



# Solar Power Microgrids and Access to Electricity in Rural Tanzanian Healthcare Facilities: An Ethnographic Study,

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## Abstract

Solar power microgrids have become a significant solution for improving access to electricity in rural healthcare facilities across Africa. An ethnographic study conducted among healthcare providers, patients, and community members in four rural health centers in Tanzania over a period of one year. Solar power microgrids provided reliable electricity for basic medical equipment, with an average daily savings of \$0.50 per facility compared to traditional diesel generators. The study demonstrated that solar power microgrids are effective in improving access to essential healthcare services and reducing operational costs in rural settings. Government bodies should prioritise funding for the installation and maintenance of solar power systems in underserved health facilities.

**Keywords:** *Geographic, Cultural, Socioeconomic, Contextual, Qualitative, Indigenous, Knowledge, Folklore, Community, Livingstonian*

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