



Sewage Integration into Abidjan Slum Water Supply Networks: Seven-Year Energy Savings and Health Benefits

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Abstract

This Policy Brief examines the integration of sewage treatment into Abidjan slum water supply networks in an effort to reduce energy consumption and improve public health. A comprehensive analysis was conducted using available data on water supply networks, sewage treatment operations, and public health records within Abidjan. Statistical tools were employed to assess energy savings and health improvement trends over the study period. The integration of sewage treatment into the water supply network resulted in a 25% reduction in overall energy consumption compared to pre-integration levels, with notable improvements in both sanitation and respiratory health outcomes among slum residents. This policy brief underscores the potential for sustainable urban development by highlighting the positive impact of integrated sewage treatment systems on public health and resource management in African cities. The findings suggest that policymakers should consider implementing similar integrated sewage treatment systems to enhance energy efficiency and improve public health outcomes in other slum areas. Additionally, ongoing monitoring is recommended to ensure continued benefits and address any emerging issues.

Keywords: *Geography, Africa, Sewage, Treatment, BiomassEnergy, Slum, Ethiopia, WasteManagement*

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