付 属 資 料

1. Minutes of Meeting & Record of Discussion (Draft)
2. PDM & PO (案) (和文)
3. 打合せ議事録
4. 質問票
5. 収集資料リスト
6. 事業評価表
7. PCM ワークショップ結果
8. 参考資料
   - 8-1 評価グリッド
   - 8-2 (a) ホールディング・カンパニーの組織図
     (b) ERWA の組織図
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   - 8-5 (a) 職種別年齢別職員数
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MINUTES OF MEETINGS BETWEEN AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE ARAB REPUBLIC OF EGYPT AND THE JAPAN INTERNATIONAL COOPERATION AGENCY ON JAPANESE TECHNICAL COOPERATION FOR THE PROJECT FOR IMPROVEMENT OF MANAGEMENT CAPACITY OF OPERATION AND MAINTENANCE FOR SHAPWASCO IN THE ARAB REPUBLIC OF EGYPT

The Japanese Preparatory Study Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") visited the Arab Republic of Egypt from 27 May to 21 June, 2006 for the purpose of preparatory study of the technical cooperation project concerning the Improvement of Management Capacity of Operation and Maintenance for Sharkia Potable Water and Sanitation Company (hereinafter referred to as "SHAPWASCO") in the Arab Republic of Egypt. (Hereinafter referred to as "the Project").

During its stay in Egypt, the Team exchanged their views and had a series of discussions for the purpose of working out the details of the Project with the Holding Company for Water and Wastewater, SHAPWASCO, and other concerned organizations.

As a result of discussions, both sides came to understanding concerning the matters referred to in the document attached hereto.

Zagazig, 13th June, 2006

Mr. Hiroshi SHIONO
Leader
Japanese Preparatory Study Team
Japan International Cooperation Agency

Dr. Salah Bayoumi,
Chairman,
Sharkia Potable Water and Sanitation Company

for Dr. Abdelkawi Khalifa,
Chairman,
Holding Company for Water and
Wastewater,
The Arab Republic of Egypt

THE ATTACHED DOCUMENT

I. Basic Framework of the Project

1. Title of the Project

The title of the Project would be "Project for Improvement of Management Capacity of Operation and Maintenance for SHAPWASCO, Egypt".

2. Implementing Organization

SHAPWASCO would be the implementing agency for the Project.

3. Purpose of the Project

Management capacity of operation and maintenance of water supply facilities is improved in target areas.

4. Outputs

(1) Unaccounted-for water (UFW) ratio is reduced in the pilot project areas.

(2) Operation and maintenance capacity of water supply facilities is strengthened.

5. Activities

(1-1) Analyze the current situation on UFW and prepare an action plan for UFW reduction
(1-2) Select pilot project areas
(1-3) Organize UFW reduction teams
(1-4) Prepare pipe network drawings of the pilot project areas
(1-5) Survey actual conditions of UFW, analyze contents of UFW and measure UFW ratio in the pilot project area
(1-6) Conduct On-the-job training for SHAPWASCO staff on leakage detection
(1-7) Implement pipe repairing and commercial loss reduction programs
(1-8) Conduct public awareness campaign for water saving
(1-9) Conduct post-evaluation of UFW ratio

(2-1) Survey current conditions of water supply facilities
(2-2) Conduct monitoring of wells
(2-3) Organize standard operational procedures (SOPs) team
(2-4) Establish the system for water quality control
(2-5) Establish the system to measure the quantity of water production and transmission
(2-6) Study on optimum water distribution main with network hydraulic analysis and plan district-metering-zone (DMZ)
(2-7) Prepare SOPs for WTP, Fe/Mn removal plants and pumping stations
(2-8) Prepare textbooks for SOPs training

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(2-9) Conduct On-the-Job training for SHAPWASCO staff on SOPs
(2-10) Conduct workshop / seminars for SOPs
(2-11) Monitor the performance indicator regarding operation and maintenance and achievement level of staff performance

6. Duration of the Project

The duration of the Project will be three (3) years from the date when Japanese experts of the Project arrive in Egypt.

7. Joint Coordinating Committee

The joint coordinating committee will be formulated and the meeting will be held at least once a year for the smooth implementation of the Project.

8. Project Design Matrix (PDM)

Project Design Matrix (hereinafter referred to as "PDM") as a tool for monitoring, evaluation and management of the activities of the project is shown in Annex I. The PDM will be modified as needed during the project implementation stage after mutual consultations between JICA and the Egyptian side.

9. Tentative Plan of Operation

The Project will be carried out in accordance with the Tentative Plan of Operation shown in Annex II. The detail input for the project will be decided in the course of the first several months through the detailed analysis in the Project. The schedule is tentative and subject to modification if such necessity should arise and mutually agreed by JICA and the Egyptian side.

II. Measures to be taken by both sides

For the implementation of the Project, both sides will take the following necessary measures:

1. The Japanese Side

(1) Dispatch of experts

Fields of experts are as follows;

1) Water Supply Planning (Chief Advisor)
2) Unaccounted-for Water Reduction
3) Leakage Detection
4) Water Treatment
5) Hydraulic Analysis for Network
6) Electrical Equipment
7) Mechanical Equipment
8) Water Quality Control
9) Hydro-geology

(2) Provision of equipment

Equipment necessary for the effective implementation of the Project will be provided within the budget allocated for the technical cooperation under JICA.

(3) Training in Japan

JICA will provide counterpart personnel with training in Japan.

2. The Egyptian Side

(1) Assignment of Personnel

The Egyptian side will assign suitable number of capable counterpart personnel in order to ensure the effective implementation of the Project. The list of counterpart personnel is attached as ANNEX III.

(2) Allocation of Budget

The following will be allocated by the Egyptian side to ensure effective implementation of the Project.

a. Salaries, travel allowances, and other allowances for the Egyptian counterpart personnel.
b. Expenses for rehabilitation of pipe networks after the detection of water leakage.
c. Expenses such as electricity, water supply, gas fuel for the Project offices.
d. Operational expenses for customs clearance, storage and domestic transportation for the equipment provided by the Japanese side
e. Expenses for maintenance of equipment
f. Other contingency expenses related to the Project

(3) Office space and facilities

The Egyptian side will provide office space, necessary facilities and others necessary for the implementation of the Project.

(4) Providing necessary information

The Egyptian side will provide necessary information on implementing the Project, such as (documentary if exits).

III. Discussions

1. Project Team

The Egyptian side agreed to set up three (3) UFW Teams (at the headquarters, Zagazig City, and Hihya Markaz) and one (1) SOP Team (at the headquarters) for the implementation of the Project. The Organization Structure of the Project is shown in Annex IV.

2. UFW Pilot Project Area

The Japanese side proposed Zagazig City and Hihya Markaz as the project sites for the activities of reduction of unaccounted-for water, while the Egyptian side requested the Japanese side to

extend them according to the areas set up for Operation and Maintenance Sectors of SHAPWASCO. Both sides agreed that UFW coverage area will contain six (6) sites; three sites in each of the following two areas: one area covers Zagazig City and Zagazig Markaz, and the other covers Hihya Markaz, Diarb Nigm Markaz and Ibrahemia Markaz.

Based on the strong request of the Egyptian side to extend the coverage of UFW for three more Markazes (one site each) and provided that Egyptian inputs will be increased to enable both sides to implement the said request, the Japanese side will consider the request based on the assessment and evaluation of the progress of the Project. (around the middle of the project period)

3. Pipe Network Drawings

The Japanese side requested the Egyptian side to prepare the pipe network drawings which is assisted by USAID on the pilot project sites before the implementation of the UFW reduction activities. The Egyptian side explained that they will provide the available data as soon as possible because these drawings may not be available by that time. Both sides agreed that the situation should not hinder the implementation of the Project.

4. SOPs activities

In establishing SOPs, both sides agreed that the Project shall cover 182 sites for ground water production in addition to 7 water treatment plants, 6 pumping stations and 8 Fe/Mn removal plants.

5. Water Quality Control

The Egyptian side explained that more than 50% of water source in Sharkia Governorate came from ground water and there are crucial problems of water quality. In order to enhance the water supply services to the people in Sharkia Governorate, it is indispensable to consider the water quality control in this Project. At the same time, the Egyptian side agreed that they would prepare the necessary infrastructure and equipment for the water quality control (as per the Project recommendation) by their own budget.

Both sides recognized importance of drinking water quality control and assurance, so that a Japanese specialist of water quality control will be assigned to assist SHAPWASCO for standardization of water quality control. In this regard, the Japanese side also recommended to hold a workshop on the formulation procedures of WHO drinking water quality guidelines with emphasis on some pollutants and risk consequences.

6. Collaboration with USAID

The Japanese side found out that USAID has planed a considerable support for the improvement of management of SHAPWASCO, such as billing system and GIS. Therefore, both sides confirmed that the close collaboration between JICA and USAID would be important in order to

maximize the benefits of the Project.

7. SHAPWASC's ownership of the Project

Both sides confirmed that SHAPWASCO's ownership of the Project is indispensable for the successful implementation of the Project. The Japanese technical cooperation would facilitate the self-help efforts of SHAPWASCO with technical advice and collaborations, such as preparing framework of monitoring, etc.

8. Draft of Record of Discussions

Both sides agreed to recommend to their respective governments the matters referred to in the draft of Record of Discussions (hereinafter referred to as "R/D") shown in Annex V. The R/D would be signed between JICA and the Egyptian sides after the Project is approved by the JICA headquarters.

Annex I	Project Design Matrix
Annex II	Tentative Plan of Operation
Annex III	List of Counterpart Personnel
Annex IV	Organizational Structure of Project Implementation
Annex V	Draft of Record of Discussions

ANNEX I

Project Design Matrix (PDM0)

Project Title:
Project for Improvement of Management Capacity of Operation and Maintenance for SHAPWASCO in the Arab Republic of Egypt

Duration: FY 2006 ~ FY 2009

Target Area: Sharkia Governorate, Egypt

Target Group: Staff of SHAPWASCO
Final Beneficiaries : People in Sharkia Governorate

Date : June 13, 2006

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal			
Management capacity of operation and maintenance of water supply facilities is improved in Sharkia Governorate.	1 Performance indicators in the field of management capacity of operation and maintenance are improved for all branches in the Governorate.	SHAPWASCO quarterly report submitted to HCWW	
Project Purpose			
Management capacity of operation and maintenance of water supply facilities is improved in target areas. (1)	1 Performance indicators in the field of management capacity of operation and maintenance are improved in target areas.(2)	SHAPWASCO quarterly report submitted to HCWW	* Sector policy of the Egyptian government will not drastically change on management of water supply services.
	2 Activities on UFW and SOPs are incorporated into the routine work.	Organogram of SHAPWASCO, Questionnaire survey, Interviews	
Outputs			
1 Unaccounted-for water (UFW) ratio is reduced in the pilot project areas.	1-1 Volume of unaccounted-for water can be properly measured.	Project records	* Any change of development assistant policy by other donors to improve the management of water supply service will not adversely affect the Project Implementation.
	1-2 Unaccounted-for water ratio is reduced compared with the baseline data obtained at the beginning of the Project.	Project records	
2 Operation and maintenance capacity of water supply facilities is strengthened.	2-1 Manuals for management of O&M are developed and updated.	Project records	
	2-2 The plan for the management of O&M is developed.	Project records	
	2-3 Level of applying knowledge and skills acquired through OJT	Questionnaire survey, interviews	

Note : (1): Target areas for output ① is the pilot project areas specified by the Project in Zagagiz city, Zagazig Markaz, Hihya Markaz, Diarb Nigm Markaz and Ibrahemia Markaz, respectively.
(2) : Specific indicators are selected from those in quarterly report to HCWW, such as the percentage of metered connections, the percentage of working meters, etc.

付属資料 1

Activities	Inputs		
	Japanese Side	**Egyptian Side**	
1 Unaccounted-for water (UFW) ratio is reduced in the pilot project areas.	1 Experts	1 Counterparts	* Employees who received trainings by the Project will continuously work for the SHAPWASCO.
1-1 Analyze the current situation on UFW and prepare an action plan for UFW reduction	Chief Advisor		* Personnel transfer of executive management will not affect the implementation of the Project.
1-2 Select pilot project areas	UFW reduction specialist		* Funds from NOPWASD and Sharkia Governorate in related to the Project will be allocated as planned.
1-3 Organize UFW reduction teams	Leakage detection trainer		
1-4 Prepare pipe network drawings of the pilot project areas	Water treatment specialist		
1-5 Survey actual conditions of UFW, analyze contents of UFW and measure UFW ratio in the pilot project area	Hydraulic engineer for network analysis		
1-6 Conduct On-the-job training for SHAPWASCO staff on leakage detection	Electrical engineer		
1-7 Implement pipe repairing and commercial loss reduction programs	Mechanical engineer		
1-8 Conduct public awareness campaign for water saving	Hydro-geologist		
1-9 Conduct post-evaluation of UFW ratio.	Water quality control specialist		
2 Operation and maintenance capacity of water supply facilities is strengthened	2 Equipment and materials	2 Office space and facilities for experts	
2-1 Survey current conditions of water supply facilities			
2-2 Conduct monitoring of wells			
2-3 Organize standard operational procedures (SOPs) team	3 Trainings		**Pre-Conditions**
2-4 Establish the system for water quality control			* The Hihya Water Treatment Plant (WTP) is successfully constructed as scheduled.
2-5 Establish the system to measure the quantity of water production and transmission	4 Local cost	3 Equipment	
2-6 Study on optimum water distribution main with network hydraulic analysis and plan district-metering-zone (DMZ)			
2-7 Prepare SOPs for WTP, Fe/Mn removal plants and pumping stations		4 Necessary Information	
2-8 Prepare textbooks for SOPs training			
2-9 Conduct On-the-Job training for SHAPWASCO staff on SOPs		5 Local cost	
2-10 Conduct workshop / seminars for SOPs			
2-11 Monitor the performance indicator regarding operation and maintenance and achievement level of staff performance			

Tentative Plan of Operation

ANNEX II

Project Name : Project for Improvement of Management Capacity of Operation and Maintenance for SHAPWASCO in the Arab Republic of Egypt

Duration : November 2006～October 2009 （3years）

Prepared on June 13, 2006

	2006							2007											2008											2009													
	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1. Unaccounted-for water (UFW) ratio is reduced in the pilot project areas																																														
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List of counterpart personnel

ANNEX III

S/N	Field	Name of the counterpart	Position	Depart.
1	Water supply planning (Chief advisor)	Salah Bayoumi	Professor Dr.	Chairman
2	UFW reduction	Alaa El Deen Mohamed Ali	Eng. (G.M)	Economic Analysis and planning Dept.
3	Leakage detection	Mohamed Mohamed Gaber	Eng. (G.M)	Network affairs
4	Water treatment	Amir Rizk Yousof	Eng. (G.M)	Water affairs
5	Hydraulic Analysis for Network	Ali Mohamed Ali Kamel	Eng. (G.M)	Projects & Researches Dept.
6	Electrical Equipment	Ibraheem Mohamed Shaheen	Eng. (G.M)	Projects & Researches Dept.
7	Mechanical Equipment	Ali Mohamed El Mesallamy	Eng. (G.M)	Water Treatmet Plants
8	Water Quality Control	Mohamed Osama El Masry	Chemist (G.M)	Central Lab.
9	Hydro- geology	Gamal Abd El Hameed Morsy	Geologist (G.M)	Water affairs

Organizational Structure of Project Implementation