

# Increasing capacity of smallholder farmers to produce and market indigenous leafy green vegetables

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## INTRODUCTION

"Evidence does not support the assumption that "markets" will organise themselves to set in place the institutional arrangements that would support the achievement of the Millennium Goals. Overall, the institutional aspects of innovation systems have not been well appreciated in Farmer Field School (FFS) programmes, nor the effects studied from this perspective. There is scope for further exploration of the role of FFSs from an institutional perspective, i.e. their contribution to innovation systems that meet the multiple goals desired." (A Global Survey and Review of Farmer Field School Experiences)

## STUDY AIMS -

What special considerations do we need for horticulture to fit into the national goal of commercializing smallholders?

1. Develop strategies to improve horticulture market links to non-commercial farmers
2. Identify key factors to adoption or non adoption of horticulture as a household enterprise
3. Propose interaction effects FFS / other participatory extension can interact with market development programs



## METHODS

**Pilot Interventions:**  
**Farmer Field Schools - FFS**  
 with and without market platforms  
**Participatory Market Chain Approach - PMCA**

FFS: A participatory approach to extension in which farmers come together in groups to adapt better farming methods through discovery learning and sharing local and technical knowledge.

PMCA: A platform for all stakeholders in a market chain to develop innovations that are profitable for farmers as well as other participants in the market.

## CROPS

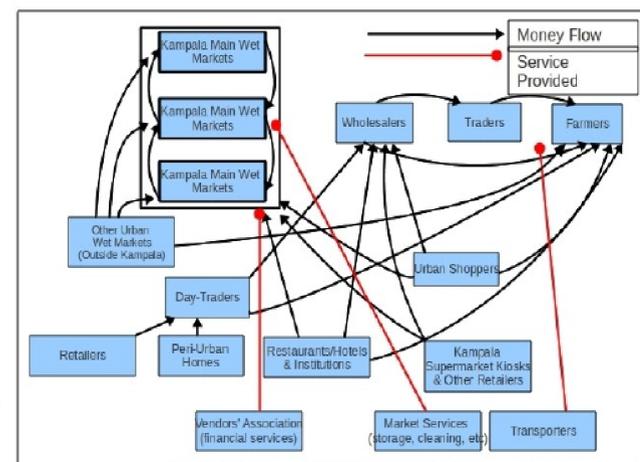
### Indigenous Leafy Greens (ILVs)

1. Solanum aethiopicum shum: "Nakati"
2. Gyandropsis gynandra "Jobyo"
3. Amaranthus graciczane "Bbugga"

Why ILVs?

1. Fast maturing
2. Relatively low production costs (compared to other vegetables)
3. Indigenous knowledge
4. High market potential

Figure 2: Market Chain Map



## INITIAL RESULTS

Many barriers outside scope of traditional extension (policy/structural barriers)

Cost of transport / Distance to market  
 Cost of irrigation / reliance on rain  
 Cost of fertility amendments  
 Disinterest in the crops  
 Lack of access to fertile land  
 Cost of renting plots  
 High cost and lack of good seed



Represents **over 60%** of the perceived barriers to growing and selling leafy greens (out of 100% of barriers reported by FFS participants)



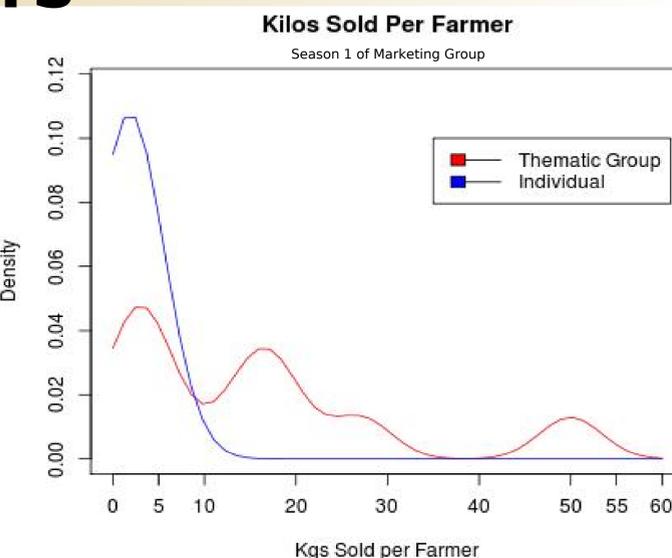
### FFS+/-PMCA responses to barriers

Reported Barrier	% reporting program reduced this barrier
Cost of transport / Distance to market	23.5%
Cost of irrigation / reliance on rain	<b>61.1%</b>
Cost of fertility amendments	<b>69.6%</b>
Disinterest in the crops	21.4%
Lack of access to fertile land	48.0%
Cost of renting plots	<b>56.0%</b>
High cost and lack of good seed	<b>79.5%</b>

## INITIAL RESULTS

### PMCA Innovations

- Seed Marketing Group (thematic group)
- Market for farmer-to-farmer sales rarely exceeds 10 kg
  - Contracts developed with international seed company
  - Farmer-owned seed marketing enterprise registered
  - Over 500 kg of sales per season expected
  - Revenue per acre comparable to fresh leaf production
    - Fresh: \$1500-\$2500 gross revenue possible
    - Seed: \$1600-\$2400 gross revenue possible



## DISCUSSION AND CONCLUSIONS

- FFS/PMCA helps participants reduce barriers to production (via increased seed access, soil fertility, renting appropriate land)
- PMCA innovations open up new marketing channels outside the restraints of traditional markets
- No strong differences so far in marketing success in traditional markets between participants of FFS and those in FFS+PMCA
- How can content of FFS and PMCA be modified to promote adoption of vegetable production as a business?



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