	sustainable AG	
Bon-Sucro Standard	Advisory Guidance Coordination Facil- itation	certification		enabling	sustainable AG	
Sustainable agricul- ture network	Advisory Guidance Coordination Facil- itation	certification		enabling	sustainable AG	
World Eonomic Forum- Vision for agriculture	Advisory Guidance Coordination Facil- itation		Public/ PPP	enabling	sustainable AG	
Gadco	agribusiness/min- ing companies	FDI	private	asset	sustainable AG	
Netafim	agribusiness/min- ing companies	micro-loans	private	asset	sustainable AG	
AgDevCo	Multilateral/region- al development banks	patient capital (debt or equity)	public/ PPP	enabling	sustainable AG	
Syngenta Foundation for Sustainable Agri- culture	Philanthropic foundations/NGOs/ CSOs	grants	private	enabling	sustainable AG	
Bon-Sucro Standard	Standards	certification	private		sustainable AG	
Green commodities facility	UN Convention fund/Multilateral or regional develop- ment banks	advisory services	public/ PPP	enabling	sustainable AG	
ProSAVANA	UN Convention fund/Multilateral or regional develop- ment banks	public	enabling	sustainable AG		
The new alliance for food security and nutrition	Multilateral finance facility		public/ PPP	enabling	sustainable AG	3000

Name of fund/ mechanism	Intermediary	Instrument	Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
German Federal Ministry for Econom- ic Cooperation and Development	Bilateral aids and development agency	grants and loans	public	enabling	sustainable AG/conser- vation	403.3
Asia DB - Water financ- ing partnership facility	Multilateral/region- al development banks	loans, grants and advisory services	public	enabling	watershed	8.7
IADB - aquafund	Multilateral/region- al development banks	grants	public	enabling	watershed	11
Latin America Water fund platform	UN Convention fund/Multilateral or regional develop- ment banks	financial and tech- nical assistance	public	enabling	watershed	27
Swiss agency for development and cooperation - water	Bilateral aids and development agency	grants	public	enabling	watershed	111.6
ADB - African water facility	Multilateral/region- al development banks		public	enabling	watershed	202
AusAID - WASH pro- gram	Bilateral aids and development agency		public	enabling	watershed	254.3
EBRD - Municipal and environmental infra- structure	Multilateral/region- al development banks	loans; equity investments; guarantees; leasing facilities; and assistance through financial interme- diaries	public	asset/ enabling	watershed	305.5
Islamic development bank - water	Multilateral/region- al development banks	loans	public	Asset / enabling	watershed	384.6
French agency devel- opment - water and sanitation	Bilateral aids and development agency	grants	public	enabling	watershed	647.1
SAB miller	agribusiness/min- ing companies	РРР	private	asset/en- abling	watershed	
Conservation District Kapuas Hulu/ public water services	Public national/ regional banks				watershed	
Finance Alliance for Sustainable Trade	Advisory Guidance Coordination Facil- itation			enabling		

Name of fund/ mechanism	Intermediary	Instrument	Source	Asset/ Enabling	ILM entry point	Financing available (USD mil.)
Frontier investments	Multilateral/region- al development banks		public	enabling		
Norwegian Govern- ment Pension Fund Global (GPFG)	Pension, sovereign wealth Funds, insurance		public	asset		
Tinker Foundation	Philanthropic foundations/NGOs/ CSOs					
Water risk filter	Philanthropic foundations/NGOs/ CSOs					
Summit capital	Portfolio investors (asset managers/ carbon,green and REDD funds)/ im- pact investors	private				
ABN Amro JP Morgan, indices	Private sector banks/investment banks					
Citibank, debt-for-na- ture swap	Private sector banks/investment banks					
FONADEFO	Public national/ regional banks					

>	Term	Definition
Glossa	Agroforestry	Agroforestry is the spatial or temporal combination of trees and crops or livestock. It exploits bio- logical and economic synergies to produce better land management, higher productivity, higher and more stable local incomes, reduced project risks and positive environmental and social impacts. Tropical agroforestry projects typically combine forestry activities (timber, industrial tree crops or fruit trees) with cattle, staple food crops or export crops. This allows projects to achieve profitability earlier and to generate diversified revenues over the long term.
	Asset Investment	An investment that aims to create tangible value, thus creating private assets.
	Biodiversity Banking (mainly Australia)	Biodiversity banking, also known as biodiversity trading or conservation banking, is a process by which biodiversity loss can be reduced by creating a framework which allows biodiversity to be reliably measured, and market based solutions applied to improving biodiversity. Biodiversity banking provides a means to place a monetary value on ecosystem services.
	Biodiversity offset payments	Natural resource extraction companies are addressing the environmental impact of their activi- ties by establishing direct payments to offset any damage. Payments can vary widely in amount and may be voluntary or required by law. Mitigation refers to efforts to reduce or offset the neg- ative environmental consequences of activities that are permitted despite their negative impact. Biodiversity offsets are measurable conservation outcomes resulting from the compensation of residual adverse biodiversity impacts persisting after appropriate prevention and mitigation measures have been implemented. The aim of these two methods is to achieve no net loss of biodiversity.
	Bond	A debt security, under which the issuer owes the holders a debt and, depending on the terms of the bond, is obliged to pay them interest (the coupon) and/or to repay the principal at a later date, termed the maturity date. Interest is usually payable at fixed intervals (semi-annual, annual, sometimes monthly). Very often the bond is negotiable, i.e. the ownership of the instrument can be transferred in the secondary market.
	Carbon credit	A certificate or instrument that represents reduced emissions of greenhouse gases equivalent to one ton of carbon dioxide relative to an agreed baseline.
	Collateral	The assets used as security for a loan. If the loan cannot be repaid, these assets are claimed by the holder of the loan (e.g. a bank).
	Corporate Social Responsibility	A form of corporate self-regulation, or philanthropy. In order to minimize local conflicts and/ or avoid interference in their business through taxation or regulations, the business may take voluntary steps that persuade governments and the wider public that they are taking issues such as health and safety, diversity or the environment seriously.
	Debt-for-nature swaps	Debt-for-nature swaps are financial transactions in which a portion of a developing nation's for- eign debt is forgiven in exchange for local investments in environmental conservation measures. Since the first swap occurred between Conservation International and Bolivia in 1987, many national governments and conservation organizations have engaged in debt-for-nature swaps. Most swaps occur in tropical countries, which contain many diverse species of flora and fauna. Since 1987, debt-for-nature agreements have generated over USD 1 billion for conservation in developing countries.
	Due diligence	The process through which an investor (or funder) researches an organization's financial health and organizational capacity, in order to guide an investment (or grant-making) decision.
	Emerging market	An emerging market is a country that has some characteristics of a developed market but is not a developed market and can include countries that may have been developed markets in the past.
	Enabling Invest- ment	Investments made to create public goods, and thus the conditions for productive investments in assets.
	Equator Principles	A voluntary set of banking standards for determining, assessing and managing social and envi- ronmental risk in project financing.

Term	Definition
Equity investment	An investment whereby an investor owns a portion of the enterprise, usually through owning shares. Eligible to receive dividends, but equity holders have the lowest priority in the event of liquidation of the assets.
Fairtrade	A certification system designed to allow buyers to identify products that meet agreed environ- mental, labor and social welfare standards.
Financial Instru- ment	Any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Can be either cash instruments or derivative instruments: Cash: Bonds, Loans, Equity Stocks, Spot foreign exchange. Derivatives: Bond futures, Options, Inter- est rate futures, Stock options, equity futures, currency futures; interest rate option and swaps, currency swaps.
Financial Mecha- nism	Method or source through which funding is made available, such as bank loans, bond or share issue, reserves or savings, sales revenue.
Forest funds	Forest funds are assets held for the specific purpose of investing in forestry activities. Most forest funds finance forest conservation and protected areas, but a few focus on development of the forestry sector. Most of the money held in these funds comes from debt-for-nature swaps and international donors, but some are also funded from private contributions. In addition to providing finance, some funds play an important role in capacity building and facilitation. Most funds support forestry activities with grants and loans, but a few pay for environmental services.
Frontier Economy	Frontier markets are less advanced capital markets and less investable stock markets than those in emerging markets and developing economies.
Impact invest- ments	Investments intended to create positive impact beyond financial return.
Institutional investor	An investor, such as a pension fund, insurance company or bank, which generally has substantial assets and experience in investments, and pools and invests capital on behalf of corporations or private individuals.
Institutional Inves- tors	The term 'institutional investors' includes mainly pension funds and insurance companies, but also endowments, foundations and sovereign wealth funds. Collectively, they represent over USD 71 trillion in assets under management.
Liquidity	The ease with which an asset can be sold at a price close to its true value.
Mitigation Banking (mainly US)	Mitigation banking is the restoration, creation, enhancement, or preservation of a wetland, stream, or habitat conservation area which offsets expected adverse impacts to similar nearby ecosystems. The goal is to replace the exact function and value of the specific wetland habitats that would be adversely affected by a proposed project.
Multilateral Devel- opment Banks and Donors	A multilateral development bank (MDB) is an institution, created by a group of countries that provides financing and professional advising for the purpose of development. MDBs have large memberships including both developed donor countries and developing borrower countries. MDBs finance projects in the form of long-term loans at market rates, very-long-term loans (also known as credits) below market rates, and through grants.
Private equity	Finance invested by private equity funds in companies that are not publicly traded on a stock exchange, or invested in publicly traded companies in order to make them private companies.
REDD+	Reducing Emissions from Deforestation and Forest Degradation in Developing Countries, in- cluding the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.
Regional Develop- ment Banks	The primary goal of regional development banks is to foster growth and cooperation among countries within their particular region (e.g. Asia Pacific, Africa, Latin America, Europe, etc.). They often raise capital through the international bond markets, and tend to work in harmony with MLDBs (e.g. IMF, World Bank, IFC).

>	Term	Definition		
Glossa	Regulated carbon markets	Banks provide equity, loans and/or upfront or upon delivery payments to acquire carbon credits from CDM and JI projects. Most acquire carbon credits in order to serve their corporate clients' compliance needs, supply a tradable product to the banks' trading desks, or develop lending products backed by emission allowances and carbon credits. Allowance trading products can include, but are not limited to: discreet placement of physical orders; fixed-or-floating swaps and indexed sales or purchases; options; allowances repurchase structures; market-making for spot and forward trades; and price hedging based on cross-commodities. Land use sequestration projects in developing countries have largely been omitted because of the relative difficulty in meeting CDM standards and the ban by the European Union Emissions Trading Scheme (ETS).		
	Rights-holders People who claim some lands rights, which could refer to ownership and other legally able rights of an individual or a community over land (de jure rights) or occupancy ar (de facto rights).			
	Small and Medium Enterprises	The World Bank defines SMEs as meeting two out of the following three criteria: minimum 50 employees, under USD 3m in either assets or under USD 3m in sales.		
	Socially Responsi- ble Investing	Investment in organizations or assets that are believed to have a positive benefit to society, whilst screening out socially harmful investments such as tobacco and arms manufacture.		
	Sovereign Wealth Fund	A state-owned investment fund aiming for long term return, usually using money accumulated from foreign exchange assets, for instance from natural resource royalties.		
	Supply Chain	System of organizations, people, activities, information, and resources involved in transforming raw materials and components into a product or service, and then moving a product or service from supplier to the end customer.		
	Value Chain	A value chain is a chain of activities that a firm operating in a specific industry performs in order to deliver a valuable finished product or service for the market; in the case of agriculture, the value chain may include (but is not limited to) input provision, production, processing, transport, storage, marketing, and export.		
	Voluntary Carbon Markets (VCMs)	In the voluntary carbon markets, the calculation and the certification of the emission reduction are implemented in accordance with a range of industry-created standards (rather than national approval and verification from the UNFCCC).		















WORLD Resources Institute



Ministry of Economic Affairs

<u>AŬA</u>

### Landscapes for People, Food and Nature An International Initiative for Dialogue, Learning and Action

#### landscapes.ecoagriculture.org

