#### **Ex-ante Evaluation**

### 1. Name of the Project

Country: The Republic of Senegal

Project: Road Improvement and Transport Facilitation Program on the Southbound Bamako-Dakar

Corridor under EPSA for Africa

(Loan Agreement: March 31, 2006; Loan Amount: 960 million yen; Borrower: The Government of

the Republic of Senegal)

# 2. Necessity and Relevance of JBIC's Assistance

Amidst the push for economic integration within Africa and particularly within the New Partnership for Africa's Development (NEPAD), there is a growing call for the development of transportation infrastructure to smooth the flow of goods across national borders, which will in turn invigorate the economy in the overall region of the economic blocs of Union Economique et Monétaire Ouest Africaine (UEMOA) and the Economic Community of West African States (ECOWAS). This is a project to build an arterial highway to contribute to the stimulation of trade between Senegal and Mali, and as such, it is positioned as the highest priority project in UEMOA's Community Infrastructure and Road Action Programme (PACITR). This project is also regarded as a regional infrastructure project of the type which NEPAD is promoting.

The project area is located in the region of Tambacounda in eastern Senegal, where approximately 85% of the resident households are engaged in farming. There is potential for agriculture in the area, but the underdevelopment of the transportation infrastructure poses a bottleneck to expansion of the residents' economic activities and improvement of their standard of living, resulting in an area with a higher-than-average poverty rate for Senegal. On the existing road which is the target of this project, there are many inferior sections on both paved and unpaved portions, and particularly on the unpaved portions, there are places where passage is impossible without reducing speed even for four-wheel drive vehicles. This project, which ensures a transportation route for agricultural products, etc., to Dakar, is indispensable to the inland region for improving access to markets and to social and economic activities. The project will thereby contribute to economic revitalization in the UEMOA region, advancement of economic integration, and reduction of poverty mainly in the inland region. Senegal's Poverty Reduction Strategy Papers (PRSP) mention, with regard to the transportation sector, the streamlining of transportation methods to reduce transportation costs and improvement of transportation between cities (including in the UEMOA region). Moreover, the stated policy goals in the Transportation Sector Program II include improvement of the capacities of related agencies in order to boost the efficiency of the sector as well as maintenance and rehabilitation of transportation

In JBIC's current Medium-Term Strategy for Overseas Economic Cooperation Operations (2005-2007), "infrastructure development for sustainable growth" and "assistance for poverty reduction" are mentioned as priority areas. Moreover, in sub-Saharan Africa, assistance is to be conducted selectively for countries whose debt repayment capacity and governance are comparatively satisfactory, and the priority areas are socioeconomic infrastructure development to benefit wide-ranging, cross-border regions and development of the private sector and agriculture sector, etc. Moreover, under JBIC's Enhanced Private Sector Assistance (ESPA) for Africa, the policy

facilities. This project is consistent with these development goals.

is to strengthen assistance for Africa using the Accelerated Co-financing Facility for Africa (ACFA) scheme to promote co-financing, and this project is consistent with that policy.

Therefore, JBIC's support of this project for the given country is highly necessary and relevant.

# 3. Project Objectives

The objective of this project is to upgrade transportation capacity and improve access to basic social services in the areas along the road by constructing a cross-border arterial road connecting Dakar, the capital of Senegal, with Bamako, the capital of Mali, as well as related undertakings including improvement of farm roads connected to the arterial road, and thereby contribute to the economic revitalization of the UEMOA and ECOWAS regions, advancement of economic integration, and reduction of poverty in the region along the road.

# 4. Project Description

(1) Target Area

Region of Tambacounda

## (2) Project Outline

This is a project to construct and improve the cross-border corridor (part of the southbound route totally approximately 1,000 km in length), between Dakar, the capital of Senegal, and Bamako, the capital of Mali, as well as to develop related infrastructure.

Civil engineering works: 81.3 km of road construction/improvement on the above-mentioned Kedougou-Faleme segment (total 112 km) in Senegal.

- (3) Total Project Cost/Loan Amount
- 32,730 million yen (Yen Loan Amount: 960 million yen)
- (4) Schedule

March 2006-April 2009 (38 months)

- (5) Implementation Structure
  - (a) Borrower: The Government of the Republic of Senegal
  - (b) Executing Agency: Agence Autonome des Travaux Routiers (AATR)
  - (c) Operation and Maintenance System: AATR
- (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 is in the road sector, under the "Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations" (established April 2002).

(iii) Environmental Permit

The EIA report was approved in December 2005 by Senegal's Ministry of Environment and

Protection of Nature (MEPN).

# (iv) Anti-Pollution Measures

This is a project to improve and pave an existing road, and so no significant impact is foreseen from air pollution, noise, or vibration. Moreover, appropriate measures will be taken for impact during construction, including the insertion of a socioeconomic considerations clause in the contractors' bidding documents.

## (v) Natural Environment

The project site is not located in or around sensitive areas such as national parks, and tit is likely to have a minimal adverse impact on the natural enbironment. Furthermore, to prevent excessive usage of natural resources by the increased population that flows in following the start of the project, it is planned to conduct educational activities concerning environmental preservation for the area residents, etc.

# (vi) Social Environment

The project is expected to require the resettlement of five households, and compensation will be implemented in accordance with the country's domestic law. It is planned to conduct educational activities concerning public health and traffic safety for the area residents and local governments, etc.

#### (vii) Other/ Monitoring

The executing agency, etc., will carry out monitoring of the residents' resettlement and traffic accidents, etc.

# (b) Promotion of Poverty Reduction

The project area (Tambacounda Region) is an area with a high poverty rate. It is likely that many area residents, including the poor, will be beneficiaries of the project, and an improvement in living conditions of area residents may be expected through betterment of their living environment and promotion of economic activities due to the project.

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

The project is expected to cause an improvement in access to social services such as education and health services for area residents. Furthermore, in the overall project, it is planned to improve basic service facilities (covering education, public health, farm road improvement, and installation of community water faucets) using the participatory approach, and so it is expected that the project will be implemented in a manner that is consistent with area residents' needs. Moreover, as TOR for the consultant service (not funded by JBIC's loan), it is planned to conduct educational activities on HIV/AIDS countermeasures and malaria prevention, etc.

## (7) Other Important Issues

There is a possibility for cooperation with grant aid from the Japanese government (i.e., construction of a bridge on the Bamako-Dakar segment).

# 5. Outcome Targets

3. Outcome rangers				
(1) Evaluation Indicators (Operation and Effect Indicator)				
Indicator	Baseline (2005)	Target (2010, 1 year after completion)		

Time required to pass through Senegal (Dakar to Faleme)	3 days	1 day	
Time required to cross the border	1 day	2 hours	

Note: The above-mentioned indicators all refer to the southbound corridor of the Bamako-Dakar segment. Indicators that have been set up as indicators of impact are "trade rate in UEMOA," "trade rate outside UEMOA," "school attendance rate," and "time required to procure drinking water."

#### (2) Internal Rate of Return

Economic internal rate of return (EIRR): 15.2%

- (a) Cost: Project cost (excluding tax), operation and maintenance cost
- (b) Benefit: Reduction of required travel time, reduction of travel expense, etc.
- (c) Project Life: 20 years

### 6. External Risk Factors

It is necessary that segments funded by other donors be constructed on schedule so that this project's segment may be connected smoothly with other segments and the project's effects may be manifested.

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

In reports on previous projects, it has been noted that premature damage to road pavement is caused by overloaded vehicles. In this project, it is planned to implement a campaign through the border guard posts, etc., to promote awareness of regulations against overloading, rules, and regulations on violations, in order to limit road deterioration. In cooperation with the African Development Bank (AfDF) and UEMOA which are coordinating the project, JBIC will make appeals as appropriate for follow-up on the said countermeasures and for acquisition of information.

#### 8. Plans for Future Evaluation

- (1) Indicators for Future Evaluation
  - (a) Time required to pass through Senegal (Dakar to Faleme)
  - (b) Time required to cross the border
  - (c) Economic internal rate of return (EIRR)

### (2) Timing of Next Evaluation

After project completion