

Ex-ante Evaluation

1. Name of the Project

Country: The Socialist Republic of Vietnam

Project: Nhat Tan Bridge (Vietnam-Japan Friendship Bridge) Construction Project (I)

(Loan Agreement: March 31, 2006; Loan Amount: 13,698 million yen; Borrower: The Government of the Socialist Republic of Vietnam)

2. Necessity and Relevance of JBIC's Assistance

In reflection of Vietnam's economic growth in recent years, the volume of freight and passengers transported by Vietnam's transportation sector continues to increase sharply on the main roads that connect the urban centers of Hanoi and Ho Chi Minh City and the regional cities of Hai Phong and Can Tho, and the increase is forecast to continue. Above all, the road sector plays a central role in transportation, accounting for 67.6% of freight transport (heavy freight) in 2004. Vietnam's "10-Year Socio-Economic Development Strategy (2000-2010)" stresses connecting development to poverty reduction as well as maintaining growth in highly developing areas. This project is planned the highway development in the "Plan for Vietnam Road Transport Sector Development to 2010 and its Direction until 2020" (Vietnam's Ministry of Transport).

The roads in the city of Hanoi have basically remained in the same condition since they were built during the French colonial period (before 1954). A bottleneck to economic growth is created by problems such as lack of a road network, insufficient road width, and poor pavement, etc. Meanwhile, due to the recent economic growth, in 2001 the number of motorbikes in Hanoi reached 1,313,000 (an increase of 20% YOY) and the number of registered vehicles reached 520,000 (an increase of 7.1% YOY), and the increase continues at a high rate. In addition, there are only two bridges, the Thang Long Bridge and the Chuong Duong Bridge that span the Red River, which separates Hanoi from its outlying regions. Traffic congestion, aggravated by mixed traffic such as bicycles, is worsening due to increased traffic at the point where the roads from central Hanoi and the north join. This project, which will construct a part of Ring Road No. 2, will function to connect the road in the south that leads to central Hanoi (currently receiving assistance from the World Bank) with the extended National Highway No. 5 in the north (by the Hanoi People's Committee) and the National Highway No. 3. Through this, the project will lead to the alleviation of congestion and increased transportation efficiency in the city of Hanoi. JICA is currently implementing the Hanoi Integrated Master Plan, which points out the importance of Ring Road No. 2 in transportation in Hanoi and also points out need to construct the Nhat Tan Bridge soon in order to support the development of northern Hanoi through promotion of distribution. The city of Hanoi is approaching its 1,000th anniversary in 2010, and so this project is also expected as a monument to the city's development.

In JBIC's current Medium-Term Strategy for Overseas Economic Cooperation Operations, "infrastructure development for sustainable growth" is positioned as a priority area.

Therefore, JBIC's assistance is highly necessary and relevant.

3. Project Objectives

The objective of this project is to improve transport infrastructure in Hanoi by constructing a bridge over the Red River and its approach road, etc., in the city of Hanoi, thereby contribute to the economic development of the area.

4. Project Description

(1) Target Area

Northern area of the city of Hanoi

(2) Project Outline

Civil works and services that are necessary for the implementation of the project in the city of Hanoi will be provided as follows.

- (a) Construction of the Nhat Tan Bridge and approach road, installation of infrastructure in the resident resettlement site, etc.
- (b) Consulting services (F/S review, detailed design, tendering assistance, construction supervision, training of operation and maintenance personnel, preparation of operation and maintenance manual, etc.)

(3) Total Project Cost/Loan Amount

51,668 million yen (Yen Loan Amount: 13,698 million yen)

(4) Schedule

October 2006-December 2012 (75 months)

(5) Implementation Structure

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

(6) Environmental and Social Consideration

(a) Environmental Effects/Land Acquisition and Resettlement

(i) Category: A

(ii) Reason for Categorization

This project is classified as Category A because it has characteristics likely to exert impact, under the “Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations” (established April 2002).

(iii) Environmental Permit

The EIA report for the project was approved in October 2005 by Vietnam’s Ministry of Natural Resources and Environment (MONRE).

(iv) Anti-Pollution Measures

Regarding the impact of air pollution and noise when the bridge is in use, it is planned to plant trees, etc., along the approach road, in addition to studying in the detailed design stage mitigation measures such as installment of soundproof walls, etc.

(v) Natural Environment

The project site is not located in or around nationally designated protected areas, thus no significant adverse impact is foreseen.

(vi) Social Environment

The project is expected to require land acquisition of 98.7 ha, relocation of 6 offices, and resettlement of 582 households. The land acquisition and resident resettlement procedures are scheduled to be undertaken in accordance with the basic resident resettlement plan prepared by the executing agency. Moreover, the residents who are to be resettled will relocate to a site prepared by the project.

(vii) Other/ Monitoring

The executing agency is scheduled to implement monitoring of the air quality and noise during construction and during usage as well as monitoring of the resident relocation, etc.

(b) Promotion of Poverty Reduction

None

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

Because this is a large-scale infrastructure project in a country where there is concern over spreading HIV/AIDS infection, it is planned to include measures against HIV/AIDS for the construction workers in the bidding documents as well as to have the contractors implement HIV/AIDS countermeasures in cooperation with the Hanoi People's Committee Health Department and to implement HIV/AIDS countermeasures through consignment to NGOs, etc. Moreover, out of consideration for the living and social environment of the resettled residents, installation of infrastructure at the resettlement sites will be included in the construction works.

(7) Other Important Issues

None

5. Outcome Targets

(1) Evaluation Indicators (Operation and Effect Indicator)

Indicator	Target (2015, 3 years after completion)
Annual average daily traffic (PCU*/day)	56,566
Time saving (1 billion dongs/year)	463.7
Vehicle operation cost saving (1 billion dongs/year)	957.3

*PCU (passenger car unit): So that the traffic volume can be expressed only in terms of passenger cars, adjustments are made for vehicles of differing sizes such as large trucks and motorbikes by multiplying their numbers by specified ratios.

(2) Internal Rate of Return

Economic Internal Rate of Return (EIRR): 17.91%

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

(b) Benefit: Time saving, Vehicle operation cost saving

(c) Project Life: 30 years
6. External Risk Factors
<p>(1) Stagnation or deterioration of the economy in Vietnam or the project site area.</p> <p>(2) Delay or alteration in the implementation of local development plans, such as industrial parks or urban development plans, etc.</p> <p>(3) Delay in completion due to natural disaster. (The progress of civil engineering works is easily affected by rainfall, etc.)</p>
7. Lessons Learned from Findings of Similar Projects Undertaken in the Past
<p>In previous urban highway construction projects in other countries, it has been learned that it is important to arrange a realistic schedule for land acquisition with which the residents will agree. In this project, consideration is being given so that a workable schedule is arranged at the stage of preparing the resident resettlement plan.</p>
8. Plans for Future Evaluation
<p>(1) Indicators for Future Evaluation</p> <ul style="list-style-type: none"> (a) Annual average daily traffic (PCU/day) (b) Time saving (1 billion dong/year) (c) Vehicle operation cost saving (1 billion dong/year) (d) Economic Internal Rate of Return (EIRR) (%) <p>(2) Timing of Next Evaluation</p> <p>After project completion</p>