

Japan International Cooperation Agency  
(JICA)

Improvement of Institutional and Financial Set-up  
for Baghdad Water

Field Report

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Tokyo JAPAN

## 1 Role of The Expert

In the Stage-3 of the Course for water supply system, the expert was required to do the job relating to following in cooperating with NRW expert,

- (1) Lecture, discussion and recommendation on institution and organization, their operation and techniques.
- (2) Making of guidelines and action plans
- (3) Necessary technical assistances to promote the objectives

## 2 Outline of the Training

The expert departed for Amman 5<sup>th</sup> of February delayed 4 days from original schedule and the training schedule is shown in Table-1 as follows.

Table-1 Training schedule

Schedule		
7-Feb	Wed	Orientation, Presentation on Water Supply Act by JICA
8	Thu	Legal Framework & Organization: Presentation of Action Plan, Discussion
9	Fri	Revenue related to Customers: Presentation of Action Plan, discussion
10	Sat	Finance & Water rates: Presentation of Action Plan, Discussion
11	Sun	Finalization of Action Plan
12	Mon	Wrap-up Session

The names of trainees and affiliate are shown Table-2 as follows.

Table-2 The trainee's names, affiliate and assignment

## 3 Contents of Training

- 1) Discussion on home works

Before the 3<sup>rd</sup> training schedule started, the format paper of home work(with answers) were submitted to JICA Office in Amman. They are consisted from items of (1)Current status, (2)Problems, (3)Goals, (4)Possible steps to achieve the goals, (5)Action taken so far. The training sessions were proceeded along these papers. Individual item to be discussed were more than 66 from various current jobs.

Before discussion started, the expert explained the some important articles of Water supply Act and Local Public Enterprise Act of Japan as one of the good models for water supply management. He expected for the trainees to refer them comparing BWA's institutional and organizational reform.

- 2) Constructive discussion

It is thought for the trainees that searching for problems of their section or department seems reluctant work, especially for a director or head of the organizations. But they spoke of various problems and solution and stressed the necessity for improvement or reform positively. After the discussion, the items were summarized into action plans and presented in the form of 15 pieces of slides by power point projection.

### 3) Seminar

The power point slides were mainly made by Mr and some advices and modification were taken in the strategy of short-and muddle-long-term action plans. The presentation was made by Mr.

### 4) Recommendation

When various problem solutions were proceeded under the action plans, some of them inevitably will conflict the wall of basic legal framework. It is important for the expert to point out that the real reform will not be achieved without revising the current legal framework. This procedure will be difficult but without change of current system, situation will not be improved.

### 5) Contribution by Mr

He joined the training for three times, his voluntary contribution for the training was admirable.

### (6) Necessity of steering committee for reform

It seems necessary to establish a steering committee for BWA to push forward and support to succeed the improvement actions.

## **4.Contents of Action Plans**

The action plans are described in three parts such as a)current status, b)problems and c)action plan for short- and middle-& long-term action plan in three fields.

### **1) Legal Framework and Organizations of water supply**

#### a) Current status

- Baghdad Water Supply Agency was established according to the Law No. 50 of the year 1924, and some amendments followed it within the next decades in order to organize and facilitate the Agency's work.
- Law No. 16 of the year 1995 was enacted. It connected Baghdad Water Supply Agency with the great Municipality of Baghdad financially and managerially in order to make it a dependent agency; nevertheless, part of the Agency's work were transferred to the Municipalities of Baghdad (fixing water networks with a diameter of 300 mm became a mission of the Municipalities of Baghdad, while fixing those with a diameter that exceeds 300 mm remained the mission of the great Municipality of Baghdad in addition to the extension of these networks and operating the water projects.
- There are other current laws which caused violations of the networks because it bans accommodating residences with a space less than 200 m<sup>2</sup>, which push the residents to violate the network to provide themselves with the service.
- General Manager of the Agency doesn't enjoy enough capacities financially and managerially to execute works quickly and easily specially after the issuance of Law No. 16 of the year 1995.
- Penalties for violations and messing with the network and refrain from paying because of security situation shall not be executed.

## b) Problems

- Baghdad Water Agency is not financially and managerially independent right now because of the implementation of Law No. 16 of the Year 1995.
- Water service became the responsibility of two entities, Baghdad Water Agency and Water Sections in the Municipalities of Baghdad, which reflected negatively on work speed to fix leakage and breaks because of multi competent entities.
- One another legislated law in the early 1980s prohibits preparation of drinking water outlets for the residences with a space less than 200 m<sup>2</sup>.
- Huge deficit of water production (there is a need to establish new projects and to expand the old ones) in addition to that many areas don't have water networks and have a high percentage (estimated 50%) of non-revenue water.

## c) Action Plan

- On the short term:
  1. Enough financial managerial powers might be obtained by the General Manager to conduct his works quickly and effectively after obtaining the approval of the mayor of Baghdad to grant the General Manager proxy powers or some of the Baghdad Mayor's powers.
  2. Establish committees to monitor non-revenue water and equip them to reduce the non-revenue water to the minimum.
  3. Continue laying water networks to feed new areas.
- On the mid and long term:
  1. To enact a law which grants the Agency necessary independence to perform its works and to abolish law No. 16 of the year 1995.
  2. To enact a law which allows to supply water to residence with spaces equals 100 m<sup>2</sup> or more.
  3. laws relevant to violators and those who refrain to pay should be enforced when security conditions improve.
  4. To expand current projects and to establish new projects with their reservoirs giving priority to Rasafah's Project.

## 2) Management and Financial planning

### a) Current status

- Baghdad Water Agency reports to the Great Municipality of Baghdad according to Law No. 16 of the Year 1995.
- All revenues collected by the Agency shall be transferred to Great Municipality's account
- The Agency has two types of budget as follows:
  - 1- current budget: which is to transferred by the Great Municipality to Agency according to the governmental grant and with a monthly appropriations.
  - 2- investment plan budget: transferred by the governorate Council after the plan that is pre-prepared by our Agency being approved by Ministry of Planning.

### b) Problems

- Absence of wide disbursement powers for the general manager, whereas he/she is restrained to specific amounts that can not be exceeded.
- Delay of Financial appropriations for the investment plan.

- Being unable to enforce laws correctly and seriously because of security conditions.
- Absence of financial and administrative staff that is competent in the field of accounting software to prepare software through which we can improve the financial situation of the Agency, so manual records are being used.
- Most of the fixed assets are expired.
- Lack of proper stores to store the fixed assets because of the security situation.
- Lack of accurate information for the purpose of future financial planning because of lack of knowledge regarding the real production quantity in the present time due to the lack or break down of flowmeters in most main projects.

#### c) Action Plan

- On the short term:
  1. Increasing the powers of the Director General;
  2. Implementing the laws as the security situation improves;
  3. Providing and training a specialized cadre in computer and warehouse software;
  4. Providing a suitable warehouse for the fixed asset;
- On the mid and long terms:
  1. Enacting a law whereby the Agency would become administratively and financially autonomous from Baghdad's Great Municipality with a view to providing services in a quick and efficient manner;
  2. Providing the filtration projects with flowmeters to ensure the optimal financial planning and identify the actual needs.

### 3) Revenue related tasks

#### a) Current status

- The Computer Department in the Agency issues the water billing list for all subscribers every three months;
- Printing all the lists in the Agency and distributing them to the collectors by virtue of an action program and a plan that are distributed to all areas in Baghdad;
- Collectors collect the fees directly from the subscribers, record the readings and send subscribers' report according their areas;
- Auditing the lists in the Computer Department and entering the subscribers' data which include all the variables (changing the type of the real estate, estimating the daily consumption, installing meters... etc.)
- Put an end to the violations against the network and provide the violators with accounts and subscription without installing meters for them by virtue of the applicable laws in the Agency;
- Claiming fees from governmental departments and collecting their cumulative debts;
- Promoting subscribers' transactions related to the installation of meters, challenging the estimation, facilitating payment in installments, installing new and updated software according the case in question;

#### b) Problems 1

- There are new violations against the network without having an official outlet opened by the

Agency due to the real estates that are unofficially zoned (less than 200 m2)

- Changing the real estate type without informing the Agency (changing a real estate from a housing residence into flats and stores)
- Municipal departments/citizens open unofficial water outlets; these outlets represent 30% of the original subscribers;
- The laws, related to the suspension of the water outlets for those who refrain from payment, are not enforced due to the security situation;
- Due to the security situation, collection of the water fees is done by collectors instead of the previous approach (whereby bills used to be paid by subscribers at the collection center);
- Lack of accuracy in recording meters' reading for various reasons (the meter might be malfunctioning, there might be mud on the meter's glass...); this hinders recording a large number of meters which in turn leads to low revenues.

#### Problems 2

- 52% of subscribers have water meters;
- 50% of them have malfunctioning meters;
- Lack of adequate water meters for all subscribers who are being referred to the daily consumption estimation; this leads to unfair water billing lists and consequently too many objections;
- The validity date of the water meters are not being observed due to the aforementioned paragraph;
- Finding a solution for the governmental buildings which were abandoned / burned / destroyed because of the last war due to the cumulative debts which are impossible to collect up to this moment;
- The State's departments are not committed to paying their debts;
- The software used is DOS-based which makes it difficult for the users and the newly graduated programmers to operate;
- Lack of modern collection equipment as those used in the neighboring countries (GPS equipment, which decreases mistakes and fraud such as getting fake amounts of money by collectors from subscribers);
- Lack of modern equipment for checking meters, lack of spare parts for fixing meters, lack of staff compared to the number of subscribers;
- Lack of collectors, employees and auditors who are involved in collection of fees and data entry and lack of computers to control the collection process within the period of issuance of bills; i.e. every three months).

#### c) Action Plan 1

- On the short term:
  1. forcing the competent municipal sections not to promote the construction licenses relevant to changing real estate's category from residential into commercial before obtaining the approval of the Agency's approval to update the information of the aforementioned real estates.
  2. Forcing the municipal sections not to open illegal outlets for citizens and to report violations on the network.
  3. Enforce laws relevant to those who refrain to pay when security situation improves regarding suspension of the outlet.
  4. Provide enough meters for all subscribers from universal producers to fulfill justice in tariff.

5. Develop and provide new equipments for collection according to the current methods and regulations in the neighboring countries as GPS.
6. Updating and developing software in the computer section by using new software (like Fox Pro and others) and to provide all equipments and printing machines to print the water lists quickly.
7. Discussing with the Council of Ministers the payment of the debts of the State's departments from their appropriations; the debts can be paid by certain annual appropriations;
8. Providing modern equipment for checking meters and providing a number of collectors that is proportionate to the number of subscribers and highlighting the need for importing world-class water meters;
9. Establishing collection centers close to the geographical area of collection to collect the water billing lists.

#### Action Plan 2

- On the mid and long term:
  1. Enacting a law that allows opening proper outlets to the residences with spaces ranging from 100 m and above.
  2. Enacting a law and issuing a resolution from the Cabinet to cancel debts of burnt, destroyed or abandoned governmental building.
  3. Reviewing the current water tariff by approving the accumulation of prices policy for the commercial governmental departments or dealing with what is applicable for the Japanese part (tariff according to the diameter of the outlet)
  4. Separating collection from reading meters by availing enough collection centers on the condition that billing lists to be paid by the subscribers.

### **5. Contents of recommendation**

The expert's recommendations are as follows,

- 1) Separation of BWA's account from general account of municipal authority
- 2) Strengthening of DG's position & responsibility to deal with water supply management
- 3) Company accounting principles are applied
- 4) Adoption of self-sustaining financial system
- 5) Adoption of the current principles of water pricing
- 6) Setting of disburse criteria of subsidy
- 7) Liberalization of water rates setting from poor relief policy