



Three-Year Impact Assessment of LED Lighting Installations on Energy Saving Behaviors in Kenyan Villages: An Analytical Study

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Abstract

LED lighting installations have been increasingly adopted in Kenyan villages to reduce energy consumption and costs. A mixed-methods approach combining surveys and qualitative interviews was employed to gather data from participants in selected villages. Significant increases in awareness about energy conservation were observed among villagers who used LED lighting, with a proportion of 75% reporting changes in their daily routines as a result of the installations. The findings suggest that while initial enthusiasm for LED lights was high, sustained behavioural change towards more sustainable practices requires ongoing support and education initiatives. Communities should be provided with continuous training on energy management techniques alongside improved infrastructure to ensure long-term adoption of LED lighting as a viable solution for energy conservation.

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Concepts:

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