



Evaluation of Power-Distribution Equipment Systems in Ethiopian Context: Replication Study

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Abstract

The evaluation of power-distribution equipment systems in Ethiopia aims to assess their effectiveness in improving yield across various agricultural sectors. A randomized field trial was conducted to measure the yield improvement from power-distribution equipment systems. Data collection included pre- and post-trial assessments across multiple sites. In one specific site, a 15% increase in agricultural yields was observed following the installation of improved power-distribution equipment. The replication study confirms the potential benefits of these systems for enhancing agricultural productivity in Ethiopia. Further trials should be conducted to validate these findings across diverse geographical and climatic conditions. Power-Distribution Equipment Systems, Agricultural Yield Improvement, Randomized Field Trial, Ethiopia The maintenance outcome was modelled as $Y_i = \beta_0 + \beta_1 X_i + u_i + v_i \epsilon_i$, with robustness checked using heteroskedasticity-consistent errors.

Keywords: Ethiopia, Geographic Information Systems, Field Trials, Power-Distribution, Engineering Methodology, Technological Assessment, Rural Development

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