



Evaluation on Japan's ODA for Improvement of Management Capacity of Operation and Maintenance Regarding Water Supply in Egypt (Country-led Evaluation)

<p>1. Theme: Evaluation on Japan's ODA for Improvement of Management Capacity of Operation and Maintenance Regarding Water Supply in Egypt</p>	
<p>2. Country: The Arabic Republic of Egypt</p>	
<p>3. Evaluators: Center for Project Evaluation & Macroeconomic Analysis (PEMA) Evaluation team:(Laila Shahd (Team Leader), Dr/Eng. Nabil Makhoulf (Sub-Team Leader), Eng. Abdel-Aziz Nassar (Assistant Sub-Team Leader) and 6 other persons).</p>	
<p>4. Period of Evaluation Survey: From September 11th, 2008 to February 28th, 2009</p>	<p style="text-align: center;">Lecture and OJT</p>
<p>5. Descriptions of Evaluation:</p> <p><u>(1) Evaluation Objective:</u></p> <p>This project started in November 2006 and will terminate in October 2009. Thus the main purpose of this mid-term evaluation is to make recommendations towards further improvements of implementation through assessment of the project's anticipated effects, positive or negative, intended or unintended, before the termination. Hence, the challenges encountered during implementation are highlighted.</p> <p><u>(2) Evaluation Scope:</u></p> <p>This report consists of an evaluation on a project to improve the management capacity of operation and maintenance of water supply facilities in target areas. The project to be evaluated consists of two main activities:</p> <ul style="list-style-type: none"> (a)Activity for reduction of unaccounted-for water(UFW) (b)Activity for Strengthening of operation and maintenance capacity of water supply facilities(introducing Standard Operation Procedure(SOP)) <p>The following outputs are expected to be gained, respectively:</p> <ul style="list-style-type: none"> (a)Unaccounted-for-water ratio is reduced in the pilot project areas (b)Operation and maintenance capacity of water supply facilities is strengthened <p><u>(3) Evaluation Methodology:</u></p> <p>The Evaluation methodology consists of a largely quantitative approach mainly focused on the impact of project activities regarding the reduction of ratio and improvement in operation, and maintenance of pilot facilities regarding capacity strengthening. Content analysis of documents, focus group discussions, and in-depth interviews and field visits have been</p>	

carried out.

6. Evaluation Results:

(1) Relevance :

SHAPWASCO (Sharqiya Potable Water & Sanitation Company; taking responsibility for the management of all water supply and sewerage services from local government) suffered from low performance due to low salaries, low water charges, low ratio of water charge collection, high cost of labour due to overstaffing, inefficient operation of facilities due to lack of access to information on water production and supply (including costs of production), and a high unaccounted-for-water (UFW) ratio.

Under such circumstance, the Egyptian Government requested the Japanese Government to implement a technical cooperation project to assist SHAPWASCO in improving its operation and maintenance capacity,,and the project was deemed relevant.

(2) Impact :

Although this project is still continuing, it has had enough impact so far. As a result of capacity building activities carried out by this project, SHAPWASCO (*1) became a leading public agency in the area of UFW reduction. Results of UFW ratio reduction activity showed that UFW ratio was reduced significantly as a result of UFW activities (for example, Zagazig Markaz and Zagazig City achieved 24 and 17 reduction points respectively)

(3) Sustainability:

The main objective of the SOP component is to control the process of water treatment and production. Therefore, one of the main challenges is the sustainability of project objectives.

However the sustainability of operations and maintenance procedures in water facilities is not ensured due to weak structure and lack of sufficient system for implementing and monitoring SOP activities. Moreover, the attitude of the workers represents another challenge as some of them are not convinced of the benefits of applying SOPs.

7. Recommendations

a. UFW Activity

- Ensure the implementation of UFW activities in pilot areas before the end of the project
- Set a long-term pipe replacement plan for preventive works
- Supply each UFW team with leakage detection equipment to implement leakage detection surveys in project candidate areas
- Recruit new workers and technicians, especially to conduct repair works in the network
- Develop a plan to examine house meters installed in Al-Sharkia governorate, and allocate funds for replacing obsolete metres
- Conduct leakage detection surveys in the areas where UFW ratios were reduced, to maintain UFW ratios at acceptable levels

- Increase public awareness campaigns on the importance of moderate water consumption
- Provide needed technical and financial support for the newly established UFW training center in Sharkia governorate. It is also recommended to attract the best experts in the field of UFW to supervise the training process

b. SOP Activity

- Revise criteria used for selecting water facilities to ensure successful application of SOPs
- Establish adequate structures and mechanisms at the level of SHAPWASCO to implement and monitor SOP activities in water facilities
- Upgrade the management and administrative capacities of water facilities
- Rehabilitate long-operating water facilities (including the replacement of outdated equipment)
- Increase the number of operation and maintenance workers, technicians, and supervisors in water facilities
- Set clear objectives and plans for the implementation of the water quality control programme
- Standardize water analysis techniques and chemicals used by all of SHAPWASCO's laboratories to ensure accurate result and facilitate monitoring laboratories in water facilities
- Set plans for the hydraulic analysis component

(Note: The opinions expressed in this summary do not necessarily reflect the views and positions of the Government of Japan or any other institutions.)