Experimental Evidence on Land Demarcation, Social Norms, and Agricultural Investment

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Two Studies on Land Rights in Mozambique

• Impacts of social-norms information on co-titling behaviors
  ▶ Can updating perceptions of community acceptance of women’s land rights shift land-titling practices and increase women’s empowerment

• Impacts of demarcation activities on agricultural investment in matrilineal contexts
  ▶ Does tenure insecurity represent a binding constraint to agricultural investment? If so, for whom?
  ▶ What are titling/co-titling practices and behaviors?
Study 1: Role of Social Norms in Limiting Women’s Gains from Land Formalization
National land regularization efforts represent the nexus where customary land ownership/management regimes interact with gender-equal formal land laws.

The extent to which the formalization process remains gender neutral hinges on social norms and individual preferences.

An impact evaluation of the national MozLand land formalization project in Mozambique, in partnership with the Ministry of Agriculture and Rural Development, is starting to shed light on this question.
In advance of the formalization efforts, we surveyed 20 individuals in 100 communities about their attitudes and perceptions of social norms about women’s land rights.

We found that:

- Over 80% of women and men surveyed support women owning land.
- Yet, both women and men significantly underestimate the level of support within their community.
- This gap is particularly pronounced for men who estimate that only 45% of other men in their community would support women owning land.
Could perceptions of restrictive social norms restrain households from putting land in women’s names, potentially limiting benefits from land formalization efforts?

Plan to conduct an information intervention to update these beliefs and examine potential impacts on demand for co-titling in the context of the MozLand project. (*Results anticipated in 2023*)

Embedded in a larger impact evaluation that will examine the impacts of the large-scale MozLand land formalization project. (*Results anticipated in 2024/25*)
Study 2: Impacts of Demarcation Activities on Agricultural Investment
Context: Smallholder Farmers in Mozambique

• Examine whether insecure property rights constrains agricultural investment for smallholder farmers

• We focus on two components of a NGO-implemented sustainable agriculture program in Zambezia, Mozambique: conditional land titling and an input subsidy offer

Boxho, Brudevold-Newman, Goldstein, Montalvao, and O’Sullivan (2022) Experimental Evidence on Land Demarcation and Agricultural Investment
Randomly selected households were offered the opportunity to have one plot of land demarcated for a land-use permit

- Only largest plot of land was eligible (identified from baseline data)
- Required to include the head woman’s name on the title

* All land in Mozambique is owned by the State and is not collateralizable
Study Design: Randomized Land Demarcation

- 534 women in eligible households randomly assigned
- Treatment: Land-Use Title, n=268
- Control: No Title, n=266

Aug 2020

Sep-Oct 2020

- There was high take-up of the conditional land-titling offer with over 92% of the treatment group accepting (w/ 38% of households solo titling).
Study Design: Randomized Land Demarcation

534 women in eligible households randomly assigned

Treatment: Land-Use Title  
n=268

Control: No Title  
n=266

Take it or leave it offer for subsidized agricultural input bundle  
n=487

Aug 2020

Sep-Oct 2020

Oct-Nov 2020

Boxho, Brudevold-Newman, Goldstein, Montalvao, and O'Sullivan (2022) Experimental Evidence on Land Demarcation and Agricultural Investment
Following the land demarcation activities, our partner NGO offered the head women the chance to buy a discounted agricultural input bundle.

Bundle had a market value of US$330 and included:

- Maize and sugar bean seed to cover 0.25 hectares, each
- Cassava, sweet potato, and fruit-tree cuttings
- Fertilizer, insecticide, herbicide, and fungicide

The bundle offer was framed around the woman: it was an opportunity for her to buy and use agricultural inputs.

Whether women accepted the agricultural investment offer measures the direct impacts of land demarcation on willingness to invest.
Key Results and Discussion

Investment impacts of demarcation activities depend critically on pre-program customary rights:

- Investment increases when registration formalizes rights for land inherited from the woman’s family.
- Land demarcation fully closes an investment gap with households whose main plot was purchased or inherited from the man’s family.

What’s driving this pattern of results?

- Not easing credit constraints (land is not collateralizable).
- These women do not report higher pre-program tenure insecurity.
  - Context matters: in this matrilineal setting, older male relatives retain some control. The title offer (which was made to her and her husband) may help increase their control over the land.
Thank you!