

Ex-Ante Evaluation (for Japanese ODA Loan)**1. Name of the Project**

Country: Republic of Kenya

Project: Mombasa Port Area Road Development Project

Loan Agreement: June 2, 2012

Loan Amount: 27.691 billion yen

Borrower: The Government of the Republic of Kenya

2. Background and Necessity of the Project**(1) Current State and Issues of the Road Sector and the Mombasa Region in Kenya**

The largest international port in East Africa, the volume of cargo going through Mombasa Port has risen sharply in recent years, since it acts as a logistical hub not only for Kenya, but also for the distribution and transport route (Northern Corridor) of the East African Community (EAC). However, the lack of port facilities and infrastructure around the port hinders smooth logistics and distribution. In particular, although there is already serious traffic congestion on the road that connects Mombasa Port and the Northern Corridor, it is expected to worsen once the new container terminal currently under construction through a Japanese ODA loan is completed in 2016. In addition, since the only means of travelling from the central part of Mombasa (including the port) to the southern portion of the city is a ferry that crosses the strait, development in the southern part of the city, as well as the flow of goods toward Tanzania is obstructed. In order to improve physical distribution originating at Mombasa Port and to develop the region in a balanced manner, the construction of new routes to connect the new container terminal to the Northern Corridor and to the southern part of the city is a priority issue.

(2) Development Policies for the Road Sector and the Mombasa Region in Kenya and Priority of the Project

In Kenya's long-term development policy formulated in 2008 called Vision 2030, providing a high quality of life, the power to be globally competitive, and economic prosperity are set at national goals to be met by 2030. In the policy, the development of infrastructure is positioned as one of the pillars that form the foundation of the country. One of the goals described in the Road Sector Investment Program 2010 is the surfacing of all national and international roads with asphalt, with the Project listed as a priority project. Additionally, since there are roads targeted within the Project that connect to neighboring countries, the necessity of the Project is high for EAC countries as well. In the Vision 2030 First Medium Term Plan 2008-2012, a concept has been included for constructing a free trade port in the southern portion of the city, an area through which the roads for the Project will pass. (The Master Plan is currently being formulated.) Implementation of the Project will promote the realization of this concept, and is expected to revitalize the region and provide growth to the overall economy of Kenya.

(3) Japan and JICA's Policy and Operations in the Road Sector and the Mombasa Region

In the Rolling Plan for the Republic of Kenya, the development issue of Transport Infrastructure Development is laid out within the priority area of Economic Infrastructure Development. For this, the Program on Improvement of Regional Transport Infrastructure aims to revitalize Kenya and the entire region of East Africa by supporting the

construction of international corridor infrastructure. The Mombasa Port Development Project, a Japanese ODA loan approved in FY 2007, was positioned under this program with the aim of creating an environment in which the port's function as a distribution hub can be optimally utilized. The development of regional transport infrastructure was also emphasized in the Yokohama Declaration, which was presented at the Fourth Tokyo International Conference on African Development (TICAD IV). In addition to the development of transport infrastructure, JICA provides technical assistance for strengthening cross-border customs administration, as well as support for revitalizing distribution not only for Kenya, but also for East Africa as a whole.

(4) Other Donors' Activities

The World Bank is currently conducting the Transport Sector Support Project, which includes a F/S (completed in February 2011) pertaining to the road network in the entire Mombasa area, including sections targeted for the Project. Additionally, World Bank and the African Development Bank are providing assistance from 2007 to 2014 to facilitate distribution on the Northern Corridor as a part of the East Africa Trade and Transport Facilitation Project.

(5) Necessity of the Project

The stagnation of distribution caused by a lack of infrastructure at Mombasa Port and its surrounding roads hinders economic growth for Kenya, as well as the inland countries of East Africa. Thus, facilitating smooth distribution by developing infrastructure is an urgent issue. By building a road network around Mombasa Port, the Project will promote smooth distribution to areas within Kenya, as well as East African nations, which is expected to contribute to the economic growth of Kenya. As this is in line with the development issues and policies of Kenya, as well as Japanese and JICA assistance policies, the necessity and relevance of JICA's support of the Project are high.

3. Project Description

(1) Project Objectives

The objective of the Project is to facilitate distribution centered at Mombasa Port by constructing roads connecting the new container terminal to the Northern Corridor and a bypass road to the southern coast of Mombasa in Kenya's Mombasa Port area, which is a distribution hub for East Africa, thereby contributing to the economic and social development of the entire region, including both Kenya and its neighboring countries.

(2) Project Site/Target Area

Mombasa City, Coast Province, Kenya

(3) Project Components

- 1) Construction of roads (approx. 26 km; includes two long-span bridges and one viaduct (International Competitive Bidding))
- 2) Consulting services (Detailed design, bidding assistance, construction management) (Shortlist)

(4) Estimated Project Cost

38.845 billion yen (Loan Amount: 27.691 billion yen)

(5) Schedule

From June 2012 to August 2020 (total of 99 months). Project completion is defined as the commencement of

service (August 2018).

(6) Project Implementation Structure

- 1) Borrower: The Government of the Republic of Kenya
- 2) Executing Agency: Kenya National Highways Authority (KeNHA)
- 3) Operation and Maintenance System: Executing Agency is responsible for supervision of O&M.

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

1) Environmental and Social Consideration

- ① Category: A
 - ② Reason for Categorization: The Project is located in a sensitive area, has sensitive characteristics, and falls into a sensitive sectors as specified in the JBIC Guidelines for Confirmation of Environmental and Social Considerations (April 2002).
 - ③ Environmental Permit: The Project's Environmental Impact Assessment (EIA) report was created in October 2010, and approved by the National Environment Management Authority (NEMA) in November 2011.
 - ④ Anti-Pollution Measures: During construction work, Kenyan laws and regulations on pollution, etc. will be observed and mitigation measures will be taken.
 - ⑤ Natural Environment: 18,000 m² of mangrove forest is scheduled to be cut down, but no rare species have been found to inhabit the mangrove wetlands or tidelands. The use of work methods that minimize the number of trees cut down and the impact on the tideland ecosystem are planned to be applied. Also, since mangrove reforestation is planned after completion of the Project, a significant adverse impact on the natural environment is not expected.
 - ⑥ Social Environment: The Project will require the acquisition of approximately 270 ha of land and resettlement of 445 residents. Resettlement and compensation procedures are being conducted by the Executing Agency following a Resettlement Action Plan (RAP) formulated in accordance with Kenyan laws and JBIC guidelines.
 - ⑦ Other/Monitoring: The Executing Agency will conduct monitoring on land acquisition/ involuntary resettlement, ecosystems, air quality, noise/vibration, and water quality (within the bay and groundwater) during the construction period. Once the facilities are in service, the Executing Agency will conduct monitoring on the growth conditions of reforested mangrove, surrounding ecosystems, air quality, noise/vibration, and water quality within the bay.
- 2) Promotion of Poverty Reduction: Creation of jobs in construction, as well as in the operation, maintenance, and management of the facilities.
 - 3) Promotion of Social Development: The Executing Agency will request contractors to implement HIV/AIDS countermeasures for construction workers and surrounding residents.

(8) Collaboration with Other Donors

The World Bank has implemented a F/S for regional Mombasa roads, including those covered by the Project, and is studying the possibilities of road construction in other sections as well.

(9) Other Important Issues

- 1) A synergistic effect with the Mombasa Port Development Project currently being implemented with a Japanese ODA loan is expected.
- 2) The Executing Agency for the Project is KeNHA, which JICA has been assisting in capacity building in the technical cooperation project entitled the Project for the Strengthening of Capacity on Roads Maintenance Management through Contracting. The standard bidding documents for term-contracts for road operation and maintenance that were formulated through this technical cooperation project will continue to be used.
- 3) Through the technical cooperation project entitled the Project on Capacity Building for the Customs Administrations of the Eastern African Region, the regional transport network will continue to be facilitated.
- 4) These roads are not toll roads.

4. Target Outcomes

(1) Quantitative Effects

1) Performance Indicators (Operation and Effect Indicators)

Indicator		Baseline (Actual value in 2011)	Target (2020) (Expected value 2 years after project completion)
Passenger Car Unit (PCU) (No. of cars)	Miritini - Mwache	-	22,000
	Mwache - Kipevu	-	28,200
	Mwache - Mteza	-	9,400
	Mteza - Kibundani	-	9,400
Average travel time (minutes)	Miritini - Kibundani	70.5	17.0
	Likoni - Miritini	64.1	24.6
Average degree of traffic congestion (V/C ratio)	Port Reitz Road	0.83	0.62
	Changamwe Roundabout	1.11	0.35

2) Internal Rate of Return

Based on the conditions indicated below, the Economic Internal Rate of Return (EIRR) has been calculated as 20.05%.

- Cost: Construction cost (excluding tax), operation and maintenance cost
- Benefit: Reduction of average travel time, reduction in driving costs, and a decrease in the number of traffic accidents.
- Project Life: 30 years

(2) Qualitative Effects

- 1) Improvement of the investment and living environments in Kenya through the development of infrastructure in the area surrounding Mombasa Port
- 2) Creation of jobs for local residents during the construction period
- 3) Development of industrial areas (Dongo Kundu Area) and promotion of tourist area development in the Mombasa southern coastal region
- 4) Economic and social development for the entire region including Kenya and its neighboring countries

5. External Factors and Risk Control

Government administration capacity will not be diminished with the 2012 (or 2013) presidential election and general election.

6. Lessons Learned from Past Projects

(1) Results of Evaluation of Similar Past Projects

From the ex-post evaluations of similar past projects in the road sector, it was learned that since more time than expected is needed for land acquisition and resident resettlements, delays in the progress of projects have been experienced. Therefore, it is important to inform residents and stakeholders of the Project, and hold consultations with them before the Project is executed.

(2) Lessons for the Project

This Project is also a road sector project that includes plans for land acquisition and resettlements. Based on evaluation results of similar projects, information has been disclosed and consultations with residents have already been conducted at stakeholder meetings. However, taking into the consideration the implementation status of the RAP, cautious monitoring is necessary.

7. Plan for Future Evaluation

(1) Indicators to be Used

- 1) Passenger Car Unit (PCU) (No. of cars)
- 2) Average travel time (minutes)
- 3) Average degree of traffic congestion (V/C ratio)
- 4) Economic Internal Rate of Return (EIRR) (%)

(2) Timing of the Next Evaluation

Two years after project completion