Gender and Agriculture: Building smarter policy

Markus Goldstein







#### Why should we care about women farmers?

Women farmers produce less per hectare than men

- FAO: Addressing this could have big payoffs.
  - Women with equal access to inputs would increase their output by 20-30%
  - Aggregate increases could lift 100-150 million out of hunger
- A story from Burkina Faso
  - Both men and women in the household farm
  - But the women produce less per hectare than the men
  - Equalizing resources (labor, fertilizer) would significantly boost household production - with the resources they have now
- This is inefficient. This is money on the table. This is a gap we ought to close.



- 1. Understanding the problem better
- 2. Policies that work

## Using data and analysis to understand the femalemale productivity gap

#### 2 new reports

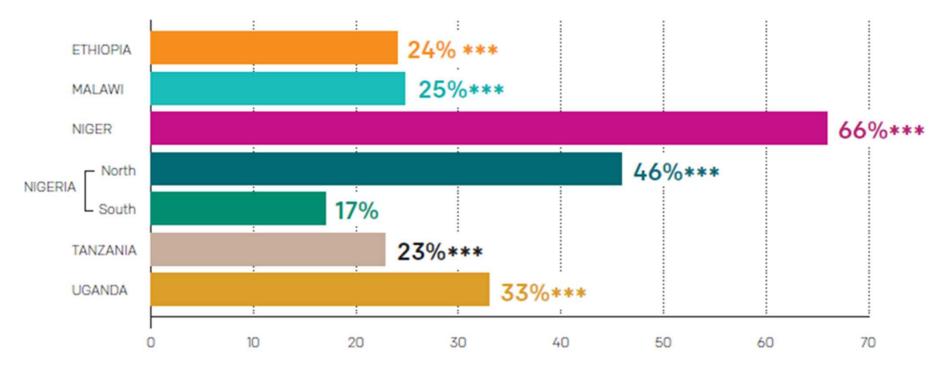
- Better data than ever before
  - LSMS-ISA surveys
  - Detailed plot level data including who manages
  - Nationally representative
- Decomposition analysis:
  - How much quantity of inputs matter
  - How effective are the inputs (the returns)





#### How much less do they produce?

#### DIFFERENCE AFTER ACCOUNTING FOR PLOT SIZE AND REGIONS

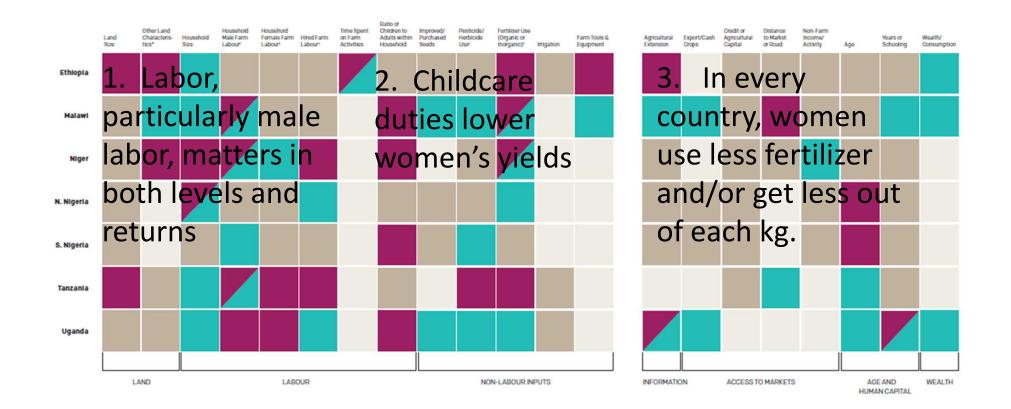


# And this difference matters for the economy & food security

#### **Closing the gap in Tanzania would yield a:**

- 2.1 percent increase in current agricultural output
- 1.5 percent increase in agricultural GDP or about \$85 million
- 0.46 percent increase in total GDP or about \$105 million
- 80,000 people being lifted out of poverty
- 80,000 more people being adequately nourished

#### What's driving the gap?



# Closing the gap: policy priorities



Key Driver		Policy Priority	STATE OF EVIDENCE
LAND		1. Strengthen women's land rights.	PROMISING
LABOR	Jul S	2. Improve women's access to hired labor.	EMERGING
	60	3. Enhance women's use of tools & equipment that reduce the amount of labor they require on the farm.	EMERGING
	<b>İ</b> x <b>İ</b>	4. Provide community-based child- care centers.	EMERGING
NON- LABOR INPUTS		5. Encourage women farmers to use more, & higher-quality, fertilizer.	PROMISING
		6. Increase women's use of improved seeds.	EMERGING

# **Closing the gap: policy priorities**



Key Driver	Policy Priority	STATE OF EVIDENCE
INFOR- MATION	7. Tailor extension services to women's needs, and leverage social networks to spread agricultural knowledge.	PROMISING
ACCESS	8. Promote women's cultivation of high-value/cash crops.	EMERGING
MARKETS	9. Facilitate women's access to & effective participation in markets.	PROMISING
HUMAN CAPITAL	10. Raise education levels of adult female farmers.	PROMISING

#### But we have a long way to go in terms of evidence

- Some "promising" interventions but based on quite limited evidence
- Half of the areas are "emerging" which means there is no rigorous evidence
- 2 quick examples from our work on land registration to show some evidence on what works, and how

#### How might security of property rights matter?

- 1. With worse property rights, you invest in the land less
  - In Southern Ghana, women produce less maize and cassava per hectare than men because they are more afraid of losing their land
- 2. It takes time to protect your property rights (e.g. you have to guard your borders) and this keeps rural citizens from maximizing their income

### **Better property rights in Benin**

- MCC funded intervention provided for land certificates with rights determined at the community level
- Rigorous evaluation comparing treatment and control communities
- Results in the short term:
  - Both women and men are more likely to be growing perennial crops and planting trees
  - Women fallow their land more, closing the gap with men. With fallowing, their productivity can improve.

#### Better property rights in Benin

- Results in the medium term:
  - Both men and women are still more likely to be growing perennial crops
  - Only women are more likely to be planting trees
- Better property rights → more investment, and the response is stronger for women

#### Land title registration in Rwanda

#### The program

- UKAID and others funded a pilot and then national scale up of land title registration
- This was a low cost, participatory approach building on a range of legal changes (including for women's rights over land)
- Rigorous evaluations of both the pilot and the national program

#### Land title registration in Rwanda

#### **Pilot results**

- Increased investment in land
  - +9.9 percentage points for male headed households
  - +19.3 for female headed households
- Married women significantly more likely to have property rights (recognized as owner)
  - But not officially married women (i.e. those without a marriage certificate) significantly **less** likely

#### Land registration in Rwanda

#### Then the program went national

- Preliminary results from a rigorous evaluation show:
  - Not officially married women got equal rights (policy change)
  - Farm labor for both men and women was reduced
  - But yields were constant → the reduction in labor came from labor that was guarding not producing
  - Off-farm work and earnings went up
  - Food security improved for males and females, adults & children

- Continue to better understand where the gender gap in production is coming from by looking at root causes (e.g. labor)
- Interventions may not work as we expect, so continue to experiment, evaluate and scale effective interventions