

## Improving Water and Sanitation Systems in Rural Ethiopia

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**Abstract :** Access to clean water and sanitation is a critical issue in rural Ethiopia, impacting public health and quality of life. This research explores ways to improve water and sanitation systems in these underserved areas. It begins by assessing the current infrastructure, identifying major challenges such as financial constraints, environmental factors, and inadequate technical solutions. The study employs a mixed-methods approach, combining case studies, interviews, surveys, and document analysis to gather comprehensive data. Findings reveal that successful interventions often involve community engagement, appropriate technologies, and resilient infrastructure. Case studies from Ethiopia and other countries highlight effective strategies and lessons learned. Recommendations include strengthening infrastructure, enhancing community involvement, addressing gender disparities, and building financial and environmental resilience. This research aims to provide practical, context-specific solutions to ensure sustainable improvements in water and sanitation systems for rural communities in Ethiopia.

**Keywords :** rural Ethiopia, environmental factors, prevent water pollution, pure water

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