

# *SEWA BANK*

## *Energy Portfolio*



# Background

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- Location: Gujarat, India
- Partners/Stakeholders:
  - SEWA Bank
  - Existing Clients of SEWA BANK
  - SELCO
  - Sister Organizations of SEWA Bank

# SEWA BANK's Energy Portfolio Plan

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- To create a complete menu of loans for various energy services.
- To look at a menu of technology options
- Steps for each technology option:
  - Awareness
  - Training
  - Demonstration
  - Service Providers
  - Replication Steps
  - Working Capital
- Assess Potential New Income Generating Activities
- Experiment Innovations in Financing

# The potential technologies under the SEWA BANK Energy Portfolio

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- Solar Lighting
- Biogas Systems
  - Night Soil Based
  - Cow Dung Based
- Cooking
  - Individual
  - Community Based
- Drying
- Drip Irrigation
  - Small Holders
  - Large Holders

# Importance for SEWA Bank Energy Loan

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- **Lower Income Groups:** Such loans would help SEWA provide reliable energy services to lower income groups.
- **Income Generation:** By providing similar loans SEWA Bank has proved that there can be a direct linkage between energy services and income generation.
- **Partnerships:** Partnerships with reliable technology suppliers like SELCO, it has led to successful, innovative and sustainable projects.

# SEWA Bank's Members – Income generating activities.

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# SEWA Members Field Visits to Energy Sites

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# SEWA Bank Members Training in Energy Services



# SEWA Bank Women members Installing a Solar System in a temple



# Potential Interventions: cooking

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*Example*

**Street Vegetable Vendors**

# Before Intervention – Prevailing Conditions

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- Street Vendors were using kerosene lanterns or petromaxes.
  - Smoky lanterns leading to transfer of smelly odor on to the vegetables and fruits.
  - Un-healthy environment created by the fumes.
  - Cumbersome maintenance of the lamps
  - Price fluctuations in fuel were not predictable.
  - Many a time, it also led to unsafe conditions.

# Project Concept

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- The project involves providing one light to hawkers in Ahmedabad.
- The battery for powering the light shall be charged using solar power.
- All the batteries of the street-vendors are charged at a central location by a solar power plant.
- The central power plant owned by a local entrepreneur: a street vendor herself.
- The solar power plant installed by SELCO at the entrepreneur's choice of place.
- The entrepreneurs are financed by SEWA Bank.
- The entrepreneurs deliver the solar charged batteries on a daily basis to the street vendors on a "pay for charge" operating basis.
- The entrepreneurs collect the discharged batteries, every night and takes them back to the charging station (mostly in their residences).



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# Usage

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# Barriers and Solutions – Role of Partners

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- Smoky Lanterns
  - **SELCO** designed a reliable light that was safe and clean.
- Affordability for the Street Vendors
  - The **entrepreneurs** do the collections on a daily basis, thus piggybacking on their exiting cash flows. They were already spending Rs. 15 to Rs. 18 on a daily basis for kerosene lamps. Now they are paying Rs. 12.
- Affordability for the entrepreneur
  - SEWA BANK financed the solar system to the entrepreneur; Her cumulative daily collections matched the loan installments (after deducting her operational costs and little bit of profits).

# Results

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- **Job creation:** The project resulted in the creation of a sustainable job for the entrepreneur.
- **Convenience:** The solar light program was very convenient to the street vendors as they no longer had to maintain the dirty and noisy petro-maxes.
- **Better Produce:** The street vendors were able to sell vegetable that did not have the smell of kerosene.
- **Economical:** The daily charge for the solar charged batteries were no more expensive than the petromaxes.

