

# **Evidence Review for Agricultural SME Finance**

# **Executive Summary**

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## Why agri-SME financing?

Despite accounting for 19 percent of gross domestic product (GDP) in "least developed countries" and employing a majority of the population, agriculture receives a disproportionately low level of formal credit<sup>1,2</sup>. In Kenya, for instance, agriculture accounts for over 22 percent of GDP and employs over 30 percent of the working population, but receives only 3.6 percent of total formal credit<sup>3,4,5</sup>. Similar imbalances are typical for many low-income and lower-middle income countries.

Credit that flows to the agriculture sector in low and lower-middle income countries is primarily provided to large commercial farms and industrial processors. This results in a substantial financing gap for agricultural small and medium-sized enterprises (agri-SMEs)<sup>6</sup>. These actors are difficult to serve given small ticket sizes, high transaction costs of reaching remote rural areas, and limited financial management capacity on top of systemic risks related to climate, market volatility, and crop failure that are inherent to the sector more broadly. At the same time, increasing access to finance for smallholder farmers and agri-SMEs has significant potential to improve rural livelihoods, strengthen food security, mitigate the effects of climate change, and create economic opportunities for women, youth, and other marginalized groups.

In recent years, donors and development finance institutions have funded a growing number of initiatives to boost lending to agri-SMEs, including credit guarantee schemes, new investment vehicles, credit lines, and capacity building for commercial banks. Increasing resources to develop agricultural finance markets creates both opportunities and risks. Market interventions and policy reforms can be most effective when based upon evidence: including data, practitioner insights, and third-party evaluations. Such evidence is limited when it comes to the agricultural finance sector, meaning that new initiatives are funded largely on the basis of intuition and influence. **Expanding the knowledge base of what does and does not work for mobilizing additional capital into the sector and how to steer that capital for greatest impact will enable more strategic deployment of time and resources for donors, policymakers, and practitioners alike.** 

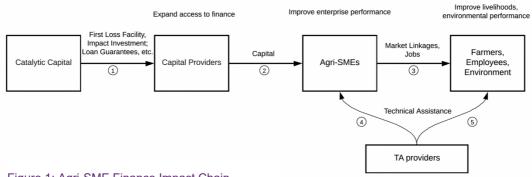
In this evidence review, the International Growth Centre (IGC) mapped the existing body of practitioner and academic evidence on lending to agricultural SMEs in developing economies and identified research and learning priorities to fill key gaps. The review was conducted in partnership with the <u>Council on Smallholder Agricultural Finance</u> (CSAF), a network of 20 social impact investors that collectively lend \$700M+ to agricultural SMEs on an annual basis and come together to share learning and develop best practices for lending to agricultural SMEs in emerging markets.

#### What do we mean by "Agricultural SME"?

This review is particularly focused on finance for agricultural SMEs spanning loan sizes of \$10k-\$2M, though the data and reports provided by CSAF members is concentrated on the \$100k-\$2M range. For purposes of this review, "agricultural SMEs" refers to any enterprise, whether privately owned or a cooperative or producer organization, that employs at least five full-time workers and/or aggregates at least 25 smallholder farmers. Agricultural SMEs may be involved in various stages of the value chain from input supply to primary production to post-harvest handling and storage to value-added processing.

### Agri-SME Finance Impact Chain

In the agri-SME financing space, catalytical capital (in the form of debt or equity with belowmarket returns, loan guarantees, or other incentive structures) is provided to financial intermediaries with the assumption that these actors will be encouraged to expand access to finance to agri-SMEs beyond the financing available commercially. This financing for agri-SMEs is intended to improve enterprise performance and growth. Most upstream providers of catalytic capital also intend to increase financing at the SME level to create more and better paying jobs, improve farmer livelihoods, and—when sustainable practices are used have a positive environmental impact. Several practitioners and donors also provide technical assistance (TA) to agri-SMEs and/or farmers with the expectation that TA will facilitate improved productivity and performance at enterprise and/or farm levels. The impact chain illustrated in Figure 1 shows the interaction points that must be evaluated to thoroughly understand the impact of market interventions for agri-SME financing. This initial analysis is specifically focused on agri-SME lending but could be expanded in the future to include equity investments and other financing instruments beyond debt.





The purpose of this evidence review is to evaluate the evidence at each step in the chain to understand if and how concessional capital flows through the ecosystem to ultimately create jobs, improve livelihoods, and generate positive environmental impact. The IGC partnered with CSAF to collate and analyse the evidence across the impact chain. The three main data sources used are:

- 1. **Loan data:** An analysis of 14 CSAF members' lending data covering 6,700 loans totalling \$5 billion across 81 countries up to the year 2020;
- Practitioner reports and case studies: A review of case studies, reports, and independent evaluations used by practitioners and their partners to assess the impact of their lending activities; and
- 3. Academic literature: An examination of the academic literature on agri-SME finance to identify gaps and areas of consensus.

#### Why is this important?

The agri-SME financing sector can benefit greatly from studying past examples. Microfinance emerged as a popular development tool in the 1980s, but there was not a robust evidence base until around 2010 (see Figure 2). In recent years, it has become clear that the impact of microfinance is nuanced and not necessarily what was expected by early proponents<sup>7</sup>. An increased understanding on the impact of microfinance enabled donors, practitioners, and policymakers to target their resources and efforts more effectively. As illustrated in the diagram below, the level of evidence in peer-reviewed economics journals of what works in agri-SME finance is comparable to microfinance 20 years ago. Note that the blue line incorporates all types of academic literature relating to SMEs, therefore representing an upper bound to what is known about agri-SME financing. While many practitioners and donors believe that concessional capital can increase access to finance for agricultural SMEs and thereby support enterprise growth and improved livelihoods, there is insufficient knowledge about how limited resources can be deployed to maximise impact.

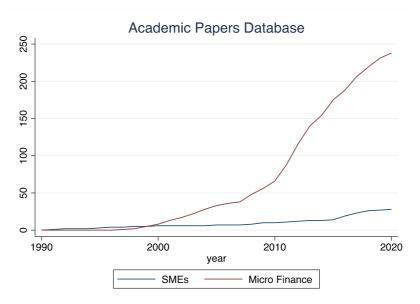


Figure 2: Illustration of academic papers on SMEs and microfinance

To be clear, the IGC and CSAF are <u>not</u> advocating for a moratorium on concessional funding for agri-SME finance while the sector builds a more comprehensive evidence base. Rather,

it is imperative for researchers to partner with practitioners and donors to establish research and action learning as part of the growing set of efforts that are embedded into agri-SME finance initiatives.

#### **CSAF** data analysis

The dataset provided by CSAF contains valuable information on 6,742 loans totalling \$5 billion from 81 countries. These loans span 34 crop commodities and were issued to 1,406 agricultural enterprises (borrowers) by 14 lending institutions. In the context of the impact chain, the nature of the dataset enabled us to examine the interaction between lenders and agri-SMEs (*i.e.*, Link 2 in Figure 1). The findings from this data analysis are synthesized in the *Analysis of CSAF member agricultural SME lending data* and summarized here.

Our analysis reveals a positive correlation between the duration of the borrower-lender relationship and the size (in terms of revenues) of a borrower. However, we also find that this correlation is primarily driven by the fact that large borrowers tend to establish longer-term relationships. This implies that firms which are likely to take out multiple loans in the future are larger in size prior to obtaining their first loan compared to firms that borrow only for one year. Additionally, we observe that loan amounts tend to increase as a borrower-lender relationship matures, while interest rates tend to decrease slightly over time.

Likewise, our analysis finds that as lenders provide more loans in a specific country-crop pairing (market), they tend to offer larger aggregate credit volumes in subsequent years. Additionally, they tend to offer loans at slightly lower interest rates and experience fewer defaults. Meanwhile, when a lender enters a new crop market in a country where they already operate, they tend to offer less aggregate credit volumes within that new market compared to existing ones. Furthermore, markets where more lenders are active tend to have slightly lower interest rates and higher average loan amounts issued. Lastly, we find substantial differences in average default rates between crops and countries.

These findings provide preliminary insights into enterprise growth linked to access to finance, changes in loan terms through repeated borrowing, competitive market dynamics, and differences in credit risk across countries and crops. We believe there is significant value in expanding the data and deepening the analysis both to draw more robust conclusions for how the agri-SME credit market currently functions and to generate ideas for how it might be improved.

### Analysis of practitioner reports and case studies

CSAF members also submitted approximately 200 case studies, reports, and blog posts for IGC's literature review. Most of these documents provide anecdotal evidence of the positive impact of their lending on borrowers. The findings from this analysis are synthesized in the <u>Agri-SME financing literature review</u> and summarized here.

Practitioners report that credit provided to the agricultural sector is often used to expand operations, enhance community welfare, and integrate farmers into formal value chains. However, it must be noted that these reports are not primarily designed for rigorous impact evaluation purposes. Thus, only around 18 percent of submitted pieces use counterfactuals and the vast majority use qualitative evidence.

Compared with the microfinance sector, where the large number of borrowers and low transaction costs for acquiring clients is conducive to experimental studies, it is quite challenging to establish a large sample size and control group in the agri-SME finance sector. Given the challenges of conducting experimental evaluations in the sector, it should not be surprising that only a small number of documents generated by lending practitioners include counterfactuals or control groups in their analysis. Most rely on qualitative descriptions. A much larger, and more representative body of evidence that includes control groups for robust comparisons is needed.

#### **Review of academic literature**

Due to a difficulty in conducting rigorous studies with strong counterfactuals, there is also unsurprisingly—a dearth of academic literature on agri-SME finance in low and lower-middle income countries. The relevant evidence currently available is predominantly on SME finance (but not specific to agriculture) or findings related to microfinance. The findings from this analysis are synthesized in the <u>Agri-SME financing literature review</u> and summarized here.

IGC's review of the academic literature covered 16 relevant papers from 9 academic journals across three key areas:

- i. Credit constraints faced by borrowers
- ii. The relationship between access to finance and enterprise growth
- iii. The relationship between access to finance and livelihoods

The main conclusions from the reviewed papers are summarised below:

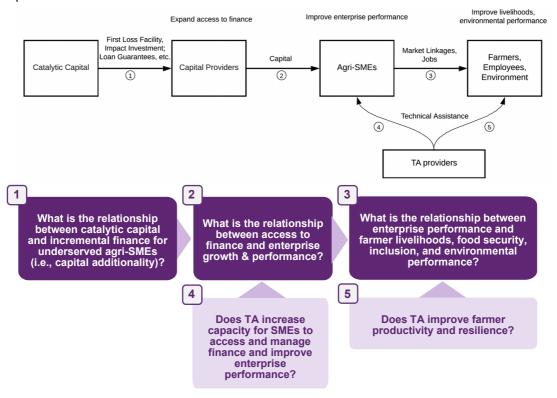
- SMEs in the coffee sector perceived as risky face credit constraints while those that are perceived as less risky are generally not subject to the same credit constraints.
- Larger SMEs seem less likely to face credit constraints than smaller SMEs.
- Targeted programs that attempt to improve access to finance for SMEs in low and lower-middle income countries can be successful in their attempts to increase firm investment and performance.
- Capital constraints of agricultural borrowers are not the only barrier to investment; uninsured risks related to agricultural production and climate faced by small-scale farmers are also a major driver for underinvestment.

- When access to finance is limited to a subset of enterprises in the market, borrowers' improvements in operations can result in a competitive advantage at the cost of firms that are unable to access finance.
- Credit expansion schemes to under-served areas can improve poverty outcomes; the effects on poverty vary by industry and context.

While we believe that these papers from adjacent fields provide useful insights into credit constraints and the effect of access to finance on enterprise growth and livelihoods, most of them do not focus on agri-SME finance. This, again, highlights the need for more research on agri-SME finance to guide better decision-making by policymakers, practitioners, and donors.

#### Areas for future research

This evidence review provides a foundation upon which future research will be built. Further rigorous studies are necessary to investigate the entire impact chain. By exploring the chain, both practitioners and researchers can identify research questions that are relevant for practitioners.



Each of the above links contain multiple sub-questions that could be answered to understand if and how impact flows through the chain.

- i. **Incentivising lending to / investment in agri-SMEs:** To what extent is financial risk associated with agri-SMEs real versus perceived? To what extent are transaction costs limiting access to finance for agri-SMEs? Do agri-SMEs have the enterprise capacity to absorb larger amounts of capital (*i.e.*, what is the addressable demand)?
- ii. Access to finance and growth: Does access to finance for agri-SMEs improve their resilience to external shocks? For agri-SMEs that are able to access capital, what are the leading challenges to meeting performance targets? What are appropriate benchmarks for growth in the agri-SME sector given systemic risks and natural production cycles in agriculture?
- iii. Value created for stakeholders: Do agri-SMEs with adequate access to finance offer higher prices and/or other valued services to their farmer suppliers? Under what conditions do farmers linked to agri-SMEs benefit from productivity gains by the SME or improve their environmental practice? What is the relationship between access to finance at the agri-SME level and the number and quality of jobs for full-time and casual workers at the SME and farm level?

Expanding the evidence base to answer these questions and others will be useful to build a more holistic understanding of the impact of agri-SME financing. The evidence will help practitioners, policymakers, donors, and researchers determine the drivers of impact and make informed decisions to strengthen the agri-SME finance sector.

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