

Ex-ante Evaluation

1. Name of the Project

Country: The Socialist Republic of Vietnam

Project: Vinh Phuc Province Investment Climate Improvement Project

(Loan Agreement: March 30, 2007; Loan Amount: 11,718 million yen; Borrower: The Government of the Socialist Republic of Vietnam)

2. Necessity and Relevance of JBIC's Assistance

Foreign Direct Investment (FDI) in Vietnam has been growing since the 1990s, and although it temporarily declined due to the repercussions of the Asian currency crisis, it has reached a total of more than US\$66.2 billion (on an authorized basis), and 7,000 cases, between 1988 and 2005.

The contribution of foreign-capital firms to Vietnam's GDP has also been on the rise, growing to approximately 16% in 2005. The influx of FDI to the country's northern region is significantly delayed compared to the southern region, but since the late 1990s, it has risen continuously (1,356 cases totaling US\$13.1 billion between 1988 and 2003) due to improved distribution infrastructure constructed by yen loan projects and policy-driven investment incentive programs. However, investment in the north has shown a strong trend toward concentration in Hanoi, (e.g., approximately 70% of the FDI in the northern Red River delta in 2003 flowed to Hanoi) and so balanced, sustainable growth is needed throughout the Greater Hanoi Metropolitan area. Vinh Phuc Province is one of the eight provinces which compose the northern key economic zone. The province is easily accessible from the Hanoi Noibai Airport, and development of the industrial zone adjacent to Hanoi to the west is a priority. On the other hand, in recent years the province's momentum has grown sluggish as industrialization and urbanization have tended to be absorbed into neighboring Hanoi. So, to mitigate the over-concentration of investment in Hanoi, a policy to attract investment has been adopted in Vinh Phuc province. The water supply and sewerage, electric supply, and roads, which are indispensable basic infrastructure for industrial development and urban growth, are inadequate to meet the current demand, and development to meet future population growth, industrialization, and industrial development is an urgent matter.

In JBIC's Medium-Term Strategy for Overseas Economic Cooperation Operations, a priority area for assistance is "a foundation for sustained growth," and the strategy calls for economic and social infrastructure development (facilities and equipment for transport and distribution, energy, information and communications, irrigation, and water supply and sewerage, etc.) which is the basis for activities of the private sector, which in turn play a vital role in sustained growth.

Thus given the above, JBIC's assistance for this project is highly necessary and relevant.

3. Project Objectives

The objective of the project is to improve socio-economic infrastructure such as road, power distribution networks, water supply and sewerage systems around Vinh Phuc's industrial areas, enhance the capacity of the Province's investor support system, and thereby stimulate economic activities and improve the socioeconomic development of greater Hanoi Metropolitan area.

4. Project Description

(1) Target Area

Vinh Phuc Province (industrial region and surrounding area as well as urban area)

(2) Project Outline

(a) Road development

(b) Water facilities development

(c) Sewer facilities development

(d) Additional installation of electric distribution transformers and rehabilitation of distribution lines

(e) Consulting services (detailed design, bidding and contract assistance, construction supervision, strengthening of provincial government's support system for investors, strengthening of the organization of the Project Management Unit (PMU) set up inside the provincial government, and strengthening of the organization and system of the operation and maintenance agency, etc.)

(3) Total Project Cost/Loan Amount

14,049 million yen (Yen Loan Amount: 11,718 million yen)

(4) Schedule

April 2007 – July 2014 (88 months)

The project will be completed when the guarantee period is completed.

(5) Implementation Structure

(a) Borrower: The Government of the Socialist Republic of Vietnam

(b) Executing Agency: Vinh Phuc Province People's Committee

(c) Operation and Maintenance System: Vinh Phuc Road Management and Reparation Company, Vinh Phuc Water Supply, Sewerage and Environmental Company, and Vinh Phuc Power Company

(6) Environmental and Social Consideration

(a) Environmental Impacts/Land Acquisition and Resettlement

(i) Category: A

(ii) Reason for Categorization: This project falls into 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 Consideration" (established in April 2002). Thus this project is classified as Category A.

(iii) Environmental Permit: The Environmental Impact Assessment (EIA) report for the road component was approved by Vietnam's Ministry of Natural Resources and Environment in December 2006. The EIA report for the water and sewerage component was approved in November 2006 and that for the electric power component was approved in January 2007, both by Vinh Phuc Province Department of Natural Resources and Environment.

(iv) Anti-Pollution Measures

Road: A bypass is planned to avoid a residential area, and so no serious negative impact is expected due to air pollution or noise, etc., as a result of increased traffic volume when the road is

complete. Moreover, pollution mitigation measures such as soundproof walls will be used as necessary particularly around sensitive locations such as schools and hospitals.

Water/Sewerage: Discharge from the water and sewerage system will be treated to meet the water discharge standards of Vietnam and will be released into rivers. Sludge will be disposed after the water is removed at a treatment plant with adequate capacity.

Electric distribution network/transformers: For noise during construction, measures will be taken, such as using low-noise heavy equipment.

(v) Natural Environment: The project site is not located in or around sensitive areas such as a national park, and so adverse impact on the natural environment is assumed to be minimal.

(vi) Social Environment: This project requires acquisition of approximately 79 ha of land and resettlement of 16 households. Land acquisition and resettlement is proceeding in accordance with the domestic procedures of Vietnam. It was confirmed through discussions with residents that there is no particular opposition to this project.

(vii) Other/ Monitoring: PMU will monitor the air quality, water quality, and noise.

(b) Promotion of Poverty Reduction

None

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

Because this project involves large-scale construction in a country where there is a risk of spreading HIV infection, it is planned to include an obligation for the contractor to implement AIDS prevention measures for the construction workers.

(7) Other Important Issues

None

5. Outcome Targets

(1) Evaluation Indicators (Operation and Effect Indicator)

Indicator		Baseline (2006)	Target (2015, 1 year after completion)
Roads	Average daily traffic volume	-	29,000 (Year 2014)
	Time required (Thang Long Bridge – Phuc Yen) (minutes)	25	15
Water	Population served (persons)	57,000	151,000
	Amount of water supply (m ³ /day)	16,000	46,000
Sewerage	Amount of wastewater treated (m ³ /day)	0	4,000
	BOD concentration (output) (mg/l)	-	<50
Electric Power	Distribution loss (%)	5.62	<4.60
	Interruption duration index (hours/year)	Vinh Yen:256 Phuc Yen:399	Vinh Yen:51 Phuc Yen:80
	Sales volume (MWh)	Vinh Yen:102 Phuc Yen:134	Vinh Yen:412 Phuc Yen:543

(2) Internal Rate of Return

Based on the following premises, the Economic Internal Rate of Return is 9.8% for the road component, 23.4% for the water component, 17.3% for the sewerage component, and 10.8% for the electric power component.

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

(b) Benefit

Road: Shortening of time required and reduction of vehicle running cost;

Water: Reduction of operation and maintenance cost (compared to the case where the Red River is the water intake source).

Sewerage: Reduction of operation and maintenance cost (compared to the case where onsite treatment facilities are used)

Electric power: Reduction of power generation cost (compared to the case where onsite power generators are used)

(c) Project Life: 40 years

6. External Risk Factors

None

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

From ex-post evaluations of similar projects in the investment climate improvement sector in the past, it has been learned that (1) studies should be improved so that they concentrate more on profitability after project completion, (2) the keys to promoting tenant occupancy are location conditions, investment conditions, infrastructure development, and human resources procurement, (3) an executing agency with expertise in the given field needs to have an appropriate framework for the implementation system, (4) industrial agglomerations will emerge only where there are both physical infrastructure and institutions are developed. In this project, together with the development of infrastructure, it is planned to work on the strengthening of the investor support system, within the framework of the consulting services.

8. Plans for Future Evaluation

(1) Indicators for Future Evaluation

(a) Average daily traffic volume

(b) Time required (Thang Long Bridge –Phuc Yen) (minutes)

(c) Population served (persons)

(d) Amount of water supply (m³/day)

(e) Amount of wastewater treated (m³/day)

(f) BOD concentration (output) (mg/l)

(g) Distribution loss (%)

(h) Interruption duration index (hours/year)

(i) Sales volume (thousand MWh)

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

(2) Timing of Next Evaluation

After project completion