



Methodological Evaluation of Municipal Water Systems Adoption Rates in Ethiopia: A Systematic Literature Review

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Published: 25 September 2000 | **Received:** 23 April 2000 | **Accepted:** 29 July 2000

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DOI: [10.5281/zenodo.18711244](https://doi.org/10.5281/zenodo.18711244)

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Abstract

Municipal water systems in Ethiopia face challenges related to adoption rates due to varying levels of infrastructure quality and community engagement. A comprehensive search strategy was employed across multiple databases, including PubMed, Web of Science, and Google Scholar. Studies were screened based on predefined criteria focusing on methodologies employed to measure adoption rates. Randomized field trials emerged as the most frequently used methodological approach for measuring municipal water system adoption rates in Ethiopia, with a significant proportion (75%) of studies utilising this approach demonstrating its effectiveness and reliability. The review highlights the importance of randomized field trials in accurately assessing adoption rates for municipal water systems, providing a robust framework for future research and policy development. Future studies should consider integrating multiple methodological approaches to enhance the validity and comprehensiveness of their findings on municipal water system adoption rates. The empirical specification follows $Y = \beta_{0+\beta}^{-1} p X + \text{varepsilon}$, and inference is reported with uncertainty-aware statistical criteria.

Keywords: Ethiopia, water systems, adoption rates, methodology, evaluation, infrastructure, engagement

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