Renewable Energy for Rural Economic Development Project

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Presentation Outline

- Support for renewables: ESD and RERED Projects
- Financing credit and grant
- Implementation arrangements
- Credit terms

World Bank Assisted Projects

- Energy Services Delivery (ESD) Project (1997-2002)
 - Credit Programme (private sector)
 - Pilot Wind Farm (CEB)
 - Capacity building (CEB)
- Renewable Energy for Rural Economic Development (RERED) Project (2002-2007)

ESD Credit Programme Achievements

	<u>Plan</u>	Actual
Grid-conn. Mini Hydros	21 M W	31 M W
Off-grid Village Hydros	20 projects 2,000 homes 200 kW	84 projects 4,174 homes 879 kW
Solar Home Systems	15,000 homes (revised)	19,200 homes
Disbursements		100%

RERED Project Vision

To promote private sector and community participation in providing electricity services using renewable resources for

- Rural economic development

- Capacity addition to the grid

Primary Targets

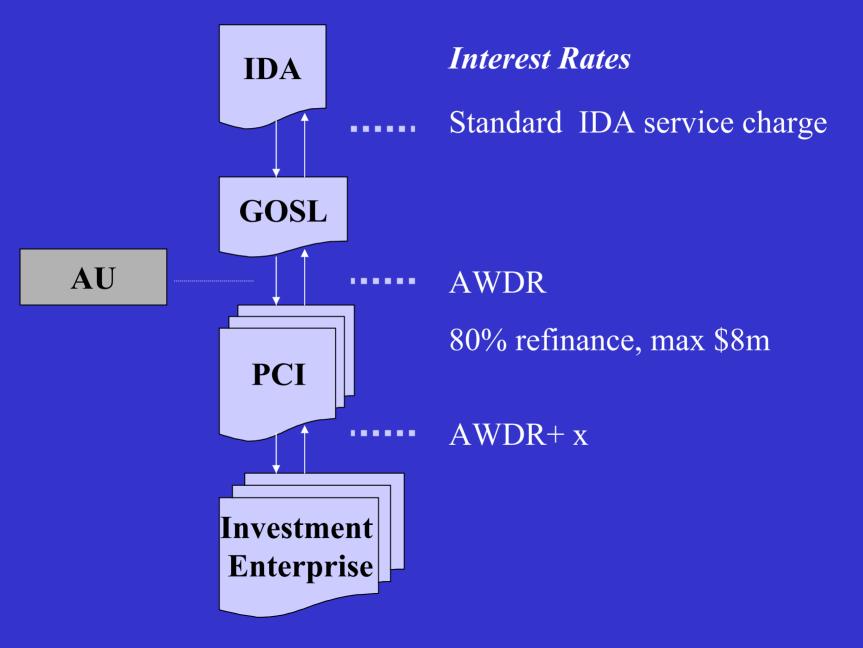
- Electricity access to 100,000 homes through solar home systems and independent mini-grids
- Electrification of 1,000 small enterprises and institutions through renewable energy resources
- Addition of 85 MW capacity to the grid

Financing under RERED Project

IDA Credit GEF Grant US\$ 75 m <u>US\$ 8 m</u> <u>US\$ 83 m</u>

Grant - Cofinancing (off-grid)- Project preparation (off-grid)- Technical assistance

IDA Credit



Participating Credit Institutions as on 31 Jan 2003

- Licensed specialised banks
 DFCC Bank, National Development Bank, Sanasa
 Development Bank
- Licensed commercial banks
 Commercial Bank, Hatton National Bank, Seylan Bank
- Leasing companies & merchant banks Ceylinco Leasing Corporation
- Micro finance institutions
 Sarvodaya Economic Enterprises Development Services

Other Non-RERED Sources of Funds

Credit

- Regional Development Banks
- Micro finance institutions

Grant

- Provincial Councils
- Donors

1. Grid-connected Investments

Credit

Term loans for mini hydros, wind, biomass projects

Technical Assistance

Cost shared and full cost for wind and biomass: training, resource analysis, feasibility studies, business plans, standardised biomass supply contracts etc

2. Solar PV Investments

Credit

Term loans to solar companies for infrastructure development and permanent incremental working capital;Term loans to micro finance providers for consumer financing

Grant

Cofinancing grant (US\$40-70 per SHS, with limits)

Technical Assistance

Cost shared and full cost: market testing, new applications, reduction of transaction costs etc.

3. Independent Grid Systems

Credit

Term loans for off-grid village hydros, wind and biomass

Grant

Cofinancing grant (\$400 per kW, max. \$20,000 per subproject)Project preparation assistance (max. \$6,000 plus max. \$2,000 for setting up economic development activities)

Technical Assistance

Cost shared and full cost: training, business model development, technology assessment, new applications etc.

4. Energy Efficiency and Conservation

Credit

Term loans for ESCOs and end-users

Technical Assistance

- Energy Efficiency Building Codes: demonstration
- Industrial benchmarking: standards for sectors such as textiles, tea
- Energy labelling programme: refrigerator test facility
- Capacity building for banks to appraise EE projects

5. Cross-sectoral Energy Applications

Goal

Support rural economic development and facilities in the health, education and water sectors through access to energy services

Technical Assistance

Public institutions -

- Policy development
- Specification of standard energy packages
- Implementation support

Commercial

- Implementation of innovative ideas

6. Other Technical Assistance

- Post-RERED sustainability issues
- Monitoring and evaluation
- National Rural Electrification Subsidy Mechanism
- Assistance to regulatory body
- Implementation of CDM

Loans from PCIs

PCI in agreement with client determines

- Interest rate (typically AWDR+x, repricing semi-annually)
- Tenure (max 10 years including max 2 years grace)
- Debt/equity ratio (usually around 60:40)
- Security (usually project assets and cash flow)

Max. refinance: \$8.0m per subproject Investment enterprise: pvt firm, NGO, co-op, indiv. Credit risk on subproject borne by PCI Forex risk on credit line borne by GOSL

Environment

Environmental/social assessment requirements:

- As per RERED Environmental and Social Assessment Framework
- IDA prior review for:

 all biomass
 mini hydro > 5 MW
 wind > 10 MW
 projects involving land acquisition/resettlement

Procurement

World Bank procurement guidelines:

- International Competitive Bidding for goods > \$2m works > \$3m and turnkey contracts > \$5m
- Established commercial practices for lesser amounts (three representative quotations)

Other Off-grid Features

Compliance with technical specifications

- Solar home systems, solar lanterns
- Off-grid village hydro schemes
- Prior review of specs for other off-grid systems

Consumer protection

- Warranty arrangements
- Consumer complaint investigation

Quarterly stakeholder review meetings

Contact Details

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