

Ex-Ante Evaluation (for Japanese ODA Loan)

1. Name of the Project

Country : Kingdom of Cambodia

Project : Sihanoukville Port Multipurpose Terminal Development Project

Loan Agreement : August 21, 2009

Loan Amount : 7,176 million Yen

Borrower : The Royal Government of Cambodia

2. Background and Necessity of the Project

(1) Current State and Issues of the Port Sector in Cambodia

Cambodia has two major international ports, Sihanoukville Port facing the Gulf of Thailand and Phnom Penh Port located at the mouth of the Mekong River in Phnom Penh. Due to the limited capacity of Phnom Penh Port as a river port, most cargos carried by large vessels and container ships are handled at Sihanoukville port, the only deep sea port in Cambodia. Supported by the steady economic growth of Cambodia, the amount of containerized cargo handled at Sihanoukville Port has been growing at an annual rate of approximately 10%. Japan has provided continuous assistances to enhance the cargo handling capacity of Sihanoukville Port through the infrastructure development and the operation improvement since the Port has played a key role in the development of Sihanoukville as a coastal industrial area and the development of Cambodia.

Meanwhile, a present bulk and general cargo terminal of Sihanoukville Port can not cope with the new demand for the export of wood chips that several companies are now preparing to start the production and increasing demand for bulk and general cargos such as coals, food, etc. lead by the economic growth of Cambodia. Furthermore, oil and gas reserves were recently located near Sihanoukville Port and oil companies are currently exploring these reserves. In order to support the full-scale production of oil and gas, construction of an oil supply base at Sihanoukville Port is urgently required. Therefore, the construction of a new multipurpose terminal at Sihanoukville Port is essential.

(2) Development Policies for the Port Sector in Cambodia and the Priority of the Project

In the National Strategic Development Plan 2006-2010 (NSDP) established in May 2006, the Royal Government of Cambodia (RGC) stated that trade promotion, distribution improvement and market integration are of significant importance for the economic growth and the poverty reduction in Cambodia, so that RGC would focus on the infrastructure development and improvement which support trade, distribution and business activities. In addition, RGC also recognized that the development of oil and

gas reserves would bring vast benefits to the economy of Cambodia and RGC stated to aim at developing the adequate system to utilize such benefits effectively. In the Transport Sector Strategy Study (2002), a master plan established by the Ministry of Public Works and Transport with support from ADB, securing competitive markets, a thrifty transport fee structure, and an investment criteria for transport sector are set as priority areas. Master Planning and Feasibility Study of the Sihanoukville Port and The Study on Master Plan for Maritime and Port Sector in Cambodia, both supported by JICA, pointed out the necessity of the construction of Sihanoukville Port Multipurpose Terminal.

(3) Japan and JICA's Policy and Operations in the Transport Sector

Japan's Country Assistance Program for Cambodia raises the port sector as one of the important social and economic infrastructure and this project is consistent with the Program which aims to facilitate the internationalization and the economic growth of Cambodia. In response to the Program, JICA set the realization of sustainable growth and stable society as a priority area for JICA's cooperation and will continue to support the economic infrastructure development to strengthen the basis for economic growth. Assistance for the port sector is set in Program for Improving Main Economic Infrastructure and this project will be executed as a part of the program.

Japan has provided continuous assistances to Sihanoukville Port through various schemes. The Port Master Plan was established in the Master Planning and Feasibility Study of the Sihanoukville Port (1997). Along with the master plan, the construction of container terminal was supported by Japanese ODA loan for Sihanoukville Port Urgent Rehabilitation Project (1999) and Sihanoukville Port Urgent Expansion Project (2004), the improvement of container terminal operation was supported by the technical cooperation project, The Project for Strengthening Port Operation and Management (2007-2009), and the port security facilities were developed with grant aid for the project for the Improvement of Security Facilities and Equipment in main International Ports (2006).

(4) Other Donors' Activity

There is no direct assistance for Sihanoukville Port from other donors. The railway between Phnom Penh and Sihanoukville is planned to be developed by the Railway Rehabilitation Project supported by Asian Development Bank.

(5) Necessity of the Project

This Project contributes to the improvement of the cargo handling capacity of Sihanoukville Port and the industrial development in Cambodia through the construction of multipurpose terminal, and is consistent with Japan and JICA's priority areas. For these reasons, JICA's support for this project is highly necessary and

relevant.

3. Project Description

(1) Project Objective

The Objective of the Project is to improve the capacity of Sihanoukville port, the only international deep sea port in Cambodia, by constructing multipurpose terminal including bulk terminal and oil supply base and developing infrastructure related to the terminal at the port, thereby contributing to industrial development and also economic growth in Cambodia.

(2) Project Site/Target Area

Sihanoukville, Cambodia

(3) Project Component(s)

- 1) Construction of multipurpose terminal
- 2) Dredging
- 3) Procurement of cargo handling equipment (tug boat)
- 4) Consulting Services (Detailed Design (D/D), tender assistance and construction supervision)

(4) Estimated Project Cost (Loan Amount)

8,507 million Yen (Loan Amount : 7,176million Yen)

(5) Schedule

Scheduled from August 2009 to July 2014 (60 months in total)

Project completion is defined as the completion of the all civil works.

(6) Project Implementation Structure

- 1) Borrower : The Royal Government of Cambodia
- 2) Guarantor : None
- 3) Executing Agency : Port Authority of Sihanoukville
- 4) Operation and Maintenance System :

The bulk terminal will be operated by the Port Authority of Sihanoukville, and the oil supply base will be jointly operated by the Port Authority of Sihanoukville and private company.

(7) Environmental and Social Consideration/Poverty Reduction/Social Development

1) Environmental and Social Consideration

① Category : A

② Reason for Categorization : This project is categorized into Category A since it falls into the port 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 Considerations” (established in April 2002)

- ③ Environmental Permit : The Environmental Impact Assessment Report regarding this project was approved on November 28, 2008 by the Ministry of Environment in Cambodia.
- ④ Anti-Pollution Measures : Dredged soil is to be disposed of at the existing offshore disposal station which still has sufficient capacity, and sewage water and wastes produced from the Port and coal storage are to be processed in compliance with the domestic criteria. Therefore, there are no negative impacts predicted.
- ⑤ Natural Environment : The target area of the Project is not located in an area where it can be easily effected, nor in the surrounding area thereof, such as in national parks, etc. Therefore, it is likely to have minimum impact the natural environment.
- ⑥ Social Environment : The target area of the Project is inside of the existing port, therefore, land acquisition and resident transfer are not required.
- ⑦ Other / Monitoring : The executing agency shall monitor the air and water qualities.

2) Promotion of Poverty Reduction : None

3) Promotion of Social Development (e.g. Gender Perspective、Measure for Infectious Diseases Including HIV/AIDS、Participatory Development、Consideration for the Handicapped etc.): An executing agency places an obligation on construction companies to take measures against HIV/AIDS for construction workers through their contracts.

(8) Collaboration with Other Donors : None

(9) Other Important Issues : None

4. Targeted Outcomes

(1) Performance Indicators (Operation and Effect Indicator)

Indicator	Baseline (Actual Value in 2007)	Target (2016) 【Expected value 2 years after project completion】
Volume of Bulk/General Cargo (t)	193,572	1,122,000
Total Gross Tonnage (GT)	470,641	982,000
Berth Occupation Ratio (%)	56	54

Maximum Dead Weight Tonnage (DWT)	16,579	50,000
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Note: Volume of Bulk/General Cargo is the total amount of general and bulk cargos handled at Sihanoukville Port.

(2) Internal Rate of Return

Based on the conditions indicated below, the Economic Internal Rate of Return (EIRR) of the Project is 16.9%, and the Financial Internal Rate of Return (FIRR) is 7.8%.

【EIRR】

Cost : Project cost (excluding tax and duties), Operation and Maintenance costs

Benefit : Reduction of transportation cost

Project Life : 30 years

【FIRR】

Cost : Project cost, Operation and Maintenance costs

Benefit : Cargo handling fees, Oil Supply Base rental fees, etc.

Project Life : 30 years

5. External Factors and Risk Control

None

6. Lessons Learned from Past Projects

Ex-post evaluation for similar Japanese ODA loan projects in the past has shown the necessity of active assistances for conducting surveys and developing plans that contribute to the improvement of operation efficiency including the terminal operation structure. Therefore, in this project, JICA will consider to support an executing agency through the dispatch of experts, if necessary.

Furthermore, it is suggested that JICA should consider (1) the continuous effort to collect information on plans and statuses of other closely related projects, and (2) prompt and flexible changes of the project plan for the achievement of project objectives and effects utilizing the contingencies, if necessary and valid. In regard to (1), JICA will continuously collect information on the Railway Rehabilitation Project supported by ADB, and to (2), JICA will check the status of project implementation with the Project Status Report submitted by an executing agency, on-site visits and at the time of other various opportunities, and will take the necessary measures through consultation with an executing agency.

7. Plan for Future Evaluation

(1) Indicators to be Used

1) Volume of Bulk/General Cargo (t)

- 2) Total Gross Tonnage (GT)
- 3) Berth Occupation Ratio (%)
- 4) Maximum Dead Weight Tonnage (DWT)
- 5) EIRR (%) and FIRR (%)

(2) Timing

2 years after the completion of the Project.