



# Renewable Microgrids and Kerosene Stoves in Senegalese Rural Egypt: An Effectiveness Study

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## Abstract

This study examines the effectiveness of renewable energy microgrids in reducing kerosene stove usage among Senegalese rural households in Egypt. The study employed a mixed-methods approach, including surveys and interviews conducted among selected households in Senegalese rural areas. Data analysis used descriptive statistics and thematic coding to interpret findings. A notable theme emerged regarding the preference for kerosene stoves over renewable energy options due to affordability and familiarity with these appliances. While microgrids showed promise, they faced significant challenges in terms of initial investment costs and acceptance among local communities. Further research is recommended to explore potential policy interventions. Local governments should consider subsidizing the installation costs for renewable energy solutions and involve traditional leaders in promoting their benefits.

**Keywords:** *Sub-Saharan, African, Sustainability, Ethiopia, Kerosene, Grids*

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