



# Promoting Renewable Energy Use Through a Lighting Programme in Rural Zimbabwean Communities: A Mixed Methods Study in Senegal

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## Abstract

This study examines the effectiveness of a lighting programme in promoting renewable energy use among rural communities in Senegal and its potential application to similar contexts in Zimbabwe. A mixed methods approach was employed, integrating qualitative interviews with quantitative surveys to gather data from participants in rural Senegal ( $n = 150$ )  $\wedge$  Zimbabwe ( $n = 80$ ). Solar lanterns were widely adopted by households, with a usage rate of 92% among participating communities. Community members expressed strong support for the initiative. The programme demonstrated significant success in increasing renewable energy use and improving community health outcomes through increased access to light. Future projects should focus on expanding solar lantern distribution, addressing financial constraints with subsidies, and enhancing sustainability by training local artisans to produce lamps locally.

**Keywords:** *African geography, renewable energy, rural development, qualitative methods, quantitative analysis, participatory observation, community engagement*

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