

Irrigation System Microleasing for High-Value Crops

For a Climate-Resilient Agriculture Sector



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for sustainable development



Background

Small and medium sized enterprises (SMEs), including small-scale agribusinesses, play a significant role in economic growth and inclusion in Uganda and account for approximately 90% of private sector employment. The current National Development Plan in Uganda identifies the strategic importance of the agriculture sector to economic growth and inclusion. However, issues with productivity and crop value have a destabilising effect on the sector and food security in Uganda. These challenges drain potential income from farmers and are exacerbated by the increasing occurrence of weather-related shocks and a lack of farm assets (such as irrigation solutions) to adapt to these shocks. The main challenges impacting access to irrigation solutions in Uganda include high costs of irrigation system technology, lack of coordination between financiers and tech providers, and limited distribution channels for tech and climate-smart agriculture education.

Solution Overview

The **irrigation system microleasing for high-value crops** solution directs deal flow to climate-smart irrigation systems to improve productivity and climate resilience of small-scale agribusinesses. Solar-powered irrigation system deployment for climate change adaptation and productivity improvements depends on coordinated institutional arrangements, irrigation infrastructure and capacity-building measures. This solution:

1. **Offers low-risk microleasing with buy-back options** that delivers irrigation systems and system financing via technology provider networks to align cash flows with climate-smart technologies and incentives for sustainable agriculture practices;
2. **Aligns technology payments with crop cycles** through comprehensive climate-smart technology assessments and issues term-based payments aligned with crop cycles and agribusiness cash flows;
3. **Decentralised delivery of bundled agricultural inputs via tech suppliers** for improved climate-resiliency and value crop production by small-scale agribusinesses;
4. **Incentivises financial institutions to finance adaptation technologies in their appraisals** by vetting irrigation technologies prior to the lending process.

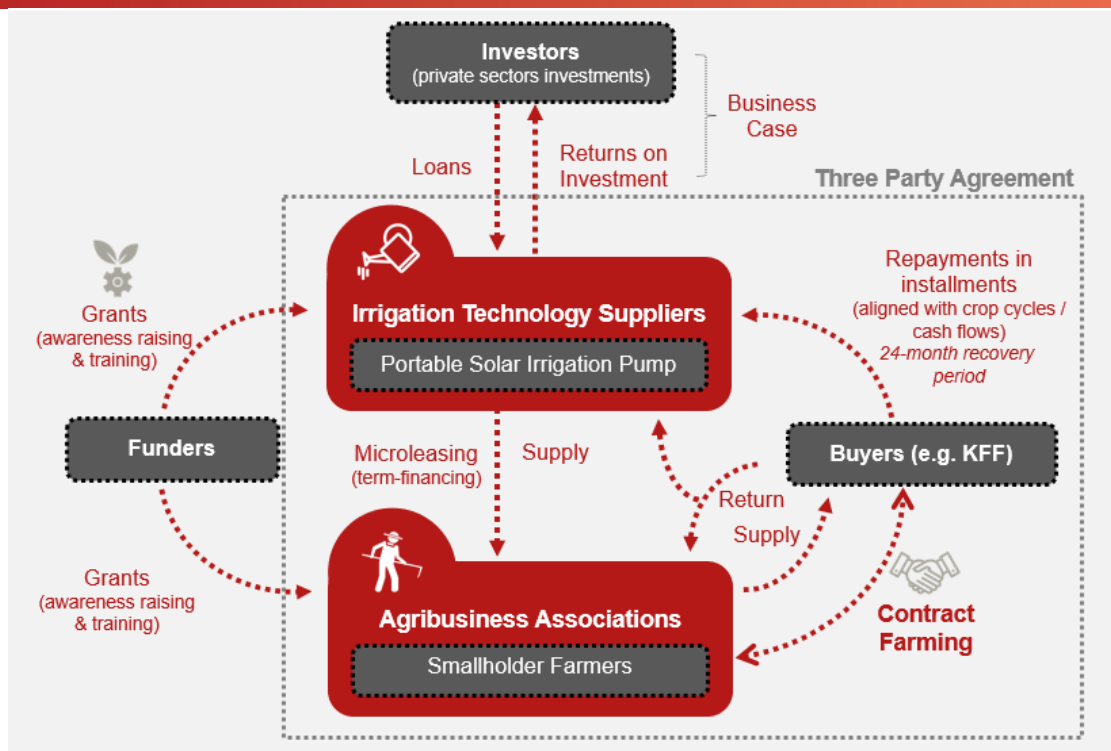
Focus:	Mitigation, Adaptation
Ecosystem Impact:	Access to Finance
Lab Cycle:	Climate Finance, Uganda 2018
Challenge hosted by:	Swisscontact Uganda

This innovative instrument **mitigates investment risks for both farmers and financial institutions**. The irrigation system financing model directs financing for climate-smart irrigation technologies through technology providers to agribusinesses that produce (or have the potential to produce) commercial crops that generate higher profits at market. The **financing mechanism for irrigation systems engages the private sector to maximise returns on investment in productive farm assets** (specifically irrigation) in the agriculture sector.

Key Features

This irrigation system microleasing solution is designed to increase levels of private sector investment (by financial institutions) in climate-smart irrigation systems offered by technology providers that increase the productivity and climate resiliency of small-scale agribusinesses across Uganda. This solution has the following key features:

- Microleasing improves liquidity of climate-smart irrigation technology suppliers
- On-demand access to irrigation solutions with favourable interest rates increases crop yields and climate resiliency
- Aligns crop cycle and cash flow data with payment cycles for selected climate-smart irrigation technologies
- Micro- and small-scale irrigation products are offered alongside other agro-inputs for sustainable agriculture
- Microleasing via technology providers capitalises on decentralised networks for climate-smart tech dissemination and support



Innovative Characteristics

- **Mitigates consumer and supplier risk** via microleasing (self-collateralising financing mechanism) where tech providers act as intermediaries between financiers and end users
- **Aligns payments with crop cycles and cash flow data** to ensure financing of adequate technologies and real-time adjustments in response to irrigation needs
- **Bundles climate-smart agricultural solutions**, meaning irrigation system microleasing paired with agri-inputs for climate-resilient agriculture (e.g. fertilizers, seeds)

Target Market

This financing mechanism targets extending access to technology for **small-scale agribusinesses with up to 20 acres who are involved in high-value crop production**. The irrigation systems financed by this product are **micro- and small-scale irrigation systems** that are compatible with small-scale agribusinesses with less than 5 hectares to between 5-100 hectares, respectively. Product marketing concentrates on farmers' associations and extension officers operating in areas where water resources are readily available but underutilised. Focus regions include Central, Mid-western and Eastern districts of Uganda.

Solution Developer



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Impact Potential

The solution generates positive impacts for the tech consumer (small-scale agribusinesses), financiers and tech providers. Financial institutions are able to grow their portfolios by engaging in lower risk end user financing. Technology end users (smallholders and agribusinesses) benefit from increased productivity and better climate-related risk management offered by irrigation solutions.

- **Secures private sector investment in climate-smart agriculture** via attractive payment terms and buy-back options and improves liquidity of tech suppliers via self-collateralising financing;
- **Increases climate-smart technology adoption** by promoting knowledge transfer among financiers, climate-smart tech providers and small-scale agribusinesses;
- **Improves sustainable agricultural productivity** while increasing crop yields and establishing case for financiers and agribusinesses to invest in irrigation solutions within Uganda's small-scale, commercial agriculture sector.

SEED Practitioner Labs Climate Finance engage financial institutions, funders, intermediaries and other SME ecosystem stakeholders to co-create innovative climate finance products and mechanisms that extend access to long-term financing opportunities for "missing middle" small and growing climate-smart enterprises that struggle to advance beyond the start-up stage and multiply their contributions to climate-smart and socially inclusive economies.