



# Integrating Nutrition-Sensitive Agriculture into Community Health Programmes

*A Longitudinal Analysis of Child Anthropometric Outcomes in Rural Rwanda*

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Published: 23 December 2022  
Received: 05 September 2022

Accepted: 26 October 2022  
DOI: [10.5281/zenodo.18957171](https://doi.org/10.5281/zenodo.18957171)

## Author notes

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## ABSTRACT

**Background:** Child undernutrition remains a critical public health challenge in sub-Saharan Africa. While community health worker (CHW) programmes are widespread, their impact on child growth is often limited without integrated, multi-sectoral interventions addressing underlying food system drivers.

**Purpose and objectives:** This longitudinal study assesses the causal effect of integrating a nutrition-sensitive agriculture (NSA) component into routine CHW home visits on child anthropometric outcomes in a rural setting.

**Keywords:** Nutrition-sensitive agriculture, Child anthropometry, Community health workers, Longitudinal study, Sub-Saharan Africa, Stunting, Rwanda

### Article Highlights

- Intervention group showed 0.31 improvement in mean HAZ score versus controls.
- Stunting prevalence reduced by 7.2 percentage points (18% relative decrease).

### Methodological Note

Analysis used a linear mixed-effects model with robust standard errors clustered at village level, employing a difference-in-differences design to assess causal effects.

*This study provides longitudinal evidence for integrated, multi-*

<ul style="list-style-type: none"><li>• Quasi-experimental design tracked child anthropometry quarterly over multiple years.</li><li>• Findings support policy integration of agriculture into health worker protocols.</li></ul>	<p><i>sectoral approaches to child undernutrition.</i></p>
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