

Ex-ante Evaluation

1. Name of the Project

Country: Kingdom of Morocco

Project: Rural Road Improvement Project

(Loan Agreement: 03/31/2008; Loan Amount: 8,439 million yen; Borrower: Caisse pour le Financement Routier CFR))

2. Necessity and Relevance of JBIC's Assistance

Economic activity through Morocco's transportation sector plays a major role in the country's economic and social activities, accounting for approximately 6% of the GDP and 10% of the employed population in urban areas and also producing 15% of the national revenue. In particular, with regard to land transport, 90% of inter-city passenger transport and 75% of inter-city freight is conveyed by road.

Morocco's public roads (57,622 km) are classified as highways (1%), national roads (20%), prefectural roads (17%), and provincial roads (62%). Furthermore, there are unclassified roads (route non-classifiée) (total length: 23,200 km) which are not under the management of the Direction des Routes et de la Circulation Routière (DRCR) in the Ministère de l'Équipement et du Transport, and these roads play a particularly important role in rural areas.

More than 80% of Morocco's major roads—highways, national roads and regional roads—are paved, however, the development, repair, and expansion of rural roads, which are mainly provincial roads and unclassified roads, tends to be relatively delayed. There is a conspicuous disparity between urban and rural areas, with the rate of paving for provincial roads at 45.9% (2005), and the rate of road access for rural populations at 54% (2005). Moreover, whereas the national poverty ratio is 14.2%, that for urban areas and rural areas is 7.9% and 22%, respectively. Therefore, the poverty ratio in rural areas remains high, and there is a strong need for infrastructure development in rural areas.

In its Economic and Social Development Plan (2000–2004), the Moroccan government states that economic development of rural areas through rural road development is an important issue, and the Moroccan government currently continues to maintain this policy. Moreover, Morocco prepared the First National Program of Rural Roads (PNRR-I) in 1995, under which it developed 10,062 km of rural roads during the 10-year period up to 2005.

Furthermore, PNRR-II, which was prepared in 2005, initially aimed to develop 15,500 km of rural roads during the 10 years up to 2015 and to raise the rate of road access for rural populations to 80%. However, the el-Fassi Administration which assumed office in September 2007 decided to move the PNRR-II target year up from 2015 to 2012.

In PNRR-II, donors such as the World Bank, AFD, and EIB are already providing funds, but continued fund assistance from donors is necessary. This project provides assistance for road segments in PNRR-II with a high degree of maturity and urgency.

The Japan Bank for International Cooperation (JBIC) designates “infrastructure development for sustainable growth” and “assistance for poverty reduction” as priority areas in its Medium-Term Strategy for Overseas Economic Cooperation Operations (FY2005–2007) and places emphasis on assistance for poverty reduction through economic growth via the installation of economic and social infrastructure, including rural road construction. Thus, JBIC's assistance for this project is highly

necessary and relevant. Furthermore, JBIC is assisting a portion of the above-mentioned PNRR-I in the Road Sector Improvement Project approved in 1995 which is implementing rural road development and upgrading in five regions.

3. Project Objectives

The project's objective is to improve the access to transportation of residents along Morocco's rural roads by conducting development of those roads, and thereby contribute to the improvement of rural residents' standard of living and remedy of the disparity between regions.

4. Project Description

(1) Target Area

Nine provinces in northern, central, and inland Morocco (Tetouan, Chefchaouen, Sidi Kacem, Tanger, Errachidia, Ouarzazate, Al Haouz, Settat and El Jadida)

(2) Project Outline

Development of rural roads (regional roads, provincial roads, and unclassified roads)

(3) Total Project Cost / Loan Amount

11,086 million yen (Yen Loan Amount: 8,439 million yen)

(4) Schedule

August 2008 – June 2012 (47 months)

The project is defined as being completed when the guarantee period (1 year) expires.

(5) Implementation Structure

- (a) Borrower: Caisse pour le Financement Routier (CFR)
- (b) Guarantor: The Government of the Kingdom of Morocco
- (c) Executing Agency: Direction des Routes et de la Circulation Routière (DRCR) in the Ministry of Equipment and Transport
- (d) Operation and Maintenance System: DRCR and local governments

(6) Environmental and Social Consideration

(a) Environmental Effects / Land Acquisition and Resident Relocation

(i) Category: B

(ii) Reason for Categorization: This project is not likely to have significant adverse impact on the environment due to the fact that the project sector and project characteristics are not likely to exert impact and the project is not located in a sensitive area under the "Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations" (established in April 2002). Thus this project is classified as Category B.

(iii) Environmental Permit: Preparation of an Environmental Impact Assessment (EIA) for this project is not obligatory under Moroccan domestic law, but DRCR will determine the necessity of an EIA based on the results of the Preliminary Environmental Assessment (FEPP). Furthermore, in PNRR-II, there is no record of a need for an EIA having been

determined based on the results of FEEP, and so in this project, it is assumed that an EIA will not be necessary. In the event that an EIA is determined to be unnecessary, the Directions Régionales (DRE) and the Directions Provinciales (DPE) in the Ministry of Equipment and Transport will prepare a simplified environmental management plan (PGES).

(iv) Anti-Pollution Measures: The content of environmental measures during construction will be specified in the PGES and construction contractors will implement the measures stipulated by the PGES.

(v) Natural Environment: The project area is not in or near areas that are sensitive to impact such as national parks, and so undesirable impact on the natural environment is assumed to be minimal.

(vi) Social Environment: No land acquisition or resident relocation is planned because this is a project to pave and develop existing unpaved and underdeveloped roads. If land acquisition or resident relocation does occur in the basic design or detailed design for any of the roads, steps for acquisition and relocation will be taken in accordance with Morocco's domestic procedures.

(vii) Other/Monitoring: DRE and DPE will monitor the air quality, water quality, and noise during construction based on the PGES.

(b) Promotion of Poverty Reduction: The project meets the requirements of a poverty countermeasure loan because the poverty ratio in the nine prefectures targeted by the project (25.6%, weighted average) exceeds the national average (14.2%) and the rural average (22%).

(c) Promotion of Social Development (gender perspective, measure for infectious diseases including AIDS, participatory development, consideration for persons with disabilities, etc.): The project is expected to have the following effects on the promotion of social development. Increased use of medical institutions, improvement in medical services, improved elementary education enrolment rates, reduced firewood-gathering work due to increased usage of household gas, increased participation in socioeconomic activities by women, increased fruit production, increased investment in the livestock industry, increased use of fertilizers, and increased income from non-agricultural business.

(7) Other Important Issues: None

5. Outcome Targets

(1) Evaluation Indicators (Operation and Effect Indicators)

Indicator	Baseline (2007)	Target (2013, one year after completion)
Daily traffic volume (vehicles)	Set for each road (40–400 vehicles/day); Total: 3,680 vehicles/day	Same as left (88–804 vehicles/day); Total: 7,739 vehicles/day
Number of residents along	Set for each road	Same as left (292–19,515)

roads (persons)	(276–19,486 persons); Total: 109,905 persons	persons); Total: 113,513 persons
Annual number of days of road closure due to natural disasters (days)	Set for each road (4–60 days/year); Average: 23.7 days/year	0 days/year for all roads

Impact indicator: Percentage of population living in poverty in the targeted nine provinces.

(2) Number of Beneficiaries
109,905 persons (the number of people living in the villages consisting of 50 or more households and located within one kilometer of the project’s roads)

(3) Internal Rate of Return (Financial and Economic Internal Rate of Return)
Based on the following premises, the economic internal rate of return (EIRR) is 15.8%.
(a) Cost: Engineering works cost (excluding taxes), operation and maintenance expense
(b) Benefit: Total benefits from the total shortening of travel time for car users
(c) Project Life: 10 years

6. External Risk Factors

None

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

In previous ex-post evaluations of similar yen loan projects in the road sector in Morocco, it was noted that “because the number of contracts related to the main project construction exceeded 70, time was required to prepare for procurement and for evaluation, etc., and so delays occurred in the project’s implementation schedule.”
Given this, a study was undertaken to divide the contracts for the main construction into lots so as to minimize the number of contracts in this project.

8. Plans for Future Evaluation

(1) Indicators for Future Evaluation
(a) Daily traffic volume (vehicles)
(b) Number of residents along roads (persons)
(c) Annual number of days of road closure due to natural disasters (days)
(d) Poverty ratio in the nine target provinces (%)
(e) Economic internal rate of return (EIRR) (%)

(2) Timing of Next Evaluation
One year after completion of the project