# Male Migration & Changing roles for Women in Indian Agriculture

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## Introduction

- Migration is a widely prevalent global phenomenon and has important implications for agriculture, by leading to changes in labor, farm inputs, crop-mix, yield, profits, as well as farm decision-making.
- Labor migration is heavily male dominant in rural India.
  Women are left behind to tend to agriculture, resulting in feminization of agriculture.
- Women farmers have lower access to resources and limited managerial exposure; therefore, feminization of agriculture has important implications for agricultural productivity & profitability.

## Results

The results indicate a modest increase in women's share in family labor (4%). On the other hand, male migration leads to a significant and robust increase in the likelihood of having a female farm manager or decision-maker (13%).

	% of Female Labor	Female Farm Manager
Migration	0.038*** (0.011)	0.127*** (0.013)
N	9,880	9,880

- Exploring the linkage between migration induced female farm management and farm profits, I find that female farm management mediates 28% of total effects of migration.
- However, mediation results are highly sensitive to the model assumptions.

## **Research Questions**

- How does male migration change women's work and decision-making in agriculture?
- Does female farm management play a mediating role in influencing migration's overall effects on farm profits?

#### Data

- The data comes from the two rounds (panel) of Indian Human Development Survey IHDS (2004-05 & 2011-12).
- The analysis focuses on the balanced sample of rural households that are engaged in cultivation.

## Conclusion

- The results suggest changing roles for women increase in female farm decision-making.
- Increase in female farm management is concentrated in households: with inter-state migrants, in North India, belonging to SC-ST castes, with a joint family set-up.
- Female farm management mediates 28% of total negative effects of migration on farm profits.

## **Empirical Methods**

- To examine changes in farm labor & decision-making, the analysis employs a Difference-in-Differences (DID) strategy in combination with Propensity Score Matching (PSM) methods.
  - DID compare change in outcomes over time between two sets of households *non-migrant* (no migration in both time periods) & *migrant* households (male migrants in *end-line* only).
  - PSM methods to account for self-selection.
- To examine the mediating role of female farm management, the analysis adopts Imai et al.'s causal mediation framework (2010).

### References

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