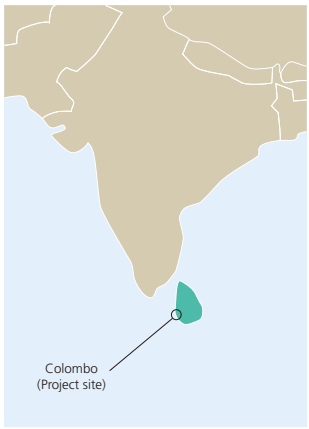
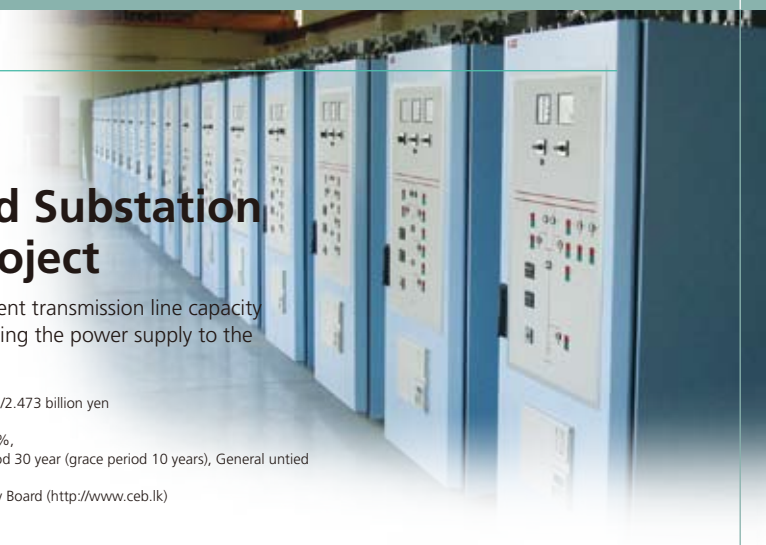
External Evaluators: Yasutami Shimomura, Yoshitaro Fuwa, Kyoji Fujii

Overall Rating **B**

A Foundation for Sustained Growth





26 **Sri Lanka**

Transmission and Substation Development Project

Redressing voltage drops and insufficient transmission line capacity Contributing to increasing and stabilizing the power supply to the Colombo area

Loan Amount/Disbursed Amount	3.114 billion yen/2.473 billion yen
Loan Agreement	August 1997
Terms & Conditions	Interest rate 2.3%, Repayment period 30 year (grace period 10 years), General untied
Final Disbursement Date	November 2003
Executing Agency	Ceylon Electricity Board (http://www.ceb.lk)

Project Objectives

The Western Province near Colombo is a major consumer of electricity. By repairing the Kolonnawa substation, there and increasing the transmission voltage on lines running between Biyagama and Pannipitiya from 132kV to 220kV, this project aims to stabilize the power supply. This in turn will help improve the living environment for local residents and contribute to overall development of the regional economy.

Effectiveness & Impact

Rating **a**

This project increased the line voltage between Biyagama and Pannipitiya, thereby increasing the power supply. In substations like Ratomalana, Panadura, and Matugama, which were receiving their power supply from Pannipitiya, transmission volumes surpassed the national average following the startup of partial operations in 2002. Moreover, whereas in 1995 there were eight systemic power outages originating in the Kolonnawa substation, since 2003—the year project was completed—there have been no power outages. The power supply can thus be said to be more stable following project completion. Moreover, whereas prior to project execution the voltage received at the Matugama substation, located in the southern end of the Western province, was frequently below the permissible range, voltages within the permissible range have now been secured thanks to an increase in voltage following project completion. Transmission losses between Biyagama and Pannipitiya have been markedly reduced from a 1995 level of 1.0% to 0.6% in 2004. Thus, as project targets have for the most part been realized, effectiveness is deemed as being high.

Changes in transmission losses between Biyagama and Pannipitiya

	1995	2000	2001	2002	2003	2004
Loss rate	1.0%	1.3%	1.7%	0.5%	0.9%	0.6%
Transmission voltage	132kV	132kV	132kV	220kV	220kV	220kV

A transformer installed by this project at the Kolonnawa substation

Relevance

Rating **a**

This project has been highly relevant with national policies both at the time of the appraisal and at the time of the ex-post evaluation. Through both the appraisal and the ex-post evaluation, stabilizing the power supply for insufficient transmission line capacity and voltage drops have been major policy objectives. Moreover, at the time of the ex-post evaluation, a bill for the electricity sector reform was introduced by the nation's parliament, therefore the execution of the project was consistent with this bill.

Efficiency

Rating **b**

Although project costs were kept to approximately 71% of target expenditure, project period was approximately 169% of the target timeframe for completion. Therefore, the evaluation for efficiency is moderate.

Sustainability

Rating **b**

Since no major problems have been observed, sustainability of this project is moderate. However, as for financial affairs, despite the fact that electricity fees were greatly increased, the financial status of the executing agency has worsened. At the time of the ex-post evaluation, based on a power sector reform, debt restructuring negotiations were under way. While there are hopes that the financial situation will improve, monitoring needs to be continued.

Conclusion, Lessons Learned, Recommendation

In light of the above, this project's overall evaluation was high. Issues that remain include the need to improve the financial condition of the executing agency and need to raise the technical capabilities of the executing agency by refurbishing the highly deteriorated training center.

Third-Party Opinion

Progress in electricity sector reform, which had been going nowhere until now, is expected in the future, and further improvement in the power supply system is expected. As stabilizing and strengthening the power supply is fundamental to fostering small- and medium-sized businesses, this project will have a big impact.

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