

# Efficient Electric Cooking Market Uptake in Nepal

Electricity supply from the national grid is becoming reliable which may open avenues for households to adopt electric cooking. However, market growth of electric cookstoves has been slower than anticipated. Some barriers to adoption of ecooking in Nepal include lack of awareness on electric cookstoves and their benefits, underdeveloped supply chain, cultural cooking preferences, skepticism of newer products, and high upfront cost of efficient electrical cooking appliances.

### Fast Facts

FUNDER: UK DEPARTMENT FOR INTERNATIONAL DEVELOPMENT PARTNER: RENEWABLE ENERGY, WATER SUPPLY AND SANITATION PROMOTION CENTRE (REWSSPC) LOCATION: KATHARIYA, RAUTAHAT



This project will assess consumer's preferences for Electric Pressure Cookers (EPCs), willingness to pay, preferred business models, economic benefits of EPCs, and impacts of EPCs on existing electricity infrastructure and required improvements. The project will be piloted in Katahariya Municipality of Province 2 in Nepal.

## **Project Approach**

The project will install 50 EPCs; 30 households from the general population (open pool) and 20 households from disadvantaged group. The project will subsidize up to 40% of EPC cost for 30 early adopters from the open pool and up to 80% for 20 early adopters from the disadvantaged group. Municipality will provide around 20% subsidy to these 50 adopters, and the remaining will be paid by consumers. The project will install energy meter and provide kitchen diary to 50 households to maintain daily records on the type of food cooked, time electricity consumed. reauired. and voltage fluctuations or interruptions.

In addition, the project will capture information on willingness to pay for EPCs, preferred business model by households to buy EPC, type of food appropriate for cooking in EPCs, the convenience of EPCs, changes in cooking roles of household members, savings from the use of EPCs, problems faced by EPC users, and any effect of EPCs on the power supply, as indicated by frequency of tripping of circuit breakers in house meter or at transformer.

## **Project Objective**

The broader aim of the project is to gather and disseminate information to increase adoption of EPCs and EPCs impact on load management and grid design. The specific objectives include:

- To determine consumer's preference on the use of EPCs, willingness to pay, preferred business models, economic benefits of EPCs, and impacts of EPCs on existing electricity infrastructure and suggest required strengthen measure
- To Expand knowledge of wider stakeholders • on EPC and its benefits
- Policy advocacy for scaling up EPCs and viable business/financial models.

## **Project Activities**

#### Set Up Phase

- Market assessment of available EPCs in . Nepal
- Stakeholder Consultation
- Awareness, orientation and demonstration events
- Develop Booklet on EPC use
- Procurement of CE certified EPCs
- Selection of intervention households
- Establishment of demo kitchen lab

#### Monitoring Phase

- Cooking Diary Intensive and Light for Baseline, Transition phase, monitoring phase and end-line phase data collection
- End-Use survey (Questionnaire Survey)
- Video documentary and case studies

#### **Dissemination and Outreach Phase**

- Local, Provincial and Federal workshops
- Preparation of Final Report
- Wider dissemination through online media

# **Partnerships**

Winrock International, in partnership with local private sector Renewable Energy, Water Supply and Sanitation Promotion Centre (REWSSPC) will jointly carry out the study. Winrock will provide technical assistance to Renewable Energy, Water Supply and Sanitation Promotion Centre (REWSSPC) to conduct awareness raising and promotional activities, create demand, enable financing through local financial institution, install EPCs and collect data. REWSSPC will establish a kitchen lab to demonstrate EPC's use and collect data on performance in a controlled environment which will be later compared with data from households. REWSSPC will share the cost for establishing kitchen lab and share 50% of the demonstration events cost.

## **Expected Outcomes**

- EPC will be used as primary cooking technology in majority of intervention HHs
- EPC will be adopted by other HHs in the . community
- The project will expand stakeholder's knowledge on EPCs and carry out policy advocacy for scale-up



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