



KOAZA

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

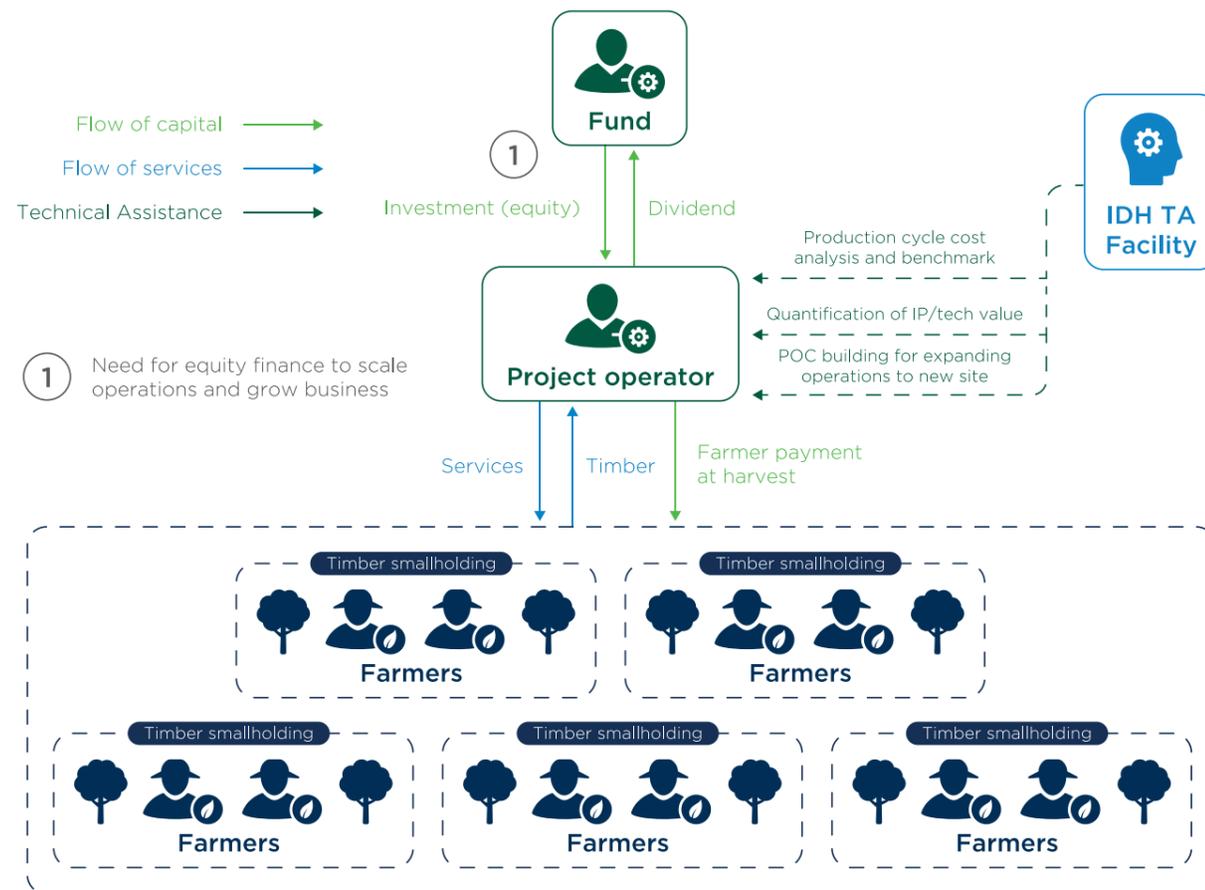
To date:

- 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.