

Ex-Ante Evaluation (for Japanese ODA Loan)

1. Name of the Project

Country: The Democratic Socialist Republic of Sri Lanka

Project: Eastern Province Water Supply Development Project

Loan Agreement: March 26, 2010

Loan Amount: 4,904 million yen

Borrower: The Government of the Democratic Socialist Republic of Sri Lanka

2. Background and Necessity of the Project

(1) Current State and Issues of the Water Supply Sector in Sri Lanka (Eastern Province)

Although 87% of Sri Lanka's population has access to safe drinking water through wells and surface water, the percentage of population connected to piped water has remained low at 34%. At the same time, demand for water is growing rapidly in line with its population growth, which is accelerating year-by-year.

Eastern Province, which is the target area of the project, likewise faces a situation in which water supply is not keeping pace with increasing water demand among approximately 1.46 million residents. Moreover, high non-revenue water (NRW) ratio in Eastern Province has a negative impact on the efficiency of the water supply sector. Installation and improvement of the transmission and distribution network is urgent issue in order to reduce the NRW ratio.

(2) Development Policies for the Water Supply Sector in Sri Lanka and the Priority of the Project (Eastern Province)

Sri Lanka's "Ten Year Horizon—Development Framework" (2006-2016) stipulates poverty reduction and correction of regional economic disparities as important policy issues, designates Northern and Eastern Provinces as priority regions from the aspects of economic reconstruction and promotion of peace, and points out the necessity of supplying safe water in the regions affected by tsunami and conflict. Thus, the project is consistent with the Framework. Furthermore, as an approach to poverty reduction, the Government of Sri Lanka set the goal of ensuring access to safe water for the entire population. Based on the Millennium Development Goals, the Government of Sri Lanka seek to improve access to safe water to 85% of the national population by 2015 and 100% of the population by 2025, and to extend water supply to 40% of the national population by 2011.

(3) Japan and JICA's Policy and Operation in the Water Supply Sector (Eastern Province)

JICA has provided eight ODA loans for Sri Lanka's water supply sector that are worth 53,296 million yen.

In Japan's Country Assistance Program for Sri Lanka (FY2004), "assistance for peace-consolidation and reconstruction" and "development of economic infrastructure" are stated as the directions for assistance. Moreover, JICA sees improvement of livelihood and social environments for residents of conflict-affected regions as a significant issue. Accordingly, JICA's support for this project has high necessity and validity.

(4) Other Donors' Activity

Support for Sri Lanka's water supply and sewerage sector is being provided by the World Bank and Asian Development Bank as well as Finland, Sweden, Denmark, Australia, Germany, South Korea, and others.

(5) Necessity of the Project

Regional disparities in Sri Lanka are pronounced. Eastern Province, in particular, requires infrastructure development that has been delayed due to tsunami and conflict. The project will provide highly necessary assistance, as it seeks to expand the area in which safe drinking water is supplied through effective utilization of existing water supply facilities and construction of small scale water supply facilities in areas without water supply network. Therefore, this project is in agreement with Japan and JICA's assistance policies.

3. Project Description

(1) Project Objectives

The objective of the project is to provide safe drinking water by constructing and expanding water supply facilities in Eastern Province, and thereby contribute to improving living standards and reducing poverty in the area.

(2) Project Site/Target Area

Eastern Province

(3) Project Components

- 1) Construction and expansion of a transmission main and distribution network and construction of a treatment plant etc. in Ampara District
- 2) Construction of small scale water supply facilities in remote areas
- 3) Consulting services
 - ① Capacity development for water treatment and assistance for designing, etc.
 - ② Detailed designs for small scale water supply facilities, capacity development training, construction supervision, etc.

(4) Estimated Project Cost

6,054 million yen (Loan Amount: 4,904 million yen)

(5) Schedule

March 2010 — December 2014 (total of 58 months). The project will be completed when

the facilities begin operation (December 2013).

(6) Project Implementation Structure

- 1) Borrower: The Government of the Democratic Socialist Republic of Sri Lanka
- 2) Executing Agency: Ministry of Finance and Planning
- 3) Operation and Maintenance System

Ampara District Water Supply Scheme: National Water Supply and Drainage Board
Rural Water Supply Scheme: Eastern Provincial Council, local governments, community based organizations

(7) Environmental and Social Consideration/Poverty Reduction/Social Development

1) Environmental and Social Consideration

- ① Category: B
- ② Reason for Categorization: The project does not correspond to sensitive sectors, characteristics, or areas that are mentioned in the “Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations” (formulated in April 2002) and thus will not have a significantly undesirable impact on the environment.
- ③ Environmental Permit: The preparation of the Environmental Impact Assessment (EIA) report for the project is not required under the laws of Sri Lanka.
- ④ Anti-Pollution Measures: Noise and dust produced during construction will be suppressed through use of low-noise equipment, sprinkling during construction, etc., and thus it is anticipated that the project will satisfy environmental criteria in Sri Lanka. Furthermore, sludge to be produced by the water treatment plant will be dried on air-drying beds and used as agricultural fertilizer.
- ⑤ Natural Environment: The project area is not in a region that is susceptible to impact (such as a national park, etc.) nor in the vicinity of such a region, and thus it is anticipated that undesirable impacts on the natural environment by the project will be minimal.
- ⑥ Social Environment: The project will involve land acquisition (approximately 4,000 m² of public land) for construction of the water treatment plant. This process is currently underway. No local residents are to be resettled.
- ⑦ Others/Monitoring: The Executing agency will monitor noise, vibration, dust, and so on during construction, and will monitor water quality, noise, and so on during operation under the project.

2) Promotion of Poverty Reduction

Access to safe water for impoverished residents will be improved, as the initial connection fee for water supply network was set in consideration of the income level of impoverished residents. It is anticipated that the project will contribute to an increase of opportunities for productive activity by improving health conditions, shortening time needed to draw water, etc., and thereby help reduce poverty.

- 3) Promotion of Social Development (e.g. gender perspectives, measures for infectious diseases including HIV/AIDS, participatory development, consideration for the disabled, etc.)

Awareness raising activities will be held on safe water use, water conservation, etc. There are also plans for awareness raising activities on HIV/AIDS that will target laborers involved in Ampara District Water Supply Scheme.

- (8) Cooperation with Other Donors

The project includes work to extend water transmission and distribution facilities that were built with assistance from the Australian government. Establishment of the water transmission network under this project will make use of water towers that were built with assistance from the World Bank.

- (9) Other Important Issues

None

4. Targeted Outcomes

- (1) Performance Indicators (Operation and Effect Indicator)

Indicator	Baseline (Actual value in 2009)	Target (2015) (Expected value 2 years after project completion)
Total population served (people)	153,045	209,000
No. of connections (houses)	30,539	41,000
Minimum water-supply hours in the project area (per day)	4	24

Note: Implementation of a baseline survey is scheduled under the project in areas targeted for Rural Water Supply Scheme.

- (2) Internal Rate of Return

Based on the conditions indicated below, the Economic Internal Rate of Return (EIRR) for the project is 6.1%.

EIRR

Cost: Project cost (excluding taxes), operation and maintenance cost

Benefit: Total amount of willingness to pay of newly connected residents, reduction of medical expenses on waterborne diseases

Project life: 20 years

5. External Factors and Risk Control

None

6. Lessons Learned from Past Projects

From post-project evaluations of past projects, it is understood that 1) because water demand

predictions are greatly influenced by future economic growth, it is desirable to appropriately ascertain the relationship between demand plans and facility expansion/investment plans from the country's medium-term development plan, etc., and 2) lowering the NRW ratio is absolutely essential in securing the financial sustainability of water supply projects. For 1), the appropriateness of the project plan is being confirmed by conducting a basic survey of the water sector and reviewing demand forecasts and supply plans for Eastern Province. For 2), efforts are underway to abolish community faucets, which cause the NRW problem in the target region, and to promote individual connections as steps toward developing the water distribution network.

7. Plan for Future Evaluation

(1) Indicators to be Used

- 1) Total population served (people)
- 2) No. of connections (houses)
- 3) Minimum water-supply hours in the project area (per day)
- 4) Economic internal rate of return (EIRR) (%)

(2) Timing

2 years after project completion