

AREC 345: Global Poverty & Economic Development

**Lecture 22:**

**Savings Constraints and Productivity**

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Savings Constraints

## Review: Impacts of Microfinance

Evidence from randomized evaluations demonstrates that:

- **Many** poor households want an MFI loan, but **most** do not
  - ▶ Microfinance take-up rates range from 13 to 32 percent
- Those who do take out loans do not use them to start businesses
  - ▶ Some evidence that they are used to expand existing businesses, particularly when access to other forms of credit is limited

**What does everyone else use them for? Why do they want loans?**

## Borrowing vs. Saving

**A poor woman who makes the same low income every day.**



## Borrowing vs. Saving

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When is she better off taking out a loan?



## Borrowing vs. Saving

A poor woman who makes the same low income every day.



When is she better off taking out a loan?



*When she is better off having the good and living on a slightly lower per-period income (because some income goes toward repayment).*

## Borrowing vs. Saving

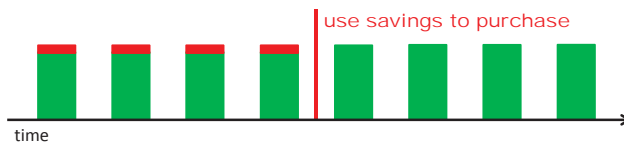
A poor woman who makes the same low income every day.



When is she better off taking out a loan?



If she's better off with the loan, why didn't she save?



## Savings Constraints

Dupas-Robinson (2013) conduct a randomized trial of a program in Kenya that gave micro-entrepreneurs interest-free savings accounts

- Savings accounts appear to help women save, expand businesses
  - ▶ After 6 months, access to savings accounts associated with higher levels of individual expenditures (i.e. income) among women
  - ▶ No significant impacts among men

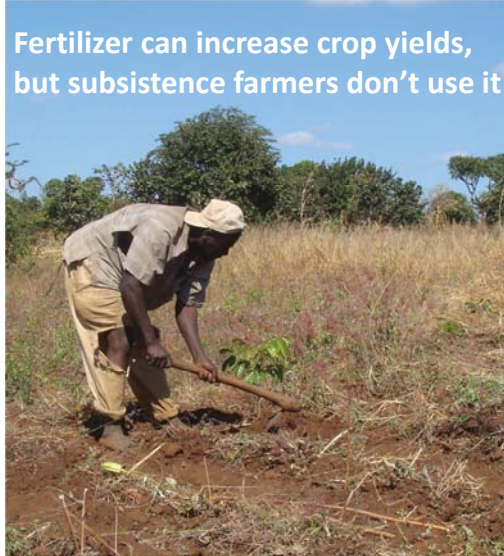
**What prevents women from saving at home?**

- Self control problems? Do current wants/needs seem important?
- Social pressure to share income with family, neighbors?
- Risk of theft?

**Are savings interventions a low-cost alternative to credit?**

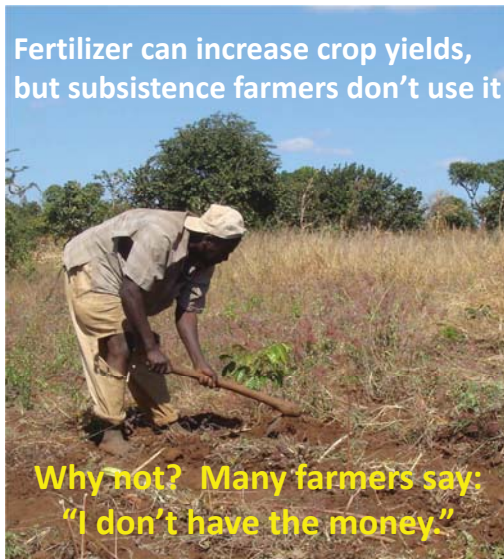
## Why don't farmers use fertilizer?

Fertilizer can increase crop yields,  
but subsistence farmers don't use it



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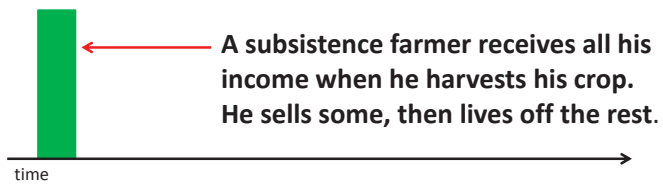
## A Model of Fertilizer Use

A subsistence farmer's income stream:



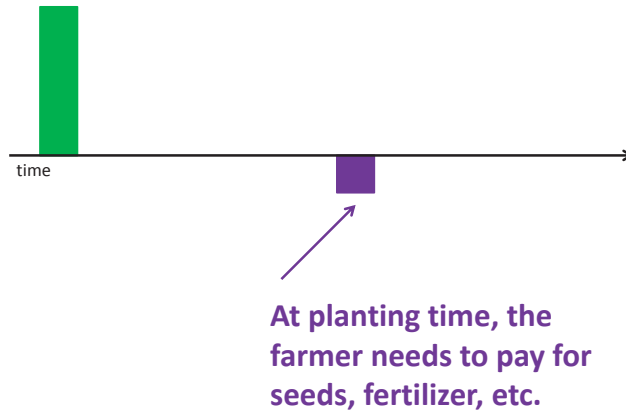
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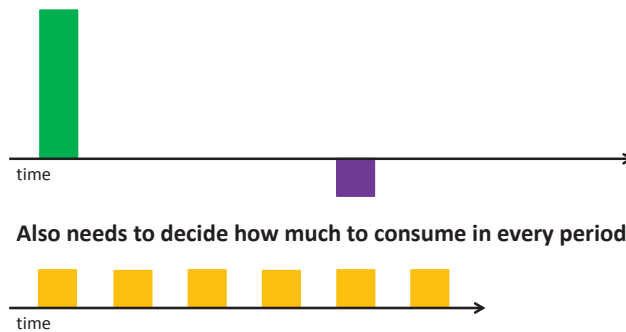
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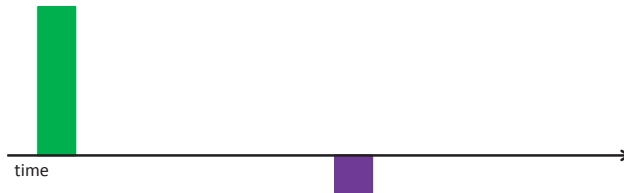
## A Model of Fertilizer Use

A subsistence farmer's income stream:



## A Model of Fertilizer Use

A subsistence farmer's income stream:



Also needs to decide how much to consume in every period



And make sure that you don't consume so much that you have no agricultural income/savings left over at planting time.

## A Model of Fertilizer Use

As we've already seen, saving can be difficult (esp. w/o an account)

- May be tempting to consume a bit more today, save a bit less
- Relatives, neighbors might have emergencies that are more important than fertilizer, making it difficult to protect your savings

Why don't farmers buy the fertilizer post-harvest, when they have money?

- Going to get it is time-consuming, so they may procrastinate
- Some risk that fertilizer might be stolen or damaged (e.g. by water)

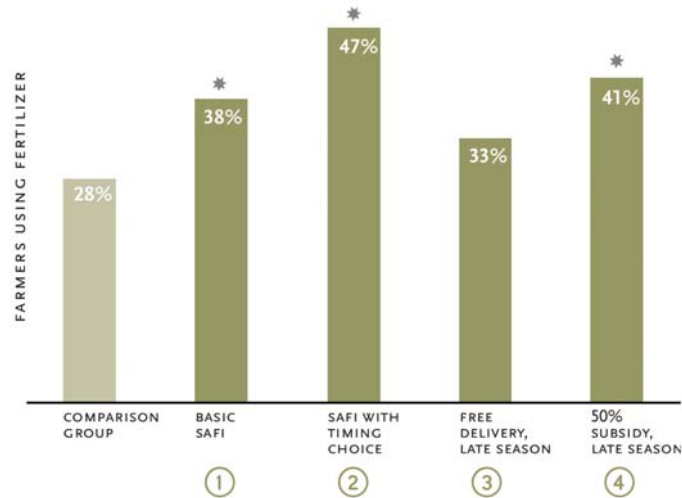
**Enter SAFI**, an NGO program that allows farmers to pay for fertilizer upfront, and encourages them to do so by offering free delivery



## Nudging Farmers to Invest in Fertilizer

	① BASIC SAFI	② SAFI WITH TIMING CHOICE	③ FREE DELIVERY, LATE SEASON	④ 50% SUBSIDY, LATE SEASON
Incentive	Free delivery	Free delivery	Free delivery	Free delivery and 50-percent discount
Timing of sales visit from SAFI officer and purchase	Immediately after previous season's harvest	Farmer chooses timing of purchase	During the growing season, at fertilizer application time	During the growing season, at fertilizer application time
Timing of fertilizer delivery	Farmer chooses	Farmer chooses	During the growing season, at fertilizer application time	During the growing season, at fertilizer application time

## Nudging Farmers to Invest in Fertilizer



## Summary and Takeaways

The SAFI results should remind you of the immunization study

- Small incentives to “act now” are an example of a **nudge**

Why do the poor need nudges?

- There are plenty of examples from rich countries, too
- **But**, poor people in low-income countries are responsible for a wide range of things that most people in rich countries don't think about
  - ▶ How should I treat my water to make it safe to drink?
  - ▶ Which vaccinations should my children get?
  - ▶ How do I manage my farm or small enterprise?
  - ▶ How much do I smooth my consumption when my income varies?

## Summary and Takeaways

Many of these issues stem from poor governance

- Governments fail to provide services, enforce regulations
  - ▶ Poor countries with good governance tend to become less poor
  - ▶ People in poor countries have to make health decisions we don't
- Bad governance also discourages investment, so jobs are scarce
  - ▶ People in poor countries forced into self-employment

**We don't have a great model for improving governance**

- Failed attempts at improving school quality are discouraging

## Summary and Takeaways

Markets can also fail without help from a weak government

- Example: consequences of limited liability for credit markets
- Health, education investments often have positive spillovers, so private investment levels will be below the social optimum

There is also a strong case for giving things away (“aid”)

- Examples: insecticide-treated bednets, deworming medication
- We can only know what works if we evaluate our programs
  - ▶ The list of interventions that don't work is very long

## Summary and Takeaways

Just giving the poor accurate information can have big effects

- Families in India quickly “learn” to educate their daughters

Main takeaways from the course

- Policy interventions (information, nudges, aid\*) are making small but measurable improvements in the lives of the poor in many ways
  - ▶ Be suspicious of silver bullets
- Growth is working (slowly), too