Ex-ante Evaluation

1. Name of the Project
Country : The Republic of Kenya
Project : Mombasa Port Development Project
(Loan Agreement: 11/20/2007, Loan Amount: 26,711 million yen, Borrower: Kenya Ports Authority: KPA)

2. Necessity and Relevance of JBIC’s Assistance
1. Current status and issues of the ports sector in the Republic of Kenya
The Port of Mombasa is the only international port in Kenya and the largest in East Africa, serving not only as the hub of imports and exports for Kenya, but also as the port for landlocked countries (Uganda, Burundi, and Rwanda etc). Container handling volume at the Port of Mombasa has doubled in the space of six years, from approximately 240,000 TEU in 2000 to approximately 480,000 TEU in 2006. The demand forecast indicates approximately 960,000 TEU in 2015, but as the current annual container handling capacity at the port is limited by 450,000 TEU., the port needs to improve facilities for larger size containership, accessibility to the port and operational efficiency. In order to respond to the rapid increase in container volume at the port, the Kenya Ports Authority (KPA), which is in charge of operations of the port, has introduced an IT system for customs operations and installed additional cargo handling equipment, but has not yet taken fundamental measures to respond to future increases in demand. For achievement of further economic development through the strengthening of economic competitiveness of Kenya and the East African region, development of a new container terminal, enhancement of container handling volume, and improvement in operational efficiency are urgent and essential.

2. Port sector policy in Kenya and the positioning of this project
Under the Investment Program for the Economic Recovery Strategy for Wealth and Employment Creation (2003-2007) (“IP-ERS”), the Government of Kenya (“GOK”) is undertaking further structural reforms in order to achieve poverty reduction through economic growth driven by infrastructure development. The acceleration of rehabilitation and expansion of infrastructure will be further emphasized in the new national development policy “Vision 2030,” which starts in January 2008. The development of the Mombasa Port is a one of national flagship projects under the Vision 2030. In this context, the project is recognized as one of the most important regional priority projects in Africa, which is certified by the New Partnership for Africa’s Development (“NEPAD”).

3. JBIC’s assistance strategy and track record in the ports sector
In the Medium-Term Strategy for Overseas Economic Cooperation Operations (FY2005-2007), JBIC regards “foundation for sustained growth” as a priority and emphasizes supporting the promotion of economic growth through socio-economic infrastructure development including transport improvement. The objective of the project is in line with “economic and social infrastructure development that benefits wide areas that stretch across national boundaries” which is one of prioritized areas for support in Sub-Saharan African countries. Thus, JBIC’s support of this project is highly necessary and relevant.

3. Project Objectives
The objective of this project is to enhance container handling capacity by constructing a new container terminal and providing new handling facilities at the Port of Mombasa, with a larger goal of facilitating trade and economic development in Kenya and neighboring countries in East Africa.
### 4. Project Description

(1) **Target Area**  
Mombasa Port, the Republic of Kenya

(2) **Project Outline**  
(a) Construction of a container terminal (depth: 15m and 11m; berth 17)  
(b) Procurement of cargo handling equipment (SSG cranes and RTG cranes)  
(c) Construction of an access road (approx. 1.6km)  
(d) Dredging works (dredging volume: approx. 3 million cubic meters)  
(e) Consulting services (detailed design, bidding assistance, construction supervision and assistance for selection of terminal operators, etc.)

(3) **Total Project Cost/ Loan Amount**  
34,800 million yen (Yen Loan Amount: 26,711 million yen)

(4) **Schedule**  
November 2007-November 2015 (97 months).

(5) **Implementation Structure**  
(a) Borrower: Kenya Ports Authority (KPA)  
(b) Executing Agency: Same as (a)  
(c) Guarantor: The Government of the Republic of Kenya  
(d) Operation and Maintenance System: Same as (a). Concession of terminal operation to private terminal operators is under consideration.

(6) **Environmental and Social Considerations**  
(a) **Environmental Effects/ Land Acquisition and Resident Relocation**  
   (i) Category: A  
   (ii) Reason for Categorization: This project falls into the port sector, has characteristics that are likely to exert an impact, and is located in a sensitive areas under the “Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations” (established in April 2002). Thus, this project is categorized as Category A.  
   (iii) Environmental Permit: The Environmental Impact Assessment (EIA) report for the project has been approved by the National Environment Management Authority (NEMA) of Kenya on May 28, 2007.  
   (iv) Anti-Pollution Measures: The quality of the water discharged from vessels port will be released into the sea in line with the country’s effluent standards, and no significant adverse impact is foreseen from the effluent.  
   (v) Natural Environment: The project will entail deforestation of approximately 200 mangrove trees. KPA is planning to reforest 2.5 hectares of mangrove forest near the project site. Furthermore, marine disposal of dredged soil will be conducted where the disposal will not exert a significant influence on coral reefs or other fragile organisms.  
   (vi) Social Environment: The project will require the resettlement of 15 households and an orphanage (22 people), which will be implemented in accordance with the Resettlement...
Action Plans by KPA. In addition, the fishermen (64 people) whose livelihoods will be affected by the project will obtain compensation through the provision of motorboats etc.

(vii) Other/ Monitoring: Environmental impacts regarding such items as air quality, water quality and resettlement will be monitored by the executing agency.

(b) Promotion of Poverty Reduction: None.

(c) Promotion of Social Development (e.g. Gender Perspective, countermeasures for infectious diseases such as AIDS, participatory development, consideration for disabled persons, etc.): The rate of adult HIV infection is 6.1% in Kenya overall (2005) and 12.3% in the target area for this project (2004), and construction work of the project is expected to increase HIV infection. The consulting service under the project includes implementation of the HIV prevention program by KPA for targeting stakeholders such as construction workers, KPA staff and local residents.

(7) Other Important Issues: None.

5. Outcome Targets

(1) Evaluation Indicators (Operation and Effect Indicator)

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<tr>
<th>Indicator</th>
<th>Baseline (Recorded in 2006)</th>
<th>Target (2017) (2 years after completion)</th>
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<tr>
<td>Container volume</td>
<td>480,000 TEU</td>
<td>990,000 TEU</td>
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<tr>
<td>Total tonnage of vessels entering port</td>
<td>9 million GT</td>
<td>15.43 million GT</td>
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<td>Annual containerization</td>
<td>62%</td>
<td>73%</td>
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<tr>
<td>Containership average waiting time</td>
<td>1.49 days/ship</td>
<td>1.0 days/ship</td>
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(2) Internal Rate of Return (Financial and Economic Internal Rate of Return)

Financial Internal Rate of Return (FIRR) : 8.5% (a) EIRR

(a) Cost: Project costs (tax excluded), operation and maintenance expense
(b) Benefit: Decrease in marine costs through enlargement of ship size, reduction in transportation costs through shortening berthing times and reduction in relevant costs through shortening dwell times.
(c) Project Life: 30 years from the start of construction

Economic Internal Rate of Return (EIRR): 12.2%.

(a) Cost: Project costs, operation and maintenance expenses
(b) Benefit: Income from port usage charges
(c) Project Life: 30 years from the start of construction

6. External Risk Factors

Reduction of cargo volume due to economic stagnation in Kenya, neighboring countries and trading partners.

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

The operation and management of the terminal constructed by the project will be commissioned to organizations (private terminal operators) other than the executing agency. By taking into consideration the lesson learned from the evaluation of past port projects, namely that “it is important for JBIC to positively support the survey and planning contributing to improvement of the operational efficiency, such as reviewing the operation scheme of the port terminals, etc.,” the
consulting service of the project includes assistance for selecting terminal operators.

### 8. Plans for Future Evaluation

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<tr>
<th>(1) Indicators for Future Evaluation</th>
<th>Same as 5. (1)</th>
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<tr>
<td>(2) Timing of Next Evaluation</td>
<td>Two years after project completion</td>
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