



# Methodological Evaluation of Regional Monitoring Networks in Tanzania: Quasi-Experimental Design for Clinical Outcomes Measurement

Mawanda Simeon<sup>1,2</sup>, Kamali Muthui<sup>2</sup>

<sup>1</sup> Sokoine University of Agriculture (SUA), Morogoro

<sup>2</sup> National Institute for Medical Research (NIMR)

**Published:** 06 January 2012 | **Received:** 11 August 2011 | **Accepted:** 05 December 2011

**Correspondence:** [msimeon@hotmail.com](mailto:msimeon@hotmail.com)

**DOI:** [10.5281/zenodo.18949451](https://doi.org/10.5281/zenodo.18949451)

## Author notes

*Mawanda Simeon is affiliated with Sokoine University of Agriculture (SUA), Morogoro and focuses on Energy research in Africa.*

*Kamali Muthui is affiliated with National Institute for Medical Research (NIMR) and focuses on Energy research in Africa.*

## Abstract

This study evaluates the effectiveness of regional monitoring networks in Tanzania for measuring clinical outcomes related to energy access. A quasi-experimental design was employed, including surveys of healthcare providers and systematic review of network performance data. Statistical analysis used regression models to assess the relationship between monitoring frequency and clinical outcomes. Surveys indicated a preference for networks that performed at least two checks per year over those with less frequent monitoring (75% preferred higher frequency). The quasi-experimental design confirmed higher monitoring frequencies are associated with better patient care, supporting the recommendation for increased network activity. Healthcare providers should be encouraged to participate in networks that conduct at least two checks annually to improve clinical outcomes. The empirical specification follows  $Y = \beta_{0+\beta} p X + \text{varepsilon}$ , and inference is reported with uncertainty-aware statistical criteria.

**Keywords:** *African geography, energy access, ethnographic study, quasi-experimental design, qualitative analysis, rural development, sustainability indicators*

## 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](mailto: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](http://app.parj.africa)



Scan to visit [app.parj.africa](http://app.parj.africa)

**Open Access Scholarship from PARJ**

Empowering African Research | Advancing Global Knowledge