conducted by Uganda office: March, 2013

Country Name	The Project for the Improvement of Traffic Flow in Kampala City
Uganda	The Project for the improvement of Traine Flow in Kampala City

I. Project Outline

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Project Cost		Limit: 778 million yen Contract Amount: 771 million yen				
E/N Date	June, 2005					
Completion Date	September, 2007					
Implementing Agency	<ul> <li>Ministry of Works, Housing and Communications (Current Uganda National Roads Authority (UNRA) under Ministry of Works and Transport (MOWT))</li> <li>Kampala City Council (Current Kampala Capital City Authority (KCCA))</li> </ul>					
Related Studies		Study: August 2004 - March, 2005				
Contracted Agencies	Consultant(s)	Nippon Koei Co., Ltd.				
	Contractor(s)					
	Supplier(s)	Kounoike Construction Co., Ltd.				
Related Projects (if any)	<ul> <li>Japan's cooperation:         <ul> <li>Project for Improvement of Trunk Roads in Kampala (1998, Grant Aid)</li> <li>Project for Improvement of Trunk Roads in Kampala, PhaseII(2002, Grant Aid)</li> </ul> </li> <li>The Study on Greater Kampala Road Network and Transport Improvement (2009-2010, Technical Cooperation)</li> <li>Follow-up Cooperation for The Project for the Improvement of Traffic Flow in Kampala City (2012, Technical Cooperation)</li> </ul>					
Background	The Government of Uganda (GOU) had implemented the structural adjustment policy since 1987 and had developed the Public Investment Plan (1996/97-1998/99) with the development goals of continuous economic growth and others. Expansion of the transportation sector was deemed as an essential way to achieve the above-mentioned goals, and therefore, GOU formulated a 10-Year Road Sector Development Program and other road sector policies.  In the mean time, the capital, Kampala city which is the center of economy of Uganda had long been faced with problems of increase of traffic volume and traffic accidents thereby, as well as frequent flooding of roads and junctions because of poor drainage due to the hilly location of Kampala city. Under this circumstance, with the request of GOU, JICA conducted the study "Improvement of Trunk Road at Kampala Urban Interface Sections" from December 1996 to November 1997 on the basis of the above mentioned 10-year program. Based on this study, several traffic congestion alleviation projects in Kampala city were implemented including traffic congestion alleviation projects supported by Japan and drainage improvement projects supported by World Bank. Under the circumstance, this project was expected to alleviate heavy traffic congestion around junctions in the city center.					
Project Objectives	Outcome To ensure the safe and smooth traffic in Kampala City by improving facilities of 6 existing junctions and 2 roads.  Outputs Japanese Side Pavement/expansion, drainage, traffic lights installment on 6 crossings (Clock tower, Shoprite, Katwe/Mengo Hill, Kampala/Entebbe road, Jinja road, Africana) and 2 roads (Nsambya road (200m) and Entebbe road (300m)  Ugandan Side Land acquisition Connection of low-voltage line to traffic signal systems Relocation of public assets (electricity, communication and water lines) in the construction site Provision of temporary site and electricity					

## II. Result of the Evaluation

# Summary of the Evaluation

Rapid growth of traffic volume in Kampala had caused serious traffic congestion and thereby traffic accidents often occurred. Urgent measures for the main cause of this traffic congestion such as insufficient traffic capacity of junctions, frequent flooding of road sections and damage of pavement were needed.

The project has largely achieved its objective of ensuring the safe and smooth traffic in Kampala City including the junctions of the project site as both the travel time and the number of traffic accident has decreased. As for sustainability, some problems have been observed in technical aspect in accordance with retirement/resignation of the staff as a result of organizational restructuring. However, training for basic operation and maintenance skills was carried out by follow-up cooperation by Japan.

For relevance, the project has been highly relevant with Uganda's development policy, development needs as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency, the project period has slightly exceeded the plan.

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

### 1 Relevance

This project has been highly relevant with Uganda's development policy (Developing an efficient traffic system which contributes to economic growth and poverty eradication as set in Public Investment Plan 1996/97-1998/99 and National Development Plan 2010/11-2014/15), development needs (Measures for increase of traffic volume, and thereby traffic congestion and traffic accidents), as well as Japan's ODA policy (Economic infrastructure (road, power and others) as one of the 4 priority areas in Japan's ODA to Uganda) at the time of both ex-ante and ex-post evaluation.

Therefore, relevance of this project is high.

# 2 Effectiveness/Impact

The project has largely achieved the project objective of ensuring safe and smooth traffic flow in Kampala City. Travel time from Entebbe road to Jinja road (4.7km) has been shortened. According to interviews with the implementing agencies and road users, introduction of traffic lights system, separating pedestrians from vehicles in the crossings has improved the traffic flow, and thereby reducing the number of traffic accidents. However, the increase of traffic volume has exceeded the prediction and therefore traffic jam has not been resolved fully. The implementing agencies have a view that traffic flow cannot be controlled only by improving facilities of junctions any more, and they have come up with other interventions such as construction of elevated bridges and increase of passenger carriage by introducing bus lanes.

On the impact, as a result of increase of traffic capacity and order and controlled traffic flow, public transport service has improved and lives of local residents have become more convenient: the number of scheduled return trips that commuter taxis can operate has increased, and larger passenger capacity buses have been introduced. People's road safety awareness and observation of traffic safety requirements/regulations need to be improved, however, it is difficult to solve those issues only by implementing agencies and measures need to be taken by the related authorities/institutions as a whole. Also, there were no negative impacts to the natural environment observed that could be attributed to the project.

Therefore, effectiveness/impact of this project is high.

#### Quantitative Effect

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	2004 Actual	2007 Planned	2008 Actual	2012 Actual
	(BD)		One year after	(at the time of
			completion)	ex-post evaluation)
Indicator 1	It takes long (38 minutes) from	Shortened	8-13 minutes	10-15 minutes
Shortening of	Entebbe road to Jinja road (4.7			
travel time	km) because of jam in the			
	round-about.			
Supplemental	①Entebbe road:10,157/day	N/A	①13,816/day	①32,789/day
indication	②Jinja road: 15,532/day		②21,928/day	246,337/day
Traffic volume per				
day on Entebbe				
road and Jinja				
road				

(Source: measured during project site visit on September 20, 2012 and interview with the implementing agencies.)



(Controlled traffic at Jinja Road Junction)



(Well-maintained drainage on Entebbe road)

# 3 Efficiency

Although the project cost was as planned (ratio against the plan: 99%), the project period slightly exceeded the plan (ratio against the plan: 112%), because of the delay in the procurement and construction. Outputs were produced mostly as planned.

Therefore, efficiency of this project is fair.

#### 4 Sustainability

The facilities and equipment provided by the project are maintained by Uganda National Roads Authority (UNRA) which operates and maintains roads, and Kampala Capital City Authority (KCCA) which operates and maintains facilities and equipment of junctions. Although the implementing agencies were restructured after the project implementation, both of UNRA and KCCA have sufficient number of maintenance staff and they do not have financial problems since certain amount of operation and maintenance budget has been secured. UNRA has no technical problems, however, KCCA has problems in technical capacity for maintaining traffic signals since most of staff that was trained during project implementation retired and

resigned after organizational restructuring. Current KCCA staff were later trained and have gained basic operation and maintenance skills through follow-up cooperation by Japan. In order to carry out operation and maintenance appropriately, in addition to the skills of responding to troubles, further capacity development such as operation skills of traffic signals in accordance with traffic volume is needed. As to the current status of operation and maintenance, maintenance has been mostly done as planned or more frequently than planned, and all the traffic signals, controls, road surface and drainage were in operation and in good conditions.

Therefore, sustainability of this project is high.

### III. Recommendations & Lessons Learned

Recommendations for Implementing agencies

- 1. In response to significant expansion of traffic volume, KCCA needs to acquire operational skills for controlling the safe and smooth traffic.
- 2. In addition to implementing agencies, the government of Uganda as a whole including traffic police and other related authorities in cooperation, needs to take measures for improving people's road safety awareness and observation of traffic safety requirements/regulations.

## Lessons learned for JICA

There are countries where people do not share individual skills acquired through training within an organization. In such case, resignation/retirement of counterparts results in the suspension of operation and maintenance practices. JICA should carry out training for sufficient number of counterparts, and also distribute sufficient number of manuals to an implementing agency, so that the newly hired/allocated staffs can continue operation and maintenance.