



Internationale Konferenz
für Erneuerbare Energien, Bonn
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Developing Small Scale Renewables on Market Principles

Sri Lanka Energy Services Delivery Project

Jayantha Nagendran, Senior Vice President,
DFCC Bank, Sri Lanka

2004

renewables

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Presentation Outline

Sri Lanka Energy Services Delivery (ESD) Project:

- Achievements
- Public-private partnerships
- Commercial financing
- Multi-stakeholder approach
- Developing support industries
- Assistance from of donors

ESD Credit Program

- Commercial financing through banks and micro finance institutions (MFI) for private sector provision of on- and off-grid renewable energy services:
 - Private grid-connected mini hydro plants
 - Community based off-grid village hydro schemes
 - Solar home systems
- US\$19.7m credit line from IDA (World Bank) and US\$3.8m grant from Global Env Facility (GEF)
- ESD implementation: 1997-2002; follow-on RERED Project in progress

Achievements ^{1/4}

Grid-connected mini hydro plants

Pre ESD: 1 MW through 1 developer

ESD Project 1997-2002:

- 31 MW added through 15 projects

Post ESD, up to March 2004:

- 7 MW through 5 projects commissioned
- 41 MW through 12 projects under construction
- Letters of intent issued for about 200 MW

Achievements ^{2/4}

Off-grid community owned village hydro schemes

Pre ESD: Ad hoc donor funded projects

ESD Project 1997-2002:

- 350 kW added through 35 Chartered Engineer certified schemes financed with commercial loans and grant, serving 1,732 homes

Post ESD, up to March 2004:

- 286 kW through 26 certified schemes serving 1,279 homes
- Several more under construction

Achievements ^{3/4}

Solar home systems

Pre ESD: About 5,000 systems installed since the late 1970s

ESD Project 1997-2002:

- 20,953 certified systems installed by 4 companies
- Consumer financing mainly through one MFI

Post ESD, up to March 2004:

- 23,977 certified systems installed by 9 solar companies
- Consumer financing through > 4 competing institutions

Achievements ^{4/4}

Commercial financing for renewables

Pre ESD: Almost non-existent, but devt banks interested

ESD Project 1997-2002:

- 2 devt banks, 3 comm banks and an MFI
- Loans totaling US\$ 24 m disbursed

Post ESD, as at March 2004:

- 3 devt banks, 4 comm banks, 2 leasing cos and an MFI in the follow-on RERED Project
- 2 finance cos and a rural devt bank providing independent credit financing outside RERED

Public-Private Partnerships

- Standardised small power purchase agreement and tariff for renewable energy plants < 10 MW
- Provincial Councils endorse off-grid solar and village hydros; thus providing credibility to developers, suppliers and financiers
- On-going power sector reforms will encourage small scale renewables

Commercial Financing

- Development banks led the way for mini hydros; Risk mitigated through loan syndication and escrow account; Commercial banks now competing for business.
- Village hydros initially seen as fulfilling social goals, but now complementing rural business development strategies. Several types of financial institutions have entered this sector.
- Consumer loans and leases for solar home systems through a tripartite arrangement – MFI, solar co. and customer; Leasing companies and finance companies also active in selected markets.

Multi-stakeholder Approach

- Consultation through quarterly stakeholder workshops
 - Suppliers, developers, NGOs, community based electricity consumer societies, consultants, financial institutions, Provincial Councils, CEB, industry associations
 - High degree of willingness to share information, discuss problems and suggest solutions
 - Collaboration leads to high service quality and thus low reputational risk for an emerging RE industry
- Village Hydro Working Group
- Encouragement for new entrants and ideas through an ‘innovation solicitation’ process

Developing Support Industries

- Training for new VH developers: typically SMEs, NGOs, self-employed technicians to expand their scope of business
- Specialised training for VH suppliers on turbine manufacture and induction generator controllers
- Capacity building for Electricity Consumer Societies to better manage VH schemes, and undertake productive applications with daytime excess power
- One-time grant to solar companies for business plan preparation
- Assistance in setting up industry associations, training and networking

Assistance from Donors

- IDA credit line with partial refinance enabled credit institutions to provide *long-term* loans
- GEF grant financed technical assistance, consultancy studies and output-based subsidies for off-grid VH and SHS
- Donor assistance is not limited to finance ...
 - Project design
 - Implementation support and advice based on worldwide experience

Next Steps ... RERED Project

- Add 85 MW to the grid, including wind and biomass
- Electrify 100,000 rural homes through off-grid solutions
- Link electricity provision with rural
 - Income generation
 - Social service delivery
- Pilot carbon finance transactions
- Address national policy issues to promote renewables

Project Implementation

ESD Credit Program and the follow-on RERED Project implemented by an Administrative Unit set up within DFCC Bank, Colombo.

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