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

# 1. Name of the Project

Country: Republic of Uganda

Project: The Construction of a New Bridge Across River Nile at Jinja Project

Loan Agreement: November 1, 2010 Loan Amount: 9,198 million yen

Borrower: The Government of the Republic of Uganda

# 2. Background and Necessity of the Project

# (1) Current State and Issues of the Road Sector in the Republic of Uganda

The Republic of Uganda (hereinafter called Uganda) relies on roads for over 90% of its freight and passenger transportation due to the undeveloped railway transportation system. The number of vehicles registered more than doubled in the period from FY 2001/2002 to FY 2008/2009. The traffic volume has increased by about 10% per year during the same time period. However, paved national roads only account for about 27% of all the national roads (about 10,800 km) and most of the other roads (such as district roads) are also unpaved. In addition, road maintenance is insufficient because of a lack of budget in comparison with the increase in traffic volume. In response to the situation, the Ugandan government established the Uganda Road Fund in August 2008 and also secured 102 million US dollars for road maintenance costs in FY 2010/2011, in order to improve the situation.

Uganda is promoting regional integration by promoting trade within Africa and conducting economic cooperation as a member of the East Africa Community (EAC) and the Common Market for Eastern and Southern Africa (COMESA). Customs unions of member countries have already been established for both EAC and COMESA and trade activity within the region is expected to increase in the future. Therefore, strengthening the road networks within the region is recognized as a regional issue.

### (2) Development Policies for the Road Sector in Uganda and the Priority of the Project

The Ugandan government formulated the National Development Plan in 2010. The plan was formulated under the theme of "Growth, Employment and Socio-Economic Transformation for Prosperity" and it focuses on "improving both the quantity and quality of economic infrastructures" as one of the policies to stop being a low income country within 30 years.

Based on the idea that the improvement of economic and social infrastructure is essential to improve economic operations and to improve production, competitiveness and income, the Ugandan government formulated the National Transport Master Plan (NTMP) in 2008. The plan sets forth the important issues in each sub-sector including roads, railways, aviation and water transport as well as setting forth long-term strategies such as investment plans up to 2023, based on the assessment results for the transport sector, demographics and economic growth forecasts. The project is stipulated as a priority project in the NTMP.

With regard to the road sector, the Ugandan government formulated the Second 10 Year Road Sector Development Program (RSDP2) in 2002 and it has worked for the improvement of road systems and policies by developing road networks in the country as well as working on

capacity building at relevant agencies. Later, based on the results of the medium-term evaluation, etc., the government decided that amendments to the plan were needed in order to make the plan more feasible. Therefore, preparations are currently underway to shift from the RSDP2 to the RSDP3 without waiting for the 10-year program to be completed.

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

"Boosting economic growth" was included in the priority fields in the Yokohama Action Plan which was adopted at the Fourth Tokyo International Conference on African Development (TICAD IV) in May 2008. The plan focuses on the development of economic and social infrastructure which benefits areas transcending national borders as well as developing the private sector and the agricultural sector, as specific sectors to be supported. The project meets the support policy stipulated in the plan. As assistance for the road sector in Uganda, Japan also supported the development study for the project, the "Feasibility Study on the Construction of a New Bridge Across River Nile at Jinja." It is also supporting the loan aid project, the "Upgrading of Atiak-Nimule Road Project" (the loan amount: 3,395 million yen, the signing of the loan agreement: March 2010), which is a co-financing project with the World Bank.

## (4) Other Donors' Activity

The road sector is one of the priority sectors for the National Development Plan of Uganda. In order to implement the NTMP and the RSDP, which are the detailed development plans for implementing the National Development Plan, various donors are providing assistance including the World Bank, the African Development Bank and the EU.

### (5) Necessity of the Project

Situated inland in East Africa, Uganda has to conduct importing and exporting activities via ports in neighboring countries. It primarily uses Kenya's Port of Mombasa, and the Northern Corridor is extremely important for Uganda's logistics, as it extends from Kampala (the Ugandan Capital) to the Port of Mombasa. The existing Nalubaale Bridge is used for crossing the Nile River in the Jinja District which is situated about 80 km east of Kampala. While Nalubaale Bridge was constructed in 1954 on top of the Owen Falls Dam, it has become a traffic bottleneck due to its deteriorated condition, the narrowness of the lanes and other factors. The volume of traffic in the area is predicted to increase in the future. The construction of a new bridge by the project will ensure a smooth and safe distribution route along the Northern Corridor and in turn contribute to economic growth in Uganda. Furthermore, the implementation of the project will benefit neighboring inland countries including the Republic of Rwanda, the Republic of Burundi and the Democratic Republic of the Congo, through the invigoration of distribution activities along the Northern Corridor.

### 3. Project Description

### (1) Project Objective

The project is to construct a new bridge along with access roads across the Nile River in Jinja District. The Nile flows through the Northern Corridor, which extends from the Port of Mombasa in the Republic of Kenya to the Ugandan Capital Kampala. The objectives of the project are to strengthen the transportation capacity and reliability of the Northern Corridor in

Uganda, thereby contributing to the revitalization of the regional economy, the economic growth of Uganda and economic integration with neighboring states.

# (2) Project Site/Target Area

Jinja District in Uganda

- (3) Project Components
- 1) Construction of a prestressed concrete cable-stayed bridge (525 m)
- 2) Construction of access roads (about 1,900 m including the access roads on both sides of the river)
- 3) Consulting services: Review of detailed designs, bidding assistance, construction supervision
- (4) Estimated Project Cost (Loan Amount)
- 11,871 million yen (Loan Amount: 9,198 million yen)
- (5) Schedule

Planned for November 2010 - March 2019 (101 months in total); the project will be completed when the facilities start operation (March 2017).

- (6) Project Implementation Structure
- 1) Borrower: The Government of the Republic of Uganda
- 2) Executing Agency, Operation and Maintenance System: Uganda National Roads Authority (UNRA)
- (7) Environmental and Social Consideration/Poverty Reduction/Social Development
- 1) Environmental and Social Consideration
  - (1) Category: B
  - (2) Reason for Categorization: This project is classified as Category B because it comes under non-large scale projects in the road sector and is not expected to have significant adverse impacts on the environment according to the "Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations" (formulated in April 2002). It is also because the project does not have sensitive characteristics nor will it be conducted in sensitive areas that are stated in the guidelines.
  - (3) Environmental Permit: The National Environment Management Authority (NEMA) has completed the approval procedures in January 2010 for the environmental and social impact assessment (ESIA) report for the project.
  - (4) Anti-Pollution Measures: It has been determined that the project will not have a significant impact concerning air quality, water quality or noise pollution, based on impact forecasts and evaluations using the baseline data. Regarding the impacts expected during the construction and the operation of the facilities, it is expected that the environmental standards under domestic laws and of international agencies will be met by taking mitigation measures in accordance

- with the Environmental and Social Management Plan (ESMP) included in the ESIA report.
- (5) Natural Environment: The target area for the project is not classified as a sensitive area such as a national park or an area near sensitive areas. Nonetheless, the impact will be minimized by taking mitigation measures in accordance with the ESMP in consideration of the possible wildlife living in the area.
- (6) Social Environment: Under the project, land acquisition of approximately 7.2 ha and resettlement of 16 residential households (56 people) will be executed. Based on the resident resettlement plan (approved in February 2010) formulated under domestic laws and the UNRA, compensation will be provided at replacement cost and procedures for land acquisition and resident resettlement will be proceeded with. The letter communicating to the Executing Agency the securing of the resettlement budget for the project was issued by the Ministry of Finance Planning and Economic Development on April 20, 2010.
- (7) Other/Monitoring: The construction company will conduct environmental monitoring for the project based on the contract with the UNRA. The UNRA will report to JICA every quarter on the environmental monitoring results and the progress in land acquisition and resettlement.
- 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.)
  - The project poses the risk of increasing HIV infections among the workers and nearby communities. Therefore, the construction company will take measures to control infectious diseases targeting workers in cooperation with the Uganda AIDS Commission and others. The consulting firm which supervises the construction will monitor the implementation of the control measures.
- (8) Collaboration with Other Donors

None

#### (9) Others

The project comes under "large-scale and complex projects which require particular consideration of safety measures." It was confirmed at the time of the appraisal that the consulting firm which supervises the construction will monitor the implementation of safety measures conducted by the construction company and the UNRA will report the results to JICA. In order to further ensure appropriate safety measures, JICA is considering indirect support using Technical Assistance, etc.

## 4. Targeted Outcomes

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

Indicator	Baseline (Actual Value in 2008)	Target (2019) [2 years after project completion]
Annual average daily traffic (PCU*/day)	14,070	24,287
Traveling time (minutes)	6.5	3.3
Average speed (km/hour)	20.0	42.4

<sup>\*</sup> Passenger Car Unit (PCU) is a unit converted into the number of passenger cars from the number of various transportation vehicles.

### (2) Internal Rate of Return

Based on the conditions indicated below, the Economic Internal Rate of Return (EIRR) will be 14.05%.

#### [EIRR]

Cost: Project cost (excluding taxes), operating and maintenance costs

Benefits: Savings in traveling time, savings in traveling costs and maintenance costs, etc.

Project Life: 25 years

### 5. External Factors and Risk Control

- The detailed design will be developed by the Ugandan government without delay.
- The financial situation of the Ugandan government will not deteriorate, the budget for the Ugandan expenses will be secured and executed without delay.

# 6. Lessons Learned from Past Projects

In light of the lessons learned from the collapse of the Can Tho Bridge in Vietnam, JICA is considering indirect support using Technical Assistance, etc. in consultation with the UNRA, in order to ensure appropriate safety measures during the construction of the large-scale bridge under the project.

### 7. Plan for Future Evaluation

- (1) Indicators to be Used
- 1) Annual average daily traffic (PCU/day)
- 2) Traveling time (minutes)
- 3) Average speed (km/hour)
- 4) Internal rate of return (EIRR, %)
- (2) Timing

Two years after project completion