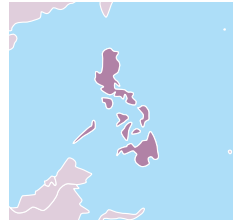




Metro Manila Interchange Construction Project (4)

Asia **Philippines**



Relieving traffic congestion by building interchanges in Manila and thereby supporting the regional economy by building interchanges

[External evaluator]

Yasuhiro Kawabata and Yuriko Sakairi, Sanshu Engineering Consultant Co., Ltd.

Rating

Effectiveness, Impact	a	Overall rating B
Relevance	a	
Efficiency	b	
Sustainability	b	

Project Objectives

To alleviate the traffic congestion, which is becoming increasingly serious, and to improve the living environment by constructing three interchanges and undertaking detailed designs for four interchanges at major intersections along EDSA and C-5, which are the most important and heavily congested circumferential roads in Metro Manila, thereby contributing to economic development of the region.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 5,849 million yen / 5,096 million yen
- Loan agreement: September 1998
- Terms and conditions: 2.2% interest rate; 30-year repayment period (including a 10-year grace period); general untied [consulting services: 0.75% interest rate; 40-year repayment period (10-year grace period); partially tied]
- Final disbursement date: January 2005
- Executing agency: Department of Public Works and Highways (DPWH)
- Website URL: www.dpwh.gov.ph/
- * This ex-post evaluation has been conducted jointly with the National Economic and Development Authority (NEDA) of the Philippine government.

Effects of Project Implementation (Effectiveness, Impact)

The average travel time for turning at the EDSA / Quezon Interchange has reduced from 10 minutes at the time of appraisal to less than one minute. The average turning time for the other interchanges is also below one minute now. Both the average speed and the speed at peak hours are above the targets, virtually eliminating congestion (see the table below). A beneficiary survey showed that nine out of every ten respondents have experienced the elimination of congestion and improvements in accessibility and mobility. As major effects of this project, a reduction in transport costs was identified by some 60% of the respondents, contributions to local economic activities by 50%, and more business and employment opportunities by 70%. Improvements in environmental aspects such as air quality and noise levels due to the elimination of congestion were also noted.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with the Philippines' national policies and development needs at the times of both appraisal and ex-post evaluation. Infrastructure development was high on the agenda for the Medium-Term Philippines Development Plan (MTPDP) that was in place at the time of the appraisal and whose overall goal was economic development. The MTPDP at the time of ex-post evaluation also aimed to promote economic growth and increase job opportunities. One of its priorities toward these two goals was the development of road and railway networks aimed at reducing congestion in Metro Manila.

Efficiency

This project's cost was lower than planned (97% of the planned cost) but took much longer than planned (279% of the planned period); therefore, the evaluation for efficiency is moderate. The major causes for the implementation delay include an underestimated schedule at the time of the appraisal, and extra time needed for procurement and land acquisition as well as accommodating changes to design and civil works arrangements.

Sustainability

No major problems have been observed in the operation and maintenance (O&M) of this project. The pavement surfaces are largely in good repair. However, inadequate O&M budget allocations remain a source of concern, especially in the face of the possibility that major renovation work will be necessary in several years. Though these problems have been observed, sustainability of this project is fair.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be satisfactory. The evaluator has drawn three major lessons for the design and preparation phases before the start of the construction work. First, a more detailed technical study and design should be undertaken to forestall any changes to the design that would cause a delay in construction work or a cost overrun. Second, a framework should be established for closer coordination among the DPWH, Local Government Units, and other stakeholders in the public and private sectors for smooth land acquisition. Third, a schedule should be developed that takes full account of the time required for land acquisition, bidding, and construction.

Travel speed of turning vehicles (km/hour)

Interchange		Target	Actual
EDSA / Quezon	Average speed	37	42
	Speed at peak hours	17	20
C-5 / Boni Serrano	Average speed	20	50
	Speed at peak hours	n/a	n/a
C-5 / Ortigas	Average speed	31	31
	Speed at peak hours	13	16

Source: DPWH