



CASE STUDY 12: INDIA – SOLAR LOAN PROGRAMME

Barriers	Limited access to credit for rural households
Instrument	Soft loans
Application	Provision of subsidy to end-customers, used to pay down interest costs of commercial loan
Amount	US\$1 million, US\$ 900,000 subsidy amount

PROJECT BACKGROUND AND OBJECTIVES

The rate of rural electrification in India was significantly low, with most households not connected to the grid. Where there is grid connection, it is unreliable and considered to be expensive. The Government of India has implemented several initiatives to promote the use of solar power system in households.

The objective of the UNEP solar loan program is to develop a sustainable commercial market for solar home systems (SHS), by engaging and supporting local banks to offer household consumers credit for financing SHS in the Southern Indian states of Karnataka and Kerala. The main target of this project are rural households who can afford service loans, however, the existing Self Help Group (SHG) initiative used by local banks can be used in conjunction with the solar loan system to reach poor households.

The local financial institutions, i.e. banking system, in the region is well placed to deliver the UNEP solar loan program, as they have significant local knowledge and are already have loan programs and policies for rural household customers. Several vendors of SHS already exists in the states of Karnataka and Kerala, however, they have not managed to market and disseminate information regarding the benefits of SHS. Another issue is that service maintenance of the SHS after sale was not up to standard; hence consumer confidence in the system is not very high.

INSTRUMENTS USED

The UNEP solar loan program includes a loan subsidy in the form of an interest rate subsidy for borrowers, distributed through participating local banks and transaction cost support in the form of fees paid to the participating local banks per closed loans. Simplified loan application and procedures were used to process the solar loans to make them more appealing to the targeted households.

In addition, part of the fund was used for training and other capacity building activities, including qualification of SHS vendors.

INSTITUTIONAL ARRANGEMENTS

The funding for the UNEP solar loan program comes from United Nation Foundation and Shell Foundation, and is provided to local participating banks to support transaction costs and to pay the subsidy amount for borrowers.

The UNEP subsidy does not cover the interest rate per se, but is calculated as an amount equivalent to buy down the interest rate (for example from a 12% commercial rate to only 6%) over the term of the loan. The amount calculated usually adds to 2-6 monthly loan payments on a five year loan. This subsidy amount is then passed on to the borrower on a back-end basis, at the end of the loan term. The local banks still lend to borrowers on a commercial rate basis. The calculated subsidy amount is then placed on deposit with the bank and applied to offset the borrower's last several

payments. Hence, the customer would only get the subsidy after successfully repaying the loan. Overtime the subsidy will be decreased with a view of removing the subsidy all together once the system is in operation and is sustainable.

The participating banks only provide loans for SHS manufactured by qualified vendors. The loans must adhere to normal lending policies and loan appraisal criteria of the banks, subject to UNEP stipulated conditions in meeting the project's objectives. The banks receive training and assistance in business planning and marketing of the SHS loans. The partnership between the vendors and the banks also helps promote the sale of SHS using the subsidized loan.

OUTCOMES

Since its implementation in 2003, the programme has disbursed around 19,500 loans, with 2076 bank branches participating in the programme and 5 qualified vendors.

Moreover, the loan arrangement and the partnership between vendors and banks can be replicated easily without intervention or subsidy. More banks and vendors are reported to be discussing similar partnerships to promote SHS. The programme originated in Karnataka, but has expanded to Kerala. New loan programme were discussed in 2007, with more banks and vendors registering interests in the programme.

The success of this programme indicates that similar types of programme can be implemented in other

regions or countries. Several important factors to note that contributed to the success of this programme are:

- The availability of good local financial institutions – in this case, there are local banks who has the experience of lending to rural households under different schemes, and are motivated to provide socially inclined loans
- The existence of local vendors – this shows that the technology already exist and in use in the area, and therefore it only requires strengthening and improvement in marketing and information to customers.

Further reading

UNEP Energy Branch website – click [here](#)