

Ex-Ante Evaluation (for Japanese ODA Loan)

1. Name of the Project

Country: The Republic of Mozambique

Project: Nampula – Cuamba Road Upgrading Project

Loan Agreement: March 10, 2010

Loan Amount: 5,978 million yen

Borrower: The Government of the Republic of Mozambique

2. Background and Necessity of the Project

(1) Current State and Issues on Development of the Road Sector/Northern Region in Mozambique

Mozambique has lagged behind in terms of road development due to the long lasting civil war. The total length of roads is 32,000km, of which only approximately 20% have been paved, and many of the unpaved roads are impassable in the rainy season. Nampula Province is the poorest province in the country, and more than half of the population (approx. four million people) is living below the poverty line. Therefore, it is urgent to revitalize the local economy and reduce poverty in the province.

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

The Government of Mozambique places the greatest emphasis on infrastructure development in the Action Plan for the Reduction of Absolute Poverty II (PARAP II) from 2006 to 2009. The plan considers the lack of basic infrastructure, such as roads, is one of the primary reasons for poverty in rural and suburban areas, so development of areas with high potentials for economic development and areas with high poverty rates are important. For the road sector, the Road Sector Strategy 2007-2011 prioritizes the road projects in terms of (i) cost efficiency, (ii) effects of the road network, (iii) benefits for beneficiaries, and (iv) benefits for poor people. According to this prioritization, Nampula-Cuamba Road Upgrading Project is given a higher priority. Moreover, the Project is expected to provide inexpensive and reliable transportation for the landlocked nations of Malawi and Zambia to get to the Port of Nacala and thereby facilitate economic and social development in the region. Therefore, implementing this project is considered highly significant.

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

The Government of Japan has identified "rural development and economic growth" as one of the priority areas in its assistance to Mozambique and gives high priority to the projects that can contribute to the establishment of the economic foundation. This road upgrading project is consistent with these policies. The Project is also in line with the assistance policy of "region-wide transportation infrastructure development" suggested by the Government of Japan in the Yokohama Action Plan at the Fourth Tokyo International Conference on African Development (TICAD IV). For the road to be rehabilitated by this

Project, JICA conducted a development study in 2006, and the Government of Mozambique completed a detailed design in March 2008 by using its own financial resources (counterpart fund of non-project grant aid). This Project is considered as a pillar of the region-wide assistance to develop the Nacala Economic Corridor, including port development, agricultural promotion, and agro-industrialization. In the meantime, a feasibility study for the one-stop border post (OSBP) in Mandimba and the Cuamba-Mandimba Road, which connects the Project road to Malawi, was completed in March 2010.

(4) Other Donors' Activity

This Project is to be implemented in co-financing with the African Development Bank (AfDB) and the Export-Import Bank of Korea. The AfDB is also considering supporting the development of roads on the Nacala Corridor in Malawi and Zambia.

(5) Necessity of the Project

As described above, this Project is in line with the poverty reduction strategy of the Government of Mozambique as well as the assistance policies of the Government of Japan. Moreover, this Project can assist the Government of Mozambique in its policy to boost economic growth through infrastructure development and thereby contribute to poverty alleviation in the country. Therefore, it is highly necessary to implement this Project.

3. Project Description

(1) Project Objective

The objective of the Project is to increase the transportation capacity of the National Road connecting Nampula City in Nampula Province and Cuamba City in Niassa Province on the Nacala Corridor in northern Mozambique, by upgrading the Road, thereby contributing to the revitalization of the region-wide economy, the increase of the income of residents, and the poverty reduction.

(2) Project Site/Target Area:

The Nacala Corridor between the cities of Nampula in Nampula Province and Cuamba in Niassa Province in northern Mozambique (The Nacala Corridor runs from Nacala Port in Nampula Province to Lusaka, the capital city of Zambia, through Nampula, Cuamba, Mandimba on the border with Malawi, and Lilongwe)

(3) Project Components

- 1) Civil works (approx. 350km) (road pavement including bridge construction)
- 2) Consulting services (bidding assistance, construction supervision, etc.)

(4) Loan Amount

26,318 million yen (180.03 million UA¹)

Estimated project cost (amount requested: 5,978 million yen, loan amount: 5,978 million yen)

¹ The Unit of Account of the AfDB

(5) Project Implementation Schedule

March 2010 to September 2014 (55 months in total). Project completion is defined as when the facility operation is commenced (September 2013).

(6) Project Implementation Structure

- 1) Borrower: The Government of the Republic of Mozambique
- 2) Executing Agency: National Roads Administration (ANE)
- 3) Operation and Maintenance System: ANE

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

1) Environmental and Social Consideration

- ① Category: A
- ② Reason for Categorization: This project is classified as Category A because it has characteristics that are likely to exert impact under the “Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Consideration” (established April 2002).
- ③ Environmental Permit: The Environmental Impact Assessment (EIA) report was approved by the Ministry of Coordination of Environment Affairs in January 2009.
- ④ Anti-Pollution Measures: In order to reduce air and noise pollution during the construction period, appropriate measures will be taken in accordance with the Environmental Management Plan (EMP).
- ⑤ Natural Environment: There are two forest reserves and migration routes of African elephants near the Project site. Although no direct negative impact is anticipated on these areas, the Provincial Bureau of Forest and Wildlife Conservation will strengthen restrictions to prevent secondary impacts such as fires and poaching.
- ⑥ Social Environment: This Project will require the relocation of 227 households. They will be compensated in accordance with Mozambique’s laws and regulations as well as the Resettlement Action Program (RAP) created by the implementing organization.
- ⑦ Other / Monitoring: In this Project, a consultant in charge of environmental and social considerations will monitor the implementation of preventive measures against infectious diseases, waste management practices, soil erosion, and other necessary matters and report the results to the implementing organization during the construction period. After the Nampula-Cuamba Road is reopened to traffic, the implementing organization will monitor traffic accidents, and the Bureau of Public Health will monitor HIV/AIDS.

2) Promotion of Poverty Reduction: Transportation improvements will create job opportunities for local residents as well as facilitate the development of small- to medium-sized businesses for local workers and contractors.

3) Promotion of Social Development (e.g. Gender Perspective, Measure for Infectious Diseases Including HIV/AIDS, Participatory Development, Consideration for the Handicapped, etc.): Since adequate attention is not given to gender issues at present, it is essential to mainstream them through gender analysis. To this end, the contract with the contractor should include special provisions on gender considerations and possible monitoring indicators. JICA is also considering involving county and village committees in the monitoring of gender issues. Moreover, although the risk of HIV and other infections is not very high at present, because an increase in the flow of people may raise the risk, necessary measures will be taken in cooperation with existing NGOs and CBOs. Furthermore, the costs for traffic accident prevention shall be included in the budget in order to curb the increase of traffic accidents due to the increase of traffic volume.

(8) Collaboration with Other Donors: This Project is to be implemented in co-financing with the AfDB and the Export-Import Bank of Korea.

4. Targeted Outcomes

(1) Operation and Effect Indicator

Indicator		Baseline	Target (2014) 【Expected value 1 year after project completion】
Annual average daily traffic (vehicles/day) (Baseline in 2006)	Nampula – Ribaue (131km)	291	432
	Ribaue – Malema (104km)	88	130
	Malema - Cuamba (114km)	207	307
Vehicle operation cost (USD/km) (Baseline in 2008)		0.958	0.613
Vehicle operation time (hours) (Baseline in 2008)		9	5.3

(2) Internal Rate of Return:

Based on the conditions indicated below, the economic internal rate of return (EIRR) of the Project is 17.9%.

Cost: project cost (tax excluded), operation and maintenance costs

Benefit: vehicle operation cost saving, time saving

Project Life: 20 years

5. External Factors and Risk Control

A rise in construction costs due to the sudden increase in the prices of construction materials

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

This Project will be Japan's second ODA loan project in Mozambique. Since the first project has not yet finished, there has been no ex-post evaluation in the country; however, in light of ex-post evaluation on road development projects implemented by other donors in other countries, it is essential to ensure proper maintenance through supervision.

The road to be developed through this Project is to be maintained in accordance with the ACFA Guidelines and monitored through the project management activities of the AfDB. The results will be reported in quarterly reports, and any problems will be addressed as soon as possible.

7. Plan for Future Evaluation

(1) Indicators for Future Evaluation

- ① Annual average daily traffic (vehicles/day)
- ② Vehicle operation cost (USD/km)
- ③ Vehicle operation time (hours)
- ④ Economic internal rate of return (EIRR) (%)

(2) Timing of Next Evaluation

2 years after project completion