

Ahmedabad Slum Electrification Program

Electrifying Change

Municipal authorities in Ahmedabad, Gujarat's largest city, had initiated a trust- and confidence-building exercise with people in informal settlements and slums to address the menace of illegal electricity connections. The effort, involving a local non-governmental organization, has helped convert a large number of unsafe and illegal connections into safe ones and reduce the losses incurred by the utility. Enthused by the success of the pilot, the Ahmedabad Electricity Corporation scaled-up the initiative and more than 200,000 slum households now have legal connections. The initiative has been integrated into a larger development program for slums and informal settlements, called *Parivartan* (Change).



Given the scale of the challenge, a slum electrification program that would extend safe, reliable, and legal electricity connections to the informal settlements in the city in a collaborative approach was taken up.



The Challenge

Till as recently as 2002, the majority of the slums and informal settlements in Ahmedabad—where 40 per cent of the city's 3.51 million population resides—were without critical infrastructure such as water, sanitation or electricity.

A very small proportion of households in the informal settlements in Ahmedabad had legal electricity connections. An informal, illegal system of electricity distribution had thus developed over the years, leading to high losses for the Ahmedabad Electricity Company Limited (AEC).

The Way Forward

Given the scale of the challenge, a slum electrification program that would extend safe, reliable, and legal electricity connections to the informal settlements in the city in a collaborative approach was taken up. A viable option of connecting informal settlements to the electricity network was worked out for the AEC after discussions with a local NGO and project partner, the Self-Employed Women's Association (SEWA). A pilot project was initiated in 2002 by the AEC with financial support from USAID. The project has since become part of a wide-ranging slum upgrading program, *Parivartan*, which was already under way.

The role of the NGO, which had strong inroads in the informal settlements, was to help build trust and willingness among the people *vis-a-vis* the AEC. More significantly, its role was to convince the people, who were hitherto used to illegal providers and power thefts, to opt for legal connections.

Roles of the Stakeholders

Stakeholder roles were defined on the basis of the strengths that each stakeholder brought to the project.

Responsibilities of the Ahmedabad Electricity Company Limited

- Appoint lead project coordinator.
- Prepare technical layouts.
- Release legal supply after obtaining legal documents and receipt of necessary fees.
- Provide check meter at source point.
- Monitor consumption patterns and identify pilferage.
- Establish metering and bill recovery system.
- Coordinate Slum Awareness Campaign.
- Impart training to NGOs.
- Take the lead on relevant documentation, metering, billing, pilferage management, and training and awareness.

Responsibilities of non-governmental organizations

- Obtain legal documents from the Ahmedabad Municipal Corporation.
- Submit application to Ahmedabad Electricity Company Limited (AEC) in the slum dwellers' name.
- Collect dues from slum dwellers on behalf of the AEC.
- Identify community-based organizations (CBOs) or groups and provide necessary support.
- Establish metering and bill recovery system.
- Train CBO in the bill collection system.
- Educate CBO and slum dwellers.
- Influence policies within the AEC for upscaling the program on the basis of the lessons learned from the pilot.

Responsibilities of CBOs

- Create awareness and motivate slum dwellers to access legal electrification.
- Check the billing system once in a month.
- Collect dues from slum dwellers on behalf of the AEC and the NGO.
- Submit applications to the AEC on behalf of the slum dwellers.
- Act as a watchdog against pilferage of electricity.

Institutional Arrangements

The electricity corporation tied up with SEWA to work in areas where the latter already had strong inroads and acceptability. In addition to its role of convincing people to opt for regular connections, SEWA was also entrusted

with the task of setting up community-based organizations (CBOs) in the settlements. Individuals identified from each CBO were trained by the NGO to read individual household meters. The AEC prepared the bills and handed these over to the NGO. The CBO then stepped in

Highlights

- The project demonstrated that slum households are willing to and able to pay connection fee and their utility bills.
- Trust- and confidence-building between people and the municipal authority is an important focus of the initiative. Non-governmental organizations had an important role in facilitating this mutual trust.
- The project was undertaken in a spirit of partnership; spirit giving space to all partners to pool in with their strengths.
- Timely measures, such as bank loans for poor households, facilitated the change from illegal to legal connections.
- A monthly billing was introduced for slum households to make the payment of user charges easier.
- The project turned out to be a *win-win situation for all partners*.
- The project demonstrated that the losses due to thefts in slum areas could be substantially reduced.

to collect the dues from the slum dwellers on behalf of the NGO and the AEC.

SEWA also facilitated the process of households converting to regular electricity connections. Its credit organization, known as SEWA Bank, provided facilities for residents to finance their electrical connections.

The government, on its part, provided 'no objection certificates' (NOCs) necessary to avoid land tenure barriers for regular connections.

The Ahmedabad Municipal Corporation (AMC) also provided a permanent road opening permission especially

for electrification in slums (for the mainstream areas this permission has to be taken for every road opening by the AEC). Since another scheme, called *Parivartan*, had been carried out in partnership with the AMC, it decided to give an NOC for those areas where that scheme had been undertaken.

Project Costs and Finances

In the pilot project, the cost for connecting the customer and installing internal wiring were split between the household, the AEC, and USAID. The household paid

Rs. 3.35 (US\$0.07);¹ the AEC and USAID each contributed Rs. 2.20 (US\$0.04) per household.

In the scaling-up phase, the slum households bore the cost of connections and usage charges, and the AEC used its own funds for network expansion. The connection charges were initially Rs. 5,000 (US\$112) for permanent structures and Rs. 3,500 (US\$78) for temporary structures, plus Rs. 200 (US\$4) as a security deposit. The connection charge was later reduced to Rs. 2,300 (US\$52) per household. A majority of the slum households paid a monthly user charge of approximately Rs. 150-300 (US\$3-6.7) per month.

Progress So Far

In the pilot phase, 820 households in seven slums were covered. Enthused by this success, the AEC scaled-up the slum electrification program and planned to provide services to 200,000 households by March 2007. Today, the partners have been working proactively to ensure that the maximum number of legal electric connections are provided in the slums of Ahmedabad. More than 200,000 households have already been electrified.

¹US\$1 = Rs. 44.54 (as of December 15, 2006). Conversion rates from www.xe.com. All conversions from Rs. to US\$ are approximate.

References

- Meetings with Self-Employed Women's Association (SEWA). 2005.
- E-mail contact with SEWA. 2006.
- Bureau for Economic Growth, Agriculture, and Trade. 2004. 'Innovative Approaches to Slum Electrification.' USAID. Washington, D.C.
- Gujarat Mahila Housing SEWA Trust. 2005. 'Managing Electric Supply to the Disadvantaged Groups of the Society: An Overview by the Ahmedabad Team.' Power Point presentation.
- Shukla, S. 2005. 'Ensuring Access of Urban Poor Communities to Basic Services.' WSP. New Delhi.
- E-mail contact with Torrent Power Ltd. Chirag Desai. 2006.