Ex-ante Evaluation

1. Name of the Project
Country: The Republic of Mozambique Project: Montepuez – Lichinga Road Project (Loan Agreement: March 19, 2007; Loan Amount: 3,282 million yen; Borrower: The Government of the Republic of Mozambique)
2. Necessity and Relevance of JBIC's Assistance
As a result of many years of civil war, road improvement has been seriously delayed in Mozambique. Consequently, while the average per capita road density in developing countries is 0.2km/m^2, in Mozambique it is only 0.02km/m^2. On top of that, only about 20% of the roads (total distance of around 32,000km) are paved, and many roads are impassable during the rainy season. The Government of Mozambique gives priority to new investments and maintenance in the road sector with the view to promoting regional integration, economic revitalization, and public access to basic social services. In Mozambique's "Poverty Reduction Strategy Paper II (PARPA II) (2006-2009)", in order to achieve the goal of reducing the poverty rate from 54.1% (2002/3) to 45.0% (2009), the government identifies the lack of roads and other basic infrastructure as one of the factors responsible for the increasing poverty in rural areas and urban fringes, and sets a policy to expand the market and revitalize trade centering on agricultural products by promoting and implementing infrastructure development in regions with high potential for economic growth and in areas with high levels of poverty. The objectives of the Road Sector Strategy 2007-2011 (hereinafter referred to as RSS) include supporting market expansion, securing local access, connecting regions to arterial roads, decentralization, and securing quality road construction. These objectives are consistent with the indicators for reaching the goals of PARPA II in reducing poverty. The goals of RSS and those of PARPA II both aim to contribute to poverty reduction through the expansion of road networks. In addition, the policy of RSS is to make new investments and implement operation and maintenance efficiently by prioritizing road projects from the standpoint of their (1) economic return, (2) effect on road networks, (3) benefit to the local residents and road users, and (4) benefit to the poor. This project is regarded as a high priority project from those perspectives. The project improves (paves, widens, etc.) a portion of National Road 14 (269km), which connects the two provinces in northern Mozambique, Cabo Delgado and Niassa, where infrastructure development is seriously delayed and the poverty rate in the population is very high. (The poverty rates in 2002/3 were 63.2% and 52.1%, respectively.) As a result, in this region, one of the major production areas in Mozambique, the project will facilitate the distribution of agricultural commodities (corn, rice, cotton, tobacco, etc.) grown in the vicinity of the transport corridor, improve access to the ports of Nacala and Pemba (distribution bases) as well as Nampula, the largest consumer market in northern Mozambique, and expand accessibility of basic social services to local residents. The project is expected to contribute to the development of northern Mozambique and to the reduction of poverty therein. In the Medium-Term Strategy for Overseas Economic Cooperation Operations (FY2005-2007), JBIC

regards “a foundation for sustained growth” and “poverty reduction” as priority areas and places emphasis on supporting promotion of economic growth through socio-economic infrastructure development including road improvement. Additionally, “socio-economic infrastructure development” and “promotion of trade and foreign direct investment” are included in the focus areas of a comprehensive initiative to support African private sector development, “Enhanced Private Sector Assistance (EPSA) for Africa.” Therefore, the objectives of the project are in line with the purpose of EPSA for Africa. Thus, JBIC’s support of this project is highly necessary and relevant.

3. Project Objectives

The object of this project is to increase transport capacity and improve access to distribution bases by widening and improving the national road between Montepuez in Cabo Delgado province and Lichinga in Niassa province, in northern Mozambique, thereby improving the livelihood of local residents and contributing to the revitalization of the local economy and poverty reduction.

4. Project Description

(1) Target Area
Provinces of Cabo Delgado and Niassa in northern Mozambique

(2) Project Outline
The project undertakes, among other things, widening of 269km of the 516km long National Road 14 running between Montepuez and Lichinga (the former in Cabo Delgado province and the latter in Niassa province) as well as improvement of road pavement and building of bridges. For some sections, the project will be co-financed by JBIC and the African Development Bank (AfDB); in others, it will be financed by grant from the Swedish International Development Agency (SIDA).

(a) Civil works
(b) Consulting service (construction supervision, etc.)

(3) Total Project Cost/Loan Amount
12,022 million yen (Yen Loan Amount: 3,282 million yen)

(4) Schedule
November 2006 – August 2011 (58 months)

(5) Implementation Structure

(a) Borrower: The Government of the Republic of Mozambique
(b) Executing Agency: National Roads Administration (ANE)
(c) Operation and Maintenance System: Same as (b)

(6) Environmental and Social Consideration

(a) Environmental Effects/Land Acquisition and Resident Relocation

(i) Category: A

(ii) 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).

(iii) Environment Approval

The Environmental Impact Assessment (EIA) report was approved by the Ministry of Coordination of Environment Affairs in September 2006.

(iv) Anti-Pollution Measures

Since this project is to improve existing roads, it does not envisage any significant negative impact to air, noise or other forms of pollution.

(v) Natural Environment

Adverse impact on the natural environment is expected to be minimal because it is not located in or around sensitive areas, such as a national park, etc.

(vi) Social Environment

This project involves the relocation of 72 resident households, compensation proceedings are being taken in compliance with Mozambique's domestic laws, etc.

(vii) Other/Monitoring

In this project, the executing agency and others will monitor a wide range of matters including water area management of soil runoffs and drainage ditches, resident relocation, and accidental collisions with wild animals.

(b) Promotion of Poverty Reduction

The poverty rate in both Cabo Delgado and Niassa, the target areas of this project is higher than 50% (as previously noted), although that in Niassa is slightly lower than the national average of 54.1%. Hence many of the beneficiaries of this project are believed to be local residents including those in the poorest segment of the population, and expectations are high that the implementation of the project will help poverty reduction by improving local residents' access to social services (education, health, etc.). Thus, this project is accredited as a project for reducing poverty as defined by JBIC.

(c) Promotion of Social Development (e.g. Gender Perspective)

(i) HIV/AIDS countermeasures: Mozambique is concentrating all its efforts to combat HIV/AIDS as one of its most important national policies. The HIV/AIDS infection rate is 11.1% in Niassa and 8.6% in Cabo Delgado. In order to avoid the risk of increased infection rate caused by a greater inflow of people as a result of improved traffic, HIV/AIDS countermeasures, including educational campaigns and HIV testing, will be implemented in this project.

(ii) Gender perspective: ANE is planning to hire workers from the local community (about 200) to work on the road construction. Taking gender into consideration, ANE has adopted a policy that requires 25% of these workers to be women.

(iii) Monitoring social development items: As one of its construction supervision consultants, ANE plans to hire an individual to take charge of matters related to environment and social considerations.

(7) Other Important items: The project is the first ODA loan extended to the Republic of Mozambique.

5. Outcome Targets

(1) Evaluation Indicators (Operation and Effect Indicator)

Indicator		Baseline (2005)	Target (2010, at completion) Note
Annual average daily traffic (vehicles/day)	Montepuez-Balama (54km)	264	611
	Balama-Ruaca (81km)	204	518
	Litunde-Lichinga (66km)	130	401
Vehicle operation cost saving (USD/vehicle km)		0.443	0.222
Time saving (opportunity cost: USD/day)		192	110

(Note) Construction completion time is defined as when civil works are completed.

(2) Internal Rate of Return (Economic Internal Rate of Return EIRR): 19.6%

(a) Cost: project cost (tax excluded), operation and maintenance costs
(b) Benefit: time saving, vehicle operation cost saving
(c) Project Life: 20 years

6. External Risk Factors

Rise in civil works costs, etc., caused by rising oil prices

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

Given similar projects undertaken in Africa in the past where poor road maintenance affected road use, management of the road fund, regulation of excess lading, etc., will be thoroughly monitored through AfDB, etc.

8. Plans for Future Evaluation

(1) Indicators for Future Evaluation

(a) Annual average daily traffic (vehicles/day)
(b) Vehicle operation cost saving (USD/vehicle km)
(c) Time saving (opportunity cost: USD/day)
(d) Economic internal rate of return (EIRR) (%)

(2) Timing of Next Evaluation

After project completion