Ex-ante Evaluation

1. Name of the Project

Country: India
Project: Visakhapatnam Port Expansion Project (E/S)
(Loan Agreement: 03/31/2006; Loan Amount: 161 million yen; Borrower: The President of India

2. Necessity and Relevance of JBIC's Assistance

The cargo volume handled by Indian ports has displayed rapid growth in recent years due to the country's open-door policy. However, the ports' overall operational efficiency remains low due to lack of expansion projects because each Port Trust has insufficient funds, low cargo handling capacity due to aging facilities, low worker productivity, and the low level of service, etc. Another issue is the fact that the number of berths, berth extensions, water depth, etc., is small scale compared to major ports of other countries, even though the size and number of ships including container ships and freighters in port are increasing.

In India's 10th 5-Year Plan (April 2002 – March 2007), it is planned to boost the cargo handling capacity of India's 13 major ports from 344.4 million tons as of the end of FY2002 to 455.6 million tons. The Plan also proclaims the need for strengthening of the ports' cargo handling capacity and improvement in the level of service. Moreover, in July 2005 the National Maritime Development Programme was drawn up for the purpose of promoting investment in port projects and improving the level of service as well as boosting competitiveness of the ports, and this project is designated as a candidate for development.

In JBIC's current Medium-Term Strategy for Overseas Economic Cooperation Operations, a priority sector in assistance to India is "Economic Infrastructure Development". The assistance to this project conforms to the strategy.

Visakhapatnam Port is one of 13 major ports in India and handled 50.1 million tons of cargo in FY2004. Of that, iron ore accounts for 16.5 million tons (outer harbor, 14.2 million tons; inner harbor, 2.3 million tons). The port is an important shipping port including exports of high quality iron ore from the Bailadila Mine (30.7% of which is shipped to Japan). The amount of iron ore handled by the outer harbor in FY2004 was 14.2 million tons; this is planned to reach 19 million tons in FY2012, and for that, larger ships will have to enter the port. Consequently, it is necessary to implement a port expansion project immediately for the long-term stability and efficiency of iron ore exports henceforth, and so JBIC's assistance in this project is highly necessary and highly relevant.

3. Project Objectives

The objective of this project is to increase transport capacity and enhance transport efficiency by upgrading the existing iron ore handling facilities at the Port of Visakhapatnam in the State of Andhra Pradesh in southern India, and thereby contribute to the economic development of the country by expanding export amount of iron ore, etc.

4. Project Description

(1) Target Area
State of Andhra Pradesh

(2) Project Outline

Civil works and procurement of goods and materials, etc., will be carried out as follows for the improvement of capacity and efficiency for iron ore transport.

(a) Civil engineering works (improvement of stockpile foundation)

(b) Marine works (berth expansion, dredging of ship channels and moorings)

(c) Equipment procurement (ship loader, reclaimer, stacker, belt conveyor system)

(d) Consulting services

Of the above, this E/S loan is for consulting services involved in investigation works, detailed design, and support for preparation of tender documents.

(3) Total Project Cost/Loan Amount

198 million yen (this E/S portion only) (Yen Loan Amount: 161 million yen)

(4) Schedule

January 2006 – August 2007 (20 months)

(5) Implementation Structure

(a) Borrower: The President of India

(b) Executing Agency: Visakhapatnam Port Trust (VPT)

(c) Operation and Maintenance System: Same as (b)

(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 an engineering service loan and because the overall project is not in Category C, according to the "Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations" (established April 2002).

(b) Promotion of Poverty Reduction

None

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

None

(7) Other Important Issues

None

5. Outcome Targets

In the case that the project (civil works and procurement of goods and materials, etc.) is implemented after the completion of this engineering service, the following indicators are monitored and evaluated.

(1) Evaluation Indicators (Operation and Effect Indicator)

Indicator	Baseline (2005)	Target (2012, 2 years after completion)
Total Cargoes (million tons/year)	14.2	19.0
Number of Vessels (ships/year)	237	218
Total Gross Tonnage (million GT/year)	9.18	12.37
Berth Occupancy Ratio (%)	65	72.9
Max. Dead Weight Tonnage (DWT)	154,249	200,000

(2) Financial Internal Rate of Return (FIRR): 10.3%

(a) Cost: Project cost, operation and maintenance expense

(b) Benefit: Income from port usage charges

(c) Project Life: 25 years

6. External Risk Factors

There are no external risk factors in the implementation of the engineering service.

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

In the ex-post evaluation of similar projects in the past, it has been learned that it is important to check demand forecasts and future plans, etc., for peripheral projects that may affect the scale of port expansion project. In the implementation of this engineering service, in addition to making an iron ore demand forecast, the mining capacity of the iron ore and the transport capacity of railroad to the port will be reconfirmed, and the project plan will be adjusted as necessary.

8. Plans for Future Evaluation

(1) Indicators for Future Evaluation

(a) Total Cargoes (million tons/year)

(b) Number of Vessels (ships/year)

(c) Total Gross Tonnage (million GT/year)

(d) Berth Occupancy Ratio (%)

(e) Max. Dead Weight Tonnage (DWT)

(f) Financial internal rate of return (FIRR) (%)

(2) Timing of Next Evaluation

After completion of the project