

Impact of an Extension-based Campaign and the Mediating Role of Women's Empowerment on the Adoption of Agricultural Technologies in Uganda

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Background & Objectives

- Adoption of agricultural technologies improves household welfare through higher yields.
- Technology adoption is still low in Sub-Saharan Africa due to limited access to information.
- Information asymmetry is rampant among women because they are usually excluded from extension services.
- Women have less decision-making power and control over productive resources, further limiting their ability to adopt technologies.

Research Questions:

- 1) Did access to agricultural information empower men and women?
- 2) What components of empowerment were enhanced by the campaign?
- 3) Did the campaign significantly influence the adoption of agricultural technologies?
- 4) Which indicators of women's empowerment influenced the adoption of agric technologies?

Material & Methods

- We used the RCT intervention to estimate the single difference impact of the treatment relative to the control.
- Regressed changes in adoption between baseline and end-line on the treatment and women's empowerment indicators.

Indicator	Description
Aggregate Empowerment Indicators	
Empowerment score	Weighted average of achievements in the 6 indicators of the respondent (censored)
No. of adequacies	No. of A-WEAI sub-indicators for which the individual achieved adequacy (0–6)
Empowerment gap	Difference between empowerment scores of the man and woman in the same household
Subdomain Indicators	
Input in productive decisions	No. of agricultural activities for which one makes decisions solely or jointly
Asset ownership	No. of asset types one owns solely or jointly
Access to & decisions on credit	No. of sources of credit one participated in decisions about
Control over the use of income	No. of activities for which one has input in decisions related to income and outputs
Group membership	No. of community groups one is an active member of
Workload	Total hours spent on paid and unpaid work & total hours spent on farm work in a day

Table 1 Empowerment Indicators

Results & Discussion

- Info access had a positive & significant impact on empowerment
- Campaign significantly influenced all domains of women's empowerment except time.
- Campaign significantly influenced all domains of men's empowerment except assets.

Impact of the Campaign on Adoption:

- ✓ Influenced the uptake of mulch, manure, trenches & the three practices combined.
- ✓ Women's participation in agricultural, credit, and income decisions significantly influenced the adoption of the technologies.



Fig. 1 A Woman in her well-mulched banana plantation

Conclusions

- Empowered women tend to adopt mulching, a labor-saving technology, and the combined package.
- Provision of information to farmers empowers them and facilitates the adoption of agricultural technologies.
- Specifically targeting women in addition to men in extension activities boosts the adoption of technologies.