Comparative Analysis of Economic Activities and Job creation Spurred by Advent of Electrification between Distribution of Electricity Between NEA (DCS) and CREE

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PRESENTATION OUTLINE

- Introduction
- Electrification status
- Rural Electrification models
- Research Introduction
- Initial Research Findings
- Conclusion
INTRODUCTION

- Study area selection criteria
  - Road and transport
  - Availability of financial institution
  - More than 5 years of electrification

5 Survey in 5 locations
ELECTRIFICATION STATUS

NEA-DCA: Nepal Electricity Authority – Distribution Consumer Service
CREE- Community Rural Electricity Entity (Wholesale Purchaser from NEA)
RETs: Renewable Energy Technologies such as Solar, Wind, Bioenergy...
RESEARCH THEME

Research Hypothesis: Incentives and capability of CREE and DCS to provide quality electricity and complimentary inputs differ.

Electricity and Complementary Inputs

- Access to reliable electricity
- Access to finance
- Good management services

Increased Economic Activity

Research Objectives

- What are the differences in no. of enterprise growth between DCS and CREE areas?
- Difference in types and size of enterprises along with ownership and management
- Responsible factors for the differences, if any
RESEARCH METHODOLOGY & INDICATORS

Methods
- FGD, KII, Questionnaire Survey, case studies

Research Indicators
- Enterprises (number, types, scale); Access to electricity connection; Quality and Reliability of power supply; Promotional activities by distribution company

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PRELIMINARY FINDING

- FGD/KII
  - Growth in number of enterprises
  - Shops most dominant in no.
  - More IGA practicing HHs in CREE
  - No Load shedding in DCS and CREE
  - Power interruptions and voltage issues mainly in rainy season
  - Interruptions and voltage issues more in DCS
  - Transmission line repair and maintenance is faster in CREE
  - Higher incidents of deaths and accidents reported in DCS areas
  - Electricity theft reported in DCS
PRELIMINARY FINDINGS (Quality and Reliability)

% of respondents reporting voltage issues

Average number of weekly power interruption

Average time to resolve issues
PRELIMINARY FINDINGS

Perception on reliability of electricity

Number of Enterprises in study areas

- Butwal CREE
- Butwal DCS
- Dhading CREE
- Dhading DCS
- Tanahu CREE
- Tanahu DCS
- Parsa CREE
- Parsa DCS

- less
- average
- reliable

- No. of Enterprises CREE
- No. of Enterprises DCS
- Before electrification CREE
- Before electrification DCS

Syangja
Butwal
Dhading
Tanahu
Parsa
CONCLUSIONS

➢ Electrification has increased economic activity in the study area
➢ Power interruption is higher in DCS
➢ Voltage issue is comparatively lower in CREE (except Dhading)
➢ Average time to resolve issues is higher in DCS areas
➢ CREE is perceived to be more reliable
Thank you

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