

**Ex-Ante Evaluation (for Japanese ODA Loan)**

**1. Name of the Project**

Country: The Republic of Kenya

Project: Mombasa Port Development Project Phase 2

Loan Agreement: March 9, 2015

Loan Amount: 32,116 million yen

Borrower: Kenya Ports Authority (KPA)

**2. Background and Necessity of the Project**

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

Mombasa Port is the only international trade port in Kenya. It is the largest port in East Africa and serves not only as a hub for imports and exports in Kenya, but also as a port for “land-locked” neighboring countries (Uganda, Rwanda, South Sudan, etc.). The volume of container cargo handled at Mombasa Port increased threefold, from 300,000 TEU in 2002 to 900,000 TEU in 2012. The demand for container-handling volume is expected to continue to increase, reaching more than 1.8 million TEU in 2020.

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

Kenya’s “Vision 2030”, which is the country’s new development strategy covering the period from 2008 to 2030 highlights the importance of infrastructure development, and one of the national government’s highest priority projects is the development of Mombasa Port. The development of new container terminals at Mombasa Port is also mentioned as being the highest priority in the Port Master Plan developed by the Kenya Ports Authority (hereinafter referred to as “KPA”). In order to cope with a rapid increase in the volume of container cargo handled at the port, JICA provided a yen loan (signed in November 2007) for the Mombasa Port Development Project (hereinafter referred to as the “Phase 1 project”), and a new container terminal will be completed in 2016. After the Phase 1 project is completed, Mombasa Port will have a container-handling capacity of 1.3 million TEU. However, the total capacity, which includes the additional capacity resulting from the operation improvement, will not be able to cover the demand in 2018, raising concerns over a possible disruption of cargo flow. There is an urgent need to further promote the development of container terminals at Mombasa Port and to enhance its container-handling capacity for the sustained economic development of East Africa. Therefore, there is an urgent, high-priority need to implement the Mombasa Port Development Project Phase 2 (hereinafter referred to as “the project”) along with the Phase 1 project.

(3) Japan and JICA’s Policy and Operations in the Port Sector

Japan's Country Assistance Program for Kenya sets forth "Economic Infrastructure" as a priority area (April 2012), and at the Fifth Tokyo International Conference on African Development (TICAD V) the Government of Japan proposed an assistance policy designed to support the development of five major economic corridors. Mombasa Port is located at the entrance of the Northern Economic Corridor. In addition to the Phase 1 project, JICA has also supported the Project for Technical Cooperation to KPA on Dongo Kundu Port, Mombasa (2014 to 2015) to provide support for Kenya's port sector.

#### (4) Other Donors' Activities

The World Bank is implementing a program aimed at facilitating regional trade and improving transportation efficiency to enhance the integration of regional economies. Regarding the One-Stop Border Post (OSBP) for East Africa and the customs area, the World Bank, the African Development Bank and Trade Mark East Africa (TMEA; a non-profit organization organized and managed by funds provided by a total of eight donors, including the UK's Department for International Development (DFID), to facilitate regional trade) support the development of infrastructure facilities on each national border, while the World Bank, the United States, and TMEA also support capacity development. At Mombasa Port, the World Bank provides support for the operation and maintenance of port facilities, including the centralized management of various operational systems and customs offices. In addition, TMEA is also conducting a program to support capacity building of the KPA and promote efficiency of cargo handling operations.

#### (5) Necessity of the Project

The project is in line with the development agendas and policies set forth by the Government of Kenya as well as the cooperation policies of the Government of Japan and JICA. Therefore, the necessity and relevancy to implement of this project are high.

### **3. Project Description**

#### (1) Project Objective(s)

The objective of the project is to meet the increase in demand for cargo handling at Kenya's Mombasa Port, a logistics hub in East Africa, and to promote the efficient management of the port by constructing a container terminal and providing cargo-handling machines and other equipment, thereby contributing to the promotion of regional trade and the economic development of an entire region that includes Kenya and neighboring countries.

#### (2) Project Site/Target Area

Mombasa Port, Mombasa, the Republic of Kenya

#### (3) Project Component(s)

- 1) Construction of a container terminal
  - 2) Procurement of cargo-handling machines (gantry cranes, transfer cranes, etc.)
  - 3) Procurement of safety systems (including fences surrounding the container terminal)
  - 4) Consulting services: (i) detailed design, bidding assistance, construction supervision; (ii) assistance with the selection of a terminal operator, etc.
- (4) Estimated Project Cost (Loan Amount)  
41,860 million yen (Loan Amount: 32,116 million yen)
- (5) Schedule  
March 2015 to May 2021 (75 months in total); the project will be completed when facilities enter operation (May 2020).
- (6) Project Implementation Structure
- 1) Borrower: Kenya Ports Authority (KPA)
  - 2) Guarantor: The Government of the Republic of Kenya
  - 3) Executing Agency: KPA
  - 4) Operation and Maintenance System: KPA will invite a private operator to operate the container terminal under Concession Agreement between the operator and KPA through competitive bidding.
- (7) Environmental and Social Consideration/Poverty Reduction/Social Development
- 1) Environmental and Social Consideration
    - ① Category: B
    - ② Reason for Categorization: This project does not fall under the definition of a large-scale port sector project as per “Japan International Cooperation Agency Guidelines for Environmental and Social Considerations” (issued in April 2010), and it is unlikely to have a serious adverse impact on the environment. In addition, the targeted area does not have, nor is it expected to have, an environmental impact specified in the guidelines.
    - ③ Environmental Permit: The Environmental Impact Assessment (EIA) for the construction of the new container terminal was approved by Kenya’s National Environmental Management Authority (NEMA) on May 28, 2007. Addendum 2 to the EIA for the project was also approved in April 2014.
    - ④ Anti-Pollution Measures: KPA is scheduled to implement anti-pollution measures for land reclamation work, including building an additional sedimentation reservoir and installing silt curtains to reduce turbidity.
    - ⑤ Natural Environment: The project site is not located in or around sensitive areas such as national parks, and any adverse impact on the natural environment is assumed to be minimal.
    - ⑥ Social Environment: The land required for access roads has already been obtained in the Phase 1 project. Therefore, the project will not require resident relocation or land acquisition. In addition, KPA is continuing to consult with

fishermen living in neighboring areas and is scheduled to provide them with support, including the provision of fishing equipment and training.

- ⑦ Other / Monitoring: The executing agency is scheduled to monitor the quality of air, water and other elements during construction and operation of the facilities.
- 2) Promotion of Poverty Reduction: Employment will be generated from the construction, operation, management, and maintenance of facilities.
- 3) Promotion of Social Development (e.g. Gender Perspective, Measure for Infectious Diseases including HIV/AIDS, Participatory Development, Consideration for People with Disabilities, etc.): Appropriate measures will be taken to prevent HIV/AIDS.
- (8) Collaboration with Other Donors: TMEA is providing support for the institutional building and the improvement of cargo-handling operations through measures such as rehabilitating existing berths and negotiating with labor unions. In order to ensure the smooth implementation of the project, it is essential that the KPA managers and workers maintain a harmonious relationship with each other and that they work in unison to improve cargo-handling efficiency. The components of the project do not overlap with the work of TMEA.
- (9) Other Important Issues: Special Terms for Economic Partnership (STEP) is applied to the project, as was the case with the Phase 1 project (land reclamation on soft ground).

#### 4. Targeted Outcomes

##### (1) Quantitative Effects

##### 1) Performance Indicators (Operation and Effect Indicators)

Indicator	Baseline (recorded in 2012)	Target (2022) (2 years after completion)
Volume of container cargo handled annually (TEU/year)	903,000	2,019,000
Total tonnage of vessels entering the port (GRT/year)	10,350,000	16,821,000
Containership average waiting time (gross) (hours/ship)	8.16	3.84

##### 2) Internal Rate of Return

Based on the conditions indicated below, the Economic Internal Rate of Return (EIRR) for the project and the Financial Internal Rate of Return (FIRR) are calculated to be 12.2% and 7.0%, respectively.

##### [EIRR]

Cost: Construction costs (excluding tax) and operation and maintenance costs

Benefit: Reduction in ship freight resulting from an increase in the size of vessels; reduction in transportation costs resulting from the shortening of berthing time; and reduction in related costs resulting from the shortening of container retention time

Project life: 30 years after completion of construction

[FIRR]

Cost: Construction costs and operation and maintenance costs

Benefit: Cargo-handling fees, port utilization fees, and storage fees

Project life: 30 years after completion of construction

## (2) Qualitative Effects

The project is expected to have knock-on effects on the economic development of Kenya and neighboring countries as a result of an increase in the volume of cargo handled at Mombasa Port and improvements in port services.

## 5. External Factors and Risk Control

### (1) Assumption

Security conditions at the project site will not worsen.

### (2) External Factors

Decrease in the volume of cargo due to the economic situation in Kenya and neighboring countries

## 6. Lessons Learned from Past Projects

### (1) Evaluation Results for a Similar Project

The results of an evaluation of the Philippines Batangas Port Development Project Phase 2 indicate that the intended vessels' shift from existing ports to the target port did not proceed as planned. As a result, the operating rate of the new terminal fell short of the target set. It has been pointed out that one of the reasons for this failure was a delay in the selection of the port operator.

### (2) Lessons Learned from This Project

The operation and management of the container terminal to be constructed under the project is scheduled to be outsourced to a private sector operator, as was the case with the Phase 1 project. Supporting the selection of the operator will be included in the work of loan consultants so as to ensure that the operator is selected before completion of the civil engineering work and that the port management can be launched smoothly.

## 7. Plan for Future Evaluation

### (1) Indicators to Be Used

Same as 4. (1) 1)

### (2) Timing

Two years after project completion