ACELI AFRICA

LEARNING REPORT: YEAR 2

Unlocking Private Capital for African Agriculture

EXECUTIVE SUMMARY

Aceli Africa is a market catalyst mobilizing private capital for small- and medium-enterprises (SMEs) in the agriculture sector. Aceli offers financial incentives for commercial banks, non-bank financial institutions, and international social lenders so they can overcome the high risks and transaction costs of lending to agricultural SMEs in Sub-Saharan Africa. Increased access to finance is critical for agri-SMEs to realize their growth and impact potential: creating economic opportunities for farmers and workers, boosting food security and nutrition across the region, and contributing to a healthier and more resilient planet.

Aceli's incentives target loans ranging from \$25k-\$1.75M, with a particular focus on the \$25k-\$200k range, well below the level typically reached by international development finance institutions and impact investors. Through our incentives program, Aceli aims to: i) accelerate the maturation of a more competitive and efficient lending market; and ii) build the evidence base demonstrating that the development return on investment of these incentives far exceeds their cost. Aceli plans to progressively reduce incentives for lower-risk market segments (*e.g.*, larger loan sizes, value-added processing), while making the case that donors and, increasingly, African governments can cost-effectively advance their development priorities for segments requiring on-going support (*e.g.*, smaller loan sizes, primary production, and regions particularly susceptible to extreme climate conditions).

SUMMARY OF INITIAL RESULTS (SEPTEMBER 2020 - DECEMBER 2022)

Since launching in September 2020 in Kenya, Rwanda, Tanzania, and Uganda, Aceli has provided incentives for 713 loans totaling \$84M to agricultural SMEs that collectively purchase crops from 429k farmers and employ 16k full-time workers. More than half of these loans are going to first-time borrowers and the impact profile of the loans exceeds targets for most priority categories. Lender utilization of Aceli's incentives is highly correlated with five factors:

1. **Senior-level commitment** from the C-suite and board to grow agricultural lending;
2. **Defined agricultural strategy** mapping the lender's product offering and priority value chains, regions, and borrower segments;
3. **Empowered middle manager** leading a dedicated team with specific targets for growing agri-SME lending;
4. **Awareness** of Aceli's incentives and **staff engagement** across multiple levels (senior, middle management, branch) and functions (origination, credit risk, treasury); and
5. **Sharing incentives with the branches** where agri-SME loans are originated and managed.

The pace of behavior change varies between lenders depending on their progress relative to the factors outlined above. Some lenders rapidly adopt the incentives while others require time to align internally. Overall, the initial results are positive across the following areas:

- **Increased risk appetite** as lenders extend into new value chains;
- **Improved loan terms** in the form of lower collateral requirements, reduced interest rates, longer loan tenors, and lower minimum loan sizes;
- **Expanded reach** as the additional income from Aceli's origination incentives allows lenders to serve new customers in remote areas;
- **Reinvesting in their own capacity** through a combination of training in agricultural lending for existing staff and hiring new staff; and
- **Orienting their lending towards greater impact** particularly related to gender inclusion as well as climate and environment.

In last year's report, we projected that Aceli's Y1 leverage ratio of 12X (*i.e.*, $12 of private capital mobilized for every $1 of donor-funded incentives Aceli provides to lenders) would increase to 15-20X by 2025. We continue to believe that the market will become more competitive, allowing incentives to be lowered for any given segment of the market over time. **However, while increasing the leverage ratio across Aceli's incentives offering overall may be possible, we are not sure it is desirable.**

Based on learning over the past two years, we see greater opportunity for impact by supporting smaller loans than we originally anticipated (average loan size to date is $118k vs. our initial projection of $467k). This shift down-market will allow Aceli to support a much larger number of enterprises (3,700 loans v. 1,500) but also entail less capital mobilized ($600M v. our pre-launch target of $700M by year-end 2025). We are now shifting our focus even more on market segments that are least served – for example, smaller loans to enterprises owned by women and youth, as well as business models focused on climate resilience, regenerative agriculture, and the circular economy – even if this prioritization further reduces Aceli's total capital mobilized and leverage ratio. See Diagrams 1a and 1b depicting Aceli's intended focus pre-launch and our evolution towards the lower end of the SME market.

We are finding that headline figures for capital mobilized and leverage ratio are relevant metrics, but they may obscure or even distort whether a blended finance approach is truly achieving its goals. **We believe the more important question – for Aceli or any other blended finance mechanism striving to mobilize private capital for development impact – is how concessionary funding can be optimized to generate i) capital additionality and ii) social and environmental impact.**

Designing blended finance solutions that efficiently deliver capital additionality and impact is challenging, even in contexts where there is robust evidence about both what is needed to unlock commercial capital and where that capital can have the greatest impact. In the case of finance for SMEs in the agriculture sector, there is limited evidence addressing either dimension. Since 2018, Aceli and our data partner, Dalberg Advisors, have been building a dataset on the lending risks, operating costs, and financial returns for agri-SME lending in East Africa. With our evaluation partners, International Growth Centre (IGC) and 60 Decibels, we are also mapping the direct and indirect effects of Aceli's incentives and capacity building interventions across an impact chain that flows from lenders to SMEs to smallholder farmers, workers in agricultural value chains, the natural environment, and the broader macroeconomic context (see Diagram 8 on page 13).

In short, Aceli aims to fill a dual void by testing and iterating solutions to address a longstanding market gap, while simultaneously building the evidence base for what works in the agri-SME finance sector. We share this Y2 Learning Report in the spirit of transparency, continuous improvement of our approach, and contribution to sector learning.

ACELI FINANCIAL INCENTIVES

Aceli offers two types of financial incentives (portfolio first loss cover and origination incentives) to increase lender risk appetite and defray the high transaction costs of lending to the least served segments of the agri-SME market. Incentives are tiered with bonuses for loans that generate higher capital additionality (*i.e.*, to first-time borrowers) and impact (*i.e.*, gender inclusion, youth inclusion, food security & nutrition, and climate & environment). More information about Aceli's incentives for lenders is available here.

Diagram 1a

Market segmentation & enabling conditions for agri-SME finance

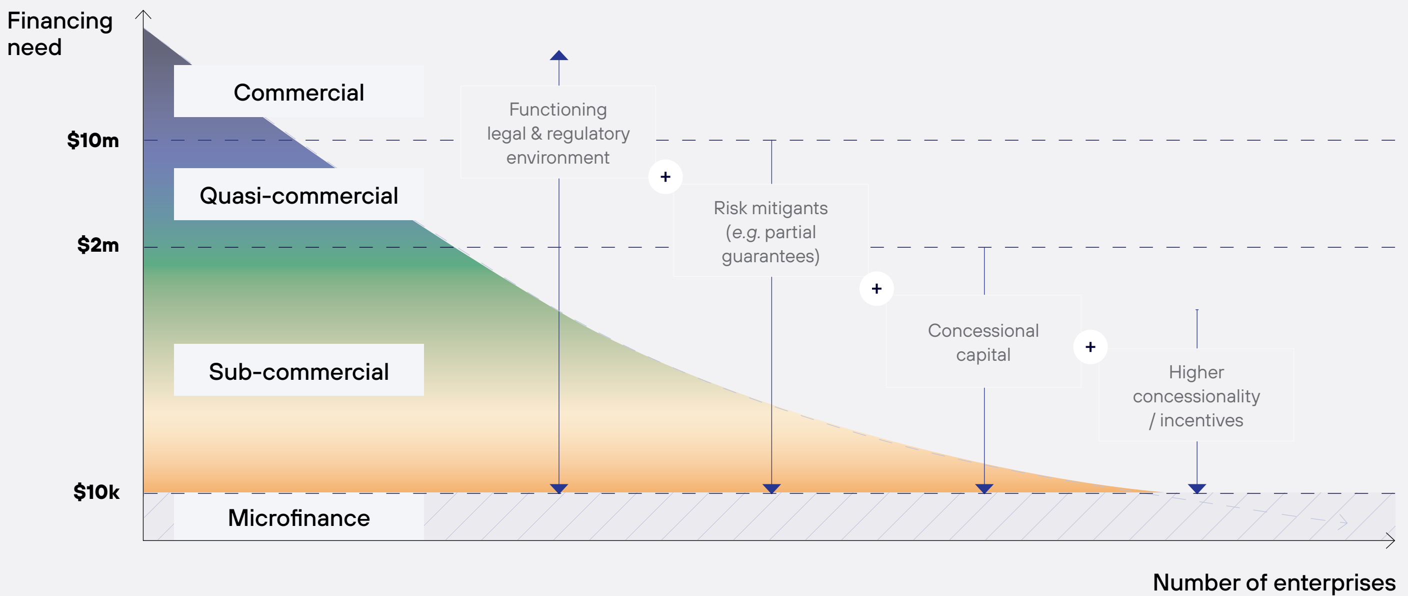
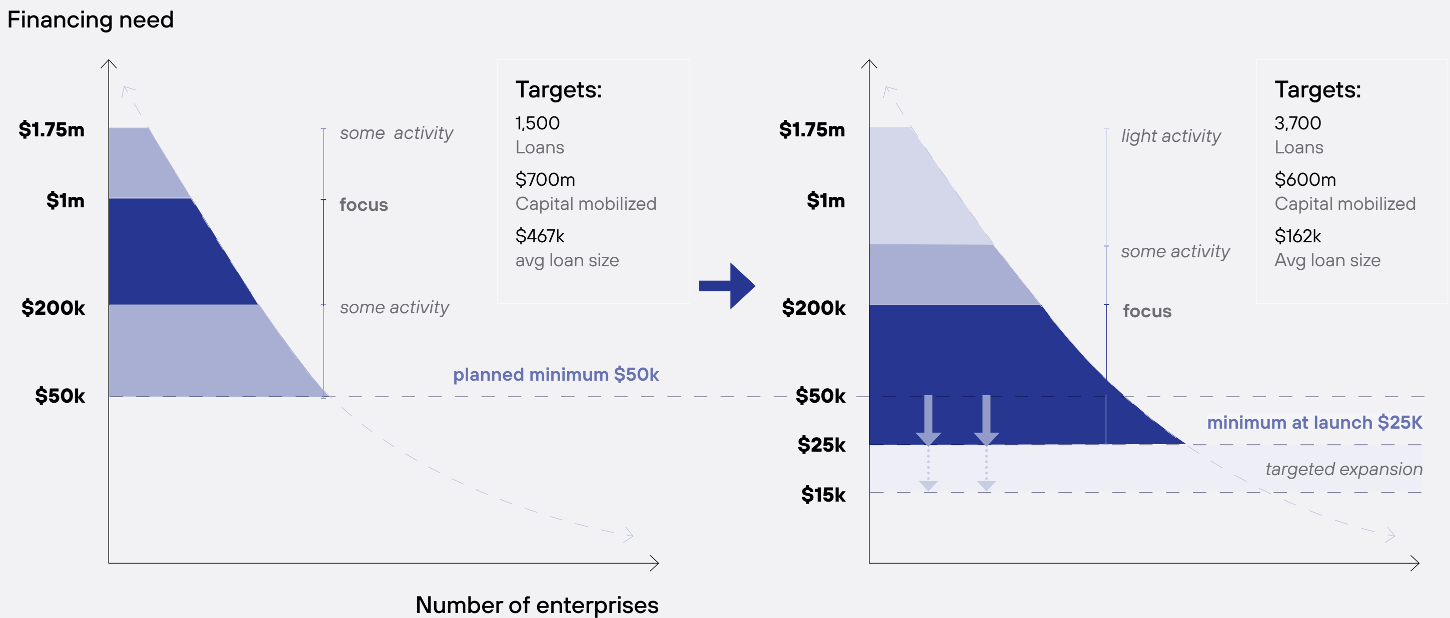


Diagram 1b

Aceli's evolution towards the lower end of the agri-SME market



Introduction

Aceli's Year 1 Learning Report focused on three themes: 1) mobilizing private capital; 2) targeting capital for impact; and 3) spurring adoption & replication. This report returns to the first two themes, while deferring the third for a future publication later in 2023. The headlines:

01
Mobilizing capital for agricultural SMEs

The timing of rolling out Aceli's incentives program aligns with and has amplified growing interest in agri-SME lending that has emerged in East Africa independent of Aceli. Numerous lenders of all types – commercial banks, state-owned banks, non-bank / alternative lenders domiciled in the region, and international social lenders – are now responding to Aceli's incentives and appear poised to ramp up their agri-SME lending. The incentives act as an accelerant for lenders that are committed to serving agri-SMEs. Deep and lasting behavior change will take time but early results are promising.

"Your vision helped us develop the appetite for ag. Previously, we would have been thinking twice before doing agri-lending. You guys are giving us courage."

\- **CEO, Tanzania Commercial Bank**

02
Targeting capital for impact

Aceli's incentives steer lenders to weight loans to new borrowers as well as to impact areas (*e.g.*, gender inclusion, climate & environment) that many previously overlooked. As more lenders become sensitized to impact or simply respond to the incentive design and adjust their strategies accordingly, there are increasing opportunities – some being realized already, others on the horizon – to channel capital to high-impact segments of the agricultural market. While a growing body of evidence in the microfinance sector informs how blended finance practitioners might tailor their approaches for greatest impact, there is minimal evidence on either the financial or impact dimension for the agri-SME finance sector (see Diagram 9 on p 15). Aceli and our learning partners are beginning to fill these gaps. Through action learning, we aim to engage like-minded researchers and blended finance practitioners to expand the knowledge base and refine market incentives for our nascent sector.

SPURRING ADOPTION & REPLICATION

Beyond Aceli, interest in blended finance models to bridge capital supply and demand – for agri-SMEs in Africa as well as for other sectors and geographies – continues to rise. Aceli's rollout in East Africa has involved: a 2.5-year set-up period to gather and incorporate investor data and stakeholder perspectives; a market-level perspective working across several private sector actors; a critical mass of donor funding to launch and grow the model at a threshold scale from the beginning; and an implementing team with extensive experience as lending practitioners.

As we receive inquiries about replicating the model in other contexts or drawing on the learning to inform independent approaches, the recurring questions is "What ingredients are essential?" and "What is a minimum viable product?" We look forward to sharing reflections on this topic and initial learning from applying an "Aceli-like" approach in a different context in the coming months.

SECTION 1

Mobilizing capital for agricultural SMEs

1.1 Benchmarking data

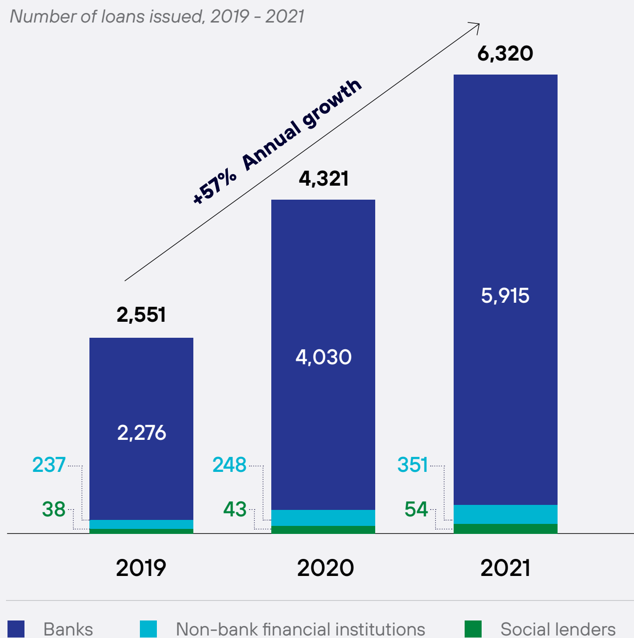
In mid-2022, 35 lenders submitted loan-level and portfolio-level data on the economics of their agri-SME lending and shared qualitative insights during interviews with Aceli's third-party data partner, Dalberg Advisors. This latest installment of the financial benchmarking data that Aceli and Dalberg began in 2018 covers all loans (13.2k totaling $749M) ranging from $10,000 to $2M in agricultural value chains made by participating lenders in Kenya, Rwanda, Tanzania, and Uganda between January 1, 2019 and December 31, 2021.[1] Key findings from this new dataset include:

- **Aceli's lending partners bucked regional trends for agricultural lending during COVID.** Notwithstanding data indicating that lending to the agriculture sector declined in some East African countries,[2] lenders participating in the Aceli-Dalberg dataset collectively expanded their agri-SME portfolios 57% by loan volume and 45% by value from 2019-2021.[3]
- **The largest lending increases across the dataset were concentrated in smaller ticket size ranges** ($10-50k segment followed by the $50k-200k segment) and in Kenya and Tanzania.

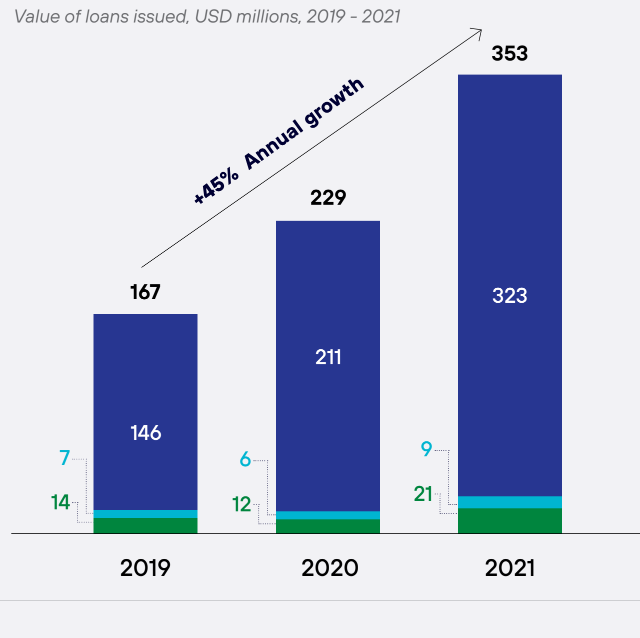
Diagram 2

Growth trends in agricultural sme lending (2019-2021)

2a. Loan volume growth by lender type



2b. Loan value growth by lender type



Banks | Non-bank financial institutions | Social lenders

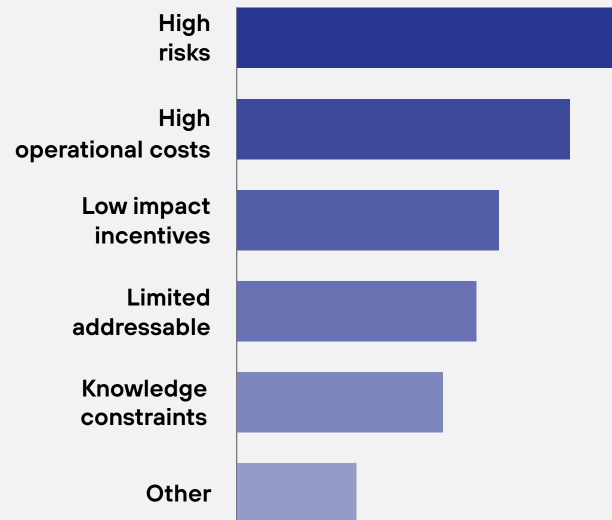
[1] *Aceli's incentives program launched in September 2020 and participating lenders have received incentives for 280 or ~2% of the loans in the dataset.*
[2] *Central Bank of Kenya's 2021 yearbook reports that lending to the agriculture sector fell as a total percentage of private and public sector credit from 2019 to 2021.*
[3] *For the 28 lenders reporting data going back to 2017, the five-year annual growth rates were similar.*

- **At the same time, lender risk appetite, particularly among commercial banks, has also tightened, likely in response to market uncertainty linked to COVID-19.** For example, 28% of the loans issued by commercial banks in 2019 did not require any collateral while only 9% were uncollateralized in 2021; meanwhile, international social lenders maintained a higher risk tolerance with only a slight drop in uncollateralized loans from 40% in 2019 to 37% in 2021. Loan tenors have also decreased across the dataset from an average of 24 months in 2019 to 21 months in 2021. We interpret these trends as a response by lenders to reduce their exposure to market volatility during COVID-19.
- **Larger loan sizes are more profitable as higher interest and fee income allows lenders to defray operating costs that are similar per loan regardless of loan size** (note: this conclusion is specific to SME loan portfolios, which have distinct operating models from both microfinance and corporate lending). However, most of the unmet capital demand is among SMEs requiring smaller loans in the least profitable size segment. This finding underscores the need for interventions such as Aceli's origination incentives to supplement interest income and cover basic operating costs for smaller loans.
- **Lenders report that the leading barrier to agri-SME lending is high risk, while operating costs to serve agricultural SMEs is a close second.** These findings echo the data we gathered before COVID indicating the need for incentives that both increase lender risk appetite and defray the transaction costs of serving agri-SMEs (in contrast with the most common approach to increasing agri-SME lending, loan guarantees, which partially address risk but do not address transaction costs at all). Interestingly, lenders ranked "low impact incentives" as the third leading constraint ahead of "limited addressable demand" and "lender knowledge constraints," respectively.

Diagram 3

Challenges in agri-SME lending

How would you rank the following challenges from your experience working with agri-SMEs?



1.2 Lender participation

A growing number of lenders are applying to participate in Aceli's incentives program. Some trends:

- **Commercial banks.** While several first movers joined the incentives program in late 2020 and 2021, there was a surge of interest in 2022 as more banks heard about the incentives offering and scrambled to catch up to their competitors. We expect this trend to continue in 2023.
- **Social lenders & non-bank ancial institutions (NBFIs).** The idea for Aceli originated among international social lenders that are members of the [Council on Smallholder Agricultural Finance (CSAF)]. To date, a handful of CSAF members are actively using the incentives while a few signed up but have since opted out and others decided not to apply in the first place because of limited lending volume in the ticket size range where Aceli's incentives are weighted ($25k-500k, whereas many

CSAF members are more active in the $500k-$3M range). On the other hand, a growing number of social lenders and NBFIs are applying for the incentives program. Several of these lenders are newer to the market, did not initially meet Aceli's volume requirements, and are making loans in the $25k-500k range.

- **Country breakdown.** Some patterns have also emerged at the country level. Uganda has the largest number of participating lenders, including several commercial banks. Meanwhile, activity in Rwanda has been more concentrated initially among social lenders and is now growing among commercial banks. In Tanzania, NBFIs and state-owned banks account for most of the lending volume to date, but the country's two largest commercial banks have recently joined and three other banks are in process. To date, one commercial bank has driven volume in Kenya while others are now joining alongside social lenders and NBFIs. These trends reflect lending dynamics across the region as Uganda has the largest share of bank lending going to the agriculture sector (12%) followed by Tanzania (8%) and Kenya and Rwanda (both fluctuating in the 3-5% range).[4]

Diagram 4

Total lenders participating in Aceli's incentive program

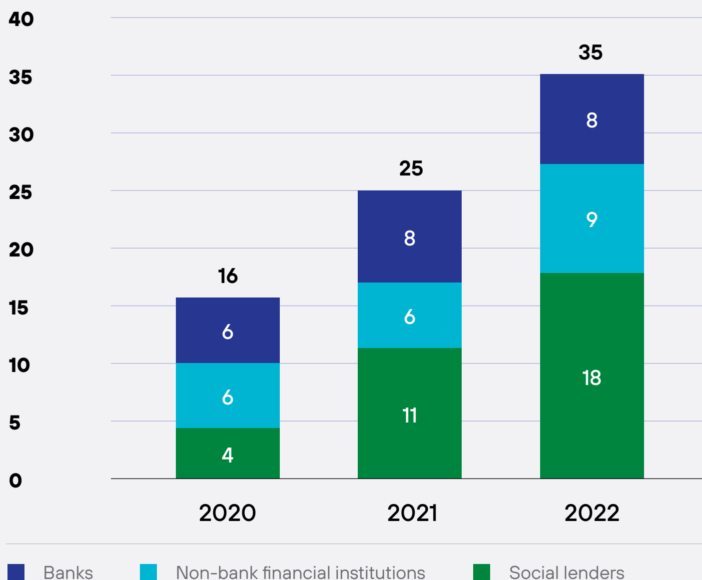


Diagram 5

Growth in lender utilization of Aceli incentives

	YE 2020	YE 2021	YE 2022	YE 2023 *(projected)*
# of lenders that have registered at least 10 loans for incentives	0	7	16	25
Loans registered for Aceli incentives	24	256	433	700
Cumulative loans registered for Aceli incentives	24	280	713	1413

Aceli's original design assumed that the incentives would support 1,500 loans at an average loan size of $467k from 2020-25. To date, average loan size has been much smaller ($118k) and we are now projecting a significantly larger volume of loans (3,700). Although smaller than projected, the SMEs receiving loans are much larger than "micro" in terms of annual revenues (average of $761k) and full-time employment (average of 22 workers per SME); in addition, roughly $168M or 31% of their $542M in total topline revenues are channeled to purchases from an average of 727 smalholder farmers per enterprise. While the lower average loan size has prompted us to reduce our capital mobilization targets (from $700M to $600M), we are exceeding our projections for the higher priority capital additionality and impact metrics. More information is available on these metrics and how they are informing our strategy in Section 2 and Diagrams 10 and 11.

$168M
PAYMENTS TO FARMERS

727
SMALLHOLDERS PER ENTERPRISE

[4] Sources: Economic Policy Research Centre for Uganda, 2019 , Bank of Tanzania: 2021/2022 Annual Report, Central Bank of Kenya: Bank Supervision Annual Report, 2021, and Rwandan Ministry of Agriculture: National Agriculture Policy Paper, 2018.

Diagram 6

Capital additionality declines as leverage ratio increases by loan size

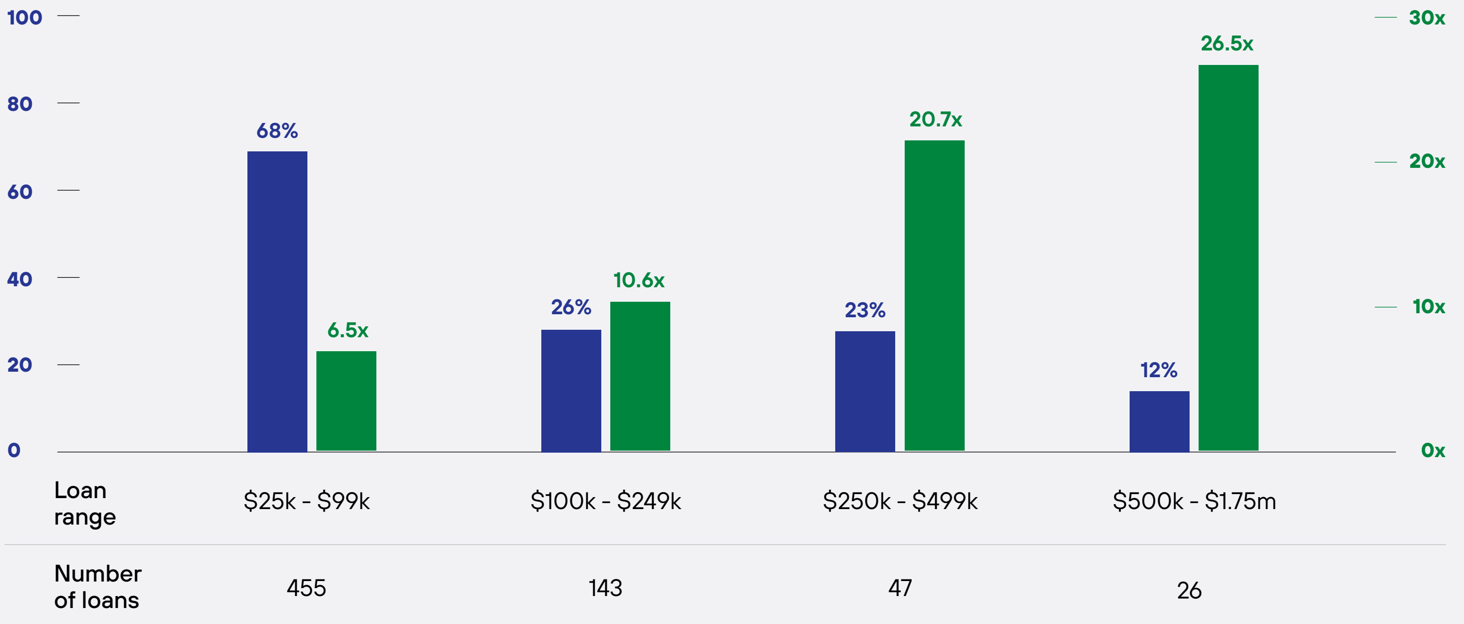


Diagram 6 presents data from the 713 Aceli-supported loans through year-end 2022, illustrating the concentration of loan volume at lower size ranges. The data highlights that smaller loans tend to have a high level of capital additionality, measured here by the percentage of loans going to first-time borrowers, but a lower leverage ratio (calculated as total capital mobilized divided by the cost of Aceli's incentives for these loans).

Unlike the striking inverse relationship between loan size and percentage of loans going to new borrowers in Diagram 6, the relationship between loan size and livelihoods impact is less clear. For example, we cannot predict *ex ante* – nor are there reliable and cost-effective methods in the agri-SME sector for measuring *ex post* – which of the following loans has greater impact on livelihoods: i) a $50k loan to a first-time borrower that purchases maize from 50 smallholder farmers and employs 10 workers in value-added processing or ii) a $100k loan to a returning borrower that purchases maize from 100 smallholder farmers and employs 20 workers.

A meaningful comparison would incorporate measures for: the **capital additionality** of each loan, the **impact profile** for each enterprise, the **impact performance** for each enterprise (*i.e.*, what it did with the loan), and the **expected incremental impact performance** in future years weighted according to the capital additionality of the current loan. This calculation is the impact analogue to net present value calculations commonly used when making investment decisions.

Aceli envisions that a decade from now the development sector will have: 1) recognized and data-tested methodologies for calculating expected impact; and 2) the data to make predictive projections guiding decisions for individual investments, portfolio allocation, and how to design market interventions (*e.g.*, guarantee or incentive facilities). We plan to share how Aceli is synthesizing disparate types of data to form a composite view of impact relative to cost (*i.e.*, value for money) in a future publication.

1.3 Lender adoption

Once lenders are signed on to Aceli's incentives program, their adoption rates vary significantly. Commercial banks have the largest under-utilized capacity to serve agri-SMEs – if they tap into their balance sheets, access deposits in local currency, and growing branch network. Among banks, utilization of Aceli's incentives is highly correlated with five factors:

1. **Senior-level commitment** from the C-suite and board to grow agricultural lending. Key indicators of this commitment are: identifying agriculture as one of the lender's top 3-5 priorities; specific targets around portfolio growth in financial terms and/or percentage of the lender's overall portfolio; and ready access to the lender's senior leaders during Aceli's due diligence process. While the endorsement of the CEO / MD is valuable, buy-in from other senior leaders is at least as important to increase the likelihood that alignment cascades down the hierarchy; otherwise, the credit risk department may reject loans originated by the agricultural team or the treasury department may not allocate sufficient capital to fund portfolio growth.
2. **Defined agricultural strategy** mapping the lender's product offering and priority value chains, regions, and borrower segments. Several lenders have requested capacity building to support in developing an agricultural strategy and/or adapting their product offering, internal policies and procedures, and training staff. Capacity building for lenders was not part of Aceli's original design; in response to lender demand, we launched a pilot in 2022 in partnership with the advisory firm Moving Frontiers to offer these services on a cost-share basis for two commercial banks. We plan to expand this offering to several lenders over the next few years and view these engagements as an important tool for change management alongside the incentives.
3. **Empowered middle manager** at the helm of a dedicated team (a.k.a. "agri-desk") with specific targets for portfolio growth. As lenders start to reach internal thresholds for portfolio allocation, there is often push-back from credit risk or treasury related to risk management and/or risk-weighted returns. The process and outcome of this internal friction is indicative of how much and how quickly the institution will grow its agri-lending.
4. **Awareness** of Aceli's incentives and **staff engagement** beyond the lead relationship manager (usually a middle manager) and one or two team members. The most successful lenders have established buy-in both top-to-bottom (*i.e.*, senior management, the middle manager leading the agriculture strategy, branch managers, and frontline loan officers) as well as horizontally between functions that provide checks and balances within a bank (*i.e.*, business banking, credit risk, treasury, and legal & compliance).
5. **Sharing incentives with the branches** where agri-SME loans are originated and managed closer to production zones than the head office. The lenders that have successfully activated their branch staff have done so by allocating all of Aceli's origination incentives into the branch's Profit & Loss statement rather than retaining them as extra income for the head office. Branch managers, in turn, are assigning more of their staff to identify prospective clients and originate loans to agricultural SMEs.

Notably, lenders are also learning from each other's experiences – following Aceli's November 2022 stakeholder convening in Nairobi that featured frontrunners sharing their approach to assigning incentives to the branch that originated the loan, banks across the region have adopted a similar practice and are starting to see results.

2022 BANK OF THE YEAR FOR HIGH-IMPACT AGRICULTURAL SME LENDING: FAMILY BANK, KENYA

When Family Bank applied for Aceli's incentives program in early 2021, loans to the tea sector accounted for 92% of its agriculture portfolio. Recognizing that our incentives would have minimal additionality for the bank's lending to the tea sector, Aceli restricted Family Bank from accessing incentives for its tea loans. Family Bank was initially disappointed by this constraint, but quickly embraced it as an opportunity to diversify into other value chains. Eighteen months later, Family Bank has grown its agriculture portfolio by 79% overall and exceeded its diversification target of 50% non-tea by year-end 2024 in half the allotted time. As of year-end 2022, more than 60% of the bank's agriculture portfolio is now outside of tea. Notably, the bank has achieve this diversification while maintaining low levels of non-performing loans, doubling the number of women-owned businesses served, and financing value chains such as dairy and staple grains that contribute to food security. The "secret" to Family Bank's success? Comprehensive buy-in across the institution in each of the five areas described on page 10.

Family Bank leaders accepting Aceli's 2022 Bank of the Year award.

"There is an awakening that has been created. Aceli incentives have helped us become more innovative in product design,"

\- **Head of Agribusiness, Family Bank**

1.4 Changing lender behavior

Lenders report that they are using Aceli's incentives in a variety of ways within the overall categories of increasing risk appetite and defraying transaction costs. Aceli's origination incentives represent a novel revenue stream that is paid soon after a loan has been closed and disbursed, compared with credit guarantees that allow lenders to recover a portion of loan principal several months or years later in the event of non-payment. Lenders report spending their unrestricted origination incentives on: covering the cost of field visits (65% of respondents), investing in loan underwriting systems and processes (59%), and capacity building for staff (29%).

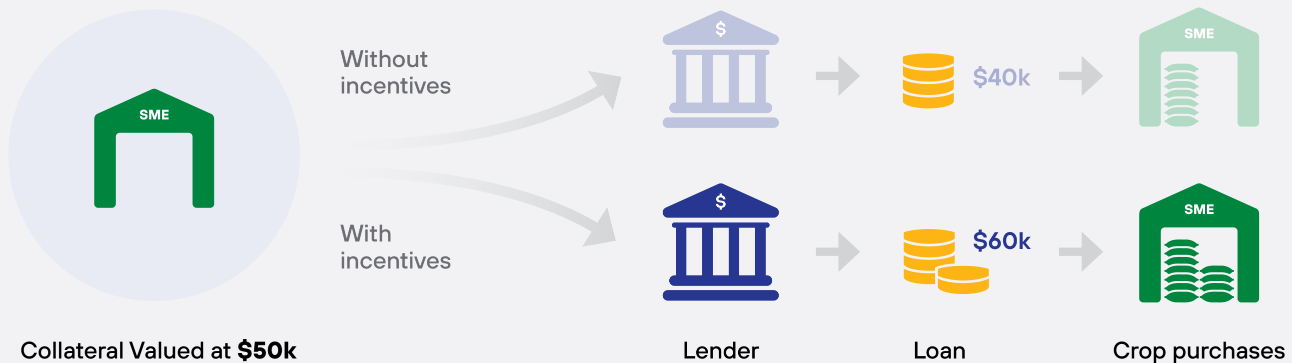
Effects on risk appetite are varied and difficult to measure in the short term, but preliminary indications are encouraging. Below is a sampling of interview responses from lenders reflecting on how Aceli's incentives have affected their strategies, policies, and practices.

Several lenders are offering more attractive terms, including:

- Collateral adjustments. One Ugandan bank reports reducing its collateral requirement by as much as half. For example, as shown in Diagram 7, if an SME presents collateral with a forced sale value of $50k then a non-Aceli loan would be eligible for a loan of up to $40k, while an Aceli-supported loan could be eligible for as much as $60k. For the SME, accessing a loan that is 50% larger could allow it to buy more crops from farmers, generate increased employment along the value chain, and grow its revenues and profitability faster.

Diagram 7

Aceli incentives increase loan amount, unlocking enterprise growth



- **Pricing adjustments.** Several lenders have reduced interest rates by 1-5% (generating savings of 10-25% for borrowers).
- **Longer terms.** As expressed by one Ugandan bank: "Aceli helped us to build confidence…it meant that the bank was a lot more comfortable extending credit for longer periods."
- **Lower minimum loan sizes.** SME Impact Fund (SIF), winner of Aceli's award for 2022 Non-Bank of the Year for High-Impact Agricultural SME Lending, reports that the origination incentives have enabled it to make smaller loans to SMEs it was not previously serving. Of the 52 loans SIF has issued with support of Aceli's incentives over the past two years, 23 (44%) both fall below its previous size minimum of ~$50k and are going to first-time borrowers, a clear example of how the incentives are mobilizing additional capital for under-served businesses.

Spurred by Aceli's portfolio first-loss cover, several lenders indicate that their risk appetite has increased and they are extending into new value chains.

Several report that the additional income from Aceli's origination incentives is allowing them to travel farther into remote areas to underwrite and monitor customers that would otherwise be too expensive to serve. As one example, see impact profile for a cluster of 9 SMEs in Northwestern Tanzania that are accessing their first loans to purchase cassava from 1,980 smallholder farmers.

Lenders are reinvesting a portion of the origination incentives to train and hire more staff. The manager from one commercial bank notes that, in addition to training covering the basics of agricultural lending, it has targeted additional training on engaging women- and youth-owned businesses in response to Aceli's impact bonuses in those areas.

TWO STEPS FORWARD, ONE STEP BACK

One lender had an experience that typifies the internal skepticism many institutions encounter when adopting Aceli's incentives. The lender initially lowered its collateral requirements and interest pricing, growing its portfolio to reach 62 new borrowers (47% of its total Aceli-supported loans) and extending larger loans to returning borrowers. However, in March 2022, the reduced interest rates and collateral requirements raised concerns from the lender's internal audit department about the profitability of the adjusted approach. The audit team slowed further lending for a period of eight months until it completed a comprehensive financial analysis, which found that the adjusted policies combined with Aceli's incentives were, in fact, more profitable than pre-Aceli lending. The bank has resumed its agri-lending and is now pushing to hire more staff focused on agriculture and further expand its portfolio.

The longer-term question is: to what extent will the lender maintain an increased risk appetite, lower collateral requirements, and lower interest pricing as Aceli reduces the incentives over time?

SECTION 2

Targeting capital for impact

Aceli's Y1 Learning Report made the case for assessing blended finance approaches on the basis of capital additionality and impact alongside the more common headline numbers for capital mobilization. In this report, we go a level deeper to present Aceli's impact chain and outline some of the approaches we are using to assess the effectiveness of Aceli's interventions and begin filling in the evidence gap for the agricultural SME finance sector more broadly. The Y1 report presented metrics on 205 Aceli-supported loans during the first 12 months of offering the incentives. This report presents metrics for capital additionality and impact across 713 loans spanning 28 months (September 2020 - December 2022). Beyond these output metrics, there is a growing pool of loans for which we have outcome indicators (see bullet on repeat borrowers in section 2.2 below). Going forward, we will increasingly share outcome and impact findings drawing on the baseline data and comparison groups we are establishing now.

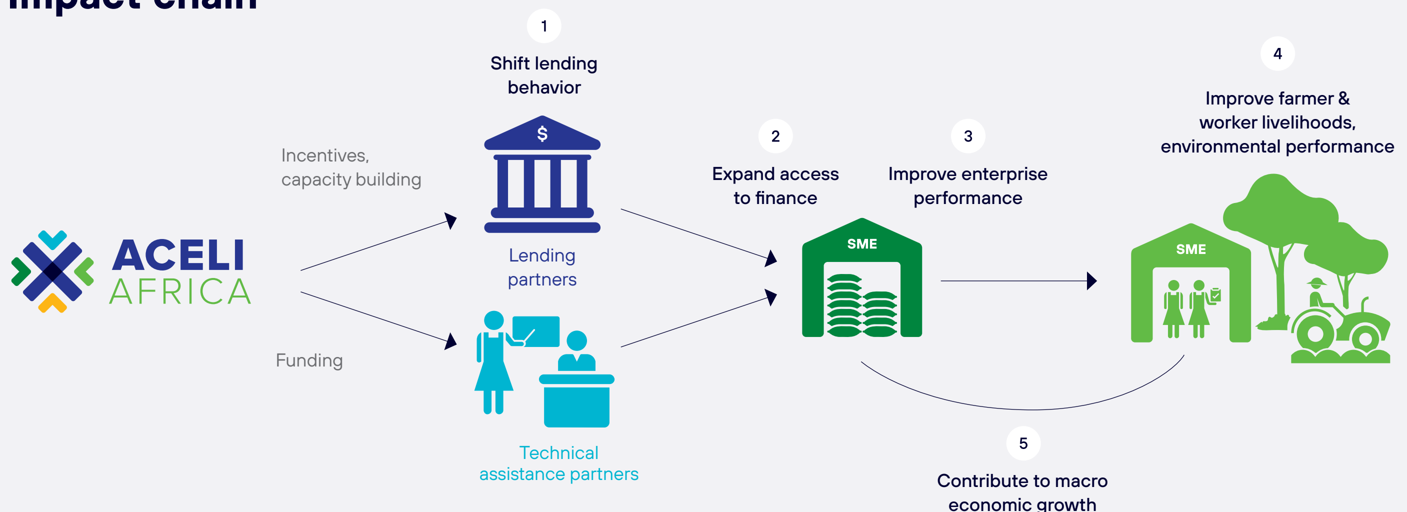
2.1 Impact chain

Aceli's primary offering, financial incentives for lenders, is designed to influence lender behavior and thereby increase access to finance for agricultural SMEs. Alongside the incentives, Aceli and our partners also provide: i) capacity building to support lenders in adapting their strategies, financial products, technical expertise, and processes to meet the needs of agri-SMEs; and ii) pre- and post-investment technical assistance to prepare SMEs to access and manage financing. Despite limited evidence available across the sector to date, most lenders and development practitioners believe that increasing access to finance for SMEs will strengthen enterprise performance and ultimately improve livelihoods for farmers and workers.

We particularly aim to promote agricultural practices that build climate resilience and benefit the environment. When implemented at a meaningful scale, we expect these interventions to contribute to macroeconomic growth and other development priorities as farmers and employs spend higher disposable income on food and other essentials, local consumers have improved access to affordable and nutritious food, and enterprises generate increased demand for goods and services, higher export earnings, and a larger tax base. We are testing these hypotheses and will be refining the impact chain based on our ongoing learning. See Diagram 8 for Aceli's impact chain.

Diagram 8

Impact chain



Capital additionality

We define capital additionality in Aceli's context as lending that is incremental to what would have occurred on a commercial basis without our intervention. We assess capital additionality in the form of increased access to finance for SMEs across three dimensions:

- **New borrowers.** The most straightforward indicator for capital additionality is a simple output metric for the percentage of loans going to new borrowers.[5] Of the 713 loans receiving incentives through year-end 2022, 374 (52%) went to new borrowers. This is well above our target of 35% and is a lead indicator of future growth in lenders' portfolios. However, we cannot claim attribution for all of these loans without a control group (*i.e.*, what would have happened in the absence of aceli's incentives).
- **Repeat borrowers.** A second measure of capital additionality assesses outcomes linked to Aceli's incentives by tracking changes in loan size and enterprise revenues from year-to-year. There is a group of SMEs (66 as of year-end 2022 and growing) that have received a second cycle of Aceli-supported loans – on average, these SMEs have increased their loan size year-on-year by 26% and revenue by 30%. These are significant levels of growth but, as with new borrowers above, we cannot fully attribute these changes to Aceli without a control group for comparison.
- **Loan terms.** As depicted in Diagram 7, another potentially powerful effect of Aceli's incentives is on loan terms such as collateral requirements. Lenders have anecdotally reported that they have lowered interest rates and are offering longer loan terms based on Aceli's incentives. Going forward, we aim to quantify these changes across the full set of lenders accessing the incentives.

Aceli and our evaluation partner, IGC, are in the process of developing more robust approaches for assessing the potential areas of capital additionality outlined above, including:

1. **Randomizing incentives.** Offering the same lender incentives for some of their agri-SME loans but not others; prospective loans will be randomly assigned as either eligible for incentives or not eligible early in the loan underwriting process to assess if the presence of the incentives affects the approval rate, loan amount, and loan terms.
2. **Comparing the uptake and effects of agri-lending.** We aim to use a difference-in-difference approach to compare lending activity and enterprise performance in geographic areas served by lenders receiving Aceli incentives with comparable areas served by lenders that are not receiving Aceli incentives. The approach here would take advantage of the natural growth of Aceli's lending partnerships and expanding reach in a country to establish a baseline across a large number of sub-regions and assess changes over time in both agri-SME lending activity and the performance of SMEs that receive loans with comparable SMEs that do not.
3. **Comparing agri-lending to lending in other sectors.** If sufficient data is available, we may also be able to apply a difference-in-difference approach to compare changes in lending activity between sub-portfolios within the same lending institution (*e.g.*, agri-SME loans receiving incentives vs. loans to SMEs in other sectors over the same time period).

2.3 Impact

While it is challenging to develop rigorous evaluations of capital additionality for agri-SME lending, quantifiable assessments of impact with robust comparison groups are even harder. As with capital additionality, we take a tiered approach to tracking output metrics across all Aceli-supported loans and measuring outcomes at the SME and farmer levels through surveys with a representative sample. The initial focus of our impact evaluations has been on the left side of Aceli's impact chain (*i.e.*, effect of the incentives on lender behavior and SME access to finance) closest to our direct interventions. We are increasingly evaluating the effects of Aceli's upstream activities (incentives and capacity building for lenders as well as technical assistance for SMEs) on enterprise performance, farmer and worker livelihoods, and measures of climate resilience and environmental sustainability.

[5] *Aceli defines new borrowers as businesses that have not received a loan of $25k or more from any source in the past three years.*

Enterprise revenue. Collectively, the SMEs generate $542M in annual revenue. The average enterprise revenue is $761k while the median is $294k.

Purchases from farmers. The 647 SMEs purchase a combined $168M from 429k farmers, including $236k (44%) from women. With roughly 31% of topline revenues flowing through to farmers in the form of crop purchases, agri-SMEs play an important role in facilitating market access. Many also offer services such as farm inputs, credit, and agronomic assistance to their smallholder suppliers. In partnership with 60 Decibels, Aceli is surveying farmers associated with a sampling of agri-SMEs to understand what value the farmers derive from this relationship. Preliminary data from surveys with 3,400 farmers linked to 31 SMEs (served by 11 lenders) indicates the additionality of SME services from farmers' perspective. The majority of farmers say that they cannot easily access good alternatives to SMEs. They report benefiting in the form of higher prices, more timely payments, and other services such as transport and input credit compared to other buyers. Farmers also report feeling more secure about their livelihoods due to their relationship with the SME.

Employment. The SMEs employ 16k full-time workers, including 6k (38%) women. In surveys by 60 Decibels with 243 workers from 26 SMEs, 86% of employees report that their salaries are higher than in previous jobs, while 12% report their salaries are the same, and 2% report a decrease. We will be sharing more detailed findings from both the farmer and employee surveys in a forthcoming publication.

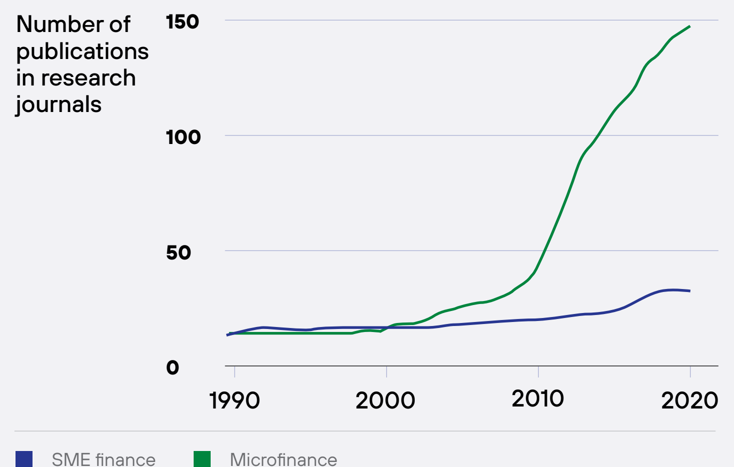
SMEs that meet higher impact standards. To qualify for Aceli's incentives, every loan must meet a set of social and environmental impact criteria, including purchasing from at least 25 smallholder farmers and/or employing at least five full-time workers. On top of these baseline incentives, Aceli offers bonuses to reward loans to SMEs that meet higher impact standards across four categories (the minimum impact criteria as well as the criteria for each of the impact bonus criteria).

STATE OF EVIDENCE FOR AGRI-SME FINANCE AND ACELI'S EVALUATION PARTNERS

Over the past fifteen years, there has been an exponential increase in the quantity and quality of research in the microfinance sector. Bold proclamations about the impact of microfinance have given way to nuanced findings about the value of credit relative to savings segmented by borrower profile and region, among many others. However, as shown in Diagram 9 based on a review of academic papers by IGC, there is a much thinner body of research for access to finance among SMEs across all sectors (similar to the evidence base in microfinance circa 2010). Evidence is even more scant regarding the effects of access to finance for SMEs in the agriculture sector in terms of enterprise performance, farmer livelihoods, or employment. And, per the findings of the 2021 "Impact evaluation of credit guarantee schemes in agriculture" report by the Food & Agriculture Organization, there is limited rigorous evidence demonstrating that credit guarantees in agriculture are effective.[6] Aceli aims to generate data and learning that both guide adjustments to our incentives offering and begin to fill in evidence gaps across the sector. We also aim to spark interest among researchers and practitioners to collaborate in building the depth of knowledge about agri-SME finance that now exists in microfinance.

Diagram 9

Research gap between microfinance and SME finance



Source: IGC analysis

[6] *Benni, N. 2021. Impact evaluation of credit guarantee schemes in agriculture. Methodology and guidelines. Rome, FAO.* https://doi.org/10.4060/cb7917en

Diagram 10

Benefit breakdown of Aceli's incentives

Diagram 10 shows impact metrics for the 713 loans receiving Aceli incentives from launch in September 2020 thru year-end 2022. These loans were made to 647 SMEs (as 66 have received multiple Aceli-supported loans). A few points to highlight in addition to those already discussed above.

Aceli impact bonus areas

The impact profile of loans receiving Aceli incentives is higher overall than initially targeted. However, large portions of the agri-SME market remain under-served. There are also opportunities to support SMEs (whether already accessing finance or not) in improving their social and environmental performance. Below we share metrics on the impact profile of SMEs receiving Aceli-supported loans to date. On the next page, we share our plans to adjust the incentives in mid-2023 to promote increased impact.

Climate & environment (C&E)

19% of loans qualify for the C&E impact bonus, which is sub-divided into regenerative agriculture (focused on soil and ecosystem health) and circular agriculture (efficient use of by-products and energy). Notably, 63% of loans in the coffee sector are to SMEs with agroforestry practices that meet these criteria while only 10% of loans for food crops like maize and rice and 7% of loans for livestock qualify for the bonus. This gap highlights the importance of supporting SMEs and their affiliated farmers in food crop and livestock value chains in adopting improved environmental practices. Aceli is developing partnerships to advance these objectives.

Food security & nutrition

The majority (59%) of loans go to SMEs that contribute to food security in Africa by selling food for consumption in the region. A smaller percentage of loans (10%) also meet a higher standard for the nutrition impact bonus for products such as green leafy vegetables, animal- and plant-based proteins, and fortified porridges or other nutritious end products.

Gender inclusion

59% of the loans qualify for Aceli's gender inclusion impact bonus, which is aligned with the 2X Challenge Criteria. Loans meeting the gender inclusion criteria do so on the basis of exceeding required thresholds for female employees (43% of all loans), senior leadership (31%), board composition (22%), and farmer suppliers (21%); only 9% of loans are majority women-owned. More detailed analysis is available in Aceli's 2022 Gender Inclusion Learning Brief.

Youth inclusion

In the absence of a recognized international standard for youth inclusion such as the 2X Challenge that exists for gender inclusion, Aceli has adapted the 2X approach for youth. Aceli's youth inclusion criteria mirrors the gender inclusion categories: ownership, senior management, board composition, employees, and farmer suppliers. Since adding the youth inclusion bonus in May 2022, 38% of loans have qualified for this impact bonus with the highest number doing so based on employees. To date, only 12% of loans go to businesses owned by youth age 35 or younger.

Adjusting financial incentives for greater impact. Aceli's model is premised on using market-level data combined with practitioner insights and experience to bridge the gap between capital supply and demand for agricultural SMEs. From the outset, we envisioned periodically adjusting our incentives based on market trends with the aim of reducing and eventually eliminating incentives for market segments no longer requiring them while possibly increasing them in areas that remain under-served.

Over the past year, we have observed significant progress: a handful of front-runners have fully incorporated the incentives into their agri-lending strategies and adjusted their policies accordingly. A larger group of lenders is moving in that direction and we anticipate significant shifts in lenders' commitment level, capabilities, and agri-SME lending activity over the course of 2023-2024. Given the complexity of Aceli's incentives and the time required for lenders to fully internalize the requirements and processes, we have decided to make only a few targeted adjustments to the incentives in 2023 and defer more significant changes until the market is more developed. The planned adjustments target impact priorities in three areas:

- **Women-owned businesses:** lowering the minimum loan size from $25k to $15k and increasing the incentive specifically for loans to SMEs that are majority women-owned (*i.e.*, beyond the incentive already offered for loans that meet gender inclusion criteria);
- **Youth-owned businesses:** lowering the minimum loan size to $15k and increasing the incentive specifically for loans to SMEs that are majority owned by youth 35 and under (*i.e.*, beyond the incentive already offered for loans that meet youth inclusion criteria);
- **Climate & environment:** increase the incentive offered for loans that meet Aceli's C&E criteria for regenerative and/or circular agriculture.

The lower minimum loan size for women- and youth-owned SMEs responds to known barriers in the market: women and youth are less likely than men to own land and typically have fewer assets that can be pledged as collateral for loans. The higher incentives across each of the three priority areas will increase our incentive payouts and reduce our capital leverage figures. We believe these tradeoffs will be worth the cost if lenders do, in fact, serve more SMEs that meet these criteria.

Conclusion

While this report focuses on Aceli's incentives, incentives alone will not be enough to shift the capital market for agri-SME lending. Aceli's incentives, including the planned adjustments outlined above, are one piece of a broader strategy that includes: developing partnerships with industry associations, agricultural development programs, incubators, and other actors to identify high potential enterprises; pre- and post-investment technical assistance to prepare these SMEs to access and manage financing; matchmaking to link SMEs graduating from TA with interested lenders; and capacity building for lenders to adapt their product offering and strategy to serve these businesses. We believe these coordinated interventions can add up to much more than the sum of each part.

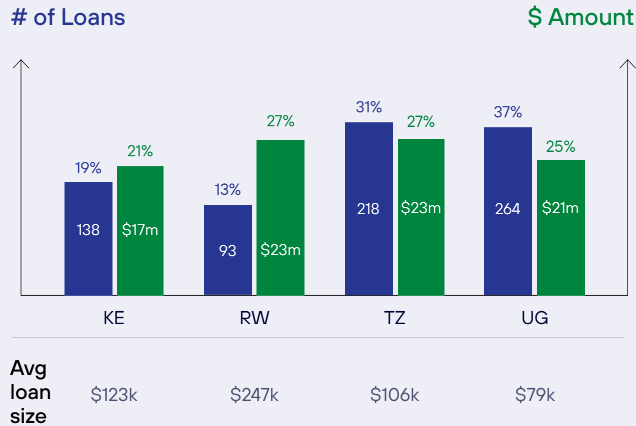
Aceli is committed to continuous learning to guide improvements in the design and implementation of our financial incentives and other activities. In 2022, we published learning briefs focused on Gender Inclusive Lending for Agriculture in Africa and The Effect of Central Bank Policies on Lending to Agricultural SMEs in East Africa. We will continue to share learning that contributes to more effective incentive models for agricultural finance in Africa and beyond. Our long-term goal is to design, test, demonstrate, and scale blended finance models that shift capital markets towards greater impact while building the evidence base and forging alliances to embed these approaches in a strong enabling environment. We are already seeing growing interest and lending for agricultural SMEs in just two years despite the challenging macro environment. We look forward to working with our many partners to scale and sustain these trends in the years ahead.

APPENDIX

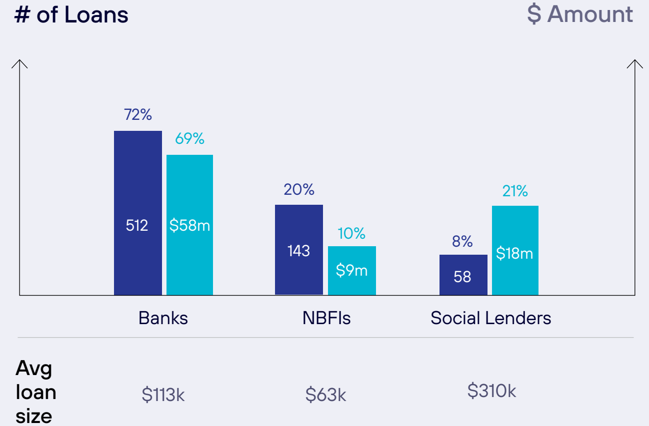
Diagram 11

Characteristics of the 713 loans receiving Aceli incentives (2020-2022)

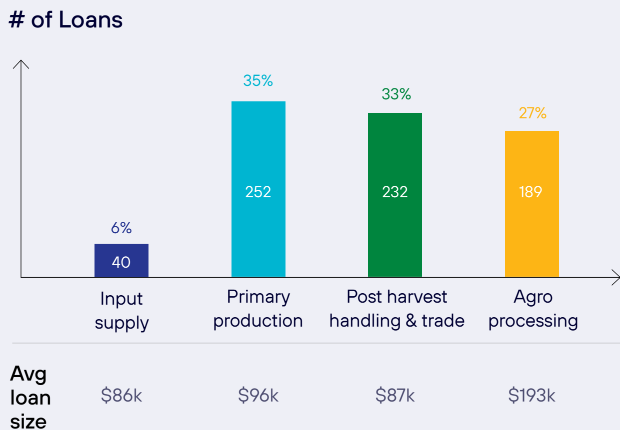
11a. Loan distribution by country



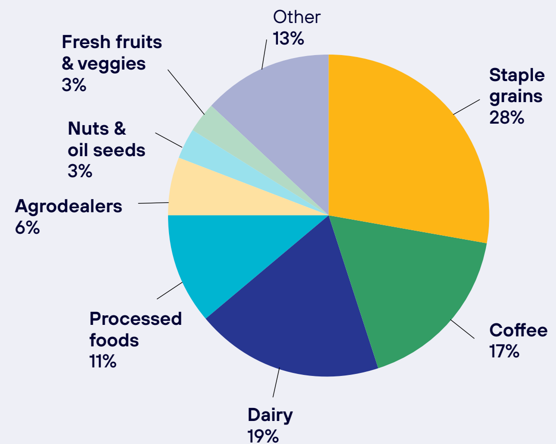
11b. Loan distribution by lender type



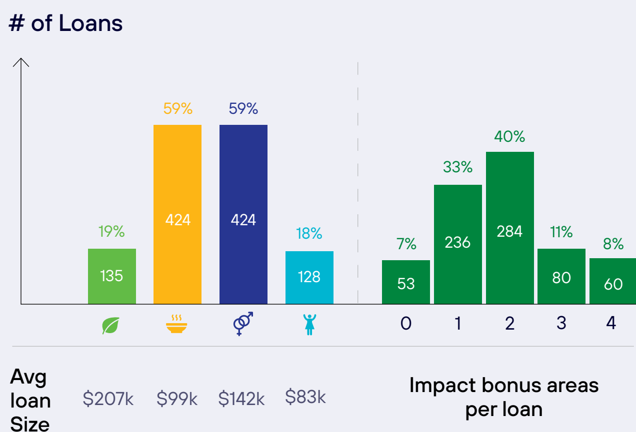
11c. Loan distribution by stage in the value chain



11d. Loan distribution by crop type



11e. Number of loans qualifying impact bonuses



11f. Enterprise metrics

	Median	Avg	Total
Enterprise revenue	$294k	$761k	$542m
Payments	$127k	$379k	$168m

	Total	Women
# farmers	429k	190k
# employees	16k	6k

ACELI AFRICA

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