



LANDSCAPES



LEARNING BRIEF

INNOVATIVE AND INCLUSIVE SUSTAINABLE LAND MANAGEMENT AND ECOLOGICAL RESTORATION FINANCE CASE STUDIES

Initial insights from the Land Degradation Neutrality Technical Assistance Facility
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ACKNOWLEDGEMENTS

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The report and its contents are the sole responsibility of IDH.



ABOUT IDH, THE SUSTAINABLE TRADE INITIATIVE

IDH convenes companies, civil society organizations, governments and others in public-private partnerships. Together, we drive the joint design, co-funding and prototyping of new economically viable approaches to realize green and inclusive growth at scale in commodity sectors and sourcing areas. IDH is supported by multiple European governments, including our institutional donors: the Netherlands Ministry of Foreign Affairs (BUZA); the Swiss State Secretariat of Economic Affairs (SECO); and the Danish International Development Agency (DANIDA). We also receive support on specific projects and programs from donors, including the Norwegian, American, British, and French governments. We work with over 500 companies, civil society organizations, financial institutions, producer organizations and governments in 11 sectors and 15 landscapes in over 50 countries worldwide.



ABOUT LDN FUND AND LDN TAF

The Mirova Natural Capital platform, established by responsible investment specialist Mirova, is dedicated to providing innovative investment solutions to fight climate change and protect landscapes, biodiversity, soils, and maritime resources.

The Land Degradation Neutrality (LDN) Fund, co-promoted by the United Nations Convention to Combat Desertification (UNCCD) and Mirova, is a first-of-its-kind impact investment fund investing in profit-generating sustainable land management (SLM) and land restoration projects worldwide. The LDN Fund has secured over US \$150 million in commitments from investors.

The Land Degradation Neutrality Technical Assistance Facility (LDN TAF) is the grants making arm of the LDN Fund and is managed by IDH. The LDN TAF can provide grants and reimbursable grants to (potential) LDN investment projects, to improve technical quality, and strengthen environmental and social impacts, so that the investment project meets the LDN Fund investment criteria. Current donors to the LDN TAF are AFD and the GEF/ WWF.

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INTRODUCTION

BACKGROUND

INVESTMENTS IN SUSTAINABLE LAND USE

Sustainable land management and ecological restoration are widely recognized as a cornerstone for achieving the Paris climate goals and the Sustainable Development Goals (SDGs). Attaining LDN (SDG target 15.3) and restoring ecosystems requires **a broad range of financing options**.

There is an upward trend of banks, companies, and other investors looking to invest in sustainable land use and ecological restoration, primarily through the agriculture and forestry sectors. Estimates indicate committed capital to sustainable land use amounted to at least US \$8 billion in 2015¹. However, a significant portion of this remains undeployed because of a lack of investable projects.

New vehicles are needed to bring together **private sector** investors and firms to finance restoration projects. Especially in lower capacity regions (such as Non-Annex I, LDCs, and SIDS), this gap remains large, as project risks are too high and the investments needed to make a difference are often long term and beyond the capabilities of local financial institutions. As such, there is a need to close this gap and prepare projects to match private capital investment requirements.

ABOUT THIS PUBLICATION

The Land Degradation Neutrality Technical Assistance Facility (LDN TAF) provides grants and reimbursable grants to (potential) SLM and ecological restoration investment projects, to improve technical quality, and strengthen environmental and social impacts, enabling the investment project to meet the LDN Fund investment criteria. The TAF also supports projects post-investment to reduce project risks and increase positive social and environmental impacts, as well as to better monitor their impacts and practice adaptive management more effectively.

As manager of the LDN TAF, IDH supports learning and knowledge sharing of successful models for sustainable land management investment, beyond the LDN Fund and its projects.

The publication shares insights in the underlying business models and innovative financing structures for SLM and ecological restoration. It also serves to generate discussion among key stakeholders working in this space. Over the course of 2020, IDH aims to conduct analyses over additional cases and publish an **insights note** with practical recommendations for project developers looking to create nature-based-solutions that generate positive impact on natural capital while generating financial returns.

1. Source: KOIS Invest, Financing Sustainable Land Use, January 2018

APPROACH TO LEARNING

Because proven investment models for successful inclusive SLM and ecological restoration investments are only just emerging, and there is an opportunity to grow awareness of these models with the broader business and investment community, a number of key learning questions were identified where with increased knowledge and evidence, investments in SLM and ecological restoration can be scaled up.



INITIAL FOCUS LEARNING QUESTIONS

- How and under which conditions can SLM and ecological restoration be a viable and inclusive **underlying business model**?
 - What are the main costs and revenue drivers, and project risks of SLM and ecological restoration?
 - What innovative business models engage and empower local communities through SLM and restoration investment?
 - When and how is it “bankable” or “investment ready”?
- How best to **finance** SLM and ecological restoration, and to **structure such investments**?
 - What are key risks in these investment projects, and how are these mitigated / allocated to enable external investment?
- What **positive impact** is generated by investment in SLM and ecological restoration, and how can environmental and social returns best be guaranteed?
 - What standards are used to assess and monitor SLM and ecological restoration investments?
- What is needed to **scale up and replicate** SLM and ecological restoration business models and investments?



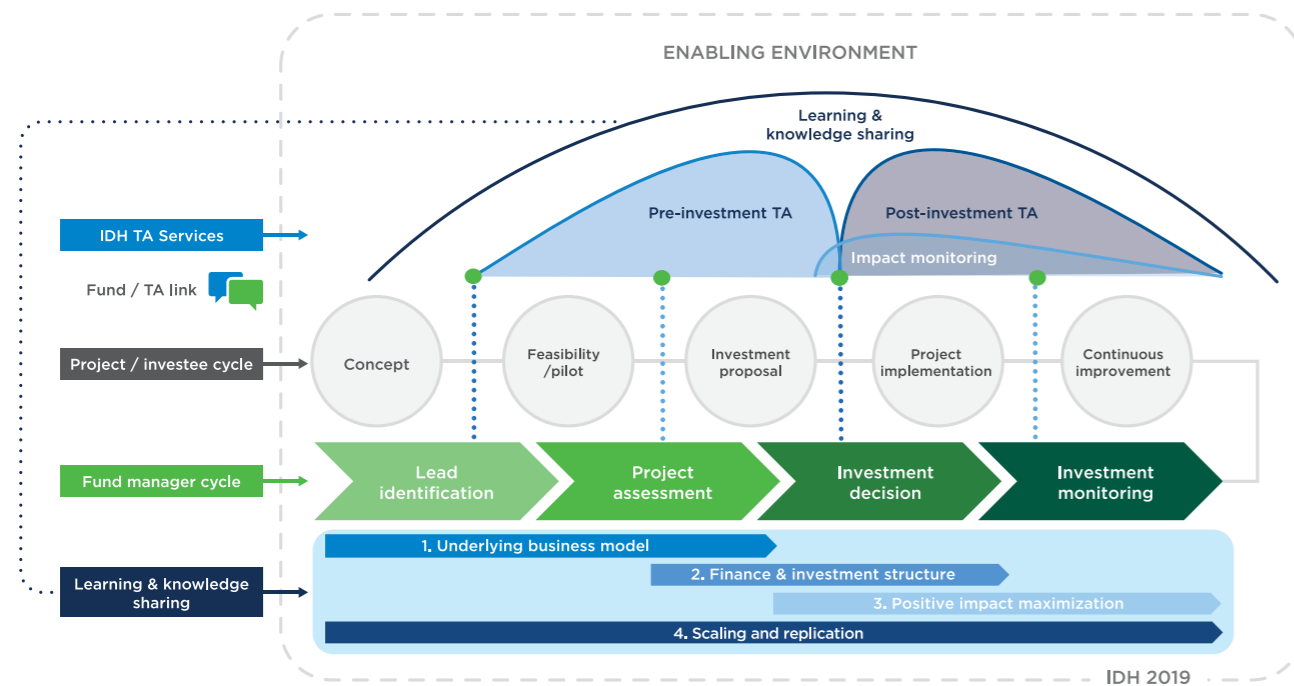
WITH OUR PARTNERS, IDH AIMS TO CREATE:

Action-driven analysis to:

- Analyze existing inclusive SLM and ecological restoration finance cases;
- Develop insights packaged for project operators looking for investment to contribute to sustainable land use (including positive LDN impact).

A learning community to:

- Gain a better understanding of inclusive SLM and ecological restoration investment models;
- Develop knowledge of key levers making SLM or ecological restoration models bankable;
- Better understand the needs of the business (and amount of technical assistance or grants required);
- Share lessons to make it easier for project developers to become investment ready, and demonstrate viability of business models;
- Increase knowledge on how to define and monitor environmental and social returns for adaptive management, in addition to financial returns;
- Gain a better understanding of the financing needed, and the role that technical assistance and grants can play at various stages.



IDH will encourage dialogue with key partners on these topics, through analysis of a broader range of innovative SLM and ecological restoration finance cases, and through joining and facilitating knowledge-sharing events.



SUMMARY OF THREE CASE STUDIES

This section gives an overview of three examples from the LDN Technical Assistance Facility (TAF). These three case studies demonstrate how project preparedness for impact investment to target LDN impact is addressed. Or, in the case of post-investment, how projects can become investable and be developed to generate enhanced environmental and social returns through well-informed technical assistance.



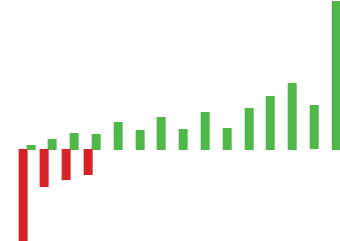
PERU



INDONESIA



KENYA

	Café Selva Norte	Fairventures Social Forestry	Komaza
Stage of investment as technical assistance recipient	Post-investment	Pre-investment	Pre-investment
Payback/revenue model	<p>Investor: interest payments of the loans, fees of the services provided by the mill, carbon credits, coffee commercialization</p> <p>Producer: coffee, agroforestry (timber)</p>	<p>Investor: timber with cash crops and NTFPs, potential for carbon revenue</p> <p>Producer: agroforestry</p>	<p>Investor: timber</p> <p>Producer: timber intercropped with cash crops (e.g. maize)</p>
Smallholder/community engagement	Through local existing coffee cooperatives whose members have secured land rights	Through partnership with local social forestry permit holders (communities), who provide the land for the investment case and have the right to provide the largest part of the necessary labour, all following FPIC procedures	Through partnerships with individual smallholder farmers who own their lands and that provide zero-cash investment
(Targeted) use of impact funds	Debt financing to transition to agroforestry system, and equity financing to improve coffee-processing capacity and securitize carbon benefits	Blended finance of grants, soft loans and patient equity for proof of concept at significant size; debt financing to scale community agroforestry model	Equity financing to scale operations
	<p>Investment period: 4 years</p> <p>Duration of fund: 15 years</p> <p>Net expected internal rate of return: 12%</p>		
Projected cash flow	 <p>Cashflow expected to be positive in year 8, and 13-year payback period</p>		<p>Cash flow expected to break even in 3-5 years with US \$30 million in revenues</p>
Projected impact²	<ul style="list-style-type: none"> 20,550 hectares 2,000 farmers 1.29 million MtCO₂eq 	<ul style="list-style-type: none"> 97,500 hectares 50,000 farmers 212,880 MtCO₂eq 	<ul style="list-style-type: none"> 20,000 hectares 50,000 farmers 5 million MtCO₂eq

2. See the individual case studies for aggregation and definitions of these projected impacts

	Café Selva Norte	Fairventures Social Forestry	Komaza
Legal structure	Through a special-purpose vehicle (SPV) and joint venture	German GmbH plus Indonesian PT PMA (both limited liability companies)	Equity investments in US for-profit corporation, which owns 100% of local entity, setting up SPV for forestry operations
Risk-mitigation measures	<ul style="list-style-type: none"> Collective guarantee on carbon offsets and cooperative coffee sales volumes (diversified revenues) Disbursement to producers by milestones Climate-smart agriculture to reduce natural risks Technology/ MINKA data platform 	<ul style="list-style-type: none"> Direct support of communities in the social forestry scheme; active management and lowering of risks in the underlying model Direct supply agreements with industry partners Satellite and drone mapping as well as active monitoring Diversification of revenue streams 	<ul style="list-style-type: none"> Deployment of a proven micro-forestry business model that allows for widespread distribution of risks Use of technology for risk reduction in operational management, as well as scaling strategy
Role of technical assistance	<ul style="list-style-type: none"> Cooperative capacity building Research into coffee hybrid varieties and timber value chain Setting LDN baseline and impact monitoring 	<ul style="list-style-type: none"> Cash crop selection Soil preparation and fertilizer selection Field testing Post-harvesting best practice research Financial modelling 	<ul style="list-style-type: none"> Cost analysis of the production cycle, incl. benchmark Quantification of the operator's intellectual property (IP) / technology Feasibility study for expanding the project's operations to new sites, including environmental impact assessment
Key drivers for success	Proven concept with a dedicated project operator, whose core business is developing bankable ecological restoration projects with collective organizations of small producers, allowing for scaling and building on field-level knowledge	Dedicated project operator with an NGO background combined with a business mindset, a social license to operate, and a well-developed concept providing benefits to communities	Business model with a proven track record, led by a dedicated project operator with experience of working with smallholders





CAFÉ SELVA NORTE

COFFEE AGROFORESTRY IN PERU

Financing to enable climate-smart coffee agroforestry systems

POST-INVESTMENT

- Project operator:** ECOTIERRA
- Vehicle:** Urapi Sustainable Land Use³
- Business model:** Coffee, agroforestry (timber) and carbon credits
- Financing:** Debt and equity

CONTEXT

Coffee cooperatives in the project area face significant barriers to continue their growth and transfer value created to smallholder producers. There is a lack of availability of processing facilities, causing quality loss and high transportation costs. Cooperatives have limited resources available to reach appropriate markets and to invest in processing infrastructure to ensure quality and traceability, which causes producers to receive lower prices. On the producers' side, coffee plantations are often old and unproductive as well as poorly protected against the effects of climate change, leading to declining yields and low income. They have little or no access to affordable long-term credit to renovate, expand or improve processes or infrastructure on their farms, and a lack of knowledge and poor management practices to adapt to climate change. Altogether, this leads producers into a vicious circle of migratory agriculture, deforestation, soil erosion and a preventable loss of income.

To overcome the barriers identified, private investment is required. As such, an investment of US \$14.5 million over the next four years is being made to finance:

- Secured-term loans to participating cooperatives for on-lending to smallholder farmers, in order to transition from degraded lands to agroforestry and forestry systems;
- Equity investment in a newly constructed processing plant to cover construction costs and part of the operational expenditures. This includes improving processing and commercialization services of the participating cooperative, of which ownership shares will be fully transferred to the participating cooperatives over time;
- Investment to securitize and trade carbon credits generated by regeneration of degraded land in agroforestry systems and forest protection.

3. Received an investment from the LDN Fund



SMALLHOLDER/ COMMUNITY ENGAGEMENT

This project is bringing an innovative credit and service product in direct partnership with local cooperatives whose members, individual smallholder farmers, have secured land rights. As such the project aims to improve key areas of the coffee value chain by increasing the production, quality and commercialization of its products, thereby reducing land degradation and increasing forest cover.

PAYBACK/REVENUE MODEL

The three investment activities are recovered through repayment of the loans by the producers (including interest), through the sale of coffee, agroforestry products (e.g. timber revenues later in the project), and carbon credits, with dividends paid out of the commercial returns of the processing plant (resulting from fees paid for the services provided by the mill). Moreover:

- The microcredit is structured to match the cash flow needs of the producer, allowing repayment when cash is at its peak, to be repaid over a five-year term with the bulk of the loan reimbursement only required toward the end of the term loan.
- Sale of the shares owned by the fund in the processing plant to the participating cooperatives at a pre-established price, which is the investment made plus an inflation factor. All the dividends to the cooperatives will initially be used for the purchase of the shares owned by the fund.
- The carbon project will be verified in the first few years of the project to issue the initial carbon credits. But the biggest benefits become available towards the end of the project, because the project produces only ex-post carbon credits.

RISK MANAGEMENT

Several risk-mitigation strategies are deployed to reduce risks associated with this finance case:

- To reduce internal risks such as defaults, bankruptcy, poor governance and delays, safeguards are put in place including the participation of multiple cooperatives, collective guarantees on the carbon offsets and coop sales volumes, disbursements by milestone, and transfer of members to another coop in case of bankruptcy of their coop.
- To mitigate risks around decreases in commodity and carbon credit prices, the revenue base is diversified (coffee, timber, carbon, as well as revenues from mill and commercialization), and rescheduling of debt is made possible.
- To reduce natural risks, the project focuses on supporting climate-smart agriculture and reducing land degradation, as well as providing technical assistance to producers.
- Use of technology (MINKA) for monitoring of progress and impact and use insights for adaptive management.

INVESTMENT

This finance case concerns an investment of US \$14.5 million in the project as a combination of debt through a special-purpose vehicle (SPV) and as private equity in a newly created limited company (LC) for the processing plant. Through the SPV, the fund makes loans to cooperatives for on-lending as microcredit to their members to pay for the transition towards sustainable land use. The LC builds new infrastructure and purchases the necessary equipment. All assets belong to the LC. Initially, the LC will be co-owned by the fund and the participating cooperatives, while controlled by the fund. On termination of the project, assets will be transferred to the cooperatives following a transition plan with a clearly defined exit value. The overall expected internal rate of return of the project is around 12%.

USE OF TECHNICAL ASSISTANCE

The TAF provides additional support to this investment in order to reduce certain investment risks and maximize the projected impact of the project. The assistance provided includes:

1. Building capacity of cooperatives and strengthening of women leadership to reduce risk and strengthen potential for sustained impact. Special attention is given to gender equality and empowerment. The amount of capacity building required is beyond what can be commercially expected from a private-sector partner;
2. Support in producing hybrid coffee varieties to ensure higher climate change resilience and a stronger market position of cooperatives and smallholder producers;
3. Value chain commercialization study to increase returns from timber production in the agroforestry system, to diversify income to cooperative members and reduce risks of defaults, for example;
4. Support in establishing an LDN baseline and related monitoring to allow for adaptive management to maximize credible environmental and social returns from the project.



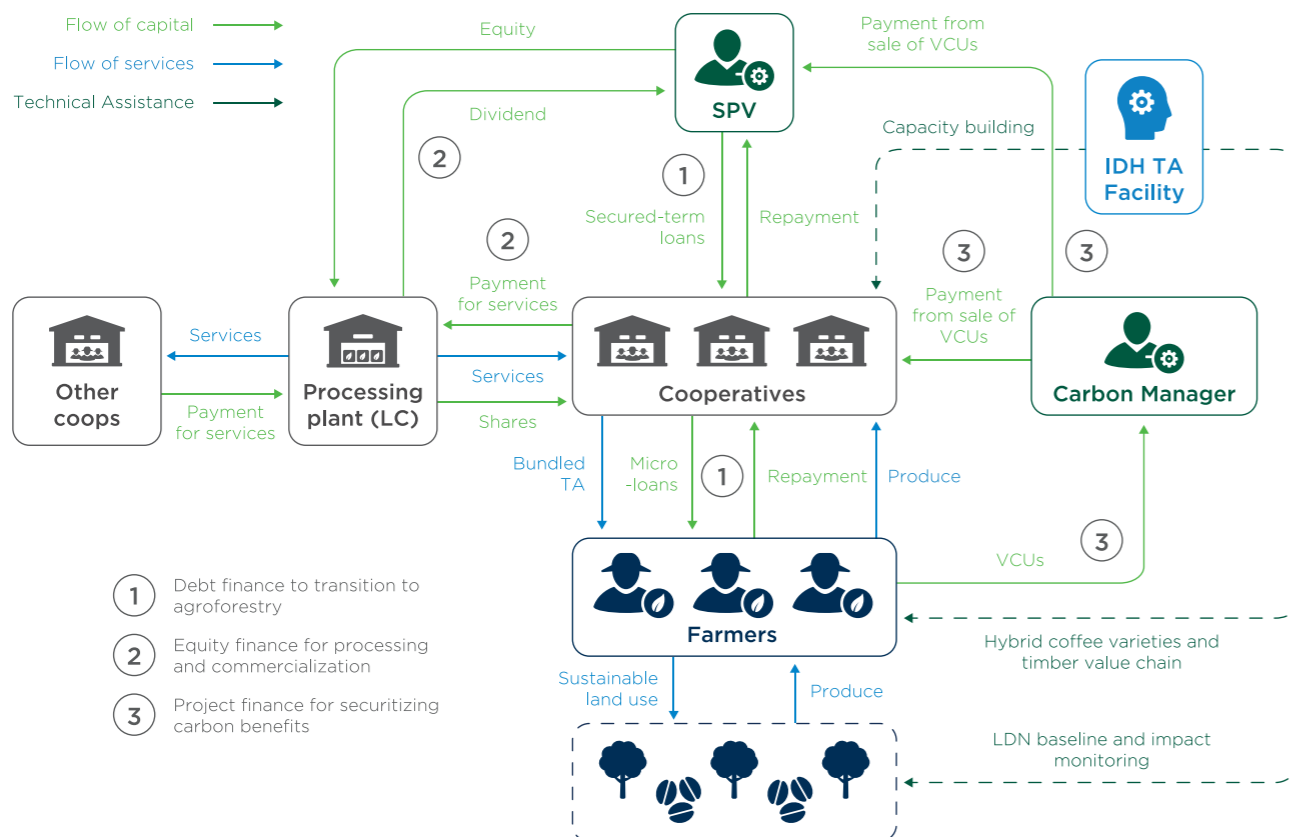
PROJECTED IMPACT

- **Restoration of degraded land***: 8,250 hectares
- **Protection of forest**: 12,300 hectares
- **Producers reached**: 2,000
- **Emissions reduction**: 1.29 million MtCO₂eq

* The agroforestry system includes a mix of local tree species, also taking soil improvement, pollination and biodiversity into account.



FLOW OF CAPITAL AND SERVICES



Credit: Guillaume Nadeau



FAIRVENTURES SOCIAL FORESTRY COMMUNITY AGROFORESTRY IN INDONESIA

Strengthening the underlying business model of an innovative restoration project with communities

PRE-INVESTMENT

Project operator:	Fairventures Social Forestry
Business model:	Timber agroforestry with cash crops and non-timber forest products; potential for carbon revenue
Financing:	Blended financing of grants, soft loans and patient equity to establish proof of concept at significant size; debt financing for scaling operations.

CONTEXT

In many Indonesian landscapes, including in Central Kalimantan, deforestation, slash-and-burn practices, illegal mining and large-scale agriculture have negatively affected Indonesia's forests, leaving behind degraded fallow land and a lack of income opportunities for local communities. One policy response has been to grant forest-dependent communities access to forest land through social forestry permits. However, not only has the distribution of permits been slow, but concrete economic benefits for households and communities also remain largely absent. There is therefore a need for project developers looking to utilize the social forestry scheme to create attractive economic benefits for local communities in balance with natural resource protection. This project is demonstrating such a scalable commercial model for landscape restoration with community participation on land issued through social forestry permits, and is preparing to attract additional (impact) investment.

The project aims to initially rehabilitate 4,000 hectares of degraded lands through planting fast-growing tree species and cash crops in agroforestry systems, and increasing the value of secondary forests through enrichment plantings with non-timber forest products (NTFPs). This project is a good example of a potential innovative restoration finance case that was initiated by an NGO and turned into a for-profit social venture. The operation is currently looking to secure financing to implement a successful showcase at significant size, followed by initial private investment for scaling impact on LDN and creating income opportunities for local communities.

SMALLHOLDER/ COMMUNITY ENGAGEMENT

The project cooperates with communities that were granted a social forestry permit from the Indonesian Government. The communities provide the land for the investment case and have the right to provide the largest part of the necessary labour. In return, they receive wages and a part of the profit from the sales. The project operator also deploys staff explicitly to help communities understand their rights and responsibilities and conduct FPIC processes.

PAYBACK/REVENUE MODEL

The investment in this project is expected to be recovered through sales revenues from fast-growing light wood after an initial growth period of seven years. Additional income is generated from the sale of intercropped agricultural crops (e.g. peanuts) and NTFPs (e.g. rattan), and sale of carbon credits (potential for sale not yet fully developed). This is combined with active protection of remaining forests. Specifically, the revenue is expected to result from:

- Sustainable timber (82%);
- Cash crops (16%);
- Carbon credits (2%);
- Potential from NTFPs (not yet included in baseline scenario)

RISK MANAGEMENT

The project is planning to deploy several risk mitigation strategies to reduce investment risk. These include:

- Direct supply agreements with industry partners to reduce offtake risks for timber sale;
- Satellite and drone mapping to select degraded areas only for agroforestry, and active monitoring to reduce deforestation risk and fire risk;
- Diversification of revenue streams to mitigate underperformance of specific crops and risk of defaults on repayments.

Most importantly, the project operator allows for direct support of communities in the social forestry scheme, and the active management and reduction of risks in the underlying model.

INVESTMENT

This project creates economic value from restoration of previously degraded land via commercial agroforestry, combined with active primary and secondary forest protection. The current business model of this project has a targeted internal rate of return of around 10%. The initial investment in the project amounts to €5 million, largely made up of grants, equity and soft loans. Seed funding is used to finance the development of the first 4,000 hectares. The main funding need is for growth financing to scale up to 100,000 hectares. The expected investment vehicle is a silent partnership to provide equity financing or soft loans to the project operator to finance capital and operational expenditures for growing the business. In addition, grants or public subsidies as blended finance elements would enable the model to pay for less commercial work and tasks related to the earlier proof of concept for the business.

USE OF TECHNICAL ASSISTANCE

The focus is on cash-crop operations in the project's agroforestry approach to improve early cash flows of the model as well as to significantly improve the payback period. The technical assistance will consist of a market evaluation, defining soil conditions and fertilizer options, field testing, post-harvest processing, and financial modeling to include cash crops into the overall investment proposal. Specifically, the technical assistance provided will allow:

1. Selection of the most appropriate (shorter rotating) cash crops with strong market linkages, to ensure offtake and significantly improve cash flows to shorten the payback period and increase repayment security for investors;
2. Identification of best-practice soil preparation and fertilizer options, to reduce costs and optimize yields, as well as to ensure positive environmental impact;
3. Field testing of the project's model, specifically the use of the various cash crops identified, fertilizer options, and soil preparation under local conditions (climate, soils) to strengthen the underlying business model before seeking growth finance;
4. Provision of research on best-practice post-harvesting processes for the selected cash crops;
5. Financial modeling of the impact of an intensified cash crop approach under the current business model.

PROJECTED IMPACT

Short term

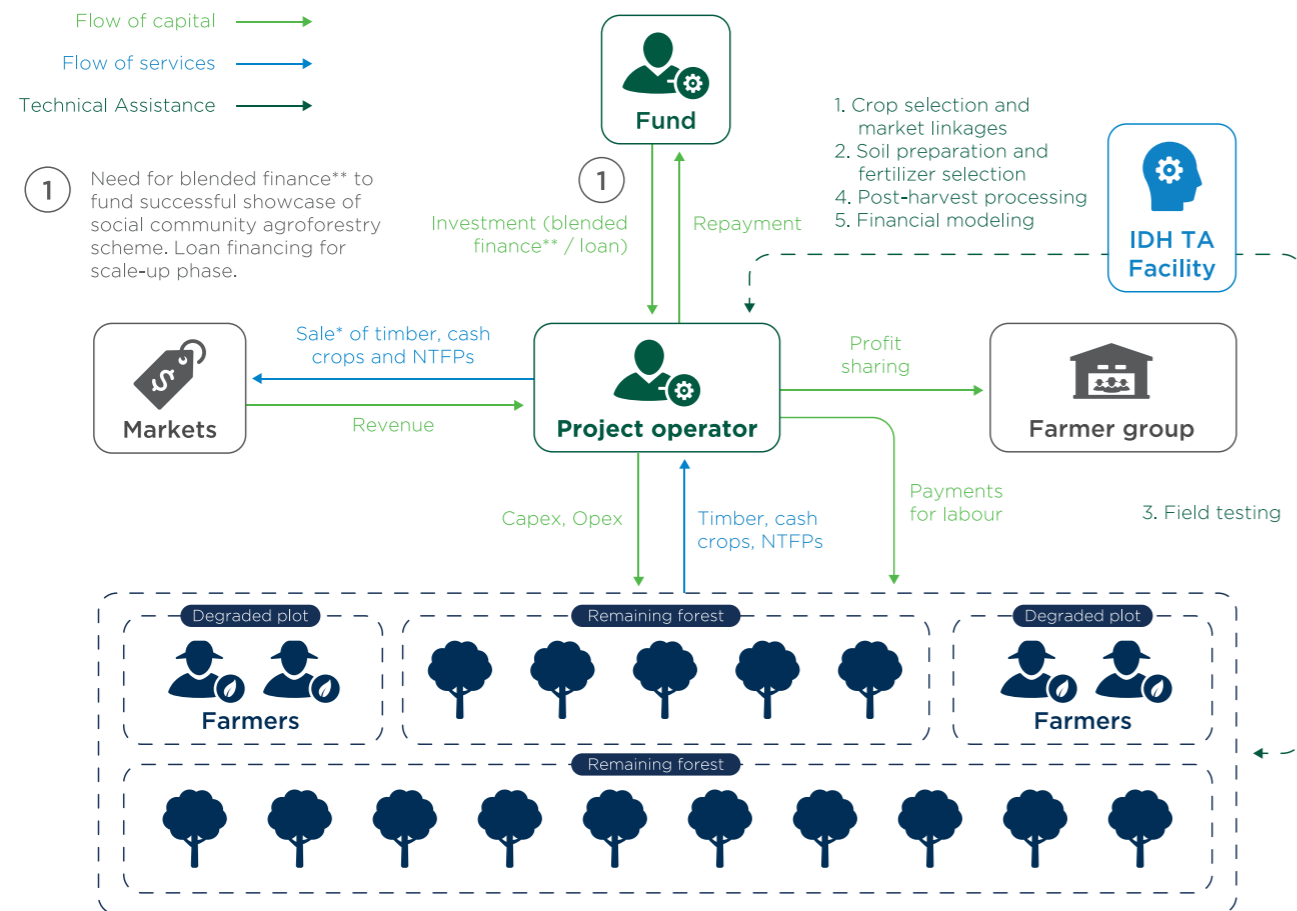
- 1,500 hectares of degraded area reforested through agroforestry, and measurably improved soil fertility and soil organic carbon (SOC) content;
- 1,500 hectares of secondary forest managed as protected areas with enrichment plantings of NTFPs in suitable areas;
- 1,000 hectares of primary forest protected, contributing to the conservation of biodiversity in the area, and restoration of key ecosystem services (erosion control, moisture cycle, microclimate);
- Job creation and income generation for local communities.

Longer term

- 11,000 additional hectares of agroforestry, sustainable forest management, and forest protection in five years, and another 85,000 hectares in ten years;
- Sequestration of up to 212,880 MtCO₂e_q from restoration (excluding carbon stores in protected forests);
- Project benefits extended to up to 50,000 residents;
- Replication of the project's model by other actors.



EXPECTED FLOW OF CAPITAL AND SERVICES



*Carbon income not depicted as not yet fully integrated in projected revenue model
 ** Innovative financing structure of grants, soft loans and (patient) equity



KOMAZA

SMALLHOLDER FORESTRY IN KENYA

Developing a large outgrower scheme for smallholder forestry, using innovative technological solutions

PRE-INVESTMENT

Project operator: Komaza

Business model: Timber

Financing: Equity financing to grow operations

CONTEXT

The continent of Africa is currently the world's largest consumer of wood; with population increases, this demand is expected to rise even further over the coming decades. 75% of Africa's primary energy comes from fuel wood, of which most (93%) originates from natural forests. In addition, it is expected that without investments in local production, 75% of the demand for industrial wood will need to be met by imports⁴. To meet these growing demands in a sustainable manner, alternative solutions to traditional plantation forestry are therefore needed that will also allow for positive social and environmental impact. This project demonstrates such a solution by developing a micro-forestry model to unlock the potential for small-scale farmers to serve industrial wood markets. It leverages existing farmland and labor, allowing farmers to plant trees at lower costs than traditional plantations and yielding positive long-term internal rates of return.

The project operator supports local farmers by providing seedlings, inputs, technical expertise and training to grow trees on the Kenyan coast, in addition to existing agriculture. It then manages the harvest, industrial processing and wood product sales. Farmers are paid above-market price at harvest, generating significant income for the farmer. Planting drought-resistant trees provides climate-proof income for farmers. With the long-term income the trees bring, farmers can plan for the future – to buy land, build houses, educate their children, and start businesses.

4. Source: Komaza

SMALLHOLDER/ COMMUNITY ENGAGEMENT

The project works in direct partnership with smallholders, also to mitigate risk of land acquisition by the government. Participating smallholders own their own land, and the cost and benefits created by timber production are shared between smallholders and the project operator, while allowing for enough land for farmers' food production. The project also creates a direct cash stream to empower those who enroll and complete the requisite labor, 50% of whom are women.

PAYBACK/REVENUE MODEL

The project's business model of forestry without a nucleus plantation is unique. Unlike traditional forestry businesses, this project is executed exclusively in partnership with smallholder farmers to grow trees. As such, it allows for lower initial capital investments (e.g. forestation costs) and more rapid regional expansion to increase volumes. Under current assumptions, the project is expected to break even in three to five years. The trees planted offer decent returns across all opportunity-cost scenarios. Combining trees with other crops (e.g. maize) allows for a diversified portfolio, strengthening day-to-day cash flows for farmers and securing long-term returns. Participating farmers are not required to make a cash investment.

RISK MANAGEMENT

Two key risk-mitigation strategies in this project are:

- Deploying a proven micro-forestry business model that allows for widespread distribution of risks. The underlying business model is based on ten+ years of implementation with thousands of farmers. This allowed the operator to build strong proof of concept and attract investment from prominent donors and investors including DFID, FMO, and Novastar, and key stakeholders in forestry including the Kenyan government (KFS, KEFRI, NEMA) and NGOs (Conservation International/The Nature Conservancy);
- Using technology for risk reduction in operational management: the project utilizes the project operator's proprietary operational and technological platforms, including an Android-based application that integrates day-to-day operations and farmer data, and is now ready for rapid expansion, including beyond Kenya.



Credit: Dagmar Mooij

INVESTMENT

This project is targeting equity financing of €15-20 million to scale up its operations. Traditional commercial financing is not suitable because of the long-term nature of greenfield forestry, the type of business model, and rapid anticipated upscaling of operations. It therefore requires (impact) investment with more favorable conditions, including a longer tenor, for example.

USE OF TECHNICAL ASSISTANCE

Technical assistance for this project focuses on:

1. Third-party cost analysis of the production cycle benchmarked against large plantations, to ensure cost effectiveness and the presence of an attractive risk-return profile;
2. Third-party quantification of the operator's intellectual property (IP)/technology to assess the value that can be derived from the operator's IP under different growth scenarios to make the project more attractive to potential investors;
3. Feasibility study for expanding the project's operations to new sites to de-risk field operations, assess the environmental impact of the expansion model, and evaluate market feasibility.

This helps value the new business model that is key for eligibility for equity investment. The technical assistance provided will also generate benefits beyond their initial purpose, as sector briefs of the key findings will be made publicly available.

PROJECTED IMPACT

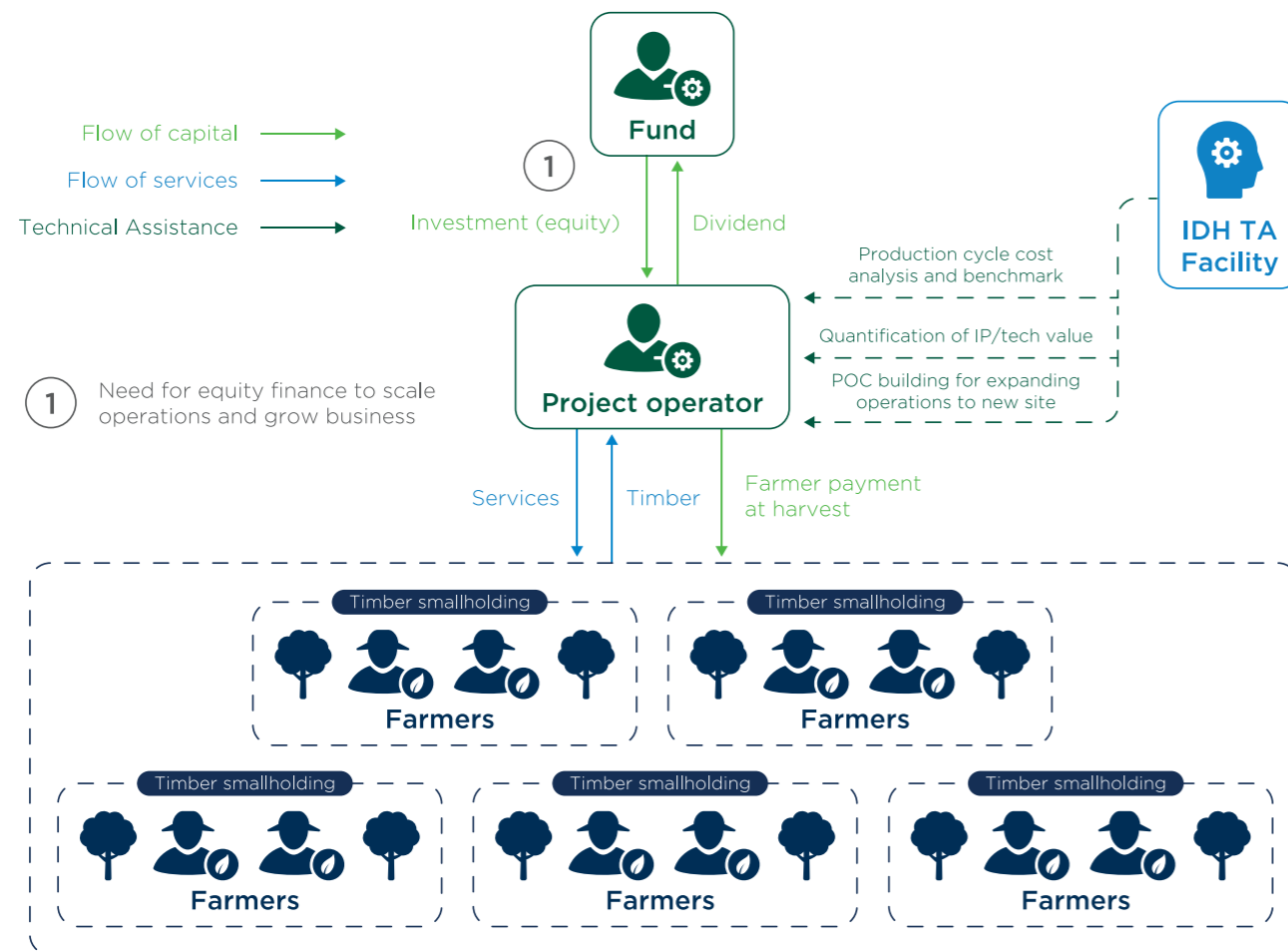
To date:

- Reached 20,000+ farmers (50% women) over an area of 5,000 hectares; 2019 planting accounted for 40% of the country's commercial planting.
- Employed over 400 people for operations in rural Kenya, 80% of which at the bottom of the pyramid.

Longer term:

- By 2030 Komaza targets 20,000 hectares of new forest planted in Kenya with 50,000 smallholder farmers.
- 5 million tons of CO2eq captured.
- Expansion to other sites.

PROJECTED FLOW OF CAPITAL AND SERVICES



REFLECTIONS AND FUTURE WORK

CONCLUSION

From only this initial overview of three projects that receive technical assistance to enable an investment transaction and/or maximize the impact of their innovative and inclusive sustainable land management models, it is too early to extract cross-cutting trends. Nonetheless, distinctions between different types of investable projects can be made. For example:

1. New players/start-ups with innovative and inclusive approaches that “disrupt” existing value chains. Their business cases are generally between the proof of concept stage and the break-even stage. Often, their connection with off-takers is weaker. These players work in direct partnership with smallholder farmers and local communities, who remain stewards of their land. The operators provide technical, financial and market support to create investable propositions that empower smallholder farmers and local communities.
2. Experienced players (producer organizations/ structured SMEs/large corporations) with stronger links to international markets, which are already profitable or at least at break-even point. These players need to convert to more inclusive SLM and ecological restoration practices.

Both project examples need well-informed and well-targeted technical assistance to be bankable, but targeting different issues. The three projects featured in this short publication largely fall under the first category, which means there's a need to further analyze projects in the second category. There's also a need to further analyze cases that have already successfully attracted private capital for scaling their inclusive SLM and ecological restoration efforts.

IN ADDITION

- **Underlying business models:** These projects have proven underlying business models, which diversify investment risks and allow for financing of SLM and ecological restoration through revenues generated by commercial agri-commodity crop production, agroforestry systems (e.g. NTFPs and timber), and payment for ecosystem services (e.g. sale of carbon credits).
- **Investment readiness:** These projects are close to, or already at, an investable level, meaning they have demonstrated business models at an appropriate scale to match available ticket sizes, financial and operational robustness, appropriate management capability, appropriate governance, and structures that allow for acceptance of investment and growth. Private investment is a logical next step for these projects.
- **Project developer capacity:** The developers behind these projects all exhibited the analytical capability and business mindset required for investment by impact funds, as well as availability of the required time and resources. Nonetheless, grant support is needed, and continues to be, to help build the investment case and implementation of these projects.
- **Risk reduction:** These projects, whose core activities are generally perceived as carrying a higher investment risk, have incorporated a variety of risk-management strategies to create a more attractive risk-return profile for investors.
- **Impact monitoring:** Monitoring of project performance against environmental and social indicators, and using insights from this for adaptive management to maximize a project's impact, is not yet the standard and requires additional support outside the project developers' usual capacity.
- **Importance of technical assistance:** Technical assistance plays an important role in these projects to help alleviate bottlenecks, to effectively prepare and link these projects to funds and/or impacts, and to reduce the overall risk.

NEXT STEPS

This short information brief only provides initial insights into the underlying business and finance models of innovative and inclusive SLM and ecological restoration investment cases. To enable more such cases, a restoration economy, and the development of the natural capital asset class all require a vast learning network of project developers, investors and knowledge institutes.

GLOSSARY AND KEY ACRONYMS

Agroforestry	Collective name for land-use systems and technologies where woody perennials (trees, shrubs, palms, bamboos, etc.) are deliberately used on the same land-management units as agricultural crops and/or animals, in some form of spatial arrangement or temporal sequence.
Blended finance	Use of development finance to catalyze and mobilize commercial finance towards sustainable projects.
Debt financing	Loans from a bank or other financial intermediary that are repaid by the borrower over time, usually with interest.
Ecological restoration	The process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed.
Equity financing	Monetary contribution from investors (shareholders) who are looking to support the company and eventually sell their stake (ideally at a premium).
IDH	The Sustainable Trade Initiative.
Internal rate of return (IRR)	The interest rate at which the net present value of all the cash flows (both positive and negative) from a project or investment equal zero. It is one type of indicator used to evaluate the attractiveness of a project or investment.
Investee	An organization that receives investment.
Investment readiness	A project that has an investment proposal that meets the basic requirements of an investor, which allows the investor to make a positive decision to invest in the project.
IP	Intellectual property
Land Degradation Neutrality (LDN)	A state whereby the amount and quality of land resources necessary to support ecosystem functions and services, and to enhance food security, remain stable or increase within specified temporal and spatial scales and ecosystems.
Land restoration	The process of building soil carbon, improving soil fertility, increasing above- and below-ground biodiversity, and improving land productivity.
LC	Limited Company.
LDN Fund	The Land Degradation Neutrality Fund.
LDCs	Least Developed Countries.
Microcredit	An extremely small loan given to an individual to help them become self-employed or grow a small business.
Natural capital	The world's stocks of natural assets, which include geology, soil, air, water, and all living things.

Nature-based solutions	Actions to protect, sustainably manage, and restore natural or modified ecosystems, which address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.
NTFP	Non-timber forest products.
Post-investment project	A project that has already received a positive investment decision from an investor.
Pre-investment project	A project that has not yet received a positive investment decision from an investor.
Project developer	Includes small- and medium-sized enterprises, larger private companies, social enterprises, and local banks.
SDG	Sustainable Development Goal
Secured-term loan	A term loan in which the borrower pledges some form of security or collateral against the loan.
SIDS	Small Island Developing States.
Sustainable land management (SLM)	The use of land resources, including soils, water, animals and plants, for the production of goods to meet changing human needs, while simultaneously ensuring the long-term productive potential of land.
SME	Small- and medium-sized enterprise.
SOC	Soil organic carbon.
Soft loans	A loan with no interest or a below-market rate of interest. Such loans often also have lenient terms, such as extended grace periods and longer amortization schedules than conventional bank loans.
SPV	Special purpose vehicle.
Technical assistance (TA)	Non-financial assistance provided by local or international specialists. It can take the form of sharing information and expertise, instruction, skills training, transmission of working knowledge, and consulting services, and may also involve the transfer of technical data.
Technical assistance provider	An organization or individual that delivers technical assistance to project developers as part of a contract signed with the LDN Fund Technical Assistance Facility (TAF).
TAF	LDN Fund Technical Assistance Facility.
Term loan	A loan for a fixed period of more than one year and repayable by regular instalments with interest.
UNCCD	The United Nations Convention to Combat Desertification.



LANDSCAPES

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