# **Internal Ex-Post Evaluation for Grant Aid Project**

Country	The Project for the Enhancement of Training Capabilities of Construction Machinery Training Institute
Pakistan	

conducted by Pakistan Office: October, 2011

I. Project Outline							
Project Cost	E/N Grant Limit: 890 million yen	Contract Amount: 848 million yen					
E/N Date	May, 2006						
Completion Date	February, 2007						
Implementing	Construction Machinery Training Institute	(CMTI) (renamed to CTTI: Construction Technology Training Institute					
Agency	in 2005)						
Related Studies	Basic Design Study: August 2004 - Februa						
	Detailed Design Study: February 2006 - Ja						
Contracted Agencies	· · · · · · · · · · · · · · · · · · ·	nsultants – Yachiyo Engineering (JV)					
	Contractor(s) Tobishima Corporation						
	Supplier(s)Itochu Corporation						
Related Projects (if any)	Japanese cooperations: Construction Machinery Training Centre(JICA Technical Cooperation, 1985-1990), Construction Mach Training Institute (Third Country Training Program, 2006-2010), The Construction Project for the Constru- Machinery Training Centre (JICA Grant Aid, 1984), The Project for Expansion of Construction Mach Training Institute (JICA Grant Aid, 1995)						
Background	In Pakistan, there was a huge demand for infrastructure development, and thus for capable human resources for operation and maintenance of construction machinery. Since its opening in 1985 with assistance from Japan, CTTI trained 9,200 persons up to the time of the ex-ante evaluation of this project. However, due to recent rapid modernization of construction machinery, CTTI needed to open new courses, which required new facilities and equipment.						
Project Objectives	Outcome						
	To enhance training capabilities of C development of facilities and equipment for	Construction Machinery Training Institute (CMTI), Islamabad, by or new training courses.					
	Outputs						
	Japanese Side						
	•	buildings and procurement of equipment necessary for opening of three					
		Vehicle Electrician, and (iii) Welding and Fabrication.					
	Pakistan Side						
	- Machinery yard (952m <sup>2</sup> ), site clearance	, and connection to existing infrastructures.					

## **II.** Result of the Evaluation

Summary of the Evaluation

In response to the huge demand for infrastructure development, and thus for capable human resources for operation and maintenance of construction machinery that was being modernized rapidly, CTTI needed to open new courses, which required new facilities and equipment.

This project has largely achieved the enhancement of training capabilities of CTTI through development of facilities and equipment for the three new training courses, due to the fact that those courses, since opened in 2008, have produced total 316 graduates who are capable of handling highly-mechanized construction works demanded by the construction industry. As for sustainability, there was no problem observed in the project due to the appropriate operation structure, qualified human instructors, good financial conditions to run training, and appropriate operation and maintenance practices of CTTI.

For relevance, the project has been highly relevant with Pakistan'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 as well, both the project cost and project period were within the plan.

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

1 Relevance

This project has been highly relevant with the Pakistan's development plan (infrastructure development as set in national five-year plan 2005-2010), development needs (human resource development for construction machinery), as well as Japan's ODA policy (priority on infrastructure development), at the time of planning/ ex-post evaluation. Therefore, its relevance is high.

2 Efficiency

Both project cost and project period was within the plan (ratio against plan: 95%, 100%). Therefore, efficiency of the project is high.

### 3 Effectiveness/Impact

The project has largely achieved its purpose of developing the human resource for operation and maintenance of construction machinery. The number of graduates from the three new training courses is mostly satisfactory in the target year. Based on information from the implementing agency, it is considered that the contents of the new training, which includes latest mechanized technology exactly compatible with the market demand, are highly appreciated by construction companies. As shown in the fact that 955 CTTI graduates have been employed by domestic and foreign-invested companies (including Japanese companies), more trained operators, mechanics and supervisors are now available in the market to the construction companies as compared to the past, and thus most of the construction work is now extensively mechanized. For example, rehabilitation of the last year's flood damaged roads is almost all mechanized. By supplying its graduates to many construction companies, CTTI has contributed to such trend. In addition, the Third-Country Training Course "International Course on Operation and Maintenance of Construction Machinery" has also benefited from this project as it has used the facilities/equipment developed by this grant aid project since Japanese Fiscal Year 2008. Therefore its effectiveness/impact is high.

Quantitative Effects

Indicator(unit)		2004	(Actual value)				
		(BD year)	2008	2009	2010*	2011	Total
No. of graduates from	Vehicle mechanic	0	27	28	29	28	112
new training course	Vehicle electrician	0	25	24	27	0	76
	Welding and fabrication	0	49	28	25	26	28

Source: CTTI. Note: \*The target year set in BD (three years after the project completion). The target value has not been specified in BD. Number of graduates from the Third Country Training Course: 18 (JFY2005), 20 (JFY2006), 19 (JFY2007), 20 (JFY2008), 20 (JFY2009).



A practical training going on utilizing the equipment and facilities



A classroom lecture on the course

#### 4 Sustainability

This project has no problem in structural, technical and financial aspects and operation and maintenance status of the implementing agency as we observed the current status as follows. 1) Current organizational settings for O&M are very appropriate according to number of trainees, workshop facilities and machines, 2) This institution has qualified instructors on its faculty strength to teach classes of Diploma of Associate Engineer in civil, Mechanical, Auto & Diesel Technology and short courses, 3) Financial resources required to sustain project effectiveness have been secured by Government of Pakistan and expected to be secured for future as well. And 4) All the facilities available in this Institute are maintained regularly and kept in worthy condition. Furthermore, CTTI has made their best effort in their current capacity, such as holding evening trainings, to meet the increasing demand for trainings. Therefore sustainability of this project is high.



The facility kept clean and well maintained

### **III. Recommendations & Lessons Learned**

Recommendation for Counterpart Agency:

It is recommended that CTTI increase the number of trainings as the demand for trainings is much higher. CTTI has already made their best effort in their current capacity, such as holding evening trainings and maintaining the equipment and other training facilities in excellent conditions. Therefore, it is recommended to CTTI to seek the way to increase the number of trainings by formulating the future plan for the training and calculation of necessary additional input for convincing relevance ministries or donors to fund them.

#### Column: Combined Factors for the Success:

This project is very successful because they could establish the positive spiral as follows. This spiral starts from the capable and highly motivated personnel of CTTI. Because of these personnel, CTTI have maintained their equipment and other facilities in excellent conditions, which enables them to provide the training courses of high quality. CTTI has a good reputation, shows their achievement and the more demands for the training comes up which helps Ministry of Communication to allocate required budget and support to CTTI, and this enables CTTI to maintain the equipment and facility appropriately for providing the high quality training courses.