

Extended Abstract

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Paper/Poster Title	Impact of Microfinance on nutrition in agricultural households
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Abstract prepared for presentation at the 96th Annual Conference of the Agricultural Economics Society, K U Leuven, Belgium

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Abstract	200 words max
<p>Microfinance is widely used to supplement credit to smallholders in agriculture. We use data from the India Human Development Survey to estimate the impact of microcredit on (a) index of bargaining power of women (b) index of agricultural practices (c) household food security.</p> <p>It is estimated that more than USD 1 million was disbursed in 2015¹ from institutional sources of credit. Informal credit was as high as 36% of all loans disbursed. Of the total self-help groups (SHGs) providing microcredit, 93% financed women SHGs in 2016². However, the pathways by which microcredit may impact on nutritional status, specifically, women empowerment or increasing agricultural productivity, have not been analyzed in the literature.</p> <p>Our results suggest that microfinance has a positive but moderate impact on nutrition among participating and non-participating households, mediated by changes in the relative status of women, consumption smoothing and agricultural practices.</p>	
Keywords	Agricultural households, Microfinance, Nutrition
JEL Code	Q12 Micro Analysis of Farm Firms, Farm Households, and Farm Input Markets I3 Welfare, Well-Being, and Poverty see: www.aeaweb.org/jel/guide/jel.php?class=Q)
Introduction	100 – 250 words
<p>Microfinance affects agricultural households by a pure “income effect” by relaxing the budget constraint and allowing consumption smoothing. It may lead to adoption of better agricultural practices raising the overall productivity and food security. Finally, microcredit has the potential to change the perceived economic value of women to men and allow women to decide expenditure allocations.</p> <p>On the other hand, the “substitution effect” of microfinance could result in less time devoted to child care and investments in health as the opportunity cost of a woman’s time increases.</p>	

¹ Ministry of Agriculture, Government of India

² Status of Microfinance, NABARD, 2017

For agricultural households, a perverse effect of microfinance is specialization in a major crop. Non-separability of production and consumption implies that diet diversity could be adversely affected as farms specialize in one crop or cash crops.

Since intrahousehold decisions and agriculture are two main points of intervention in nutrition, our first hypothesis examines if *access to and participation* in microcredit schemes changed the relative bargaining power of women. Our second hypothesis tests if loans from formal, informal and microfinance sources improve agriculture practices. Finally, we check if either index is related to diet diversity for households that participated in microfinance and those that did not.

Methodology

100 – 250 words

We use the India Human Development Survey (2005, 2011), which is a nationally representative panel focusing on demographic information (age, sex, caste, education), gender relations, mother and child characteristics and farm activities. Self-selection is not a problem as we use panel data methods to isolate the impact of microcredit on household level outcomes of interest.

We construct indices of bargaining power and agricultural practices that capture decisions related to food security. Next, we compute stunting and wasting rates for children and household level diet diversity scores. Access to and participation in a microcredit program are considered, the latter being viewed as a natural experiment. We also classify households as new and old borrowers thus introducing another layer of identification.

Results

100 – 250 words

Using both fixed effects, and a difference-in-difference approach, our results indicate that index of agricultural practices and index of bargaining power both, showed a significant improvement for households borrowing microcredit. Both indices lowered stunting and wasting of children under five but the impact of agriculture on diet diversity scores was higher in magnitude compared to bargaining power. This suggests a potentially greater role for microfinance to enhance agricultural productivity and food security.

Discussion and Conclusion

100 – 250 words

Our study provides new evidence of the potential pathways that microcredit can affect nutritional status in agricultural households. Given the gender specialization of activities in agriculture, restrictions on access to credit, can be detrimental to female, small and marginal farmers operating in a non-separable framework. The importance of agricultural incomes and

production to diet diversity thus has far reaching implications for food security (Mango et al, 2018; Ayenew et al, 2018; Demeke et al, 2017; Jones et al, 2014; Sibahtu et al, 2015).

We test for households that participated in microfinance after 2005, exploiting the before and after effects, in a natural experiment setting. Although our study suffers from limitations of having only two rounds of data, our results are applicable to different settings in developing countries and emphasize the importance of carefully designing multi-pronged approaches to tackling malnutrition in developing countries.