





# Background & Motivation

- Nutrition-sensitive agriculture –
   shown to have positive impacts on
   production, diets, nutritional
   status
- Very limited evidence on sustainability

→ Evaluate sustainability of a groupbased nutrition-sensitive agriculture project

#### Intervention

- ♦ Use existing women's groups as a platform for nutrition-sensitive agriculture
  - increase production and consumption of nutrient-rich vegetables, chickens, and eggs
- End goal: Improved nutrition for women and young children
- Components:
  - ♦ Gardening
  - ♦ Intensive poultry rearing
  - ♦ SBCC, women's empowerment



## Research Questions

Do groups continue to use the gardens and henhouses?

Do they remain productive, with work and benefits shared?

Do they remain nutritionsensitive?

#### Research Methods

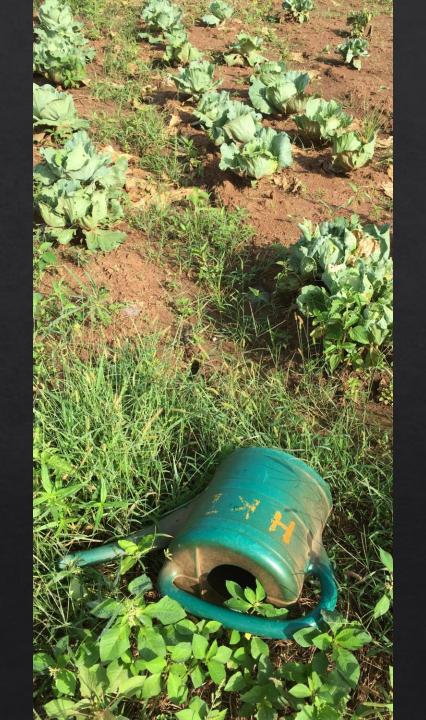




- ♦ 18 mo. after project end
- ♦ 12 of 42 villages
- ♦ Quantitative survey (n=277)
- $\diamond$  In-depth qualitative interviews (n=50)
- Observations at all gardens, henhouses
- Review of production records
- Compare data to monitoring surveys conducted during project

## Results - Gardening

- Strong continued membership in groups
  - ♦ 91% of respondents remain active members
- Decreased use, productivity
  - Only 25% of communal gardens fully planted
- ♦ Sales continue (170-340 USD / quarter), but less than in project
- Shift from collective production to individual management
  - ♦ 10% of gardens grown collectively, down from 95% at mid-project



## Results - Gardening

- ♦ Fall in crop diversity
  - only 60% have 5 or more crops planted, down from 81%
- ♦ Declines in production of main promoted nutrient-rich crops
  - ♦ OFSP, squash, carrot, moringa
- ♦ Increase in production of market crops (e.g., hot pepper)
- ♦ Decline in portion of harvest used for consumption (as opposed to sold)
  - ♦ From 30% mid-project to nearly 0% post-project





### Results - Poultry

- All henhouses still in existence, nearly all in good shape
- ♦ Only 3 of 12 being used to keep chickens
  - ♦ 2 of the 3 have small flocks about 40% fewer birds than at project end
- Shift towards non-intensive, lower productivity techniques
- ♦ Fall in egg production
- ♦ Only ~25% of respondents participating in poultry activities
  - ♦ Usually just 1-2 people responsible for henhouse



#### Poultry case study

- Highly productive
  - ♦ Raises cycles of 400-800 broilers
  - ♦ Earning USD 1,700 per cycle
  - ♦ Expanded twice, built new building, added ducks

#### But...

- taken over by a male manager
  - ♦ No use by women in village or benefit for them
- Raising broilers for sale to urban markets:
  limited nutrition impact



#### Reasons for Outcomes

- ♦ Motivations:
  - ♦ Solidarity and mutual support
  - ♦ Income earning, autonomy
- Challenges:
  - ♦ Free riders under collective models
  - ♦ Intensive chicken-rearing has limited margin for error
  - ♦ Lack of confidence



Conclusions



## Thank you!

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