Inclusive Business Analysis

Analysing Agro Supply's integrated agri-input model to improve financial outcomes for women smallholder farmers and unlock scalable growth

Agro Supply Limited | Uganda

Public Report

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transforming markets

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Disclaimer

This study examines the projected (financial) performance of Agro Supply Uganda Limited's Business Model and explores and recommends potential improvements and opportunity pathways. The findings in this report have been used by IDH, Agro Supply 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.

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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

DTA	Digital Transformation Assessment
EBIT	Earnings before interest and taxes
EBITDA	Earnings before interest, taxes, depreciation and amortization
FGD	Focus Group Discussion
FTE	Full-time equivalent
GAP	Good agricultural practices
GDP	Gross domestic product
HCD	Human- Centred Design
IBA	Inclusive Business Analysis
IT	Information technology

IVR	Interactive Voice Response
KII	Key Informant Interview
MT	Metric ton (1,000 kg)
NGO	Non-governmental organization
P&L	Profit and loss statement
PDM	Parish Development Model
SHF	Smallholder farmer
SWOT	Strengths, weaknesses, opportunities and threats
USD	United States dollar (currency)
VLSA	Village Savings and Loan Association

Report outline

1

Executive summary

The objective of this IBA is to understand Agro Supply's save-to-buy model and digital tools in order to strengthen outcomes for smallholder women farmers and unlock pathways to scale (1/2)

Scope	Agro Supply's Objectives	IBA Learning questions
Climate-smart products and resilience	• Strengthen women SHF resilience through better impact data and climate-smart layaway products • Identify most effective and scalable resilience solutions for women SHFs	• Which climate-smart products offered through Agro Supply's save-to-buy model are most valued by women SHFs and why? • How does access to climate-resilient inputs affect women's productivity, food security, and income stability across seasons? • How do climate shocks affect women's ability to complete layaway purchases and default risk? • What constraints limit women's uptake of climate-smart products, and which delivery strategies help overcome them?
Agri-insurance and climate shock mitigation	• Explore bundling climate-smart inputs with insurance to reduce layaway default risk • Build the business case for insurance at scale	• How do women SHFs perceive agri-insurance as a climate risk mitigation tool? • Does insurance coverage influence women's willingness to invest in climate-smart inputs? • How does insurance affect women's recovery after climate shocks? • What is the business case for bundling climate-smart products with insurance?
Digital savings for rural women	• Design and pilot simple, accessible digital savings products tailored to rural women farmers • Link digital savings to layaway to improve financial planning and retention	• How do women currently save for agricultural inputs and household needs? • Does access to digital savings increase women's ability to plan for inputs? • How does digital savings affect customer lifetime value and retention? What operational changes are required to integrate it into Agro Supply's model?

Source: ABERA notes

The objective of this IBA is to understand Agro Supply's save-to-buy model and digital tools in order to strengthen outcomes for smallholder women farmers and unlock pathways to scale (2/2)

Scope	Agro Supply's Objectives	IBA Learning questions
AI voice response and farmer support	• Pilot an AI voice response system to provide real-time, local-language answers to farmers' questions • Reduce cost-to-serve through AI-assisted extension	• Does access to AI voice response in local languages improve women's timeliness of farm-level decisions? • Does use of AI voice support correlate with adoption of climate-smart practices? • Does AI voice response reduce cost per farmer supported compared to traditional extension? • What barriers influence women's use of AI-based support tools?
Peer learning and impact data systems	• Strengthen gender- and climate-segmented data collection and use in Agro Supply's operations • Learn from ABERA peer companies to improve impact measurement	• How effectively is impact data currently used in Agro Supply's business decision-making? • Which design features make digital savings and loan products usable and trusted by women? • What partnerships offer the highest impact-to-cost potential for Agro Supply? • What role do agents and field staff play in enabling women's uptake of savings, insurance, and digital tools?

Agro Supply brings quality inputs, flexible savings options and market access to 35,000 smallholder farmers across Uganda

Background

About

- Agro Supply is an agri-tech company founded in 2017 to support smallholder farmers across Uganda in accessing high-quality agricultural inputs through an innovative mobile-based 'save-to-buy' model.
- Agro Supply's interventions are designed to address critical challenges faced by farmers, including low productivity, limited climate resilience, constrained access to finance, restricted market access, and gaps in extension services.

Partners

- Agro Supply's work is strengthened through strategic collaborations with local and international partners, demonstrating a shared commitment to unlocking the full potential of smallholder agriculture in Africa.
- Primary seed supplier is ZamSeed, with SeedCo as a secondary supplier.
- Fertilizer is sourced from Yara.

Activities

Supply chain

- Agro Supply sources high-quality inputs from local and international input suppliers and leverages its network of agents and farmers to distribute the inputs to the farmers' doorsteps.
- Agro Supply has serves over 35,000 farmers through innovative financial and agricultural products and services.
- Smallholder farmers are supported by village agents, who are in turn overseen and managed by Agro Supply field officers(agronomists)
- Agents are responsible for farmer onboarding, training, input distribution, and are compensated on a commission basis.

Products

- Agro Supply enables smallholder farmers to increase productivity by providing high-quality, climate-resilient seed varieties and fertilizers.
- Through its save-to-buy layaway system, cash-constrained farmers, who are unable to pay upfront, can save in instalments and access these inputs without taking on debt.
- Chemical inputs and farming tools were previously offered but discontinued due to a shift toward organic farming, and lower demand for the tools.

Sources: KIIs

Gender Insights | Registering farm plots in women's names does not guarantee financial inclusion — produce interception and literacy barriers mean digital tools as a channel for financial inclusion are underperforming

Women cultivate, but men control the proceeds	Even when a garden legally or practically belongs to a woman, the male partner or male relative takes the produce to the village agent at marketing time, negotiates the transaction, and receives the cash. This breaks the assumed causal chain in Agro Supply's gender strategy: female registration as a farmer, or layaway subscription does not guarantee that a woman receives or controls income from her own crop. It means that product adoption metrics (e.g., registered users, layaway subscribers) may significantly overcount women's active financial participation.
Financial decision-making remains predominantly male	Social norms vest financial authority in men. In the words of the Focus Group Discussion (FGD) participants, “The men have the right". The expenditure priority divergence offers further insights: women and men share the top three priorities – school fees, feeding, health – but women add clothes for their children and themselves while men add entertainment as the fourth. Women's fourth priority is a household necessity and men's is a discretionary expenditure, a pattern consistent with broader literature on gendered spending behaviour and the financial case for women's financial control.
Low literacy is the primary barrier to digital tool adoption for women	There is an estimated 88-90% functional illiteracy rate among the women served by Agro Supply. It renders SMS, text-based menus, and written digital interfaces almost entirely inaccessible as service delivery channels for women in these groups. The consequence for the Agro Supply layaway product is significant: If the onboarding or transaction interface relies on any text-based interaction, it is functionally inaccessible to most women in the target population.

Source: Focus Group Discussions, KIIs

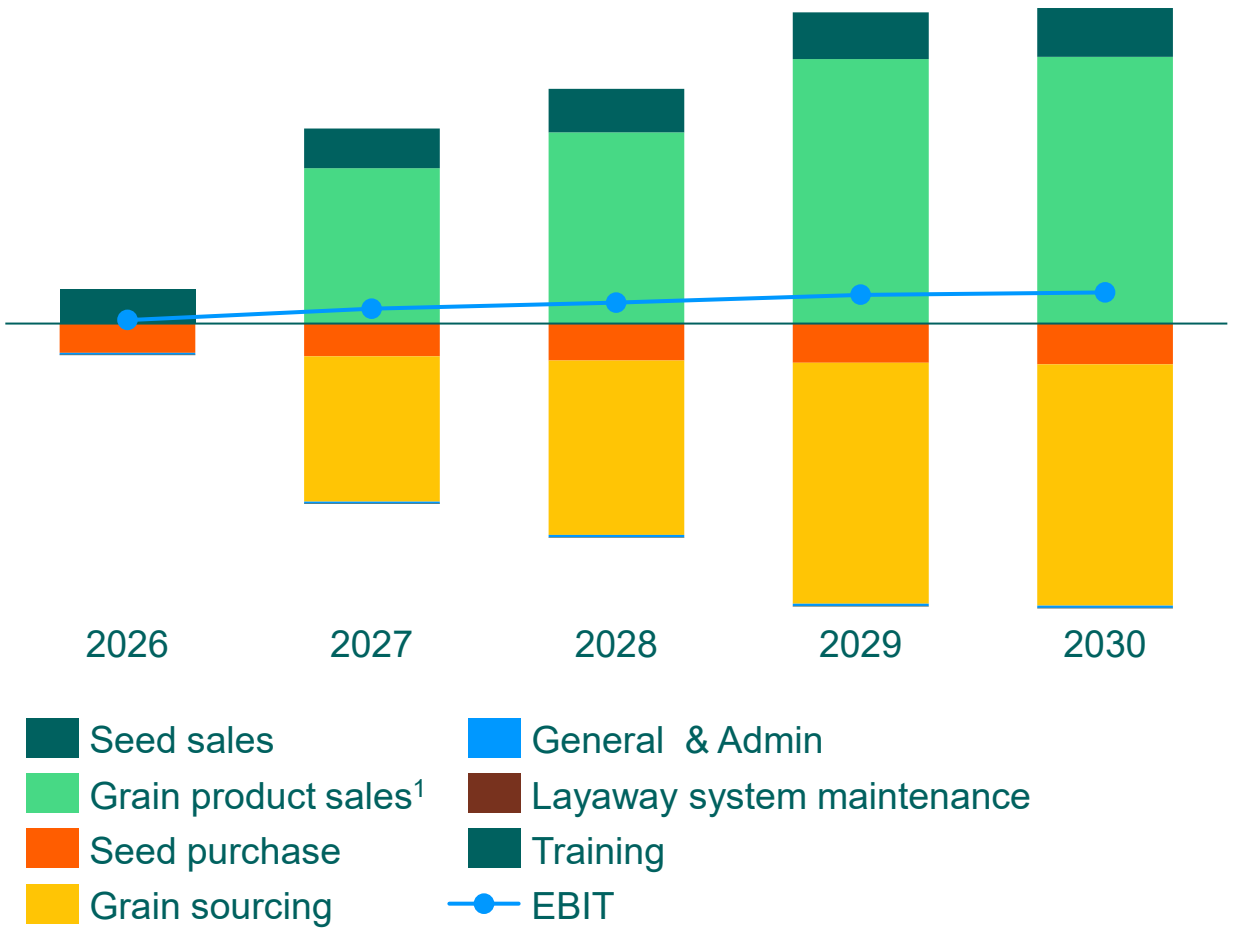
Gender Insights | Climate shocks are forcing women to liquidate the assets that safeguard their households — but Agro Supply's financial literacy training is already shifting household decision-making and strengthening women's voice in family financial planning.

Women bear disproportionate household stress from climate shocks	Women liquidating productive assets – chickens, livestock – to meet consumption obligations such as school fees and food is a common occurrence. This is a gendered coping pattern: Women are selling the assets within their sphere of control to cover the household expenditure priorities they feel responsible for (e.g., feeding, school fees, health), even when those assets represent future income streams. 'I had to sell my chickens for the children to go to school," said one FDG participant.
Agro Supply's family financial planning training is showing early signs of positive gender impact	FGDs revealed that Agro Supply's family financial planning training is actively changing how men and women make decisions together, with household tensions reportedly reducing as women's voices are increasingly considered. This suggests that structured, programme-delivered gender-inclusive financial training – delivered through an agronomy platform that men already engage with – can begin to shift the very household dynamics that limit women's financial participation.

Source: Focus Group Discussion and KIIs

Agro Supply is investing in a grain processing facility to expand farmer market access, reduce aflatoxin risks, and drive value addition across the value chain

Profit and loss for 2026 – 2030 ('000 USD)

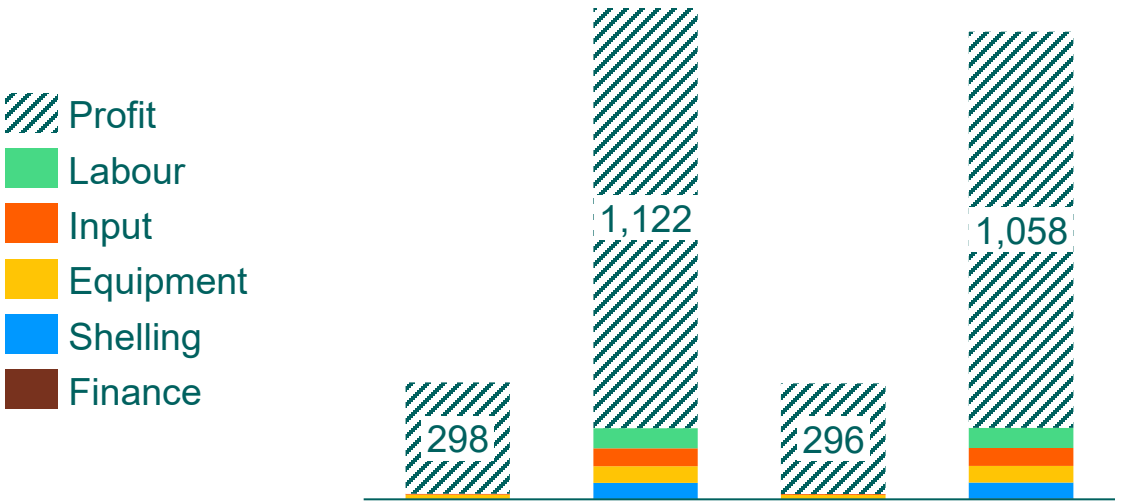


- The business demonstrates resilience through diversified revenue streams across inputs, grain trading, processing, and farmer services, reducing dependence on a single source of income.
- Maize remains the dominant crop across the review period, accounting for over 75% of seed sales volumes by 2030, highlighting its importance as Agro Supply's primary revenue driver. Maize delivers a profit margin of 16%.
- Agro Supply's layaway model enhances affordability of agricultural inputs, particularly for smallholder farmers with seasonal cash flow constraints.
- Agro Supply's expansion into new regions is driving uptake of the layaway model, as farmers increasingly rely on its financing and distribution network to access agricultural inputs.

[1]*Grain products include maize flour, grain and bran, cleaned and bagged soybean and sorghum*

Agro Supply's layaway model enables farmers to gradually save toward seed inputs, making input purchases more affordable and reducing financial pressure

Annual cost of production and profit – Year 5 (USD/acre)

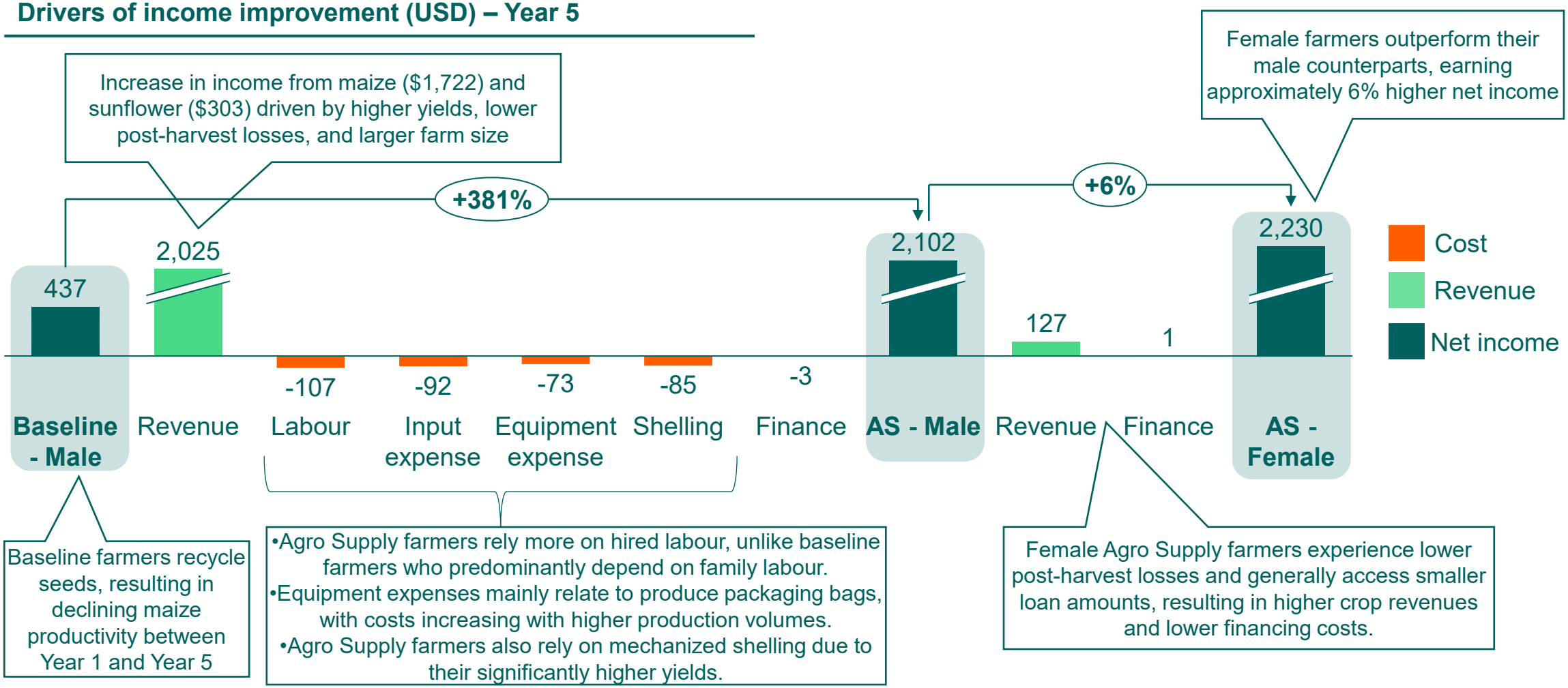


	Baseline - Female	AS - Female	Baseline - Male	AS - Male
Revenue (USD/Acre)	313	1,312	310	1,248
Production costs (USD/Acre)	15	190	14	191

- Farmers engaged with Agro Supply generate significantly higher profits per acre than baseline farmers, with female and male farmers earning 277% and 258% higher profits, respectively, demonstrating the strong impact of Agro Supply's support model.
- Despite substantially higher production costs among Agro Supply farmers, increased revenues from improved yields more than offset these costs, resulting in materially stronger profitability outcomes.
- Baseline farmers maintain low production costs largely due to seed recycling and lower input usage; however, this contributes to significantly lower yields and weaker overall farm profitability.
- Agro Supply's integrated support model including quality inputs, GAP training, layaway financing, and extension support is driving meaningful improvements in farmer productivity, profitability, and farming practices.

Income build-up | Female farmers outperform their male counterparts, earning approximately 6% higher net income

Drivers of income improvement (USD) – Year 5



Summary and key recommendations (1/4)

Area	Observation	Recommendation
Climate Shock	• Drought was the most difficult climate challenge reported in the FGDs and KIIs. • Flooding caused complete crop loss (maize, sweet potatoes, rice) and is particularly severe for farmers near wetlands. • Armyworm, invasive weed species (*scorpiurus muricatus*, strider weed), and unpredictable seasonal patterns compound losses. • Weather unpredictability undermines crop calendar planning and layaway savings assumptions. • FGDs revealed that Insurance value proposition is not appreciated by famers due to the extra costs involved and low confidence in claims being honoured.	• Prioritize drought-tolerant variety distribution, particularly for sunflower and maize. • Consistently train farmers on effective natural weed control. • Apply Human-Centred Design to co-create an affordable, trust-building insurance product bundled within the layaway offering — addressing the fraud perception documented in field research.

Sources: KIIs and FGDs

Summary and key recommendations (2/4)

Area	Observation	Recommendation
Layaway Product Adoption	• Uptake is low. Only 4 of 20 female FDG participants in Agweng village, for example. use the layaway product. • Layered barriers — product unawareness, technology anxiety, and women's proxy subscriptions through adult children's or spouses' SIM cards — suppress women's layaway adoption and make it impossible to accurately measure their actual participation • Despite relatively high mobile phone access, very few women and men are saving digitally. Most save in VSLAs and cash stashed away within the home. • The layaway lock-in mechanism is specifically valued by both men and women for preventing impulse spending (including on alcohol).	• Redesign layaway onboarding: replace any text-based menus with voice-based, agent-assisted enrolment. • Formalize the VSLA as a collective layaway unit — enabling group-level seed orders, group savings targets, and VSLA treasurer-administered accounts — to leverage existing social trust and reduce individual onboarding barriers. • Route agricultural produce payments directly to the selling farmer's registered mobile wallet at the point of aggregation, enabling immediate conversion to layaway credit and closing the produce interception gap that currently prevents women from controlling income from their own crops.

Sources: Company interviews and FGDs

Summary and key recommendations (3/4)

Area	Observation	Recommendation
Digital Tools and Literacy	• Estimated 88-90% functional illiteracy among FGD participants (only 6 of approximately 20 women completed Primary level 7; only 2 can read and write). • SMS messages and text-based digital tools are largely ignored — most women see no value in messages they cannot read. • Village agents currently function as a human intermediary for digital information, verbally relaying messages to VSLA members. • Phone-based consultation with agents demonstrates farmer willingness to engage digitally when the interface is voice-based and the conversation is with a known community member.	• Voice-based IVR in local language (Luo/Acholi) is the minimum viable digital interface for this population. All product communication features should be designed for voice delivery first. • Leverage radio— it remains the most accessible mass. communication channel.
SIM Registration & Digital Identity	• Women disproportionately lack SIM cards registered in their own names, primarily due to absent National IDs, creating a legal barrier to mobile financial service access. • Many cannot register due to biometric fingerprint capture failure, a documented exclusion mechanism that disproportionately affects women doing manual agricultural labour.	• Where possible, liaise with Mobile Network operators to conduct village proximate clinics to support capture of multiple fingerprints.

Sources: Company interviews and FGDs

Summary and key recommendations (4/4)

Area	Observation	Recommendation
Seed Access and Input Supply	• Quality seed is the most valued Agro Supply product without exception. • The yield differential is quantified at 4-6 bags of maize with recycled seed vs 8-10 bags with hybrid seed — hybrid seed nearly doubles yield. However, farmer mindset still leans towards recycled seeds. • Fertiliser affordability is a barrier. Few farmers using organic fertiliser (e.g., sheep droppings); insufficient budget to cover all gardens. • Better sunflower varieties for the first planting season are explicitly requested across multiple sites.	• Expand variety range to include first-season sunflower varieties as a near-term product priority. • Explore a fertiliser-specific input credit or layaway sub-product to address the affordability barrier.

Sources: Company interviews and FGDs

Summary & Key recommendations (same as in executive summary)

Area	Observation	Recommendation
Village Agent Network	• Commission-based agents handle farmer onboarding, input distribution, and training. • At marketing time, male partners or relatives take women's produce to the agent and receive the cash, even when the registered farmer is a woman — breaking the link between female registration and female financial benefit. • Seed delivery delays are a key pain point during peak season and frustrate time-sensitive planting decisions.	• Pilot direct wallet payment to the registered farmer: at the point of produce delivery, transfer payment to the registered account holder's mobile wallet rather than handing cash to whoever transports the produce. • Improve peak-season delivery: pre-positioning agents with pre-purchased stock before planting windows open would eliminate the most common delay cause. Tie this to the input credit facility for qualifying agents. • Expand the <10% agent input credit ceiling selectively — agents with strong repayment histories and high-density farmer catchments are underserved by the current threshold.
Produce Aggregation & Market Access	• Agents advance-purchase from farmers at above-market prices and retain the margin. • Agro Supply's purchasing calendar is not aligned with farmers' peak selling windows, forcing below-market distress sales to informal buyers when cash pressure is acute (school fees, loan repayments). • Multiple loan obligations with produce-repayment terms further compress selling prices at harvest — farmers lose both to timing and to debt pressure simultaneously	• Early communication of seasonal offtake schedule at the start of each planting season: even an approximate schedule communicated through village agents reduces the uncertainty that forces distress sales. Farmers who know when Agro Supply will buy can plan around it.

Summary & Key recommendations (same as in executive summary)

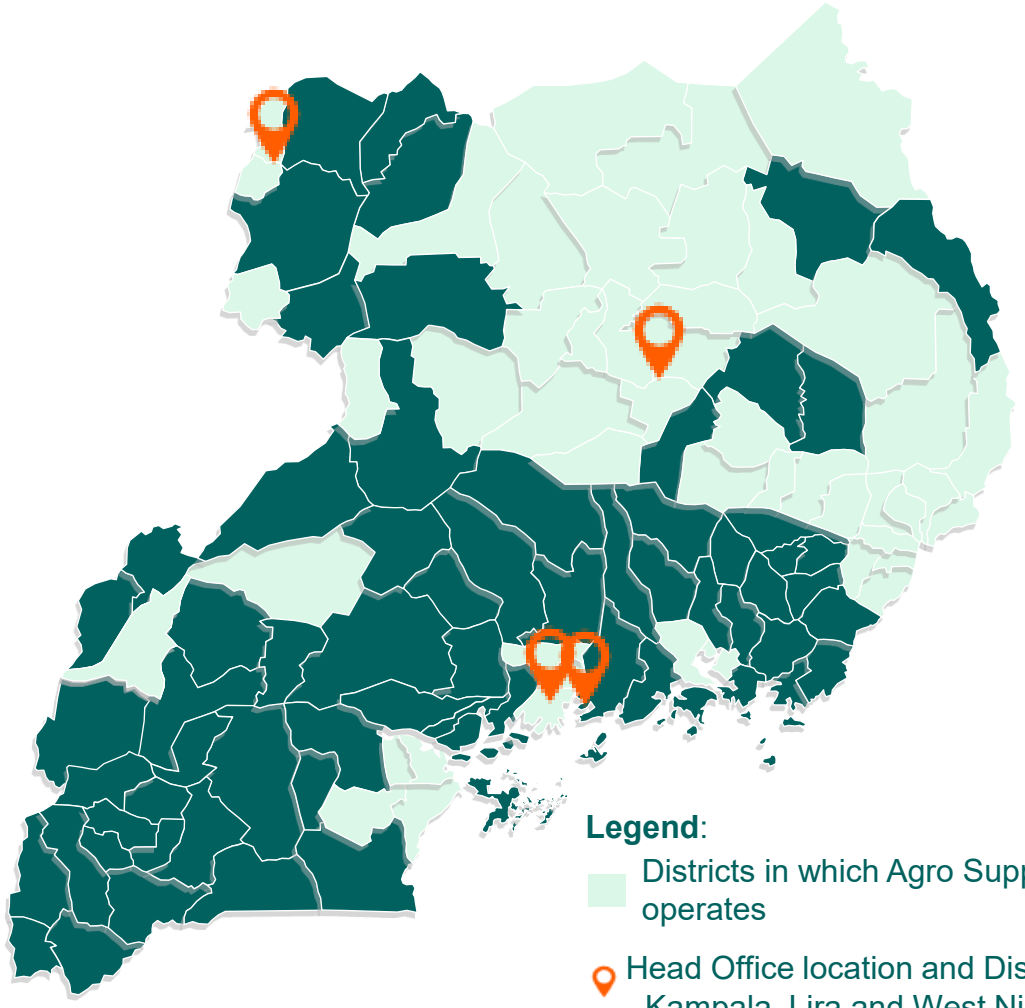
Area	Observation	Recommendation
Save to Buy (Layaway)	• Farmers save in instalments via mobile to purchase quality seed without taking on debt — addressing the cash-constraint barrier at the point of input purchase. • A service margin (paid by farmer) covers the layaway service; Agro Supply receives revenue post-agent commission. • Enrolled farmers receive SMS updates on services and pricing; a toll-free line links farmers to agents for prices and seed access. • USSD registration (farm size, gender, age) is conducted by village agents, but data is entered manually in Kampala — creating a lag and data integrity risk.	• Digitise USSD data entry at field level: manual-to-digital transcription in Kampala creates unnecessary delay and error risk. Equip field officers with a real-time sync application on their mobile phones. • Support onboarding for voice-first delivery: replace USSD/SMS interfaces with agent-assisted voice enrolment in local language (Luo/Acholi). Literacy is the primary adoption barrier, not technology access.

Sources: Company interviews and FGDs

2

Business model

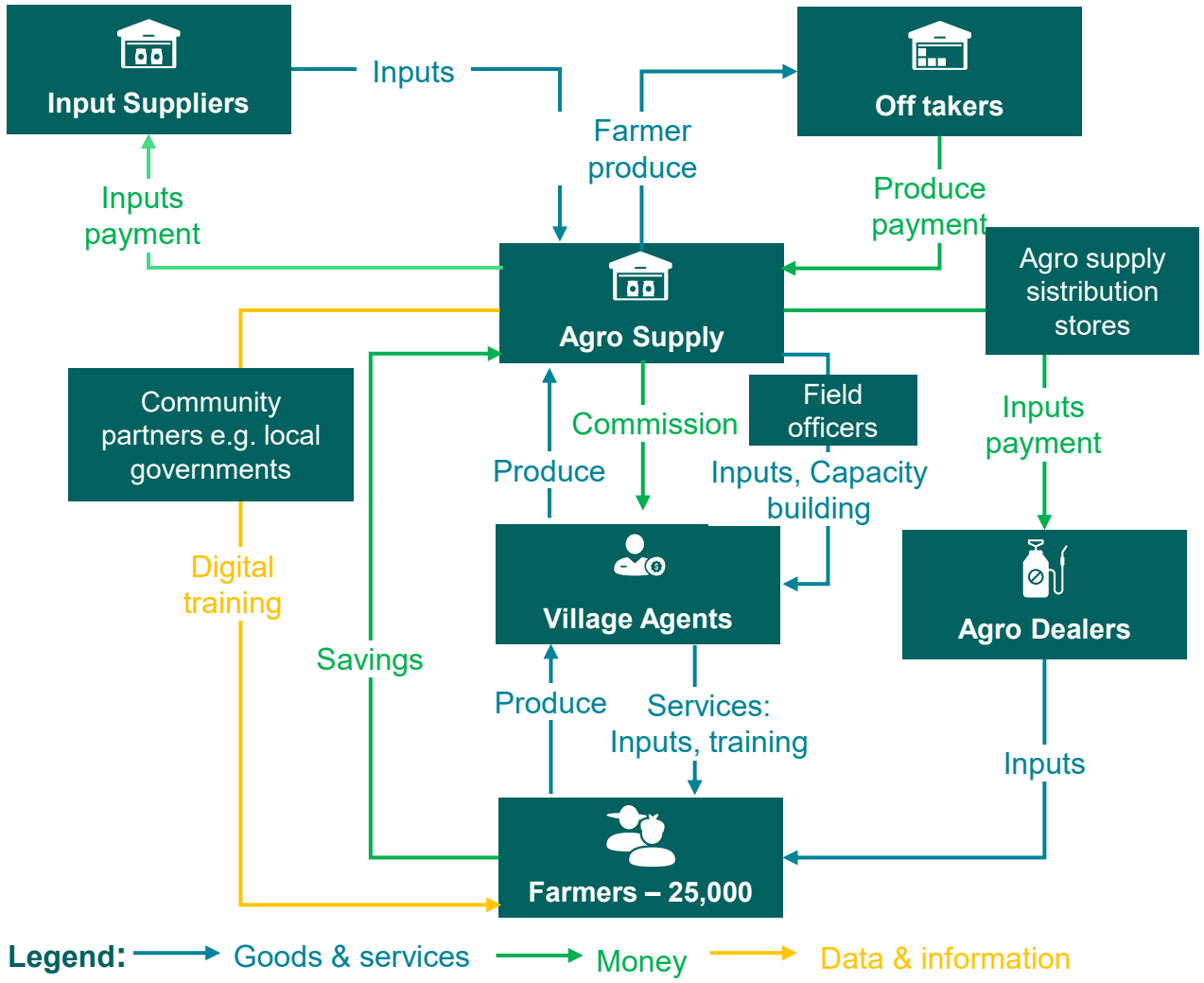
Location | Agro Supply operates across 41 Ugandan districts, with a strong Northern hub and a decentralised last-mile model reaching 35,000 farmers



- Agro Supply operates in 41 (of 146) districts in Uganda.
- The company serves ~35,000 SHFs (45% women) via a network of 297 trained village agents (22% women) who serve as a critical link for farmer training, farm input distribution, and the sale of surplus produce.
- Although Agro Supply operates across multiple regions in Uganda, the company maintains a strong presence in the Northern region, which serves as its operational hub.
- Northern and Eastern Uganda have large populations of low-income, rain-fed farmers who face significant gaps in access to agricultural inputs and financing.
- Agro Supply operates a decentralised last-mile model to reach farmers in rural districts through 4 local distribution points across the country: Lira, Kampala, Container Village in outer Kampala, and West Nile.

Source: ABERA interviews

Business model overview | A commission-based agent network links suppliers, dealers and farmers, with Agro Supply coordinating inputs, produce aggregation and financial services



Source: ABERA interviews

- Village Agents operate independently and set their own commission up to a ceiling provided by Agro Supply. Agro Supply receives revenue from agents post-commission. Field officers supervise agent mark-ups and maintain a sales price database.
- Agro Supply works with 100+ agro dealers alongside the village agent network.
- Grain is stored at Agro Supply's warehouse or with village agents. Agents advance-purchase from farmers at above-market prices set by Agro Supply, retaining the margin.
- Free delivery of inputs is available directly to farmers within 100km of Lira and Gulu, depending on minimum order and peak season.
- Input credit available to <10% of qualifying agents based on sales volume or cooperative guarantee. The terms are 30-day repayment at zero interest.
- Village agents collaborate with community partners, including district local governments and the PDM (Parish Development Model) platform (approximately 2,000 partners in Lira), to sensitize on good farming practices.

Farmer relationships | From outreach to data collection, Agro Supply manages farmer relationships through a structured agent-led model

Outreach

- Village Agents identify and onboard farmers across Uganda.
- Farmers enrolled in Agro Supply's layaway input system receive regular SMS updates on the company's services and offerings.
- Toll free line based in Kampala for customers. Main topics are prices, access to seed, and links to agents.

Selection

- *Village agent*
  - Selected by Agro Supply team based on level of influence in the community
  - Agents can also select, recruit, and vet other agents
- *Farmers*
  - Acquired through agents, cooperatives, or toll-free contacts

Contracting

- Field agents oversee that contracts between Agro Supply and farmers are enforced
- For seeds, Agro Supply holds 20% of their sales to make sure all the input delivery are made – this is not mandatory.

Segmentation

- No segmentation as farmers change their value chains too often.
- Large scale farmers can get a wholesale price.
- Delivery to large scale farmers is direct to their location. Delivery to smallholder farmers is to their agents, which takes a further 1-2 days.
- Key pain point is delivery delays: This typically occurs when agents have not yet purchased inputs from Agro Supply or when agents lack the transport capacity to deliver large volumes in a single trip, requiring staged deliveries.

Data collection

- Use USSD to register client, collecting farm size, gender, age, etc.
- Village agent manually collects information from every sale (e.g., name, age, land size) and then it is digitally entered in the system in Kampala.

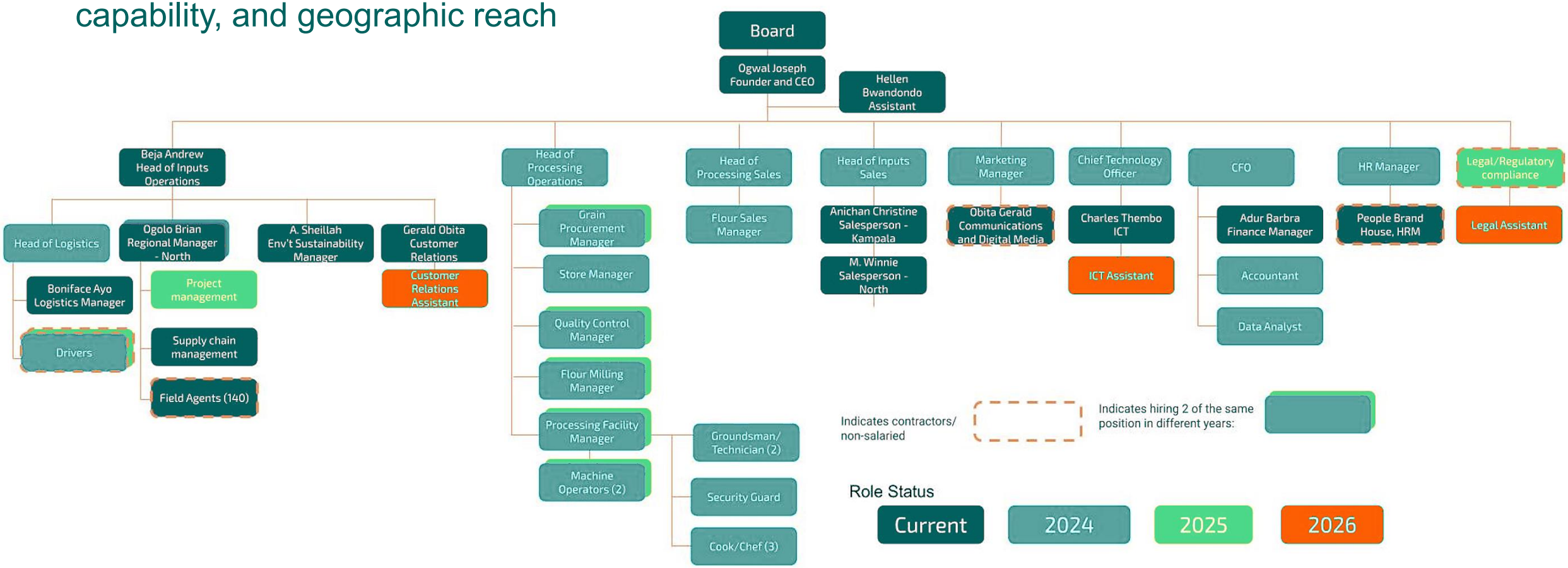
Source: ABERA interviews

Services | Agro Supply offers an integrated bundle of training, inputs, financial services and market access, all delivered through its agent network

Category	Service	Expected service impact	Service provider	Status
Training and information	Digital and on-farm GAP training	• Increase farm productivity • Reduce post-harvest losses	Agro Supply via its digital system and Village agents network	Ongoing since 2017
Inputs	Drought-resistant seeds and fertiliser	• Reduced loss from crop failure • Increased farm productivity	Agro Supply via its last-mile delivery model (village agents and agro dealers)	Ongoing since 2017
Financial services	Layaway savings	• Access to investment capital • HH income resilience	Agro Supply via a mobile platform	Ongoing since 2017
	Yield-indexed crop insurance	• Reduced risk of total (farm income) loss	Pula and Oko	Piloted in 2024 and 2025
Post-harvest services	Aggregation	• Reduced post-harvest losses • Better pricing for produce	Agro Supply via its Village Agents	Ongoing since 2025
Market access	Facilitate access to dependable, fair markets for surplus produce	• Timely access to ready markets and better pricing	Agro Supply via its Village Agents	Ongoing since 2025

Source: ABERA interviews

Organizational structure | A founder-led, vertically integrated operation built on 140 field agents, with the 2024-2026 hiring roadmap signalling deliberate scaling of processing, digital capability, and geographic reach



- **Gender composition:** Women hold roles in finance (Finance Manager), sales, sustainability and executive assistance. All operational leadership functions – Inputs Operations, Processing, Logistics, and ICT – are male–led. Company-wide 60% of staff are female, but women's concentration in support and sales roles rather than operational management limits their influence over the service delivery decisions that most impact women farmers.

Source: Agro Supply

Climate risk scan | Three compounding climate risks with no insurance buffer: AgroSupply farmers face consecutive season losses that erode both household resilience and input investment capacity

The Lango sub-region of Northern Uganda (Lira, Alebtong, Kwania districts) faces compounding climate risks driven by intra-seasonal drought, seasonal flooding from the Lake Kyoga basin, and growing fall armyworm pressure. These risks directly undermine yield, input investment, and the layaway savings cycle that underpins AgroSupply's business model.

	Armyworm and new weed species	Flooding	Droughts
	Fall armyworm and invasive weed species proliferating under erratic, warmer rainfall conditions across Lango farmland	*Seasonal flooding from the Lake Kyoga basin lasting 2–3 months, causing complete crop loss on wetland-adjacent farms*	*Intra-seasonal dry spells during the rainy season, with delayed rainfall onset and prolonged mid-season breaks*
	Very high risk	**High risk**	**High risk**
Climate projections	Fall armyworm (*Spodoptera frugiperda*), established in Northern Uganda since 2016, is now an annual threat in Lango Subregion. Pest pressure intensifies with warmer nighttime temperatures and erratic rainfall that disrupts natural predator cycles. Striga weed is an emerging additional constraint.	Lake Kyoga and Nile basin drainage systems generate seasonal flooding across Lira and Alebtong lowlands. Northern Uganda rainfall is projected to intensify in variability, with more extreme wet periods. Road flooding impairs access to markets and agents at critical harvest and planting moments.	The region will see a large increase in the frequency and severity of droughts[1,2,5]. Additionally, the Rwenzori glaciers are projected to disappear by 2040, which can have severe impacts on the water availability in the region[3].
Farm vulnerability	Armyworm managed with commercial pesticides (benzomax), adding significant costs to already stressed households. Multiple loan obligations force trade-offs between pest management and debt servicing, leaving some farms unprotected during peak infestation windows	Farmers face complete investment loss from seasonal flooding. Wetland-adjacent maize destroyed at flowering stage. Road flooding disrupts Agro Supply agent access, input delivery, and produce offtake at critical seasonal moments.	Maize and sunflower yields severely impacted by dry spells. Consecutive poor seasons force livestock asset liquidation, eroding household financial resilience.

** Field data from four FGDs conducted in Lira, Alebtong, and Kwania districts, April 2026.*

3

Business Case

This section has been excluded from the public version of the report due to business sensitivity

4

Impact Case

Farmer segments | Farmers purchasing inputs from Agro Supply have access to bundled services designed to enhance productivity, improve farm management, and unlock better returns

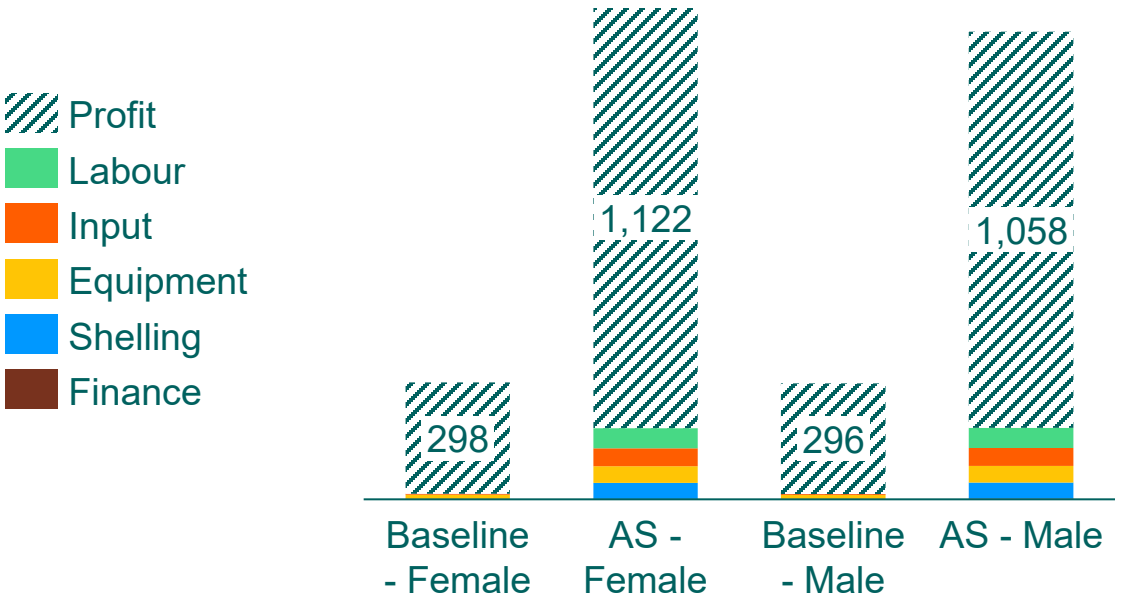

Characteristics	Female		Male	
	Baseline	Agro Supply	Baseline	Agro Supply
Farm size	1 Acre	2 Acres	1.5 Acres	2 Acres
Current yield (Maize / Sunflower)	1.5 / 0.3 MT/Acre	1.5 / 0.5 MT/Acre	1.5 / 0.3 MT/Acre	1.5 / 0.5 MT/Acre
Maximum yield (Maize / Sunflower)	1.5 / 0.5 MT/Acre	4 / 0.9 MT/Acre	1.5 / 0.5 MT/Acre	4 / 0.9 MT/Acre
Post-harvest losses (Maize / Sunflower)	20% / 20%	10% / 10%	25% / 15%	15% /12%
Farm-gate price (Maize / Sunflower)	0.27 / 0.32 USD/kg	0.32 / 0.32 USD/kg	0.27 / 0.32 USD/kg	0.32 / 0.32 USD/kg
Services from Agro Supply				
Training	N/A	GAP	N/A	GAP
Inputs	N/A	Seeds	N/A	Seeds
Market Access	N/A	Grains	N/A	Grains

- Baseline farmers currently do not receive any services or support from Agro Supply. As a result, they do not view farming as a business enterprise and are therefore less inclined to adopt Good Agricultural Practices (GAP).
- Uganda has two main crop growing seasons each year. Farmers engaged with Agro Supply typically cultivate maize in one season and sunflower in the other[1]. Maize contributes 79% of the farmers' total annual revenue[2].
- Farmers who purchase inputs from Agro Supply are registered in the company's database. These farmers receive crop-related information and advisory support three times during each crop season as part of farmer training.

Sources: [1]Agro Supply currently facilitates market access for farmer produce and will commence grain aggregation and value addition from 2027, [2]IBA Analysis

Profitability per acre | Profits earned by female and male farmers engaged with Agro Supply are 277% and 258% higher, respectively, than those of their corresponding baseline farmers

Annual cost of production and profit – Year 5 (USD/acre)

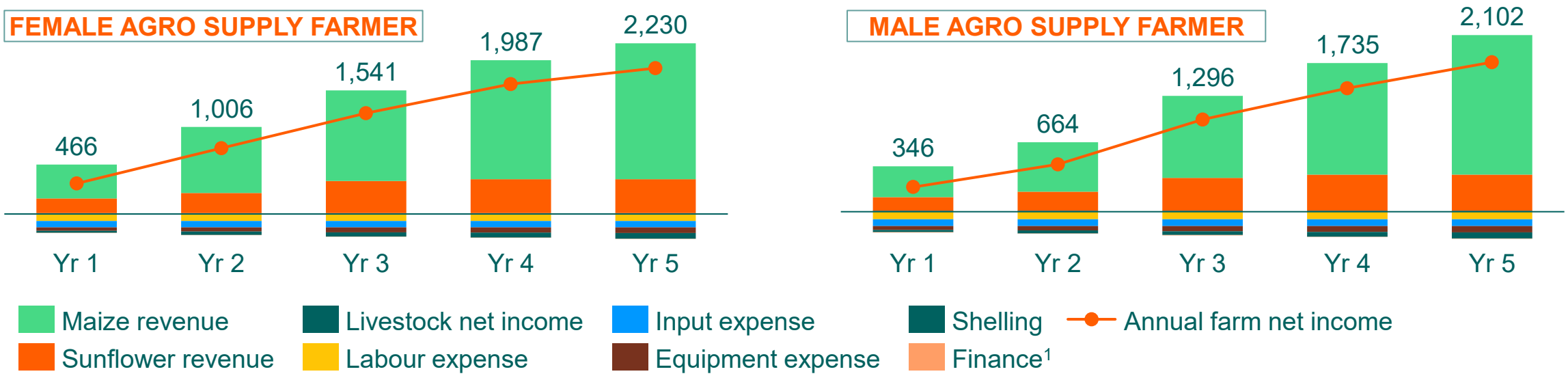


	Baseline - Female	AS - Female	Baseline - Male	AS - Male
Revenue (USD/Acre)	313	1,312	310	1,248
Production costs (USD/Acre)	15	190	14	191

- Farmers engaged with Agro Supply incur higher production costs due to their investment in high-yielding inputs and the use of hired labour for farm operations. In contrast, baseline farmers often recycle seeds, which contributes to declining maize yields.
- While the upfront investment in quality inputs and adoption of Good Agricultural Practices (GAP) increases production costs, it is justified by the resulting improvements in productivity and overall farm output.
- Agro Supply's layaway model enables farmers to gradually save toward seed inputs, making input purchases more affordable and reducing financial pressure.
- Farmers draw on microloans (10% annual interest) to meet household financial needs. Male farmers engaged with Agro Supply tend to access larger loan amounts (c.$80/year) compared to their female counterparts (c.$53/year), reflecting their higher risk tolerance. Female farmers, on the other hand, tend to be more cautious in borrowing decisions due to concerns around over-indebtedness.

Farm P&L | Farmers continue to realise steady positive gains, highlighting the positive impact of Agro Supply on farmer returns

Profit and loss for a five-year period (USD/Year)

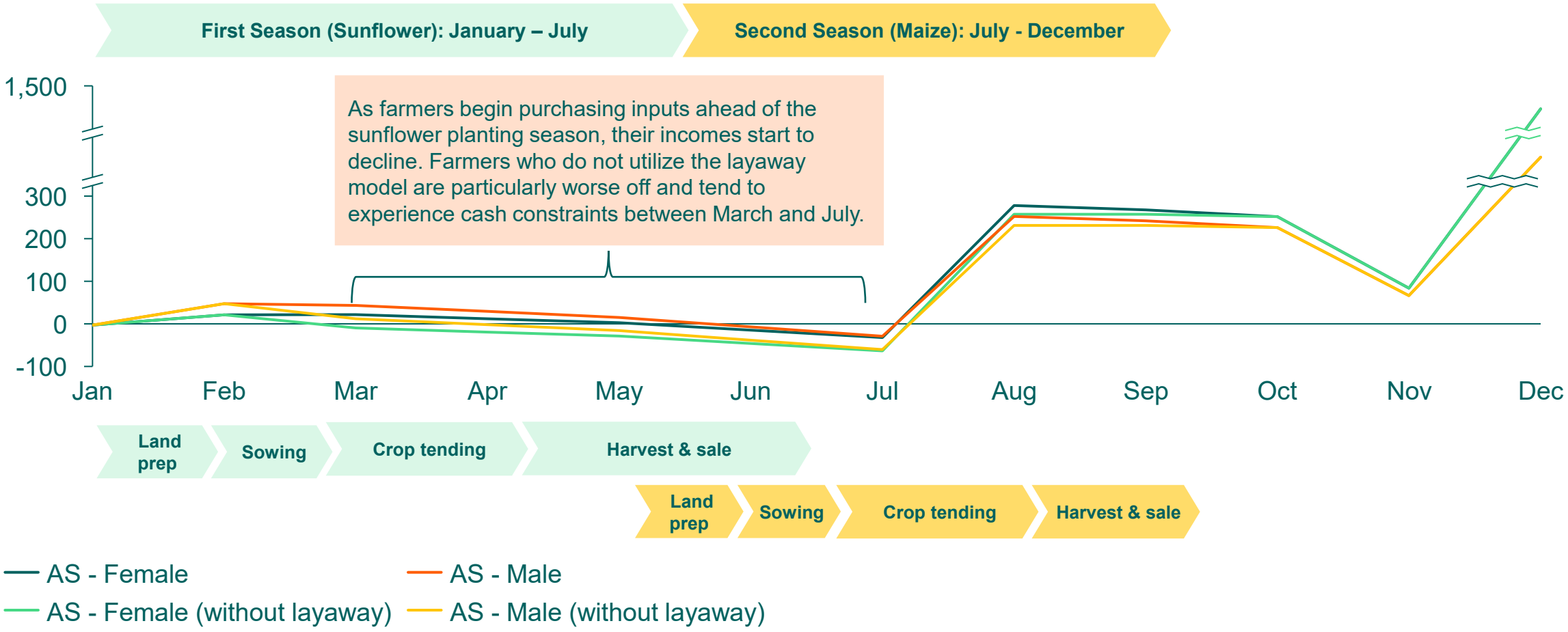


- Between Year 1 and Year 5, farmer yields increase by 2.5 MT/acre for maize and 0.4 MT/acre for sunflower.
- Average production costs remain low at US$0.05/kg for maize and US$0.06/kg for sunflower, indicating efficient production despite farmers' increased investment in high-quality inputs and GAP.
- Female farmers outperform male farmers, mainly due to slightly lower post-harvest losses, driven by closer adherence to and more consistent adoption of GAP, which results in improved crop handling and post-harvest management.
- Labour and input costs remain relatively stable, accounting for approximately 60% of total farmer production costs.

[1]*Finance-related costs refer to interest charges incurred on consumption loans accessed by farmers.*

Monthly cash flow | Layaway model cushions farmers against seasonal cash constraints during input purchase periods

Average monthly cash flow (USD)



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Thanks

IDH would like to express its sincere thanks to Agro Supply Limited for their openness and willingness to partner through this study. By providing insight into their model and critical feedback on our approach, Agro Supply Limited 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

Underlying data & information

Company assumptions

Farmer numbers	Unit	% of women	2026	2027	2028	2029	2030
Maize	# of farmers	41%	17,383	19,383	20,883	23,883	28,883
Sunflower	# of farmers	14%	1,645	3,145	3,645	4,645	5,645
Sorghum	# of farmers	0%	500	700	1,000	1,200	1,500
Soybean	# of farmers	0%	50	200	700	1,200	1,700
TOTAL	**# of farmers**		**19,578**	**23,428**	**26,228**	**30,928**	**37,728**
Input sales							
Maize seeds	MT		X	X	X	X	X
Sunflower seeds	MT		X	X	X	X	X
Sorghum seeds	MT		X	X	X	X	X
Soybean seeds	MT		X	X	X	X	X
TOTAL	**MT**		**X**	**X**	**X**	**X**	**X**
Sourcing							
Maize	MT		X	X	X	X	X
Soybean	MT		X	X	X	X	X
Sorghum	MT		X	X	X	X	X
TOTAL	**MT**		**X**	**X**	**X**	**X**	**X**

Source: IBA

Farmer assumptions

Variable	Unit	Female		Male	
		Baseline female	Agro Supply	Baseline	Agro Supply
Farm size main crop	Acres	1.0	2.0	1.5	2.0
Maize					
Max yield	MT/Acre	1.5	4.0	1.5	4.0
Post harvest losses (min possible)	%	20%	10%	25%	15%
Home consumption	%	20%	10%	20%	10%
Proportion sold to Agro Supply	%	0%	100%	0%	100%
Farm-gate price	USD/MT	$ X	$ X	$ X	$ X
Production cost/MT (5-year average)	USD/MT	$ 8.82	$ 48.10	$ 8.43	$ 51.59
Sunflower					
Max yield	MT/Acre	0.5	0.9	0.5	0.9
Post harvest losses (min possible)	%	20%	10%	15%	12%
Home consumption	Kg	0	0	0	0
Proportion sold to Agro Supply	%	0%	0%	0%	0%
Farm-gate price	USD/MT	$ X	$ X	$ X	$ X
Production cost/MT (5-year average)	USD/acre	$ 10.69	$ 57.45	$ 10.69	$ 57.45

Source: IBA