African Equine Science (Agri/Animal Science)

Climate Smart Villages Programmes and Food Security in Rural Democratic Republic of Congo: An Evaluation

Baloumi Mbindyo[1]

[1] Department of Soil Science, Institut National pour l'Etude et la Recherche Agronomiques (INERA)

Published: 21 March 2006 | **Received:** 29 November 2005 | **Accepted:** 21 February 2006

Correspondence: bmbindyo@gmail.com

DOI: 10.5281/zenodo.18827058

Author notes

Baloumi Mbindyo is affiliated with Department of Soil Science, Institut National pour l'Etude et la Recherche Agronomiques (INERA) and focuses on Agriculture research in Africa.

Abstract

Climate change poses significant challenges to food security in rural areas of the Democratic Republic of Congo (DRC). The Climate Smart Villages (CSV) programme seeks to enhance agricultural productivity and resilience through improved climate-smart farming practices, irrigation systems, and other interventions. A mixed-methods approach was employed, combining quantitative data from farmer surveys with qualitative insights from focus group discussions and interviews. Data were collected from randomly selected villages implementing CSV programmes in DRC's Eastern Province. The analysis revealed a significant increase ($p<0.05$) of 18% in mean crop yields among participating farmers compared to non-participating counterparts, although there was variability across different types of crops and geographical regions within the study area. CSV programmes have demonstrated positive effects on food security indicators but require further support for scaling up and ensuring long-term sustainability. Key factors identified include adequate technical assistance and community engagement in programme design and implementation. To achieve sustained improvements, CSV initiatives should prioritise tailored training programmes and continuous monitoring of agricultural practices to address local-specific challenges effectively. Climate Smart Villages, Food Security, Rural DRC, Agricultural Productivity The empirical specification follows $Y = \beta_{0+\beta}^{\rightarrow} p\, X + varepsilon$, and inference is reported with uncertainty-aware statistical criteria.

Keywords: *African Geography, Climate Change Adaptation, Food Security Studies, Agricultural Productivity, Rural Development Models, Sustainable Intensification, Crop Yield Analysis*

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

✉ REQUEST FULL PAPER

Email: info@parj.africa

Request your copy of the full paper today!

SUBMIT YOUR RESEARCH

Are you a researcher in Africa? We welcome your submissions!

Join our community of African scholars and share your groundbreaking work.

Submit at: app.parj.africa

Scan to visit app.parj.africa

Open Access Scholarship from PARJ

Empowering African Research | Advancing Global Knowledge