

LIGHTING ASIA

INDIA PROGRAM

Catalyzing Markets for Off-Grid Lighting

AN INNOVATION OF



**International
Finance
Corporation**

World Bank Group

Supporting creation of rural entrepreneurs to enhance access to clean lighting

As part of the **Lighting Asia – India program**, IFC is working with **MINDA NexGen Tech Limited (MINDA)** since May 2012. Through off-grid power generation facilities using mini and micro-grid power plants, MINDA is providing energy access to communities and households that are un-electrified or partially electrified.

At the beginning of September 2013, MINDA installed eighty three (83) mini/micro-grid systems that provide electricity for 6-8 hours every day for two light bulbs (Light Emitting Diode, LED) and mobile phone charging to 16,600 individuals. In each system, the solar panel and the battery are installed in one of the houses in the village or a community area like the ‘panchayat’ office (local government office) from where power is distributed to the houses. The system is electronically programmed to supply electricity automatically during evening hours on a pre-agreed basis with the connected households.

With IFC’s advisory support, MINDA is implementing a plan for scaling up this business. The specific focus is on creating rural solar entrepreneurs from the villages who will own and operate MINDA’s micro-grid solution as a business. MINDA and IFC will also design learning programs for rural entrepreneurs and consultative workshops for rural off-grid stakeholders (Picture 1 and 2).



Picture 1: IFC and MINDA mobilizing village heads to build product awareness



Picture 2: IFC and MINDA talking to villagers about system value proposition

Promoting Rural Entrepreneurship

A standard MINDA solar grid product solution costs approximately \$1800 and can service about 40 households. The rural entrepreneur will purchase and operate the system and MINDA will provide initial maintenance support. With each household paying approximately \$2.5 per month for the electricity, the cost-recovery period for the rural entrepreneurs is less than two years. So far, MINDA has installed 48 systems in Uttar Pradesh, 4 in Rajasthan, 3 in Tamil Nadu, 3 in Jharkhand, 1 in Bihar and 3 in Maharashtra.

Building Awareness and Sustainability

Formation of self-help groups that collect monthly payment from households connected to the grid is an important element. These funds can be utilized for replacement of battery and any other maintenance, when needed. This helps promote sustainability by emphasizing the role of operations and maintenance in enhancing plant lifecycle.

A key challenge faced by MINDA is the relatively low awareness about the solar technology and its product that makes it difficult to convince villagers about the value proposition of this solution.

IFC is supporting MINDA in the following ways to address this issue:

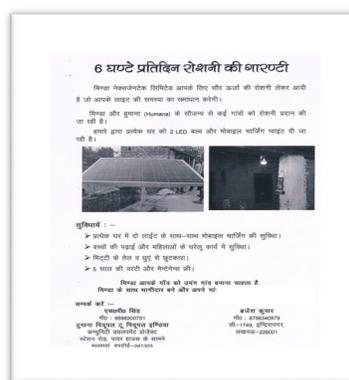
- An initiative taken up by MINDA with IFC advisory is provision of lights for demonstration purpose to its sales team members along with house hold distribution box (Picture 3). This approach of live demonstration works well with consumers. This is part of a broader sales strategy that IFC is helping MINDA put in place.
- IFC helped MINDA develop pictorial leaflets for the purpose of ‘awareness creation’ (Picture 4).
- IFC is helping MINDA train its sales force and develop a sales and marketing human resource plan.
- IFC is helping connect MINDA with regional micro finance institutions to seek financing opportunities.

Next Steps

IFC is supporting MINDA in testing models and associated activities in the field, which will help lay the foundation of Minda’s mini/micro-grids on the ground. MINDA is exploring partnerships with large corporates and foundations so that their earmarked social development funds can be used to install these plants in unelectrified villages.



Picture 3: Demonstration Unit



Picture 4: Leaflets for Awareness Creation

“Clearly, our association with IFC has played a significant role in facilitating the progress as above, and the team and I would like to place on record, our deep appreciation for the support received.” - Arun Nagpal, (Ex) CEO, Minda NexGen Tech Limited (April 2013)

Contacts

Anjali Garg | AGarg1@ifc.org

Chandrasekar Govindarajalu | CGovindarajalu@ifc.org

About IFC

IFC, a member of the World Bank Group, is the largest global development institution focused exclusively on the private sector. Working with private enterprises in more than 100 countries, we use our capital, expertise, and influence to help eliminate extreme poverty and promote shared prosperity. IFC leverages the power of the private sector to create jobs and tackle the world’s most pressing development challenges. For more information, visit www.ifc.org.

Lighting Asia/India is a market-transforming program with the objective of promoting the value and presence of modern off-grid lighting amongst two million people in rural India. Modern off-grid lighting includes solar lighting appliances, home systems and connections to renewable energy mini-grids. The program is designed as a series of interventions to alter market behavior, reach two million people and displace at least 64,000 tons of CO2 by the end of 2015.

In partnership with

