EVALUATING THE IMPACT OF THE VOLUNTEER FARMER TRAINER APPROACH ON THE DISSEMINATION OF IMPROVED FEEDS AND FEEDING PRACTICES AMONG SMALLHOLDER DAIRY FARMERS IN EASTERN UGANDA

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Introduction

- Limited access to agricultural information is a major policy concern
- Paradigm shift in extension approaches
  - supply driven to demand driven
- Quest for extension approaches that are cost effective and accessible to resource poor farmers
  - Volunteer Farmer Trainers (VFT) approach has been used the world over
    - 14,500 FTs working with the Ministry of Agriculture (MOA) in Rwanda
    - 13,500 with MOA in Malawi
- Farmer to farmer extension (FFE): the provision of training by farmers, to farmers, often through the creation of a structure of farmer-trainers (Scarborough et al. 1997).
Introduction

Rationale for the study

- Limited evidence of the effects of VFT on access to extension by smallholder resource constrained farmers as well as on intermediate outcomes (trainees’ knowledge and adoption)

- Limited empirical evidence on the impact of VFT
  - Difficulty to design rigorous studies on extension

Key policy question

- Robust causal evidence on how to design cost effective extension model for smallholder farmers in sub-Saharan Africa

- We take advantage of the roll out of Phase 2 of the East Africa Dairy Development Programme (EADD2) in the Near East and South West Uganda
Key research questions

1. Does VFT approach enhance adoption of high value feeds and feeding practices?

2. Does adoption of high value feeds and feeding practices improve:
   - milk productivity?
   - Farmers’ income
   - Household welfare (food security)

3. Which variations can make VFT approach more effective?
   - Incentive
   - Linkage to extension agent (EA)
   - Needs assessment
Key hypotheses for the variations

Incentive = metallic sign post
1. Increase training
   • Motivation
   • Reputation effect
2. Change training quality and content

Linkage = voucher for EA
1. Quality effect
2. Monitoring effect
3. Side benefits
4. Long-run effect
5. Credibility effect

Needs Assessment = tailored work plans
1. Customization effect
2. Individualization of the training format
3. Change in perception and aspirations
4. Increased trainee’s demand
Evaluation design

Randomized phase-in

Year 0

Year 1-3  412 FTs treated

Year 4  627 FTs treated
Design and Implementation process

Step 1
Pilot (EADD phase 1 sites)

Step 2
Identification of communities and potential FTs
Rigorous and participatory
627 FTs from 627 villages

Step 3
Baseline
3116 farmers including 627 Potential FTS interviewed

Stakeholder engagement

Fine-tuning and choice of variations

Near East and not South West
- High population density
- Large number of resource constrained smallholder dairy farmers
- Limited access to extension services
Assignment of treatments through public lottery

Step 4

Implementation

• Initial training
• Refresher training every 6 months
• Needs assessment training every 6 months

Step 5

Follow up

Midline - July 2016
Endline - July 2017

Periodic monitoring of programme implementation
• Quantitative
• Qualitative

Follow up

Farmers participating in refresher training sessions
Preliminary quantitative monitoring results
FTs organizing trainings

FTs in the linkage variation organize significantly more trainings after the initial training.

N=1636
Number of training sessions/month

Significant decline in the number of sessions organized in all the variations
Mean number of trainees per session

Number of trainees tappers of after the initial training
Technologies taught by FT

Incorporation of knowledge and capital intensive technologies
Conclusion

- In general linkage variation seems to increase likelihood of trainings occurring

- Number of trainings are initially high but drops over time (in all variations)

- Remarkable shift from simple to more knowledge and capital intensive technologies, suggesting that FT incorporate new material after refresher trainings such as water harvesting and commercial feeds)
Lessons learned from the approaches

1. Prerequisites for designing policy relevant interventions
   - Piloting
   - Local knowledge + stakeholder involvement
   - Reconnaissance surveys

2. Ways minimizing non-compliance
   - Use of rigorous and transparent methods to recruit and assign participants to different treatment arms
   - Periodic monitoring

3. Periodic monitoring is key in
   - Identifying potential spill overs
   - Devising corrective measures to avoid contamination
Thank you