



Environment: Forestry, Energy & Ecosystem Services

Access to Clean Energy through Microfinance (UNCDF CleanStart Project)-NMB

Rationale

The overall energy consumption of Nepal is largely dominated by the use of traditional forms of energy. Water and Energy Commission Secretariat (WECS 2010) states the very worse figure on environment friendly renewable energy consumption in Nepal where only 1% of Nepal's total energy needs is being met by such sources. Unlike, almost 87% and another 12% come from traditional sources and commercial sources respectively. Only 56% of Nepal's population has access to grid connected electricity, and only about 25% of the rural population has access to electricity.

Central Bureau of Statistics (CBS 2012) states that about 1 million households in Nepal still use kerosene and locally available resources for lighting. Similarly, more than 4 million households use firewood and cow dung which counts to around 74% of the total households. The figure shows that at least 94% of those households live in rural areas. The use of firewood and kerosene results in indoor air pollution which causes health problems, especially for women and children. Furthermore, the increasing prices of petroleum products in the world market will make kerosene lighting more expensive in the future. Nepal Oil Corporation has increased the kerosene price 70 times by 985% within just less than 18 years, between 1996 to 2013. This data presents the annual kerosene price increment by more than 55% which is at least 5 times higher than the overall country inflation rate. Moreover, forest resources such as fuel-wood used by communities for heating and cooking purposes are indicated to lead to gradual degradation of natural resources.

Our Solution

To address these challenges, various Renewable Energy Technologies (RETs) need to be promoted to increase energy access and to enhance the rural livelihoods. In this regard, with the financial support from

United Nations Capital Development Fund (UNCDF) NMB Bank (NMB), Winrock International (Winrock), Nirdhan Utthan Bank Limited (NUBL) and Positive Planet are jointly implementing Access to Clean Energy through Microfinance project for 3 years from July 2014. Winrock is facilitating the implementation of this project as core technical partner.

This project will therefore fulfil a crucial need by promoting various RETs and energy-based Medium, Small, and Micro Enterprises (MSMEs) in rural Nepal through accessible credit for poor households. NMB will provide wholesale loans to NUBL and other local FSPs and potential MSME entrepreneurs for the installation of RETs and various enterprises. Besides, NMB provide RPs during the capacity building trainings to NUBL branch offices and other local FSPs.

Project Objective

- To promote RETs based on requirement to increase energy access
- Increase financial access of rural communities for access to energy and enhanced livelihoods
- Assist NMB and NUBL to increase investment in RETs and other clean energy projects

Targets

It targets the installation of 600 biogas plants, 17,200 SHSs, and 6,200 ICS

Project Activities

- Technical Assistance to NMB and NUBL on credit financing for RETs through NUBL branches and other FSP networks
- Building capacities of FSPs to finance RETs as loan product
- Assist NMB and NUBL for energy financing and linkage with prospective new business
- Enhance rural livelihoods by establishing rural



enterprises using energy generated

Roles and Responsibilities

UNCDF: Financial and necessary technical support.

NMB Bank Lead the project, conduct due diligence and provide loans to NUBL and local FSPs for RETs and MSMEs.

Winrock International: Overall responsibility of implementing the project - select field level partners, districts and FSPs, develop training materials and hand-outs, provide capacity building trainings to NUBL and NMB, facilitates NMB for due diligence, coordinate with AEPC/NRREP, pre-qualified solar companies and other stakeholders, conduct MSME trainings, and report project progress to NMB.

AEPC/NRREP: Manage and provide subsidy for RETs

Energy Companies: Provide and install quality RET products and prompt after-sales-service

Positive Planet: RET business plan trainings to NUBL branches and other FSPs. Develop contracts and facilitates for agreement between NUBL or other FSPs. Assist local FSPs for processing loans with NMB. Facilitate NUBL for demand creation and marketing efforts on RETs.

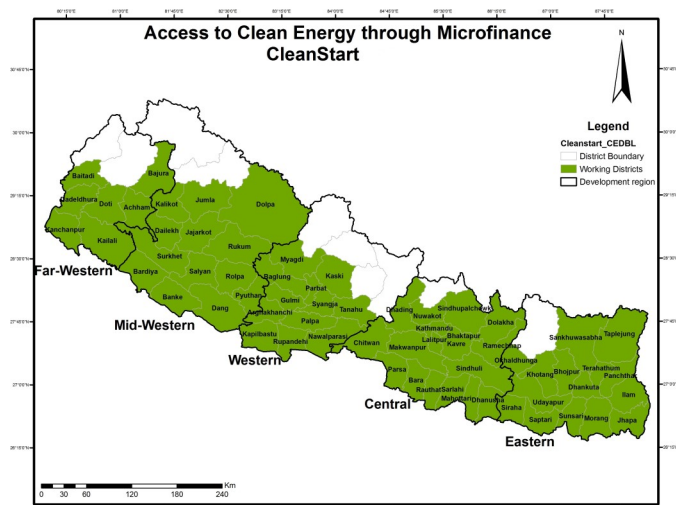
Nirdhan Utthan Bank Limited : Provide loans and facilitate for the installation of RETs. Implement the project activities as a key local financial service provider. Field level monitoring of the project.

Project Status & Achievements

- Facilitated for the installation of 12,832 SHS, 2,942 biogas, 790 ICS. Similarly, 110 households electri-

fied from IMW and 1,201 households electrified from MHPs.

- Facilitated NMB for achieving 1.675% portfolio in RE sector (> NRs. 82 crore)
- Facilitated NUBL for lending in RE sector for more than NRs. 48 crore.



Working Areas

Sustainable Impact

The project will see following impacts after successfully completion of the project.

- US\$ 130,000 kerosene purchase cost saving and reduction of at least 6,500 tCO₂e per year through biogas, ICS, and SHS installation.
- Establish bank-LFIs relationship.
- Reduce indoor air pollution, health and fire risk and increased homework and school attainment.
- Access to information (benefited from mobile charging, watching television & listening to radio)

Winrock International is a nonprofit organization that works with people in the United States and around the world to empower the disadvantaged, increase economic opportunity, and sustain natural resources.

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