## **JBIC Ex-post Monitoring Report**

Project Name: Thailand "Sattahip - Map Ta Phut Railway Project"

## [Outline of Loan Agreement]

Loan Amount/Loan Disbursed Amount	: 3,002 million yen/2,826 million yen
Signing of Loan Agreement	: September 1988
Final Disbursement Date	: January 1997
Ex-post Evaluation	: 1998
Executing Agency	: State Railway of Thailand

## [Project Objective] (Field Survey : January 2005)

This project was to construct a railway line for freight transportation and associated facilities between Map Ta Phut and Sattahip on the Eastern Seaboard located southeast of Bangkok in order to accommodate the demand for freight transportation to and from Map Ta Phut Industrial Port and Industrial Estate and thereby contribute to the development of the Eastern Seaboard.

Outline of Results] Item	Ex-post Evaluation	Ex-post Monitoring
	Ex-post Evaluation	
[Effectiveness and Impact] (1) Satisfaction of the demand for freight transportation between Sattahip and Map Ta Phut	<ul> <li>(1) The volume of freight transport is approximately 421 thousand tons, only 10% of the target volume of 4 million tons. The main item of freight is petroleum. Factors behind the lower transport volume than estimated are as follows (breakdown of the unachieved 90% of the target):</li> <li>As for 50% of the portion (mineral resources and agricultural products), transportation is not carried out (the mineral resources (mainly potash used for fertilizers, etc.) development project has yet to be implemented and agricultural products are handled at the Bangkok Port).</li> <li>As for the other 40% (petroleum, LPG and industrial products), the transportation demand is met by other modes of transportation (truck, etc.)</li> </ul>	(1) The volume of freight transport increased to 925 thousand tons in 2003 (nearly a 2.2 fold increase from 1 most of the industrial products manufactured in Map Ta Phut Industrial Estate are still transported by truck parailroad transportation capacity between Siracha - Chachoengsao is full. Truck transportation is more efficient and time than railway transportation, which requires loading and unloading twice. Of the increasing transport thousand tons), other items than petroleum, transport of cold-rolled steel sheet is increasing. $\frac{\text{Item}  1997  1998  1999  2000  2001  2002  2003}{\text{Volume of freight transport}  217  421  554  664  765  928  925}$
(2) Regional development through the construction of a railway network on the Eastern Seaboard	(2) Development of the railway network on the Eastern Seaboard (including the implementation of other railway projects) contributed to the industrial development of the region.	(2) GRDP (gross regional domestic product) of Rayong Province (Eastern Seaboard) has increased by around (206.1 billion bahts for 1998 and 319.3 billion bahts for 2003), and the gross product per capita is more national average (GDP of Thailand: 4.63 trillion bahts for 1998 and 5.94 trillion bahts for 2003).
[Sustainability] (1) Technical Capacity, O&M System and Financial Status	(1) Facilities of the State Railway of Thailand (SRT, a state enterprise under the Ministry of Transport) are generally decrepit, and the continuing operating deficit causes financial deterioration. Since SRT's operation is supported by a government subsidy, improvement of SRT's financial condition and business management is necessary for the reduction of the financial burden on the Thai Government.	the Civil Engineering Department and 83 staff members are assigned to Mechanic Department. SRT est Maintenance Section and Signal and Communication Maintenance Center at each branch office f
(2) O&M Status	(2) SRT has 81 years experience in railway operation and has well-established guidelines and manuals for the maintenance and inspection of tracks, signaling system, and communication equipment. Therefore, there is no problem with the operation and maintenance of the facilities constructed under the project.	(2) There is no problem with the operation and maintenance of the tracks or with associated facilities construction project.
	(1) None. (As the ex-post evaluation was conducted as program evaluation, no particular project base lessons learned or recommendation is made.)	
(2) Lessons learned in the ex-post monitoring and recommendations for maintaining sustainability		(2): SRT is trying to improve the transportation volume of this line by doing marketing to industries in Maptaph been approached by several companies. However, it is hindered by the issue of transportation capacity of especially in between Siracha - Chachoengsao. It is suggested that SRT make progress the double tracking of rid of the bottleneck of transportation.

m 1998). However, a partly because the ent in terms of cost nsport volume (925

nd 10% every year ore than double the

bers are assigned to established a Track for maintenance the line.

004, it recorded an is working on such on demand (around e establishment of ment improvement

nstructed under the

taphut area and has y of northern lines g of this part to get