A Forward March towards an Energy Empowered Nation Case Study in Sri Lanka

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Country Profile

- Population of 21.4 million
- Rural population 16.1 million
- GDP per capita USD 4,065.00

Power Sector at a Glance

- Installed electricity capacity 4043 MW
- Total system loss 9.6%
- 6.6 million electricity service connections
- 99.7% Electrification Rate (as at October 2017)
How does it work

Strategies adopted

• Consistent National Policy

• Institutional Development

• Project Financing

• Grid Extension

• Supporting low income households
National Energy Policy

• 1984 – The first ever national policy identified providing basic needs of energy as one of the main policy elements

• 2008 – Revised policy continues to recognize providing electricity to all as one of the main policy elements.

• Clear milestones of achieving the target of 100% electrification
Institutional Development

- Identified Rural Electrification as a priority function and Establishment of separate project division for Rural Electrification in the Ceylon Electricity Board in 1980
Project Financing

- Ensuring adequate Investments through bilateral and multilateral development partners
  - Rural schemes were packaged into projects and presented for financing
  - 2008 – Developed individual projects for each of the provinces to address specific needs of the province
  - 2008 – Included provisions in National Budget for expansion of rural electrification
  - 2016 – Specialized projects to address remote pockets (ex: ADB funded Supporting Electricity Supply Reliability Improvement project targeting small isolated islands)
# Rural Electrification Projects financed by Development Partners

<table>
<thead>
<tr>
<th>Project</th>
<th>Development Partner</th>
<th>Loan Amount USD Millions</th>
<th>Project Period</th>
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<tbody>
<tr>
<td>RE1 - Rural Electrification Project</td>
<td>Asian Development Bank (ADB)</td>
<td>11.3</td>
<td>1980</td>
</tr>
<tr>
<td>RE2 - Power System Expansion Project</td>
<td>Asian Development Bank (ADB)</td>
<td>74.8</td>
<td>1990</td>
</tr>
<tr>
<td>Medium Voltage Distribution Development Project</td>
<td>Government of Japan-JICA</td>
<td>43.7</td>
<td>1998</td>
</tr>
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<td>RE 5 - Rural Electrification Project</td>
<td>Government of Kuwait -Kuwait Fund</td>
<td>10.7</td>
<td>2000</td>
</tr>
<tr>
<td>RE 6 - Power Sector Development Project</td>
<td>Asian Development Bank (ADB)</td>
<td>69.8</td>
<td>2003-2006</td>
</tr>
<tr>
<td>RE 7 - Rural Electrification Project 7</td>
<td>EXIM Bank of China</td>
<td>24.2</td>
<td>2003</td>
</tr>
<tr>
<td>RE 4 - Fourth Rural Electrification Project</td>
<td>Swedish International Development Agency (SIDA)</td>
<td>28.8</td>
<td>2004-2011</td>
</tr>
<tr>
<td>RE 8 - Rural Electrification Project 8</td>
<td>Export Development Bank of Iran</td>
<td>83.4</td>
<td>2010</td>
</tr>
<tr>
<td>Northern Province Power Sector Development Program (Uthuru Wasanthaya)</td>
<td>China EXIM Bank</td>
<td>31.8</td>
<td>2010-2014</td>
</tr>
<tr>
<td>RE 4 Extension</td>
<td>Swedish International Development Agency (SIDA)</td>
<td>54.1</td>
<td>2011-2013</td>
</tr>
<tr>
<td>Lighting Sri Lanka - Uva Province (Uva Udanaya)</td>
<td>China EXIM Bank</td>
<td>24.9</td>
<td>2011-2014</td>
</tr>
<tr>
<td>Supporting Electricity Supply and Reliability Improvement Project</td>
<td>Asian Development Bank (ADB)</td>
<td>115.0</td>
<td>2016 - 2021</td>
</tr>
</tbody>
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Grid Extension

• 2008 – By considering the Economic and Social benefits, decided to extend the electricity distribution grid to where schemes are not financially viable to the utility and the Government provide any shortfall to make such schemes financially viable.

• 2011- Extended the Electricity supply to the premises of the households (up to 50m from household premises) where households will pay only a fixed charge for the service connection.
Supporting Low Income Households

- 1987 – Introduced first credit based electricity provision model
  (1987 - 2002 enabled electricity access to over 450,000 households)
- 1993 – Introduced a special loan scheme “Low cost service connection loan” focusing on the estate community
- 2011 – Devised standardized wiring schemes and introduced a concessional credit line to pay for service connections and internal wiring and recovered the loan in installments through the monthly electricity bill
- 2015 – Expanded credit line facilities for last mile service connections
Provincial Electrification Accomplishment Level

[Graph showing the level of electrification in different provinces.]

- **Western**: 100% in 2005, 99% in 2010, 99% in 2017.
- **Central**: 100% in 2005, 100% in 2010, 100% in 2017.
- **Southern**: 100% in 2005, 100% in 2010, 100% in 2017.
- **Northern**: Not specified.
- **Uva**: 98% in 2005, 98% in 2010, 98% in 2017.
- **Eastern**: 100% in 2005, 100% in 2010, 100% in 2017.
- **North Western**: 100% in 2005, 100% in 2010, 100% in 2017.

[Map showing the levels of electrification in different regions of the country.]
Key Success Factors

• Clear **Policy directions**

• Ensuring adequate **Financing for Infrastructure Development**

• **Creating an environment** for all consumers to get the service connections

• Rigorous **follow-ups and monitoring** of the progress

• **Capacity and dedication** of the Utility Staff