ACELI AFRICA

Produced in partnership with Dalberg

Profitability of Agricultural SME Lending in East Africa

Financial Benchmarking Report: January 2024

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Introduction and Executive Summary

Key Agri-SME Lending Trends

Impact of Aceli Incentives

Financial Benchmarking Report: January 2024

Introduction

Aceli Africa (“Aceli”) is a market incentive facility launched in September 2020 that seeks to build a thriving market where capital flows unlock the growth and impact potential of small and medium enterprises (SMEs) in the agriculture sector.

In 2018-19, Aceli and Dalberg Global Development Advisors (Dalberg) gathered data from 31 lenders on the loan-level and portfolio-level economics of 9.3k loans totaling $3.5 billion to agricultural SMEs. The data indicated that risk in agricultural SME lending is twice as high as in other sectors and that financial returns are significantly lower. These findings informed the design and launch of Aceli’s financial incentives for agricultural SME lending in Kenya, Rwanda, Tanzania, and Uganda.

Aceli offers lenders two types of financial incentives:

1) Portfolio first-loss cover (FLC) is a risk mitigation tool for Agri-SME loans of $15k-$1.75M with incentives accruing in a lender’s reserve account as it makes more loans and then available to cover losses across the lender’s portfolio of qualifying loans.
2) Origination incentive (OI) are cash payments to lenders to defray the high transaction costs for originating loans ranging from $15k-500k to agricultural SMEs.

Aceli, in collaboration with Dalberg, updates the financial benchmarking analysis annually. This helps in tracking Agri-SME lending trends and informs adjustments to Aceli’s incentives, ensuring they remain aligned with the evolving market.

This report focuses on the data collected in 2023, encompassing 20.3K agriculture loans valued at $1.17B disbursed between 2019 and 2022. The dataset is sourced from 35 lenders operating across Kenya, Uganda, Rwanda, and Tanzania. The report provides quantitative data on lending trends at both the loan and portfolio levels. It also includes analysis of the impact of Aceli’s incentives on lenders based on loans registered for incentives from September 2020 to December 2022. This report builds on financial benchmarking reports from 2020 and 2023.

Funding Partners

Aceli would like to thank our anchor donors for their partnership and support:

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The U.S. Government's Global Hunger & Food Security Initiative

IKEA Foundation

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Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development and Cooperation SDC

Ministry of Foreign Affairs of the Netherlands

UK International Development
Partnership | Progress | Prosperity

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Benchmarking Approach

The benchmarking exercise encompasses the following components:

- **Loan level analysis**: Examination of 20.3K loans with a focus on loan and borrower characteristics such as ticket sizes, borrower types and value chains. The loan-level data covers loans ranging from $10K to $2M issued between 2019 and 2022 in Kenya, Rwanda, Tanzania, and Uganda.

- **Portfolio level analysis**: Analysis of revenue drivers (fee and interest income), cost drivers (origination costs, lifetime service costs, expected credit losses and cost of funds), profitability trends, and growth trends. Portfolio level data is primarily split by country and/or lender type – i.e., commercial banks, non-banking financial institutions (NBFIs), and multi-country social lenders.

- **Lender interviews**: Conducting interviews with lenders to gain insights on trends identified through the data analysis and the impact of Aceli's incentives on lender behavior. Dalberg interviewed 24 lenders that have participated in the Aceli program for more than 12 months and 10 lenders that recently joined or are in the process of joining the Aceli program.

Aceli has developed a standardized methodology to segment Agri-SME loans by value chain and borrower type, and further estimate their profitability by analyzing interest rates, tenors, fees, origination and servicing costs, cost of capital, and expected credit losses. By using a standardized approach across all lenders that participated in the benchmarking study, we can develop a perspective on Agri-SME lending in East Africa and look for patterns and differences across the industry. Further details on the methodology are included in the **Appendix.**

Executive Summary: Lending Trends (2019 – 2022)

- The 2024 Financial Benchmarking Report presents an analysis of key Agri-SME lending trends in East Africa, **drawing insights from a dataset of 20.3K agriculture loans valued at $1.17B** disbursed between 2019 and 2022. **This data was sourced from 35 lenders**, including commercial banks, non-banking financial institutions (NBFIs), and multi-country social lenders operating across Kenya, Rwanda, Tanzania, and Uganda.

- **Agri-SME lending by these lenders has experienced remarkable growth, with the value of the loan book tripling between 2019 and 2022**, from $154M to $497M. Notably, Tanzania leads this growth trajectory, propelled by supportive central bank policies initiated in 2021.

- **Commercial banks make up 90% of the loans in the dataset and their lending is increasing** at an impressive compounded annual growth rate of 50% from 2019 to 2022.

- **Bank lending to agriculture has more than tripled in volume and doubled as a total share of their loan portfolios (from 2.0% in 2019 to 4.1% in 2022);** nevertheless, Agri-SME lending still constitutes a modest proportion of their overall lending.

- **Loans below $200K account for 94% of loans by number and 50% by value in 2022**. Notably, the $10K-$25K segment has experienced significant annualized growth of 60%, outpacing each of the larger loan size segments.

- **The focus on new borrowers is evident, with 20-35% of loans consistently allocated to this segment** annually across most countries and lender types, signaling steady and sustainable growth.

- **Informal value chains,** dominated by maize, rice and livestock**, hold the largest share in Kenya, Tanzania, and Uganda**. In contrast, **formal value chains** (e.g., coffee, tea, and horticulture) **have a larger presence in Rwanda**.

Executive Summary: Impact of Aceli's incentives (Sept 2020 – Dec 2022)

- Lenders continue to highlight **high risks and origination costs as primary impediments to Agri-SME lending**.
- **Origination Incentives (OI) are recognized as highly impactful, driving institutional change and increased portfolio growth** with the majority of lenders leveraging OI to subsidize origination costs such as field visits, build capacity of their agri teams, conduct value chain analyses, and/or and adapt their product offering.
- **First Loss Cover (FLC) is increasing risk appetite particularly for higher-volume lenders to reach underserved segments**. By contrast, some lower-volume lenders perceive FLC as only moderately impactful due to its cumulative nature and the limited coverage it provides at the individual loan level.
- **Aceli's incentives boost net margins for commercial banks, elevating net profits from 3.2% to 6.5%.** However, even with Aceli support, Agri-SME yields for banks are still well below returns from other sectors and low-risk investments like governments bonds.
- Non-banking financial institutions (NBFIs), typically grappling with high origination costs, lifetime service costs, and elevated cost of funds, face net losses on their Agri-SME portfolios before receiving Aceli's support. **Aceli's incentives play a crucial role in transforming NBFIs financial position, shifting from a loss of 1.6% to a profitable margin of 2.8%.**
- Social lenders, characterized by high origination and lifetime costs and high expected credit losses, also contend with net losses on their Agri-SME portfolios in East Africa before factoring in Aceli's support. **Aceli's incentives improve returns for social lenders from a net loss of 15% to losses of 11.7%.**

***Note**: The benchmarking report serves as a companion piece to Aceli's learning report (planned publication Q1 2024). While the benchmarking report delves into comprehensive Agri-SME lending trends and performance, the learning report focuses on insights derived from Aceli's incentives program.*

Recent changes to central bank policy in Tanzania have significantly affected lending practices by come eligible local banks

Insights

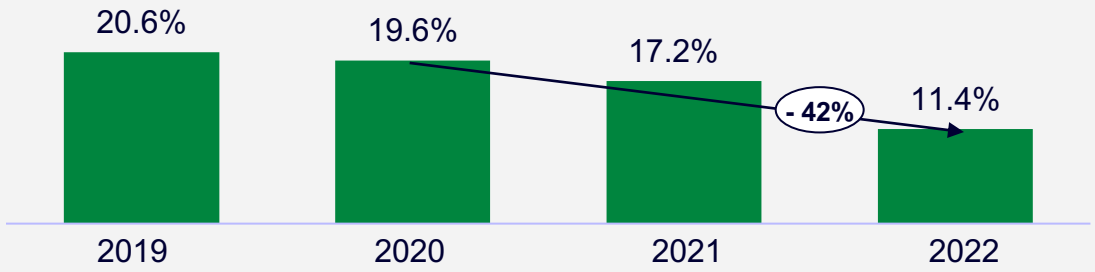
In 2021, the Tanzanian government made several policy changes to support the agriculture sector in the wak of Covid-19. These include, among others:

- **Established a TZS 1 trillion fund to be channeled through financial institutions for private-sector lending.** This fund carries an annual interest rate of 3%, and caps bank loan rates to the private sector at 10% p.a. This helps to improve bank liquidity and lower lending rates.
- **Reduced minimum reserve requirement for banks extending loans to the agriculture sector at lower than 10% per annum.** The aim was to decrease the cost of capital and make agricultural lending more appealing.
- **Increased the agri-budget from TZS 294B in 2021/22 to TZS 954B 2022/23.** This funding will support irrigation infrastructure, seed multiplication, and extension services.
- **Note:** The central bank policy changes have initially been targeted to a couple of large commercial banks.

*"**The changes supported, for the first time, consistent loans at 10% for farmers,** which increased appetite for borrowing. While not every bank got the funds, others have also followed government mandate for the sector with a renewed focus across banks"*
– Industry Expert, Tanzania

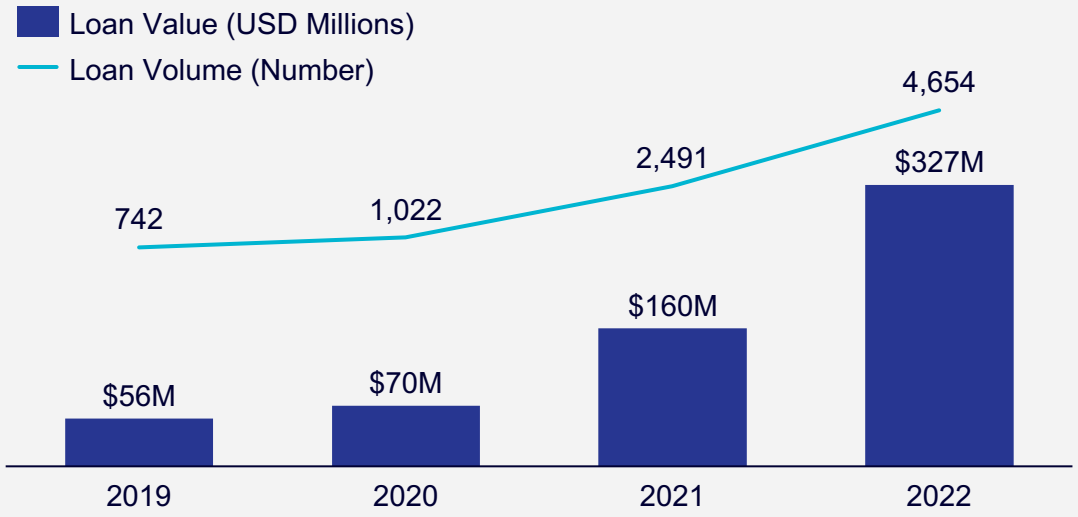
Local currency interest rates for Aceli lenders in Tanzania

Average annual interest rate, 2019-2022



Tanzania Loan Volume and Value

Volume and Value, 2019-2022



Sources: BoT, 2021; Dalberg analysis; Stakeholder interviews 2023; ITA, Tanzania Budget Analysis 2022/23, accessed 2023

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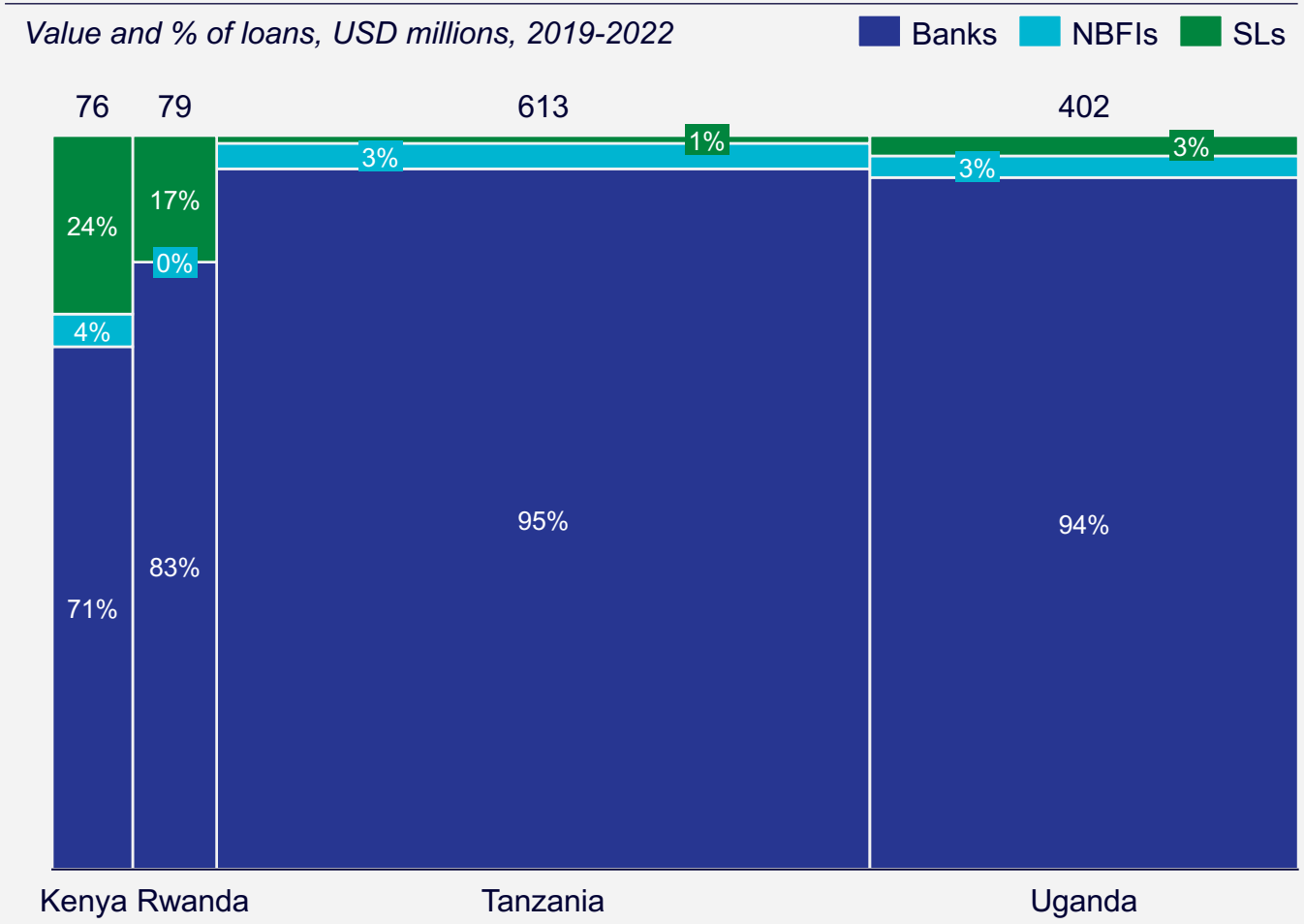
Data analyzed: The analysis consists of 20.3K loans from 35 lenders with a total value of ~USD 1.17B, issued from 2019 to 2022

Total loan value by country and lender type



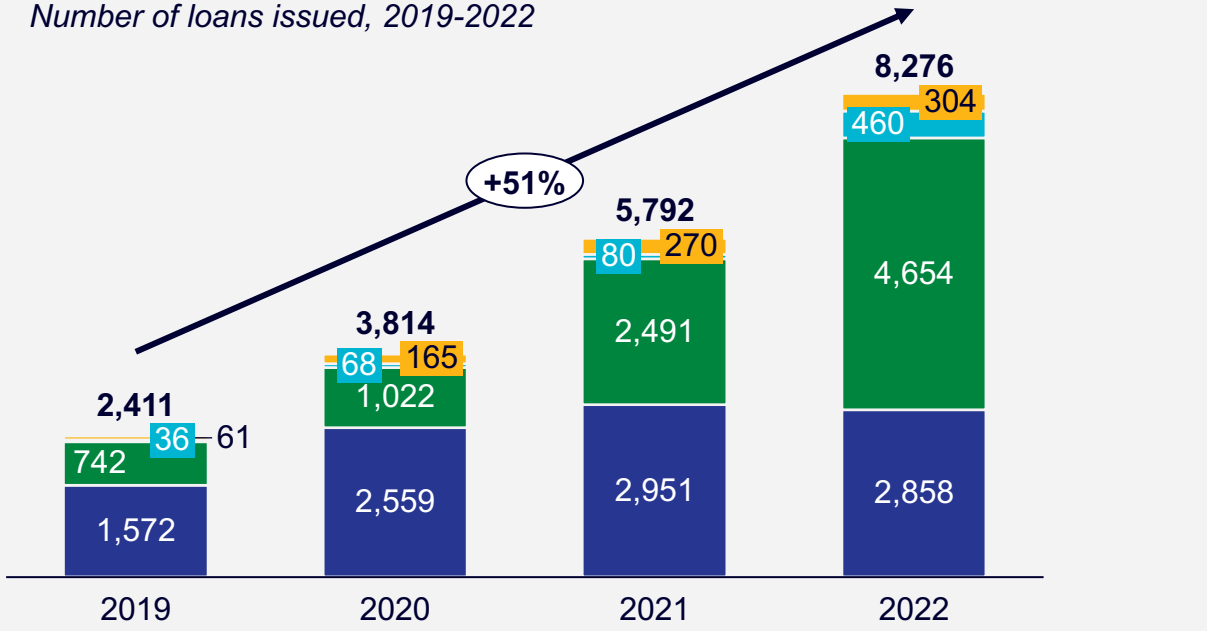
- The 2023 benchmarking data consists of 20.3K agriculture loans with a total value of $1.17B sourced from 35 lenders operating in Kenya, Rwanda, Tanzania, and Uganda.
- The analyzed data primarily comprises loans from Tanzania and Uganda where many high-volume lenders have actively participated in the Aceli program.
- Although there are fewer loans from Rwanda, its smaller market size is well represented by high-volume local lenders that have already joined the program.
- The Kenyan dataset lacks representation from high-volume lenders many of whom are still in the process of joining the program.
- In Q4 2023, Aceli launched operations in Zambia and data from this market is expected to be included in the next benchmarking cycle in 2024.

Sources: Dalberg analysis; Aceli 2023 benchmark data.

The value of the **Agri-SME lending book has more than tripled** between 2019 and 2022 for Aceli's lending partners, driven by growth in Tanzania

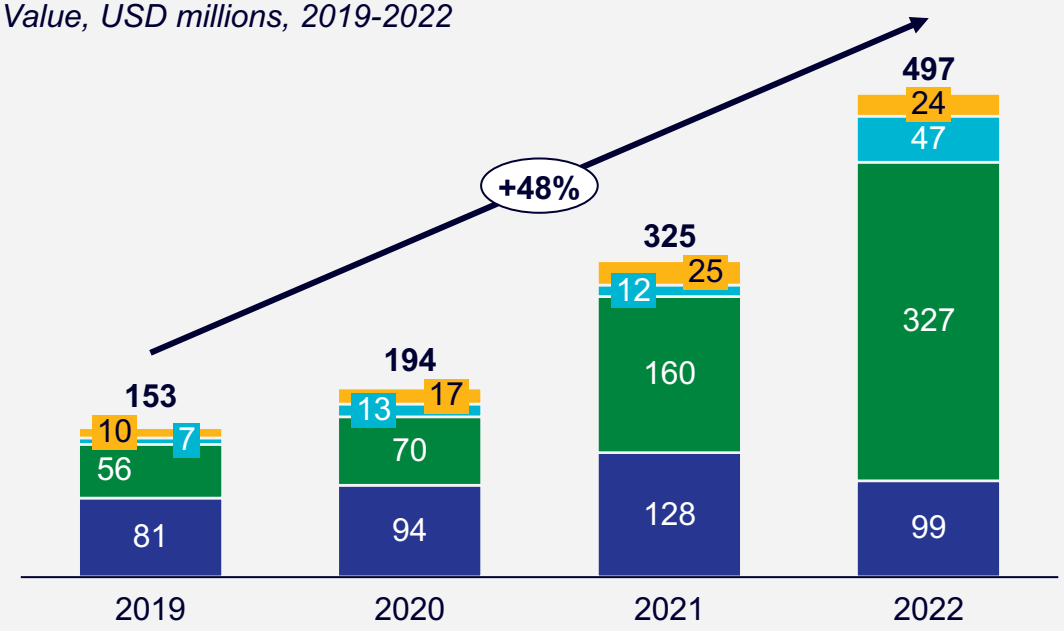
Loan volume by country Kenya Rwanda Tanzania Uganda

Number of loans issued, 2019-2022



Loan value by country

Value, USD millions, 2019-2022



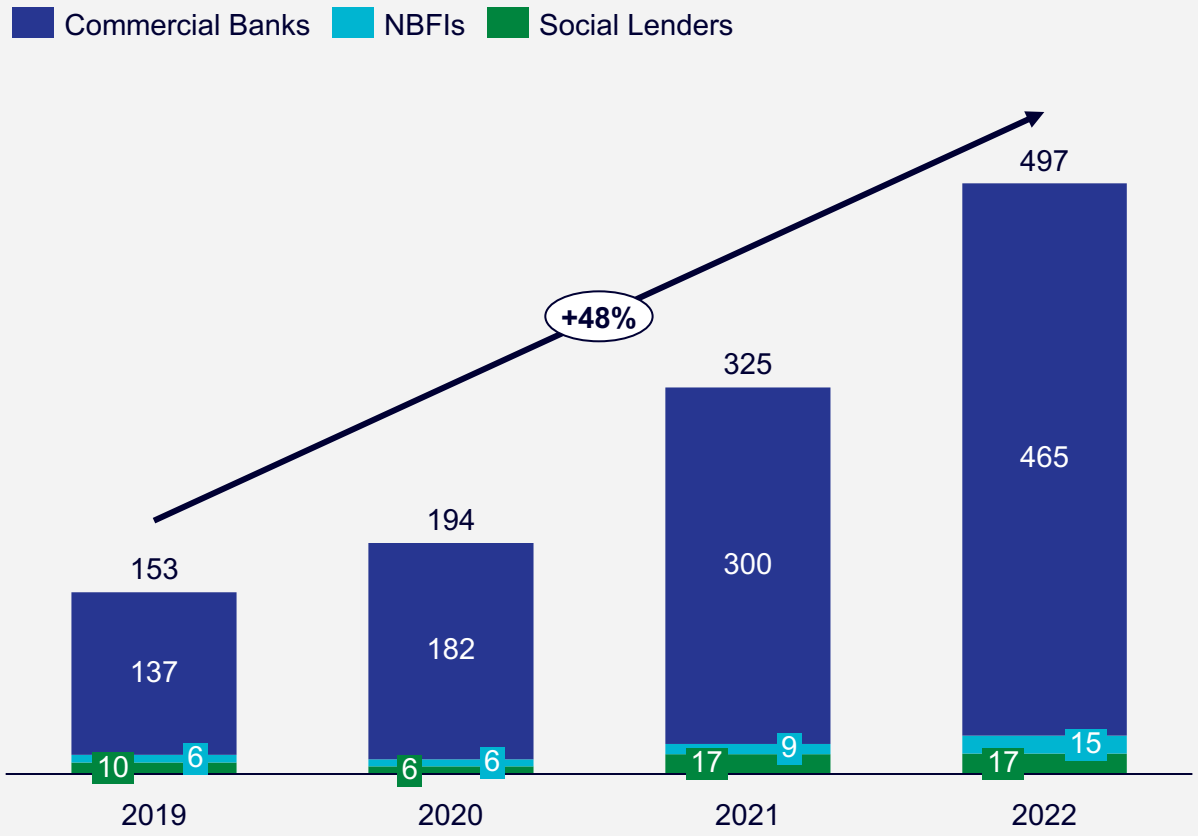
- Agri-SME lending experienced significant growth between 2019 and 2022 across all four countries, with the loan book tripling during this period.
- Tanzania exhibited the most substantial growth, particularly between 2021 and 2022. This surge in Tanzania is linked to the implementation of supportive central bank policies for agricultural lending initiated in 2021.
- Note: In Rwanda, the addition of data in 2022 from a high-volume lender that was not present in prior years means that the uptick in loan volume and value between 2021 and 2022 is not a like-for-like comparison

Sources: Dalberg analysis; Aceli 2023 benchmark data; Interviews with lenders and sector experts 2023; Bank of Tanzania, Public Notice, 2021.

Commercial Banks account for more than 90% of Agri-SME lending and are the key drivers of the growth in the overall market

Agri-SME lending volume by lender type

USD Millions and %, 2019-2022



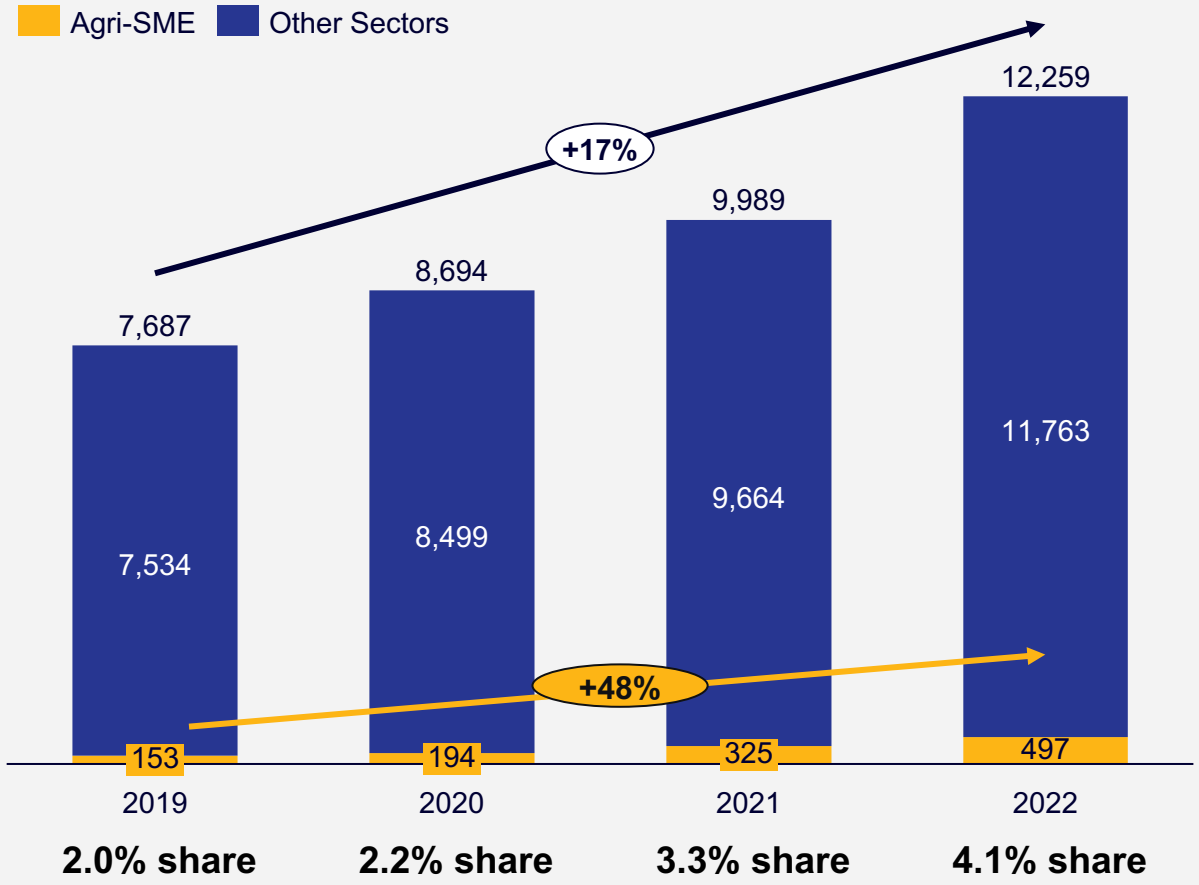
- Commercial Banks account for the more than 90% of the loan volume in this dataset.
- The value of commercial bank lending grown substantially since 2019 with a Compound Annual Growth Rate (CAGR) of 50%, primarily fueled by expansion in Tanzania.
- Although Non-Banking Financial Institutions (NBFIs) contribute to a smaller share of overall Agri-SME lending, they are growing at a significant CAGR of 36% from a combination of both new market entrants and incumbents increasing their portfolio allocation to agri-SMEs.
- Social Lenders, on the other hand, were most affected by Covid-19 (in part because of limited physical presence in the focus countries) and recorded more modest growth with a 19% CAGR.

Notes: Agri-SME lending refers to all agricultural loans that were between USD 10k and 2M USD
Sources: Dalberg analysis; Aceli Benchmark Data 2023

The Agri-SME share of overall bank lending has doubled, albeit from a low base

Agri-SME lending as a share of overall bank loan portfolio

USD Millions and %, 2019-2022



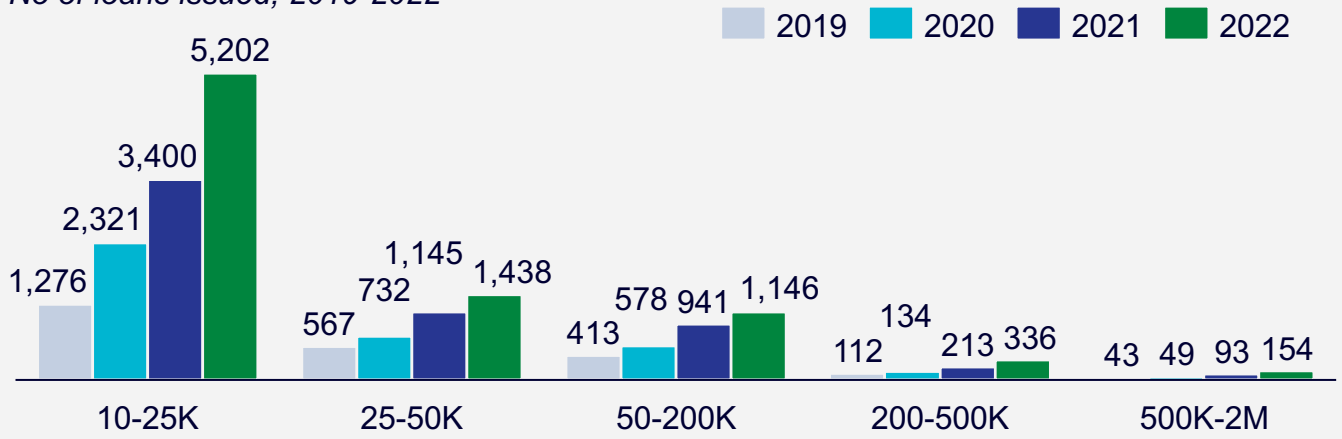
- The Agri-SME portfolio has expanded at a rate three times faster than the overall lending portfolio, resulting in a doubling of the Agri-SME share within the overall portfolio.
- This significant expansion in lending has led to a doubling of the Agri-SME share within the overall lending portfolio, reaching 4.1% by the end of 2022.
- For Commercial Banks, major contributors to Agri-SME lending, the sector's share of overall lending grew to 3.8%. This was an increase of 1.7% since 2019, reflecting significant growth amounting to $328M in loan value over the three-year period.

Notes: Agri-SME lending refers to all agricultural loans that were between USD 10k and 2M USD; Overall Portfolio refers to the entire lending portfolio of the lender
Sources: Dalberg analysis; Aceli Benchmark Data 2023

Loans below $200K lead in both volume and value with substantial growth over the past 3 years

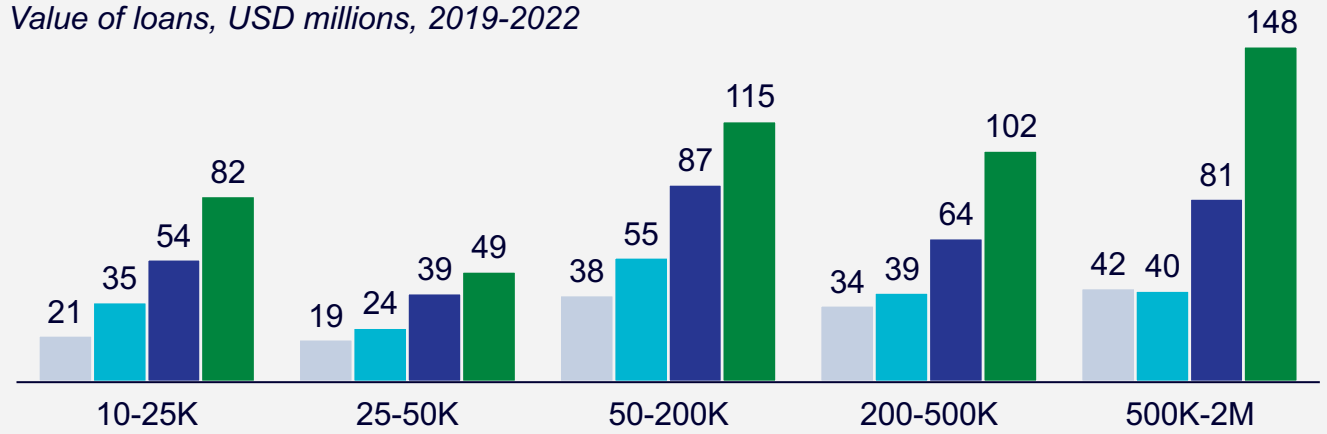
Total loans issued by ticket size

No of loans issued, 2019-2022



Value of loans issued by ticket size

Value of loans, USD millions, 2019-2022



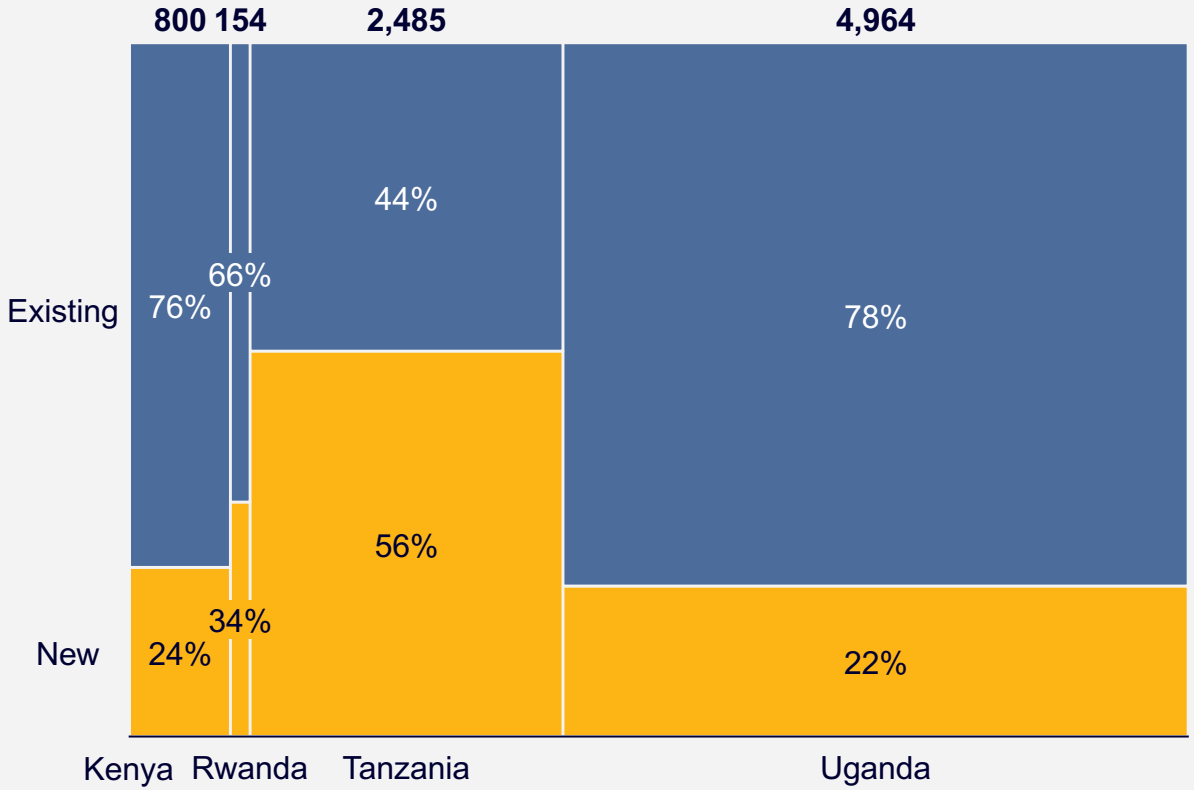
- In 2022, loans below $200K constituted the majority, making up 94% of lending volumes and 50% of loan value.
- All loan size categories demonstrated annualized growth rates exceeding 30% over the past 3 years. Particularly noteworthy is the $10K-$25K segment, which experienced remarkable growth with an annualized rate of 60%, significantly contributing to the overall increase in lending volumes.
- Although loans above $500K accounted for only 2% of lending volumes in 2022, they represented 30% of overall lending. This segment has also exhibited notable growth from 2019 to 2022.
- The largest growth in loan volume was observed in Tanzania. Across all the countries, every lending segment exhibited growth, except for loans exceeding $500K in Uganda, which experienced a decline from 2019 to 2022.

Sources: Dalberg analysis; Aceli 2023 benchmark data.

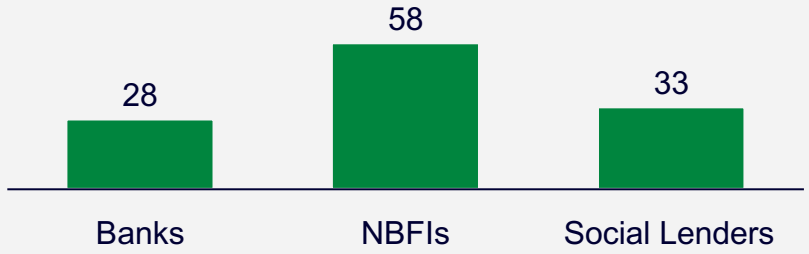
20–35% of loans are directed to new borrowers across most countries and lender types with notable outliers (Tanzania and NBFIs)

Total loans issued by lender type and borrower status

Number of loans issued and % to new vs. existing borrowers, 2019-2022



% of new borrowers by lender type across all countries, 2022



- In Kenya, Uganda, and Rwanda, 20-35% of loans are extended to new borrowers. Notably, in Tanzania, over 50% of loans are allocated to new borrowers, potentially influenced by supportive policies from the central bank described earlier in the report.
- In 2022, Commercial Banks and Social Lenders directed 25%-35% of loans to new borrowers. NBFIs, many of which are still in the initial phases and establishing their portfolios, allocated 58% of loans to new borrowers. As NBFIs continue to grow, their allocation to new borrowers is anticipated to stabilize at levels similar to banks and social lenders.
- The consistent allocation of 20-35% to new borrowers across various countries and lender types serves as an indicator of steady and sustainable growth.

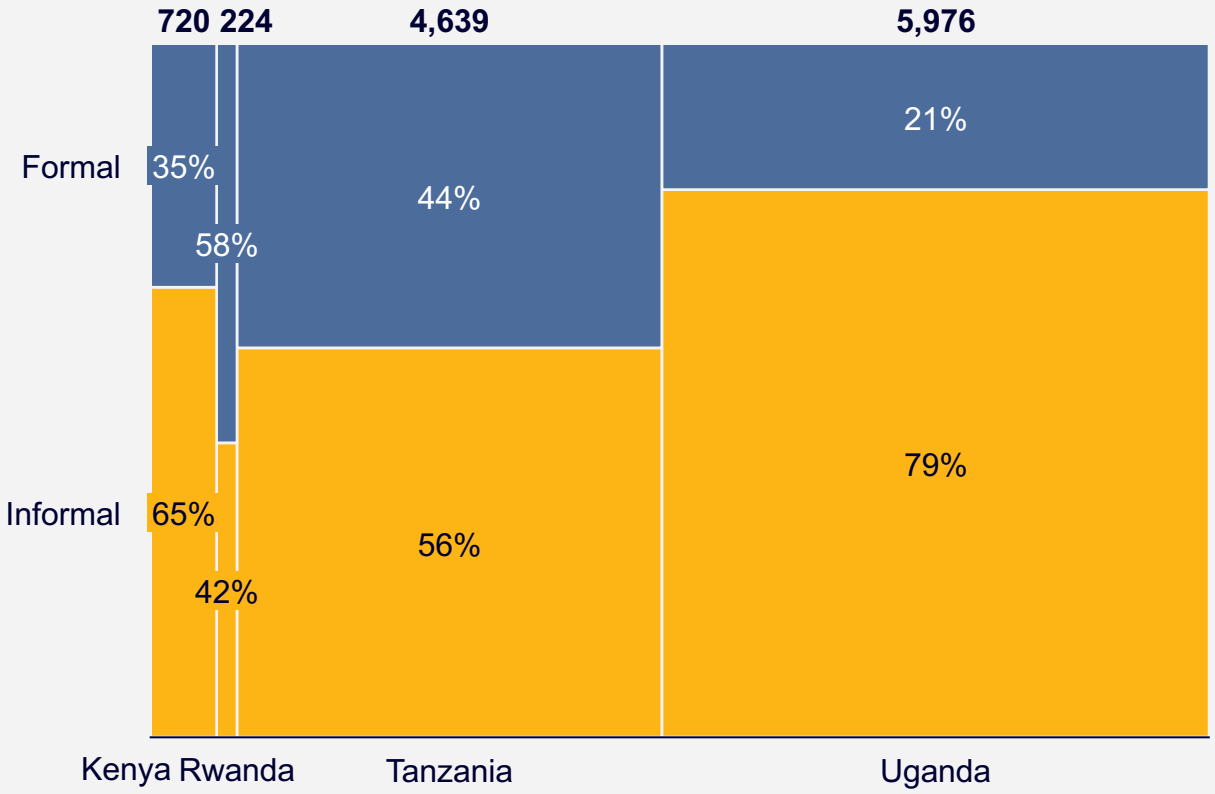
Note: 10,836 loans had missing data for new vs returning borrower status and are therefore excluded from the analysis. New borrowers were defined as those new to the lender, but not all were without credit history. This definition differs from the definition of a new borrower in Aceli's financial incentives (*i.e.,* one that has not received a loan of $15K from any source in the past three years).

Sources: Dalberg analysis; Aceli 2023 benchmark data.

Informal value chains predominate in Kenya, Uganda, and Tanzania, whereas in Rwanda, formal value chains take the majority share

Total loans issued by country and value chain

Number and % of loans issued, 2019-2022



- Aceli classifies value chains as either formal or informal based on a range of factors. Formal value chains generally have structured markets and lower exposure to risks e.g., non-perishable export crops like coffee.
- Informal value chains on the other hand are characterized by a higher risk exposure e.g., perishable food crops. A detailed value chain classification is included in the Appendix.
- In Kenya, Uganda, and Tanzania, the majority of loans are directed towards informal value chains, primarily comprising maize, rice, and livestock.
- In Rwanda, formal value chains take a larger share, propelled by growth in coffee, tea, and horticulture in recent years.
- Commercial banks mostly finance loans in informal value chains, while social lenders focus on formal value chains, such as coffee and tree nuts (primarily macadamia).
- Meanwhile, NBFIs strike a balance between formal and informal value chains, with a notable emphasis on equipment financing.

Note: 7,680 loans had missing value chain data or data that could not be classified into formal vs informal and are therefore excluded from the analysis.
Sources: Dalberg analysis; Aceli 2023 benchmark data.

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Summary of Aceli Financial incentives (1/2): Portfolio First-Loss Cover

Objective: increase lenders' risk appetite by absorbing incremental risk

Design:

- Applies to loans of **$25k-$1.75M**
- **2-9%** of each loan paid into **reserve account** (~5% avg)
- **Higher %** based on **risk** (new borrowers) & **impact bonuses** (climate & environment, food security & nutrition, gender inclusion, youth inclusion)
- **Reserve builds** up as loan volume increases
- Available to **cover any losses at portfolio level**
- **Complements** typical 50% loan guarantee offered by others

Summary of Aceli Financial incentives (2/2): Origination Incentives

Objective: defray transaction costs to motivate lending to smaller, underserved SMEs

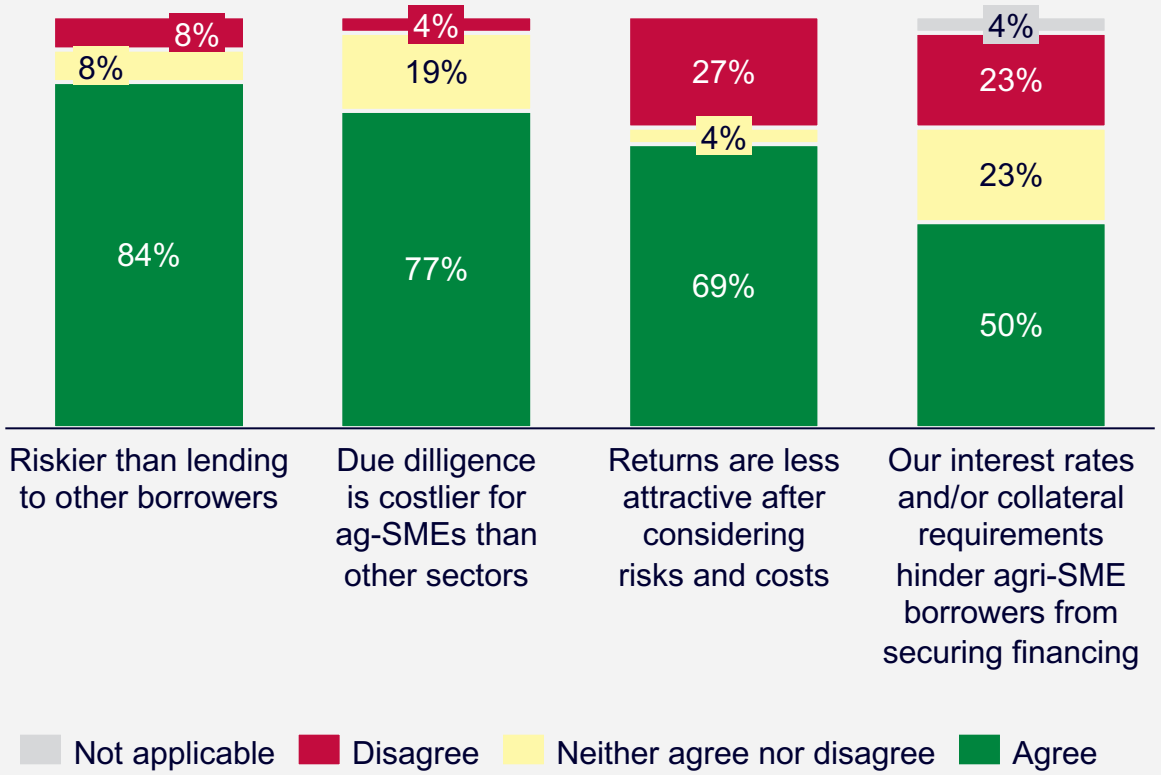
Design:

- Applies to loans of **$25k-500k**
- Payment of **2-14% of loan amount** depending on loan size, new v. returning borrower, and impact bonuses (same as previous slide)
- **Payments are unrestricted**, typically used for hiring new agri specialists, training staff, paying for field visits, conducting value chain analyses

Lenders continue to cite **higher risks and origination costs as barriers to lending to Agri-SMEs**; responses are more varied in other areas

Agri-SME Lending Experience

% of respondents, N = 24 existing lenders



- Lenders report that Agri-SME borrowers pose higher risks and entail higher origination costs than lenders in other sectors.
- Returns from lending to Agri-SMEs are generally perceived as less attractive.
- High collateral requirements and interest rates also remain a hindrance to access to finance for Agri-SME borrowers. While many lenders report that these challenges are more pronounced in the agriculture sector, several noted that they are also present in other SME sectors outside of agriculture.

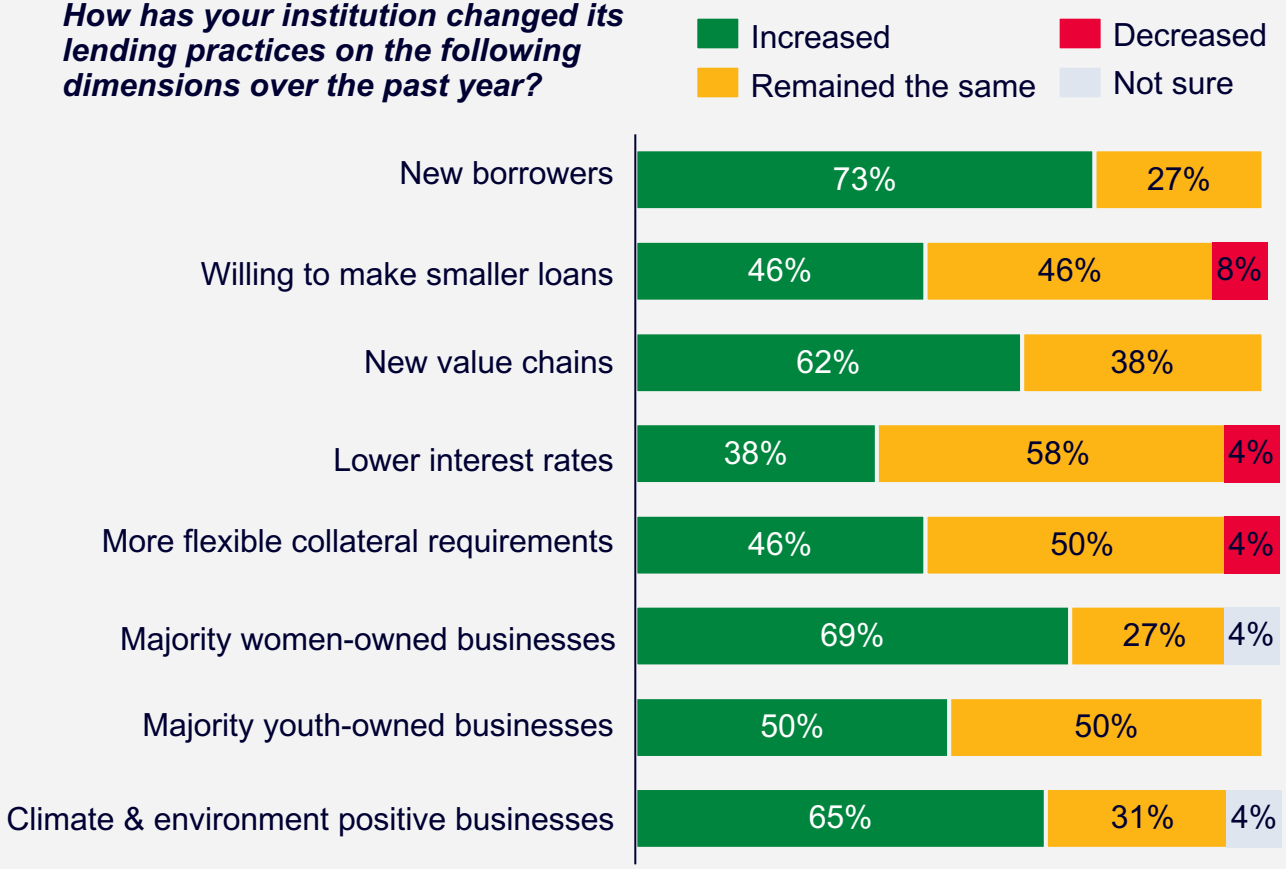
Note: Existing lenders refers to lenders that have joined Aceli's incentives program and have registered loans for incentives
Sources: Lenders surveys and interviews 2023; Dalberg analysis.

Effects of Aceli incentives: Lenders report a range of positive changes

Lenders' reported changes in strategy & practices

N = 24 lenders

How has your institution changed its lending practices on the following dimensions over the past year?



> *"If we had a certain sector we were capping at prime+4%,* ***Aceli allows us to play with the margin… For vanilla, it was 100% the Aceli incentive that helped us go in****. Aceli changed the thinking and mindset towards looking at the* ***cash flow rather than traditional collateral****."*
>
> – Commercial Bank, Uganda [1]

> *"…instead of giving someone UGX 90 million, we increase the amount by 10 million to hit 100 million and then increase the tenor.* ***This person would now be covered by [Aceli's First-Loss Cover] which allows us to lend to them where we would not before"***
>
> – *NBFI, Uganda* [2]

> **"We are seeking to move from 33% of the portfolio being women to 50%.** This is where we feel we can have a major impact and impact bonuses will help. We are also seeing how we can target youth."
>
> – *NBFI, Kenya* [3]

Sources: Lenders surveys and interviews 2023; Dalberg analysis.

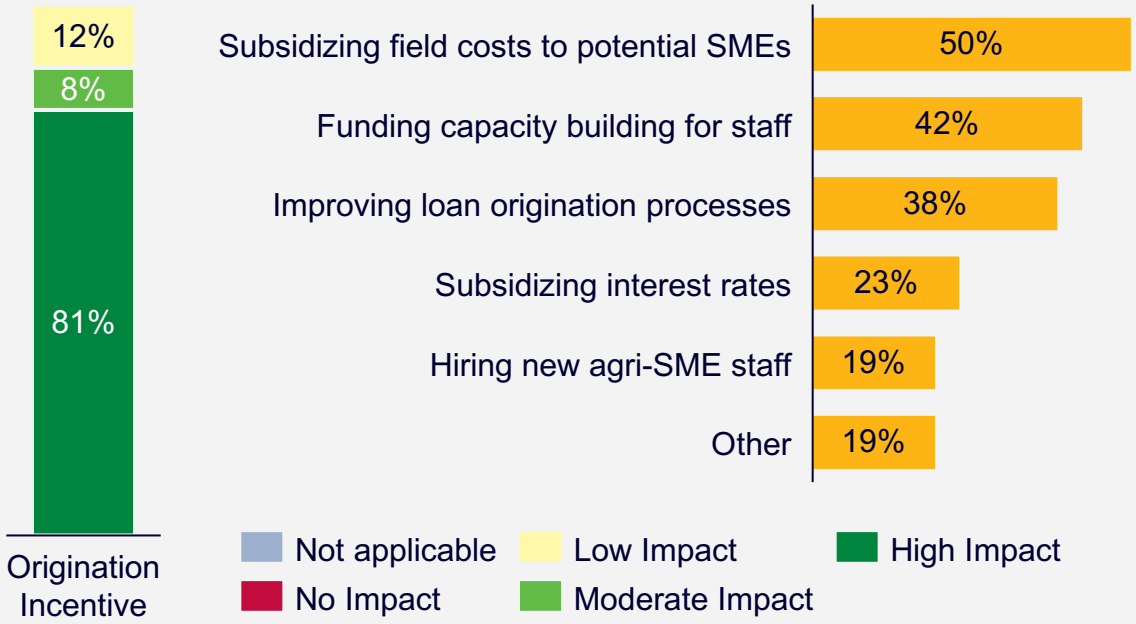
Aceli's Origination Incentives are shifting agri strategies and practices for most participating lenders

Lender feedback on Origination Incentives

% of respondents, N = 24 existing lenders

Impact of OI

Q: How has your organization utilized origination incentives received from Aceli?



- Origination incentives are regarded by most lenders as highly impactful on their Agri-SME portfolios. The incentives are driving portfolio growth, particularly to new geographies and value chains.
- Lenders draw on origination incentives to subsidize field visits, build internal capacity, and adapt their processes to agri cycles.
- A few lenders are also transferring the benefits of Origination Incentives directly to borrowers by subsidizing interest rates and easing collateral requirements.

*"**Origination incentives have allowed us to subsidize higher operational costs**. Aceli has allowed us to move to source customers that are further than two hours from each branch "*

– NBFI, Tanzania

*"Origination Incentives have allowed us **to expand within our current value chains with us covering more geographical areas and allowing us to accept more non-traditional collateral."***

– *Commercial Bank, Uganda*

*"**Origination Incentives have helped us in building capacity of farmers and SMEs.** We have been able to go further in training farmers to come up with bankable projects. These incentives have also allowed us to recruit more staff who are dedicated to particular value chains "*

– Commercial Bank, Rwanda

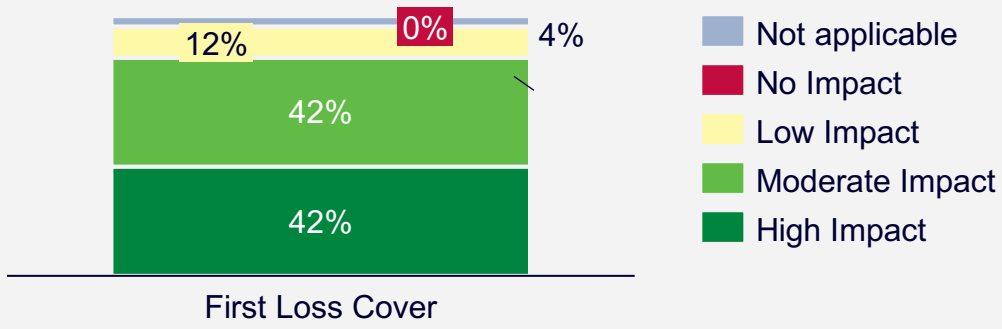
Sources: Lenders surveys and interviews 2023; Dalberg analysis

Most lenders view First Loss Cover (FLC) as impactful; however, by design, FLC does not create significant impact for low-volume lenders

Lender feedback on First Loss Cover (FLC)

% of lenders, N = 24 existing lenders

Impact of FLC



- FLC has been impactful for lenders, shifting mindsets, improving risk appetites and catalyzing loans to previously underserved value chains and segments.
- For some lenders with lower volumes, FLC is only considered moderately impactful, given that it only covers a small fraction of individual loan values.

*""**FLC has allowed us to take on the heightened risk of lending.** There are very few farmers in Tanzania that depend on irrigation schemes making them riskier**. We know when customers default, we can get something from Aceli.**"*

– NBFI, Tanzania

*""**FLC allows us to venture into riskier value chains such as oil seeds.** We are also looking at getting into the rice value chain."*

– Commercial Bank, Uganda

*"**The lenders that have challenges with FLC adequacy have loans that are too large. It is the cumulative feature that is genius**. It is really helping you to build up a portfolio. It does accumulate and eventually you would cover your loans."*

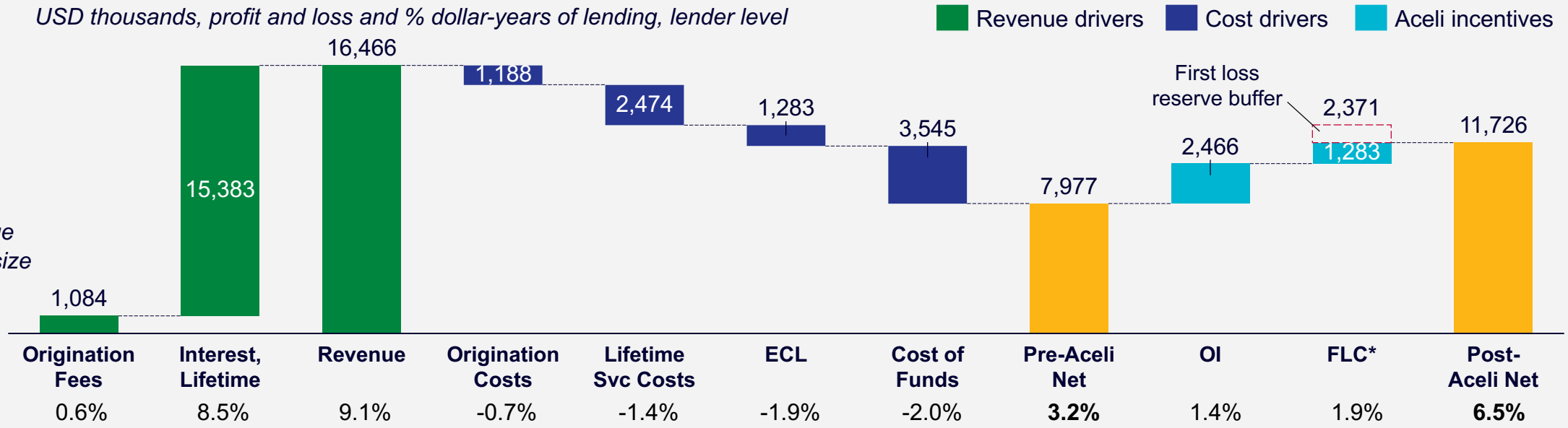
– Global Social Lender

Sources: Aceli benchmark data 2023; Aceli incentives data; Dalberg analysis.

Impact of incentives on banks (1/3): Reducing opportunity costs

USD thousands, profit and loss and % dollar-years of lending, lender level

Banks
513 loans
$58.5M loan value
$114K avg loan size



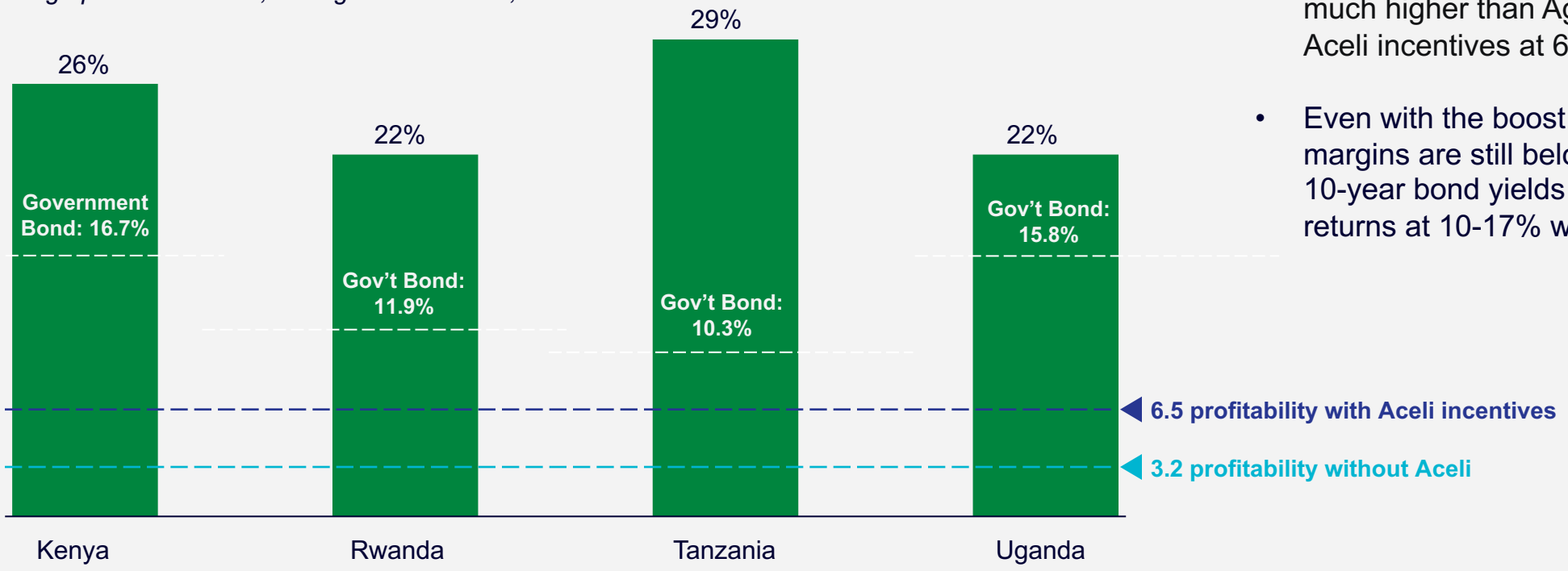
- Based on economies of scale, which contribute to low origination and lifetime costs, and benefitting from a low cost of funds as deposit-taking institutions, commercial banks generate positive margins from agri-SME loans even before Aceli support.
- After factoring in Aceli's origination incentives and first loss cover for loans registered under the program, the net margin experiences a substantial boost, increasing from a 3.2% profit to 6.5%.
- The first loss cover serves as an essential safeguard, offering downside risk protection to lenders. It is crucial to note that this risk protection is not reflected in the profitability figures presented here. This aspect is particularly significant in the face of external market shocks experienced in recent years, including the impact of events such as Covid-19 and the Ukraine war.

Notes: FLC* calculation is capped at the level of the ECL; if the graph includes a bar with a red shaded outline, that represents any additional reported FLC.
Analysis is limited to loans that have earned incentives. Sources: Aceli 2023 Benchmark Data; Aceli incentives data; Dalberg analysis.

(2/3) However, even with Aceli support, commercial banks' Agri-SME margins still fall below the returns from other sectors and lower-risk investments

Commercial bank profitability

Average profit before tax, % of gross revenues, 2022



- Overall bank profitability of 22-29% is much higher than Agri profitability with Aceli incentives at 6.5%.
- Even with the boost from incentives, margins are still below government 10-year bond yields which offer safe returns at 10-17% with minimal effort.

Notes: Return on Assets or Equity is a more common way to evaluate bank financial performance, but profit before tax (PBT) is shown here as it is a more familiar, intuitive calculation. PBT is after depreciation and amortization, and the margin is calculated relative to gross revenue (interest income, fees, trading income, forex income, and other revenues) without interest expense of bad debt provision. The profitability calculation of 6.5% with Aceli incentives follows a different methodology based on the Aceli incentive effect net of revenues, costs, expected losses, and cost of capital over the full life of a loan, not within a single financial year. However, this comparison provides an indicative way to demonstrate opportunity costs for banks.
Sources: Annual reports

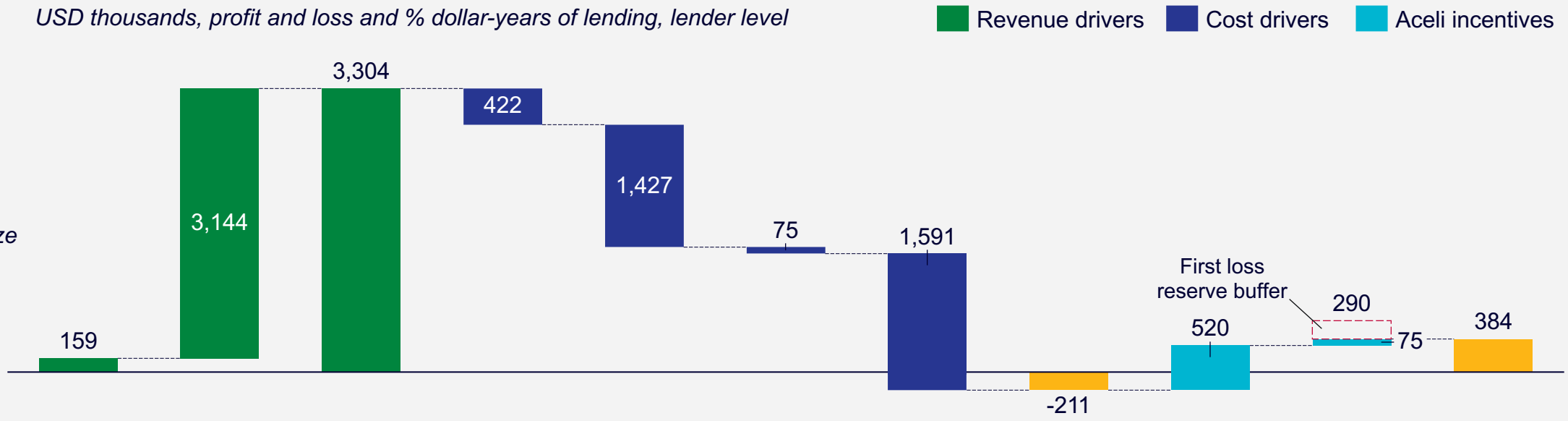
(3/3) Ticket size & returns: Analysis of the overall data for banks highlights the correlation between loan size and profitability for banks

Note: Lender composition changes by loan size bucket, which is why components like Cost of Funds do not follow a fully consistent trend. Details of the methodology are in the appendix.
Sources: Dalberg analysis; Aceli Benchmark Data 2023

Impact of incentives on NBFIs: From negative to positive margin

USD thousands, profit and loss and % dollar-years of lending, lender level

NBFIs
130 loans
$7.5M loan value
$58K avg loan size



Origination Fees	Interest, Lifetime	Revenue	Origination Costs	Lifetime Svc Costs	ECL	Cost of Funds	Pre-Aceli Net	OI	FLC*	Post-Aceli Net
1.1%	22.6%	23.8%	-3.0%	-10.3%	-0.6%	-11.5%	**-1.6%**	3.7%	0.6%	**2.8%**

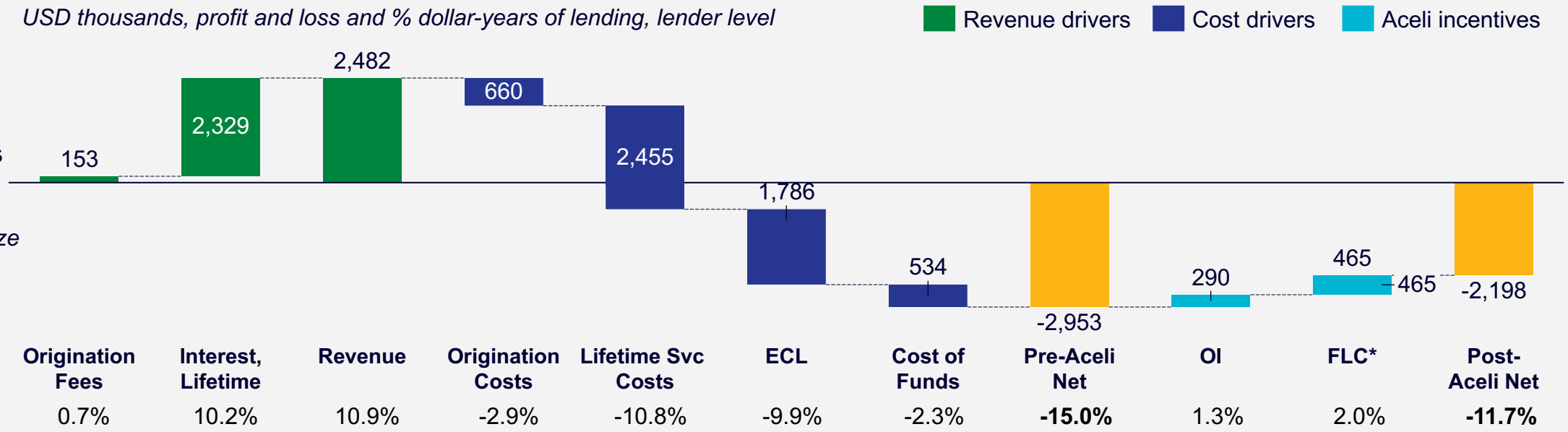
- NBFIs incur a significantly higher percentage of both origination and lifetime servicing costs as they are sub-scale relative to banks. Additionally, they face elevated costs of funds since they are not deposit-taking institutions and depend on investor funding, which is often in hard currency.

- Given these substantial costs, NBFIs find themselves in a deficit before considering the impact of Aceli's incentives. Aceli's incentives shift the returns from negative to positive for NBFIs' qualifying agri-SME loans.

Notes: FLC* calculation is capped at the level of the ECL; if the graph includes a bar with a red shaded outline, that represents any additional reported FLC. Analysis is limited to loans that have earned incentives. Sources: Aceli 2023 Benchmark Data; Aceli incentives data; Dalberg analysis.

Impact of incentives on multi-country social lenders: Closer to breakeven

USD thousands, profit and loss and % dollar-years of lending, lender level



Social Lenders
58 loans
$17.7M loan value
$305K avg loan size

Origination Fees	Interest, Lifetime	Revenue	Origination Costs	Lifetime Svc Costs	ECL	Cost of Funds	Pre-Aceli Net	OI	FLC*	Post-Aceli Net
0.7%	10.2%	10.9%	-2.9%	-10.8%	-9.9%	-2.3%	**-15.0%**	1.3%	2.0%	**-11.7%**

- Social lenders, like NBFIs, incur a higher percentage of origination and lifetime servicing costs as they are sub-scale compared to banks. Notably, a substantial portion of the cost structure for social lenders originates from outside the region in higher-cost geographies such as Europe and North America. Additionally, social lenders contend with higher expected credit losses (ECL), potentially stemming from a larger proportion of unsecured lending.

- As a result, social lenders experience net losses on their agri-SME loans in East Africa. Aceli's incentives mitigate these losses and bring the lenders closer to break-even.

- It is noteworthy that social lenders are mission-driven, consciously choosing to operate in the sector despite incurring losses. To sustain their Agri-SME lending in East Africa, these lenders typically employ a cross-subsidization strategy, using profits from larger and more lucrative loans in other regions and/or sectors (*e.g.,* microfinance).

Notes: FLC* calculation is capped at the level of the ECL; if the graph includes a bar with a red shaded outline, that represents any additional reported FLC. Analysis is limited to loans that have earned incentives. Sources: Aceli 2023 Benchmark Data; Aceli incentives data; Dalberg analysis.

Looking Ahead

We expect next year's report to reflect the following adjustments to our dataset and methodology:

- **Inclusion of data from lenders in Zambia** following Aceli's launch in the country in Q4 2023.
- **Expanded representation from the Kenyan market** as more high-volume lenders sign on to Aceli's incentives program.
- **Enhanced analysis of lending trends**, particularly related to:
  - ✓ interest rates and risk-based pricing;
  - ✓ non-performing loans by country, crop, loan size, stage in the value chain, and other factors; and
  - ✓ shifts in lender financial products, collateral requirements, and other terms.

***Note**: The benchmarking report serves as a companion piece to Aceli's learning report (planned publication Q1 2024). While the benchmarking report delves into comprehensive Agri-SME lending trends and performance, the learning report focuses on insights derived from Aceli's incentives program.*

ACELI AFRICA

Produced in partnership with Dalberg

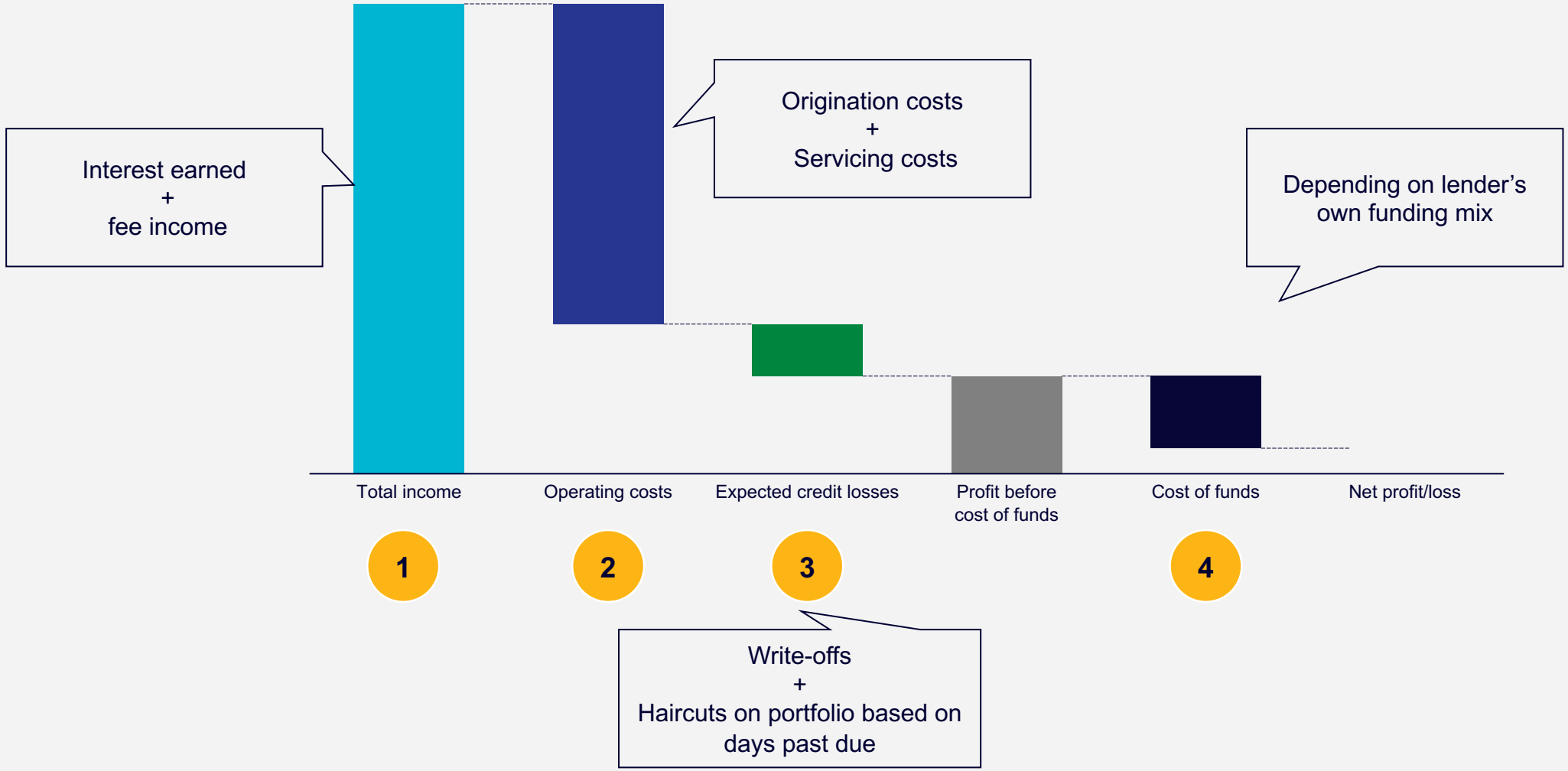
Definitions & Methodology

Financial Benchmarking Report: January 2024

Definitions and acronyms in the report

- Lenders continue to highlight **high risks and origination costs as primary impediments to Agri-SME lending**
- **Bank:** Financial institution, either privately or publicly owned, that is regulated as a deposit-taking institution by the Central Bank in its country of domiciliation in East Africa
- **Non-bank financial institution (NBFI):** Lender domiciled in East Africa that is not subject to Central Bank regulations as a deposit-taking institution
- **Social lender:** Multi-country lending institution domiciled outside of Africa that has an explicit social-impact mission related to its lending
- **Portfolio first-loss cover (FLC):** Aceli financial incentive to mitigate the risk of Agri-SME loans ranging from $25k-$1.75M; FLC incentives accrue in the lender's reserve account as it makes more loans and the reserve is available to cover losses across the lender's portfolio of qualifying loans
- **Origination incentive (OI):** Aceli financial incentive made in the form of cash payments to lenders to defray the high transaction costs for originating loans ranging from $25k-500k to Agri-SMEs
- **Qualified loans:** Loans from lenders that have been accredited by Aceli and that meet eligibility criteria specific for one or both of Aceli's financial incentives (FLC and OI)
- **New lenders:** Lenders that have joined or are in process of joining Aceli's incentives program but have not yet registered any loans for incentives
- **Existing lenders:** Lenders that have joined Aceli's incentives program and have registered loans for incentives
- **New borrowers**: SME that has not received a loan of $25k or more in the past three years from any lender prior to receiving an Aceli-supported loan from one of Aceli's lending partners
- **Returning borrower:** SME that has received a loan of $25k or more in the past three years either from the lender registering the loan for incentive with Aceli or from another lender
- **Compound Annual Growth Rate (CAGR):** The annual percentage growth for, e.g., number of loans in a lender's portfolio

Methodology: We analyzed lender loan performance on four dimensions that drive loan profitability (I/III)



We analyzed lender loan performance on four dimensions that drive loan profitability (II/III)

	Dimension	Approach
1	**Total income** *interest earned + fee income*	$\textbf{Interest income} = Dollar\ years\ of\ lending^{1} * Annual\ interest\ rate(\%)$ + $\textbf{Fee income} = Loan\ size * Origination\ fees\ (\%)$
2	**Operating costs** *Origination costs + servicing fees*	$\textbf{Origination costs}^{2} = \frac{Estimated\ average\ agriSME\ costs\ per\ year * 30\%}{Number\ of\ agri\ originations}$ + $\textbf{Servicing costs} = \frac{Average\ cost\ per\ active\ loan^{2} * Tenor}{12}$

$\textbf{Average agriSME costs per year}$:
$= Estimated\ agri\ staff\ costs, i.e\ \left(\frac{Total\ FTE\ staff}{Total\ staff} * total\ staff\ costs\right) + Estimated\ agri\ non\ staff\ costs, i.e\ ((Total\ operating\ costs\ - staff\ costs) * (\frac{Average\ outstanding\ agriSME\ loans\ balance}{Entire\ organization\ outstanding\ balance}))$

$\textbf{Average cost per active loan} = \frac{Estimated\ average\ agriSME\ costs\ per\ year * 70\%}{Number\ of\ average\ active\ loans}$

$\textbf{Average active loans} = \frac{Average\ tenor\ of\ agri - loans\ in\ portfolio}{12} * agri\ originations$

Notes: [1] A weighting factor (dollar-years of lending) was utilized to allow a like-for-like comparisons of profitability drivers across different loan tenors = (Loan size*loan tenor in months/12), [2] Average origination costs and costs per active loan for 2018, 2019 and 2020 loans were used across the loan-level analysis

We analyzed lender loan performance on four dimensions that drive loan profitability (III/III)

Dimension	Approach
3 **Expected credit losses** *Write-offs + Haircuts on loans in portfolio*	$\textbf{Total write} - \textbf{offs}^1$ + $\textbf{Expected haircuts} = Outstanding\ balance\ (if\ not\ written\ off) * Recovery\ rate\ (\%)\ based\ on\ lender\ type$ ***Haircut provision rates for different lender types*** • ***Banks & NBFIs:*** *100% for loans 365+ Days Past Due (DPD); 50% for 180-364 DPD; 25% for 90-179 DPD; and 0% for 0-89 DPD* • ***GSLs:*** *100% for loans 365+ DPD; 75% for 180-364 DPD; 50% for 90-179 DPD; 25% for 30-89 DPD; 0% for 0-29 DPD*
4 **Cost of funds**	• Primarily, we used cost of funds provided by different lenders • If banks or NBFIs did not provide cost of funds, this was calculated from publicly available financial statements *(= Total interest expense / Total liabilities)* • If GSLs did not provide cost of funds, 3% was used based on inputs from previous Aceli lender profitability analysis

We have set a categorization of formal / informal value chains in East Africa (I/II)

Formal Value Chains		
Agrodealers (farm machinery)	Herbs (basil, coriander, mint, tarragon, chives)	Sisal
Asian vegetables (cabbage, broccoli, celery, cauliflower)	Honey	Snow peas
Avocado Oil	Irrigation equipment	Spices (others)
Baby corn	Juice processing	Sugar cane
Barley	Jute	Sunflower
Beverage production	Leeks	Tea
Cage fish farming	Kola Nuts	Tractor hire services
Cardamon	Loose patra (Colocasia)	Tractor Purchase
Cashew	Macadamia	Turnips
Cereal processing (millet, sorghum, wheat)	Maize milling	Vanilla
Cinnamon	Oats	Wheat
Cloves	Olives	
Cocoa	Palm oil	
Coffee	Peppers (processed)	
Commercial forestry (large scale)	Pond fish farming	
Cotton	Post-harvest equipment hire	
Cumin	Processed foods	
Cut Flowers	Processed livestock meat	
Dried vegetables	Processing Equipment	
Extension and veterinary services	Purchase of transport utilities	
French beans	Pyrethrum	
Garlic	Rubber	
Ginger	Shea tree	

We have set a categorization of formal / informal value chains in East Africa (I/II)

Informal Value Chains			
Agrodealers (farm inputs)	Dried vegetables	Mushroom	Sorghum
Agrodealers (seed suppliers)	Egg plants	Non timber forestry products	Soya beans
Apples	Fonio	Onions	Straw berries
Avocado Fresh fruit	Fresh livestock meat	Open fishing	Sweet Potatoes
Banana wine	Goat	Other fruits (guavas, loquards)	Teff
Bananas	Grapes	Papaya	Timber (Smallholder agroforestry)
Cabbages	Green beans	Passion fruits	Tomatoes
Capsicum	Green grams	Pearl Millet	Tree nursery
Carrots	Green leafy vegetables	Pig farming	Watermelon
Cassava	Groundnuts	Pigeon peas	Yams
Castor	Input supply (animal feeds)	Pineapple	
Chia seeds	Irish Potatoes	Plantains	
Chick peas	Jack fruits	Poultry – broilers	
Chili/ Peppers Fresh	Kola Nuts	Poultry - Indigenous	
Citrus (including lime, oranges and tangerine)	Lentils	Poultry - layers	
Coconut	Livestock (cattle trade)	Pumpkins	
Common Beans (Dried Beans)	Livestock fattening	Rice	
Cow peas	Maize	Rice milling	
Cucumber	Mango	Sesame	
Dairy	Millet	Sheep	