

Ex-ante Evaluation

1. Name of the Project

Country: The Islamic Republic of Pakistan

Project: East-West Road Improvement Project (N-70) (I)

(Loan Agreement: May 3, 2008; Loan Amount: 15,492 million yen; Borrower: The President of the Islamic Republic of Pakistan)

2. Necessity and Relevance of JBIC's Assistance

Based on the Poverty Reduction Strategy Paper (December 2003), the government of Pakistan is tackling “acceleration of economic growth” and “poverty reduction,” regarding the development of transport infrastructure as an important factor supporting economic growth. Additionally, in its Medium Term Development Framework 2005-2010 (May 2005), the government adopts as its road development objectives, strengthening of the transportation capacity of existing road networks through rehabilitation and widening of the roads, and development of road networks that help promote trade with neighboring countries.

As one of the major routes crossing the country east to west, as it links Quetta, the capital of Balochistan Province, and Multan, a major city in southern Punjab Province, National Highway No. 70 (N-70) takes a role in the shipment of mining products, such as coal, and agricultural products. The section of N-70 targeted by this project (approx. 34 km) goes through mountainous areas with narrow, steep and sharp curves, hindering traffic of large vehicles such as trailers, tankers and large-scale buses and forcing them to detour to other routes. Furthermore, traffic blockage caused by accidents involving trucks rolling over and landslide disasters often make it hard for even cars and other ordinary passenger vehicles to pass through. The National Highway Authority (NHA) plans to strengthen the transportation capacity of N-70, especially by improving the section that runs through the mountainous areas, in order for N-70 to serve as the shortest and highly safe east-west crossway.

The government of Pakistan has already begun developing sections of N-70 with assistance of the Asian Development Bank (ADB), not included in the section targeted by this project. Because of the technical difficulties, road improvement in this section, which runs through steep mountainous areas, calls for Japanese construction technologies. Works on the entire line of N-70 will be completed when the section targeted by this project is constructed, which will then contribute to producing the planned effect of N-70 as a central highway.

In its Medium-Term Strategy for Overseas Economic Cooperation Operations (April 2005), JBIC sets forth “foundation for sustained growth” as one of its priority areas, and attaches importance to the development of key infrastructure for strengthening the link between urban and rural areas. Construction of a major route linking Balochistan Province, where development has been delayed, and Punjab Province will contribute to a balanced development of local communities and economic growth. Thus, this project is consistent with the medium-term strategy. Consequently, it is highly necessary and relevant that JBIC should support the project.

3. Project Objectives

This project aims to enhance mutual access between Balochistan and Punjab Provinces by improving the 34-km section of N-70 running through mountainous areas and eliminating traffic bottlenecks; thereby contributing to the development of the regional economy.

4. Project Description

(1) Target Area

Rakhi Gaaj – Bewata section (approximately 34 km) in Punjab Province

(2) Project Outline

The 34km section of N-70 (Rakhi Gaaj – Bewata section in Punjab Province) running through mountainous areas will be improved.

- (a) Civil works: Widening the existing road width, partial altering of linear shapes, etc.
- (b) Consulting services: Detailed design, bidding assistance, construction monitoring and supervision, etc.

(3) Total Project Cost / Loan Amount

18,928 million yen (Japanese ODA Loan Amount: 15,492 million yen)

(4) Schedule

March 2008–February 2016 (96 months). Project completion is defined as when the section targeted by this project is placed in service.

(5) Implementation Structure

- (a) Borrower: The President of the Islamic Republic of Pakistan
- (b) Executing Agency: National Highway Authority (NHA)
- (c) Operation and Maintenance : Same as (b)

(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, compared with other projects in the road sector, the project is not particularly large, the 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” (April 2002). Thus, this project is classified as Category B.

(iii) Environmental Permit

The Environmental Impact Assessment (EIA) report concerning this project was prepared in August 2006 and approved by the Environmental Protection Agency (EPA) of Punjab Province in March 2007.

(iv) Anti-Pollution Measures

With regard to air quality, water quality, noise, etc. during construction, measures will be implemented to meet the domestic standards of Pakistan by spraying water, treating leachate, restricting night time construction, etc.

(v) Natural Environment

The area targeted by this project is not located in or around sensitive areas such as national parks, and so adverse impact on the natural environment is assumed to be minimal.

(vi) Social Environment

The project will involve the acquisition of about 5.8 ha of land and resident relocation of 30 households. The land acquisition and resident relocation will be carried out in accordance with the domestic procedures of Pakistan.

(vii) Other/Monitoring

In this project, the executing agency will monitor air quality, noise, land acquisition, resident relocation, etc.

(b) Promotion of Poverty Reduction

None

(c) Promotion of Social Development (e.g. Gender Perspective, Measure for Infectious Diseases Including AIDS, Participatory Development, Consideration for the Handicapped, etc.)

HIV/AIDS measures by contractors targeting construction workers will be stipulated in the bidding documents.

(7) Other Important Issues

None

5. Outcome Targets

(1) Evaluation Indicators (Operation and Effect Indicator)

Indicator	Baseline (2006)	Target (2017, 2 years after completion)
Annual average daily traffic (PCU/day)	2,959	7,760
Passage time (minutes)	133	48

(2) Number of Beneficiaries

Approximately 10 million (population as of 1998 along N-70, including the section targeted by this project [Multan–Quetta section, including parts of N-50])

(3) Internal Rate of Return (Economic Internal Rate of Return)

Based on the conditions indicated below, the economic internal rate of return (EIRR) is 19.4%.

- (a) Cost: Project cost (excluding land acquisition compensation cost and tax), operation and maintenance expenses
- (b) Benefit: Time saving, vehicle operation cost reduction
- (c) Project Life: 30 years

6. External Risk Factors

Deterioration in the security situation

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

As premature deterioration of road surfaces due to overloaded vehicles and the rash of traffic accidents caused by reckless driving are mentioned in the ex-post evaluations of similar projects in Pakistan, the lesson learned is that the Ministry of Communications and NHA should strive to make sure drivers observe traffic laws and thereby ensure traffic safety by expanding the sections that should be policed by the National Highway and Motorway Police (NHMP), installing traffic safety facilities, and promoting driver education.

In this project, in addition to strengthening the clamp down on overloaded vehicles by installing weight measuring stations for trucks, NHA will introduce a basic traffic control system through installation of traffic control centers, measure traffic volume, provide information, and control information in an integrated manner by using dedicated radio transmission.

8. Plans for Future Evaluation

(1) Indicators for Future Evaluation

- (a) Annual average daily traffic (PCU/day)
- (b) Passage Time (minutes)
- (c) Internal rate of return : EIRR(%)

(2) Timing of Next Evaluation

Two years after project completion