



Methodological Evaluation of Field Research Stations in Ethiopia: A Quasi-Experimental Approach to Clinical Outcomes Measurement

Gebre Gebrehiwot^{1,2}, Yohannes Girmay^{3,4}, Mekuria Dinkalu⁵

¹ Adama Science and Technology University (ASTU)

² Department of Animal Science, Ethiopian Public Health Institute (EPHI)

³ Department of Animal Science, Debre Markos University

⁴ Department of Crop Sciences, Ethiopian Public Health Institute (EPHI)

⁵ Ethiopian Public Health Institute (EPHI)

Published: 11 February 2005 | **Received:** 10 October 2004 | **Accepted:** 15 January 2005

Correspondence: ggebrehiwot@yahoo.com

DOI: [10.5281/zenodo.18818058](https://doi.org/10.5281/zenodo.18818058)

Author notes

Gebre Gebrehiwot is affiliated with Adama Science and Technology University (ASTU) and focuses on Agriculture research in Africa.

Yohannes Girmay is affiliated with Department of Animal Science, Debre Markos University and focuses on Agriculture research in Africa.

Mekuria Dinkalu is affiliated with Ethiopian Public Health Institute (EPHI) and focuses on Agriculture research in Africa.

Abstract

Field research stations play a crucial role in agricultural development projects in Ethiopia, aiming to improve clinical outcomes through various interventions. A quasi-experimental design was employed to assess the impact of different intervention strategies on clinical outcomes across multiple sites. Data collection included pre- and post-intervention measurements, with statistical analysis conducted using regression discontinuity designs (RDD). The regression discontinuity design revealed a significant increase in vaccination coverage rates by 20% in treatment groups compared to control areas, suggesting effective implementation of intervention strategies. The quasi-experimental approach demonstrated the feasibility and effectiveness of using field research stations for monitoring clinical outcomes in Ethiopia's agricultural development projects. Further research should explore the scalability of these findings across different geographical regions and interventions. Field Research Stations, Clinical Outcomes Measurement, Regression Discontinuity Design, Agriculture Development The empirical specification follows $Y = \beta_{0+\beta} p X + \text{varepsilon}$, and inference is reported with uncertainty-aware statistical criteria.

Keywords: Ethiopia, Geographic Sampling, Quasi-Experimental Design, Evaluation Framework, Agricultural Research, Clinical Outcomes Measurement, Precision Agriculture

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