



National Bank for Agriculture and Rural Development

SMS-based prepaid power meters

CASE STUDY

Summary

Production, installation and commissioning of solar powered energy source for a cluster of interiors villages of Sitapur, Uttar Pradesh, was a big challenge apart from motivating villagers to pay for the usage of the power. The NABARD UP Regional Office, sensing the potential innovative idea of using SMS-based prepaid meters, decided to support this low cost technology driven developmental business model. Villagers have now taken fancy to the SMS-based top up for ensuring uninterrupted power supply in their households. Like many in the villages, Janaki Devi, owner of a sewing machine centre candidly says that the unproductive dark evening hours have given way to well-lit homes, allowing uninterrupted work which doubled her production of stitched clothes.

Objective of Intervention

The case study tries to establish the fact that transparent management through IT solutions as well as assured solar electricity supply has the villagers interested in paying for the power making solar power a viable solution.

Type of Intervention and Location

Providing Solar Energy-based innovative energy solutions to un-electrified villages- Kalyanpur and Raghunathpur in Biswan block of Sitapur, Uttar Pradesh through innovative, low cost, viable, and scalable business model

Description of Intervention

Investments were made on setting up of the micro grid along with the distribution network through credit from NABARD. Grant from NABARD was utilized for development of the prepaid tailormade meters. A



Solar micro grid to generate 1 KWA each was set up in two villages of Biswan block of Sitapur. Underground distribution lines to individual households were laid. SMS-based prepaid tamper proof power meters for each of the subscribing consumers was provided. Cloud-based accounting and follow up process was established.

Intangible or Tangible Benefit

The project has resulted in providing electricity, through the micro grid, to more than 60 village households. Increase in productivity of the artisans, workmen, etc., increase in productivity hours, savings on expenses on Kerosene, Lead batteries, batteries charging, Drudgery reduction for the villagers, and Development of micro enterprises due to availability of power in the evening hours leading to employment generation

About NABARD

The bank came into existence on 12 July 1982 by transferring the agricultural credit functions of Reserve Bank of India (RBI) and refinance functions of the then Agricultural Refinance and Development Corporation (ARDC). NABARD was dedicated to the service of the nation by the late Prime Minister Smt. Indira Gandhi on 05 November 1982.

NABARD was set up with an initial capital of ₹ 100 crore. Consequent to the revision in the composition of share capital between Government of India and RBI, the paid up capital as on 31 March 2015, stood at ₹ 5000 crore with Government of India holding ₹ 4,980 crore (99.60%) and Reserve Bank of India 20.00 crore (0.40%).

Mission: Promote sustainable and equitable agriculture and rural prosperity through effective credit support, related services, institution development and other innovative initiatives.