

Ex-ante Evaluation

1. Name of the Project

Country: The Republic of Indonesia

Project: Engineering Services for the Jakarta MRT System Project

(Loan Agreement: November 28, 2006, Loan Amount: 1,869 million yen, Borrower: The Republic of Indonesia)

2. Necessity and Relevance of JBIC's Assistance

According to the "Study on Integrated Transportation Master Plan for JABOTABEK, in the Republic of Indonesia" (JICA), the population of the Jakarta metropolitan area has climbed to 21 million, and accompanying this growth (3.7% from 1990 to 2000), which is particularly apparent in the adjacent environs of Jakarta (Bogor, Depok, Tangerang, and Bekasi), the volume of traffic flowing from these areas into the central area of Jakarta is steadily increasing. Transportation in the Jakarta metropolitan area relies heavily on the road transport (98%), and a surge in the number of vehicle registrations in the Jakarta metropolitan area (increase from about 3.05 million vehicles in 1998 to about 4.86 million vehicles in 2002) is causing concern over further congestion on the roads. It is estimated that the economic loss from traffic congestion will reach about 3 trillion rupiah (about 38 billion yen) in vehicle travel costs and about 2.5 trillion rupiah (about 31.6 billion yen) in lost time. Especially in the Sudirman street, which is a main street of Jakarta targeted at this project, despite implementing measures such as "the 3-in-1" policy (the restriction of automobiles carrying less than three passengers during morning and evening peak hour traffic) and establishing dedicated bus lanes, the management of traffic demand and promoting the transition to the use of public transportation are issues in need of urgent action to respond to the city's burgeoning traffic volume.

Indonesia's National Medium Term Development Plan (Rencana Pembangunan Jangka Menengah Nasional: RPJM) places importance on improving railway transport as one of the priority areas and cites the revitalization and construction of mass railway transport in the Jakarta metropolitan area as its program for achieving this goal. The urban plan of the DKI Jakarta Provincial Government also calls for the improvement of rail transport capacity through the construction of elevated railways and underground railroad systems.

Japan's "Assistance Plan for Indonesia" (November 2004) cites development of economic infrastructure as a priority area for promoting improvement in the investment climate and places emphasis on the necessity of the development of new infrastructure, especially in the transport sector, to alleviate the deterioration in traffic conditions and the distribution of goods affected by chronic traffic congestion resulting from traffic increases. Furthermore, in JBIC's Medium-term Strategy for Overseas Economic Cooperation Operations (April 2005), "basic infrastructure for sustainable growth" is cited as a priority area, and the establishment of an economic infrastructure in Indonesia is earmarked as a priority area for establishing a favorable investment climate.

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

3. Project Objectives

The project aims to increase passenger transport capacity in the Jakarta metropolitan area, where traffic congestion is serious, by constructing a mass rapid transit system (total length about 14.5km, hereafter "MRT") and to contribute to improvement of the investment climate of Java by alleviating traffic congestion in the Jakarta metropolitan area.

The loan will be for engineering services (E/S) to assist the preparation of the engineering design, tender procedure, and establishment of a MRT operating company, and these initiatives will lay the groundwork for the smooth implementation of the project.

4. Project Description

(1) Target Area: Jakarta metropolitan area

(2) Project Outline:

The following civil engineering and consulting services will be provided:

- (a) Railway construction: total length of about 14.5km (elevated railway: about 10.5km; subway: about 4.0km. Construction of elevated railway stations: 8; subway stations: 4)
- (b) Establishment of electricity and communication infrastructure
- (c) Procurement of rolling stock
- (d) Construction of depot
- (e) Consulting services (Engineering Design, assistance in the establishment and operation of a MRT operating company, tender assistance, construction supervision, etc.)

Among the services listed in item (e) above, the following will be implemented through the yen loan as engineering services in preparation of the projection implementation.

- a. Engineering Design: basic design of the elevated railway, subway, stations, depot, electrical equipment, as well as the rolling stock.
- b. Assistance for the establishment of a MRT operating company and assistance in its operation: assistance for the establishment of a MRT operating company (to be a regionally owned company in which the DKI Jakarta Provincial Government will be the majority investor), assistance in preparing a financial plan, guidance in efficient management, etc.
- c. Tender assistance: assistance in preparation of the bidding documents and in bidding procedures for MRT construction

(3) Total Project Cost/Loan Amount

2,206 million yen (for the E/S portion of the loan only; Yen Loan Amount: 1,869 million yen)

(4) Schedule

December 2006 - May 2010 (42 months)

(5) Implementation Structure

- (a) Borrower: The Republic of Indonesia
- (b) Executing Agency: Directorate General of Railways, Ministry of Transportation. However, at the time of construction, the executing agency will be DKI Jakarta Provincial Government.
- (c) Operation and Maintenance System:
At present a MRT operating company to implement the actual work under the jurisdiction of the

DKI Jakarta Provisional Government is being considered.

(6) Environmental and Social Considerations

(a) Environmental Effects/Land Acquisition and Resident Relocation

(i) Category: B

(ii) Reason for Categorization

This project is classified as Category B because the loan is for engineering services and, furthermore, the overall project does not come under Category C under the “Japan Bank for International Cooperation Guidelines for Confirmation and Environmental and Social Considerations” (April 2002).

(b) Promotion of Poverty Reduction: None.

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

Station facilities, etc., are to be barrier-free facilities.

(7) Other Important Issues

An advisory committee, consisting of both Indonesian and Japanese experts, will be organized to provide technical and intellectual support in the implementation of this project.

5. Outcome Targets

(1) Evaluation Indicators (Operation and Effect Indicator)

To be established at the time of the project implementation.

(2) Internal Rate of Return (Financial and Economic Internal Rate of Return)

To be established at the time of the project implementation.

6. External Risk Factors

None.

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

In the ex-post evaluations of railway projects in Indonesia in the past, among the outstanding issues indicated in the management of railways were: the ill-defined systematic framework; weakness in coordination with urban planning in areas such as access to train stations and development of areas at the front of train stations; securing the minimum profit for sustainable and independent development; and the need not only for yen loans but also for technical assistance from the perspective of improving profitability and organizational management.

Furthermore, in the ex-post evaluations of a subway project in another country, it was learned that appropriate coordination among public transport operation organizations is absolutely essential for improving the utilization of subways and, in cases requiring the coordination of many relevant organizations, a commitment by the relevant organizations is essential for the efficient implementation of the project.

Taking into account the lessons mentioned above, JBIC undertook an investigative study of the Greater Metropolitan Jakarta Transport Policy Project and considered transport system measures for complementing the MRT. Special assistance in project formation (SAPROF) was also provided and, currently, development of means of access to train stations, improvement of train stations, and the

introduction of an integrated fare system between bus services and existing train systems are being considered as measures for boosting demand and increasing revenue for the sustainable and independent development of this project. Furthermore, the DKI Jakarta Provincial Government announced that it would implement these measures during the implementation of this project.

In SAPROF, mentioned above, JBIC provided assistance in promoting the drawing up of an agreement among the various stakeholders. Since it was learned from past experience that consultation with residents targeted for relocation should commence at an early stage in the project under the initiatives of relevant organizations, open consultation with residents who will be affected by the project were held on several occasions during the stage prior to the EIA approval for this project.

8. Plans for Future Evaluation

(1) Indicators for Future Evaluation

To be established at the time of the project implementation.

(2) Timing of Next Evaluation

After the completion of this project.