#### **Ex-ante Evaluation**

## 1. Name of the Project

Country: The Socialist Republic of Vietnam

Project: Regional and Provincial Hospital Development Project

(Loan Agreement: March 31, 2006; Loan Amount: 1,805 million yen; Borrower: The Government of

the Socialist Republic of Vietnam)

# 2. Necessity and Relevance of JBIC's Assistance

Health indicators in Vietnam have improved accompanying the country's economic growth, and the health indicators have attained the average level of Asian countries. However, increasing disparities has been observed in the health indicators based on region and income level. The percentage of patients with infectious diseases is declining, however, it is still needed to strengthen regional core hospitals to accommodate the increase in other kind of patients, such as the injured, accident victims, and stroke patients. Currently, the referral system<sup>1</sup> is not functioning adequately, as patients with minor ailments are skipping the regional core hospitals and receiving examinations at large urban hospitals, which should focus on delivering advanced medical care.

Given this, the Vietnamese government is prioritizing improvement in the quality of healthcare service and medical network (e.g., Health and Medical Care Master Plan 2010-2020), especially in the provincial areas. The Vietnamese government has also established the Healthcare Fund for the Poor (HCFP) and distributes free insurance cards, so that the poor can receive healthcare services.

In northern Vietnam, urgent intervention is needed because the hospital facilities and equipments are seriously aged due to the weaker economy of the region, and patients are concentrated in Bach Mai hospital in Hanoi. Since the World Bank has already provided similar assistance to this project to the southern and Mekong Delta region, it is necessary to assist the northern region, which is impoverished and where the upgrading of regional core hospitals' services is overdue. Japan provided grant aid and technical assistance to large urban hospitals such as Bach Mai Hospital; in order to expand targeted region it is necessary to utilize loan aid.

In JBIC's current Medium-Term Strategy for Overseas Economic Cooperation Operations, "assistance for poverty reduction" and "assistance for human resources development" are positioned as priority areas. In JBIC's country strategy for Vietnam, it is stated that "priority shall be given to assistance for secondary institutions<sup>2</sup> for the improvement of their facilities and equipment, human resources development, and operation and maintenance."

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

#### 3. Project Objectives

The objective of this project is to upgrade the referral system and to improve healthcare services in the project area by providing equipment and materials to core hospitals<sup>3</sup> and implementing training in medical technology in the three provinces of Ha Tinh, Thai Nguyen, and Lang Son in northern

<sup>&</sup>lt;sup>1</sup> The referral system is the system wherein local public health centers introduce patients to advanced medical institutions as necessary depending on the ailments of the patients.

<sup>&</sup>lt;sup>2</sup> Secondary institutions are healthcare institutions at the district and province level.

<sup>&</sup>lt;sup>3</sup> The number of beds per hospital is approximately 700 at Thai Nguyen Hospital, 500 at Ha Tinh Hospital, and 300 at Lang Son Hospital.

Vietnam, and thereby contribute to the improvement of the health of local residents.

# 4. Project Description

(1) Target Area

Ha Tinh Province, Thai Nguyen Province, and Lang Son Province

# (2) Project Outline

Equipment and materials as well as services that are necessary for the implementation of the project in the above-mentioned three provinces will be provided as follows.

- (a) Provision of hospital-related equipment at Ha Tinh Hospital, Thai Nguyen Hospital, and Lang Son Hospital
- (b) Implementation of medical training at the above-mentioned three hospitals
- (c) Consulting services
- (3) Total Project Cost/Loan Amount
- 2,124 million yen (Yen Loan Amount: 1,805 million yen)
- (4) Schedule

December 2006-December 2008 (24 months)

- (5) Implementation Structure
  - (a) Borrower: The Government of the Socialist Republic of Vietnam
  - (b) Executing Agency: Ministry of Health
  - (c) Operation and Maintenance System: Hospitals that receive the equipments
- (6) Environmental and Social Consideration
  - (a) Environmental Effects/Land Acquisition and Resident Relocation
    - (i) Category: B
    - (ii) Reason for Categorization

This project is classified as Category B because it is not in a sector likely to exert impact nor does it have characteristics likely to exert impact, nor is it in a sensitive region, and so no significant adverse impact on the environment is considered likely, under the "Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations" (established April 2002).

(iii) Environmental Permit

The EIA report is not required for the project in the country's legal system.

(iv) Anti-Pollution Measures

Of the medical wastes that are expected to increase due to the project, solid medical wastes will be incinerated in the hospitals. Liquid medical wastes will be disposed in drains after being treated to meet waste standards by heat sterilization and microbiological treatment

equipment. Wastes from radiation therapy will be collected and disposed by the government.

## (v) Natural Environment

The project will be implemented within the grounds of existing hospitals, thus no impact on the surrounding natural environment is foreseen.

# (vi) Social Environment

The project consists of provision of equipment and materials and implementation of training at existing hospitals, and it will not involve any land acquisition nor involunysty resettlement. (vii) Other/ Monitoring

In addition to monitoring by departments specialized in medical waste disposal at each hospital, there will be regular inspections by the provincial and central governments to monitor water quality and medical wastes, etc.

# (b) Promotion of Poverty Reduction

The project will be implemented in an impoverished area. The consulting services will promote the implementation of the HCFP.

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

The staff at each hospital has received training in basic healthcare and preventative healthcare, including measures for infectious diseases and mother-child healthcare.

#### (7) Other Important Issues

- (a) Formation of the project was assisted by the Faculty of Medicine of Nagoya University in Japan.
- (b) The training to be provided in this project will be implemented using the technological guidance program for lower-level hospitals of Bach Mai Hospital by JICA. This project will have the effect of scaling up the current assistance by Japan's technical cooperation to a broader region.

#### **5. Outcome Targets**

(1) Evaluation Indicators (Operation and Effect Indicator)

Indicator	Baseline (2004)		Target (2012, 3 years after completion)
Average days of hospitalization (days)	Thai Nguyen	9.6	
	Lang Son	6.2	reduction by 20%
	Ha Tinh	9.0	
Number of referrals to advanced	Thai Nguyen	76	
hospitals (cases)	Lang Son	1,033	reduction by 20%
	Ha Tinh	658	
Number of surgeries (cases)	Thai Nguyen	5,057	
	Lang Son	2,470	increase by 10%
	Ha Tinh	2,898	

#### 6. External Risk Factors

None

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

In ex-post evaluations of similar projects in the healthcare sector in the past, it has been reported that, when selecting equipment and materials, (1) adequate consideration on necessity, capability to use, and capacity for operation and maintenance are needed at the time of preparing the equipment list, and (2) the training for operation and maintenance of the equipment and materials and for overall healthcare services should be provided simultaneously. Based on this, in the project, (1) the medical equipment and materials provided by the project will basically consist primarily of replacements for the aged equipment and materials currently in use at each hospital, and selections will be made with consideration for the role expected of each hospital, characteristics of ailments in the region, and the technological level and operation/maintenance capabilities of the hospital staff and doctors where the equipment and materials will be used and (2) selections will be made in coordination with training on operation and maintenance and on overall healthcare services.

## 8. Plans for Future Evaluation

- (1) Indicators for Future Evaluation
  - (a) Average days of hospitalization (days)
  - (b) Number of referrals to advanced hospitals (cases)
  - (c) Number of surgeries (cases)
- (2) Timing of Next Evaluation

After project completion