

## Ex-ante Evaluation

### **1. Name of the Project**

Country: Democratic Socialist Republic of Sri Lanka

Project: Greater Colombo Urban Transport Development Project

(Loan Agreement: March 28, 2007; Loan Amount: 21,917 million yen; Borrower: The Government of the Democratic Socialist Republic of Sri Lanka)

### **2. Necessity and Relevance of JBIC's Assistance**

#### (1) Current Condition of and Issues in the Road Sector

In Sri Lanka, 92% of overland transport (passenger and freight transport) uses road transport (2004), and road transport plays a significant role in the economic and social activities in the country. However, the road network connecting major cities and other urban areas is not developed well.

In the Colombo metropolitan area, due to increasing vehicle fleet by around 14% annually and insufficient road development, chronic congestion is occurring, leading to concerns that the resulting bottleneck in distribution may hinder economic growth. Moreover, traffic congestion is being aggravated and roads are becoming dysfunctional due to lack of traffic control equipment such as traffic signals and due to delays in construction of flyovers.

Additionally, the major economic activity of Sri Lanka is concentrated in the Colombo metropolitan region, and it has been recognized the importance to promote balanced development among the regions in Sri Lanka. To achieve this target, it is necessary to construct a new highway network to reinforcement of the transport capacity between the Colombo metropolitan region and other regions as well as among major regional cities.

#### (2) Development Policy of the Sri Lankan Government

In the road sector master plan prepared in 2005, the highest priority was placed on the construction of a new highway network to connect the major cities for the purpose of promoting economic growth. In particular, for the purpose of mitigating congestion in Colombo and stimulating the regional economies by enhancing connectivity between Colombo where economic activity is lively and major regional cities, the high-priority projects that are planned or undertaken are the Colombo Outer Circular Highway, the Southern Highway, the Colombo-Katunayake Highway, the Colombo-Kandy Highway, and the Colombo-Jaffna Highway.

#### (3) Consistency with JBIC's Assistance Policy

In Japan's Country Assistance Plan for Sri Lanka (April 2004), "institutional reform and assistance for providing economic foundation" is stated as the direction for assistance during the next five years. This project is consistent with this direction. Moreover, in JBIC's Medium-Term Strategy for Overseas Economic Cooperation (FY2005-2007), "a foundation for sustained growth" is positioned as a priority area, and "economic infrastructure development for the purpose of sustainable private sector-led economic growth," etc., is positioned as a priority area in JBIC's support for Sri Lanka. Thus, JBIC's support of this project is highly necessary and relevant.

### **3. Project Objectives**

The objective of this project is to mitigate traffic congestion in the Colombo metropolitan region and enhance connectivity with other regions by constructing a highway in the outskirts of Colombo that will link to major roads and the Southern Highway, thereby contributing to the strengthening of economic foundation and improvement of the economic disparity among the regions in Sri Lanka.

### **4. Project Description**

#### (1) Target Area

Outskirts of Colombo (Maharagama and Kaduwela in Colombo District)

#### (2) Project Outline

- (a) Construction of Colombo Outer Circular Highway (consisting of four lanes for vehicles only) (approximately 12 km from Kottawa to Kaduwela)
- (b) Construction of interchanges (two locations) and construction/widening of adjacent local roads
- (c) Consulting services (detailed design, assistance in bidding, supervision of construction)

#### (3) Total Project Cost/Loan Amount

30,025 million yen (ODA Loan Amount: 21,917 million yen)

#### (4) Schedule

April 2007 – April 2013 (73 months)

#### (5) Implementation Structure

- (a) Borrower: The Government of the Democratic Socialist Republic of Sri Lanka
- (b) Executing Agency: Under the supervision of the Ministry of Highways and Road Development (MOHRD), the Road Development Authority (RDA) is to implement construction of the vehicles-only road (including interchanges), and the Urban Development Authority (UDA) is to implement construction and widening of local roads adjacent to the interchanges.
- (c) Operation and Maintenance System: The vehicle-only road (including interchanges) is to be operated/maintained by RDA, and the local roads are to be operated/maintained by the provincial councils.

#### (6) Environmental and Social Considerations

##### (a) Environmental Effects/Land Acquisition and Resettlement

##### (i) Category: A

##### (ii) Reason for Categorization

This project is classified as Category A because it falls into road sector under the JBIC Environmental Guidelines for ODA Loans (established October 1999). (This project is classified as Category A because it falls into road sector and has a sensitive characteristic under the “Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Consideration” (established April 2002).

(iii) Environmental Permit

The Environmental Impact Assessment (EIA) report has been approved by the Central Environmental Authority in May 2001. Following a recommendation by the Central Environmental Authority, a supplementary EIA report concerning areas where route changes were made was prepared, and it has been approved in May 2005.

(iv) Anti-Pollution Measures

Air quality and noise after completion are expected to meet domestic standards. To alleviate pollution further, greenery will be planted along the road, etc. To prevent water pollution during construction, measures will be taken to mitigate pollution, such as proper management of the materials storage yard.

(v) Natural Environment

The project site is not located in or around sensitive areas, such as a national park, etc. Adverse impacts on the natural environment are assumed to be minimal.

(vi) Social Environment

This project requires the acquisition of approximately 107 ha of land and resettlement involving 156 households. The land acquisition process is being pursued in accordance with the land acquisition law, etc. RDA and UDA have been conducting consultations with the affected persons for land acquisition and resettlement.

(vii) Other/Monitoring

RDA and UDA will monitor air quality, noise, water quality, land acquisition and resettlement, etc., for this project.

(b) Promotion of Poverty Reduction

For the residents affected by the land acquisition and resettlement of this project, payment of subsidies to poor households and, for those who desire it, activities to assist income recovery, such as job training in sewing, farming, and computers, will be provided by the executing agencies.

(c) Promotion of Social Development (e.g. Gender Perspective)

Implementation of AIDS countermeasures for construction workers is included in the bidding documents, and the contractors are scheduled to implement AIDS countermeasures in cooperation with the local authorities.

(7) Other Important Issues

In addition to this project, in the future JBIC and the Sri Lankan government will study construction of the northern section of this road as well as improvement of intersections with chronic problems and the construction of flyovers at intersections, in order to realize synergistic effects.

**5. Outcome Targets**

(1) Evaluation Indicators (Operation and Effect Indicator)

Indicator	Target (2014, 1 year after completion)
Annual average daily traffic (vehicles/day)	42,186
Time saving (million rupees/year)	1,693
Vehicle operation cost saving (million rupees/year)	931

Decrease of traffic accidents (million rupees/year)	50
<p>(2) Internal Rate of Return  Economic Internal Rate of Return (EIRR): 17.4%</p> <ul style="list-style-type: none"> <li>(a) Cost: Project cost (excluding land cost and taxes) and operation and maintenance expenses</li> <li>(b) Benefit: Vehicle operation cost saving, time saving, decrease of traffic accidents</li> <li>(c) Project Life: 15 years</li> </ul>	
<p><b>6. External Risk Factors</b></p>	
<p>Climate conditions, in particular, the possibility of project delays due to the occurrence of flooding</p>	
<p><b>7. Lessons Learned from Findings of Similar Projects Undertaken in the Past</b></p>	
<p>From experience with previous road projects, it was learned that it is necessary to consider the executing agencies' ability to deal with residents affected by the project. In this project, it is necessary to carefully monitor land acquisition and resettlement being underway. Moreover, it has been learned that it is necessary to pay attention to the establishment of the operation and maintenance system following project completion, and so the preparation of the road operation and maintenance fund and the highway operation and maintenance policy will be monitored.</p>	
<p><b>8. Plans for Future Evaluation</b></p>	
<p>(1) Indicators for Future Evaluations</p> <ul style="list-style-type: none"> <li>(a) Annual average daily traffic (vehicles/day)</li> <li>(b) Time saving (million rupees/year)</li> <li>(c) Vehicle operation cost saving (million rupees/year)</li> <li>(d) Decrease of traffic accidents (million rupees/year)</li> </ul> <p>(2) Timing of Next Evaluation  After project completion.</p>	