



LEARNING BRIEF 3

# BUSINESS MODEL SUSTAINABILITY

Promising pathways and opportunities for research:  
Understanding profitability in smallholder finance

## Key takeaways

A number of financial services providers (FSPs) serving smallholder farmers affirm they have already achieved profitability. Despite this, providers affiliated with the Lab’s [partners](#) overwhelmingly agreed that cost to serve – and not farmer risk as often mentioned – is the most important cross-cutting barrier to business model sustainability. Efforts to achieve this long-term profitability can be sorted into five major pathways: unit economics, scale, cross-subsidizing, shared costs, and long term subsidies. However, according to new research by the Mastercard Foundation Rural and Agricultural Finance Learning Lab (‘the Lab’), many still face significant challenges to developing and consolidating sustainable business models. Even after overcoming the difficulty of understanding the agricultural sector and smallholders’

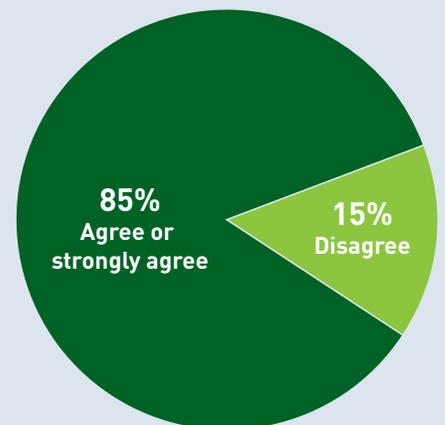
unique financial needs, FSPs face high costs and risks of serving this segment. Although the pathways of scale and cross-subsidy appear to be preferred, there is a need for more research. For example, there is little to no publicly available analysis of the return on investment (ROI) for financial institutions serving smallholders. New learning around ROI and profitability levers (like technology and partnerships) is required to understand what works best for each institution type and how.

## What we know about profitability today

**FSPs see smallholder finance as a promising market and some have already achieved profitability. However, given the significant investment required to design and deliver financial products and services to this segment, many are still struggling to achieve sustainability in the near term.** Among Lab portfolio providers we surveyed, there is a split between

### COST TO SERVE IS BIGGEST CHALLENGE AND ACHIEVING SCALE IS SEEN BY MOST AS PATHWAY TO ADDRESS

**The risks of serving smallholders get too much attention; the real challenge is the cost of serving remote populations with low transaction values.**



# DEFINING BUSINESS MODEL SUSTAINABILITY TO SERVE SMALLHOLDERS

**BUSINESS MODEL SUSTAINABILITY = REVENUES\* > TOTAL COSTS\*\***

\* **Revenue** includes net repayment revenue and associated fees from the smallholder products and services. It can be bolstered by multi-year committed funding that does not have a guaranteed end date (e.g. government subsidies that do not have a set end date, or long-term guarantees) but does not include time-bound grants from donors

\*\* **Costs** can include direct field operation costs, direct costs from non-financial support services, direct marketing and sales costs, and all overhead and allocated program support costs required for serving smallholders.

## SUSTAINABILITY IS HARD AND MANY SEE IT AS LONG WAY OFF

Currently, is your Smallholder farmer business unit profitable? If not, how long before you anticipate being profitable?



the 40% who affirm their profitability today, and those unlikely to be profitable for 3-4 years or beyond. This varies by partner type and business model, with commercial banks and non-deposit taking microfinance institutions (MFIs) most likely to report profitable models and agribusinesses, and NGOs and social lenders the least.

It has been commonly perceived that FSPs serving smallholders struggle with profitability because of the additional risk carried by smallholder lending. Information asymmetries make it difficult for providers to make well-informed decisions, while external risks such as climate patterns and crop failure can dramatically impact

farmer income and their ability to repay loans. However, FSPs overwhelmingly agreed that the cost to serve smallholders is the main barrier to business sustainability. According to one of the Lab's partners, an FSP, "We've found that the risk of smallholder finance is not significantly higher than risk of other low-income populations. We believe the cost to serve is the main binding constraint." The cost of acquiring and serving smallholder customers is high given the lack of product awareness among smallholders, poorly designed products, and the barriers presented by rural geography. Particularly, rural geographies present a myriad of challenges including poor road networks, poor cell

phone connectivity, long distances between various points, and sub-scale markets due to low population densities – especially compared to urban areas.

## Five pathways to sustainability

FSPs are responding creatively to these challenges, developing business models that allow them to extend their financial services to smallholder farmers while working to achieve profitability. The Lab's analysis of different partner business models sorts these efforts into five different pathways to reach sustainability. Each of these pathways represents an overarching strategy or primary approach to achieving profitability, but in practice most provides will combine more than one of these strategies:

**Unit Economics:** In this pathway, margins are high enough that the model is profitable even at a small scale. For example, some microfinance institutions (MFIs) are able to charge interest rates to farmers high enough to cover financing and operation costs while still earning a profit. Such models may rely on existing local presence of an MFI and may be limited in reach.

**Scale:** With products offering lower margins, FSPs are able to achieve profitability when they sell enough

units to minimize fixed costs. This pathway works well for large banks lending to large numbers of smallholder farmers, but requires a solution to the challenge of low-cost distribution. Many digital innovations in smallholder finance are in the service of the scale pathway to sustainability.

**Cross subsidizing:** In this pathway, FSPs cover part of the cost of extending loans (or insurance) to smallholders with the profits generated by cross-selling other financial or non-financial services, or possibly from serving other customers, intentionally using the profits from these services to subsidize smallholder finance offerings. For example, a digital provider in East Africa subsidizes unprofitable smallholder farmer loans with their main source of revenue, mobile money transaction fees. Cross-subsidy may be a strategy to capture market share and bring in new customers before graduating them to longer, higher-margin loans or higher-value products. Or, in the case of agribusinesses, providing finance bolsters the production and loyalty of their smallholder suppliers, which are essential to their core off-taking business.

**Shared costs:** Providers using this pathway work with partners to split costs and offer bundled or complementary services. For example, a microfinance loan provider in Kenya has reduced costs and increased loan volumes by partnering with irrigation, agriculture, and livestock product manufacturers to provide technical assistance along with financial products. The [last mile partnerships](#) analyzed in our previous briefing note support the shared-cost pathway to sustainability. The potential to unlock profitability by sharing costs with partners is large, but so are the chal-

lenges to forging such partnerships, which may be one reason why this potential is currently largely untapped by providers.

**Long term subsidies:** Some smallholder populations and some smallholder finance products may require smart subsidy for the foreseeable future to foster a sustainable market. Developed countries continue to subsidize loans and insurance for farmers, and while the appropriateness of individual subsidies may be debatable, it is possible for a private sector FSP to develop a business model that achieves sustainability on the basis of such subsidies. In Africa, Kenya has been one of the first countries to introduce a [large scale agriculture insurance program](#), and insurance companies there are already developing products for farmers that leverage government subsidies. Kenya Livestock Insurance Program partners with private insurers to subsidize premiums for registered herders, covering up to five animals per household and disbursing a lump sum payment automatically once a certain satellite-based index threshold is met. Similarly, in India, state and central governments support private insurers by subsidizing the difference between the farmer's premiums - fixed at 1.5%, 2% and 5% for Rabi, Kharif and commercial crops - and the actuarial premiums quoted by insurance companies. Credit guarantees, while requiring great care to design well, can also foster sustainable lending models.

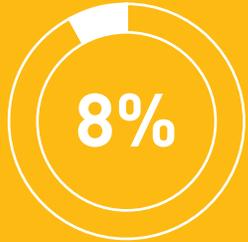
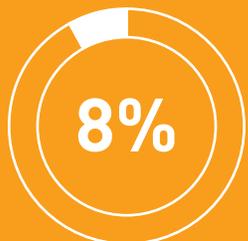
In addition to combining the above strategies (e.g. cost-sharing with scale) providers may sequence strategies as they learn about the market. For example, cross-subsidy may enable an FSP to stay in the business of serving smallholders long enough

to reach scale or otherwise innovate its model.

**Most of the providers we reached told us their primary pathway to sustainability was scale, and finding ways to reduce cost to serve lower income last mile customers.**

A financial intermediary working in Kenya identifies scale as the centerpiece of their approach: "Our model is to partner with end buyers of produce (e.g., supermarket chains) and agribusinesses to achieve scale fast." A social enterprise working in East Africa has also adopted this strategy: "We have been shifting our model and are looking for players that are more capable of achieving scale. We are targeting MFIs as well as savings and loans institutions who have access to cheap capital through deposits." A third FSP partner noted, "Currently, [our] main source of revenue are transaction fees. We expect loans to become profitable when we achieve scale." Despite these testimonials, very little quantifiable information on the profitability of smallholder portfolios is available. The majority of institutions serving smallholders are not tracking cost data and financial performance in alignment with their smallholder portfolio - smallholder business activities are frequently business extensions of an existing program (e.g., agri-lending or consumer lending) - preventing a segmented understanding of profitability. In practice, this challenges organizations' ability to understand how to reduce cost through scale. As another provider explained, "we have different hypotheses about how to achieve sustainability (e.g., digitizing services or leveraging deposits as a main source of capital) but we still haven't entirely cracked the nut on the best way to scale".

# FIVE PATHWAYS TO SUSTAINABILITY IN SMALLHOLDER FINANCE

PATHWAY	HOW IT WORKS	RESPONDENTS "PRIMARY PATHWAY?"
 <p>SCALE</p>	<p>Product offering becomes profitable after reaching a certain level of scale</p>	 <p>50%</p>
 <p>CROSS-SUBSIDIZING</p>	<p>Offering additional financial services (e.g., savings, insurance, payments) to cross-subsidize the cost of smallholder lending</p>	 <p>17%</p>
 <p>LONG-TERM SUBSIDIES</p>	<p>Subsidizing the cost of products with support from external organizations (e.g., government)</p>	 <p>17%</p>
 <p>SHARED COSTS</p>	<p>Offering bundled or related services in partnership with other organizations and sharing costs of service delivery (e.g. financial institutions and agribusinesses)</p>	 <p>8%</p>
 <p>UNIT ECONOMICS</p>	<p>Product offered to a select group of farmers at high margins, enough for it to be profitable at low scale</p>	 <p>8%</p>

Source: Learning Lab and Dalberg analysis, Interviews with RAF partners, Lab survey of providers (non-representative sample), IFC (2014) "Access to Finance for Smallholder Farmers"

**Achieving scale can be challenging and even elusive because of the high need for product customization as providers expand to new markets, the complexity of building new local partnerships, and the organizational and management changes involved as growth occurs. While scale is needed to address the smallholder finance gap, alternative pathways to profitability should be more fully explored and understood. Cross-subsidies, in particular, seem promising.** FSPs that have figured out ways to pilot or de-risk smallholder lending using cross-subsidy from existing or more profitable parts of the business are succeeding. One MFI partner uses more profitable loan products in semi-urban markets to subsidize the cost to serve harder to reach rural clients. Further, the Initiative for Smallholder Finance argues, “The capacity to scale sustainably depends drastically on the FSP model; we believe cross-subsidies are important (either by bundling or across business lines).” Cross-subsidy can be a competitive differentiator for some providers who may originally been skeptical, particularly when entering new markets, and it often strengthens a more profitable business line. For example, zero-fee accounts generate similar costs to serve as a fee-based account - and are therefore often loss making - but strengthen an institution’s lending business line by building a larger customer base to which it can target its credit products.

## Future research areas

Current research and evidence on business model sustainability is in the early stages. Most of the research to date has focused on traditional MFIs and on agribusiness service delivery models (which often include finance) research has not explored business model sustainability of the smallholder-specific operations of banks, fintechs, or niche lenders who hope to drive much of the growth in smallholder finance in sub-Saharan Africa. Because scale and cross-subsidies are seen as the most promising, priority research should focus on three areas:

Deeper assessment of return on investment for different business models serving smallholders

1. Fuller exploration of the challenges and potential of smallholder finance sustainability pathways
2. Analysis of the impact of technology, partnerships and other key profitability levers on ROI

**The first area for further research is an understanding of the ROI of the different business models serving smallholders, with a focus on large-scale lenders and new models that have received less attention in previous research.** Here the Lab is hoping to work with its partners to advance understanding of the ROI of specific business models and financial products (e.g. working capital, asset finance), as well as break-even points and the sensitivities of different performance drivers. More broadly, for providers with a negative ROI, research should focus on identifying what is constraining profitability and determining the extent to which this is temporary (and if so, for how long).

**The second area is a fuller exploration of the pathways that different FSP models are currently using to reach sustainability, including what is working, what the constraints are, and which pathways have the greatest untapped potential.** Some FSPs have reached sustainability and others expect sustainability in the coming years. How does profitability vary by pathway? Priority research should focus on the scale journey, evaluating the barriers to scale faced by different types of FSPs and providing guidance – to institutions themselves but also to donors – on how to best work around these.

**Finally, it will be critical to understand how profitability levers drive the sustainability of business models.** Priority research should focus on building the evidence base for digitally-enabled smallholder finance. Data analytics and automatization of previously manual and paper-based tasks are believed to lead to significant efficiency gains and increased markets for Lab partners. Yet quantitative evidence is still scarce on the impact of technology on key FSP cost drivers (e.g. how much can specific technologies reduce the cost to serve smallholders?) as well as on what tools, when and how should they be introduced in given FSP model? The impact of digitalization should be particularly assessed in the context of scaling and in conjunction with other key profitability levers (e.g. partnerships) to facilitate digital integration.

**By providing a comprehensive view of “what works” and supporting evidence in each of these three key areas, this research will enable the creation of a sustainable business model or models, and unlock the potential of multiple data-driven pathways to sustainability.**

## About this briefing

This brief intends to (1) bring clarity to the different efforts currently undertaken by FSPs to reach financial sustainability and (2) set the stage for future research, all for the purpose of providing FSPs with evidence that can guide their journey in achieving financial sustainability. This briefing focuses specifically on business model sustainability of FSPs and does not aim to understand income, profitability, or impact of the smallholder. The findings in this brief draw on a review of the experience to date of Mastercard Foundation rural and agricultural finance (RAF) partners, including documentation, interviews and a survey of 17 financial service providers, as well as secondary research from external sources.

## About the Mastercard Foundation Rural and Agricultural Finance Learning Lab

The Mastercard Foundation Rural and Agricultural Finance Learning Lab is jointly implemented by Dalberg Global Development Advisors and the Global Development Incubator. The Lab is committed to actionable and collaborative learning that leads to better financial solutions for more smallholder farmers and other rural clients. We invite the engagement of our readers, including feedback on this report, contributions of additional data, or input on future areas of study. At our website, [raflearning.org](http://raflearning.org), users can contact the Lab directly or comment on this or any other publication. We are on Twitter @raflearning, or the Rural and Agricultural Finance professional group on LinkedIn.

## Authorship

Dalberg conducted this research in partnership with the Mastercard Foundation Rural and Agricultural Finance Learning Lab. The authors would like to acknowledge and thank the sponsor of this work — The Mastercard Foundation — for providing guidance and input for this project. We would also like to thank the RAF portfolio partners who participated in interviews and surveys to inform this research.