

Effectiveness of integrated Agriculture, health livelihood and nutrition interventions to improve maternal and child nutrition and health in rural Uganda: A birth cohort study

Turyashemerwa, F.¹, Bashaasha, B.¹, Kawuma, A.¹, Kabunga, N.² Griffiths, J.³ and Shibani.³

¹Nutrition Innovation Lab-Makerere University ; IFPRI² and ³Tufts University

1. Introduction

Under nutrition if not addressed before the first two years of life can have irreversible consequences may be. Integrated nutrition, health and agriculture interventions can potentially have greater impact on maternal and child nutrition than nutrition-specific interventions alone. The USAID Community Connector (CC) Project is providing packages of nutrition, health and agriculture interventions to improve the nutrition for women and children. There is, however, limited evidence on effective interventions to improve maternal and child nutrition and on the mechanisms through which interventions can impact these key outcomes.

2. Objectives

- 1.To determine the effect of integration and/or co-location of nutrition, agriculture and health interventions on health and nutrition status of pregnant women and children under two years of age.
- 2.To determine the effect of aflatoxin exposure and environmental enteropathy on health and nutritional status of children under two years of age.
- 3.To assess the coverage, uptake, and adherence to CC intervention messages and activities and assess effect of heterogeneity on maternal and child health and nutritional status.
- 4.To determine heterogeneity in the effect of CC interventions on maternal and child health and nutritional status due to variability in household

3. Research Design

- Utilize a cohort of mothers and young children followed from pregnancy to 1st two years of life
- Randomly selected CC intervention and matched non-CC sub-counties that will provide a counterfactual to evaluate the CC interventions
- Each selected CC sub-county has been individually matched to a non-CC sub-county with the same agro-ecology and predominant language

4. Data Collection

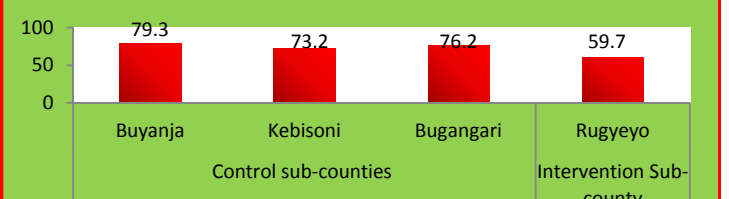
Data was collected on the following:

- Demographic and socioeconomic information services, Agriculture (activities, production and sale, labor, utilization of technologies and mgt. practices), Food security, Gender roles and dynamics, Maternal and child diet, Nutritional status and Venous blood draws for Iron, Malaria, Aflatoxins

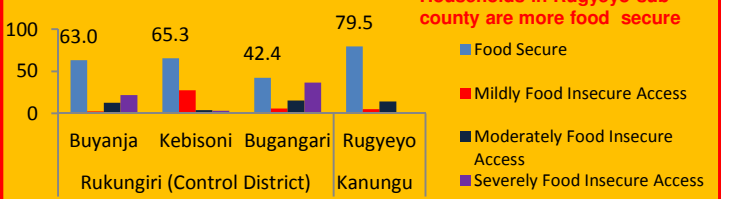
5. Selected time point one results from selected sub-counties.

Region	District	Sub-counties	No. of participants enrolled
South Western (SW)	Rukungiri	Buyanja (control)	322
		Bugangari (control)	322
		Kebisoni (control)	303
	Kanungu	Rugyeyo (intervention)	311
Northern	Apac	Aduku (Control)	322
	Lira	Agweng (Intervention)	322

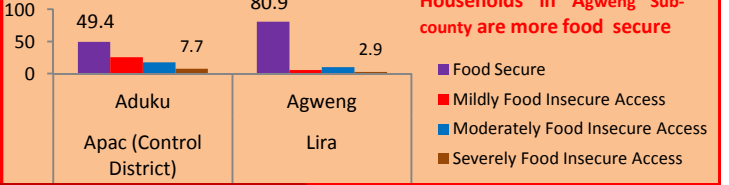
Household Dietary Diversity Score (percent of households who consumed ≥ 4 food groups) in SW Uganda



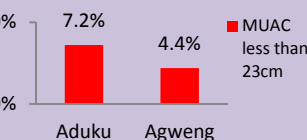
Household Food Insecurity Access Prevalence in South Western Uganda



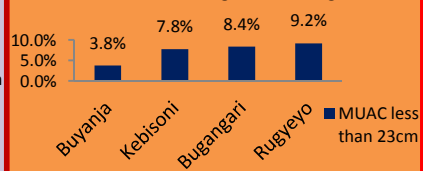
Household Food Insecurity Access Prevalence in Northern Uganda



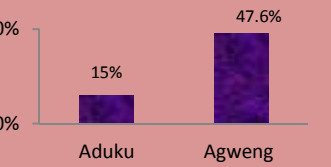
Maternal Wasting in Northern Uganda



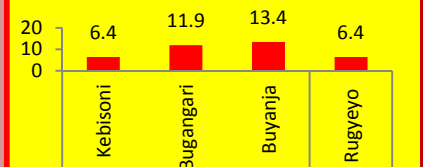
Maternal Wasting in S. West Uganda



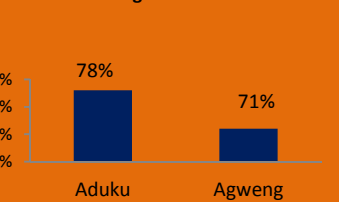
Prevalence of anemia in Women in Northern Uganda



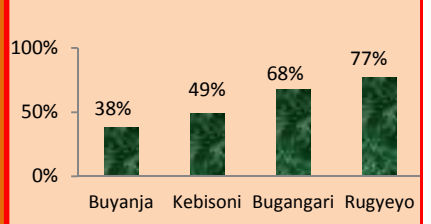
Prevalence of anemia in Women in South Western Uganda



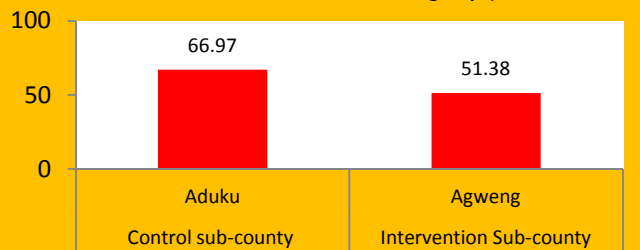
Households drinking contaminated water in Northern Uganda



Households drinking contaminated water in South West Uganda



Household Dietary Diversity Score (percent of households who consumed ≥ 4 food groups)



Acknowledgement

USAID funds the Nutrition Innovation Lab Africa. More information can be got from <http://www.nutritioninnovationlab.org/>