

Country Name	Project for Improving Planning Capacity for the Sewerage System in DKI Jakarta
Republic of Indonesia	

I. Project Outline

Background	The special capital region of Jakarta (DKI Jakarta) had the population of over 10 million. However, urbanization rapidly arose along with the economic growth of the country: as a result, urban infrastructures such as transportation, water supply, and sewerage were not developed sufficiently. It brought about more serious water-related problems including deterioration of living environment by discharging unprocessed-wastewater to existing drains besides frequent inundation caused by the limited drainage capacity of river and rainwater drain channels. To deal with the environmental and health problems, sewerage development was an urgent issue. In response, JICA implemented an ODA loan project, "Sewerage System Development Project in DKI Jakarta (E/S)" (2014-2017), to promote appropriate disposal of sewage. However, it was also necessary to heighten sewerage management capacity of governmental organizations in DKI Jakarta.												
Objectives of the Project	Through the scrutinizing, clarifying, and prescribing of related organizations and their roles for sewerage administration, provision of trainings on sewerage system to staff of the organizations, and the drafting of a mid-term sewerage development plan in DKI Jakarta, the project aimed at strengthening the implementation structure of sewerage works in DKI Jakarta, thereby contributing to improving the administrative capacity of sewerage management.												
	1. Overall Goal: Administrative capacity of sewerage management is improved. 2. Project Purpose: Implementation structure of sewerage works in DKI Jakarta is strengthened.												
Activities of the Project	1. Project site: DKI Jakarta 2. Main activities: 1) Scrutinizing, clarifying, and prescribing related organizations and their roles for sewerage administration, 2) Providing trainings on sewerage system to staff of the organizations, 3) Drafting of a mid-term sewerage development plan in DKI Jakarta, and so on. 3. Inputs (to carry out above activities) <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Japanese Side</td> <td style="width: 50%;">Indonesian Side</td> </tr> <tr> <td>1) Experts: 13 persons</td> <td>1) Staff allocated: 22 persons</td> </tr> <tr> <td>2) Trainees received: 17 persons</td> <td>2) Land and facility: one seat at DKI Regional Development Planning Board and an office space at Dinas Sumber Daya Air</td> </tr> <tr> <td>3) Equipment: copy machine</td> <td>3) Local cost: utility and transportation costs, etc.</td> </tr> <tr> <td>4) Local cost: cost for general activities</td> <td></td> </tr> </table>			Japanese Side	Indonesian Side	1) Experts: 13 persons	1) Staff allocated: 22 persons	2) Trainees received: 17 persons	2) Land and facility: one seat at DKI Regional Development Planning Board and an office space at Dinas Sumber Daya Air	3) Equipment: copy machine	3) Local cost: utility and transportation costs, etc.	4) Local cost: cost for general activities	
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Project Period	(ex-ante) June 2015 – March 2018 (actual) December 2015 – February 2018	Project Cost	(ex-ante) 200 million yen, (actual) 230 million yen										
Implementing Agency	Ministry of Public Works and Housing (MOPWH), Directorate General of Human Settlements (DGHS) DKI Regional Development Planning Board (BAPPEDA) DKI Water Resources Office (Dinas Sumber Daya Air, DSDA) Wastewater Management Enterprise (PD PAL Jaya)												
Cooperation Agency in Japan	NIHON TECHNO CO., LTD. Yachiyo Engineering Co., Ltd. Water Agency Inc.												

II. Result of the Evaluation

1 Relevance
<Consistency with the Development Policy of Indonesia at the Time of Ex-Ante Evaluation > The project was consistent with the development policy of the government of Indonesia, as the "National Medium-Term Development Plan" (2010-2014) set sewerage development as an important matter in the field of environment, sanitation, and flood.
<Consistency with the Development Needs of Indonesia at the Time of Ex-Ante Evaluation > The project was consistent with the development needs in Indonesia since the improvement of sewerage management capacity of governmental organizations in DKI Jakarta was an urgent issue to solve serious water-related problems including the deterioration of living environment by discharging unprocessed-wastewater to existing drains besides frequent inundation.
<Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation> The project was consistent with the "Country Assistance Policy for Indonesia" (2012) which raised support to further economic growth" as one of the prioritized areas, including support to infrastructure development in and around DKI Jakarta.
<Evaluation Result> In light of the above, the relevance of the project is high.
2 Effectiveness/Impact
<Status of Achievement of the Project Purpose at the time of Project Completion> The project purpose was not achieved at the time of project completion. The final version of supporting materials regarding formulation of the draft of regulations (framework) was submitted in May 2017. However, the Detailed Regulations of Governor Decree, which prescribed organization and job description, was not issued by the end of the Project (Indicator 1).
<Continuation Status of Project Effects at the time of Ex-post Evaluation> The project effects have partially continued after the project completion. DKI Jakarta has established some policies and regulations

related to wastewater management. The project has contributed to information and knowledge dissemination to the participants to enable them to formulate regulations related to wastewater in DKI. As the result, some policies and regulations related to wastewater management have been established and some regulations of the Governor Decree have been practically enforced in DKI Jakarta. For DKI Jakarta Governor Regulation Number 1 of 2018 concerning Management of Fecal Sludge is not implemented yet in DKI Jakarta because there is no regulation regarding penalty for people if they don't connect to the sewerage pipe or don't do the desludging of their septic tank regularly.

<Status of Achievement for Overall Goal at the time of Ex-post Evaluation>

The Overall Goal has been achieved at the time of the ex-post evaluation.

A sewerage construction project called Jakarta Sewerage Development Project (JSDP) has been signed on March 2020 between JICA and the government of Indonesia. The project has improved and strengthened DKI Jakarta's wastewater management administrative capacity and structure for implementing sewerage works with MOPWH under JICA loans and DKI Jakarta Provincial budget (Indicator 1).

<Other Impacts at the time of Ex-post Evaluation>

The project does not have a direct impact on gender aspects. However, the outcome of the project (the implementation of JSDP) is expected to have an impact on women, children and vulnerable groups in receiving domestic wastewater services. MOPWH explains that women, children, and other vulnerable groups can have the right to and chance to dispose of sewage properly. In general, women are the primary users and managers of water for domestic needs, as well as proponents of sanitation operations. Economic gains, a better sewerage system provision process, improved operation and maintenance, and hygiene awareness are all benefits of a gender-focused approach.

No negative impacts were observed at the time of the ex-post evaluation.

<Evaluation Result>

Therefore, the effectiveness/impact of the project is fair.

Achievement of Project Purpose and Overall Goal

Aim	Indicators	Results	Source													
(Project Purpose) Implementation structure of sewerage works in DKI Jakarta is strengthened.	Indicator 1: Detailed regulations of Governor Decree, which prescribes organization and job description, is issued.	Status of the Achievement: Not achieved (Partially achieved) (Project Completion) <ul style="list-style-type: none"> The final version of supporting materials regarding formulation of the draft of regulations (framework) was submitted in May 2017. However, the Detailed regulations of Governor Decree, which prescribes organization and job description, was not issued by the end of the Project. This was because an additional survey and reviewing by local consultants to be hired by Indonesia side and an approval of the provincial legislature were required for the issuance of Governor Decree. (Ex-post Evaluation) <ul style="list-style-type: none"> DKI Jakarta has established the following policies and regulations related to wastewater management. 	Project Completion Report, DSDA Jakarta, PD PAL Jaya													
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(Overall Goal) Administrative capacity of sewerage management is improved.	Indicator 1: Sewerage construction projects are ordered.	(Ex-post Evaluation) Achieved <ul style="list-style-type: none"> A sewerage construction project called Jakarta Sewerage Development Project (JSDP) has been signed on March 2020 between JICA and the government of Indonesia. The project has improved and strengthened DKI Jakarta's wastewater management administrative capacity and structure for implementing sewerage works with MOPWH under JICA loans and DKI Jakarta Provincial budget. During the project, participants could see the physical building of the Waste Water Treatment Plant (WWTP) and sewer pipeline that were under construction and already operating, so that this became knowledge and reference for detailed design in JSDP. The project contributed to JSDP from institutional aspects. Participants could learn Japanese institutional system that regulates sanitation matters. 	MOPWH, DSDA, PD PAL Jaya, Project Completion Report
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3 Efficiency

Although the project cost exceeded the plan because of combined factor (ratio against the plan: 115%), the project period was as planned (ratio against the plan: 79%). Outputs were produced as planned. Therefore, the efficiency of the project is fair.

4 Sustainability

<Policy Aspect>

DKI Jakarta has established the following policies and regulations to improve sewerage management capacity in DKI. A government's policy about the management of sewerage system in DKI Jakarta is also under preparation.

Name	Effective year	Description
Presidential Regulation No. 109 of 2020	2020	National Strategic Projects for improving the quality of the water and sanitation access in DKI Jakarta is listed in this regulation and Jakarta Sewerage Zone 1 and Zone 6 are positioned as top priorities.
Regional Long Term Development Plan (Rencana Pembangunan Jangka Menengah Daerah, RPJMD) 2017-2022	2017	JSDP project is positioned as top priority in RPJMD.

<Institutional/Organizational Aspect>

The number of PD PAL Jaya human resources has been sufficient for the development of Zone 0. However, if Zone 1 and Zone 6 will be operated by PD PAL Jaya after the construction finished, PD PAL Jaya needs to upgrade the number and staff capacity in operating sewerage system services. DSDA under DKI Jakarta has formed special team for Jakarta Sewerage to oversee JSDP formulation. However, temporarily, the team has not been active (because of low activity during the procurement process of ICB under MOPWH) and will be reactivated after contract for DKI packages under Zone 1 is established. MOPWH has formed a Project Monitoring Unit (PMU) to oversee the implementation of JSDP and the number of staff has been quite sufficient.

<Technical Aspect>

The staff of PD PAL Java, DSDA and MOPWH sustains necessary skills and knowledge to promote sewerage management or system in DKI Jakarta targeted by the project. MOPWH established Settlement Infrastructure Agency for Jakarta Metropolitan Region to handle human settlement projects including JSDP in 2020. The PMU formed in MOPWH has been planning to provide or maintain necessary skills and knowledge for the staffs/members in the established or previous organization to promote sewerage management or system in DKI Jakarta. Some of PD PAL Jaya staffs have attended the training held by MOPWH, JICA, USAID or other agencies.

MOPWH has used the textbook developed by the project to strengthen wastewater regulations in DKI Jakarta for the sewerage system, while PD PAL Jaya and DSDA have not.

<Financial Aspect>

MOPWH has secured budget for the PMU to oversee the JSDP. DKI Jakarta has also secure budget for construction of Package 5 & 6 of Zone 1. PD PAL Jaya as operator has proposed the budget for development of sewerage in several zones and the budget is expected to be approved by the completion of construction of WWTP at Zone 1 & 6.

<Evaluation Result>

In light of the above, slight problems have been observed in terms of institutional/organizational and technical aspects of the implementing agency. Therefore, the sustainability of the effectiveness through the project is fair.

5 Summary of the Evaluation

The project partially achieved the Project Purpose and achieved the Overall Goal to improve the administrative capacity of sewerage management, through strengthening the implementation structure of sewerage works in DKI Jakarta. Regarding sustainability, slight problems have been observed in terms of institutional/organizational and technical aspects of the implementing agency. As for efficiency, the project cost slightly exceeded the plan.

Considering all of the above points, this project is evaluated to be partially satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing Agency:

- To enhance the project impact and the sustainability of the project, PD PAL Java, DSDA and MOPWH should develop the further sewerage development plan after the completion of JSDP construction and such plan should be included in RPJMN (2025-2029) and RPJMD DKI (2023-2027). They also should sharpen/refine/maintain the task of every stakeholder and inside the organization, secure/maintain the necessary staff number, and maintain/develop the staff's capacity. Securing necessary financial arrangement for capacity development, necessary construction and O&M of related sewage management facility are required.

Lessons Learned for JICA:

- The staff reshuffling happens quite significantly, and the knowledge of preceding staff are not taken over to new staff in counterpart.

It may hamper the sustainability of the project. Before such reshuffling happens after the project completion, it should prepare a documented manual under the project and finalize it during the project period. The output could become a guideline/means for transfer of knowledge to the new staff.

- In case of the project which is related to the construction of facilities under ODA loan projects, the capacity of related agency should be maintained for the facility's O&M. Otherwise, the facilities constructed under the ODA loan project would not be operated and maintained in the correct manner. In order to maintain the capacity development for the related staff, during the project planning/implementation, it is necessary to involve the counterpart to plan a future training program. After the project completion, the future training program is to be carried out by the counterpart under their budget, but this needs to be planned during the project period. In addition, JICA should include some important capacity development courses inside the future training program, after the project ends.



Current Condition of Future WWTP Zone 6 Construction Site
in Duri Kosambi



Plan of Façade of Future Administration Building for
WWTP Zone 1