Internal Ex-Post Evaluation for Technical Cooperation Project

Country	The Droiget on Conseity Duilding for Water Supply System	
Cambodia	The Project on Capacity Building for Water Supply System	

Project Cost Project Period Implementing Agency	293million yen October 14, 2003 - October 13, 2006 (3 years)			
Implementing	October 14, 2003 - October 13, 2006 (3 years)			
		October 14, 2003 - October 13, 2006 (3 years)		
Agency	Phnom Penh Water Supply Authority (PPWSA),			
	Ministry of Industry, Mines and Energy / Department of Potable Water Supply (MIME/DPWS)			
Cooperation	Ministry of Health, Labour and Welfare, Waterworks Bureau of Kitakyushu City, Yokohama and Nagoya and			
Agency in Japan	Tokyo Metropolitan Government, Hokkaido University, Japan Water Works Association (JWWA)			
Related Projects (if any)	 Japanese cooperations: Technical Cooperation The Study on Phnom Penh Water Supply System (1993), The Master Plan of Great Phnom Penh Water Supply (Phase 2) (2006), The Project on Capacity Building for Water Supply System Phase 2 Grant Aid Projects The Project for Improvement of Water Supply Facilities (Phase 1 & 2) (Completion, 1999), The Project for Expansion of Phum Prek Water Treatment Plant (Completion, 2003), The Project for Improvement of Water Supply System in Siem Reap Town (Completion 2006) JICA Loan Niroth Water Supply Project (Co-finance with AFD) Other donors' cooperations: France: Chamkar Mon WTP and Expansion of Chrouy Changva, 			
	- World Bank, ADB: Rehabilitation of 6 Provincial Town			
Background	Water supply facilities in Cambodia have been renovated by the assistance from foreign donors including JICA, and the capacity to distribute the water has been greatly improved, especially in the urban areas of Phnom Penh and Siem Reap. Therefore, there was a great need to strengthen the capacity of MIME/DPWS which are responsible for Human Resources Development (HRD) on water supply system. With regard to this need, in response to the request from the government of Cambodia, the Japanese Government decided to implement the technical cooperation to improve (i) capacity to operate and maintain the water supply facilities in PPWSA and (ii) staff training system for water supply system in Cambodia.			
	Japanese Side	Cambodia Side		
Inputs	 Experts: 3 Long-term experts and 32 Short-term experts Trainees Received: 29 CPs in Japan Third-Country Training: 12 CPs in Thailand Equipment: 19.3 million yen for procurement from Japan and US\$82,283 for local procurement Local Cost: US\$174,076 	 Staff Allocated: 50 personnel (11 from MIME and 39 from PPWSA) Buildings and facilities: Project Office with utilities at PPWSA compounds Local cost: US\$12,420 for transportation and accommodation for training and OM cost for training center 		
	Super Goal			
Project Objectives	Super Goal Access to safe water will increase in urban area. Overall Goal Capacity to operate and maintain water supply facilities will be improved in urban area Project Purpose 1) Capacity to operate and maintain water supply facilities will be improved in PPWSA. 2) Staff training system for the water supply system will be improved in the Kingdom of Cambodia. Outputs Output 1: Capacity to control the distribution of treated water will be improved in PPWSA. Output 2: Appropriate operation and maintenance techniques in the Phun Prek water treatment plant will be mastered. Output 3: Water quality monitoring system will be improved in PPWSA. Output 4: Training programme based on human resources development plan will start in PPWSA.			

II. Result of the Evaluation

Summary of the Evaluation

Under the supports of the Japanese government and other donors, the water supply system in Phnom Penh had expanded its capacity from 65,000 m³/day in 1993 to 235,000 m³/day in 2003. Japan, World Bank and ADB were starting to reconstruct the water supply facilities in the major provincial waterworks. With this rapid expansion of water supply facilities, there was an urgent need of human resources development for PPWSA; however, MIME/DPWS which is responsible to improve capacity of provincial waterworks did not have enough experiences to conduct capacity building.

This Project has achieved its purposes of improving the capacity to operate and maintain water supply facilities in PPWSA, and the staff training system for the water supply system in Cambodia. And the Project has achieved its overall goal of improving the capacity to operate and maintain water supply facilities in urban area. As for sustainability, the project has no problems in policy background,

structural aspects of implementing agency. The capacity of MIME and provincial waterworks, especially for PPWSA has been greatly improved through the trainings conducted by the project. As for the capacity of other provincial waterworks, the on-going project namely, "Capacity Building for Water Supply System Phase 2" has focused on the training for those staff of 8 provincial waterworks. For relevance, the project has been highly relevant with the development policy of the Kingdom of Cambodia, development needs, as well as Japan's ODA policy. For efficiency, both project cost and project period were mostly as planned.

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

1 Relevance

This project has been highly relevant with Cambodian development policy, such as the Cambodia Millennium Development Goals (CMDGs), National Strategic Development Plan (2006-2010), Rectangular Strategy Phase II, National Water and Sanitation Sector Financing Strategy for Cambodia and the National Policy on Water Supply and Sanitation. The project has also been consistent with the development needs, to strengthen the capacity of MIME/DPWS, as well as Japan's ODA policy, at the time of both ex-ante and project completion. Therefore, its relevance is high.

2 Effectiveness/Impact

The project has largely achieved its purpose with combined efforts of other donor's assistant such as France, World Bank and ADB. It should be noted that the MIME/PPWSA has taken the initiatives to manage the donor coordination according to "the Study on Phnom Penh Water Supply System (1993)" and "the Master Plan of Great Phnom Penh Water Supply (Phase 2) (2006)" developed by Japan. As for the project purpose of (i) improving capacity to operate and maintain water supply facilities in PPWSA, the targeted indicators have been achieved, such that the non-revenue water ratio decreased to 5.85% in 2010 from 17.1% in 2003, the water distribution was conducted in accordance with the demands, and the quality of water in all of the three Water Treatment Plants (WTPs) operating in Phnom Penh satisfied with the WHO's Drinking Water Quality Standard. As for the purpose of (ii) improving staff training system for the water supply system, the project has also achieved its target indicators in fostering the main trainers for training the staff of provincial waterworks and training more than 200 staff by conducting 13 training courses based on the long-term human resources development program. As for the overall goal, treated water quality of Phnom Penh and eight WTPs were complied with required standard and for most of water supply facilities in the urban area utilization rates are more than 60%. As for the super goal, according to the national census of 2008, 72% of urban population has access to safe drinking water (the data includes not only the pipe-water, but also other water sources), and this is very close to the CMDG target, 80% for 2015. Some positive impacts have also been observed such that the technical information has been exchanged between DPWS and provincial Waterworks, and that MIME has started promoting the establishment of the Cambodian Waterworks Association. No negative impact has been observed. Therefore, its effectiveness/impact is high.



OJT on the maintenance of distribution facilities



OJT on how to use laboratory equipment for water quality analysis at PPWSA



OJT training for staff of provincial waterworks on operation and maintenance of pumping facilities

3 Efficiency

Both project period and project cost were mostly as planned (ratio against plan 100%, 98% respectively.) Therefore, efficiency of this project is high.

4 Sustainability

The project has no problems in policy background, structural aspects of implementing agency. The capacity of MIME and provincial waterworks, especially for PPWSA has been greatly improved through the trainings conducted by the project. As for the capacity development of provincial waterworks, the on-going project namely, "Capacity Building for Water Supply System Phase 2" has taken over the trainings. With the good performance of telemeter system, the financial situation of PPWSA is quite good. Furthermore, the facilities and equipment installed by the project are generally in good condition and in use with appropriate maintenance. Therefore, the sustainability of the project is high.

III. Recommendations & Lessons Learned

Lessons learned for JICA:

The strong initiative of the government on donor coordination is the key to achieve the intended objective through effectively binding efforts of all stakeholders.