

## **Executive Summary**

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To meet client needs cost-effectively, on a large scale, and in difficult operating environments, microfinance institutions (MFIs) have relied on simple and standardized loan products. While these have been effective for many clients, particularly the urban poor, they do not sufficiently meet the needs of smallholder farmers.

Smallholder farmers have lumpy and seasonal income due to the nature of their work. The investments they make in farming provide a slower and less predictable return than other businesses. They require financial products that offer flexibility to accommodate these characteristics. Most microfinance loan products do not have flexible repayment schedules, and thus are not well suited to the business of agriculture.

One Acre Fund has designed a loan product that offers farmers fully flexible repayments. There is no repayment schedule, and borrowers can pay as little or as much as they want at any time, as long as they complete repayment by the final deadline. This flexibility allows farmers to closely match repayments to cash flow and reduce pressure on household finances.

Delivering flexible repayment products means lenders have to adjust the way they manage credit risk, portfolio quality, and liquidity risk. It can also require IT development and additional staff training. However, the tools and processes to manage these challenges are relatively straightforward to develop, and any upfront operational burden is significantly outweighed by the long-term impact of reaching a large new market of clients: smallholder farmers.

## **Traditional Microfinance**

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Microfinance has banked a significant percentage of a previously unbanked population. Some common methodologies have emerged to make microfinance less risky, more efficient, and profitable for the lender as well as more suitable and effective for the borrower. Most MFIs employ a combination of simple policies and procedures:

- A limited number of standard loan products
- Short loan tenor (i.e. repayment period)
- Group lending (with joint liability)
- Regular repayments (weekly, bi-weekly, or monthly)
- Amortization (fixed repayment amounts every week)
- No grace period (repayments start immediately following disbursement)

There are many advantages to these policies and procedures. Regular repayment meetings strengthen group cohesion and joint liability. Fixed repayments are easy for loan staff to explain and for clients to understand. Short loan tenors reduce the lender's exposure to risk.

### *Farmers First*

However, this model is not suited to smallholder farmers, whose livelihoods are irregular and less predictable.

### **Why Farmers Need Flexibility**

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There are some common characteristics shared by smallholder farmers that demand more flexible loan terms:

- **Farmers have lumpy, seasonal cash flow.** They spend and receive money in large chunks at different times of the year. All farmers invest in fertilizer before the rains start, and at the end of the season, many farmers receive a lump-sum payment on the sale of their harvest. Farmers struggle to begin repaying a loan immediately after disbursement, particularly since they're often busy planting their fields. For the same reason, meeting regular fixed repayments is also difficult.
- **Farming is slow compared to urban enterprises.** There is a long gestation period for investments; realizing returns takes longer than the quick turnover of small urban enterprises. As a result, the short loan tenors and frequent repayments of traditional microfinance loans are unsuitable. Frequent repayments can also increase transaction costs to the farmer, often at a time when their liquidity is most constrained.
- **Farmers' returns suffer if they are forced to sell at low market prices.** Farming is inherently unpredictable due to reliance on weather, exposure to pests and disease, and market or price risk for the final product at harvest time. For example, even in a good year, a "bumper harvest" can lead to a glut of supply that suppresses market prices and the farmer's return. Unpredictable returns make it harder for a farmer to commit to repaying set amounts at harvest time, or shortly after.

These characteristics strain farmer households when they borrow from an MFI. This can lead to underinvestment in their farms or businesses, which reduces future income. Farmers may sell productive assets such as livestock or resort to multiple borrowing to pay for unmet needs (Czura et al 2011). Creating more flexible repayment structures that accommodate farmer cash flow is an essential part of providing effective farm finance.

### **Flexible Repayment at One Acre Fund**

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There are varying degrees of repayment flexibility. Some loans require interest-only payments during the season and principal is repaid after harvest. These types of loans are known as balloon or bullet loans, and are employed by many MFIs. These structures are more flexible than standard loans, but the repayment profile still does not match farmer cash flow.

## Farmers First

One Acre Fund offers joint-liability group loans, with a term of 10-11 months and fully flexible repayment terms. Farmers pay what they want, when they want. Groups comprise 5-15 members and meet weekly or biweekly, depending on the time of year and how busy group members are on their farms. Repayments are collected by field officers each meeting and farmers must meet a minimum threshold before their inputs are delivered. Aside from this initial repayment requirement, there is no minimum or maximum repayment at any meeting. Farmers pay only what they can afford at the time.

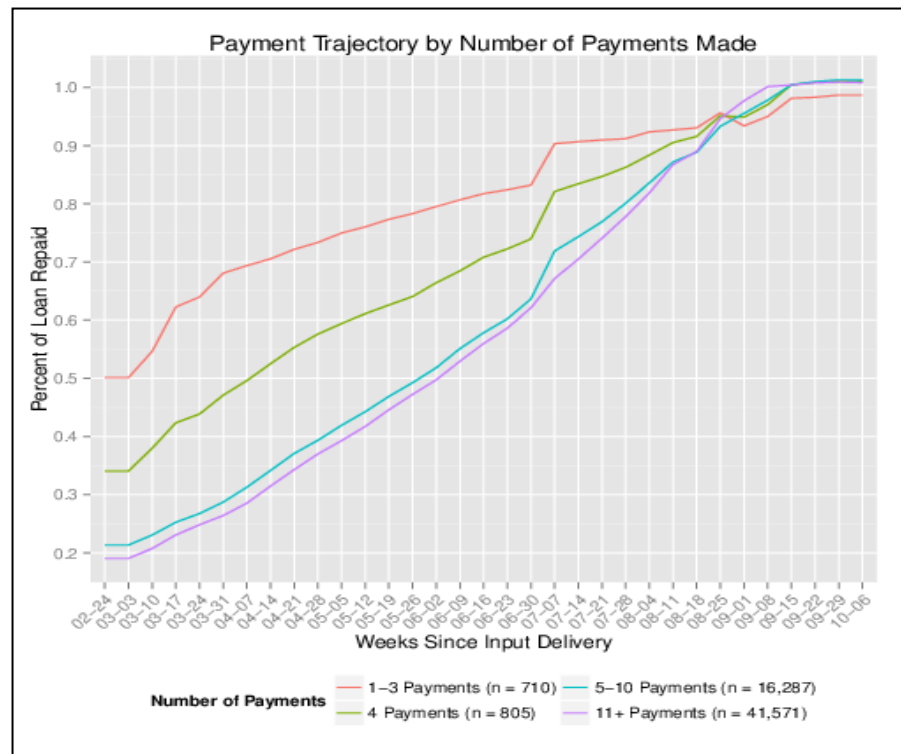


Figure 1: farmer payment trajectory over the course of one season.

From the organization’s perspective, early repayments are preferable. They improve liquidity and reduce exposure to credit risk. One Acre Fund provides small incentives to farmers to pay earlier if they can, such as free calendars or tools for their farms. But it’s ultimately the farmer’s decision. The above graph (Figure 1) shows One Acre Fund farmers split into four “groups” based on number of repayments made over the course of the loan term. Over 75 percent of farmers make more than 11 repayments over the course of the season.

One Acre Fund has a historical repayment rate of 99 percent. Why is its flexible repayment structure effective?

- **Repayments perfectly fit cash flow** when the farmer has the freedom to choose. She can take advantage of prosperous weeks or scrimp and save during the lean ones. Relieving the pressure of meeting weekly repayment targets allows farmers to make better decisions and improve general management of their household finances (Field et al, 2012). This improves the likelihood of repayment.
- **De-linking repayments from harvest income** can reduce credit risk and defaults, and provide income benefits. For example, most One Acre Fund clients earn wages as laborers on other farms, have small trading businesses, or sell milk from their cattle. Fully flexible repayments made throughout the season allow farmers to use non-harvest income to repay their loans in addition to farm income from post-harvest sales. This reduces pressure on farmers to sell immediately after harvest when prices are lowest, enabling them to realize greater profits.

## *Farmers First*

- **Group solidarity** is as important as ever. One Acre Fund farmers don't have to make repayments every week, but they still meet regularly for training and to witness group repayments. Group members are required to live within a short walking distance from one another and at enrollment they agree to work together on the farms of all group members. They help prepare one another's land and plant together once the rain comes. A cooperative approach to farming strengthens the group bond and joint liability, but it also improves quality of the group's agriculture work. Members can ensure everyone has followed best practices, which generates increased yields.

## **Adopting Flexible Repayment**

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Lenders adopting a flexible repayment approach should prepare for and mitigate the following operational risks:

- **Credit risk and portfolio quality** is difficult to track using conventional measures. The absence of a fixed repayment schedule means Portfolio At Risk (PAR) cannot be measured. As a result, it is difficult to assess credit risk during the loan cycle until an organizational repayment history has been established. Once such a history is established, an organization can measure the total amount repaid and analyze repayment trajectories to assess portfolio quality. In the interim, organizations might consider using a "projected" repayment schedule to calculate PAR and monitor against their expectations (even though clients' loans are not technically in arrears).
- **Group quality.** Less frequent group meetings and weaker group cohesion may also impact loan delinquency or default (Czura et al, 2011). Lenders can focus group activity on cooperative farming rather than repayment meetings alone to retain a high level of group cohesion. Effective training can ensure farmers make a high return on investment (ROI) and work regularly together, which reduces the risk of default.
- **Technical risk** comprises two key challenges. First, flexible repayments require more flexible systems, including a management information system (MIS) that is capable of creating and managing suitable loan products. This is not technically difficult, but many MFIs use software that has been developed for an industry that employs a small number of standardized loan products. Some software development could be necessary. Second, there are more technical demands on loan staff. Collecting fixed amounts each week is a simple process, and flexibility might introduce additional procedures or operational complexity. Sufficient staff training is required to ensure flexible loans are properly monitored and managed.
- **Liquidity risk** can increase, as it is harder to predict income from flexible loans. This can be managed, but at a small cost. Commitment to additional or regular disbursements may require a larger "liquidity buffer," or coverage ratio to be incorporated in finance policies, or the use of a working capital facility to cover any shortfalls. Borrowers can also be encouraged to repay more quickly by using incentives to reach repayment milestones during the cycle. This increases the predictability and level of income at a time chosen by the lender, but means a small trade-off in flexibility for the borrower.

## Key Conclusions

- ▶ Farmers require financial products that offer flexibility. Due to the seasonal nature of farming, smallholder farmers experience irregular cash flow, and their investments provide a slower and less predictable return than other businesses.
- ▶ The front-end effort required for delivering flexible repayment products is outweighed by the huge market opportunity of serving smallholder farmers. If lenders adjust the way they manage credit risk, portfolio quality, and liquidity risk and deploy proper IT and staff development, they can realize significant ROI and significant impact.
- ▶ There are strategies that MFIs can deploy in order to mitigate the perceived operational risks associated with lending to smallholder farmers.

## Appendix

Czura, K., Karlan, D., Mullainathan, S., (2011), *Does Flexibility in Microfinance Pay Off? Evidence from a Randomized Evaluation in Rural India*, Retrieved from:

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