

PACE PROJECT

Sri Lanka

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Country Situation

- 19 million people
- 4 million households
- Rural/urban mix – 75/25
- Agribased economy but moving towards export of labour and manufacturing
- GDP – US \$ 1,000 per capita
- 20% living below poverty line
- Literacy rate – 95%

Energy Situation

- Ceylon Electricity Board is the government owned utility
- Generation capacity – 1,700 MW (60% Hydro)
- 10% annum demand growth for electricity
- Grid Electricity – 54% of households
- Off-Grid Electricity – 35,000 households (30,000 Solar PV Systems, 5,000 Micro Hydro) – Private Sector and CBO driven

Key Initiatives

- Energy Services Delivery Project (ESD) – 1997-2002 – SL govt/WB/GEF US \$ 55 million for off-grid and grid connected renewables
- Renewable Energy for Rural Economic Development (RERED) – 2002-2007 – US \$ 100 million with an additional focus on economic development

PACE Partnerships

The focus of the project has been in off-grid rural electricity.

Project partnerships with Energy Forum, CAPS (consulting company promoting micro hydro), provincial councils, divisional secretariats, rural banks and off-grid rural Householders

What has been done

- Stakeholder meetings held and surveys carried out (50 homes each) in 2 Micro (village) hydro projects to look at the Sustainable Livelihood issues as well as public-private partnerships
- Meetings held and survey conducted on 50 solar PV users in the Uva province
- Hosted the partner country workshop and study tour – March 2003

What has been done...

- Worked with CAPS to pilot the new micro hydro project in Neluwakkana and study the process
- Intervened with the provincial council to streamline statutory approval procedures
- Worked with Energy Forum to input to the power sector restructuring process to incorporate off-grid electrification and other grass roots level initiatives

Findings – Micro Hydro

- The statutory approvals for projects from the Divisional Secretariat is a bottleneck for project development.
- Energy Forum has established the Federation of Electricity Consumer Societies in partnership with provincial councils and this should have a future impact.
- The potential for income generation is there with community based projects and some already exists

Findings – solar PV

- The partnership between Uva Provincial Council, solar PV vendors and micro financing institutions is resulting in off-grid households getting electricity at a subsidized cost as well excellent service as there is a monitoring system in place (other provinces are joining in)
- On the livelihoods area, electricity is used for lighting and entertainment resulting in an intangible increase in quality of life but small impact on income generation

Critical Issues Identified

- Off-grid rural electrification require coherent policies incorporating these into the country's energy mix. This should also identify and roles of the private sector, NGO's, MFIs, government (central, provincial and district), banks, donors and regulatory bodies.
- The power sector restructuring process is not addressing the off-grid energy sector adequately

Critical Issues Identified..

- For rural electrification to have an impact on income generation and economic development many other inputs are required (human resources/entrepreneurship, accessibility to markets, transport, telecommunications etc.)
- Sustainable livelihoods - there is link between energy and poverty alleviation (immediate quality of life improvements, but economic impact is a longer term process)

Sustainable Livelihoods

- Handunella and Marandola projects have had no income generation activities as most of the community is affluent with small tea holdings
- There are other examples emerging such as the Kitultirielle project (Kegalle district) using electrically operated machines for a tailoring business and a telecommunications centre (telephone and fax and expected to get e mail/internet)

Sustainable Livelihood - Issues

- There has been fragmented efforts to address the energy/income generation nexus through individual projects and there is information but the impact has been marginal
- There needs a national effort in coordination with the poverty alleviation programme where energy is one of the elements

Power Sector Restructuring process

This is the crucial turning point for the Sri Lankan energy sector and bound to have a significant impact on off-grid electrification.

It is even more important to address this area as the government has said only 80% of households will get the grid by 2010. One million households will require other options.

Issues

Public Utilities Commission (PUC) will become the regulator once the CEB is broken into 9 companies based on the regions

- Who will decide where to extend the grid and where to develop off-grid projects?
- Who will regulate off-grid projects for pricing and standards?
- Will distribution rights be given based on areas and regions (i.e. one distributor per area)?

Issues

- What will happen to existing community micro hydro projects, of which there are over 200?
- What will be the role of provincial councils and divisional secretariats?
- If subsidies are provided by the provincial councils, how will they be administered ?

Recommendations

- The central government has to lead the process to integrate off-grid and grid based energy systems for rural areas so the off-grid population can also access electricity at a reasonable cost.
- The central government needs to coordinate with the provincial councils in order to identify the roles and responsibilities in the energy sector based on principal of devolution of power (13th amendment).

Recommendations

- Public private partnerships are crucial so the government should establish a cross sectoral rural energy working committee to input to the restructuring process (include civil society organizations such as Energy Forum, Federation of Electricity Consumer Societies; private sector; agriculture, health, transport, education. telecommunication sectors etc..)

Role of the Public Sector

- To develop a master plan incorporating grid extension and off-grid energy (ensure the current restructuring process addresses these)
- Coordinate public private partnerships
- To link potential end users with civil society organisations and private sector
- To create easy approval processes for off-grid project development
- To monitor the after sale services
- Provide subsidies to create a level playing field

Role of Private Sector

- Invest in energy services businesses
- Commercially market appropriate technologies
- Provide financing
- Provide energy services for a fee
- Provide after sale services (Service Companies)

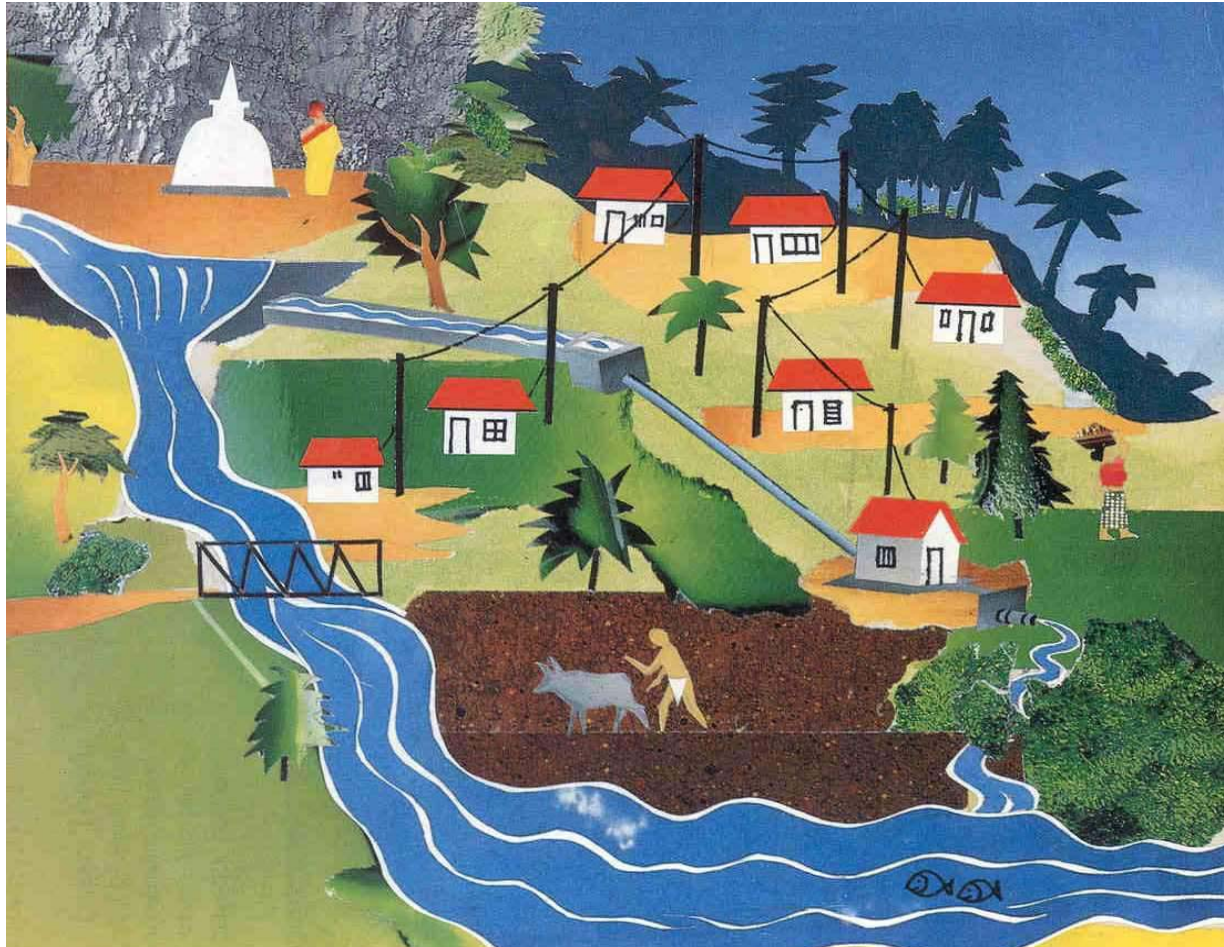
Role of Civil Society Organizations

- monitor projects
- provide micro-financing
- mobilise the community and organise the end users
- conduct grass roots level R&D (I.e. biogas, alternate fuels)
- monitor the after sale services

Role of the Donors

- Ensure that there is cross sectoral coordination when funding projects
- A focus on human resources and project management capacities when funding as many problems arise from a lack of leadership, team work and coordination capabilities

MICRO-HYDRO



There are about 160 off-grid micro-hydro power plants in Sri Lanka supplying power to over 3500 households

