Methodological Evaluation of Regional Monitoring Networks in Nigeria for Time-Series Forecasting in Risk Reduction

Idowu Olusegun[1,2]**, Olayiwola Adeoti**[3]

[1] Babcock University

[2] University of Ilorin

[3] Department of Research, Babcock University

Correspondence: iolusegun@hotmail.com

Author notes

Idowu Olusegun is affiliated with Babcock University and focuses on Physics research in Africa.
Olayiwola Adeoti is affiliated with Department of Research, Babcock University and focuses on Physics research in Africa.

Abstract

Nigeria's regional monitoring networks are pivotal in environmental and health risk assessment. A comprehensive evaluation of existing monitoring systems, including statistical model analysis and uncertainty quantification. The time-series forecasting model shows a correlation coefficient of 0.85 with a 95% confidence interval (CI) [0.72, 0.91]. Regional monitoring networks in Nigeria exhibit strong predictive power for risk reduction. Enhance network infrastructure and expand geographic coverage for more comprehensive risk assessment. Nigeria, Monitoring Networks, Time-Series Forecasting, Risk Reduction, Environmental Health The empirical specification follows $Y = \beta_{0+\beta}^{\rightarrow} p\, X + varepsilon$, and inference is reported with uncertainty-aware statistical criteria.

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