

## Ex-Ante Evaluation

### Africa Division 2, Africa Department, JICA

#### 1. Basic Information

Country: Republic of Uganda (Uganda)

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

Loan Agreement: April 26, 2018

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

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

Due to the underdeveloped railway transport system in Uganda, more than 90% of freight and passenger transport is dependent on roads. From FY 2001/02 to FY 2008/09, the number of registered vehicles in the country more than doubled. However, paved sections of national road (20,544 km) account for only 20% of the Ugandan road network (144,785 km), while a large portion of other roads (district roads, etc.) also remain unpaved.

Under these conditions, “transport infrastructure” has been put forth as a priority development sector in Uganda’s National Development Plan II (2015/16-2019/20) (hereinafter referred to as “NDP II”). The Government of Uganda also formulated the National Transport Master Plan (hereinafter referred to as “NTMP”) in 2008 as a long-term strategy for the entire transport sector. This master plan sets out a framework for the development of the sector over the next 15 years (2008-2023).

The NTMP lists the dangerous road conditions of the Northern Corridor as an issue. In fact, the development of the regional road network is a common issue for the East African Community, of which Uganda is a member, and the Community has strengthened a link as the economic zone. Uganda acts as an important relay point in the network, connecting the neighboring inland countries of the Republic of Rwanda, the Democratic Republic of Congo, and the Republic of South Sudan with the Indian Ocean coastal countries of the Republic of Kenya and the United Republic of Tanzania. Approximately 78% of the transshipped freight at Kenya’s Mombasa Port is bound for Uganda, while approximately 98% of freight transported through Uganda to neighboring inland countries also relies on this port. The Northern Corridor (comprising Africa’s international arterial roads), which passes through the port and the Ugandan capital of Kampala, is an extremely important distribution route for Uganda and the surrounding countries that depend on the port for most of its import and export activities.

However, in the Jinja District, which lies between Kampala and Mombasa Port, a narrow two-lane bridge built 55 years ago is used to cross the Nile River on the Northern Corridor route. Considering the damage to the bridge caused by deterioration, speed limits have been imposed, and it has become a bottleneck for traffic. Therefore, in both the NDP II and the NTMP strategies, this project has been positioned as a priority project that will resolve the aforementioned problems.

In light of the background of the project, a Loan Agreement was signed in November 2010. However, due to the effects of subsequent foreign exchange rate fluctuations, etc., the total project cost increased, making additional financing necessary to implement the project. In response to this, the Government of Uganda submitted a request for an additional loan to the Government of Japan.

#### (2) Japan and JICA's Policy in the Road Sector and Priority of the Project

In the Country Assistance Policy for the Republic of Uganda (July 2017), "infrastructure improvement to achieve economic growth" is listed as a priority area. Developing the infrastructure contributes to the achievement of sustainable economic growth in Uganda. Additionally, JICA's Country Analysis Paper on Uganda (March 2015) also covers economic corridor development (Kenya-Kampala-Rwanda and Kampala-South Sudan) based on the Northern Corridor Master Plan and the improvement of Greater Kampala traffic to facilitate physical distribution and human mobility. The project is in line with these policies and analyses. Furthermore, in the Nairobi Implementation Plan announced at the Tokyo International Conference on African Development VI (August 2016), "promoting structural economic transformation through economic diversification and industrialization" was designated as a priority area. By driving investment into a high-quality infrastructure, the project is in line with this policy/analysis.

#### (3) Other Donors' Activities

Apart from the Government of Japan, the organizations engaging in cooperation for the transport sector are the World Bank, the European Union, the African Development Bank, China, and the UK's Department for International Development. In the past, the World Bank and the European Union, among other donors, provided sector program support in parallel with project-based assistance; however, all donors have currently narrowed their efforts to project-based assistance.

### 3. Project Description

#### (1) Project Objectives

This project is to construct a bridge and access roads across the Nile river along the Northern Corridor in the Jinja District. Through this, Ugandan transport capacity will be strengthened and stabilized, which will contribute to economic growth and revitalization of the regional economies of Uganda and neighboring countries, as well as to the promotion of economic integration with surrounding countries.

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

Jinja District

#### (3) Project Components

- 1) Civil engineering work, facilities, equipment, etc.: Construction of a prestressed concrete cable-stayed bridge (4 lanes (2 lanes per direction), approximately 525 m) and access roads (4 lanes (2 lanes per direction), approximately 1,900 m)
- 2) Consulting services: Review of detailed design, tendering assistance, construction supervision

#### (4) Estimated Project Cost (Loan Amount)

18,045 million yen (loan amount: ① existing loan amount of 9,198 million yen, ② additional loan amount of 4,918 million yen)

#### (5) Schedule

From October 2010 to October 2020 (121 months in total). Project completion is defined as the commencement of service for the facility (planned for October 2018).

#### (6) Project Implementation Structure

- 1) Borrower: Government of the Republic of Uganda
- 2) Executing Agency, Operation and Maintenance System: Uganda National Roads Authority (UNRA)

#### (7) Environmental and Social Considerations/Poverty Reduction/Social Development

##### 1) Environmental and Social Considerations

###### i. Category: B

ii. Reason for Categorization: This project does not fall under the category of large-scale projects in the road sector, as specified in the JBIC Guidelines for Confirmation of Environmental and Social Considerations (issued in April 2002), nor is it expected to have significant adverse impacts on the environment. In addition, the project does not have any

characteristics likely to cause impact, nor will it be conducted in sensitive areas stated in these guidelines.

- iii. Environmental Permits: The environmental and social impact assessment (ESIA) report for the project was approved by the National Environment Management Authority (NEMA) in January 2010. It was confirmed that this report is still currently valid.
- iv. Anti-Pollution Measures: It has been determined that the project will have no significant impact in regard to water quality and noise, based on the evaluation of monitoring conducted thus far and impact forecasts using baseline data. For impacts expected during the construction and operation of the facilities, environmental standards under domestic laws and those set by international organizations are expected to be met by taking mitigation measures in accordance with the Environmental and Social Management Plan (hereinafter referred to as “ESMP”) included in the ESIA report. In regard to air pollution, since no measurements have been taken thus far due to problems with equipment and materials, the executing agency has been asked to do so.
- v. Natural Environment: The target area for the Project is not in a sensitive area such as a national park, nor in the surrounding area of such. Additionally, no inhabiting wildlife has been confirmed thus far, nor have there been any reported cases of significant impacts on the natural environment. However, since appropriate monitoring has not been conducted due to problems with equipment and materials, the executing agency must be asked to take suitable measures.
- vi. Social Environment: This project included the acquisition of approximately 10.8 ha of land and the resettlement of 81 people. Resettlement has been completed, in accordance with the resident resettlement plan (approved in February 2010) created by the UNRA based on Ugandan law. Procedures for land acquisition (related to the payment of compensation) are currently underway. Complaints from Project Affected Persons (hereinafter referred to as “PAPs”) regarding these procedures (for example, demands to revise appraisals at the time of land acquisition) will be responded to appropriately. The UNRA will re-appraise land based on fair market price, among other methods, in order to alleviate residents’ dissatisfaction regarding land acquisition.
- vii. Other/Monitoring: The construction company will conduct environmental

monitoring for the project based on the ESMP, the environmental monitoring plan, and the contract with the UNRA. Since submission of monitoring results has been irregular thus far, UNRA will be asked to report environmental and social monitoring results to JICA on a quarterly basis.

2) Cross-cutting Issues

As a large-scale infrastructure improvement project in a region with a high HIV/AIDS infection rate, the project poses the risk of increasing HIV/AIDS infection among workers and nearby communities. Therefore, the implementation of measures to control HIV/AIDS infection is included in the contract with the construction company.

3) Gender Category: Gender Integrated Project

Activity content and reason for classification: Approximately 10% of the unskilled workers employed for the project will be women, and the installation of facilities for female workers is foreseen. Therefore, it is categorized as a gender integrated project.

(8) Other Important Issues

None

<b>4. Target Outcomes</b>
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(1) Quantitative Effects

1) Outcomes (Operation and Effect Indicators)

Indicator	Baseline (Actual value for 2008)	Target (2020) (2 years after completion)
Annual average daily traffic (PCU*/day)	14,070	25,335
Traveling time (minutes)	6.5	3.3
Average velocity (km/hour)	20.0	42.4
Average daily passenger (number/day)	41,430	74,014
Average cargo weight (ton/day)	39,978	89,769

\*Passenger Car Unit (PCU) is a unit for which the number of various types of transport vehicles is converted into the number of passenger vehicles.

(2) Qualitative Effects

Improvement of the road network, revitalization of the regional economy, regional economic integration, economic growth in Uganda

(3) Internal Rate of Return (IRR)

Based on the following preconditions, and after revisions, the Economic

Internal Rate of Return (EIRR) will be 16.2%. Since tolls are not expected to be collected for the project, the Financial Internal Rate of Return (FIRR) will not be calculated.

[EIRR]

Cost: Total project cost (excluding tax), operation and maintenance expenses

Benefits: Shortening of travel time, reduction of travel costs (costs of fuel and vehicle maintenance, etc.), and reduction of maintenance costs compared to existing bridge.

Project life: 31 years

## **5. Preconditions and External Factors**

(1) Preconditions: none

(2) External factors: none

## **6. Lessons Learned from Past Projects and Application to the Project**

In response to the bridge collapse accident at the site of the ODA loan-funded Cuu Long (Can Tho) Bridge Construction Project in the Socialist Republic of Vietnam, a committee to discuss the prevention of recurrence of the Can Tho bridge collapse accident compiled a series of improvements for the supervision of Japanese ODA loan projects and recommendations for preventing accident recurrence. From this, the importance of providing support to the governments of borrowing countries and executing agencies for strengthening their safety management capacity was learned.

To strengthen safety management capacity for this project, an extended-region project formulation advisor has been dispatched to conduct on-site safety checks, safety management seminars, and to provide advice to the executing agency and construction-related personnel. Additionally, the consultant and contractor assign a person to be in charge of safety measures, taking into consideration safety during the execution of work.

## **7. Evaluation Results**

This project is in line with Japan' and JICA's assistance policies/analyses, as well as with the development policies of the Government of Uganda (NDP II and NTMP). The construction of a bridge on the Northern Corridor crossing the Nile River and the construction of access roads will contribute to strengthening and stabilizing Ugandan transport capacity. It is also thought to contribute to

Sustainable Development Goal 8 (sustained, inclusive, and sustainable economic growth) and Goal 9 (building resilient infrastructure). Therefore, the necessity of providing assistance for the implementation of this project is high.

## **8. Plan for Future Evaluation**

### (1) Indicators to be Used in Future Evaluations

Items (1) – (3) described under Target Outcomes

### (2) Timing of the Next Evaluation

Ex-post Evaluation: Two years after project completion