Empowering Women Farmers: Evidence from a Randomized Control Trial in Mozambique

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In Africa, most women farmers are engaged in subsistence farming and are less productive than their male counterparts.

There is limited rigorous evidence on what works to help women farmers transition into producing cash crops to sell in the market and running small businesses.

We conducted an RCT in Mozambique to test the effectiveness of combining agricultural extension with a psychology-based training aimed at fostering personal initiative.
RCT Design

Full Sample
2,240 women farmers
Across 112 villages in Tete, Mozambique

- Ag Extension
  740 women (37 villages)
- Ag Extension + Personal Initiative
  760 women (38 villages)
- Control
  740 women (37 villages)
Agricultural Extension

Promote experimentation and adoption of best farming practices and cash crops, and equip women farmers with basic agribusiness skills
Agricultural Extension

Group training sessions
7 sessions of 5 hours at key moments of the agricultural calendar on a demo plot

Individual mentoring visits
4 visits to the woman’s plot to personalize advice and reinforce content

Provision of a start-up kit
Small quantity of seeds for selected cash crops
Foster an entrepreneurial proactive mindset

Showing personal initiative means being self-starting, future-thinking, and overcoming internal barriers that keep you from achieving your goals.

PI training has been shown to beat traditional business training in boosting small business in West Africa.
Personal Initiative Training

Group training sessions
9 weekly group sessions of 4 hours:
discussions, activities, case studies, shared experiences

1st Phase (4 sessions)
Focused on entrepreneurship in farming to complement agricultural extension program

2nd Phase (5 sessions)
Greater emphasis on off-farm entrepreneurship to promote income diversification and growth
Study Timeline

Baseline survey:
collects ag. data from 2014/2015

Intervention phase
- Soft-skills training 1st phase
- Hard-skills training
- Soft-skills training 2nd phase

1st follow-up survey:
collects ag. data from 2017/2018

2nd follow-up survey:
collects ag. data from 2018/2019

Agricultural calendar year 2017/2018
Agricultural calendar year 2018/2019

Survey rounds  Interventions  Agricultural calendar
Results Overview

- PI training fostered entrepreneurship outside the farm: doubling the share of women running profitable off-farm businesses, generating important additional source of income to the households.

- PI training enhanced effectiveness of agricultural extension: leading to large increases in area cultivated and adoption of fertilizers, pesticides, good farming practices (e.g. crop rotation and mulching) and cash crops (including soy), generating greater overall value of harvest and value of harvest sold.

- Household expenditure goes up, and results persist after interventions left the field.
Conclusion

• Results show how a psychological mindset training targeted to women farmers can lead to greater investment and entrepreneurship, helping their households transition out of subsistence farming and into market-oriented agriculture and off-farm businesses

• The results also suggest the promise of psychology to improve the design and effectiveness of standard agricultural extension programs, showing the importance of teaching not only best production technologies and practices, but also developing an entrepreneurial mindset.