Mobilizing finance across sectors and projects to achieve sustainable landscapes:

**Emerging models** 

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1000 Landscapes for 1 Billion People

O LANDSCAPE O FINANCE LAB





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# **Emerging models**

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### About

**EcoAgriculture Partners** is a pioneering nonprofit organization that advances the practice of integrated landscape management and the policies to support it. From the critical analysis of policies, markets, and land use practices, it generates innovative research, tools, and methodologies that help landscape managers and policy makers create and sustain integrated agricultural landscapes worldwide. EcoAgriculture Partners has served since 2011 as the global secretariat for the Landscapes for People, Food and Nature initiative. EcoAgriculture founded and convenes the 1000 Landscapes for 1 Billion People initiative. Visit <u>ecoagriculture.org</u> for more information.

**The Coalition for Private Investment in Conservation (CPIC)** is a global, multi-stakeholder initiative focused on enabling conditions that support a material increase in private, return-seeking investment in conservation. CPIC does this by connecting conservation projects and investors, and by providing them with blueprints that help replicate and expand successful investment in conservation projects across key sectors of sustainable cocoa, forestry, coastal resilience and marine protected areas. Founded by Cornell University, Credit Suisse, IUCN, and The Nature Conservancy, CPIC was launched at the World Conservation Congress in September 2016 together with over 30 other organizations.

**WWF Landscape Finance Lab** was established by WWF in 2016 as a platform to unlock large funding for sustainable landscape initiatives and to systematically refine these new products for application more broadly in the land and sustainability finance sectors. The Lab's mission is to harness blended finance (public and private) at scale for sustainable landscapes and deforestation free trade chain solutions. The core objective of this project is to launch a social enterprise to structure and fund large-scale landscape initiatives in the land sector. Visit <a href="https://www.landscapefinancelab.org/">https://www.landscapefinancelab.org/</a> for more information.

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# **Abbreviations**

CDFI	community development finance institution
CDORBM	Cagayan de Oro Riverbasin Management Council
CLSN	California Landscape Stewardship Network
IFC	International Finance Corporation
ILM	integrated landscape management
IUCN NL	IUCN National Committee of the Netherlands
LIFT	Landscape Investment and Finance Toolkit
NGO	nongovernmental organization
REDD+	reducing emissions from deforestation and forest degradation, plus the sustainable management of forests, and the conservation and enhancement of forest carbon stocks
SLo-FIG	Sustainable and Local Food Investment Group

UN United Nations

#### Section 1

# The challenge of financing transformation at landscape scale

he world faces an imperative to balance the needs of people, prosperity, and planet. The human devastation caused by COVID-19 is a brutal reminder of the myriad links between ecosystem decline and the various dimensions of human well-being—a devastation exacerbated by the impacts of climate change, water scarcity, food insecurity, and biodiversity loss. To overcome these interlinked challenges, economies have to shift—and rapidly away from unsustainable investments to trajectories of inclusive, sustainable, and resilient green growth. This will require transformations not only at the individual farm, enterprise, supply chain, and urban center level, but also holistically at the landscape scale to address critical ecological, economic, and social processes. This paper focuses on the challenges of, and emerging solutions for, scaling integrated landscape finance to enable these individual and holistic transformations.

### **Integrated landscape management**

We use the term *landscape* to refer to interconnected socio-ecological systems that are shaped by their local contexts and histories—typically within boundaries defined by culture, bioregion, or jurisdiction (Denier et al. 2015). In the past few decades, progress has been made in developing and testing technical, institutional, market, and policy solutions that enable stakeholders to better align and integrate efforts to sustain and restore natural resources and ecosystem health, improve human wellbeing, and strengthen local economies at a landscape scale. This approach, which comes in many forms, is called *integrated landscape management* (ILM) and reflects the inclusiveness of all stakeholder interests in landscape system design.<sup>1</sup>

Central to the ILM process is the role of *local landscape partnerships*. These multistakeholder platforms take diverse forms and involve a wide range of actors depending on the local circumstances, including farmers and farmer associations,

<sup>&</sup>lt;sup>1</sup> Numerous other terms are used by various communities of practice, as noted in Scherr, Shames, and Friedman (2013).

community organizations, nongovernmental organizations (NGOs), government agencies, and businesses (Denier et al. 2015).

ILM involves a systematic process of stakeholder engagement, landscape assessment, collaborative visioning and action planning, accessing finance, encouraging action, and assessing impact for adaptive learning. By enabling stakeholders to achieve synergies and more effectively manage trade-offs across a wide range of economic, social, environmental, and cultural goals, ILM is a key strategy for achieving the Sustainable Development Goals (OECD 2012).

ILM is a key strategy for achieving the Sustainable Development Goals.

Ategy for Istainable Goals. Landscape-scale initiatives are emerging all around the world, and a series of continental surveys in 2013–17 documented more than 428 such organized partnerships in sub-Saharan Africa (Milder et al. 2014), Latin America and the Caribbean (Estrada-Carmona et al. 2014), South and

Southeast Asia (Zanzanaini et al. 2014), South and García-Martín et al. 2016). Many other initiatives can be found in North America, Australia, and elsewhere.

# Integrated landscape finance

Financial innovations have proliferated in recent decades to fund green businesses, enterprises and projects, but these have focused on individual, sector-specific investments. Meanwhile, the landscape partnerships driving ILM around the world have struggled to develop and implement comprehensive and coordinated financing strategies to turn their action plans into reality (Shames and Scherr 2015). Several reasons underlie this struggle, including the following:

 Finance mobilization remains ad hoc and linked to individual investments, regardless of their long-term dependence or impact on other investments in the landscape.

- There are limited viable business models and investment track records for some sustainable land use activities.
- Landscape partnership institutions are underfunded.
- The current financial architecture makes it difficult to achieve sufficient alignment and spatial coordination among sectoral, business, and government strategies to support transformational goals.
- Commercial, public, civic, and philanthropic funding are at best weakly aligned.
- There are few institutional mechanisms to access large pools of funds for disbursement to micro-, small, and medium-sized enterprises and projects.
- Enormous efforts are needed to mobilize investment in the hundreds of different projects required to realize landscape action plans.
- There are too few models for coordinating integrated landscape investments.

The challenges facing landscape partnerships and investors are spurring the development of innovations for *integrated landscape finance*. Such finance supports multiproject, multisector investment portfolios that encourage synergies between investments to generate impacts at scale across multiple landscape objectives. The concept of integrated landscape finance draws from related, rapidly developing fields including impact investing (GIIN 2018), conservation finance (Huwyler et al. 2014), collaborative place-based impact investing (Ashley and Ovalle 2018), blended finance (Convergence n.d.), and inclusive green growth (World Bank 2012).<sup>2</sup> The analysis presented in this paper also builds on earlier work on integrated

<sup>&</sup>lt;sup>2</sup> See the glossary in <u>appendix A</u> for definitions of these terms.

landscape investment, including by Shames and Scherr (2015, 2017).

### **Overview of the report**

This report is intended to provide a grounding in integrated landscape finance, as well as inspire further innovation by landscape partnerships, service providers for landscape finance, developers of landscape finance vehicles, and investors. It has three main components.

• <u>Section 2</u> describes the elements of integrated landscape finance systems, why these systems are important to sustainably transform landscapes throughout the world, and the key elements of a robust integrated landscape finance system.

- <u>Sections 3, 4</u>, and <u>5</u> report on major innovations that have emerged to advance integrated landscape finance, exploring a range of diverse models of landscape investment service providers and landscape finance vehicles.
- <u>Sections 6</u> and <u>7</u> reflect on lessons learned from the review, identify critical gaps, and suggest what can be done to support the success and scaling of these models of integrated landscape finance in the future.

#### **Section 2**

# What is integrated landscape finance and why is it important?

efore moving into a deeper discussion of the emerging innovations in integrated landscape finance, this section provides a brief overview of its basic premise and rationale, and the elements of a rigorous landscape finance system.

# Achieving transformation through an integrated landscape investment portfolio

Central to successful landscape-scale economic, social, and ecological transformation is the development of an *integrated landscape investment portfolio*. This is a set of investments from a variety of sectors that, taken as a whole, contribute to multiple landscape-scale objectives as defined through an ILM process. Systems of integrated landscape finance generate and channel funding to support ILM activities by diverse private, public, and civic actors.

Integrated landscape investment portfolios include both asset investments and enabling investments. Asset investments create tangible value that is returned back to the investor in the form of financial, environmental, or social values. Examples of such investments are agricultural and other production/value chain activities, green infrastructure, natural resource restoration, business development, and health programs. *Enabling investments* lay the institutional foundation for asset investments. These include support to multistakeholder dialogue and action platforms, strategic planning and coordination, setting up new finance and policy mechanisms, landscape assessment and monitoring, and incubating innovative business ideas (Shames, Hill Clarvis, and Kissinger 2014).

Suitable investments for a landscape investment portfolio share these characteristics:

 Contribute to multiple elements of landscape sustainability—human well-being, economic production, ecosystems, biodiversity, and social bonds—as well as financial returns

- Take into account socio-ecological processes, spatial interactions, and off-site impacts in the landscape
- Align with public land use sustainability plans and rules
- Align with the landscape vision and action plan developed through a stakeholder process
- Generate synergies with other investments in the landscape to meet these objectives.

Figure 2.1 illustrates such a portfolio—a set of activities that, if implemented in a coordinated way, can generate value for each other and regenerate an ecologically degraded and economically impoverished landscape. In this example, initial investments in sustainable forest management and riparian revegetation restore the flow of the river and improve water quality. With improved water resources in the landscape, opportunities for additional investment in fisheries and aquaculture emerge. Meanwhile, development of wind and solar energy reduces the need to harvest fuelwood from the forest. Strategically designed transportation systems and investments in marketing of sustainably produced, certified agricultural products create incentives for agroforestry development. Improved water quality for human consumption and improved nutrition complement and enhance the impact of local health services. With well-coordinated spatial planning and sequencing of these investments, financial, ecological, and social benefits can accrue to investors as well as to other stakeholders throughout the landscape.

Moreover, by spatially coordinating and sequencing investments at a landscape scale, each individual project can achieve a higher rate of return, a lower risk profile, and/or increased social and ecological benefits.

## Figure 1 An integrated investment portfolio for regenerating an ecologically degraded and economically impoverished landscape



The component investments of the portfolio all contribute individually to landscape goals, but ideally they are designed and situated to generate synergies with other investments and minimize trade-offs. Those interrelationships may vary along a spectrum from loose alignment to coordinated design and implementation to a fully integrated investment program:

- An example of loose alignment would be farmers operating independently to change their management practices to align with a climatesmart landscape strategy.
- An example of coordinated design and implementation would be investors in supply chains for sustainable agricultural products timing and locating their projects to build on land rehabilitation and local smart hydropower projects developed by others.
- A fully integrated project might have an entity undertaking or financing all of the above activities as a single investment.

# Benefits of integrated landscape finance

Integrated landscape finance systems are designed to address the shortcomings of conventional projectbased, sector-focused, short-term

Integrated landscape finance systems address the shortcomings of projectbased, sector-focused, short-term finance.

finance. They are structured to increase profitability as well as ecological and social benefits across landscapes by capturing synergies and minimizing tradeoffs through investment coordination, complementing value chain investments, achieving ecological and social

benefits at scale, and mobilizing flows of finance at scale.

Capturing synergies, reducing risks, and minimizing trade-offs through coordination across landscape investments. Landscape partnerships address trade-offs and pursue synergies among stakeholders that aim to restore and protect natural capital in different parts of the landscape. This includes coordinating public, private, and civic investments spatially and sequentially at the landscape scale to enhance the landscape investment portfolio. Landscape investment coordination can create value by

- Protecting supply chains
- Reducing reputational, regulatory, and climate risks
- Lowering business costs
- Generating value from ecosystem services
- Accessing markets or price premiums for new products.

Coordination at a landscape scale can also reduce costs for each actor as the investment burden to address landscape-wide economic, social, and ecological challenges is shared by all (Scherr et al. 2017; Shames and Scherr 2017).

**Complementing value chain investments for** sustainability. Development of and adherence to sustainability standards and certification can improve company profitability, market access, and reputation while reducing risk along value chains. But certification programs may yield limited social and environmental impacts if other actors in the landscape are not taking similar steps-and may have an exclusionary effect on smallholders who lack the capacity, resources, or willingness to meet stringent standards. This lack of comity means that companies committed to zero deforestation, for example, are seriously challenged in addressing the indirect environmental and other impacts of deforestation from multiple commodity chains across a landscape.

Thus, many companies have begun exploring ways that ILM can complement their supply chain sustainability efforts. Operating and investing in landscapes with coordinated landscape action plans can offer opportunities to reduce costs and risks while meeting sustainability commitments. ILM creates space for pre-competitive action by brands and companies that operate in, or source from, the same landscape. It can also support a coalition of companies in engaging with policy makers on issues relevant to landscape objectives such as land use policy. Public and civic sources can cofinance investments that address company risks around communities, climate, water, biodiversity, and infrastructure that would be difficult for individual companies to address on their own. New models of landscape/jurisdictional certification may lower overall costs (Buck and Sweitzer 2018; Olam 2018; Mallet et al. 2019; Scherr et al. 2017).

#### **Achieving ecological and social benefits**

at scale. Individual business decisions can reduce pressures on ecosystems and biodiversity or contribute to protection and/or restoration. However, the typical scale for implementation of these decisions is limited. The overall impact on ecosystems and biodiversity is strongly affected by patterns of land use and management in the broader landscape in which the project is situated. Even the impact from exemplary projects and businesses can be swamped by unsustainable activities around them. Aligning and spatially coordinating multiple "green" business investments within a landscape, in a mosaic with protected areas, can achieve effective biological corridors, habitat networks, and improvements in ecosystem services-including water flow and quality, carbon sequestration, and pollination across multiple land uses. Similarly, a landscape-scale investment strategy can often address a range of social issues more effectively. For example, efforts to contain an infectious disease require spatially aligned investments in public health. And worker protections, such as a minimum wage, can improve standards of living for communities when these are applied throughout landscapes.

**Mobilizing investment at scale.** Traditionally, conservation organizations have focused on ecosystem and biodiversity protection, restoration, and sustainable management solutions for single

sites and projects, as they lack the resources to achieve landscape-scale impact. Because civil society-driven initiatives do not typically focus on projects that generate reliable cash flows, they have not been in a position to access private finance. But landscape partnerships that include private, public, nonprofit, and producer organizations break through this barrier, catalyzing large investment portfolios that are aligned with sustainable development at the landscape scale. Emerging vehicles for

integrated landscape investment are structured to meet the needs of a wide range of investors with differing interests in terms of deal size, time horizon, and risk/ return profile. This enables the flow and disaggregated allocation of large volumes of private capital to individual projects in the landscape that would otherwise be too small for these pools of capital to fund.

Private-publicnonprofit-producer partnerships can catalyze investment portfolios at the landscape scale.

# Elements of an integrated landscape finance system

To successfully mobilize the financial resources needed to realize the benefits noted above requires a robust integrated landscape finance system with four key elements (figure 2.2):

- Investment readiness at the landscape scale (beyond project-level investment readiness)
- A robust pipeline for a portfolio of investable projects
- Accessible sources of finance with appropriate deal structures
- Mechanisms to coordinate financing of the investment portfolio

Landscape investment readiness. The first critical element in an integrated landscape finance system underlies any successful strategy for integrated landscape investment: overall

#### Figure 2.2 Elements of an integrated landscape finance system



A pipeline of projects for the landscape investment portfolio Mechanisms to coordinate financing of the landscape investment portfolio

Landscape-friendly finance sources and deal structures

landscape investment readiness. This element includes supportive long-term policies such as secure tenure and appropriate zoning regulations; financial incentives from the public sector for sustainable investments: accessible economic and ecological data on the landscape; and local financial institutions interested in supporting the landscape's economic, social, and ecological objectives. Building this readiness is an important aspect of a landscape partnership's action plan and overall financial strategy. It will typically require negotiation and actions by government agencies, businesses, civil society organizations, universities, and other actors. The role of achieving landscapewide investment readiness is typically played by the landscape partnership or by local public institutions. Although a critical enabling factor for integrated landscape finance and investment, this element is not addressed further in this report, as our focus here is on models of investment.

A pipeline of projects for the landscape investment portfolio. The second element of integrated landscape finance is a continuous pipeline of projects for the landscape investment portfolio. Developing such a pipeline requires a systematic process that begins with the collective development of a long-term landscape vision and action plan and the generation of individual landscape-friendly investment ideas. The developers of investable projects (entrepreneurs, companies, government agencies, etc.) may then need support to build business plans, connect with appropriate sources of financing, negotiate and finalize terms with investors, and ultimately lay the groundwork for a successful operation. Figure 2.3 describes the process of developing a pipeline of projects for a landscape investment portfolio.

Landscape-friendly finance sources and deal structures. The third component of an integrated landscape finance system is the availability of appropriate and accessible finance sources and deal structures. Diverse financial institutions and actors from the private, public, and civic sectors may fund landscape investments. Private investors-including individual farmers, local banks, institutional investors, and companies-are concerned primarily with projects that generate attractive risk-adjusted financial returns. Even impact investors expect a positive financial return on investment, although it tends to be lower than comparable conventional investments, with social and environmental outcomes considered an important element of the total return.

Public and civic sector sources finance many enabling investments and can make for-profit investments as well. Local and national governments are critical sources of investment in landscapes, as are NGOs and foundations. Over the last decade, international public finance institutions such as the Global Environment Facility and the World Bank have begun to make large investments in landscapefocused activities. The Green Climate Fund and others in the growing pool of climate finance are also moving in this direction. And many financial sources exist beyond the funding institutions most



Figure 2.3 Developing a pipeline of projects for an integrated landscape investment portfolio

familiar to actors in the agriculture, forestry, water, and environmental sectors. Consequently, it may be useful to scope financial flows in the landscape during the assessment and planning phases of the ILM process.<sup>1</sup>

To meet the needs of landscape-friendly investments, financial deals need to be structured in innovative ways in terms of size, time horizon, and risk/return. Blended finance—the complementary use of catalytic capital from public or civic sources to increase private sector investments—is a core de-risking strategy, along with risk guarantees and insurance. Nonfinancial risk-reducing actions may be promoted by the landscape partnership, for example, in relation to regulation, trust building, or ensuring complementary investments are made by other actors.

The mix of financing will evolve as integrated landscape initiatives and specific landscape projects develop (figure 2.4). Sequential investments over time build on the achievements of earlier investments. In the early stages of a landscape partnership, finance—usually provided from philanthropic and public sector sources—is needed for enabling investments in stakeholder convening and planning, business concept testing, and capacity building. Once the partnership is established and associated businesses develop, local commercial finance will play a more important role. Funding sources will shift from smaller and shorter term to larger and longer term as landscape businesses and projects mature. The landscape partnership will

<sup>&</sup>lt;sup>1</sup> The Landscape Assessment of Financial Flows (LAFF) tool is designed for this purpose, as it helps landscape actors identify sources of finance for new investment ideas, find the current financial flows most in need of transformation, and better understand the elements of their landscape's financial context that require support (Shames, Louman, and Scherr 2019).

#### Figure 2.4 Evolution of landscape investment and financing over time



continue to need funding to adapt to new conditions and opportunities, and to monitor progress.

Mechanisms to coordinate financing of the landscape investment portfolio. The fourth element of a strong landscape finance system is a mechanism to coordinate and connect projects in the investment portfolio with suitable sources of financing. Conventionally, this is done business by business or project by project. But this conventional approach is slow, poses risks for those investments in the portfolio that

Where interdependent projects rely on uncoordinated finance, their larger goal will fail.

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are strongly interdependent, and presents a risk that landscape objectives requiring coordinated action will not be met. The example presented in <u>figure 2.1</u> illustrates a landscape-wide strategy to restore the flow of a river for both environmental and commercial purposes, requiring

watershed and the revegetation of riparian areas along the length of the river. These areas traverse

forest restoration throughout the

many different farms, businesses, and human settlements. If these efforts rely on a range of uncoordinated finance sources and cannot move forward together, the larger goal of river restoration will fail. Government programs may be able to coordinate financing for public sector projects, and public-private partnerships have had some success in mobilizing finance for specific investments, such as infrastructure. But the challenge is more difficult when the aim is to align numerous public, business, and civil society projects. The next section describes the institutional innovations that are arising to address this challenge.

#### **Section 3**

# Scoping study on institutional innovations in integrated landscape finance

he development of institutional mechanisms for integrated landscape finance is a recent phenomenon whose details have not been well described. A joint global scoping study was undertaken in 2019 by EcoAgriculture Partners and members of the Coalition for Private Investment in Conservation (CPIC) to identify and better understand emerging models.

### Methodology

The study sought to identify examples of the major types of integrated landscape investment vehicles and support services; this search was not intended to be comprehensive, but representative. Developing the criteria for models' inclusion in the survey was an iterative process, with evaluation of those identified in the initial round of scoping helping to more clearly define the final criteria:

- In addition to financial returns, the investment vehicle or service provider seeks to generate biodiversity/ecosystem, social, and cultural benefits defined by the landscape partners.
- The model includes investments across multiple sectors.
- The investments are coordinated through the finance vehicle itself or through an external investment service provider.
- The impacts of the coordinated investments are intended to be landscape scale (e.g., funding many investments to collectively recharge a depleted aquifer or halt deforestation).

The models could be either operational or in development. The study team collected detailed information on each identified model, using a standardized template (see <u>appendix B</u>).

### **Innovation types**

The scoping exercise identified two sets of institutional innovations—*landscape investment* service providers and integrated landscape finance vehicles—that have arisen in recent years to provide a pipeline of investable projects, suitable finance, and the coordination necessary for the investment portfolio to achieve landscape transformation. Appendixes C and D list the specific models reviewed.

#### Landscape investment service providers.

To advance a coordinated pipeline development process, entities linked to—or part of—a landscape partnership help create landscape action plans and translate those plans into private, public, or civic projects that together become the landscape investment portfolio. These entities do not themselves provide financing, but greatly increase the efficiency, effectiveness, speed, and coordination of business planning and

The review identified 16 institutional models of landscape investment service providers. finance processes. Landscape investment service providers may work with business developers, government agencies, or civil society organizations to prepare both asset and enabling investment opportunities supporting implementation of agreed landscape plans. They

may steer existing financing to activities aligned with the plan, and aggregate investment opportunities. Figure 3.1 illustrates these roles.

## Figure 3.1 Landscape investment service providers



Services may be provided by any type of organization, including an NGO, government agency, business association, farmers' group, or community organization, as long as it has combined expertise in ILM, business/project development, and finance. These roles may be played by a single institution or by a coalition of actors. The review identified 16 institutional models of support services that met our criteria, many working in multiple landscapes. Each of these is operational.

**Integrated landscape finance vehicles.** This emerging class of investment entities are designed explicitly to fund multiple activities across sectors in a landscape to maximize synergies and accelerate progress toward landscape-level goals. Figure 3.2 summarizes the key features of these vehicles. Integrated landscape finance vehicles can source funds from profit-seeking or blended finance sources, as well as from investors interested only in environmental and social returns. We here focus on the vehicles channeling funds seeking at least some financial returns.



#### Figure 3.2 Key features of integrated landscape investment vehicles

The review identified 24 institutional models of integrated landscape investment vehicles that met our criteria, with some operating The review identified in multiple landscapes. Three **24** institutional models of these are in the design of integrated landscape phase; the rest are currently operational. The models investment vehicles. were all set up to support landscape-scale goals, even if they were not formally aligned with landscape initiatives.

The regional breakdown follows for the 40 models for service providers and vehicles that met the study's criteria:

- North America—15
- Africa-4
- Europe-4
- Asia—3
- Latin America—2
- Australia—1
- Multiple continents—11.

The next two sections present the findings of the scoping study, first for the landscape investment service providers and then for the integrated finance vehicles.

#### **Section 4**

# Landscape investment service providers

andscape investment service providers help landscape initiatives create action plans and translate those ideas into private or public investment ideas that ultimately can become a landscape investment portfolio. They also play finance coordination roles, seeking out and attracting supportive finance and helping projects in the portfolio access it. Some operate in multiple landscapes. Table 4.1 outlines the key features of four different types of investment service providers:

- Landscape partnerships that have expanded their role into investment and finance
- Landscape portfolio developers (nonprofit)
- Landscape development companies (for profit)
- Business incubators and accelerators that use a landscape lens.

# Landscape partnerships expanding into investment and finance

Landscape partnership leaders typically support collaborative processes, such as multistakeholder dialogue, landscape assessment, and development of a common landscape vision and action plan. But some are also organizing themselves to develop finance strategies, analyze financial flows, and contribute to early stage investment opportunity scoping. They are inviting finance experts and institutions in the landscape to join as partners. Tools supporting that process are becoming more widespread, such as the Landscape Investment and Finance Tool (LIFT) developed by EcoAgriculture Partners and IUCN National Committee of the Netherlands (IUCN NL); and Commonland's <u>4 Returns</u>, <u>3 Zones</u>, <u>20 Years framework</u> (Ferwerda 2015).

An example of this type of service provider is the **Cagayan de Oro Riverbasin Management Council** (CDORBM), located on the north coast of the island of Mindanao, the Philippines. In this landscape, much of the forest has been converted to agriculture to meet the needs of expanding plantations, and the landscape is very vulnerable to flooding and mudflows. The CDORBM emerged as a partnership

Table 4.1	<b>Types of integrated</b>	landscape investment	service providers
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Model type	Description
Landscape partnerships expanding their role into investment and finance	Support landscape coordination, including the development of a common landscape vision and action plan; can also contribute to finance strategy, analysis of financial flows, and early stage investment opportunity scoping
Landscape portfolio developers (nonprofit)	Work closely with the landscape partnership to identify and build investment opportunities, bringing in expertise in both multistakeholder landscape planning and finance
	Set up to develop as well as to earn money themselves either as paid consultants or as commercial partners in landscape investments
	Work with project developers and entrepreneurs in the landscape to refine business plans and financing strategies

between conservation organizations, universities, companies, communities, and local authorities to restore the natural buffers that offer protection against the increasingly severe impacts of climate change. To access financing for its action plan, the group began using LIFT to develop investment ideas, assess their financing needs, scope potential sources of financing, and devise a clear finance mobilization strategy. The CDORBM has also taken on the role of investment catalyst. In this capacity, it has reached out to Kennemer, a Philippines-based company that sources cocoa in areas near their landscape, to develop business cases in the Cagayan de Oro area for cocoa agroforestry with intercropped indigenous trees to support landscape restoration objectives on sloping lands.

In landscapes where government agencies convene landscape initiatives—or where such agencies are active stakeholders and have staff and access to consultants experienced in economic development landscape partnerships may also play an active role in attracting investors, linking business and projects with specialized experts.

### Landscape portfolio developers (nonprofit)

A *landscape portfolio developer* is a nonprofit organization that specializes in assisting landscape partnerships to develop a portfolio of investments that are supportive of landscape goals. The developer works closely with the landscape partnership to identify and build investment opportunities, bringing expertise in multistakeholder landscape planning and finance. There has been a sharp increase in the provision of these services in the 2010s by nonprofit organizations. Some also provide broader services to help organize multistakeholder partnerships and assist in landscape assessment and planning before focusing on investment.

A number of international NGOs have become landscape developers, with their costs mostly covered by bilateral or multilateral development assistance programs. For example, the WWF Landscape Finance Lab structures landscape programs in global biodiversity hotspots. It works on a range of programs using jurisdictional REDD+ (reducing emissions from deforestation and forest degradation, plus the sustainable management of forests, and the conservation and enhancement of forest carbon stocks), land degradation neutrality, catchment management, and landscape sourcing approaches. It also offers an online platform to support project development and knowledge exchange. The lab currently assists 15 landscape programs in priority ecoregions across Asia, Africa, and Latin America.

#### IDH (the Initiative for Sustainable Landscapes)

works in 12 landscapes in 8 countries. It supports the development of sustainable land use plans, regulatory frameworks, and business models to achieve the goals of sustainable production, natural resource protection, and improvement of local livelihoods. It is linked closely with the investment fund &Green, creating a deal pipeline for &Green to finance.

Other international NGOs providing such services include **Conservation International, Solidaridad**, **IUCN NL**, as well as the nonprofit arm of **Commonland**.

Another variant on nonprofit support services is implemented through networks of landscape partnerships. Such networks share knowledge and resources to support their members. For example, the California Landscape Stewardship Network (CLSN) was formed in 2016 by six landscape partnerships in California to learn together, address shared challenges, develop cross-boundary partnership skills, and build awareness of the value of this collaborative landscape-scale approach among the funding and legislative communities. The CLSN identified insufficient and unstable funding for member organizations and activities as a major challenge within its network. To this end, the CLSN is working on a program that would provide investment services to its members and is taking steps to establish a \$150 million Stewardship Fund that would support the landscape partnerships in its network.

#### The 1000 Landscapes for 1 Billion People Initiative

is designing a 1000 Landscapes Network, a collaboration among multistakeholder landscape partnerships around the world, together with landscape-supporting institutions and companies. The network will provide digital tools, capacity building, and other services to support landscape partnerships in organizing effectively, strengthening investment readiness, building pipelines of fundable landscape investments, and connecting with experts and financial resources.

### Landscape development companies (for profit)

Landscape development companies play similar roles to the landscape portfolio developers described above. However, these are for-profit companies set up to develop as well as to earn money for themselves either as paid consultants or as commercial partners in landscape investments. They may partner with a landscape portfolio developer or play both of these roles within a single entity.

Commonland was established to develop pipeline projects within the ecosystem approach, a framework developed in the context of the United Nations (UN) Convention on Biological Diversity (CBD 2000). It translated the theoretical ecosystem approach into a practical framework to deliver four returns (social capital, natural capital, financial capital, and inspiration) in three landscape zones (natural zone, economic zone, and combined zone) over the course of one generation (20 years). Commonland starts by helping landscape stakeholders develop a partnership, form a vision and long-term plan for their landscape, and then advance the most promising specific enterprises that arise from that planning. The set of businesses is broadened over time to further support landscape priorities.

Commonland has developed companies in four different landscapes: Almendrehesa Company, focusing on almonds (Altiplano Estepario, Spain); Amstel Farmers, a dairy company (Peat Meadows, Netherlands); Baviaanskloof Development Company, producing regenerative aromatic oil (Langkloof, South Africa); and Wide Open Agriculture, which includes the Dirty Clean Food brand for sustainably produced food (Wheatbelt, Western Australia). In the case of the Almendrehesa Company, Commonland promoted a diversified regenerative agroforestry almond production system that also included pistachios, olives, oats, green fertilizers, rotational grazing (sheep), and bees. The company is a farmerowned cooperative supported by the Commonland Foundation, the long-term steward of the landscape

vision, together with the local 4 Returns Landscape Partnership Alvelal, an association of more than 300 farmers and entrepreneurs. Both organizations are working to attract new investors to the landscape.

The **Matanataki Investment Partnership, Fiji**, was stimulated by the Landscape Finance Lab and is being designed as a for-profit project developer to identify and support/incubate investable actions that help achieve the goals of Fiji Great Sea Reef programs that seek to insulate the reefs from the most severe climate change impacts. Projects will be developed in sustainable seafood harvest, reef protection, mangrove restoration, organic agriculture, waste management, and renewable energy.

**Legacy Works**, a U.S.-based company, has worked in three landscapes in the United States and Mexico, providing services to landscape partnerships from initial convening through defining investment opportunities. Its process includes building trust among stakeholders, identifying and assessing impact opportunities, initiating collaboration, and cultivating specific interventions.

### Business incubators and accelerators with a landscape lens

The fourth model has a more specialized role: incubating or accelerating component investments in the landscape portfolio. These incubators work with project developers and entrepreneurs to refine business ideas and create financing strategies. One such incubator, the **BirdLife Forest Landscape Sustainability Accelerator**, was designed by the conservation NGO BirdLife International to support start-up businesses in priority forest landscapes around the world that are aligned with landscapewide integrated strategy for forest conservation and sustainable development strategies. It offers a fixedterm, cohort-based program to entrepreneurs in nine countries, bringing together seed investment, connections, mentorship, training workshops, and promotional events. This support helps business development teams explore and develop integrated solutions focused on the future of their landscape. For example, in Gola, Sierra Leone, the accelerator is supporting the scaling up of rainforest-friendly chocolate, with profits invested back into the landscape program. It has supported projects in 11 countries.

Another version of this model is an incubator designed to create a pipeline of projects for a specific investor. The **Land Degradation Neutrality Fund Technical Assistance Facility**, operated by IDH, supports the project proposal development process in landscapes that match the specifications of the Land Degradation Neutrality Fund.

#### **Section 5**

# Integrated landscape finance vehicles

he landscape investment service providers described in <u>section 4</u> offer a notable improvement over the ad hoc investment and finance processes that pertain to most landscape initiatives. Their value is in improving the matchmaking of quality projects with suitable finance from existing sources. In contrast, integrated landscape finance vehicles are financial instruments or institutions structured specifically to fund large-scale landscape investment portfolios (both enabling and asset investments, in multiple sectors) over the long term, drawing from large and diverse funding sources. They may include technical assistance components or involve partners to assist in portfolio development.

Of the 24 examples of investment vehicles identified in the scoping survey, all but 4 are in some stage of operation; the other 4 are in a design or planning stage. We have grouped these vehicles into five types:

- Landscape-specific funds
- Landscape-focused funds that invest in multiple landscapes
- Place-based investor collaboratives and foundations
- Landscape development finance institutions
- Landscape bonds.

Key features of each type are summarized in table 5.1.

### Landscape-focused investment funds: single landscape

There are many types of landscape-focused investment funds—structures designed to pool capital from a variety of different sources to be invested by a specialized manager. In landscape-focused investment funds, these managers have expertise in sustainable land use investment; an appreciation for the potential synergistic

Table 5.1	1 Types of integrated landscape finance vehicle	s
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Model type	Description	Typical sources of finance
Landscape-specific investment funds	Investment structures designed to pool capital from a variety of different sources, to be invested by a specialized manager with sustainable land use investment expertise and understanding of landscape-scale synergies, guided by the priorities of stakeholders in a specific landscape	Companies, foundations, organizations, financial institutions, individuals connected to a landscape partnership
Landscape- focused investment funds (multiple landscapes)	Funds operating across multiple landscapes able to invest large sums of money for their investors, thus bringing new types of investors into the landscape finance space and offering built-in fund diversification	Multilateral development banks, family offices, private investors, foundations
Place-based investor collaboratives and foundations	Investors commit to social/ecological goals in a specific landscape or place and pool financial resources with others to support development of an integrated landscape investment portfolio; not a formal fund or financial institution, but can tap or mobilize large pools of funds	Diverse types of investors
Landscape development finance institutions	Global or local development finance institutions that integrate place-based sustainability with economic growth objectives in lending and investing; could potentially evolve from existing development finance institutions to include landscape-focused investing and stakeholder governance	National and local governments, multilateral development banks, commercial banks
Landscape bond	Mechanism that can be used to borrow from a wide group of investors; this vehicle could be used in landscape contexts either by government agencies that are associated with landscape initiatives or by landscape development companies	Institutional investors, impact investment funds

financial, ecological, and social benefits of investing in a portfolio of projects at a landscape scale; and are guided by the priorities of landscape stakeholders.

An investment fund focused on a single landscape is likely closely aligned with a landscape partnership, and may even have an institutional affiliation. **The Pioneer Valley Grows Investment Fund**, in Franklin County, Massachusetts, provides financing and technical assistance to farm and food businesses through community investments to support a more sustainable and healthier food system. It comprises three distinct pools of investment in the local food system so individuals, institutions, and foundations can all invest. An investment advisory committee made up of county stakeholders reviews applications from entrepreneurs to ensure good mission fit, identifies technical assistance needs, and provides those services to farm and food entrepreneurs as needed. The fund is associated with the Franklin County Community Development Corporation.

The idea for an **Imarisha Naivasha Sustainable** Landscape Fund in Kenya came from a coordinated response to Lake Naivasha receding to dangerously low levels, along with ecosystem degradation throughout the watershed. Stakeholders from the horticulture, fishing, livestock, and tourism sectors, along with government, created a public-private landscape partnership—Imarisha Naivasha—to bring stakeholders together to strategically plan and coordinate activities within the landscape. The partnership produced a Sustainable Development Action Plan and is now designing a publicprivate Sustainable Development Fund to finance achievement of the partnership's goals.

### Landscape-focused investment funds: multiple landscapes

Landscape-focused funds are emerging that invest in multiple landscapes in a region or throughout the world. One benefit of operating at this scale is that these funds are able to invest much larger sums of money than single landscape funds, which lets them attract new types of investors into the landscape finance space. Another advantage of working across geographies is the built-in diversification this offers. By their nature, landscape-focused funds, which operate across sectors, benefit from risk reduction associated with diversification. However, each of the investments made by a single landscape fund would likely carry the same local risks associated with political, economic, and social conditions; these can be mitigated with geographic diversification.

International funds that focus on a particular element of sustainable land use (e.g., climate, water, or biodiversity) have become popular over the past decade. Examples include the Moringa Fund, the Livelihoods Fund, the Althelia Climate Fund, and the Land Degradation Neutrality Fund. All of these blend international private, public, and philanthropic capital and make investments around the world. Their focus tends to be on a specific type of investment (carbon credits, sustainable coffee, certified timber, etc.) rather than on multiple activities in a single landscape. However, there are cases where these investment funds operate with a landscape lens.

One such example is the **Althelia Climate Fund**'s Tambopata-Bahuaja REDD+ and agroforestry project in Peru. The Althelia Climate Fund is an eight-year investment fund of nearly \$120 million focused on investing in ecosystems conservation and sustainable agroforestry. Returns are generated from sustainable assets (Forest Stewardship Council certified timber, certified cacao and coffee). In the Tambopata-Bahuaja project, the Althelia Climate Fund is working with an NGO called AIDER which works in and around the Tambopata National Reserve in Peru to manage a REDD+ project. AIDER, the leader of a multistakeholder landscape partnership, is the focal point of efforts to identify and address key drivers of deforestation. These efforts are supported by Althelia's investment in cocoa agroforestry within the forest buffer zone. Althelia chose this site to invest in partially because there was a strong stakeholder process and a landscape investment facilitator. These functions are critical for Althelia's model of REDD+ investment to succeed.

In the **Livelihoods Fund for Family Farming**, the focus is on landscapes that are "sourcesheds" for the supply chains of the companies that invest in the fund. In the Livelihoods Fund's Madagascar vanilla supply chain project, the investors are Danone, Firmenich, Mars, and Veolia—all of which purchase significant quantities of vanilla—to foster sustainability and poverty reduction in vanilla supply chains. The initial project includes 3,000 family farms and aims to tackle not only the quality and traceability of vanilla production, but also food security for farmers and biodiversity conservation. The fund joined forces with Prova, a supplier to Mars, in this project; it is also collaborating with local authorities and NGOs.

Central to the investment premise of **Loom Capital's Mesoamerican Landscapes Fund**, a mixed debt and venture capital fund currently in its fundraising stage, is that financial synergies can be created by investing in a diverse range of activities in a landscape—and that working closely with landscape partnerships will maximize the fund's ability to achieve its social and environmental goals. The fund will mitigate geographic risk by working in landscapes throughout Mexico and several Central American countries.

### Place-based investor collaboratives and foundations

In this third type of integrated financial vehicle, investors commit to sustainable development in a specific landscape or place, and collaborate with others to pool financial resources to support an integrated landscape investment portfolio. There is no formal fund or intermediate institution, but these models have the potential to tap or mobilize large pools of funds. All the examples found of this type were in the United States. Some are not yet investing in the full set of landscape investments, but could be adapted fairly easily to do so.

Some models were organized collaboratives of private investors interested in impact investment in a particular place. For example, the Sustainable and Local Food Investment Group (SLo-FIG) was founded as a network of independent investors sharing the mission of using private investment to re-establish a robust and sustainable food system across the Chicago foodshed. The investors are not associated with a particular landscape initiative, but they are guided by this general landscape-scale goal. They identify promising start-up and early stage companies; then provide capital, expertise, and a network of contacts to help drive their success. A group of 20–30 accredited investors work together to fulfill the SLo-FIG mission. To date, over 250 startups and innovators have applied for funding from SLo-FIG: 20 of these companies were accepted, and \$4 million has been invested.

The **Cascadia Foodshed Financing Project** in the Cascades region of Washington State is similarly structured as a collaboration of foundations and individual impact investors. It seeks to use marketbased strategies to grow the Pacific Northwest's regional food economy.

Another type of place-based model is driven by program- or mission-related investments of community foundations. There are over 750 such foundations across the United States, each dedicated to working in a defined geographic area. These institutions play a vital role in their communities, making grants and supporting local projects in ways few other financial institutions can. Many are seeking to align the commercial investments of their endowments—which can be in the billions of dollars—with the goals of the foundation. While most of these foundations operate in urban areas, and their investments in rural areas tend to focus on economic development rather than climate, healthy ecosystems, or even sustainable agriculture, some have begun investing in integrated landscape approaches.

One example is the Incourage Community

Foundation in central Wisconsin. Established in 1994, Incourage has, in response to community needs, evolved from being a traditional grantmaker to a values-led, resident-centered, and place-based organization which is connecting all of its resources in the service of a shared vision of a community that works well for all people. During an economic depression, Incourage incubated and modeled new approaches to shape a thriving, sustainable, and inclusive community-although it does not yet incorporate a strong focus on investments in ecosystem conservation or regeneration. With its roughly \$30 million endowment, it invests in valuesaligned regional funds, organizations, companies, and projects; and takes activist positions to challenge corporations whose regional operations undermine values of the foundation and communityvoiced priorities.

Innovative investment products are emerging to serve the growing demand for place-based investors. The Bay Area Impact Investing Initiative is a conceptual model for a place-based investment vehicle that combines an investment company, a network platform to share ideas and contacts, and a clearinghouse for matching resources to solutions in the San Francisco Bay Area. A proposed center would help connect a variety of sources and types of capital, ranging from bank and community development finance institution (CDFI) lending, grants, public support, private capital, and missionrelated investments to fund investments of all kinds in the San Francisco Bay Area. Six impact investing portfolios that make up the regional impact investing solution are asset class specific: public equity, fixed income, real estate, infrastructure, private equity, and community investing/savings. Each strategy is designed to combine the best practices in institutional investment management and fiduciary duty, benchmark-like rates of return in each asset class, and an impact on the local economy. With these standardized asset classes, each investor can customize its individual investment preferences and target its unique risk, return, and impact goals.

Another leading-edge example is **OpenInvest**, an asset management platform that enables customization, direct indexing, and impact investing at scale. In May 2019, it launched a place-based impact investing offering to serve mission-driven institutions—including charitable foundations and endowments—to target their investments to companies making a positive social, economic, or environmental impact in specific geographies in the United States. These investments are not necessarily associated with specific place-based action plans, but this model could easily be adapted to serve specific landscape objectives.

# Landscape development finance institutions

Development finance institutions have historically focused on large infrastructure projects that are expected to enhance economic output growth in a region or country. In recent years, these institutions have taken steps to focus on sustainability as they continue to pursue their economic growth objectives. They have the potential to evolve into financial vehicles, as well as investment service providers, for integrated landscape programs. They are already set up to offer loans at concessionary/subsidized rates, catalyze private finance sources, blend financial instruments, support project planning, and integrate with existing government policies. Conceptual models for landscape-focused development finance institutions are being developed at local, national, and international levels, although we found no operational examples.

Models in the United States and the United Kingdom of place-based CDFIs—including community banks, credit unions, loan funds, and venture capital funds—could be adapted for a landscape context. These for-profit corporations, with community representation on their boards of directors, provide capital to rebuild economically distressed communities through targeted lending and investing. CDFIs anchor capital in communities by developing residential and commercial property ranging from affordable housing to shopping centers and even businesses. Some also provide education and social services to community residents. Sources of funding for these institutions include large banks, corporations, individuals, religious institutions, private foundations, and depositors, as well as national government sources.

While the scoping exercise found a handful of examples of sustainable forestry and food systemrelated investments in CDFIs (e.g., Coastal Enterprises, Inc., in Maine), no example was found where the focus was on landscapes as defined in our criteria. However, this structure could potentially be adapted to create a landscape development finance institution or landscape bank. Such an institution would be staffed by experts in sustainable landscape investment and finance and would have representatives from the multistakeholder landscape partnership on its board to ensure that the institution pursued investments aligned with agreed landscape priorities. It could access capital not only from conventional sources but also from supply chain and ecosystem service investors (e.g., carbon credit buyers, water funds). Exploratory discussions are under way with a network of CDFIs in the United States as well as some specific sustainabilityoriented banking institutions on how this might be done.

At the national or international level, a landscape development finance institution could be established as an umbrella organization, setting up branches in specific landscapes associated with established landscape partnerships. It could draw funding from diverse sources around the country—or the world—thus spreading investment risks. The scale of the institution would enable it to attract and further develop the needed landscape plus finance expertise, and to put quality systems in place. Lessons can be learned from the experience of the European Investment Bank, which is an innovator among development finance institutions on sustainability in general and an investor in landscape-oriented funds, including the Althelia Climate Fund and the Land Degradation Neutrality Fund. The portfolio of its Natural Capital Financing Facility includes integrated place-based investments. For example, the Green Infrastructure for Urban Resilience project integrates nature-based solutions throughout the city of Athens, Greece. Loans from the facility support the integration of green components into the restoration of public squares and streets, and the development of green corridors between different greened areas; and contribute to the natural restoration of Lycabettus Hill. The objective is to support implementation of the Athens Resilience 2030 Strategy and thus contribute to reducing urban heat islands, increasing natural water infiltration, and improving the overall attractiveness of the project areas.

### Landscape bonds

When a company or government needs more money for a business operation or project than a typical bank can provide, a bond is a mechanism that can be used to borrow from a wide group of investors. This vehicle could be used in landscape contexts either by government agencies that are associated with landscape initiatives or by landscape development companies. There has been a recent proliferation of sustainable land use-related bonds that support landscape-scale projects; however, few of these are multisector, multiproject initiatives. The Tropical Landscape Finance Facility is a joint initiative of the United Nations Environment Programme, the World Agroforestry Centre, ADM Capital, and BNP Paribas to support landscapes in Indonesia. Its first transaction is a \$95 million corporate PT Royal Lestari Utama Sustainability Bond that will finance sustainable rubber production in two heavily degraded Indonesian landscapes. The funds will be used by a joint venture of French rubber conglomerate Michelin and its Indonesia partner's Barito Pacific Group to set aside more than half of 88,000 ha granted as rubber plantation concessions in two landscapes for community livelihoods and conservation. The project will be monitored against an environmental and social action plan that includes landscape-wide goals.

The International Finance Corporation (IFC) Forest Bond supporting the Kasigau Corridor in Kenya is a principal-protected fixed-income instrument issued under the IFC's AAA-rated program that pays carbon credits, cash, or a combination of the two to bondholders. The Kasigau project is designed to reduce deforestation, protect endangered plant and animal species, and develop sustainable economic opportunities for communities in Kenya. As one of the largest initiatives approved under the UN's REDD+ program, it enables thousands of farmers to benefit from a voluntary agreement to protect an important migration corridor for endangered elephants. Originally sized between \$75 million and \$150 million, it was increased to \$152 million in response to strong demand. Buyers included U.S. teachers' pension fund giants CalSTRS and TIAA-CREF, OBE Insurance, and emerging markets investor Treehouse Investments.

#### **Section 6**

# Initial observations on integrated landscape finance models

he field of integrated landscape investing is in a period of substantial innovation. Diverse investment models provide opportunities for engagement across investor profiles and asset classes. The field has been developing quickly, as emerging support service providers and investment vehicle designers have worked to meet the needs of landscape projects for financing that fit their needs as well as the demand from investors for bankable landscape projects. Both small and large financial actors are looking for business models that allow them to contribute to social and ecological outcomes while also generating financial returns. These efforts are being supported by emerging policy frameworks at national and international levels such as the Green Deal for Nature and the UN Decade of Landscape Restoration. While more work needs to be done to fully understand the extent of these models and how they function, some initial observations can be drawn from our review. These relate to major emerging opportunities, enhancing landscape investment portfolios, systemic challenges to scaling, and capacity needs.

### **Major emerging opportunities**

Integrated landscape finance vehicles can supercharge efforts to fund landscape investment portfolios. Multiple sources of funding are needed to finance a given landscape's portfolio of investments. A single investment vehicle cannot fund the full, diverse portfolio of potential investments. But integrated investment vehicles can play a critical role in channeling and aggregating sources of finance that the landscape may not otherwise be able to access. Given the vehicles' support for landscape objectives, they are more likely to take on the additional risk of investing in activities they see as critical to overall landscape success. The existence of dedicated finance vehicles can motivate project and business developers to focus on important project ideas that might otherwise be discarded on the assumption that no financing would be available. Flows of funding from these vehicles should reduce the risk or increase the profitability of many other aligned investments. There are promising opportunities to integrate sustainable agriculture and natural resource management concerns into development finance institutions. Some of the most promising existing models for community-focused, multiobjective finance coordination currently come from place-based efforts outside the land use sector, particularly in urban development. Efforts should be made to more systematically include regenerative agriculture, forestry and fisheries, natural infrastructure, and other common landscape investments into these existing institutions.

## Landscape-scale investment opportunities are emerging for large institutional investors. Much

of the innovation in this space began with smallerscale projects. However, as demand from large institutional investors for sustainability and placebased-focused investments has grown, designers of investment vehicles have developed creative models that, in theory, could service large-scale institutional investors. Examples include the IFC's Forest Bond, OpenInvest's place-based offerings, and the still conceptual Bay Area Impact Investing Initiative.

## Opportunities are growing to leverage climate finance for integrated landscape investment.

There are promising opportunities to mobilize terrestrial carbon finance to fund whole landscape portfolios, as demonstrated by the Althelia Climate Fund's Tambopata-Bahuaja project. Key challenges are to aggregate and measure greenhouse gas emissions from the whole—or large parts—of the landscape and channel funds early on to landscape investments expected to generate climate benefits. As more adaptation funds come online, these can be designed to provide opportunity for multi-objective landscape investment.

### Generating more robust landscape investment portfolios

Investment support services are the backbone of integrated landscape finance systems.

While integrated investment vehicles will be critical to scaling up landscape finance, a dedicated investment coordinator can attract sectoral investments within a landscape context even in the absence of such vehicles. Growth in quality support services for integrated landscape investment (convening of landscape partnership, assessment of financial flows, development of a common vision and action plan, translation of the plan into investable projects, mobilizing finance, monitoring impacts) will provide the foundation for the success of new integrated investment vehicles.

## More rigorous evaluation of risk and return profiles for landscape investment portfolios is

**needed.** All of the landscape investment vehicles reviewed prioritized commercial projects on the basis of anticipated profitability, while seeking to generate social and environmental benefits

contributing to ambitious sustainable landscape goals. Even impact investors aim for market or near-market rates of return on the private capital invested.

There are promising opportunities to mobilize terrestrial carbon finance to fund whole landscape portfolios.

The promise of investing in landscape portfolios for risk mitigation and value creation is

twofold. First, if the spatial planning and sequencing of investments are well aligned, they can have positive synergies with one other. Second, a wellconstructed portfolio at a landscape (or multiple landscape) scale can optimize returns and mitigate risks through diversification. Much more work needs to be done in a wide variety of landscape contexts to better understand how these potential benefits can be realized. While some component investments in a landscape portfolio have established track records, others have not. Creative structuring of financial vehicles and blended finance, as well as policy actions, can reduce risk and improve prospective returns for private investors.

Blended finance vehicles are key to successful landscape investment at scale. Given the diverse anticipated benefits of integrated landscape investment—financial, social, and environmental large-scale financing will necessarily be a blend of public, private, civic, and philanthropic capital. While many component investments in a landscape portfolio may be highly profitable in the short term and be low risk—and thus attractive to conventional commercial investors—many others are not. The landscape investment vehicles reviewed focused on commercial projects and were funded mainly from private sector sources. However, most relied on blended finance from the public or philanthropic sectors to ensure significant social and environmental returns.

### Systemic challenges for scaling up integrated landscape finance

Policy makers have a wide range of tools at their disposal to stimulate integrated landscape finance.

Elements of an integrated landscape finance system are emerging around the world, but rarely come together in a particular landscape. All four elements of integrated landscape finance need to be in place for the system to work well: landscape investment readiness, suitable sources of

appropriately structured finance, a robust pipeline of investable projects in a landscape portfolio, and mechanisms for coordination. This paper looks at a wide range of creative models that have the potential to be replicated and scaled up. However, there were few cases found where all four elements were fully developed and well integrated.

#### There is inadequate funding available to support landscape investment readiness and investment portfolio pipeline development.

Despite the critical role of these support services, there are very few sources of the long-term, grantbased funding needed to get landscape partnerships to the point where they have robust pipelines of investable projects that align with landscape objectives. The available funding is often piecemeal, and does not cover all the requisite readiness and preparatory elements of these processes. Additional dedicated sources of funding will need to be allocated by actors at landscape, national, and international levels for these purposes.

#### **Government policy could further stimulate**

innovation. Policy makers and government agencies have a wide range of tools at their disposal to stimulate integrated landscape finance in addition to direct support to landscape partnerships. Institutional and policy harmonization at the national and subnational levels can eliminate unintended negative interactions that arise when multiple sectoral plans are implemented independently. Clarity and security of land and natural resource rights are critical to attracting landscape investment. Regulatory frameworks should be supportive of sustainable land use broadly, and coordinated at the landscape scale. Tax policy can also be a key incentive. For example, in the United States, state governments have encouraged CDFIs by granting special tax status so bonds issued are state tax exempt. On a federal level, opportunity zones-a place-based investment stimulus model-can be authorized to permit deferrals of capital gains. These kinds of tax schemes could be explored to promote landscape investment in many countries.

The present challenge is to systematize integrated landscape finance. Today, most integrated landscape investment services and investment vehicles are jury-rigged. They were built by innovators passionately committed to sustainable landscape development within a system that, in most cases, was not at all supportive. Everything from technical guidelines, to financial evaluation criteria, to monitoring systems, to legal arrangements, to policy barriers, needed to be worked out. This was done while navigating widespread skepticism, inadequate information, weak capacities—and often in contexts of high economic, social, and sovereign risk. These first movers are leading the way. The next generation of integrated landscape finance actors can learn lessons from their experience and craft a system that is easier to maneuver and manage, and more profitable— socially, ecologically, and financially—for all involved.

### Capacity needs for scaling integrated landscape finance

Landscape partnerships require financial expertise. All actors within integrated landscape finance systems need to develop additional expertise and capacity. Particular attention should be paid to supporting landscape partnerships to engage with financial actors from a position of strength. In addition to their typical roles in stakeholder convening, landscape assessment, and action planning, partnerships need the ability to understand the investment readiness needs in their landscapes, access suitable nonprofit and for-profit advisors to develop landscape investment portfolios, promote suitable investment opportunities, and access appropriate sources of finance.

More specialized financial managers are needed who are also experts in landscape management and landscape-friendly investments. Despite the many innovative

models identified in this paper, it is rare to find an investment management entity that is fully competent in all of the capacities required to successfully manage an integrated landscape finance vehicle. These managers must understand the fundamentals of finance and be able to evaluate synergies and trade-offs within a given landscape investment portfolio. They should be system thinkers and know how to build bridges between finance systems and ecosystems. Concurrently, they need to be fully conversant on topics such as blended finance, conservation finance, collaborative placebased investment, and payments for ecosystem services and be able to structure deals in complex and creative ways. Perhaps the rarest skill set within the finance community is a demonstrated

sensitivity to the importance of a legitimate multistakeholder process within a landscape that identifies and supports investment priorities.

Many landscape-friendly businesses need effective intermediation. Securing

committed landscape investors does not reduce the need for serious

The next generation of integrated landscape finance actors needs to craft a system easier to maneuver and manage.

due diligence with the businesses and organizations receiving prospective investment funds. Yet many of the critical investments for landscape transformation need to be implemented by smallholder farmers, small-scale businesses, local governments, and local civil society organizations. A central challenge is finding and strengthening intermediary organizations to enable aggregation, incubation of new businesses and business activities, and design of investment models that share responsibility with well-established organizations—without taking an excessive share of returns.

# Next steps

ur review was highly encouraging, as it identified many more models of integrated landscape finance innovation than initially expected. Innovative efforts are emerging from landowners, conservation organizations, regenerative farmers' associations, food companies, and innovative investors that point the way forward. However, there is much we do not understand about how the models work; nor have they yet generated a strong track record of largescale success. We propose four strands of work to address those gaps, related to design research, financial systems innovation, policy, and capacity strengthening for landscape partnerships and other actors.

**Mobilize design research for integrated landscape finance.** Financial institutions, business schools, agriculture and environmental policy research centers, and universities will need to step up research on integrated landscape investment models. Priority topics include the following:

- Which integrated landscape finance models are appropriate for different types of landscape partnerships and contexts
- Quantification of financial, environmental, and social returns of landscape investments in different landscape contexts
- How best-in-class landscape finance structures can support diversification across sectors and project types to create value and reduce overall risk for investors in a landscape portfolio
- How investment risk analysis differs when focusing on a single landscape versus multiple landscapes in diverse geographies
- Policy instruments that can support integrated landscape finance.

#### Catalyze financial systems innovation to support landscape investment.

Collaborative efforts are needed to catalyze and co-create the financial architecture needed to scale up integrated landscape finance—including the promotion of new private investment and blended vehicles and investment support service providers.

Partners of the 1000 Landscapes for 1 Billion People initiative have begun to engage with leaders and innovators in the finance community across the capital continuum to evaluate gaps, forge new strategies, and create an action agenda aimed at scaling integrated landscape finance.

#### Mobilize policy action to advance integrated landscape investment and finance. Policy

makers, finance institution leaders, and landscape development champions will need to structure a more systematic strategy to scale integrated landscape finance. An agenda to start down this path would include these tasks:

- National and local governments evaluate their programs, strategies, and capacities to support and co-invest through complementary and blended finance in ILM.
- As larger pools of funding emerge for integrated landscape finance vehicles, focus on governance systems that ensure that local voices and priorities are respected.
- Strengthen international policy processes and structures—such as the UN High-Level Political Forum on the Sustainable Development Goals, the UN Decade of Ecosystem Restoration,

the UN Rio conventions (the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, and the United Nations Convention to Combat Desertification), and the 2021 UN Food Systems Summit—to better support integrated landscape finance. Champions will

Strengthen capacities related to integrated landscape finance for all actors involved. Landscape partnerships, financial

institutions, government agencies,

Champions will need to structure a more systematic strategy to scale integrated landscape finance.

philanthropists, business developers, and nonprofit support service providers all need to develop additional expertise to scale integrated landscape finance. Tools such as LIFT, 4 Returns, and many others are designed for landscape partnerships to build skills and guide them through the process of facilitating the development of landscape investment portfolios. These tools need to be refined and implemented widely. Resources and training programs must be made available to business developers, fund managers, and banks to modify their business-as-usual approaches to operate in a landscape context.

# Appendix A Glossary

**Asset investments.** Investments that create tangible value that is returned back to the investor in the form of financial, environmental, or social values. In the landscape context, such investments include agricultural and other production/value chain activities, industry and processing, green and built infrastructure, and natural resource restoration.

**Blended finance.** In the context of integrated landscape finance, the complementary use of public, civic, and/or private sources to provide financing (for both enabling and asset investment) on terms that would make projects financially viable and sustainable. From the perspective of a for-profit investor, blended mechanisms are necessary when the business case for a particular asset investment is not seen as strong enough on its own and needs to be matched with enabling investors to improve its prospects. Blended finance reduces the investment risk associated with environmental and social conditions outside the investor's control. From the perspective of investors, these blended mechanisms allow them to unlock large pools of capital that would otherwise be unavailable for a given landscape investment (Convergence n.d.).

**Collaborative place-based impact investing.** Collective models that combine place-based philanthropy and impact investing. Foundations, other organizations, and individuals form partnerships as a component of their local impact investing activities (Ashley and Ovalle 2018).

**Conservation finance.** A category of impact investment referring to the set of financial structures that can be employed to invest in the conservation and restoration of ecosystems and the services they provide over the long term (Huwyler et al. 2014). As component investments within an integrated landscape investment portfolio, these structures can be seen as part of the integrated landscape investment toolbox.

**Enabling investments.** Investments that lay the institutional foundation for asset investments to be successful. These include support to multistakeholder dialogue

and action platforms, strategic planning, and coordination, setting up new finance and policy mechanisms, landscape assessment, monitoring, and incubating innovative businesses or projects.

**Impact investing.** Investments made in companies, organizations, and funds with the intention of generating social and environmental impact alongside a financial return, even if it is below market rate returns. Impact investors actively seek to capitalize on market-based solutions to social and environmental problems (GIIN 2019).

**Inclusive green growth.** A framework for fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies (OECD 2012).

**Integrated landscape finance system.** A system of finance coordination and blending that supports multiproject, multisector investment portfolios to achieve multiple landscape objectives, as well as synergies between investments and impacts at scale. A robust landscape finance system includes strategies for investment readiness at landscape scale, available sources of suitable finance, pipelines of bankable landscape-friendly investments, and coordination of investment efforts across the landscape.

**Integrated landscape finance vehicles.** An emerging class of investment entities explicitly designed to fund multiple activities in landscapes across sectors that, taken together, have positive synergies with each other and are aligned with a broader agenda defined by landscape stakeholders. These vehicles can source funds from profit-seeking or blended finance sources as well as from investors interested only in environmental and social returns.

#### Integrated landscape investment portfolio.

Multiproject, multisector investment portfolio that aims to achieve multiple landscape objectives to achieve synergies and impacts at scale. The portfolio comprises both enabling investments and asset investments by a wide range of private, public, and civic actors.

#### Integrated landscape investment services.

Services that help integrated landscape initiatives (1) translate their action plans into a landscape investment portfolio composed of investable businesses and projects and (2) mobilize the needed finance. They also often help landscape partnerships organize stakeholders, assess landscape opportunities and challenges, and develop landscape visions and action plans.

#### Integrated landscape management (ILM).

Describes a multistakeholder approach to landscape resource management. This approach seeks to achieve sustainable landscapes over the long term by explicitly addressing trade-offs and synergies among stakeholders and between different parts of the landscape, and by building collaborative relationships. Governance structure, size, and scope and the number and type of stakeholders involved (private sector, civil society, and government) in integrated landscape management vary.

**Landscape.** Interconnected socio-ecological system shaped by its local context and history, typically within boundaries defined by culture, bioregion, or jurisdiction (Denier et al. 2015).

# **Landscape investment portfolio developer.** An organization that specializes in engaging with a set of landscape actors to identify and develop a portfolio of investments supportive of landscape goals.

### Appendix B

# Scoping study data collection guide

Model type	Questions		
	What is the nature of its engagement in a landscape-scale planning process, if any?		
	<ul> <li>What type of finance is provided (debt, equity, etc.)?</li> </ul>		
	Provide examples of investments made.		
	How many investments has it made?		
Investment vehicle	<ul> <li>What is the total value of the investments made?</li> </ul>		
	Which sectors receive funding?		
	<ul> <li>Which actors are eligible to receive funding?</li> </ul>		
	<ul> <li>How do landscapes access the funds?</li> </ul>		
	<ul> <li>How are funds accessed by individual projects within landscapes?</li> </ul>		
	What readiness roles are played by the model?		
	<ul> <li>Provide examples of investments coordinated/supported.</li> </ul>		
	<ul> <li>How many coordinated/supported investments?</li> </ul>		
Pipeline portfolio service	<ul> <li>What is the total value of the investments coordinated/supported?</li> </ul>		
	Which sectors does it engage?		
	Which actors does it engage?		
	<ul> <li>How do landscapes access the services?</li> </ul>		
	How do individual actors access the services?		
	What is the model's name?		
	Briefly describe the model.		
	Who are the key actors?		
	What is the geographic focus?		
Investment vehicle +	What are the proposed and/or documented impacts, in addition to financial returns?		
portfolio service provider	• What is its stage of development (completed, operational, in development, conceptual)?		
	<ul> <li>Who are the financial and political champions of the model?</li> </ul>		
	<ul> <li>Give example of investments made or coordinated.</li> </ul>		
	What is the mechanism for investment coordination?		
	<ul> <li>Is it an investment vehicle or support service?</li> </ul>		

## Appendix C

# Investment service provider models reviewed

Model type	Example	Location
Landscape	Atlantic Forest Restoration Pact	Atlantic Forest, Brazil
partnerships	Cagayan de Oro Riverbasin	Northern Mindanao, the Philippines
expanding their role	Management Council	
into investment and	Imarisha Naivasha	Lake Naivasha, Kenya
finance	Pennsylvania Wilds Center	North central Pennsylvania, USA
	<u>Commonland</u>	Multicountry: Australia, the Netherlands, South Africa,
		Spain
	IDH (the Initiative for Sustainable	Multicountry: Wider Tai Forest Area, Côte d'Ivoire; West
	Landscapes) Landscape program	Kalimantan, South Sumatra, Aceh, and Jambi, Indonesia;
Landscape		Central Highlands, Vietnam; South East Landscape,
portfolio developers		Liberia; Central Rift Valley, Ethiopia; Namibia; Liberia; et al.
(nonprofit)	Solidaridad	Multicountry: Ethiopia, Ghana, Honduras, Kenya,
· · /		Nicaragua, Tanzania, Zambia, et al.
	WWF Landscape Finance Lab	Multicountry: Mai Ndombe Emissions Reduction Program,
		Democratic Republic of Congo; Supply Chain and
		Landscape Approach in the Eastern Plain Landscape of
••••••		Cambodia (SCALE); Fiji; et al.
	La Almendrehesa	Altiplano Estepario, Spain
	Amstelland Company	Peat Meadows, the Netherlands
Landscape	Baviaanskloof Development Company	Langkloof, South Africa
development	Landscape Enterprise Networks (LENs)	Multiple landscapes in the UK
companies	Legacy Works	Tetons (Idaho/Wyoming); Santa Barbara, California; Baja
(for profit)		California Sur, Mexico
	<u>Matanataki Investment Partnership</u>	Fiji
	Wide Open Agriculture	Western Australia Wheatbelt
Business	BirdLife International Forest Landscape	Multicountry: Argentina, Brazil, Cambodia, Indonesia,
incubators and	Sustainability Accelerator	Kenya, Liberia, Madagascar, Paraguay, São Tomé and
accelerators with a		Príncipe, Sierra Leone, Vietnam
landscape lens	Land Degradation Neutrality Fund	Multicountry
	Technical Assistance Facility	

### Appendix D

# Investment vehicle models reviewed

Model type	Example	Location
	Conservation Fund, Working Farms Fund	Georgia, USA
Landscape-specific	Naivasha Sustainable Development Fund	Lake Naivasha, Kenya
investment funds	Pioneer Valley (PV) Grows Investment Fund	Western Massachusetts, USA
	The Nature Conservancy's Cumberland Forest Project	Kentucky, Virginia, Tennessee, USA
	<u>Althelia Climate Fund</u>	Multicountry: Tambopata-Bahuaja
		REDD+ and agroforestry project, Peru;
		et al.
Londosono	Calvert Community Capital, Local investing initiative	Four U.S. cities
Landscape- focused	Land Degradation Neutrality fund	Multicountry
investment	Livelihoods Fund for Family Farming (L3F)	Multicountry: Mt. Elgon, Kenya; vanilla
funds (multiple		supply chain project, Madagascar; et al.
landscapes)	Loom Capital's Mesoamerican Landscape Fund	Multiple countries in Mesoamerica
	Scottish Conservation Finance Project, £1 Billion Project	Landscapes throughout Scotland
	World Bank Biocarbon Fund	Multicountry: Oromia Forested
		Landscape Program, Ethiopia; et al.
	<u>&amp;Green</u>	Multicountry, associated with IDH
	Bay Area Impact Investing Initiative	San Francisco Bay Area, USA
	Cascadia Foodshed Financing Project	Pacific Northwest, USA
Place-based	Fresh Taste	Chicago foodshed, USA
investor	Great Lakes Impact investment platform	Great Lakes region, USA
collaboratives and	Incourage Community Foundation	Central Wisconsin, USA
foundations	OpenInvest, Place-based investing	USA
	Sustainable and Local Food Investment Group (SLo-FIG)	Chicago foodshed, USA
	Vermont Community Foundation, Food and Farm initiative	Vermont, USA
Landscape	Coastal Enterprise, Inc.	Maine, USA
development	Natural Capital Financing Facility of the European	Multicountry: Green Infrastructure for
finance institutions	Investment Bank	Urban Resilience, Athens; et al.
· · · · · · · · · · · · · · · · · · ·	International Finance Corporation, Forest Bond	Multicountry: Kasigau Corridor, Kenya;
Landscape bonds		et al.
	Tropical Landscapes Finance Facility Sustainability Bond	Jambi and East Kalimantan, Indonesia

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