Participation levels, their baseline predictors, & their association with knowledge change in a nutrition-sensitive agriculture intervention in Singida, Tanzania

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INTRODUCTION

Nutrition-sensitive agriculture interventions are theorized to improve children’s diet through (1) asset provision and (2) behavioral changes and social support through program participation. Measuring participation in these interventions can help assess program delivery, buy-in, and overall impact, but is rarely studied in depth.

We, therefore, aim to:
1. describe participation of the Singida Nutrition & Agroecology Project
2. investigate baseline predictors of program participation
3. analyze association of participation with recall of lessons learned & knowledge change

METHODS

Data collection
The Singida Nutrition and Agroecology Project (SNAP-Tz, NCT02761876) was a nutrition-sensitive agroecological intervention. We surveyed 284 women and 252 men from households participating in the project twice a year, from January 2017 to January 2019. Baseline data was collected in 2016.

Participation: number of months participants attend at least one project meeting, based on their recall of their participation in the previous 6 months.

Lessons learned: whether participants reported learning about sustainable agriculture, gender equity, or child nutrition when asked the open-ended question, “What did you learn in project meetings?”

Knowledge: whether participants answered:
- a sustainable method (use of plant residuals, composting, mixing soil, rotating crops, intercropping) when asked how to improve soil health
- respect, cooperation, and equal decision making when asked about characteristics of an ideal household
- increasing child’s dietary diversity or giving child legumes or animal sourced foods when asked how to improve child nutrition

Data analysis
Simple linear regression with participation as outcome variable, clustered at village level

Generalized linear model, binomial, identity link, controlling for village and baseline knowledge

RESULTS

Participation. Trajectory analysis found one latent group in participation patterns. Attendance was low at first, increased in the second semester, & then plateaued at 60%.

Baseline predictors of participation. Older age and village is associated with both men and women’s participation. Household wealth is associated with men’s participation and group membership is associated with women’s participation.

Association with recall of lessons learned and knowledge change. For the most part, participation is associated with lessons learned & knowledge change at all topics. Exceptions include women’s attendance in 2017, recall and knowledge change in gender topics, and men’s attendance in last semester of intervention.

CONCLUSIONS

Association between program participation and group membership highlighted the challenges of gender programming in nutrition-sensitive interventions.

Analysis of program participation revealed valuable lessons for program implementation and design.