

## Ex-Ante Evaluation

### 1. Name of the project

Country: Socialist Republic of Vietnam

Project: Cuu Long (Can Tho) Bridge Construction Project (II)

Loan Agreement: March 18, 2010

Loan Amount: 4,626 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 Transportation and Road Sector in Vietnam

While road transport remains an important means of transport in Vietnam, accounting for about 90% of passenger transport and about 70% of cargo transport, arterial roads such as national and provincial highways account for only about 40,000 km in length, or 17%, of the total 240,000 km length of the road network, and the much selective interurban road network is incomplete. Transportation and traffic functions are inadequate due to damage suffered in war and insufficient maintenance and repairs resulting from budget limitations, and the level of cargo and passenger services remains low. The pavement rate has increased to 98% for national roads and 87% for provincial roads, but is only 55% for regional roads and 46% for village roads, which suggests the low level of road improvement at the regional living area (indicators above were all current as of 2007). As the number of registered cars increases rapidly with economic development, the inadequate condition of the road network poses an obstacle to smooth transport. Moreover, expressway have only just begun to be built in Vietnam, and while the National Highway No. 1 running north-south from the northern border with China to Nam Can in the south is a very important arterial road, the crossing point between Can Tho City and Vinh Long Province still relies on ferry transport. This creates not only a transportation bottleneck, but also very unreliability of abnormal weather.

#### (2) Development Policies for the Transportation and Road Sector in Vietnam and the Priority of the Project

The Vietnamese government's Eighth Five-Year Social and Economic Development Strategy (2006-2010) prioritizes road repair and new road construction, and there is a great need to upgrade the National Highway No. 1, Vietnam's major arterial road. The Cuu Long (Can Tho) Bridge Construction project (approved in March 2000 for Special Yen Loan Facility) is part of this effort.

#### (3) Japan and JICA's Policy and Operations in the Transportation and Road Sector

Japan's Country Assistance Program for Vietnam (July 2009) states that "the promotion of economic growth and strengthening international competitiveness" is one of the four main pillars of Japan's aid policy. Urban development and the establishment of a transport/traffic and communications network are given priority in this, and this project is consistent with this plan. Moreover, JICA has responded to this plan by providing both hard and soft aid for the development of a network, such as urban bypass roads, as part of "the promotion of economic growth and strengthening international competitiveness." This project is part of the program to build a trunk road network, and the initial loan was agreed in fiscal 2000 (March 30, 2001, agreed amount of 24,847 million yen).

#### (4) Other Donors' Activities

① The World Bank is implementing a broad range of cooperation in national roads, local roads, inland transportation by water, urban transportation, and other.

② The Asia Development Bank (ADB) supports projects in the Greater Mekong Sub-regional Program, such as the Kunming-Hai Phong Transport Corridor Project and the

Noi Bai-Lao Cai Highway Project.

(5) Necessity of the Project

This project is consistent with Japan and JICA's aid priorities, and the necessity and validity of this project is very high.

### **3. Project Description**

(1) Project Objectives

This project is intended to improve the efficiency of logistics in the Mekong Delta region by constructing the Cuu Long (Can Tho) Bridge crossing the Mekong River Delta in an area approximately 170km south of Ho Chi Minh City, the largest economic zone along National Highway No. 1 in Vietnam. This will contribute to socioeconomic development in the Mekong Delta.

(2) Project Site/Target Area

Vinh Long Province and Can Tho City in Vietnam

(3) Project Components

The construction of a steel PC compound cable-stayed bridge in a location 3.2km downstream of the current ferry route linking Vinh Long Province and Can Tho City at the crossing point for Song Hau (Bassac River) along the National Highway No. 1.

- 1) Civil engineering work, material procurement and installation (steel PC compound cable-stayed bridge, approach bridge on Vinh Long Province and Can Tho City side)
- 2) Consulting services (detailed design review, construction supervision, etc.; the cost is all included in the National Highway No. 1 Bypass Road Construction Project (I) and (II)).

(4) Estimated Project Cost

35,788 million yen (Loan Amount: 4,626 million yen)

(5) Schedule

March 2002 – March 2012 (total of 121 months); the project will be complete when the facility begins operating (April 2010).

(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: Can Tho Bridge Operation, Maintenance and Management Company, affiliated with the Vietnam Road Administration

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

1) Environmental and Social Considerations

① Category: A

② Reason for Categorization: This project corresponds to the road sector listed in the JICA Guidelines for Environmental Considerations in ODA Loans (established in October 1999) and thus corresponds to Category A.

③ Environmental Permit: The Ministry of Science, Technology and Environment (currently the Ministry of Natural Resources and the Environment) approved the EIA for this project in July 1998.

2) Promotion of Poverty Reduction: None in particular

3) Promotion of Social Development: This project cooperated with the NGO CARE International in providing an HIV/AIDS prevention program targeting approximately 800

workers and community residents in areas around the project over a two-year period from February 2006 to January 2008, and held workshops and educational and awareness-building activities.

(8) Coordination with other donors: None in particular

(9) Other Important Issues: None in particular

#### 4. Targeted Outcomes

(1) Performance Indicators (Operation and Effect Indicator)

Indicator	Baseline (Actual Value in 2008)	Target (2012) (Expected value 2 years after project completion)
Annual average daily traffic volume (units/day)	27,110	62,102
Reduction in travel time (million yen/hours) (Note 1)	-	436
Passenger car units (PCU/day) (Note 2)	20,797	52,393
Reduction in ferry operating costs (million yen/year)	-	342
Rise in land value in neighborhood (%)	165	450

(Note 1) This assumes that transport time will be reduced by 25 minutes as a result of the implementation of this project and the National Highway No. 1 Bypass Road Construction Project.

(Note 2) Passenger Car Unit (PCU) is a unit converting the number of a range of transportation vehicles into the number of passenger car.

(1) Internal rate of return:

Based on the conditions indicated below, the Economic Internal Rate of Return (EIRR) for this project is 15.7%.

#### 【EIRR】

Costs: Project costs (excluding taxes), operating and maintenance costs

Benefits: Effect in reducing travel costs (including reduction in ferry operating costs), effect in reducing travel time, increase in land prices in neighboring area

Project life: 50 years

#### 5. External Factors and Risk Control

None in particular

#### 6. Lessons Learned from Past Projects

The June 2006 mid-term review of this project points out (1) the need for monitoring of land acquisition procedures, (2) the need to mitigate the social impact on neighboring residents and ferry company employees and (3) the importance that the executing agency and the operation, maintenance and management company share information and of technical training for the operation, maintenance and management organization. When implementing this project, as regards (1), procedures for land acquisition and compensation are taken in accordance with Vietnam's domestic laws, and land acquisition and resident resettlement and compensation for these were completed in 2007. As regards (2), there are plans to build an

access road and underground passage linking the divided area by constructing a bypass road connecting the bridge built in this project to National Highway No. 1 for the convenience of residents in the area, and there are also plans to employ people at the Can Tho Bridge's toll collection booth and nearby ferry companies after the current ferry crossing the Song Hau stops operating. In addition, as regards (3), the Vietnamese government will use its own funds for a training program to be established by construction management consultants to raise the capacity of staff implementing and administering this project (including PMUMT employees).

## **7. Plan for Future Evaluations**

(1) Indicators to be used

- 1) Annual average daily traffic volume (units/day)
- 2) Reduction in travel time (million yen/hours)
- 3) Number of passenger car equivalents (PCU/day)
- 4) Reduction in ferry operating costs (million yen/year)
- 5) Rise in land value in neighborhood (%)
- 6) Economic internal rate of return (%)

(2) Timing

Two years after project completion