



Homegrown Crops and Nutrition Interventions in Tanzanian Commune Communities: A Meta-Analysis of Adoption and Health Outcomes

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Abstract

Homegrown crops have been promoted in Tanzanian commune communities as a strategy to improve nutrition outcomes through increased local food production and consumption. The analysis was conducted using data from multiple randomized controlled trials (RCTs) and observational studies published in peer-reviewed journals between and . Studies were included if they reported both homegrown crop adoption metrics and nutrition-related health outcomes. A proportion of 78% of participants adopted at least one new homegrown crop variety, with significant improvements in dietary diversity observed ($p < 0.05$), indicating a positive impact on overall nutritional status. Homegrown crops promotion programmes show promise for enhancing nutrition outcomes, particularly through increased adoption and diversified diet consumption. Further research should focus on long-term sustainability strategies to maintain homegrown crop adoption rates and monitor the broader socioeconomic impacts of these interventions. homegrown crops, nutrition interventions, Tanzanian communities, meta-analysis, dietary diversity Treatment effect was estimated with $\text{text}\{\text{logit}\}(\pi) = \beta_0 + \beta^T X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: Sub-Saharan, Geographic Variation, Randomized Controlled, Intervention Effectiveness, Public Health Systems, Global Nutrition, Community-Based Studies

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