African Applied Botany (Agri/Plant Science)

Evaluating Manufacturing Systems in Kenyan Agriculture: A Quasi-Experimental Approach to Clinical Outcomes Measurement

Wambugu Gitonga[1,2], **Mwangi Kibet**[1,3]

[1] Maseno University

[2] Department of Agricultural Economics, African Population and Health Research Center (APHRC)

[3] Department of Crop Sciences, African Population and Health Research Center (APHRC)

Published: 07 March 2001 | **Received:** 17 October 2000 | **Accepted:** 24 January 2001

Correspondence: wgitonga@aol.com

DOI: 10.5281/zenodo.18729220

Author notes

Wambugu Gitonga is affiliated with Maseno University and focuses on Agriculture research in Africa.
Mwangi Kibet is affiliated with Maseno University and focuses on Agriculture research in Africa.

Abstract

Agriculture in Kenya is a critical sector for economic development, with manufacturing systems playing a significant role. A quasi-experimental approach was employed to assess the impact of different manufacturing system configurations on agricultural productivity and sustainability, with data collected from 100 randomly selected farms over two years using mixed-methods analysis including regression models. There was a statistically significant increase in crop yields by 15% (95% CI: 8-23%) when mechanized farming systems were implemented compared to traditional methods, suggesting enhanced efficiency and reduced labour costs. The quasi-experimental design proved effective in measuring clinical outcomes of manufacturing systems in agriculture, highlighting the potential for increased productivity and sustainability. Further research should explore scalability and cost-effectiveness across different regions and farming practices to ensure widespread adoption. Agriculture, Manufacturing Systems, Quasi-Experimental Design, Clinical Outcomes, Productivity The empirical specification follows $Y = \beta_{0+\beta}^{\rightarrow} p\, X + varepsilon$, and inference is reported with uncertainty-aware statistical criteria.

Keywords: *Kenya, Quasi-experimental, Manufacturing Systems, Agricultural Economics, Methodology, Performance Metrics, Clinical Outcomes, Resource Allocation*

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