

**The Small-Scale Sustainable Infrastructure Development Fund – S<sup>3</sup>IDF**  
fostering pro-environment small-scale sustainable infrastructure services for the poor  
– energy, water, transport, communications and related investments –  
needed for poverty alleviation and overall economic advancement

**S<sup>3</sup>IDF**

***Enterprise Approach for Access of Infrastructure to the Poor***



**– A Social Merchant Bank –**

***linking and integrating technical, financial, and business support for infrastructure enterprise development***

*S3IDF-India – Bangalore, India – a Section 25 not-for-profit company with Section 80G tax exemption  
S3IDF-US – Cambridge, MA, USA – a public charity under Section 501(c)(3) of U.S. tax code*



- S<sup>3</sup>IDF, Social Merchant Bank Model
- Project Examples
- Question and Answers

# The Need

More than **one billion** people worldwide lack access to infrastructure services necessary for poverty alleviation:

- modern energy
- potable water
- sanitation
- transport
- information & communication
- other infrastructure services

Tens of millions of these people are in S<sup>3</sup>IDF's current marketshed in southern India



# Solution: A New Approach

Social Merchant Bank approach – specializing in financing and business development services



*S<sup>3</sup>IDF arranged financing for a local NGO to create an enterprise that provides telephone equipment to small stores on lease-towards-purchase basis*

- Create Enterprises
- Provide technology/know-how
- Provide BDS
- Provision of direct debt & equity
- Arrange Bank linkage
- Affordable financial structuring
- Constant M&E

***Locally Owned & Operated Micro/Small/Medium Infrastructure Enterprises that are pro-poor, financially viable, replicable & environmentally responsible***

# Solution: Social Merchant Bank Model

- **S<sup>3</sup>IDF produces a stream of fundable *small scale for-profit utilities*.**

- Businesses creating must be environmentally and socially responsible
- The owner/operator must have some capital at risk (even 'sweat equity')
- Poor benefit as owner/operators and end-users
- Enterprise should be sustainable and replicable
- Bank linkage and BDS; no grants provided



*Efficient ovens in silk reeling units*

# Using the *Social Merchant Bank* Approach

*We are...*

- Impacting 30,000+ lives mostly of people living on \$2/day or less.
- Creating employment for 450+ people and reducing poverty.
- Building a project portfolio (now 120+) and pipeline (now 80+)



*Studying with the assistance of LED based lights.*

# Hawkers' Light Points



entrepreneur with solar charging station



transportation of batteries



lighting for hawkers



In light point projects, such as this one, S<sup>3</sup>IDF arranged the business development, technology and financial assistance to help the entrepreneurs increase their income, generate employment and provide cost savings and improved lighting for street hawkers.

# Reliable and cost effective lighting services for poor households



Different types of CFL and LED lanterns and lights



LED lighting for poor households in the absence of grid

S<sup>3</sup>IDF's assistance with alternative lighting solutions and financial structuring allowed poor households to access better and safer lighting.

The Bank Manager visiting households which was financed for CFL lanterns because of unreliable grid



# Energy efficient cooking services for Poor Households



Fuelwood collected typically by women and children



Health hazards (from smoke and soot) from fuelwood cooking



Energy saving pressure cookers reducing the consumption of LPG and kerosene in rural households



'Cookshop' in use

*LPG Cookshop* – a 'common kitchen' providing poor women with clean, convenient cooking made affordable by a pay-for-use operation.



# Productive end use single phase flour mill machines for poor entrepreneurs and small enterprises



Flour mill business being run by small enterprises and would be entrepreneurs



S<sup>3</sup>IDF's partnering with the local technology supplier and financial structuring with the local financial institution enabled small enterprises and entrepreneurs to run the flour milling business in their premises

# Specialized Productive use computer based embroidery machine



Hand embroidery that is time consuming



Specialized computer based sewing machine at use



Computer aided designs being embroidered

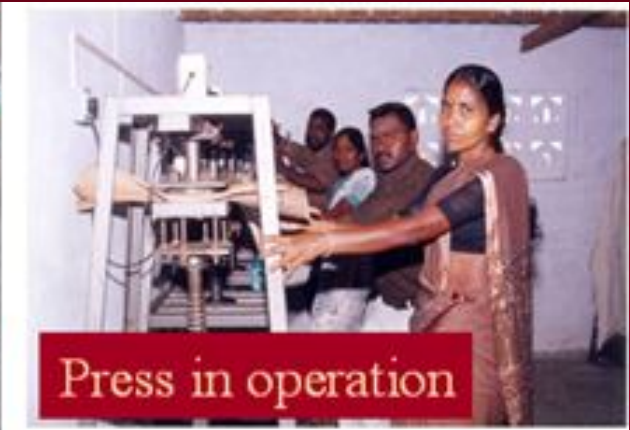


Sample work created using the computerized sewing machine

S<sup>3</sup>IDF provides direct debt (with possible future linkages with a local bank) to increase the SHG's productivity by helping save 75% of time and increasing the turnover three-folds.

The Small-Scale Sustainable Infrastructure Development Fund, Inc

# SME development – Areca plate and cup manufacturing



S<sup>3</sup>IDF facilitates the business development, technology, financial and market assistance to help create Areca product manufacturing SMEs.

# Enterprise support for efficient and smokeless clay stoves manufacture entrepreneur



The entrepreneur, Mr. Musturappa in his workshop



Heat treatment of clay stoves (in open air)



Stove piece after heat treatment



Finished clay stove being tested



Smokeless clay stove in use

Through S<sup>3</sup>IDF, the entrepreneur could invest in a shed and garner enough working capital to increase his production and install the stoves.

electric generator



battery charging



# Biogas and Productive End-Uses



milking machine



cooking

Biogas plant  
(gas outlet)

compressor



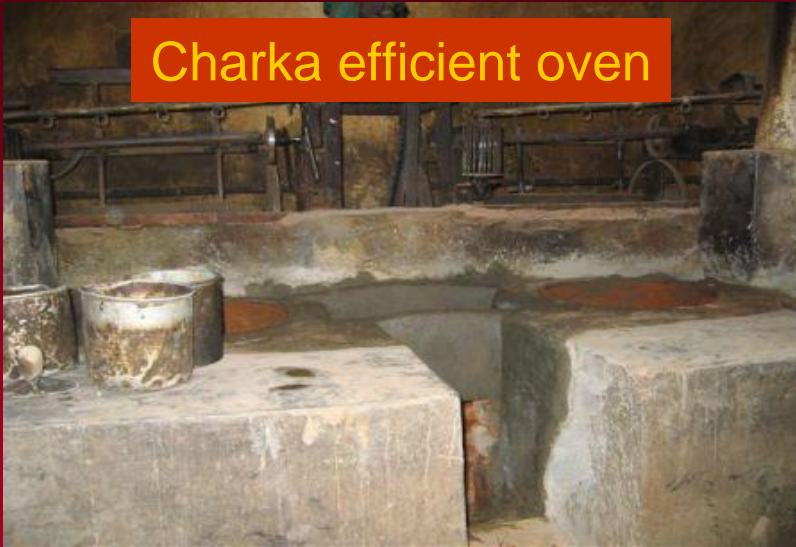
water pump



S<sup>3</sup>IDF enterprise support to a local business installing biogas plants and biogas-based generators provided working capital and assistance developing a business plan.

# Silk Reeling: Energy Efficient Ovens

Charka efficient oven



... in use



Italian efficient oven



... in use



S<sup>3</sup>IDF provided support to install the ovens by structuring financing to develop the market for the ovens and access subsidies provided by the Department of Sericulture.

# Projects in portfolio/pipeline

- Creating supply chain of infrastructure products (water purifiers, lanterns/inverter, coin phone, mobile currency, stitching machine, flour mill etc.) in rural areas by identifying and supporting entrepreneurs
- Transportation in rural areas
- Warehouse for small farmers
- Potable water supply in rural areas
- Bio-fuel for power generation

# Contacts

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**Additional slides to be used only for Q&A**

# 3. Project Cycle

## The Project Cycle & S<sup>3</sup>IDF Need for Grant Funds

<b>Pre-investment phases (Studies, Surveys, Feasibility Analysis &amp; Arranging Co-financing)</b> - Timelines after entry to Category A: generally minimum 5-8 months; some projects more than 1 year due to complexities and/or partner constraints.	<b>Implementation/Construction Phase</b> - Timelines: few months to year+ depends on complexity.	<b>Operation Phase</b> - Timelines: M&E for at least 2-3 years. For some projects atleast till the debt/equity are paid
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Financial Closure

Implementation begins

Implementation ends

Operation Starts

Project Operates Financially

- Some cost share with partners, cost can not be absorbed by the project (because of small size and pro-poor characteristics).
- These costs must be supported by grant funds.
- Some of the costs are applicable to broader project replicability.
- Current pipeline
  - 60+ projects in Category A (detailed pre-investment studies).
  - 40+ projects in Category B (preliminary concept)

- Project capital (implementation, construction) and operations costs are covered.
- Project operates in a financially viable fashion including loan, guarantee fee, etc. payments to S<sup>3</sup>IDF revolving fund.
- Some monitoring done as part of financing procedures by both S<sup>3</sup>IDF and co-financing bank in both this and operations phase (until debt, etc. repaid).
- Technical support, SME capacity building must be covered in part/whole by grant funds.
- Revolving fund must initially be capitalized by soft or grant fund, but then it operates on sustainable basis.

- Post-implementation Monitoring & Evaluation and Lessons Dissemination critical to replication by S<sup>3</sup>IDF (and others) and critical to S<sup>3</sup>IDF's broader mission of getting big development entities to do similar projects.
- These costs must be supported by grant funds.
- Now (Feb '08) M&E well underway as 115+ projects including 16 enterprise support agreements are in place (implementation or operations).



Implementation Monitoring & Evaluation and Support



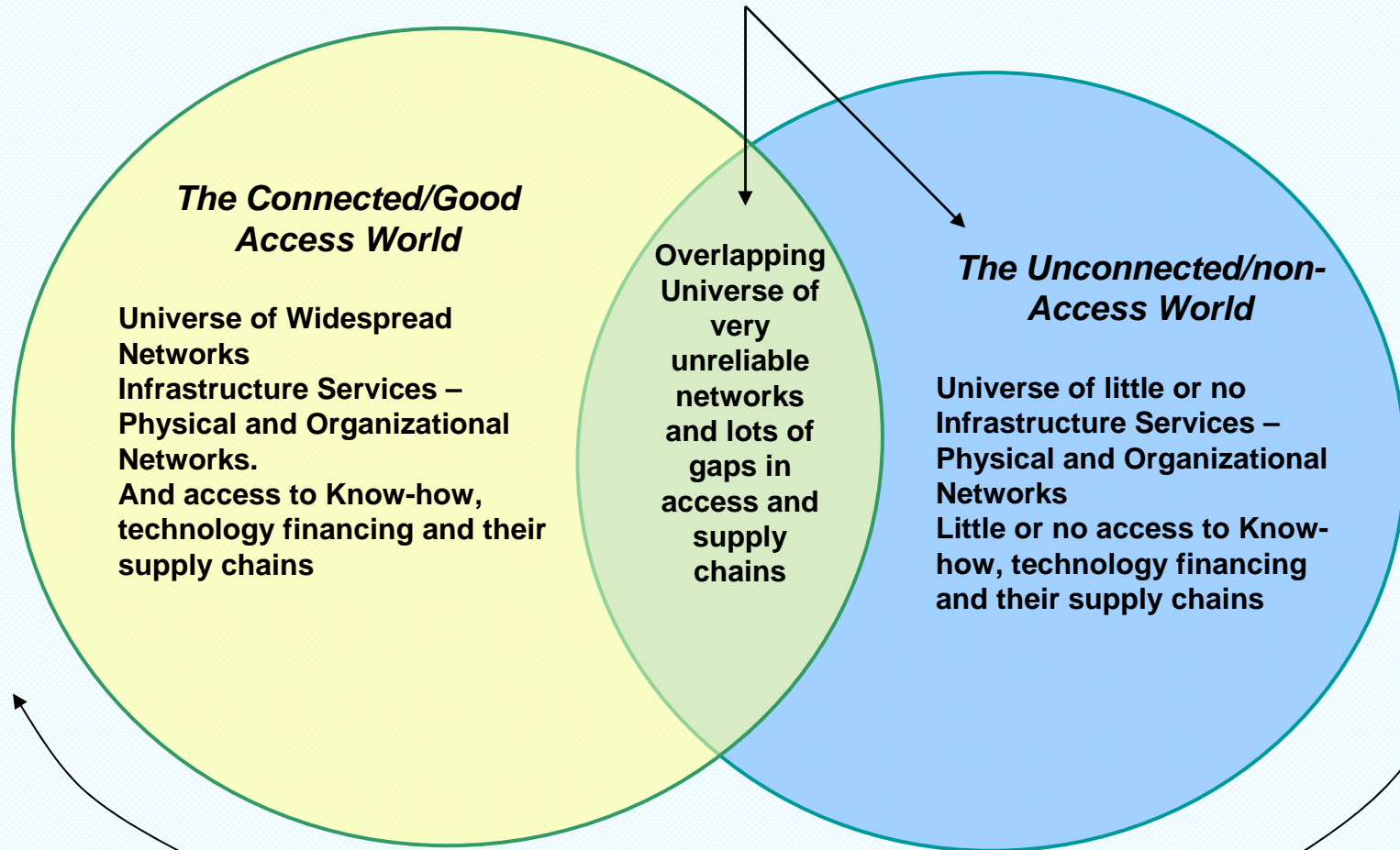
Post Implementation Monitoring & Evaluation Lessons, Dissemination



Milestones

# S<sup>3</sup>IDF's Operating Zone

## The Universe in Which S<sup>3</sup>IDF Operates



Policy and Regulatory Background: May or May Not Be a Level Playing Field

# Last Mile Electricity Distribution Franchising Project



Discussions with the Cherlapatelguda Panchayat.



The Ibrahimpatnam substation – 33/11 KV



Meter reading at the feeder level.



Franchisee/Entrepreneur Mr Hanumanth Reddy addressing attendees at the inauguration ceremony.



Interactions with the community about the franchisee operations.

***In partnership with ASCI, S3IDF is implementing a unique business model using franchisees for providing better electricity services to the villagers in Cherlapatelguda feeder. Over time, the franchisee will provide other value-added services to the community such as access to finance, potable drinking water, and information services.***

# Solar lighting for silk cocoon rearing centre



Solar panels atop the cocoon rearing centre



solar lights being used to assist in feeding the worms

S<sup>3</sup>IDF provides technology and financial linkages (partial guarantee with the local bank for loans taken by the farmers)



Silkworms placed in the 'Chandrika' where they form cocoons



Silk being reeled at a reeling center from the cocoons in the basket at extreme right

(although not part of this project)

# Enterprise support for an Arecanut boiling stoves and ASTRA cooking stoves enterprise



The stoves under construction



The stoves after installation



S<sup>3</sup>IDF organizational and financial support to SAT has enabled small farmers to avail arecanut boiling stoves.