Ex-Ante Evaluation (for Japanese ODA Loan)

1. Name of the Project
   Country: The People’s Republic of Bangladesh
   Project: South-Western Bangladesh Rural Development Project
   Loan Agreement: March 24, 2010
   Loan amount: 14,246 million Yen
   Borrower: The Government of the People’s Republic of Bangladesh

2. Background and Necessity of the Project
   (1) Current Status and Issues of the Rural Infrastructure Sector in Bangladesh
   About 40 percent of the total population of Bangladesh is still classified below the poverty line. In this context, particularly, the measures to reduce the poverty are priority development agenda in the rural area, where nearly 80 percent of the total population resides and the poverty rate is still higher than the urban area. While the nationwide poverty rate has tended to decline against the backdrop of the rapid economic development, such improvements are hardly discernible and conditions even appear to be deteriorating in the southwestern region of the country—which is the targeted project site. Thus, measures to reduce the gap are needed. In 2005, the Government of Bangladesh (GOB) has focused on improving the rural infrastructure as one of the effective poverty reduction countermeasures and established a master plan until 2015. Based on the master plan, GOB has centered on development of rural roads, while focusing on overall rural infrastructure improvements to vitalize economic activities through the improvement of market access in the rural areas and thereby increase employment opportunities. However, the elimination of the gap between demand and supply in the rural infrastructure development and the vitalization of economic activities through integrate rural infrastructure development have still remained issues to be solved in the future.

   (2) Development Policies for the Rural Infrastructure Sector in Bangladesh and the Priority of the Project
   GOB emphasized in its Poverty Reduction Strategy Paper that rural infrastructure development would play an important role in poverty reduction. The policies stressed to improve the quality of existing roads rather than constructing new roads and to strategically develop rural markets and other infrastructures that have synergistic effect with the improvement of rural roads. In addition, development measures for the rural infrastructure sector in the past, such as the Strategy for Rural Development Projects (1984) and the National Rural Development Policy (2001) also placed importance on the strengthening of rural infrastructure development for poverty reduction. The Project will contribute to the achievement of the goals specified in the master plan especially in the southwestern part, where the poverty level is higher and the progress of rural infrastructure development has been slower than in other parts of Bangladesh.

   (3) Japan and JICA’s Policy and Operations in the Rural Infrastructure Sector
   Based on Country Assistance Program for Bangladesh (May 2006) drawn up by Government of Japan, JICA has adopted “poverty reduction through economic growth” as a priority area and has placed importance on rural infrastructure development because rural development assistance is important for supporting economic growth and securing employment of poor people. The following are recent main achievements of support:
   • Technical cooperation project: Strengthening of Activities of Rural Development Engineering Center Project
   • Grant aid: The Project for the Provision of Portable Steel Bridges on Upazila and Union Roads
   • Loan aid: Northern Rural Infrastructure Development Project, Greater Faridpur Rural
Infrastructure Development Project, Eastern Bangladesh Rural Infrastructure Development Project

(4) Other Donors’ Activity
Asian Development Bank carried out rural infrastructure projects in the northern and southern parts of Bangladesh in the 1990s and the eastern, northeastern, and southwestern parts from 2000. Following-up projects in the western and northwestern parts are now under consideration. The World Bank supported similar projects in the northwestern part in the 1990s, and from 2003, it has supported additional seven districts in the northeastern part.

(5) Necessity of the project
The Project intends to improve the rural infrastructure comprehensively in the South Western area of Bangladesh, contributing to poverty reduction in the South-West and alleviating economic disparities in Bangladesh. It also contributes that mitigation measures against natural disasters will enhance adaptation capacity to the possible risk caused by climate change. As this Project is in line with the country assistance program for Bangladesh and JICA’s policy, the necessity and relevance of JICA’s support of the Project is high.

3. Project Description

(1) Project Objectives
The objectives of this Project are to increase economic opportunities for the rural poor, improve their accessibility to social services, and promote recovery from damage by natural disasters in rural areas in the south-western part of Bangladesh by the construction and rehabilitation of rural infrastructure, thereby contributing to poverty reduction and alleviating economic disparities in the South-West.

(2) Project Site/Target Area
14 districts in the southwestern part (6 districts in Barishal Division, 3 districts in Khulna Division, and 5 districts in Greater Faridpur of Dhaka Division)

(3) Project Components
1) Upgrading Upazila and Union roads (130 Upazila and Union roads in total)
2) Improvement of rural markets, bridges, culverts, ghats etc
3) Consulting service (detailed design, tendering assistance, construction supervision, etc.)

(4) Estimated Project Cost (Loan Amount)
20,052 million yen (Loan Amount: 14,246 million yen)

(5) Schedule
It is scheduled to take place between March 2010 and December 2015 (70 months in total). The Project will be completed when the facility is placed in service (December 2014)

(6) Project Implementation Structure
1) Borrower: The Government of the People’s Republic of Bangladesh
2) Executing agency: Local Government Engineering Department (LGED)
3) Operation and Maintenance System: The same as 2)

(7) Environmental and Social Consideration /Poverty Reduction /Social Development
1) Environmental and Social Consideration
   a) Categorization: B
   b) Reason for Categorization: It is judged that the Project has no serious adverse
environmental impact because this Project does not fall under any large scale sector that is likely to have impact and the Project area is not susceptible to the impact under the terms of the “Japan Bank for International Cooperation Guidelines for Confirmation of Environmental and Social Considerations” (established in April 2002).

c) Environmental Permit:
The Environmental Clearance Certificate has been issued for the Project excluding the construction of 10 (ten) bridges of over 100-meter long by the Department of Environment in April 2009. According to the Bangladesh Environment Conservation Rules (1997), over 100-meter long bridges are categorized as red, which requires EIA (Environmental Impact Assessment) documents and procedure to get the clearance certificate to be issued by DOE. LGED shall obtain EIA approval from DOE for bridges over 100-meter long by the commencement of the construction works.

d) Anti-Pollution Measures: Measures will be taken against water pollution due to the outflow of soil from the fill, such as slope protection work, tree planting work, and installation of drainage systems. Moreover, measures will be taken against dust pollution during works, such as sprinkling water.

e) Natural Environment: Because the Project area do not fall under the category of protected area, such as a national park, adverse impact on the natural environment is estimated to be minimal.

f) Social Environment: Because total 232 households (including setback) will be affected in all the subproject and total 28 hectare of land needed or to be required in the Project, the implementing entity will take measures based on the GOB legal framework that will enable the people affected by the Project to improve their standard of living, income opportunities and production levels, or at least to restore them to pre-project levels.

g) Others/Monitoring: During this project, monitoring for noise, vibration, water quality, air quality, land acquisition, relocation of the residents and so on are carried out by executing agency. Sampling survey on livelihood restoration of project affected persons will be carried out before and after the project.

2) Promotion of Poverty Reduction: During the Project, trees will be planted along road shoulders mainly by groups of women in poverty. This will promote poverty reduction in the Project area.

3) Promotion of Social Development (e.g. gender perspective, measures for infectious diseases including HIV/AIDS, participatory development, consideration for persons with disability, etc.) Measures for promoting women’s participation in the Project and social activities will be taken, such as promotion of employment of women in poverty through planting and road maintenance, and support for women’s business activities through the setting up of women’s market sections. In addition, it is planned that anti-HIV/AIDS pamphlets prepared by the Ministry of Health and Family Welfare will be distributed to construction workers.

(8) Collaboration with Other Donors: None

(9) Other Important Issues: None

4. Targeted Outcomes

(1) Performance Indicators (Operation and Effect Indicator)
<table>
<thead>
<tr>
<th>Annual average daily traffic volume (Number of vehicles per day)</th>
<th>Reference value (Actual value in 2008)</th>
<th>Target value (2016) [Two years after the completion of the Project]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Bicycle</td>
<td>290</td>
<td>631</td>
</tr>
<tr>
<td>2) Rickshaw</td>
<td>289</td>
<td>628</td>
</tr>
<tr>
<td>3) Motorcycle</td>
<td>98</td>
<td>213</td>
</tr>
<tr>
<td>4) Pickup/microbus</td>
<td>11</td>
<td>25</td>
</tr>
<tr>
<td>5) Truck/tractor</td>
<td>10</td>
<td>22</td>
</tr>
</tbody>
</table>

Note) This table shows traffic volume per upazila road estimated from current available data on upazila roads.

(2) Internal Rate of Return
Based on the following assumptions, the economic internal rate of return (EIRR) for the Project will be as follows:

\[
\text{EIRR} = \frac{\text{Benefit} - \text{Cost}}{\text{Cost}} \times 100\%
\]

Cost: Cost of the Project (excluding tax), management, maintenance and administration
Benefit: 1) Upazila and Union roads: reduction in vehicle operating costs
        2) Rural markets: reduction in spoilage and unsold farm products
Project life: 20 years
        1) Upazila and Union roads: 8.1% to 50.0% per road
        2) Rural markets: 25.8% to 74.1% per market

5. External Factors and Risk Control
Delays in civil engineering work, etc. due to natural disasters such as floods

6. Lessons Learned from Past Projects
According to similar projects in the past, it is useful to adopt a regional comprehensive development approach that integrates related infrastructures, such as rural roads and markets, promote people’s participation, grow ownership, strengthen the project management system, and standardize facilities. The Project has been designed to integrate the development of rural markets and other related infrastructures, centering on improving rural roads. In addition, the resident group members in charge of the maintenance of infrastructures in the project sites will be fully informed of the details of the project beforehand so that they can deepen their understanding and the sense of involvement, and the management system will be strengthened through capacity building, such as supervision of works, maintenance of facilities, and financial management. Moreover, roads design will be standardized through the development of infrastructures in accordance with the design specifications for rural roads established in 2005 with JICA’s assistance.

7. Plan for Future Evaluation
(1) Indicators to be used for the future evaluation
    1) Annual average daily traffic volume per road (number of vehicle per day)
    2) EIRR (%)
    3) Various indicators on social development and poverty reduction
        Standard values and target values will be set up after due consideration of availability of data during the baseline study which will be implemented by the consultant of the Project.

(2) Timing
Two years after the completion of the project