



# Six-Week Growth Observation Study on Community Garden Success Metrics for Enhanced Food Security in East African Villages: An Equatorial Guinea Case Study

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## Abstract

The implementation of community gardens in East African villages is gaining traction as a solution to enhance food security. However, there remains limited empirical evidence on the success metrics and growth trajectories of such initiatives. The research employed a mixed-methods approach, including quantitative surveys and qualitative interviews. Data was collected from a sample of 120 households across three villages in Equatorial Guinea. During the study, there was a statistically significant increase ( $p < .05$ ) in vegetable yields by 30% compared to baseline measurements, indicating enhanced productivity within the community gardens. The findings suggest that community garden initiatives can be effective in improving food security outcomes when structured and supported appropriately. Based on this study, it is recommended that local governments provide ongoing support for community gardening projects through infrastructure development and training programmes.

**Keywords:** *Community Gardens, East Africa, Geographical Indicators, Participatory Monitoring, Socioecological Framework, Quantitative Research Design, Rural Development Initiatives*

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