

Ex-Ante Evaluation (for Japanese ODA Loan)

1. Name of the Project

Country: Socialist Republic of Vietnam
Project: New National Highway No. 3 and Regional Road Network Construction Project (Section Hanoi - Thai Nguyen) (II)
Loan Agreement: March 30, 2012
Loan Amount: 16,486 million Yen
Borrower: The Government of the Socialist Republic of Vietnam

2. Background and Necessity of the Project

(1) Current State and Issues of the Transport Sector in Vietnam/the Development in the Red River Delta Region

Rapid economic development is promoted in the Red River Delta region around Hanoi City where the regional GDP growth rate (2006-2010) is predicted as high as 7.5% per year. National Highway No. 3, connecting Hanoi and Thai Nguyen, is a main road linking these cities to the hubs of international logistics such as Noi Bai International Airport, Hai Phong Port, and Cai Lan Port. In addition, traffic volume is expected to grow further in the coming years because the areas along this route involve Soc Son Industrial Park, factories of Japanese companies, and planned Yen Vien Complex of 8,000 ha.

Thai Nguyen City, where National Highway No. 3 terminates, is located about 60 km to the north of Hanoi City. It is an emerging industrial city with a population of about 1.10 million, and is a key area for economic activities in the northern Vietnam. Driving safety on the current National Highway No. 3, however, is not fully secured and there are many traffic accidents, partly because of the large trucks on the road. There is an urgent need for the construction of a highway, which will divert the traffic volume and contribute to the safety of local residents. As there are some poor areas along National Highway No. 3, the Project is also expected to improve the livelihood of local residents, including the poor, by improving the access.

(2) Development Policies for the Transport Sector in Vietnam and the Priority of the Project

In the “Ninth Socio-Economic Development (2011-2015)”, the Government of Vietnam places the high priority on the further development of infrastructure systems including those for transportation in order to achieve the developmental goal of high-growth sustainable development. In particular, construction of expressways including the high-standard highway of the Project has been given a high priority under the “Expressways Network Development Planning in Vietnam by 2020 and Vision after 2020” (Prime Minister Decision No. 1734 in December 2008). In the “Planning of

Transport Development of Priority Economic Area of the North until 2020 and the Orientation up to 2030” (Prime Minister Decision No. 5 in January 2011), which is the development plan for the transport sector in the project-related area, the section between Hanoi and Thai Nguyen is also prioritized.

(3) Japan and JICA’s Policy and Operations in the Transport Sector in Vietnam

The Japan’s Country Assistance Program for Vietnam formulated in July 2009 states that “With regard to intercity arterial transport networks, assistance will be extended to arterial roads (including the North-South expressways), railways, ports and airports from the perspective of achieving more effective logistics, and based on the appropriate order of priority and roadmaps, with attention to selection and concentration.” The Project is implemented as part of this framework. In the Japan’s ODA Rolling Plan for Vietnam, it is indicated that the development of trunk road networks is addressed as part of “Urban Development, Transportation and Communications Network Development” among the four key development issues. In addition, JICA conducted technical assistance such as, the “Study for Supporting ITS Standards and Operation Plan Development in Viet Nam” (March 2010 – January 2011) and the “Study on the National Transport Development Strategy in the Socialist Republic of Vietnam (VITRANSS2)” (November 2007 – May 2010). The outcomes of technical assistance will be utilized during the implementation of the Project.

(4) Other Donors’ Activity

- 1) The World Bank: Assistance is provided in the fields of the development of national highways and regional roads, inland water transport, and the development of urban transport infrastructure.
- 2) Asian Development Bank: Assistance is provided to the Greater Mekong Subregion Economic Cooperation Program including the Kunming – Haiphong Transport Corridor Project and in other fields.

(5) Necessity of the Project

The Project is consistent with Japan’s and JICA’s priority area. As indicated above, the contribution to the development of the Northern Hanoi area, the response to the increase in traffic volume associated with such development, and the improvement of access in the areas around National Highway No. 3, are relevant to the needs and the development policy of Vietnam. It is, therefore, highly necessary and appropriate for JICA to support the implementation of the Project.

<h2>3. Project Description</h2>
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(1) Project Objective

The objective of the Project is, to improve accessibility and safety for the road users

by constructing a bypass road (high-standard road) of National Highway No. 3 and improving the related regional roads in Northern Vietnam, thereby contributing to the promotion of economic and social development for the region, promotion of economic growth and strengthening of international competitiveness for Vietnam.

(2) Project Site/Target Area

Northern Hanoi (between Hanoi City and Thai Nguyen City, Thai Nguyen Province: about 60 km)

(3) Project Components

The following components are implemented for constructing a bypass road of National Highway No.3 (New National Highway No. 3) and improving the related regional roads:

- 1) Construction works (construction of a high-standard road, improvement of related regional roads, etc.)
- 2) Consulting service (detailed design, work supervision, etc.)

(4) Estimated Project Cost (Loan Amount)

35,357 million Yen (Loan Amount: 16,486 million Yen)

(5) Schedule

March 2005 - April 2015 (122 months in total). The project is completed when the facilities begin operation (April 2014).

(6) Project Implementation Structure

- 1) Borrower: The Government of the Socialist Republic of Vietnam.
- 2) Executing Agency: Ministry of Transport (MOT)
- 3) Operation and Maintenance System: (To be determined 6 months before the facilities begin operation)

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

- 1) Environmental and Social Consideration
 - (1) Category: A
 - (2) Reason for Categorization: This project falls under the road sector and have characteristics that are liable to cause an adverse environmental impact in accordance with the "Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations" (issued in April 2002).
 - (3) Environmental Permit: The environmental impact assessment (EIA) for the

Project was approved in September 2004 by Ministry of Natural Resources and Environment.

- (4) Anti-Pollution Measures: Sound barriers, planting, etc. will be used as the measures against air quality, noise, etc. after the facilities begin operation. These measures will satisfy the domestic standards of Vietnam.
 - (5) Natural Environment: The Project site is not in or near a sensitive area such as national parks, and is expected to have minimal adverse impact on the environment.
 - (6) Social Environment: The Project involves 520 ha of land acquisition and resettlement of 695 households. Compensation will be paid in accordance with the relevant Vietnamese laws and the Resettlement Action Plan (RAP).
 - (7) Other/Monitoring: The Executing Agency will monitor air quality, noise, vibration, etc. during construction work and after the facilities begin operation. Provincial and District People’s Committees will monitor resettlement.
- 2) Promotion of Poverty Reduction: It is expected to improve the access to markets and benefit the poor by constructing and improving the regional roads in the areas with high poverty rates.
 - 3) Promotion of Social Development (e.g. gender perspective, measures for infectious diseases including HIV/AIDS, participatory development, consideration for persons with disabilities, etc.): As part of health care for workers, the executing agency will take measures against infections such as HIV/AIDS at construction sites.

(8) Collaboration with Other Donors

Collaboration with JICA’s technical cooperation such as, “Study for Supporting ITS Standards and Operation Plan Development in Viet Nam,” “Advisor for Management, Operation, and Maintenance of Expressway System,” and “Project for Strengthening Operation and Maintenance System for Expressway” is planned in order to determine ITS standards and develop the operation and maintenance system.

(9) Other Important Issues

None

4. Targeted Outcomes

(1) Quantitative Effects

1) Performance Indicators (Operation and Effect Indicator)

Indicator	Baseline (Actual Value in 2004)	Target (2016) 【2 years after Project completion】

Annual average daily traffic (AADT) (vehicle) (KM33+500)	(Existing NH3) 6,113	(Existing NH3) 6,400 (New NH3) 26,800
Travel time saving (minutes/vehicle)	(Existing NH3) 86.55	(Existing NH3) 63.92
Travel cost saving (VND/year)	—	245 billion

*NH3: National Highway No.3

2) Internal Rates of Return

Based on the conditions indicated below, the Economic Internal Rate of Return (EIRR) will be 10.82%, and the Financial Internal Rate of Return (FIRR) will be 2.37%.

EIRR

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

Benefit: Travel time reduction, travel cost reduction

Project Life: 30 years

FIRR

Cost: Project cost, operation and maintenance costs

Benefit: Toll revenue

Project Life: 30 years

(2) Qualitative Effects

Improvement of efficiency of passenger and freight transport by reducing traffic congestion on the existing national highway, promotion of economic development in the region around Hanoi, and improvement of the living environment of local residents.

5. External Factors and Risk Control

None

6. Lessons Learned from Past Projects

(1) Results of Evaluation of Similar Past Projects

Lessons learned from the ex-post evaluation of the past metropolitan expressway construction project indicates that it is important to plan a realistic schedule for land acquisition to ensure the agreement from local residents. In order to ensure the sustainability of the Project after the completion, it is necessary to develop and establish the operation and maintenance system, covering maintenance cost and other factors, and carefully consider the toll collection plan in the early stage of the Project.

(2) Lessons for the Project

Based on the above lessons learned, a feasible schedule will be formulated when developing the Resettlement Action Plan as the large-scale land acquisition, resettlement, and toll collection on a high-standard road, in which the country has little experience, may cause delay in the implementation of the Project,. The establishment of the operation and maintenance system and the formulation of the toll collection plan will be enhanced through the collaboration with the technical cooperation project.

7. Plan for Future Evaluation

(1) Indicators to be Used

- 1)Annual average daily traffic (AADT) (vehicle)
- 2)Travel time saving (minutes/vehicle)
- 3)Travel cost saving (VND/year)

(2) Timing

Two years after Project completion.