Methodological Foundations for Assessing Municipal Water Systems Adoption in Nigerian Cities: A Multilevel Regression Analysis Framework

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Abstract

Municipal water systems in Nigerian cities face significant challenges due to inadequate infrastructure and poor maintenance. The methodology will employ multilevel regression models, incorporating data from multiple levels including city-level characteristics and household-level perceptions. This will allow for an in-depth understanding of factors influencing system adoption. This theoretical framework provides a robust methodological foundation for future empirical studies on municipal water systems in Nigeria. Future research should validate these findings through comprehensive data collection and analysis to inform policy decisions aimed at improving access to safe drinking water in Nigerian cities. The empirical specification follows $Y = \beta_{0+\beta}^{\rightarrow} p\, X + varepsilon$, and inference is reported with uncertainty-aware statistical criteria.

ABSTRACT-ONLY PUBLICATION

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