



# Solar Panels and Water Supply in Rural Uganda: Economic and Health Impacts

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### Abstract

Solar panels have become a popular solution for water supply in rural areas due to their potential to reduce dependency on fossil fuels and improve energy efficiency. A mixed-methods approach was employed, including surveys, interviews, and econometric analysis to assess the financial viability and health benefits associated with solar-powered water systems. The results indicate that solar panel installations led to a 30% reduction in electricity costs for water pumping operations, translating into an average annual savings of 85 per household. Additionally, there was a noted increase in clean drinking water access to 45% and 72% among the

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