



Power-Distribution Equipment Systems in Uganda: Methodological Evaluation and Yield Improvement Assessment

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Abstract

Power-distribution equipment systems (PDES) are critical for efficient electricity transmission in Uganda's rural areas. A randomized controlled trial was conducted with 100 randomly selected villages, measuring power delivery efficiency before and after the intervention. Significant increases in electricity supply were observed in 85% of tested villages, with an average yield improvement of 23%. The randomized field trial confirmed that PDES interventions can effectively enhance power distribution efficiency. Further research should explore long-term sustainability and cost-effectiveness of the identified methods. Power-distribution Equipment Systems, Yield Improvement, Randomized Field Trial, Uganda The maintenance outcome was modelled as $Y_i = \beta_0 + \beta_1 X_i + u_i + \epsilon_i$, with robustness checked using heteroskedasticity-consistent errors.

Keywords:

Ugandan

Geographic

Terms:

Methodological

Randomized

Controlled

Trial

Terms:

(RCT)

Theoretical

Economic

Energy

Incentives

Sustainability

Technology Adoption

Terms:

Development

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