# **Ex-ante Evaluation (for Japanese ODA Loan)**

## 1. Name of the Project (country)

Country: Kingdom of Morocco

Project: Rural Road Improvement Project (II)

Loan Agreement: July 29, 2011 Loan Amount: 5,981 million yen

Borrower: Caisse pour le Financement Routier (CFR)

### 2. Background and Necessity of the Project

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

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 as taxes related to transportation. Morocco's public roads (57,334 km) are classified as highways (1.6%), national roads (18.3%), regional roads (17.6%) and provincial roads (62.5%) under the management of the Direction des Routes (DR), in the Ministry of Equipment and Transport. Furthermore, there are non-classified roads, which play an important role in rural areas. While more than 80% of Morocco's major roads — national roads and regional roads — are paved, development of rural roads is relatively delayed as the rate of paving for provincial roads remains at 62% (2009) and the rate of road access for rural populations at 54% (2005).

## (2) Development Policies for the Rural Road Sector in Morocco and the Priority of the Project

In its Economic and Social Development Plan (2000–2004), the Moroccan government states that remedy of urban-rural disparities, economic development of rural areas through rural road development, and securing of traffic access for residents in rural and remote areas are important issues. This policy is still maintained by the government. Moreover, Morocco prepared the First National Program of Rural Roads (PNRR-I) in 1995, under which it developed 11,200km of rural roads in 10 years. Furthermore, the Second National Program of Rural Roads (PNRR-II) (total project cost 115 billion yen) was prepared in 2005, aiming at developing 15,500 km of rural roads during the 7-year period up to 2012 and at raising the rate of road access for rural populations to 80% (the construction progress rate is 65.0% as of the end of 2010). Thus, the PNRR-II aims at implementing project at a rate faster than PNRR-I (approximately 1,000km/year in the PNRR-I, approximately 2,000km/year in the PNRR-II) and are planned to contribute to promotion of local development more than in the PNRR-I, for example, by focusing on the results of improvement of the road accessibility for rural residents and by taking the approach that the local governments will participate in the financial matters and the selection of project scope. The project is intended to provide Japanese ODA loans for part of the target rural roads in the PNRR-II, and to contribute to improve the living environment of the residents along the rural roads and vitalize their economic activities.

### (3) Japan and JICA's Policy and Operations in the Rural Road Sector

In the rural road sector, Japan has provided ODA loans for "the Road Improvement Project (7,741 million yen)", "the Expressway Construction Project (9,568 million yen), "the Casablanca South Ring Road Construction Project (7,046 million yen)", "the Mediterranean Road Construction Project (12,764 million yen)", "the Marrakech-Agadir Motorway Construction Project (17,726 million yen)", and "the Rural Road Improvement Project (8,439 million yen)". This project will support Morocco's further efforts to improve the economic efficiency through improvement of the road accessibility in the rural areas, to improve accessibility to welfare and administrative facilities such as medical facilities and independence support centers for women and to focus on the potential of agriculture development among others, which is consistent with "support in the area of basic infrastructure development for sustainable economic growth" and "remedy of regional and social disparities" which are Japan's priority areas in economic cooperation for Morocco.

#### (4) Other Donors' Activities

Donors including the World Bank (2006, 2010), the French Development Agency (AFD) (2005, 2009), and the European Investment Bank (EIB) (2005, 2009) are supporting the PNRR-II continuously.

## (5) Necessity of the Project

The project's objective is to improve the rural roads where development is retarded. As it is also consistent with Japan and JICA's priority areas of assistance, the project is highly necessary and relevant.

# 3. Project Description

# (1) Project Objective(s)

The project's objective is to improve the transportation access of residents along Morocco's rural roads by improving the relevant roads in the provinces where the poverty rate is relatively high within the framework of the PNRR-II, thereby contributing to improvement of rural residents' standard of living and remedying the regional disparities.

### (2) Project Site/Target Area

Five provinces in northern, central, and inland Morocco (Al Haouz, Chefchaouen, Essaouira, Safi and Settat) (target roads have been selected from poorer provinces using social and economic indicators such as poverty rate.)

# (3) Project Components (including the procurement method)

Improvement (paving, road width expansion) and construction (paving) of rural roads (regional, provincial and non-classified roads) in the above mentioned areas (30 roads, approximately 530km). Procurement will be carried out through national competitive bidding.

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

7,740 million yen (ODA Loan Amount: 5,981 million yen)

### (5) Project Schedule (period of cooperation)

September, 2011 – October, 2014 (38 months in total)

The project is defined as being completed when the facilities are made available for operation (*month*, 2013).

### (6) Project Implementation Structure

- 1) Borrower: Caisse pour le Financement Routier (CFR)
- 2) Guarantor: The Government of the Kingdom of Morocco

- 3) Implementing Agency of Project: Direction des Routes (DR) in the Ministry of Equipment and Transport
- 4) Operation and Maintenance System: DR and local governments
- (7) Environmental and Social Consideration/Poverty Reduction/Social Development

## 1) Environmental and Social Consideration

- (i) Category: B
- (ii) Reason for Categorization: This project does not correspond to a large scale project among road sector projects under "Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations" (established in April 2002). The project is not located in a sensitive area, nor has it sensitive characteristics under the Guidelines, and its potential adverse impacts on the environment are not likely to be significant. 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 the Implementing agency (DR) may prepare an EIA at the stage of basic design based on the results of the Preliminary Environmental Assessment sheet (FEEP). However, there is no record of a need for an EIA having been determined based on the results of FEEP in PNRR-II, and so in this project, EIA is not expected to be prepared. In the event that an EIA is determined to be unnecessary, the Directions Régionales and Directions Provinciales in the Ministry of Equipment and Transport (DRET/DPET) will prepare a simplified environmental management plan (PGES).
- (iv) Anti-Pollution Measures: Impacts such as noise, water pollution and dust are expected during construction. These impacts will be specifically identified in the PGES, and construction contractors will take the mitigation measures stipulated by the PGES such as limitation of construction time, transportation to permitted places and appropriate treatments. Therefore, adverse impact on the environment is assumed to be minimal.
- (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 Moroccan domestic procedures.
- (vii) Other/Monitoring: A monitoring plan will be developed based on the PGES, and waste disposal and recovery of construction sites among others will be monitored during and after construction under supervision of the DRET/DPET.

### 2) Promotion of Poverty Reduction

In this project, target roads are selected from poorer provinces using indicators such as poverty rate and road accessibility. It is expected to improve the road accessibility in rural areas and activate local economy by paving the roads and thus shortening travel time and raising average speed, and thereby promote poverty reduction.

# 3) 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 improve elementary education enrolment rates of female children, reduce firewood-gathering work due to increased usage of household gas as a result of improvement of the road access for gas and water suppliers, etc., and enhance participation in socioeconomic activities by women.

#### (8) Collaboration with Other Donors

The World Bank, the AFD, the EIB and the African Development Bank, among others, are providing loans for the PNRR-II.

## 4. Targeted Outcomes

### (1) Quantitative Effects

## 1) Performance Indicators (Operation and Effect Indicators)

Indicator	Baseline (Actual value in 2010)	Target (2015, 2 years after completion)
Annual average of daily traffic volume (vehicles/day)	0 – 250 per road	60- 319 per road
Time saving (hours/day) (time required for passage)	Confirmed by baseline survey	9 - 1,204 per road*1
Reduction of traffic Impossibility dates due to natural disasters(days/year)	0 – 365 per road*2	0 for all roads
	Average 74	

<sup>\*1.</sup> Total shortening of travel time for car users per road

#### 2) Internal Rate of Return (EIRR): 12.47%

Cost: Civil engineering works cost (excluding taxes), operation and maintenance expenses

Benefit: Total benefits from the total shortening of travel time for car users

Project Life: 10 years

(2) Qualitative Effects: Activation of local economy, improvement of the living environment of the local residents, remedy of regional disparities

### 5. External Factors and Risk Control

None

## 6. Lessons Learned from Past Projects

From the experience in rural road development projects in the past, it has been learned that it is necessary to establish a maintenance system for after project completion. In this project, 10 out of 30 target roads are non-classified. Based on the above mentioned lesson that has been learned and considering the fact that the non-classified roads are under the jurisdiction of local governments, assistance will be provided for the CFR and the DR to establish and operate maintenance systems of local governments in collaboration with other donors.

### 7. Plans for Future Evaluation

#### (1) Indicators to be used

- 1) Annual average of daily traffic volume (vehicles/day)
- 2) Time saving (hours/day)
- 3) Reduction of traffic Impossibility dates due to natural disasters (days/year)
- 4) Economic Internal Rate of Return (EIRR)
- (2) Timing of Next Evaluation: Two years after completion of the project

<sup>\*2</sup> including roads that are totally impassable unless being paved