

Country Name	The Project for Traffic Improvement in Phnom Penh City
Kingdom of Cambodia	

I. Project Outline

Background	In accordance with the economic growth, the number of auto fleet in Phnom Penh had increased by 5% annually and reached approximately 800,000 in 2005. Traffic conditions in Phnom Penh had worsened, and traffic congestion and traffic accidents had become social problems in Phnom Penh. At the same time, there was a need for drivers education as a new traffic law which requires the motorcycle drivers to obtain licenses was expected to be enacted. Since the traffic was not controlled well in Phnom Penh, the capacity of the police officers for traffic control/law enforcement needed to be strengthened.												
Objectives of the Project	<ol style="list-style-type: none"> Overall Goal: To improve urban traffic condition by reducing traffic congestion and accidents through the implementation of appropriate traffic management in Phnom Penh Municipality Project Purpose: (1) To improve the capacity of Department of Public Works and Transport, Municipality of Phnom Penh (DPWT, MPP) to improve intersections, (2) To improve the capacity of Department of Land Transport, Ministry of Public Works and Transport (DLT, MPWT)¹ to educate drivers, and (3) To improve the capacity of Phnom Penh Municipal Police (PPMP), MPP to enforce traffic law Assumed steps for achieving the project goals²: This project implements pilot projects and training, which enables concerned agencies to improve traffic management (i.e. DPWT to improve intersections, DLT, MPWT to conduct drivers education, and PPMP to enforce traffic laws) and lead to more observance of traffic rules, thereby reducing traffic congestion and traffic accidents in Phnom Penh. 												
Activities of the project	<ol style="list-style-type: none"> Project site: Phnom Penh City Main activities: (1) Implementation of pilot projects on 2 intersections (Pet Lok Sang and Toul Kork intersections) and one corridor management, (2) Development and implementing a pilot program of motorcycle education upon license issuance, implementing the traffic safety campaign, and (3) training for trainers, development of manuals and guidelines, and technical training for police officers on traffic enforcement. <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Japanese Side</td> <td style="width: 50%;">Cambodia Side</td> </tr> <tr> <td>1. Experts: 85.5MM (5 persons in 5 fields)</td> <td>1. Staff allocated: 16 persons</td> </tr> <tr> <td>2. Trainees received : 3 persons (counterpart training in Japan)</td> <td>2. Land and facilities</td> </tr> <tr> <td>3. Equipment: Equipment for improvement of intersection, signal installation and others</td> <td>3. Local cost for improvement of intersections</td> </tr> <tr> <td>4. Local cost for civil engineering work of improvement of intersection and others</td> <td></td> </tr> </table>			Japanese Side	Cambodia Side	1. Experts: 85.5MM (5 persons in 5 fields)	1. Staff allocated: 16 persons	2. Trainees received : 3 persons (counterpart training in Japan)	2. Land and facilities	3. Equipment: Equipment for improvement of intersection, signal installation and others	3. Local cost for improvement of intersections	4. Local cost for civil engineering work of improvement of intersection and others	
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Project Period	March 2007 – March 2010 (Extended period: March 2009 – March 2010)	Project Cost	398 million yen										
Implementing Agency	(1) Department of Public Works and Transport, Municipality of Phnom Penh (DPWT, MPP) (2) Department of Land Transport, Ministry of Public Works and Transport (DLT, MPWT), and (3) Phnom Penh Municipal Police (PPMP), MPP												
Cooperation Agency in Japan	(1) Ministry of Foreign Affairs, National Police Agency, Ministry of Land, Infrastructure, Transport and Tourism, (2) Contract Agency: Mets Research & Planning Inc.												
Related Projects	Japan's cooperation: "The Transport Master Plan of the Phnom Penh Metropolitan Area In the Kingdom of Cambodia" (Technical Cooperation, 2000-2001), A Senior Volunteer (Traffic Education, and Traffic Law Enforcement, 2010)												

II. Result of the Evaluation

1 Relevance
This project has been highly relevant with Cambodia's development policy "developing safe and efficient traffic networks" as set in National Road Safety Action Plan (2006-2010), The Urban Transport Master Plan of the Phnom Penh Metropolitan Area (2001-2015), New Road Traffic Law (2009) and other documents, development needs of "improving traffic conditions and reducing traffic accidents in Phnom Penh", as well as Japan's ODA policy "promoting smooth transportation of people and goods in Phnom Penh" in JICA's Country Program (2005) both at the time of ex-ante evaluation and project completion. Therefore, relevance of this project is high.
2 Effectiveness/Impact
The project somewhat achieved the project purpose at the time of completion, as (i) the DPWT was able to plan, implement and complete intersection improvement (such as improvement of traffic signal phasing, setting traffic lane for left-turning and others) and corridor management (such as road marking) through the public experiments of the project, (ii) 48,286 motorcycle drivers licenses were issued under the pilot education program, and (iii) the capacity of traffic law enforcement improved

¹ DLT delegated the authority and responsibilities of driver license issuance and drivers education to the Division of Drivers License and Traffic Safety (DDLTS) of DPWT during the project implementation. Thus, the project also aimed at strengthening of DDLTS's capacity development.

² Reviewed at the time of the ex-post evaluation.

through on-the-job training (OJT) during the traffic safety campaign and traffic law enforcement campaign.

After the project completion, (i) DPWT has implemented 4 intersection improvements since project completion which include installation of traffic signal and road geometric improvement. According to DPWT, the project contributed a lot to DPWT's capacity in terms of knowledge and skills of how to make a proper plan for intersection improvement, intersection design and implementation. (ii) Regarding the drivers education program for motorcycle license issuance, the program was terminated at the end of 2012³, and instead, the driver safety education is carried out by private driving schools (16 hours) since 2010 in accordance with the traffic law⁴ and by public secondary schools (grade 7-9, 10 hours at each grade) as a driving education program ("life skills program"⁵). At the time of ex-post evaluation, DDLTS still carries out its mandated tasks of issuing drivers license. Applicants for the license have to submit certificate from private driving school or a letter from their school director. The contribution of the project's knowledge/ materials in the private driving schools and the public secondary schools are limited, as they are nothing but a part of the current materials/text books for providing training to motorbike drivers⁶. The system for refresher safety education, which was expected to be developed by the time of project completion, is not established by DLT due to its low priority among other law enforcement issues. (iii) PPMP has carried out the traffic law enforcement activities in Phnom Penh every day. PPMP occasionally implements traffic campaigns with NGOs or other cosponsors before the national events. PPMP was expected to develop training curriculum/programs on capacity development for traffic law enforcement by the project completion but has not developed yet, while it provides one-off training sessions (e.g. the 9-day course for "Skills and traffic law improvement" in March 2013).

For overall goal, the project dealt with only part of the traffic issues in Phnom Penh city and the traffic condition remains the same. But according to the interviews, the project activities and the government's self-efforts to construct flyovers might have contributed to the betterment of the situation. The number of accidents and casualties has slightly decreased in the past few years despite the increasing number of the city population (almost 24% increase from 2008 to 2012) and the registered automobiles (more than 50% increase from 2009 to 2013) and the significant increase of motorcycle.

Therefore, effectiveness/impact of the project is fair.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) (1) To improve the capacity of DPWT, MPP to improve intersections, (2) To improve the capacity of DLT, MPWT to educate drivers, and (3) To improve the capacity of PPMP, MPP to enforce traffic law	(Indicator 1) The public experiments planned for the second year is implemented by the counterpart personnel	(Project Completion) The public experiments (intersection improvement and corridor management) were implemented by DPWT. (Ex-post Evaluation) After the project completion, DPWT has improved another 4 intersections.
	(Indicator 2) Drivers education is implemented when a new road traffic law becomes effective.	(Project Completion) Drivers education was conducted in the license issuing pilot program, which issued 48,286 licenses at a pace exceeding the plan (target of 20,000 licenses by March, 2010). (Ex-post Evaluation) Drivers education is conducted by private driving schools and public secondary schools, and DDLTS issues driving licenses. The number of drivers educated is not obtained. (61,729 licenses were issued cumulatively until 2012)
	(Indicator 3) The campaign for traffic law enforcement is periodically implemented	(Project Completion) OJT was carried out during the traffic safety/law enforcement campaign, and intensive trainings were conducted for 5 selected police officers. (Ex-post Evaluation) PPMP has occasionally implemented the traffic safety campaigns (58 times in 2011 and 31 times in 2012). Training curriculum/programs on capacity development for traffic enforcement has not developed.
(Overall goal) To improve urban traffic condition by reducing traffic congestion and accidents through the implementation of appropriate traffic management in Phnom Penh Municipality	(Indicator 1) To improve the level of obedience to traffic rule by road users.	(Ex-post Evaluation) No data available (According to PPMP, drivers are generally more observant after the project completion due to the continuation of either traffic law enforcement or awareness raising.)
	(Indicator 2) To improve the traffic condition in Phnom Penh City	(Ex-post Evaluation) No data available (The condition in the part of the project target intersections has improved by the project and the government's self-efforts. However, the overall traffic condition in Phnom Penh has not much improved due to the increase of traffic volume.)
	(Indicator 3) To increase the traffic volume in intersections and roads	(Ex-post Evaluation) General traffic volume in Phnom Penh, especially those passing Pet Lok and Toul Kok intersections, has been steadily increasing to 94,035 in 2010, 121,488 in 2011 and 154,768 in 2012 against the backdrop that the number of registered vehicles and motorcycles has increased.
	(Indicator 4) To decrease 1) number traffic accidents per vehicle and 2) road	(Ex-post Evaluation) The number of traffic accidents, casualties and fatalities dropped in 2010 and has maintained the same level in spite of the increasing number of vehicles and motorcycles dramatically. (See Figure 1).

Source : Project Completion Report, Terminal Evaluation Report, Questionnaires & Interviews with counterparts, Annual reports

3 Efficiency

³ The program was expected to continue until 2015 but terminated due to the budget constraint and the stagnant number of applicants for motorcycle driver license. Drivers are discouraged to apply for the license partly because (a) law enforcement by traffic police for motorcycle drivers is not strict; (b) the fee for the examination determined by the Prakas (ministerial order) is high.

⁴ The traffic law designates private driving schools as a provider of drivers education.

⁵ The life skills program was approved by Ministry of Education, Youth and Sports (MoEYS) and was put into implementation just before the project started. The actual teaching of road safety education (one of the topics in life skills program) depends on each school's decision, as the life skill program is not a compulsory subject and is just encouraged by MoEYS. Since no monitoring activities were conducted by MoEYS and DLT, the number of schools that have been implementing/teaching the road safety education is unknown.

⁶ The text books were published in 2003 for private driving schools and in 2007 for public schools.

While the inputs were mostly appropriate for producing the outputs of the project, both the project period and the project cost exceed the plan (ratio against the plan: 153%, 150%), because the project period was extended as a new traffic law became effective during the implementation period which required more time for implementation of the project to incorporate the new traffic law. Therefore, efficiency of the project is low.

4 Sustainability

The project is still given importance in the current development policy. The National Road Safety Policy (2011-2020) is being drafted and waiting for approval from the Council of Minister which includes action plans for road safety management, road infrastructure, law enforcement, and driving license. A comprehensive urban transport master plan is also under formulation to respond to traffic demand in Phnom Penh City including the improvement of intersections.

Regarding the intersection improvement, the Public Works Office at DPWT and the staff from relevant offices work together in planning, designing and implementing when intersection improvement needs to be implemented. According to the interview, DPWT has sufficient number of staff for intersection improvement. For drivers education, the institutional framework has changed after project completion according to the traffic law: DDLTS is still responsible for motorcycle license issuance, but driver safety education is carried out by private driving schools and public secondary schools. DLT/MPWT provides trainings to and certifies the teachers regarding technical aspect of road safety. As to the traffic enforcement, the number of the traffic enforcement officer at PPMP is considered insufficient compared to increasing number of motorcycles and automobiles. Therefore, PPMP plans to recruit new officers every year.

Currently, there are no any technical problems in implementing the intersection improvement, drivers education, and traffic enforcement. However, since those institutions do not have any internal system for technical transfer, there are uncertainties for the future prospect.

In terms of financial aspects, the budget allocation for DPWT maintains the same level, while detailed information was not obtained about DDLTS and PPMP. According to the interviews, budget of DPWT and DDLTS is not sufficient to handle increasing traffic volume.

Thus, as there are problems in technical and financial aspects, sustainability of the project effect is fair.

5 Summary of the Evaluation

This project somewhat achieved the project purpose of (1) To improve the capacity of DPWT, MPP to improve intersections, (2) To improve the capacity of DLT, MPWT to educate drivers, and (3) To improve the capacity of PPMP, MPP to enforce traffic law, at the time of project completion. At the time of ex-post evaluation, the intersection improvement work continued and traffic enforcement campaign was conducted. Drivers education continues at private driving schools and public secondary schools, but the project's contribution to the current education program is limited. Traffic enforcement campaign has implemented occasionally but training curriculum/programs on capacity development for police officers has not been developed. Overall goal has been somewhat achieved in terms of the decreasing number of accidents, casualties and fatalities despite the increasing number of vehicles and motorcycles. As for sustainability, there are uncertainties in terms of technical and financial aspects, as each organization lacks technical transfer mechanism, and at least DDWT and DDLTS has insufficient budget. For efficiency, the project cost and period exceeded the plan to incorporate the new traffic law in the project activities.

In the light of above, this project is evaluated to be unsatisfactory.

III. Recommendations & Lessons Learned.

Recommendations to implementing agency:

1. Establishing the regular training curriculum/programs on the police officers' capacity to enforce traffic law is very important for internal transfer of the skills and know-how acquired during the project.

Lessons learned for JICA:

1. A project should carefully study the relevant institutions who may be involved in traffic issues, i.e. private driving schools for drivers education in the project, so that the project can understand more about the concerned actors and involve them through project activities.
2. Projects should set specific timeframe for activities to be done by counterparts and ensure the implementation after the project finished. In the project, the system for refresher education which was agreed by the counterpart to be established by the end of the project has not been established.

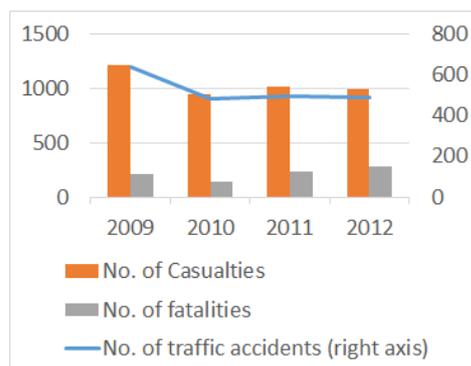


Figure 1: The number of accidents, casualties and fatalities



Toul Tompong Intersection after improvement



Road attached to Toul Tompong Intersection