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Solar Microgrids in Senegalese Villages: Energy Access and Economic Impacts, 2009

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Abstract

This study examines the implementation of solar microgrids in off-grid villages of Senegal to explore how they improve energy access and economic conditions. Qualitative research methods were employed including in-depth interviews, focus group discussions, and document analysis to gather data from various stakeholders across Senegalese villages with solar microgrids installed. Solar microgrids have significantly enhanced electricity reliability, with a reported average of 95% uptime, leading to substantial cost savings for households and businesses. Employment generation through micro-enterprise activities is also notable, with an estimated 20% increase in local job opportunities. The findings suggest that solar microgrids are pivotal in improving energy access and economic vitality in Senegalese villages, offering a sustainable model for off-grid electrification. Government policies should incentivize the adoption of solar microgrids by providing subsidies or tax benefits. Community engagement programmes should be developed to ensure long-term sustainability and widespread use.

Keywords: *Sub-Saharan, African, Solar, Tuvalu, Contextual, Bridging*

ABSTRACT-ONLY PUBLICATION

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