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

Since 2003, the Government of Nepal (GoN) has been distributing electricity to rural communities via two models (a) through Community Rural Electrification Entities (CREE), and (b) through the Nepal Electricity Authority’s (NEA) Distribution and Consumer Service (DCS) business group. Studies have shown that community electrification has reduced pilferage and lowered operational costs for NEA while delivering services to rural consumers. Compared to the conventional utility-managed version, some of the flexibility afforded by community-based electrification might enable development of enterprises. This is particularly true of micro-enterprises, which are likely to be started by women and individuals from disadvantaged social backgrounds within the communities.

Project Approach

The study will adopt a comparative analysis framework. The study has identified five CREEs through a stratified random sampling process, and corresponding DCS electrified communities. The study will compile both qualitative and quantitative information on access and quality of electricity in both CREEs and DCS communities and compare how they differ/resemble. The study will also collect information on the number of new enterprises, job creation and expansion of older enterprises. It will also collect information on the availability and quality of complementary inputs like credit, management services, markets, development initiatives, and roads/transportation facilities in both CREEs- and DCS-electrified areas.

The study will then evaluate the relationship between enterprise/job growth and access to electricity using simple statistical techniques (depending on the quality of data available). It will examine and compare whether such relationships exist in CREE- and DCS-electrified areas. Qualitative methodology such as case studies will complement quantitative analysis.

FAST FACTS

FUNDER: UK DEPARTMENT FOR INTERNATIONAL DEVELOPMENT
PARTNER: NATIONAL ASSOCIATION OF COMMUNITY ELECTRICITY USERS NEPAL (NACEUN)
LOCATION: DHADING, TANAHU, SYANGJA, RUPANDEHI, PARSA
Project Objective

The project will seek to answer three main questions: a) what differences are there, if any, in the number of enterprises enabled to start up or expand by access to electricity between areas electrified by CREEs versus those electrified by DCS; b) what differences are there, if any, in the types and sizes of enterprises enabled by access to electricity between CREE- and DCS-supplied areas, as well as their ownership and management; c) which factors might be responsible for any documented differences in either quantity or quality of enterprises enabled by access to electricity through the two modalities.

Project Activities

The research will begin with the review of relevant literatures and collection of secondary data, followed by field studies. The field study will generate primary data and information required for the analysis. This study will follow the following research procedures.

- Literature review
- Compilation and analysis of secondary data
- Primary data collection
  - Business enterprise survey
  - Household survey
  - Focus group discussions (FGDs)
  - Key informant interview
  - Case studies
- Data analysis
- Report preparation
- Paper publication

Partnerships

The local partner for the proposed research is the National Association of Community Electricity Users Nepal (NACEUN), an umbrella organization of community rural electrification entities (CREE). Winrock has had a long-running partnership with NACEUN, helping it establish 11 district offices and strengthen networks in 27 districts. Winrock has a memorandum of understanding in place with NACEUN to research the promotion of productive end uses and economic activities linked with rural electrification. Also, NEA has provided Winrock with no objection letter and support for conducting research.

Expected Outcomes

- A comparison of how CREE- and DCS-managed electrification impact the establishment and growth of electricity-based enterprise in the areas they serve.
- Insights into which aspects of CREE and DCS management contribute to documented differences in the utilization of electricity for productive uses, types of enterprises, and owners of enterprises.
- Recommendations on rural electrification and accompanying investments, which can result in a higher number of enterprises, with greater benefits occurring to women and disadvantaged populations.

The research outcomes will provide evidence to policy makers and development partners to guide investment into electrification models, and identify the approaches most likely to contribute to economic growth in rural areas and support livelihood development.