



Methodological Evaluation of Field Research Stations in Nigeria for Time-Series Forecasting of Adoption Rates

Chinedu Obioha¹, Omorie Agbolobo^{1,2}

¹ Usmanu Danfodiyo University, Sokoto

² Ahmadu Bello University, Zaria

Published: 17 February 2006 | **Received:** 08 December 2005 | **Accepted:** 17 January 2006

Correspondence: cobioha@hotmail.com

DOI: [10.5281/zenodo.18835181](https://doi.org/10.5281/zenodo.18835181)

Author notes

Chinedu Obioha is affiliated with Usmanu Danfodiyo University, Sokoto and focuses on Energy research in Africa.

Omorie Agbolobo is affiliated with Ahmadu Bello University, Zaria and focuses on Energy research in Africa.

Abstract

This study focuses on evaluating field research stations in Nigeria for forecasting adoption rates related to energy policies. Field research stations were analysed through systematic data collection methods, including surveys and statistical modelling. A linear regression equation was employed to forecast adoption rates over time with robust standard errors accounting for potential measurement uncertainties. The analysis revealed a significant positive correlation between investment levels in renewable energy sources and the rate of adoption ($p < 0.05$). Field research stations demonstrated effectiveness in data collection, but further validation is needed to ensure model reliability across different regions in Nigeria. Continuous monitoring and periodic recalibration of the forecasting models are recommended based on ongoing energy policy changes and technological advancements. Field Research Stations, Time-Series Forecasting, Adoption Rates, Renewable Energy, Linear Regression The empirical specification follows $Y = \beta_{0+\beta} p X + \text{varepsilon}$, and inference is reported with uncertainty-aware statistical criteria.

Keywords: Nigerian, Geospatial, Geographic, Regression, Time-series, Spatial, Econometrics

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