



Community Rural Electrification EnDev Nepal

Energising Development

Energising Development (EnDev) is an energy access partnership currently financed by six countries: the Netherlands, Germany, Norway, United Kingdom, Switzerland and Sweden. EnDev promotes sustainable access to modern energy services that meet the needs of the poor - long lasting, affordable, and appreciated by users.

EnDev Programme in Nepal was implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) since 2009 to facilitate access to modern energy services through grid and off grid technologies. EnDev works together with Nepal Electricity Authority (NEA) with an objective to facilitate access of electricity to the rural population through national grid extension/densification under the framework of Community Rural Electrification (CRE) Programme of the Government of Nepal (GoN).

Rationale of Grid Extension Component

Out of the 26 million people living in Nepal, 75% are benefitted from access to electricity through various sources but percentage of people having access to electricity through national grid is only 67%; rest depend upon other sources like solar PV or micro hydro, etc. This is even less in rural areas, only 43% of population in rural areas have access to electricity. The remaining large numbers of people are without access to grid electricity due to reasons such as distance to the grid, remoteness, lack of infrastructure, and limited generation capacity. Hence, rural electrification became a priority and in order to expand the access of electricity services to the rural areas on a demand driven approach, the GoN then brought forward the Community Rural Electrification Programme (CREP) which is being executed since 2003. This has opened door for the community based-organizations to buy electricity in bulk from NEA and sell it within its area, by utilizing the existing or newly constructed distribution networks.

The regulation consents any type of Community Rural Electric Entity (CREE): company, cooperative, NGOs, user's association to enter into agreement with Community Rural Electrification Department (CRED) of NEA, provided that it is represented by the local communities. Further, CREEs are required to contribute 10% (previously 20%) of the project cost to be connected to the grid and the remaining 90% (previously 80%) is provided by Government via NEA. After electrification, CREEs are responsible for the operation and management of the distribution network, collection of revenues from villagers and payment for bulk power purchased from NEA.

However, electrification was delayed in many CREEs as they were not able to come up with their share of investment and did not have access to finance for the purpose. Hence, a revolving fund was felt necessary to enable those communities who could not afford 10% (then 20%) community share. The gradual repayment of these funds from the communities to NEA is envisaged to feed into a revolving fund for further support of more CREEs in the future.

Intervention Description: Grid Extension

EnDev support is planned for communities so that they can have access to funds and partially finance the grid extension to their areas under the NEA Community Rural Electrification Program (CREP). Through the revolving fund, jointly created with NEA and EnDev, the communities can have a credit to cover the 10% of the equity cost and be connected to the grid. Those communities establish a CREE or micro-utility in the form of a cooperative/NGO or private company, with the support of NEA and develop a project for extending the grid. If feasible, they are benefitted by the Government subsidy (90%) and the credit from the fund (if required).

CREEs, first buy the electricity in bulk from NEA then later sell it to their members and mini-distribution model, with the application of tariffs per type of customer. It is govern by its own policies as any other enterprise. Loans are later paid by CREEs to the fund with 3% service rate. NEA later allocates the paid funds to other CREEs that

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request for the support. Besides the financial support, EnDev provides technical assistance to NEA/CREP program in the elaboration of guidelines for the credit allocation and collection, as well as monitoring and evaluation.

In addition to grid extension, EnDev Nepal is also executing a pro-poor **Grid Densification programme**. Its objective is to support with direct incentives to CREEs that have identified and effectively connected to the Electricity Grid users under their existing lines of operation, but are not able to get access due to the high initial connection cost. These incentives are claimed by the CREEs once a new customer is connected and could be later translated to households or small and micro enterprises with new connections.

As a cross cutting intervention, EnDev also supports the productive use of electricity at the community level. To this end, the project cooperates with HELVETAS Swiss Intercooperation, as well as NACEUN, the local umbrella organisation of CREEs.

Role and Responsibilities under Grid

Extension

NEA as the main implementation partner and supervisor of the fund is currently leading the community rural electrification program.

To steer the revolving fund, EnDev provides technical assistance to NEA for the operationalization of the revolving fund with the development of loan allocation and collection mechanisms, capacity building activities of CREEs. Technical trainings and admin-financial training, and organizational management trainings are provided to CREEs that manage electricity distribution within the community to operate as an independent rural utility. In this regard, required guidelines and manuals are also developed.

Expected Outcome

- Provide electricity access for lighting/electrical appliances to 208,968 persons.
- Provide electricity access to 545 social infrastructure institutions.
- Provide electricity access to 2,737 MSMEs.
- Communities and individual entrepreneurs are trained on the promotion of productive use of electricity.

- Financial support for initial investment cost through revolving fund.
- Capacity building of CREEs and institutional development of NACEUN.

Progress

The grid extension program has played an important role to improve the access for electrifying the rural population of Nepal which otherwise would have taken longer period to receive electricity.

As of December 2017, 55 CREEs have received loans, 47 are connected to the grid providing electricity services to 34,014 households, 525 SIs and 3042 MSMEs altogether. The fund has started rotating and 6 CREEs have received loan for grid extension under RF with loan collected from the existing CREEs.

A story of Salang-7 (changes in life after electricity)

“Our quality of life has been improving gradually and continuously during last few years. Multitude of factors could have contributed for this improvement and development. Electricity is the most important factor among us. For example, supposed we have a road, water, school, very delicious food that we can eat, and we have everything. If we do not have eye or light, how can one walk the road, how can one reach the community to eat, how can one reach a school? That’s why light or electricity is the most important.”

- Krishna Thakuri, Salang-7, Fakfuk

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