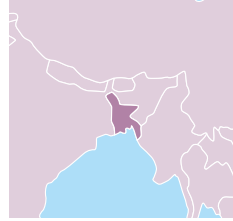




Paksey Bridge Construction Project (1) (2)

Realizing a safe and efficient passage over a major river with the construction of a high-quality bridge

Asia **Bangladesh****[External evaluator]**

Hajime Sonoda, Global Group 21 Japan, Inc.*1

Rating

Effectiveness, Impact	b	Overall rating B ^{*2}
Relevance	a	
Efficiency	b	
Sustainability	a	

Project Objectives

To develop a land route crossing the western side of the country and establish a safe and sufficient transport grid by constructing a bridge over the Ganges River, which flows in an east / west direction through Bangladesh, and contribute to the development of the economy of the western side of the country using the port of Mongla, located in the southwest region, and to bolster the economic activities between the eastern and western areas.

Outline of the Loan Agreement

- Loan amount / disbursed amount: (I) 8,707 million yen / 8,620 million yen (II) 9,209 million yen / 7,211 million yen
- Loan agreement: (I) July 1997; (II) March 2003
- Terms and conditions: 1.0% interest rate; 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: (I) September 2004; (II) May 2007
- Executing agency: Road Highway Department (RHD)
- Website URL: <http://www.rhd.gov.bd/Default.htm>

Annual average traffic at Paksey (vehicles/day)

	Planned at the appraisal		Actual (% of planned value)	
	Vehicles with 4 or more wheels	Total	Vehicles with 4 or more wheels	Total
2005	2,869	3,105	1,280 (45%)	1,945 (63%)
2006	3,084	3,338	1,481 (48%)	2,292 (69%)
2007	3,316	3,589	1,599 (48%)	2,445 (68%)

Sources: The planned values have been calculated based on reference materials used for the appraisal.
The actual figures are from the toll data compiled by the RHD.

*1. Support came from Prof. Dr. M. Mazharul Hoque, Prof. Dr. Jobair bin Alam, Dr. Md. Shamsul Hoque, and Dr. Mizanur Rahman at the Faculty of Civil Engineering, Bangladesh University of Engineering and Technology, who, as local experts, participated in traffic surveys, economic analyses, and socioeconomic impact analyses.

*2. The overall rating for this project should be B (Satisfactory) according to JICA's rating system. However, it has been evaluated as "fairly satisfactory" here because the increased scope did not match the actual traffic volume.

Effects of Project Implementation (Effectiveness, Impact)

The completion of the bridge under the project has enabled safe and efficient passage over the Ganges River. However, the volume of traffic has not grown as expected due to such factors as the sluggish level of activity at Mongla Port and Khulna Port, and improvements in ferry services crossing the Padma River. The average daily traffic since 2005 has been 2,000 to 2,500 vehicles, or two-thirds of the planned volume at the appraisal. One-third of the traffic is represented by light vehicles mainly used for short-distance travel (two and three-wheeled vehicles and two-wheel vehicles that are equipped with a carrier for passengers and goods). The traffic volume of vehicles with four or more wheels is slightly less than half of the planned volume. Meanwhile, the project has had favorable impacts on the country's southwestern city of Kushtia, located near the bridge, such as improved access to and from Dhaka. In areas farther from the bridge, no significant socioeconomic impact has been observed.

Therefore, this project has produced certain effects, and its effectiveness is moderate.

Relevance

Although the fundamental necessity of this project has remained high, predictions for traffic demand and economic efficiency were overestimated at the time of the appraisal. Given the improved ferry services crossing the Padma River and the lowered status of Mongla Port, the importance of the bridge as part of a wide-area trunk road is considered to be lower than that envisioned at the time of the appraisal. However, since the level of traffic demand will likely justify the investment, the project is evaluated to have remained relevant.

Efficiency

The project period was longer than planned while the project cost was lower than planned; therefore the evaluation of efficiency is moderate. The opening of the bridge was two and half years behind schedule due to significant delays in the procurement of equipment for bridge construction. On the other hand, despite the expanded scope of the project to include river control facilities and other aspects, a high-quality bridge was completed within the planned cost. However, expansion of the project scope through implementation of the Special Assistance for Project Formation (SAP-ROF) and the appraisal, to increase the road width and to build toll booths and administrative buildings were rather unnecessary in light of the actual traffic volume projections.

Sustainability

No major problems have been observed in the capacity of the executing agency nor its operation and maintenance system, therefore sustainability of this project is high.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be fairly satisfactory.*2 A major lesson learned is that if the economic relevance of a project might be undermined by a possible detour route, alternatives of that detour route should be carefully studied. Also, the volume of traffic to be diverted due to the possible detour route should be accurately predicted based on a detailed assessment. The evaluator has three major recommendations to make. First, the Road Highway Department (RHD) should have adequate technical skills to appropriately supervise the contractors for their operation and management of the bridge. Second, RHD should use a vehicle specially designed for bridge inspections when inspecting the bridge several years after completion. Third, the Bangladesh Railway should assess the damage to the revetments upstream of the Hardinge Railway Bridge and design an appropriate restoration project because they are now under its jurisdiction.