

Ex-Ante Evaluation (for Japanese ODA Loan)

1. Name of the Project

Country: The Democratic Socialist Republic of Sri Lanka

Project: Greater Colombo Urban Transport Development Project Phase 2 (II)

Loan Agreement: March 22, 2011

Loan Amount: 31,688 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 Road Sector in Sri Lanka

In Sri Lanka, road transportation comprises 90% of overland passenger transportation and freight distribution, playing an extremely important role in the country's socio-economic activities. However, with the stable economic growth of the country the number of registered vehicles in Sri Lanka is growing dramatically, causing chronic traffic congestion in urban areas. Furthermore, due to inadequate operation and maintenance, the existing road network does not meet a satisfactory level as an inter-regional network. This problem is one of the factors causing disparities between the Greater Colombo area and other regions.

(2) Development Policies for the Road Sector in Sri Lanka and the Priority of the Project

In the "Ten-Year Horizon Development Framework (2006–2016)" created in 2005, the alleviation of the traffic congestion in Colombo and the improvement of accessibility between suburban cities and economic zones are listed as priority issues. Also, based on the Framework mentioned above, the plan for the establishment of a road network, including expressways that connect hubs of domestic economic growth, is included in the Road Sector Master Plan created in 2007. This project is regarded as an important project with high priority, contributing to the alleviation of traffic congestion in the Greater Colombo area and the realization of smooth logistics.

(3) Japan and JICA's Policy and Operations in the Road Sector in Sri Lanka

In Japan's "Country Assistance Program for Sri Lanka (April 2004)," "assistance for systematic reforms and the improvement of economic infrastructure" is stated as the direction for assistance. Based on this direction, JICA recognizes transportation as one of the priority areas in assistance programs for Sri Lanka, with the purpose of promoting the upgrading of infrastructure that is essential for increasing investments by the private sector. Hence it supports projects such as the Southern Highway Construction Project (FY2000, loan amount 18.8 billion yen).

(4) Other Donors' Activity

The Southern Highway currently under construction is a co-financing project with Asian Development Bank (ADB). In addition, the World Bank, ADB, and JICA are

collaborating to support the improvement of a road network incorporating provincial roads and community roads in Sri Lanka.

(5) Necessity of the Project

The alleviation of the traffic congestion due to an increase in the amount of traffic in the Greater Colombo area and the improvement of the road network between major cities are the priority issues. Thus, this project, which connects the major national roads and rural areas through the construction of an outer circular highway that diverts traffic away from the central area of Colombo and contributes to the ensuring of smooth road transportation, is consistent with Japan's and JICA's assistance policy. The necessity and relevance of the project to be supported by JICA are high.

3. Project Description

(1) Project Objective

The project aims to alleviate road traffic congestion in the Greater Colombo area and improve connectivity between the regions through the construction of expressways linking the main national roads in the suburbs of Colombo and the Southern Highway, and thus contributing to the facilitation of logistics in Sri Lanka.

(2) Project Site/Target Area

Colombo District and Gampaha District

(3) Project Components

- 1) Construction of Colombo outer circular highway (four-lane expressway) and interchanges
- 2) Installation of equipment related to construction of toll facilities
- 3) Consulting services (i) review of expressway facilities/structures designs for the installation of toll collection system, and (ii) supervision of construction works.

(4) Estimated Project Cost (Loan Amount)

51,431 million yen (loan amount: 37,406 million yen; loan amount for phase 2(II): 31,688 million yen)

(5) Schedule

November 2008 to March 2016 (89 months in total). The project will be considered completed when the facility starts operation (March 2015).

(6) Project Implementation Structure

- 1) Borrower: The Government of the Democratic Socialist Republic of Sri Lanka
- 2) Executing Agency: Ministry of Ports and Highways, Road Development Authority
- 3) Operation and Maintenance System: Expressway Authority

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

1) Environmental and Social Consideration

(i) Category: A

(ii) Reason for Categorization: This project is classified as Category A according to the "JBIC Environmental Guidelines for ODA Loans" (established October

- 1999) because it is the new construction of a large-scale road.
- (iii) Environmental Permit: The Environmental Impact Assessment (EIA) for this project was approved by the Central Environmental Authority in May 2001. In addition, the supplementary EIA relating to the region where the alignment changes have been made, due to a change in the formation of the A1 Interchange (on the Colombo-Kandy road), was approved in November 2007.
 - (iv) Anti-Pollution Measures: Results of the traffic volume forecasting survey indicate that the project will meet the national environmental standards for air pollution and noise during use of the roads.
 - (v) Natural Environment: This project will not take place in or near any environmentally vulnerable regions, such as national parks, etc., and any adverse environmental impact stemming from this project is expected to be minimal.
 - (vi) Social Environment: Accompanying this project is the acquisition of approximately 80ha of land, and the resettlement of 323 households is expected. The Road Development Authority is carrying out discussions with the affected persons subject to land acquisition/resettlement, and the procedures for land acquisition are being carried out.
 - (vii) Other/Monitoring: For this project, the Road Development Authority will monitor air quality, noise, vibration, water quality, land acquisition, and resettlement during the construction period, while the Expressway Authority will monitor air quality, noise, vibration, and water quality once the road is in service.

2) Promotion of Poverty Reduction

None

3) Promotion of Social Development (e.g. Gender Perspective, Measure for Infectious Diseases Including HIV/AIDS, Participatory Development, Consideration for the Person with Disability etc.)

The implementation of HIV/AIDS countermeasures for construction workers is set to be included in the bidding documents for the project. Thus contractors will implement HIV/AIDS countermeasures in cooperation with NGOs.

(8) Collaboration with Other Donors

Improvements in work implementation capability related to operation and maintenance are supported through the "Expressway Administration Project," JICA Technical Assistance Project related to ODA Loan.

4. Targeted Outcomes

(1) Quantitative Effects

1) Performance Indicators (Operation and Effect Indicator)

Indicator	Target (2017) [Expected value 2 years after project completion]
Annual average daily traffic (vehicles/day)	42,186
Time saving (million rupees/year)	3,694
Vehicle operating cost savings (million rupees/year)	3,327
Reduction of traffic accident cost (million rupees/year)	173

Targets are set for the Kottawa-Kadawata section.

2) Internal Rate of Return

Based on the conditions indicated below, the Economic Internal Rate of Return (EIRR) of this project is 9.13%.

[EIRR]

Costs: Project costs (excluding tax), operation and maintenance costs

Benefits: Saving of travel costs, saving of travel time, reduction in traffic accidents

Project Life: 15 years

(2) Qualitative Effects

Promotion of logistics based on the ensured smooth road transportation

5. External Factors and Risk Control

Possibility of project being delayed due to climatic conditions, particularly flooding

6. Lessons Learned from Past Projects

The lesson has been learned, from ex-post evaluations of similar projects conducted previously in the road sector, that it is essential to pay attention to the establishment of frameworks for operation and maintenance for the operation stage of the road. With respect to the establishment and launch of the Expressway Authority in charge of the operation and maintenance of roads covered by the project, support frameworks for developing capabilities and creating operation and maintenance plans have been created through "Expressway Administration Project".

7. Plan for Future Evaluation

(1) Indicators to be Used

1) Annual average daily traffic (vehicles/day)

2) Time saving (million rupees/year)

- 3) Vehicle operating cost savings (million rupees/year)
 - 4) Reduction of traffic accident cost (million rupees/year)
 - 5) Economic Internal Rate of Return (EIRR) (%)
- (2) Timing
- Two years after project completion