

Ex-ante Evaluation

1. Name of the Project

Country: The Socialist Republic of Vietnam

Project: Hanoi City Ring Road No. 3 Construction Project

(Loan Agreement: March 31, 2008; Loan Amount: 28,069 million yen; Borrower: The Government of the Socialist Republic of Vietnam)

2. Necessity and Relevance of JBIC's Assistance

(1) The actual state of the road sector in Vietnam and the problems it faces

In Vietnam, the rapid urbanization and motorization paralleling the country's economic growth has led to increased traffic demands and chronic traffic congestion, resulting in huge economic loss.

In Hanoi City, the population increased from 2.74 million in 2000 to 3.22 million in 2006 (and is projected to grow to 4.5 million by 2020); thereby sharply increasing road traffic in the inner city. However, there is delay in the development of an inner city road network as well as the development of a road network connecting the surrounding regions. In addition, the use of public transport has not advanced as much as it has in other major cities of Asia. As a result, the road congestion in the center of Hanoi has become so serious that it is hindering efficient economic and social activities. Hence it is deemed necessary to ease traffic congestion and streamline the transportation of goods by improving the traffic between surrounding areas and curbing the flow of vehicles into Hanoi and the through traffic. In response to these circumstances, the Ministry of Transport has already improved the western section from the airport in the north of Hanoi towards the west side of the city, as well as the section on the east side of the Hanoi City Ring Road No.3 with the support of ADB. Additionally, as part of the Red River Bridge Construction Project (Phases I, II, III and IV: loan agreements in FY1999, 2001, 2003 and 2005, respectively), which is being carried out with the support of JBIC, the ministry has started construction of the southeast section.

(2) Road sector policy in Vietnam

The National Transport Development Master Plan (-2010), prepared in 2000, calls for the establishment of an efficient transport network and development of a public transport system in Hanoi, Ho Chi Minh and other major cities by 2010. The importance of development of arterial roads in urban area such as Hanoi and Ho Chi Minh is especially noted in the Road Development Master Plan in Effect until 2010 and Guidelines in Effect until 2020 and Vietnam's Five-Year Socio-Economic Development Strategy (2006-2010). In particular, since urban transport infrastructure is inadequate, implementation of measures to mitigate traffic congestion continues to be an urgent issue. This project will construct the southwest section of the Hanoi City Ring Road No. 3, which is not yet underway, and thereby nearly complete the development of the said ring road. Construction of the southwest section is expected to increase the freight transport efficiency and improve the city's traffic by improving access from Hoa Lac Hi-Tech Park, approximately 30 km to the west of the city, to Haiphong and Cai Lan Ports to the east (the major ports of northern Vietnam) and Noi Bai Airport to the north.

Additionally, improving a ring road is also proposed as a high priority project in the Study on Comprehensive Urban Development Programme in Hanoi Capital City (completed in March 2007),

which was conducted to formulate an urban development master plan in various fields, including the urban transport targeted for implementation in 2020 with the support of JICA.

(3) Consistency with JBIC's assistance policy

In its Medium-Term Strategy for Overseas Economic Cooperation Operations (FY2005–2007), JBIC sets forth “foundation for sustained growth” as one of its priority areas, and aims to provide assistance to the development of economic infrastructure including transport facilities as a basis for socio-economic activities. This project aims to ease traffic congestion and improve the transportation of goods in northern Vietnam by constructing a ring road in Hanoi, thereby contributing to the economic growth of the region. Providing support for this project is consistent with JBIC's assistance policy. Thus it is highly necessary and relevant that JBIC should support the project.

3. Project Objectives

This project aims to respond to the increasing traffic demands in Hanoi and the surrounding areas through the construction of a road in the section of the Hanoi City Ring Road No. 3 between its intersection with Highway No. 32 and the north of Linh Dam Lake; thereby contributing to the development of the regional economy.

4. Project Description

(1) Target Area

Hanoi City

(2) Project Outline

- (a) Construction of the section of the Hanoi City Ring Road No. 3 between its intersection with Highway No. 32 and the north of Linh Dam Lake (approx. 8.9 km, 8.5 of which is devoted for elevated roads).
- (b) Consulting services (construction monitoring and supervision, etc.)

(3) Total Project Cost / Loan Amount

33,333 million yen (Yen Loan Amount: 28,069 million yen)

(4) Schedule

January 2008–December 2011 (48 months). Project completion is defined as when construction is completed.

(5) Implementation Structure

- (a) Borrower: The Government of the Socialist Republic of Vietnam
- (b) Executing Agency: Vietnam Road Administration (VRA)
- (c) Operation and Maintenance System: VRA

(6) Environmental and Social Consideration

- (a) Environmental Effects / Land Acquisition and Resident Relocation
 - (i) Category: A
 - (ii) Reason for Categorization

This project is categorized as a road sector project which is likely to have significant adverse impact on the environment under the “Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations” (established in April 2002). Thus this project is classified as Category A.

(iii) Environmental Permit

The Environmental Impact Assessment (EIA) report concerning this project was approved by the Ministry of Transport in November 2007.

(iv) Anti-Pollution Measures

Measures will be implemented to mitigate atmospheric pollution and noise by, among other things, limiting the engine size of vehicles and installing sound insulation walls during construction and when the planned road section is in use.

(v) Natural Environment

The area targeted by this project is not located in or around sensitive areas, such as national parks, and so adverse impact on the natural environment is assumed to be minimal.

(vi) Social Environment

The project will involve the acquisition of approximately 12 ha of land and resident relocation of 770 households. Compensation and relocation of residents will be carried out in accordance with a resident relocation plan based on the domestic laws of Vietnam.

(vii) Other/Monitoring

In this project, the project management unit (Thang Long PMU) will monitor air quality, noise, vibration and so on during construction, while VRA will monitor the same when the planned road section is in use.

(b) Promotion of Poverty Reduction

None

(c) Promotion of Social Development (e.g. Gender Perspective, Measure for Infectious Diseases Including AIDS, Participatory Development, Consideration for the Handicapped, etc.)

A HIV/AIDS clause will be included in the bidding document and the contractor will implement countermeasures for factory workers to avoid HIV/AIDS and other infectious diseases.

(7) Other Important Issues

None

5. Outcome Targets

(1) Evaluation Indicators (Operation and Effect Indicator)

Indicator	Baseline (2007 actual)	Target (2014, 2 years after completion)
Annual average daily traffic (PCU/day) ^{1,2}	–	95,000
Time saving (hours/PCU) ³	–	0.312

¹ PCU (Passenger Car Unit): An indicator of traffic volume estimated in terms of types of vehicles, including passenger cars, buses, trucks, and motorcycles and converted to passenger car unit.

² Section targeted by this indicator: The section between the Trung Hoa and Thanh Xuan Interchange, where traffic is expected to be heaviest among the three sections into which the project will be divided.

³ Section targeted by this indicator: The section from the Mai Dich Interchange to North Linh Dam Lake.

(2) Number of Beneficiaries

Approx. 190,000⁴ (Calculated based on the projected traffic volume)

(2) Internal Rate of Return (Economic Internal Rate of Return)

Based on the conditions indicated below, the economic internal rate of return (EIRR) is 12.0%.

[EIRR]

(a) Cost: Project cost (construction cost, operation and maintenance expenses, excluding tax)

(b) Benefit: Reduction of conventional vehicle operating cost, economic loss effect, etc.

(c) Project Life: 30 years

6. External Risk Factors

None

7. Lessons Learned from Findings of Similar Projects Undertaken in the Past

From the ex-post evaluations of similar projects in the road sector in the past, it has been learned that training people to be responsible for operations performed at the site is important for appropriate operation and maintenance of roads. On the basis of this lesson, the project plans to include the capacity building of staff members of VRA (the agency with jurisdiction over operation and maintenance) in its consulting services.

8. Plans for Future Evaluation

(1) Indicators for Future Evaluation

(a) Annual average daily traffic (PCU/day)

(b) Time saving (hours/PCU)

(c) Economic internal rate of return (EIRR) (%)

(2) Timing of Next Evaluation

Two years after project completion

⁴ Number of beneficiaries is calculated by halving the projected traffic volume (because daily use usually involves round trips). The number of passengers per day (2014): $376,802 \times 1/2 =$ approx. 188,000