

Microfinance for rural energy services In developing countries



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topics

- Approaches in Sri Lanka, Mali, Bangladesh ...
- Village banking & microfinance
- Innovations, business models, impacts



village electrification in Sri Lanka

- cooperative operates & owns system
- loan from local bank
- support from World Bank
- service from RESCO





Rural electrification in Mali

- flood of aid money
- government controlled approach
- flawed model: South Africa





In 2002 South Africa granted concessions to 5 corporations to install 250.000 SHS

Government subsidies

SHS installation	R3500	of R4000
Monthly fee for service	R40	of R58

18.297 SHS were installed

Problem areas



Productive use, payment, maintenance, ...
Reliability, theft, user-benefit, ...

RESCO in Bangladesh





Shakti is a profitable RESCO

SHS Program	53.000 installations
Bio-gas Program	400 installations
Training	<div>   </div> <div> 407 engineers 1.700 technicians 17.700 users </div>
Technology Centers	1.500 Charge controllers / month 5.000 DC ballast for fluorescent lamps / month 1.000 DC-DC converters / month 500 Mobile phone chargers / month
Regional offices	152



Assistance for Shakti

Financial assistance

Grameen Fund, Stichting Gilles,
IFC, World Bank, USAID

Smart subsidies promote entrepreneurship



customer financing is fine-tuned

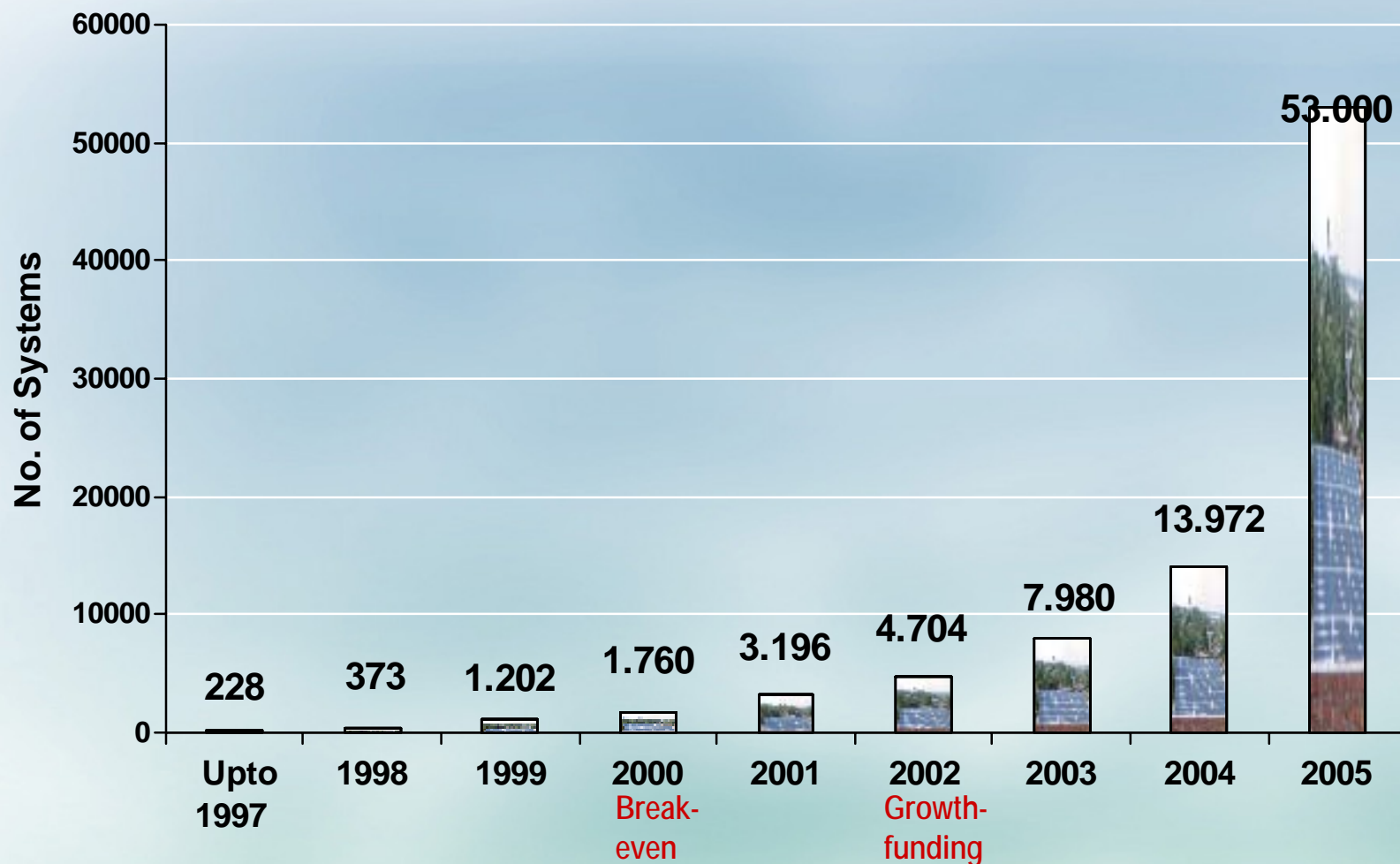
- 4 end-user financing schemes
- 1 micro-grid financing scheme

Financing schemes vary:

down-payment
installments
duration
service-charge



Shakti's plan: 100.000 SHS in 2007





Shakti supports a network of entrepreneurs

Micro-entrepreneurs provide:

- energy service via PV micro-grids
- telephone service via PV-charged mobile phones



- 150.000 village phones account for much of Shakti's sales



Shakti's plans

- hybrid systems program
- solar powered ICT
- 200.000 biogas systems by 2010



Microfinance!



Grameen Bank branch office 1995



Munsura's credit history

- 1. \$ 50 Oil, soap, ... start of business
- 2. \$ 70 sewing machine
- 3. \$ 90 cow
- 4-6. \$100-140 fabric ... extension of business
- 7. \$ 160 land





Village banking & rural microfinance

Example: Grameen Bank 2006

- 5.6 million members
- \$ 5,2 billion loans
- 98 % repayment rate
- 14 000 bank workers
- 60 800 villages served



a MFI can do a lot ...

... for a RESCO

- brand name
- market knowhow

... and its customers

- local banking service
- local purchasing power

10.000+ MFIs worldwide



MFIs are interested in RE markets

N. Wimmer, D. Barua

*Microfinance for renewable energy in
rural areas*

Renewable Energy World, July-August 2004





FINCA
Small Loans-Big Changes

DEMOCRATIC
REPUBLIC
OF CONGO

UGANDA

TANZANIA

ZAMBIA

MALAWI

SOUTH AFRICA



„FINCA Uganda does credit analysis and provides financing ...

while energy service providers develop and provide energy solutions and maintenance.“

Triodos International Fund Management

- Invests in 60 microfinance institutions
- Funded 45 rural energy service companies
- Manages special funds for MF and RE

July 2004



more income via renewable energy



mobile phone ladies in
Uganda, Bangladesh ...



micro entrepreneurs

2000
women
technicians &
entrepreneurs



- install SHS
- maintain SHS
- train customers





thank you

