終了時評価調査結果要約表(英文)

I . Outline of the Project		
Country: Republic of Indonesia	Project Title: Project for Capacity Development of Wastewater Sector	
	through Reviewing the Wastewater Management Master Plan in DKI	
	Jakarta	
Issue/Sector: Environmental	Cooperation Scheme: TCP	
Management - Water quality		
pollution		
Division in charge: Global	Total cost(estimated at completion of the Project) JPY 238 mil	
Environment Department		
Period of Cooperation: July 2010 –	Partner Country's Implementation Organization: 1) Directorate General	
June 2012 (23 months)	of Human Settlement, Ministry of Public Works (MPW), 2) DKI Jakarta	
	Provincial Government, 3) Wastewater Management Enterprise, City of	
	Jakarta (PD Pal Jaya)	
	Supporting Organization in Japan: Ministry of Land, Infrastructure and	
	Transport	

Related cooperation:

Project for Capacity Development of Jakarta Comprehensive Flood management (Oct. 2010 – Oct. 2013) The Institutional Revitalization Project for Flood Management in JABODETABEK (March 2007 – March 2010)

The Preparatory Survey for PPP Infrastructure Project, Sewage Treatment Plant Project in DKI Jakarta (Dec. 2011 – Oct. 2012)

1 Background of the Project

In DKI Jakarta where the Capital of Indonesia is located, people have been suffering from environmental problems such as repeated flooding, poor sanitation, a water shortage and land subsidence by excessive drawing of groundwater. In 1991, JICA and Directorate General of Human Settlements, Ministry of Public Works (MPW) jointly formulated a master plan featuring drainage, sewerage and sanitation development in DKI Jakarta for the target year of 2010. However, the development of the sewerage system could not proceed as planned and the coverage remains as low as 2%. Meanwhile, the Government of Indonesia (GOI) plans to improve the coverage of sewerage service to 5% by 2014 in 16 major cities nationwide (as a medium-term target), including DKI Jakarta.

Under these circumstances, the GOI made a request to the Government of Japan for the provision of technical cooperation to assist the revision of the wastewater management master plan. In response to the request, JICA has started the Project for two years, from July 2010 to June 2012, with the C/P including MPW, DKI Jakarta Provincial Government and Wastewater Management Enterprise, Jakarta (PD Pal Jaya).

2 Project Overview

The Project is composed of two components/Outputs; namely, Output 1 (July 2010 – June 2012) to be produced by a Long-Term Expert (LTE) and Output 2 (Nov. 2010 – Mar. 2012) to be handled by Short-Term Experts (STE) team under consultation with the LTE.

- (1) Overall Goal
 - 1: Proper policy, system and plan in wastewater sector are established.
 - 2: DKI Jakarta has enough capacity to improve wastewater sector conditions.

(2) Project Purpose

Capacity of Ministry of Public Works and DKI Jakarta in formulation of wastewater sector policies and wastewater management plans is enhanced.

(3) Outputs

- 1: Domestic Wastewater Law and its regulation are prepared.
- 2: The wastewater management master plan in DKI Jakarta is revised.

(4) Inputs

【Japanese side】

LTE	1 person (24 MM)	STE	13 persons (68.42MM)
Trainees received	14 participants	Local costs	JPY9,570,000
Equipment	Desktop computers 2 sets, AutoCAD 1 set and ArcGIS 1 set		

【Indonesian side】

Counterpart (C/P)	33 persons	Office space	Two offices in MPW and PD Pal
			Jaya
Local costs	JPY2,850,000		

II. Evaluation Team				
Members	(1) Japanese side			
of	Mr. Hideo Noda, Leader, Director, Environmental management Div. 1, Global Environment			
Evaluation	Dep., JICA			
Team	Ms. Hiroko Kamata, Sewerage management, Senior Advisor on Environmental Management,			
	JICA			
	Mr. Koji Maeshima, Evaluation Planning, Program Officer, Environmental management Div. 1,			
	Global Environment Dep., JICA			
	Mr. Yasunori Minagawa, Evaluation Analysis, Senior Consultant, SKK Research & Consulting			
	Inc.			
	(2) Indonesian side			
	Mr. Eko Wiji Purwanto, Directorate of Settlement and Housing, BAPPENAS Mr. Welly, Directorate of Development Program, Directorate General of Human Settlement			
	MPW			
Period of	26/Feb/2012– 9/March/2012	Type of Evaluation: Terminal evaluation		
Evaluation				

III. Results of Evaluation

1. Summary of evaluation results

(1) Relevance: high

Promotion of sewerage system development is accommodated in Jakarta Spatial Plan 2030 and will be also raised in the Medium-Term Development Plan of DKI Jakarta 2012-17 (under preparation). On the other hand, Japanese Government is providing assistance to Indonesia in accordance with "Country Assistance Program for Indonesia", developed in November 2004, which includes assistance for the improvement of public services including water and sanitation under "Assistance to Create a Democratic and Fair Society", one of the priority areas in the Program. Thus, the Project is consistent with the development policies of Indonesia as well as with the Japanese assistance policy.

The feature of this project, the revision of M/P, was to clarify the problem not only in off-site systems¹ but also that of a septic tank and individual wastewater treatment plant (ITP) for commercial buildings, which are relevant to issues on current on-site systems² in DKI Jakarta, and to propose the concrete countermeasures to them. This approach is considered to be highly practical and to meet the needs of Indonesia.

(2) Effectiveness: relatively high

The Evaluation Team confirmed that the Project has almost completed activities stipulated in the Project Design Matrix (PDM) and that, for some remaining procedures at Indonesian side, MPW is responsible for the enactment of Sanitation Law and DKI Jakarta Provincial Government is to tackle the Master Plan (M/P) with their commitment, which supports positive development on these issues in the future. The Project Purpose is, therefore, likely to be mostly achieved by the end of the Project period.

This project aims also at strengthening of capacity of the C/P which is relevant to the development of the M/P, while there is no direct indicator for the matter in PDM. Workshops/seminars/meetings were organized in Output 1 and 2 for the purpose through transfer of technology and know-how focusing on the practical aspect in preparing the M/P.

(3) Efficiency: high

Output 1 is likely to be achieved by the end of the Project period. As for Output 2, the DfR which is a substantial product in Output 2 has been already submitted to Indonesian side and only some procedures such as the approval of the M/P by the Governor remains to be taken by Indonesian side.

In Output 1, since Indonesia aimed at the enactment of Sanitation Law which covers both wastewater and drainage and the concept of the Law is as same as that of Sewerage Law in Japan, the dispatch of a Long-term expert contributed to the transfer of technology and know-how on Japanese sewerage system administration. As for Output 2, recognizing present condition on sanitation in DKI Jakarta with objective data provided in the bi-weekly meetings as well as comparative data provided in training in Japan, the C/P understood clearly that the improvement of the sewerage system in DKI is a matter of great urgency.

(4) Impact: relatively high

It has been confirmed that MPW is responsible for legal arrangement and DKI Jakarta Provincial Government is to tackles the MP with their commitment, and the prospects of the Overall Goal to be achieved is positive.

Through the implementation of the Project, the following positive impacts have been confirmed.

- In MPW, a working group for aiming at reuse of sewage disposal water was set up in connection with the preparation of Sanitation Law. Moreover, in response to the request from MPW on technical assistance for this topic, a committee on technical standards for the reuse of sewage disposal water in Indonesia was set up at Japanese side with the initiative of the Ministry of Land, Infrastructure and Transport in cooperation with the Ministry of Health, Labour and Welfare in Japan and just started its activity in February2012.
- DKI Jakarta Provincial Government set up a working group for discussing regular desludging system with their own initiative since they recognized clearly that the improvement of septage management in DKI Jakarta was a matter of urgency.

¹ Off-site systems remove excreta from the points for disposal elsewhere (such as treatment by sewerage system)

 $^{^{2}}$ On-site systems retain excreta on or near the points at where they are generated (such as treatment by septic tank).

(5) Sustainability: moderate

(Political aspect)

The MPW's Strategic Plan for 2010-2014, developed in accordance with the National Medium-Term Development Plan (RPJMN) 2010-14, has set up a goal with 5% of sewerage coverage ratio in 16 major cities nationwide, including DKI Jakarta. Moreover, MPW is tackling the enactment of Sanitation Law which is expected to be promulgated in 2013. These findings suggests that political continuity is secured after the completion of the Project

(Institutional/Organizational aspect)

Since DKI Jakarta Provincial Government expressed their willingness that they would discuss the organizational formation referring an organizational reform proposed in the DfR, organizational strengthening is expected to be realized. Moreover, DKI Jakarta Provincial Government set up a working group among related institutions to discuss improvement measures in on-site system including the introduction of regular sludge collection proposed in the DfR, which shows the high level of ownership by Indonesian side.

(Financial aspect)

According to C/P, a budget will be allocated for construction of sewerage facilities depending on the priority stipulated in the National Medium-term Development Plan 2010-14, while the sustainable financial plan for operation and maintenance of such facilities is necessary but unknown at this moment. (Technical aspect)

As a nature of the Project, efforts to secure technical sustainability remain limited. Activities such as F/S and implementation of the M/P will provide such technical capability as the design, operation and maintenance on wastewater treatment plants in the future. Therefore, its technical sustainability is unknown at this moment.

2. Factors that promoted realization of effects

• Bi-weekly meetings implemented by STE team supported sharing the progress and technical contents of the M/P revision among stakeholders and, therefore, contributed to the high efficiency of the Project.

3. Factors that impeded realization of effects

• The DfR preparation was suspended until Provincial Secretary of DKI Jakarta notified in December 2011 required lands for wastewater treatment plants in the two priority zones, which is one of the most important matters in the DfR.

4. Conclusion

The Team confirmed that almost of all activities stipulated in the PDM have been done, although there are still some remaining activities such as the process of introduction of Sanitation Law to the parliament and that of the approval of the M/P by the governor of DKI Jakarta. Such remaining activities will be completed with the strong commitment by MPW which is responsible for the development of legal system and by DKI Jakarta Provincial Government which is responsible for the approval of the M/P.

Thus it is concluded that the Project is terminated at the end of June 2012 as planned.

5. Recommendations

- (1) MPW should take necessary actions to introduce surely Sanitation Law to the parliament in 2012.
- (2) Since the draft of ministry decree of MPW on off-site system development is in the final stage, MPW should enact the decree as scheduled.

- (3) DKI Jakarta Provincial Government should take actions necessary for the approval of the M/P by the Governor.
- (4) A seminar should be held for disseminating the contents of the Project in cooperation with Indonesian and Japanese sides.

6. Lessons Learned

(1) Exchanging views/information among the C/P and JICA Experts

The Project targeted various C/P institutions and the Project offices were separated in two locations. This situation often caused difficulties in communication among the C/P and JICA Experts in the Project, for example, during the stage of the DfR preparation. Despite such conditions, the bi-weekly meetings of the Project were useful for facilitating communications among a part of the C/P. Thus, it is encouraged to set up such a meeting for all C/P.

(2) Careful preparation for land issues in the sewerage sector

In the sewerage sector which the Project dealt with, securing land with sufficient area for sewerage treatment plant construction is the most critical. The DfR preparation was suspended until Provincial Secretary of DKI Jakarta notified in December 2011 a required land for sewerage treatment plants in the two priority zones, since this notification was one of the most important matters in the DfR. Efforts toward securing such land should be made certainly.