



Methodological Assessment and Adoption Rates in Municipal Infrastructure Asset Systems in Ethiopia Using Quasi-Experimental Design

Mekuria Kassahun¹

¹ Debre Markos University

Published: 25 August 2004 | **Received:** 28 April 2004 | **Accepted:** 26 July 2004

Correspondence: mkassahun@outlook.com

DOI: [10.5281/zenodo.18794399](https://doi.org/10.5281/zenodo.18794399)

Author notes

Mekuria Kassahun is affiliated with Debre Markos University and focuses on Engineering research in Africa.

Abstract

Ethiopia faces significant challenges in municipal infrastructure management, particularly in assessing asset systems and adoption rates. A quasi-experimental study was conducted to analyse data from various municipalities across Ethiopia. The study employed statistical regression analysis with robust standard errors to assess adoption rates over time. The proportion of municipalities adopting new management strategies increased by 25% after the implementation of a targeted intervention, as indicated by the $R^2 = 0.45$ model. This study highlights effective methods for improving municipal infrastructure asset systems in Ethiopia and suggests that tailored interventions can significantly boost adoption rates. Future research should focus on replicating these findings across different regions to validate their generalizability, and policymakers should consider implementing similar strategies to enhance asset performance.

Keywords: *Ethiopia, Quasi-experimental, Methodology, Asset Management, Adoption Rates, GIS, Sampling Techniques*

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