

Inclusive Business Analysis

Analysing Agri Evolve's digital finance model to improve outcomes for women smallholder coffee farmers and unlock scalable growth

Agri Evolve Uganda Limited | Uganda

Public Report

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Agri
Evolve



Disclaimer

This study examines the projected (financial) performance of Agri Evolve Uganda Limited's Business Model and explores and recommends potential improvements and opportunity pathways. The findings in this report have been used by IDH, CGAP, Agri Evolve Uganda Limited, and involved value chain players to shape their strategy, project design, and future business models, but these organizations cannot be held accountable for meeting any targets included in the report.

The contents of this report are intended for informational purposes only. While every effort has been made to ensure the accuracy and completeness of the information presented, the analyses in this report rely partially on projections and assumptions. The conclusions and recommendations in this report are based on our best knowledge and expertise at the time of preparation, but their applicability or accuracy in any particular situation or circumstance cannot be guaranteed. Therefore, no rights can be derived from the information provided in this report.

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Introduction

Smallholder livelihoods

Agriculture plays a key role in the wellbeing of people and planet. 70% of the rural poor rely on the sector for income and employment. Agriculture also contributes to and is affected by climate change, which threatens the long-term viability of global food supply. To earn adequate livelihoods without contributing to environmental degradation, farmers need access to affordable high-quality goods, services, and technologies.

Inclusive Business Models

Inclusive Businesses provide goods, services, and livelihoods on a commercially viable basis, either at scale or scalable, to people living at the base of the pyramid, making them part of the value chain as suppliers and/or customers. These business models can sustainably increase the performance of farm(er)s while providing a business opportunity for the company. Using IDH's data-driven Inclusive Business methodology, IDH analyzes these models to create a solid understanding of the relation between impact on the farmer and impact on the company.

Insights & Innovations

Our data and insights enable businesses to formulate new strategies for operating and funding service delivery, making the model more sustainable, less dependent on external funding and more commercially viable. By further prototyping efficiency improvements in service delivery and gathering aggregate insights across sectors and geographies, IDH aims to inform the agricultural sector and catalyze innovations and investment in service delivery that positively impact people, planet, and profit.

ABERA

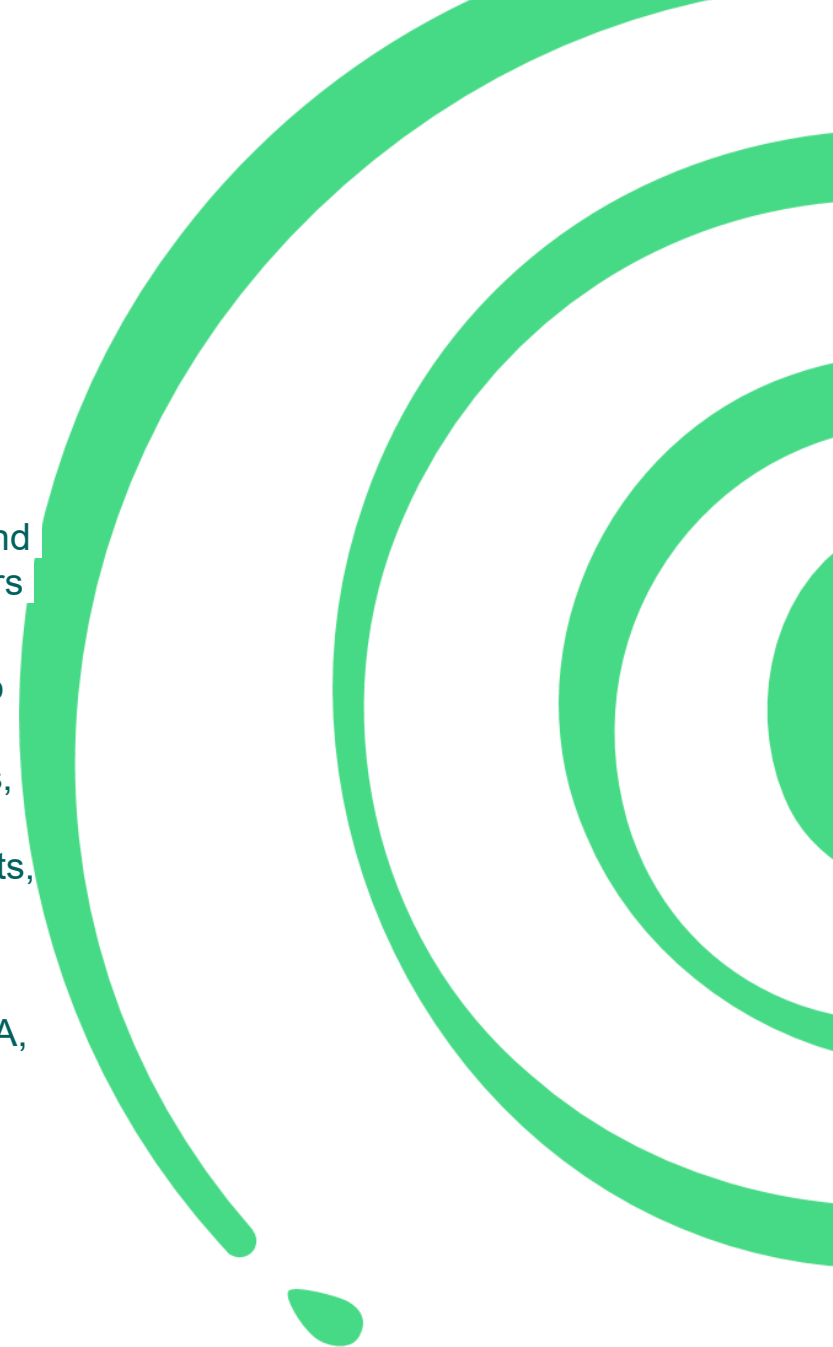
The initiative

- [ABERA](#), a collaboration between CGAP and IDH, aims to improve the climate resilience of service providers and the rural women they serve by fostering commercially viable, climate-smart innovations in inclusive finance.
- ABERA works with select innovative financial and agricultural service providers. At the beginning of each company collaboration, ABERA conducts a deep-dive Inclusive Business Analysis (IBAs) to examine overall business performance with particular attention to gender and climate. ABERA aims to generate data and experience that helps service providers and funders see their profit, gender, and climate goals as interdependent rather than mutually exclusive.
- As part of the IDH team that generated this IBA, CGAP colleagues provided insights related to financial inclusion, rural economies, and agricultural development, particularly with a gender and climate lens, derived from interviews with key ecosystem actors influential to the business, in-field focus group discussions with farmers and customers, and analysis of related data. A brief version of this report, prepared by CGAP and IDH, that highlights key findings and insights, will be available [here](#).

The approach

[CGAP](#) and [IDH](#) are accelerating business to empower rural women in agriculture through ABERA, which:

- Supports technical assistance and experimentation to help companies integrate gender and climate in their strategy and improve overall business performance
- Cultivates a forum for peer exchange and learning where companies can share experiences and co-create scalable solutions



Abbreviations

AP	Agri Partner
c.	Circa
DRUGAR	Dry Ugandan Arabica
DTA	Digital Transformation Assessment
EBITDA	Earnings before interest, taxes, depreciation and amortization
EBTDA	Earnings before taxes, depreciation and amortization
FTE	Full-time equivalent
GAP	Good agricultural practices
GDP	Gross domestic product
IBA	Inclusive Business Analysis
IT	Information technology
K	Thousand
M	Million

MT	Metric ton (1,000 kg)
NGO	Non-governmental organization
P&L	Profit and loss statement
RFA	Rain Forest Alliance
RSM	Rural Sourcing Management
SHF	Smallholder farmer
SWOT	Strengths, weaknesses, opportunities and threats
USD/\$	United States dollar (currency)
VSLA	Village Savings and Loan Association

Report outline

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2 Business model

3 Business case

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1

Executive summary



The objective of this IBA is to understand Agri Evolve's digital finance model to strengthen outcomes for smallholder women coffee farmers and unlock pathways to scale for the business (1/ 2)

Scope	Agri Evolve's Objectives	IBA Learning questions
Access to finance	<ul style="list-style-type: none"> Scale up affordable digital SHF input loans through Emata - successful pilot exists but needs gender-inclusive scale-up using VSLAs and commercial farmers 	<ul style="list-style-type: none"> What are the impacts of digital credit (Emata/Equity) on women's productivity and income? What is the impact of digital input loans and climate-smart practices on women's ability to repay loans? What role do VSLAs play in the adoption of climate-smart agricultural practices by women? How does engagement with VSLAs affect Agri Evolve's business outcomes?
Market linkage/ Supplier credit	<ul style="list-style-type: none"> Extend supplier credit to rural middlemen for cherry purchases 	<ul style="list-style-type: none"> What is the impact of supplier credit to the business case of agri partners? How has supplier credit for agri partners impacted women SHFs? How does market linkage affect women's ability to access finance and repay loans?
Agent network	<ul style="list-style-type: none"> Improve use of organizational data Leverage the Agri Partner network to deepen reach to women farmers 	<ul style="list-style-type: none"> How does an agent network leveraging digital tools influence business risks? How have digital tools like the Rural Management System (RMS) helped get better insights about customers, impacted cost-to-serve, and played a role in customer acquisition and attrition? How do women agents contribute to enhanced outcomes for women smallholders compared to male agents?



The objective of this IBA is to understand Agri Evolve's digital finance model to strengthen outcomes for smallholder women coffee farmers and unlock pathways to scale for the business (2/2)

Scope	Agri Evolve's Objectives	IBA Learning questions
<p><i>Climate smart input packages / Insurance</i></p>	<ul style="list-style-type: none"> Scale up weather-indexed insurance bundled with Emata loans e.g. drought covered insurance 	<ul style="list-style-type: none"> How has the bundled insurance product impacted the behaviour of women farmers? What is the impact of climate-smart agricultural practices on women's productivity and income? What is the business case for providing bundled insurance at scale and what is the impact on Agri Evolve's business risk? What financial and non-financial services help build women's resilience to climate change?



Uganda is the second-largest coffee exporter in Africa, after Ethiopia. The coffee sector accounts for 20 –30% of the country's foreign exchange earnings



Agri Evolve Uganda Limited

Agri Evolve is an impact-driven agri-business founded in 2015 and based in the Rwenzori region of Western Uganda.

Agri Evolve is focused on the coffee sector, exporting green coffee to coffee roasters and coffee companies around the world. The company buys coffee from smallholder farmers, processes it at their facilities, and exports it to international markets. They have recently introduced a roasted ground coffee product line for the local market under the brand names Mazima and Nzururu.

Agri Evolve works with coffee farmers in the Kasese region of Uganda to improve yields, increase income, and raise the quality of life for farmers, their families, and their communities. The company presently works directly with over 25,000 smallholder farmers (SHF), 41% of whom are women, to improve their production of specialty arabica coffee.

Agri Evolve works closely with SHF through farmer training, VSLA groups, and income-generating projects such as inputs supply and establishing tree nurseries, ensuring their active participation and leadership in the coffee value chain.

Agri Evolve's market share is estimated at c.1%. In the calendar year 2025, the company exported 76,901 bags of coffee, out of a national total of 8.8 million bags.⁵

Sources: ¹[Agri Evolve Website](#), ²[The wild coffee resources of Uganda: a precious heritage](#), ³[Uganda Coffee Federation](#), ⁴[MAAIF: Monthly Coffee Report – December 2025](#), ⁵[Uganda Coffee Development Authority](#)



Coffee value chain

Uganda is the world's seventh-largest coffee exporter, and the fourth-largest producer of robusta coffee after Vietnam, Brazil, and Indonesia. The country is also the second-largest exporter of coffee in Africa, after Ethiopia.²

c.1.8 m households are engaged in coffee farming alone, and c.5 million people engaged in post-farm coffee sector activities, including local processing and marketing.² It is estimated that as much as 20% of the entire population earn all or a large part of their cash income from coffee.³

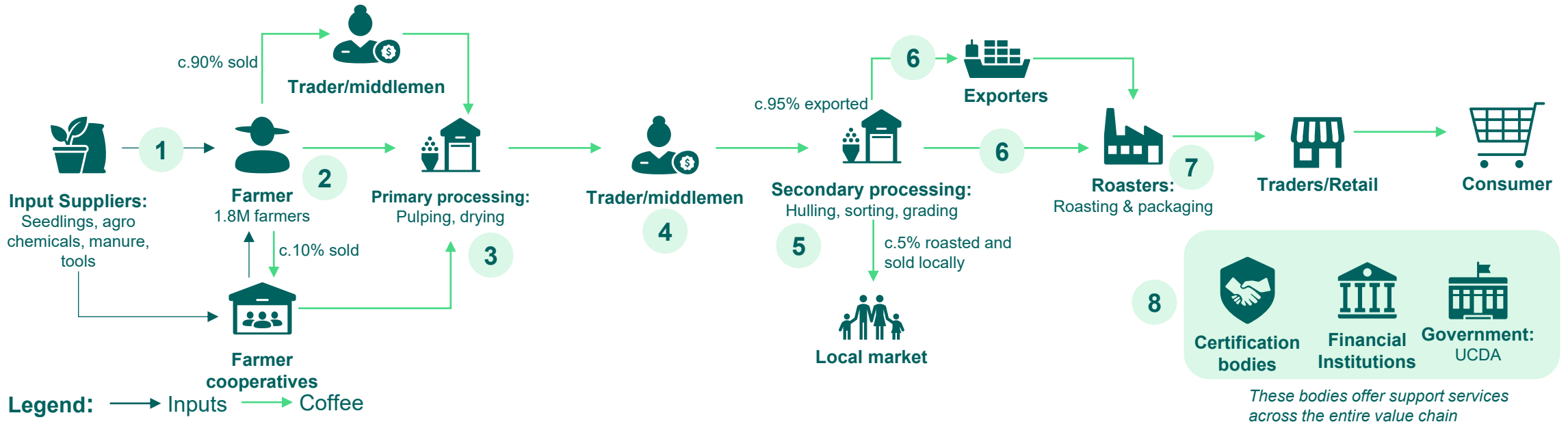
Uganda is known primarily for robusta, which makes up over 80% of total production annually. Coffee production, including that of arabica coffee, has expanded over the last decade due to expanded planting area in both traditional and non-traditional coffee-producing regions, and productivity improvements.²

Coffee exports in 2025 totalled 8.7 million bags worth US\$ 2.5 billion.⁴

Pests and diseases are critical challenges for Uganda. In response, new coffee varieties were released in 2009 and 2017 to sustain production, and national efforts are underway to enhance clone production and farmer access to these varieties.²



Despite its economic importance, Uganda's coffee value chain is structurally fragmented, with strong global demand but limited domestic value addition



Value chain challenges

Upstream (production)	Midstream (processing)	Downstream (markets)
1. Limited access to high-quality inputs; high cost of inputs; limited access to affordable credit. 2. Low productivity due to aging coffee trees; poor farming practices; erratic climate patterns; small land sizes; price volatility.	3. Inadequate processing equipment; poor handling; limited access to clean water for wet processing; high contamination risk from poor drying. 4. Exploitation from information asymmetry; weak bargaining power of farmers; lack of transparent pricing systems; informal market structures; side selling which undermines cooperatives participation. 5. Inconsistent quality control systems; high operational costs; post processing losses due to poor storage.	6. High logistics and transport costs; exposure to global price volatility; challenges complying with international standards. 7. 95% of coffee is exported green. Uganda captures low value due to lack of value addition; limited branding of Uganda coffee in international markets. 8. Policy and regulatory gaps; high cost of certification; limited access to finance for value chain actors.

Sources: [Uganda Coffee Value Chain Mapping](#)



Women increasingly manage coffee farms, but trust and access barriers limit digital credit uptake

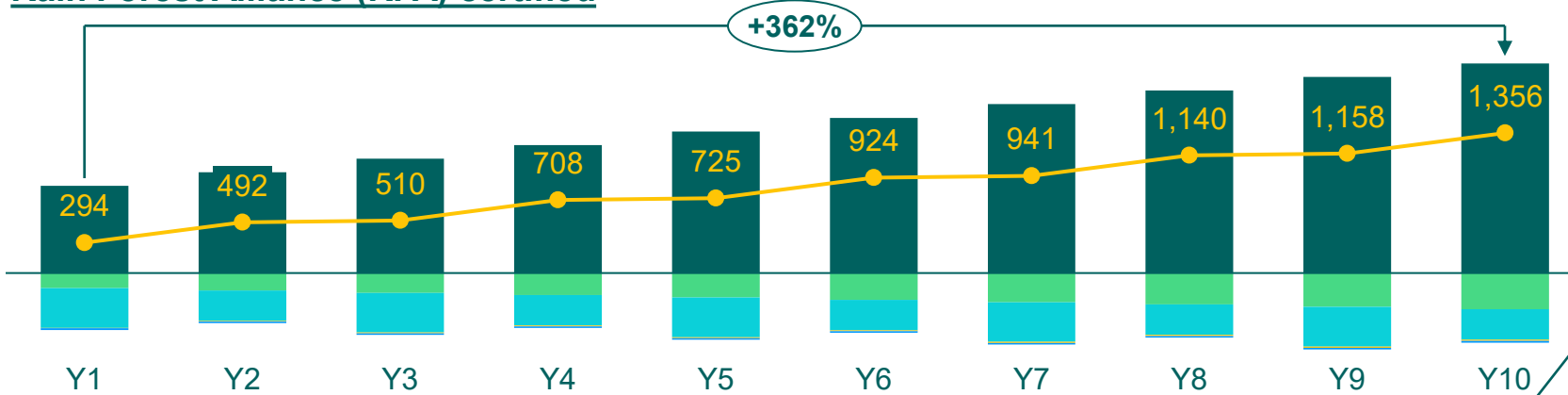
Women increasingly hold formal control over coffee assets	Most women interviewed hold farm registration in their own names, mainly because in most households coffee is seen as a low-productivity crop. Ownership alone does not translate into management capacity or credit readiness.
Digital credit adoption among women is uneven and trust-constrained	Emata is a digital credit product accessible to Agri Evolve's customers belonging to VSLAs. Its uptake varies sharply across different VSLAs. Women are reluctant to borrow as they report fear of phone-based borrowing (surveillance, mistrust). Despite this, most women are comfortable with having personal digital savings.
Women use credit primarily to smooth consumption, not to increase productivity	Across focus group discussions, school fees emerge as the dominant loan use case. Digital and VSLA credit function first as consumption-smoothing tools, with productivity gains occurring indirectly (e.g. labour hiring, harvesting cherries at the right time).
VSLAs are the primary gender-inclusive delivery channel	VSLAs provide trusted access to finance, financial literacy, and peer support. They also act as social collateral, providing credit and enabling women to layer financial services (e.g., loans in addition to or instead of Emata loans).
Climate-smart practices improve women's repayment capacity when paired with labour	Women borrowers who accessed credit used it to hire labour for physically demanding tasks (e.g., trenching, harvesting), improving yields and repayment outcomes. However, uptake of labour-saving technologies remains minimal due to cost and low perceived return.
Bundled insurance is poorly understood by women and under-leveraged	Most women had limited clarity or trust on payout on insurance triggers and coverage, limiting its influence on borrowing decisions.



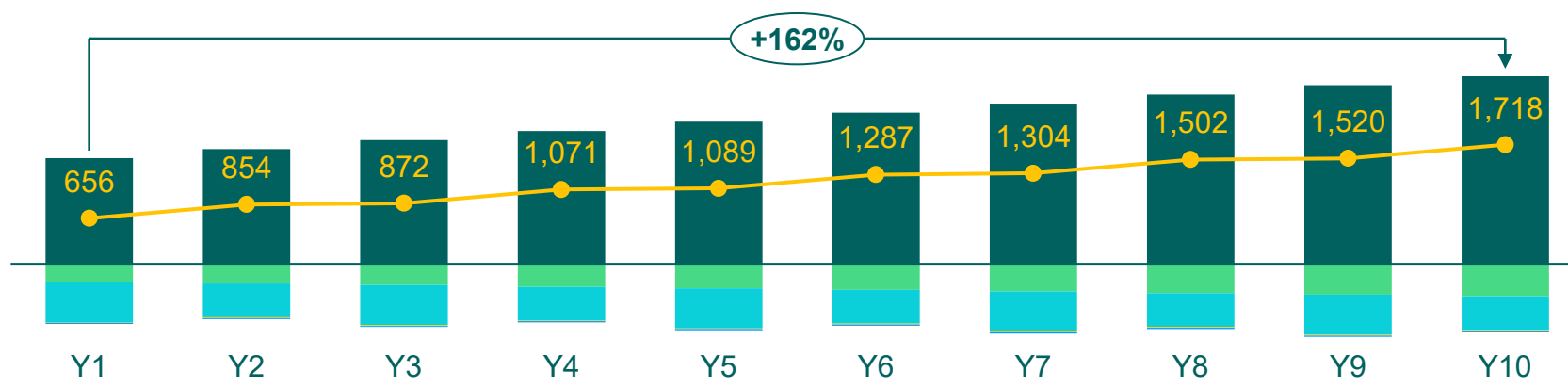
In the long term, transitioning farmers to organic certification is justified by the potential for higher returns

Profit and loss over a ten-year period (USD)

Rain Forest Alliance (RFA) certified



Organic certified



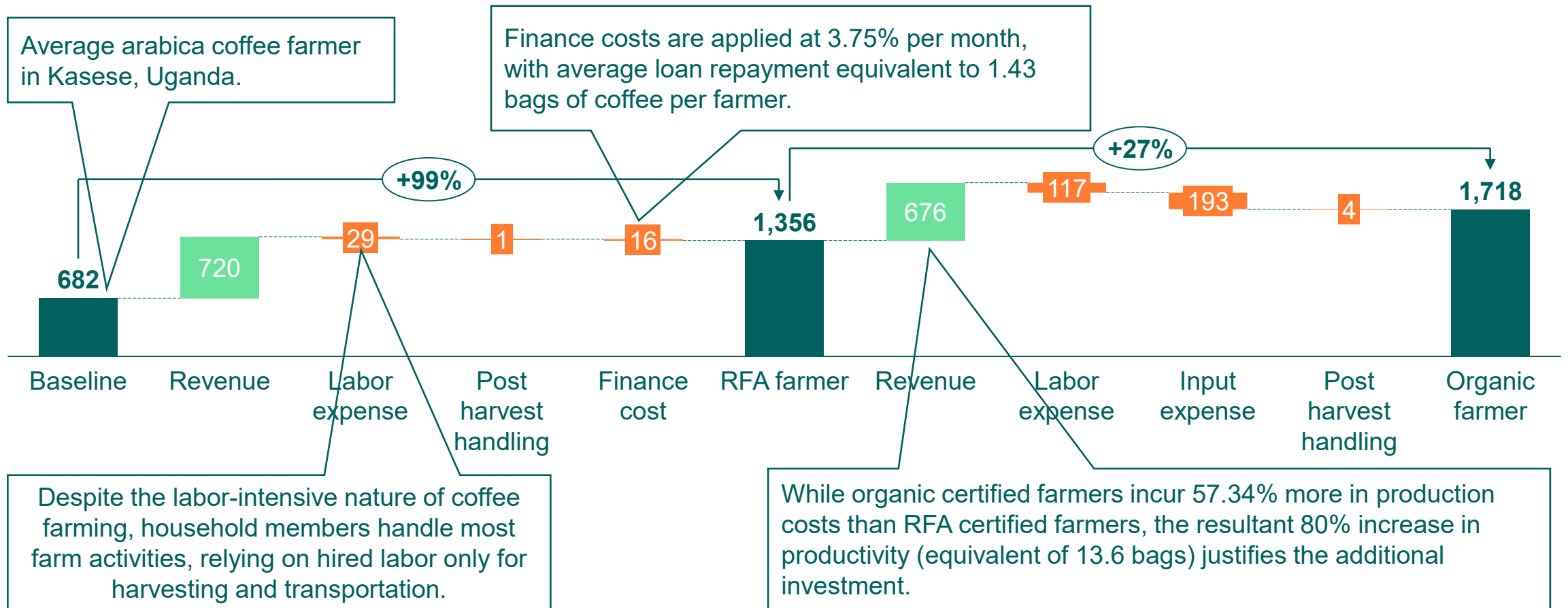
- Farmer income is driven by productivity. The current organic certified production (4.5kgs/tree) is 80% more than that of an RFA Farmer (2.5kgs/tree).
- Fertilizer is the primary cost driver, accounting for approximately 66% of total production costs across both farmer segments.
- In some instances, Agri Evolve provides organic certified farmers with organic fertilizer as an incentive for certification.

- Coffee sales revenue
- Labor expense
- Input expense
- Post harvest handling expense
- Finance costs
- Net income



Despite higher production costs, organically certified farmers derive greater benefits from increased production

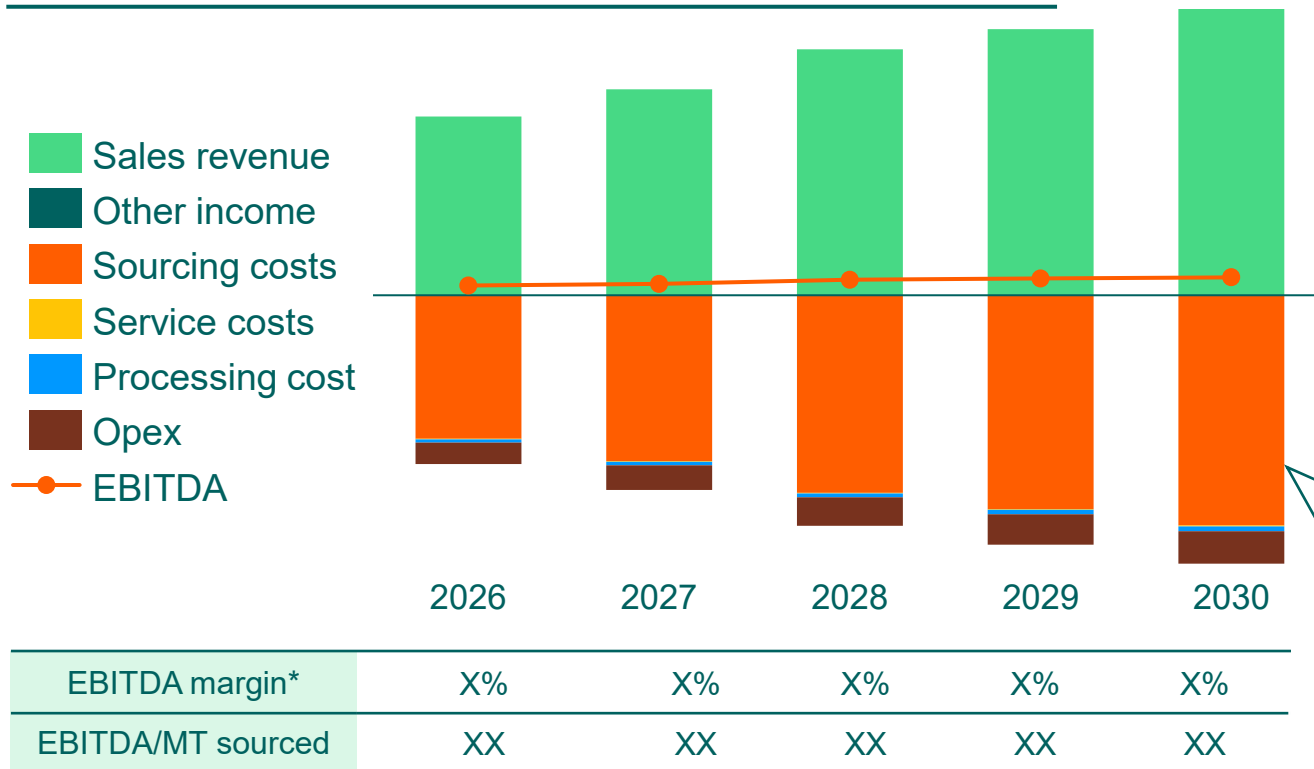
Drivers of income improvement (USD) – Year 10





Farmer service provision, coffee aggregation, and processing remain profitable for Agri Evolve

Profit and loss for 2026 – 2030 (M USD)



- Agri Evolve provides farmers with training, financial access, post-harvest support, and market access services.
- On average, it costs \$X/farmer/year* to serve the 50K farmers working with Agri Evolve.
- Agri Evolve has implemented a digital supply chain management system (SAP RSM) to improve transparency and deliver services to farmers more efficiently.
- Service costs are relatively low as services are mainly delivered through partners, shifting some service delivery costs.
- DRUGAR products account for X%* of the total sales revenue. However, parchment has the highest gross margin.

*This data is excluded from the public version of the report



Summary & Key recommendations (1/3)

Area	Observation	Recommendation
<p>Access to Finance (Digital Loans)</p>	<ul style="list-style-type: none"> • <i>Farmers have limited understanding that historical coffee delivery volumes determine Emata loan eligibility</i> • <i>Less than 50% of eligible farmers have taken an Emata loan</i> • <i>Low trust and adoption in other digital loan products(MNO offered) persists even when there is awareness</i> • <i>Agri-Partner administrative capacity constraints limit processing of multiple farmer loan applications.</i> • <i>Digital Credit is predominantly used for consumption smoothing rather than investment capital</i> 	<ul style="list-style-type: none"> • <i>Farmer training on Emata should highlight the importance of historical supply volume in determining loan eligibility value.</i> • <i>Explore digital tools to increase Agri Partner efficiency in managing farmer loan portfolio.</i> • <i>Review Financial Literacy Curriculum to enhance module on loan portfolio management to guide decision making around credit for investment vs consumption smoothing allocation.</i>
<p>Access to Finance (Bundled insurance)</p>	<ul style="list-style-type: none"> • <i>Although the Emata product is bundled with insurance, and farmers understand the value of insurance, it does not appear to be a strong enough value proposition to secure an Emata loan for those that have not yet done so.</i> 	<ul style="list-style-type: none"> • <i>Improve communication on insurance coverage, triggers, and payouts.</i> • <i>Position insurance as a repayment-risk management feature linked to Emata loans.</i>

Sources: Company interviews and FGDs



Summary & Key recommendations (2/3)

Area	Observation	Recommendation
Access to Finance (VSLAs)	<ul style="list-style-type: none"> VSLAs are a trusted channel for agronomy, income generating, and financial literacy training. VSLA credit is used for both consumption smoothing and investment into coffee farms and other income generating activities The 3 month grace period for Emata loans is an attractive feature. Emata loan does not need spousal consent although AgriEvolve training curriculum promotes joint decision making to mitigate marital conflict. 	<ul style="list-style-type: none"> Continue to motivate adoption and repeat use of good business management practices (e.g., record keeping, tracking and balancing multiple credit lines, profit reinvestment into productive investments).
Access to Finance (Insurance)	<ul style="list-style-type: none"> Climate risk is considered in borrowing decisions, but insurance is poorly understood and inconsistently linked to confidence. 	<ul style="list-style-type: none"> Review Agri Evolve Financial Literacy curriculum approach to knowledge building around Insurance. Review Emata product training curriculum to ensure bundled insurance value proposition is explained in lay terms to stimulate adoption.
Market Linkages	<ul style="list-style-type: none"> Aggregation by Agri Partners reduces travel to market burden for women. Communication frequency and in person proximity with Agri Partners gives farmers real time information on competitor off taker prices. We were not able to explore market linkages for products of alternative income generating activities. 	



Summary & Key recommendations (3/3)

Area	Observation	Recommendation
Supplier credit	<ul style="list-style-type: none"> Some Agri Partners may be reporting aggregate farmer volumes as their own to increase their credit score at the expense of individual farmers. Female Agri Partners are conservative in the credit value they apply for. 	<ul style="list-style-type: none"> Increase farmer awareness on the right to receive a system generated receipt from the Agri Partners. Tailor business management training module to increase female Agri Partner confidence in successful management of credit.
Climate Smart Input Packages/	<ul style="list-style-type: none"> Women apply climate-smart practices (e.g., mulching, trenching, shade trees), but depth of adoption varies Labour-saving and climate-smart technologies are perceived as too expensive and not worth borrowing for 	<ul style="list-style-type: none"> Strengthen extension and financial literacy messaging to link CSA adoption to yield stability and loan repayment
Other (Inclusive delivery strategies)	<ul style="list-style-type: none"> Emata product features are gender neutral. Financial Literacy, Good Agronomy practice training are delivered through VSLAs during periods of the day that are suitable for female farmer attendance. 	<ul style="list-style-type: none"> Maintain VSLA-based delivery for financial literacy and agronomy training
Other (Male allyship)	<ul style="list-style-type: none"> Agri Evolve has employed a gender inclusive training program for "coffee as a business" at household level to increase female agency in financial decision making with spouses and other male family members. 	<ul style="list-style-type: none"> Continue household-level engagement to reinforce women's agency in financial decisions

Sources: Company interviews and FGDs

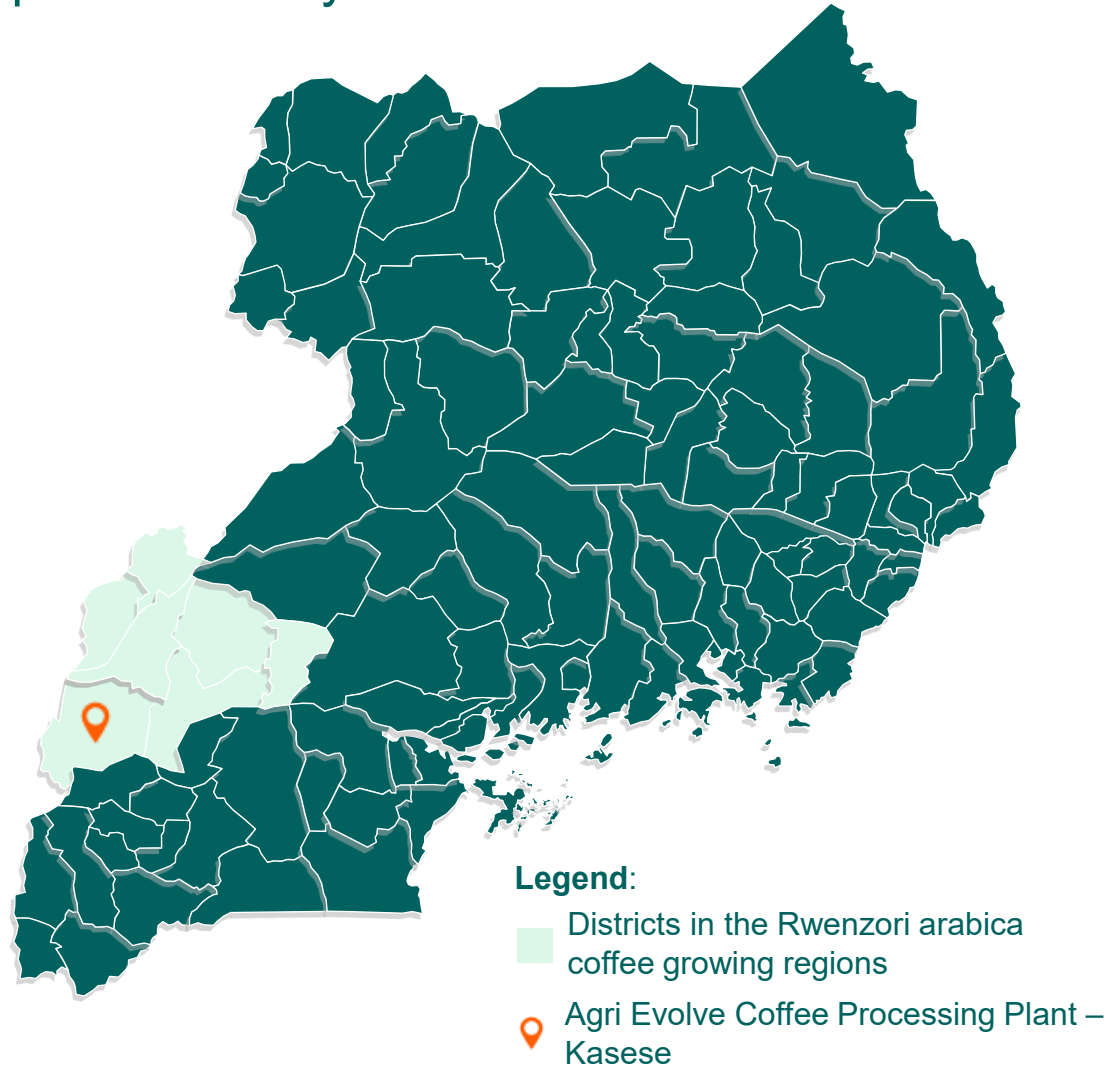


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**Business
model**



Location | Agri Evolve is strategically located in the highlands, where arabica coffee is predominantly cultivated

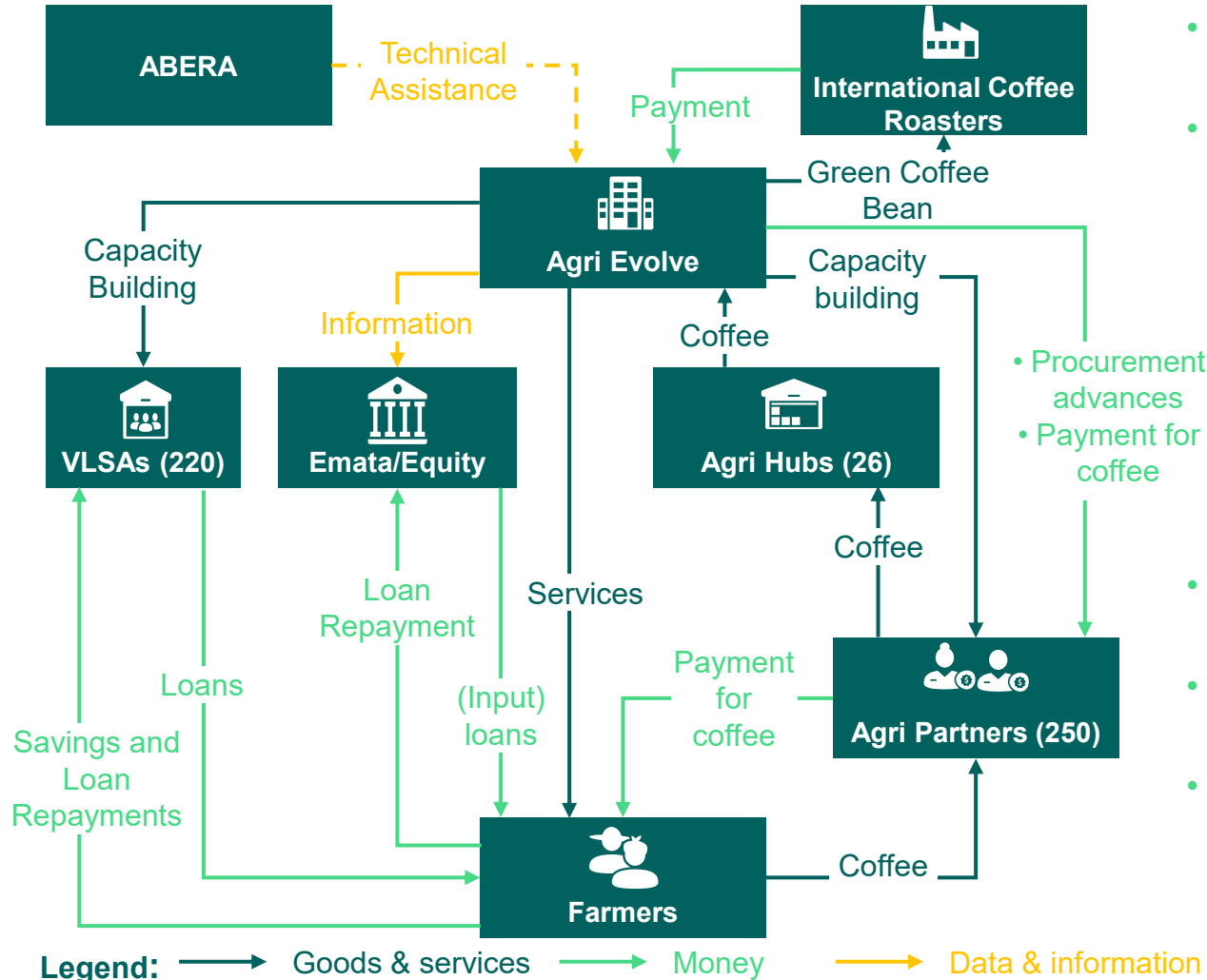


- Uganda has three predominant coffee-producing regions: Rwenzori in the West, Mt. Elgon in the East, and West Nile in the northwest.¹
- Arabica coffee, known for its floral and fruity notes, is mostly produced in Rwenzori. Approximately 12 MT of green coffee is produced annually in the Rwenzori region, where around 45,000 coffee farms are located.²
- The high-altitude, mountainous terrain of the Rwenzori Mountains creates an ideal, cool climate with rich volcanic soils tailored for high-quality Arabica coffee production.
- The coffee production system is either monocrop or interplanted as a mixed farming system with food crops, especially bananas and maize.³
- The challenging hilly terrain has necessitated Agri Evolve to adopt innovative logistics solutions, including the use of donkeys and motorbikes, to ensure efficient market access for farmers' produce.
- Agri Evolve serves 25,000 farmers, 41% of whom are women, through a network of c.250 agri partners (20% women).

Sources: ¹[Omwani Coffee](#), ²[Colipse Coffee](#), ³[International Coffee Organisation: Country Coffee Profile – Uganda](#)



Business model overview | Agri Evolve operates an agri partner model to effectively facilitate the delivery of services to farmers



- The agri partner (AP) model brings the market closer to farmers and provides an avenue for fair, timely, and transparent pricing.
- Agri partners ensure that farmers have ready access to markets for their coffee and receive instant payment via cash transfer into either their bank or mobile money account. Agri Evolve supports agri partners with a digital coffee buying and payment system, enabling them to maintain digital farmer records.
- Depending on the volume and accessibility, farmers deliver their coffee to the agri hubs and, in some instances, the AP collects the coffee from the farmers. The coffee is then transported to Agri Evolve for processing and export.
- APs manage these agri-hubs, which are strategically located in proximity to the coffee farmers.
- Agri Evolve field officers (31) offer farmer training sessions at the agri hubs, oversee coffee aggregation and transportation.
- Emata Uganda is a fintech and licensed microfinance institution that provides digital, AI-powered loans to smallholder farmers through partnerships with agribusinesses.



Farmer relationships | Agri Evolve works with 15,000+ smallholder farmers in Uganda's Rwenzori region through a structured, end-to-end relationship model



Outreach

- Field teams identify smallholder coffee farmers across the Rwenzori Mountains region
- Community radio, SMS campaigns, and buying centre presence used to raise awareness and recruit new farmer members



Segmentation

- Farmers are grouped by plot size, yield potential, quality level, and certification status
- Segmentation informs tailored support, training intensity, and premium pricing tiers



Selection

- Farmers are assessed for willingness to adopt good agricultural practises
- Priority given to smallholders with coffee plots who can commit to quality improvement and certification standards e.g. Rainforest Alliance



Graduation

- Farmers progress toward RFA certification and specialty-grade arabica production benchmarks
- Graduation tracked through improvement plans; certified farmers access higher prices and priority purchasing by Agri Evolve



Contracting

- Farmers sign formal agreements with Agri Evolve outlining commitments around child labor, adoption of good agronomy practices, proper application of agro chemicals and environment safety
- ID numbers issued
- Documentation includes toll-free grievance line to ensure transparency and trust



Data collection

- Microsoft Forms used during farm visits and customer care calls to capture real-time feedback, yield data, and service quality scores
- Use of a Rural Management System (RMS) providing full traceability
- Data fed into continuous improvement cycles for both farmer support and Agri Evolve's own operations



Financial Partner Relationships | Agri Evolve partners with Emata, VSLAs and local financial institutions to provide SHFs and APs with accessible, harvest-linked financial services

Existing partners

- Emata - seasonal digital loans to farmers, repaid in coffee
- VSLAs - informal savings and credit groups
- Financial Institutions supporting Agri Evolve and Agri-Partners: Stanbic, PostBank (Pearl Bank), Bank of Africa, Equity
- Some FIs provide technical assistance (digitalisation, capacity building, market access) to the women

Demand & Segmentation

- Farmer demand focused on:
 - Seasonal inputs and fertilizer
 - School fees and urgent household needs
- Loan limits based on:
 - Historical coffee delivery records
 - Seasonality and crop estimates
- No formal borrower rating system currently in place

SHF: Financial products & services

- Emata loans for inputs, fertilizer (from Jan 2022), school fees, household needs
 - Seasonal loans (~4 months; range 1–5 months)
 - Interest rate: 3.75% per month, no additional fees
 - Deducted at harvest by Agri Evolve and remitted to Emata
- VSLA loans for coffee investment, school fees, home improvements

Graduation

- No formal graduation pathway documented from Emata or VSLAs to banks
- Future consideration; including Agri-Partner performance in loan limit setting
- No evidence of risk-based pricing for farmers at this stage

Agent: Financial products & services

- Working capital loans to purchase coffee
- Loans provided by FIs and Emata
- Agri Evolve guarantees 75% of Agri-Partner loans
- In case of arrears/default Agri Evolve pays into FI account, auto-deduction by bank
- Agri Evolve covers administrative fees on some advance loans (not interest)

Data collection & future proofing

- Emata tracks loan disbursement, repayment, defaults
- Regular portfolio updates shared with Agri Evolve
- SAP integration links loan repayment to coffee delivery data
- Gaps noted include no consolidated view of farmer debt across Emata, VSLAs, and supplier credit



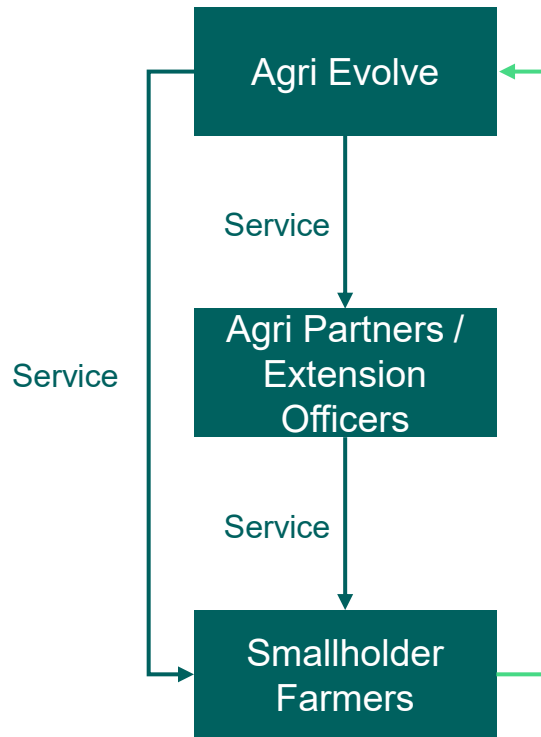
Services | Agri Evolve differentiates itself through tailored service delivery designed to meet farmer needs

Category	Service ¹	Expected service impact	Implementation	Revenue model
Training & information	GAP training	<ul style="list-style-type: none"> • Increase farm productivity • Reduce post-harvest losses 	Agri Evolve field officers	Farmer training is offered at no cost
	Financial literacy training	<ul style="list-style-type: none"> • Sound management of loans and HH incomes 	Emata and their agents	Interest income from loans taken
Financial services	Short-term loans	<ul style="list-style-type: none"> • Access to investment capital • HH income resilience 	Financial partners (Emata) and VSLAs. Crop insurance is bundled as part of the loans offered	Interest income from loans taken
	Crop insurance	<ul style="list-style-type: none"> • Reduced risk of total (farm income) loss 		
Post-harvest services	Aggregation	<ul style="list-style-type: none"> • Reduced post-harvest losses • Better pricing for produce 	Agri Evolve field officers and agri partners	Post-harvest services are offered at no cost. Transport costs are factored into the price paid to farmers.
	Transport	<ul style="list-style-type: none"> • Reduced post-harvest losses and transportation costs • Better market access 		
Market Access	Traceability	<ul style="list-style-type: none"> • Access to certified markets and better pricing 	Agri Evolve	Market premium for certified coffee

Footnote: ¹Agri Evolve has been delivering the above services to its farmers since 2022.



AgriPartner Model | Agri Evolve's Agri Partner model creates a scalable, digitally-enabled last-mile network that links farmers to markets, training, and finance



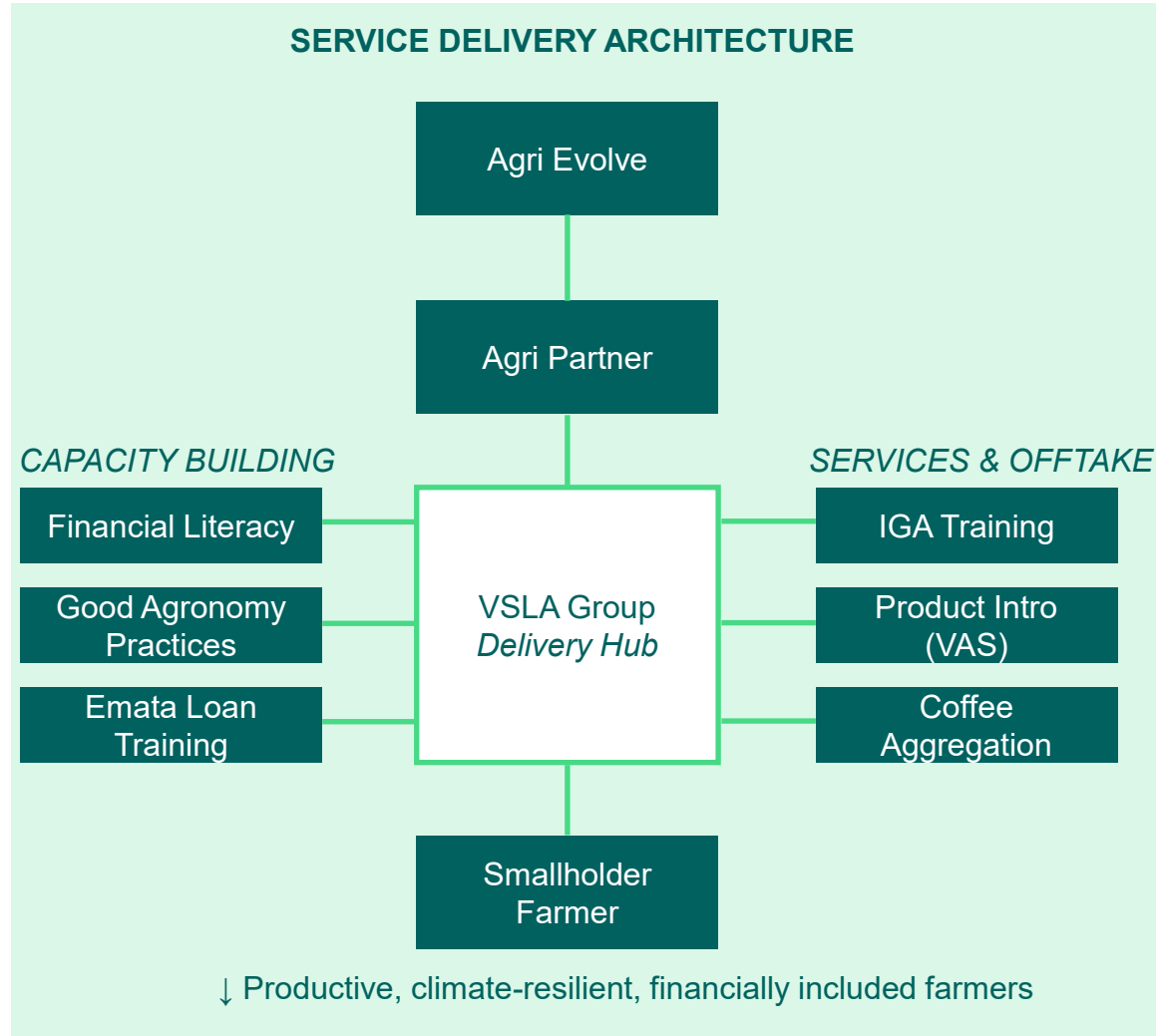
Legend:

- Goods & services
- Money
- Data & information

- Agri Evolve operates 26 buying centres across the Rwenzori region, each staffed by an Agri Partner, set up by Agri Evolve. The agri partners earn money through commissions on rate of repayment of loans by farmers.
- 250 Agri Partners act as the critical last-mile link between Agri Evolve and 25,000 registered farmers.
- Agri Partners use digital tools (RSM app, SAP) to record purchases, deliver training, and track farmer performance in real time.
- Emata digital loans are disbursed through Agri Partners and go straight to the farmers digital wallet, and are repaid in coffee at the start of each season, helping farmers finance inputs without cash upfront.
- Digital tools reduce fraud, cut admin costs, and created the data foundation for loans and certification.
- Price transparency and a clear income premium drive retention; delivery-linked credit scores lock in farmer loyalty to Agri Evolve.
- Agri Partners are upgraded from coffee buyers to financial access points via free software, disbursing digital loans far cheaper than informal lenders.
- VSLAs show strong reach into female financial inclusion, but credit tied to delivery history risks excluding women with smaller or less consistent plots. Equity of access remains an open question.



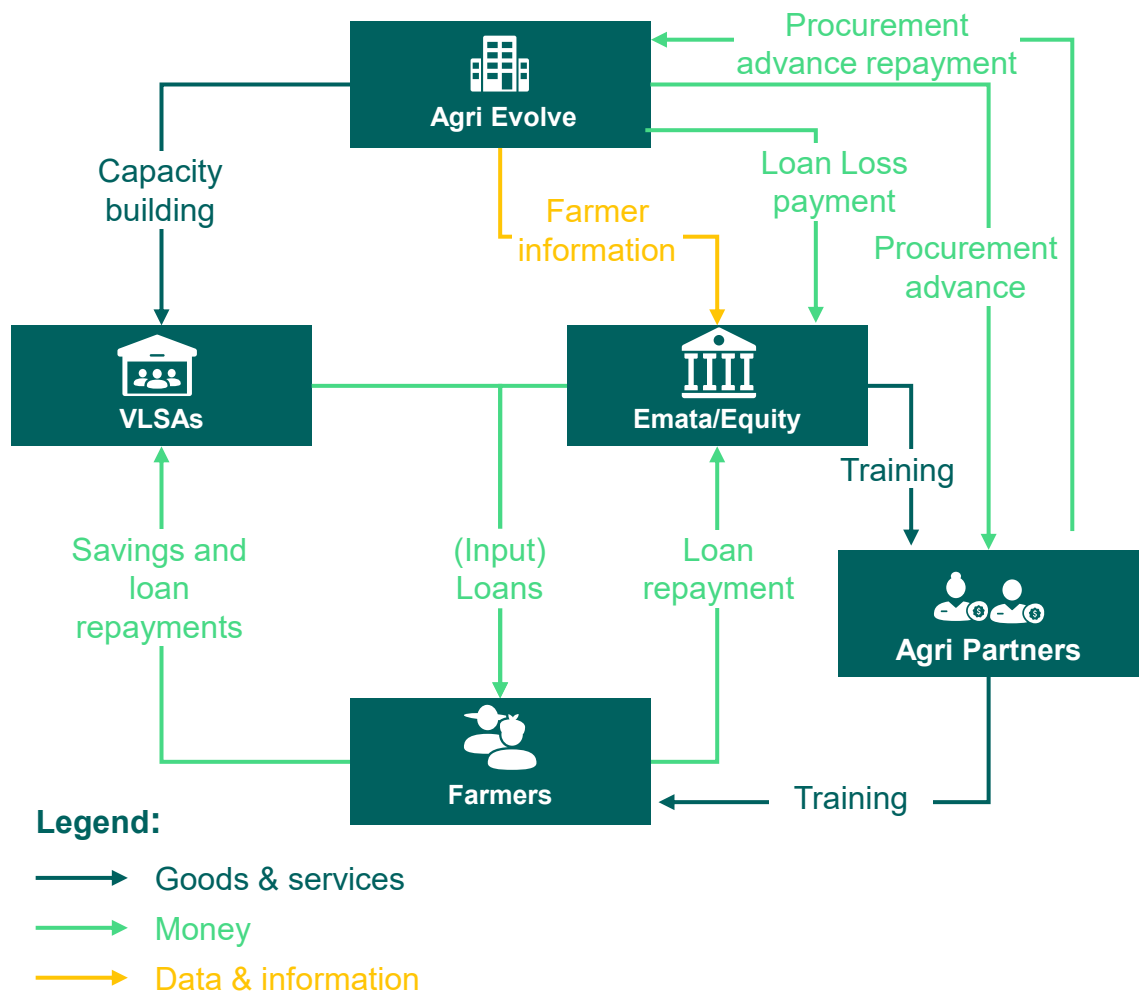
VSLA Engagement | VSLAs are AgriEvolve’s primary infrastructure for training, product access, credit facilitation and coffee aggregation



- The VSLA channel is a service delivery asset: VSLAs are the primary touchpoint for training, input access, credit facilitation and coffee aggregation.
- Multi-service bundling creates loyalty and lowers default risk: Farmers value financial literacy and agronomy training delivered through the VSLA highly — this institutional trust transfers directly to Emata adoption and repayment discipline. Bundling training, product access, and credit in one channel reduces farmer search costs and strengthens Agri Evolve's offtake capacity.
- The channel is under-converting on credit: VSLA membership guarantees exposure but not Emata adoption. Improved sensitization of credit product feature, terms and conditions should be delivered to increase portfolio volume without expanding the delivery footprint.
- Mobile-enabled credit adoption hesitancy is addressable within the VSLA: Women save via phone but fear digital borrowing, citing surveillance concerns. This is a trust gap, not a digital literacy gap — and it is best addressed through peer credibility within the VSLA. Champions who have borrowed and repaid successfully are persuasive change agents.



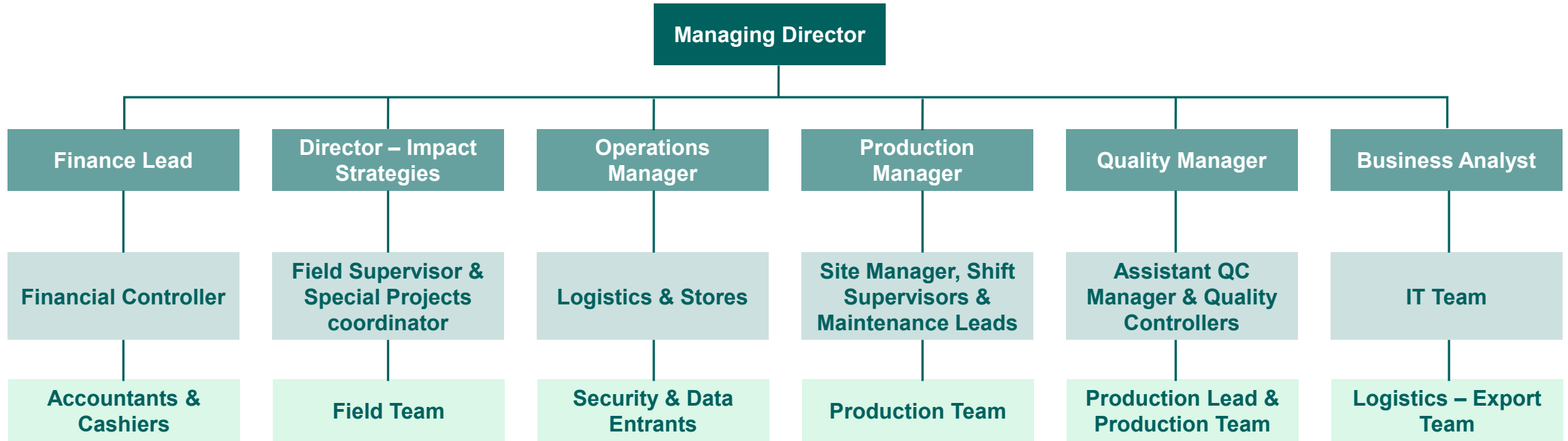
Digital Credit | Agri Evolve drives financial inclusion by enabling farmers to access savings and loans services and by providing financial education



- Agri Evolve partnered with Emata to support farmers in accessing affordable digital loans, which are repaid with coffee. Loans are issued and managed through Emata-trained APs, ensuring trust, convenience, and transparency within the farming communities.
- Agri Evolve has implemented a fully digital supply management system that enhances transparency, traceability & effective service delivery to farmers. Transactions and interactions between Agri Evolve, agents and farmers are recorded on the digital application.
- 50 APs have been trained to act as Emata agents. Their role is to train farmers to access the loans and track repayments. To date, Agri Evolve has distributed 1,327 loans with a total value of \$X.
- Findings from the focus group discussions indicate that loans from Emata, originally intended to finance farm inputs, are often used to meet household needs.
- Agri Evolve provides a loan loss guarantee of X% of the Emata loan portfolio. The current loan portfolio default rate is X%.
- Agri Evolve provides APs with cash advances to finance procurement. APs repay the procurement advances by delivering coffee to Agri Evolve. The average recovery rate for the advances is X%.



Organizational structure | Agri Evolve operates with a lean field-focused team, but gender representation remains an area for improvement



	Female	Male	% female
Executive leadership & Senior management	5	8	38%
Middle management / Supervisors	9	18	33%
Technical & Operational staff	18	55	25%
Administration & Support staff	11	12	48%
Total staff	43	93	32%

Agri Evolve employs 136 staff members. Overall, the workforce is predominantly male, while female representation is more prominent in administrative and finance-related positions



Climate risk scan | Agri Evolve's farmers in the Rwenzori region face very high climate risks, particularly from rising temperatures, erratic rainfall and increasing droughts

Uganda faces very large climate risks. It is ranked as one of the most vulnerable countries in the world to climate change, and simultaneously one of the least ready to deal with its impacts. Impacts in the Rwenzori mountains are expected to be among the largest in the country, and coffee production is highly vulnerable to some of these changes.



Increasing temperatures

Prolonged spell of high temperatures or higher average temperatures above

Very high risk



Erratic rainfall

High rainfall during short or unpredictable moments, leading to

High risk



Droughts

Prolonged spell of low or no rainfall

High risk

Climate projections

Average temperatures have already risen by 1.3 °C in Uganda since the 1960s, including 74 more hot days per year. Temperatures will keep rising by another ~2 °C by 2050, with the largest increases occurring in West Uganda. Heat waves are expected to increase by 4-36 days per year^{2,3}.

Farm vulnerability

Coffee yields and quality suffer under higher temperatures. Warming temperatures will lead to increased pest pressure (coffee berry borer, leaf rust). The area suitable for coffee production is expected to decrease by 10-50%.^{2,3} Production will become more suitable at higher altitudes, which are more remote and come with risks of deforestation.

Rainfall is projected to become much more erratic, with increasing frequency and severity of heavy rainfall events. Seasonality may change with increased precipitation during October–December and decreased March–May precipitation¹. Future risks of flooding are high.⁵

Farmers struggle with access to wet mills when roads have become impassable due to floods. This will become worse with the expected heavier rainfall events. Post-harvest handling activities become more challenging when coinciding with wet conditions¹.

The region will see a large increase in the frequency and severity of droughts. Additionally, the Rwenzori glaciers are projected to disappear by 2040, which can have severe impacts on the water availability in the region³.

Arabica is highly sensitive to droughts, with yield impacts even from short periods⁶. Indirectly, droughts are also expected to increase pressure from pests & diseases.



Income Diversification | Alternative Income Generating activities support household consumption and minimize diversion of investment into coffee plantations.

Area	Observation	Opportunities to explore
Financial Capacity	<ul style="list-style-type: none">Income from other income generating activities supports household income needs.Portfolio breadth of income generating activities varies significantly: tomatoes, beans, cassava, pigs, rabbits, turkeys; cotton; house construction; firewood and chicken sales.Livestock as informal store of value: low-capital, flexibly liquidated, not tied to coffee seasonality — a de facto savings and shock buffer mechanism.Record-keeping gap: income from diversified activities is largely untracked. Farmers likely overestimate net income because family labour costs are invisible.	<ul style="list-style-type: none">With a financing partner, explore use of income diversification mix to refine credit risk modelling — coffee volume alone understates farmer income and repayment capacity. A household income mapping tool at onboarding would strengthen both risk assessment and loan sizing.



Farmer Adaptability Services | VSLA-delivered training builds adaptability, more exploration needs to be undertaken to design suitable micro credit and loan products.

Area	Measures taken	Opportunities to explore
Financial capacity	<ul style="list-style-type: none"> Financial Literacy Training : Agri Evolve leverages the VSLA platform to provide financial literacy training. Access to finance is stimulated through multiple ways, including VSLAs and providing banks with financial data to increase creditworthiness. Disaggregated financial histories limits women from leveraging their financial history to access higher credit values/ more suitable financial products. 	<ul style="list-style-type: none"> Provide money management aides to support women in adopting and maintaining good money management practices promoted in the financial literacy training. Available credit and village loans will likely be insufficient when a large drought hits crop yields. Climate insurance options can be explored, although these must be assessed carefully for costs, benefits and coverage Explore how to bundle Marula (organic fertilizer) product within Emata loan. Agri Evolve should explore with Emata or other financing partner, a standalone instalment payment scheme for organic fertilizer and other farm inputs that women deemed essential for improved productivity of the gardens. Digitizing VSLA transactions to generate digital transaction histories should be explored after a cost benefit analysis
Ongoing support in the field	<ul style="list-style-type: none"> Agri Partners are a proximate knowledge source for farmers on various topics important to reinforcing Agri Evolve's business model. 	<ul style="list-style-type: none"> Household financial management tools that support Agri Partners to periodically reinforce financial literacy training and nudge good record keeping practices and repayment behavior.



Farmer Resilience Services | Agri Evolve's training supports famers to protect their coffee production and diversify income sources.

Area	Measures taken	Opportunities to explore
Sensitivity of produce to climate	<ul style="list-style-type: none"> • Improved varieties with better drought and disease resistance are multiplied and distributed to farmers free of charge • Crop calendars are adjusted in the latest training curriculum to be more flexible dependent on seasonal forecasts 	<ul style="list-style-type: none"> • For sustainability, promote VSLA establishment of nursery beds as an income generating activity. • Explore affordable irrigation systems offering, e.g PAYGO irrigation kits for the coffee plantations
Farm diversity	<ul style="list-style-type: none"> • Integration of nitrogen fixing shade trees (Albizia Coriaria, Barthdevia etc) has improved soil health and coffee plant productivity. • Agri Evolve provides training through VSLAs on alternative income generating activities to supplement coffee incomes and reduce tendency of premature harvesting due to financial pressures. • Agri Evolve provides clean cooking stoves to some farmer groups as an incentive for quality coffee production. The cooking stoves are constructed by youth which creates an income stream for the youth. 	<ul style="list-style-type: none"> • Income diversification: Explore introduction/ scale up of apiculture within existing gardens given the complementarity with coffee farming practices.
Buffers on and around the farm	<ul style="list-style-type: none"> • Terracing and trenching practice is taught and promoted. • Training on organic fertilizer applications in order to improve likelihood of organic certification is offered. 	<ul style="list-style-type: none"> • Rainwater harvesting contributes to water availability during dry season • Water retention through soil cover and improved soil structure has the potential to vastly increase water availability for plants.



4

Impact Case



Farmer segments | Agri Evolve farmers achieve higher yields across both farmer segments, highlighting a clear positive impact



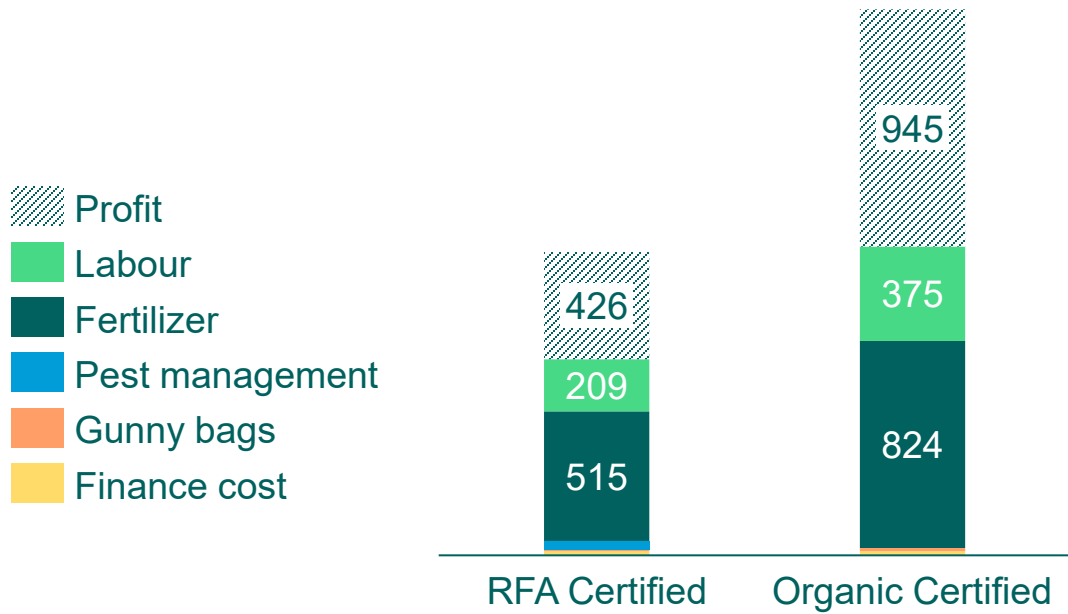
Characteristics	Baseline	RFA Certified	Organic Certified
Farm size	0.7 Acre	0.7 Acre	0.7 Acre
Tree density	680/Acre	680/Acre	680/Acre
Current yield	1.36 MT/Acre	1.7 MT/Acre	3.06 MT/Acre
Maximum yield	3.74 MT/Acre	4.08 MT/Acre	5.44 MT/Acre
Farm-gate price	0.5 USD/kg	0.71 USD/kg	0.71 USD/kg
Services			
Training	N/A	GAP training, financial literacy, Income Generating Activities	
Financial services	N/A	Loans	
Post-harvest services	N/A	Aggregation & transport	
Market access	N/A	Traceability	

- While baseline farmers may access training through extension services and credit from informal sources, they do not receive any services from Agri Evolve like the RFA-certified and organic certified farmers.
- Organic certified farmers have the potential to attain higher yields than RFA certified farmers due to their adoption of improved crop management practices in line with certification standards and requirements.
- While farmers working with Agri Evolve have access to credit through Emata, the loans secured are typically not invested in farming activities. Consequently, it is not possible to objectively evaluate how access to credit affects farm returns.
- Agri Evolve pays its farmers an additional \$X/kg sourced.
- In some instances, Agri Evolve provides organic certified farmers with organic fertilizer as an incentive for certification.



Profitability per acre | Organic-certified farmers earn \$518/acre more than RFA farmers, driven by higher productivity

Cost of production and profit (USD/acre)



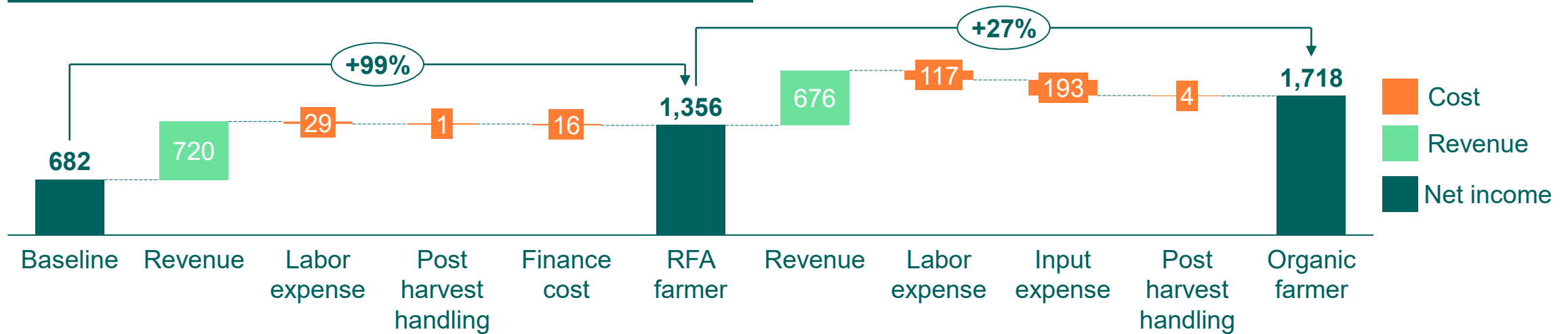
Marketable surplus (Kg/acre)	1,700	3,060
Profit (USD/acre)	426	945
Profit (USD/MT)	251	309

- Farmer income is driven by productivity. The current organic certified production (4.5kgs/tree) is 80% more than that of an RFA Farmer (2.5kgs/tree).
- Despite the labor-intensive nature of coffee farming, household members handle most farm activities as their farm sizes are small, relying on hired labor only for harvesting and transportation.
- Fertilizer is the primary cost driver, accounting for approximately 66% of total production costs across both farmer segments. Organic farmers apply organic fertilizer and cattle manure in line with certification standards.
- While organic certified farmers incur 57.34% more in production costs than RFA certified farmers, the resultant 80% increase in productivity (equivalent of 13.6 bags) justifies the additional investment.
- Finance costs are applied at 3.75% per month, with average loan repayment equivalent to 1.43 bags of coffee cherry per farmer. The current farmer loan size is c.\$85.



Income build-up | Organic farmers are projected to earn 152% more than baseline farmers and 27% more than RFA farmers in net income

Drivers of income improvement (USD) – Year 10



- RFA and organic-certified farmers produce 2.38 and 11.9 more bags of coffee cherry, respectively, compared to the baseline farmer. Agri Evolve offers its farmers a premium price which is \$X/100Kg (equivalent of X bag) higher than that paid to a baseline farmer.
- Higher labor costs for organic farmers versus RFA farmers are driven by increased coffee output, requiring additional labor for harvesting and transportation.
- Organic inputs (fertilizer and manure) applied by organic certified farmers cost 65% more than those applied by RFA farmers. Despite this higher cost, the organic farmers benefit more from the impact of improving soil health on productivity.
- In the long term, transitioning farmers to organic certification is justified by the potential for higher returns.



Sensitivity analysis | Farm revenue is highly sensitive to coffee productivity and pricing. However, yield improvements outperform price increases

Net Income (USD/Acre) for Organic certified farmers when yield and prices are variable

		Yield (Kg/acre)						
		1,700	2,125	2,550	3,060	4,080	5,440	6,000
Farm-gate price (USD/kg)	0.41	-357	-237	-116	29	319	705	864
	0.49	-218	-62	94	281	654	1,153	1,358
	0.59	-50	148	345	583	1,057	1,689	1,950
	0.71	151	399	647	945	1,540	2,333	2,660
	0.85	393	701	1,010	1,380	2,120	3,106	3,513
	1.02	683	1,064	1,444	1,901	2,815	4,034	4,535
	1.23	1,031	1,498	1,966	2,527	3,650	5,147	5,763

- The coffee value chain is characterized by significant price volatility.
- From the sensitivity analysis, interventions focused on improving yield will have the strongest and most consistent impact on farmer livelihoods.
- Farmer revenues, and ultimately incomes, remain below the living income benchmark. A living income is only reasonably achievable through combined gains in yield and price.

147% increase in net income resulting from increased productivity



Sources: ¹Living Income Data

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IDH Annual Report (2022)



Farmfit Insights Hub

This report was created using think-cell

Thanks

IDH would like to express its sincere thanks to Agri Evolve Uganda Limited for their openness and willingness to partner through this study. By providing insight into their model and critical feedback on our approach, Agri Evolve is helping to pave the way for service delivery that is beneficial and sustainable for farmers and providers



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5

Annex



5.1

Context



Objectives | ABERA and Agri Evolve's overarching goal for this analysis is to understand how to improve outcomes for women smallholder coffee farmers

Context

- ABERA is a CGAP-IDH collaboration fostering financial sector innovation to drive gender-inclusive, climate-smart outcomes in agricultural value chains. We work with companies to enhance business performance and foster innovation in climate-smart, gender-inclusive finance.
- Agri Evolve promotes Uganda's coffee and its coffee farmers through its unique service delivery and sourcing model that is tech driven.
- Since 2015, Agri Evolve Uganda has supported rural farmer communities in the Kasese region through service delivery including, training, sourcing, and exporting to international markets.
- Agri Evolve has been strategically developing, researching, and piloting service delivery, procurement, and processing using various models/methods to create the needed products to satisfy local needs (the rural communities) and international demand (international coffee roasters).

Shared Objectives¹

- **Scale up of digital SHF input loans:** Scale input loan financing for smallholder farmers (SHFs).
- **Supplier credit to rural middlemen** for coffee purchases.
- **Scale up of insurance bundled with Emata loans.** Potential/ideal features could include;
 - Weather-index-based (drought covered).
 - Claims are automated/triggered by satellite data and field checks.
 - Payouts used to clear remaining loan balances post-season.
- **VSLA groups:** Digitalisation of groups and their financial information. Allows SHFs access to lower-cost loans to invest in climate-smart initiatives; inputs and credit based on historical purchase data and yield records; gender-inclusive, and diversification initiatives that are 100% farmer-led.

Footnote: ¹Objectives shared between Agri Evolve and ABERA



5.2

**Underlying
data &
information**



Company assumptions

Farmer numbers	Unit	2026	2027	2028	2029	2030
Uncertified farmers	# of farmers	12,000	16,000	18,000	17,000	17,000
RFA certified farmers	# of farmer	15,000	20,000	25,000	27,000	27,000
Organic certified farmers	# of farmers	3,300	4,000	4,500	6,000	6,000
TOTAL	# of farmers	30,300	40,000	47,500	50,000	50,000
Acreage						
Uncertified farmers	Acres	8,400	11,200	12,600	11,900	11,900
RFA certified farmers	Acres	10,500	14,000	17,500	18,900	18,900
Organic certified farmers	Acres	2,310	2,800	3,150	4,200	4,200
TOTAL	Acres	21,210	28,000	33,250	35,000	35,000
Farmer production volumes						
Uncertified farmers	MT	11,424	18,194	23,800	25,625	28,772
RFA certified farmers	MT	17,850	27,502	39,006	47,124	52,122
Organic certified farmers	MT	7,069	9,308	11,305	16,184	17,295
TOTAL	MT	36,343	55,004	74,111	88,933	98,188
Sourcing volumes (cherry equivalent)						
Cherry sourced	MT	X	X	X	X	X



Farmer assumptions

Variable	Unit	Uncertified	RFA Certified	Organic Certified
Farm size main crop	Acres	0.7	0.7	0.7
Share of farmers increasing their farm size	%	0%	0%	0%
Yield	Kg/acre	1,360	1,700	3,060
Post-harvest losses	%	0%	0%	0%
Home consumption	Kg	0	0	0
Farm-gate price	USD/Kg	0.50	0.71	0.71
Labour cost	USD/acre	167	209	375
Fertilizer cost	USD/acre	386	515	824
Pest Management cost	USD/acre	34	34	0
Gunny bags	USD/acre	6	7	13
Finance cost	USD/acre	0	16	16