

Attachment 1: Country Report

I. Introduction

1. Name of applicant
2. Name of country
3. E-mail address

II. Country Information

1. Geographic location
2. Population
3. Economy (Main industries, GDP, etc.)
4. Climate (Annual rainfall, seasons, etc.)
5. Total number of cities
6. The three (3) largest waterworks in the country (Please fill in the **Table1**)

[Table 1]

Name of City	Name of Organization	Capital (Public/ Private/ Public-Private-Partnership)	Total Population	Supplied Population

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III. Organizational Framework and Job Description

1. Name of applicant's organization
2. The established year of the organization
3. Applicant's occupation (Please choose from the followings.)
 - (a) Staff in charge of the formulation of waterworks plan in a water supply utility
 - (b) Staff in charge of the formulation of waterworks plan in the national government or a local government
 - (c) Staff who is expected to be in charge of the formulation of waterworks plan
 - (d) Civil engineer
 - (e) Sanitary engineer
 - (f) Environmental engineer
 - (g) Other (Specify your background:)
4. Type of the applicant's organization (Please choose one option from the followings.)
 - (a) Part of government department
 - (b) Government corporations
 - (c) Independent authority
 - (d) Others (Please describe:)
5. Capital formation (Financial resource) of the applicant's organization
 - National government (%)
 - Local government (%)
 - Investor (Private) (%)
 - Others (Please describe:) (%)
6. Governmental control: (Please select all options which are subject to governmental instruction.)
 - (a) Staff number
 - (b) Staff salaries

- (c) Tariff
- (d) Appointment of top management
- (e) Budget for O&M
- (f) Budget for development
- (g) Disconnection for non-payment

7. Cost (Budget) for operation/management of the applicant's organization

- (1) Personnel: (USD)
- (2) Power/Fuel: (USD)
- (3) Chemicals: (USD)
- (4) Other materials: (USD)
- (5) Transport: (USD)
- (6) Others (describe:) (USD)
- (7) Total O&M cost: (USD)

8. The number of cities/towns which an applicant's organization has responsibility for

9. Service area of the applicant's organization (km²)

10. Total population of the applicant's city (service area?)

11. Total population served by the applicant's organization

12. Number of staff members

- (1) Clerical staff:
- (2) Engineer:
- (3) Technical staff:
- (4) Laborer:
- (5) Total:

13. Organization chart 1

(Please attach the chart of applicant's organization)

14. Organization chart 2

(Please attach the typical organization chart of every waterworks in the applicant's country, local level to the national level in the applicant's country.)

IV. Water Supply

1. Name of waterworks in which applicant is engaged

2. Total amount of annual water abstraction (intake) volume (m³/year)

Comentario [k1]: 項目（年間取水
量）を追加しました

3. Proportion of water resources (%)

- Surface water : (%)
- Groundwater: (%)
- Others: (%)

4. Total amount of annual water supply (m³/year)

Comentario [k2]: /year を追加しま
した

5. Total amount of annual water consumption (m³/year)

Comentario [k3]: 項目（年間消費
量）を追加しました

6. Maximum daily water supply demand (m³/day)

7. Average water supply demand (m³/day)

8. Number of treatment plants

9. Total capacity of treatment plants (m³/day)

10. Water quality (Please fill in the Table2)

[Table 2]

	Raw water	Tap water (Treated water)
Turbidity (degree)		
Color (degree)		
pH		
Hardness (ppm)		
Iron (ppm)		
Manganese (ppm)		
Nitrate Nitrogen (ppm)		
Others(Please		

describe:) (ppm)		
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11. Main treatment process (Please choose one option from the followings.)

- (a) Conventional
- (b) Slow Sand Filter
- (c) Others (Please describe:)

12. Chlorination method (Please choose one option from the followings.)

- (a) Gas injection
- (b) Powder injection
- (c) Other disinfection method (Please describe:)

13. Frequency of bacteriological tests

- (1) daily (times/day)
- (2) weekly (times/week)
- (3) monthly (times/month)
- (4) annually (times/year)

14. Distribution pipes

- (1) Length (km)
- (2) Pipe size (mm)
- (3) Materials
- (4) Inventory of pipe size

15. Storage capacity (m³)

16. Water leakage ratio (%)

17. Countermeasures for Leakage control

18. Annual number of repaired leakage points

19. Typical problems

Please fill in the **Table 3** describing three typical problems, classified into 3 categories (i.e. big, middle and small) of current issue of unaccounted-for water and their countermeasures.

[Table 3]

	Name of City	Unaccounted-for Water Conditions	Countermeasure
Big (Serious problem)			
Middle			
Small (Minor problem)			

V. Customer Service

Please describe the followings concerning the largest water utility in applicant's jurisdiction.

1. Number of house connections
2. Number of public taps (PT) / Standpipes (SP)
3. Number of people per PT / SP
4. Custom of water usage for drinking (Please choose one option from the followings.)
 - (a) Directly from tap
 - (b) After boiling
 - (c) After filtering
5. Coverage of 24-hour water supply (%)

6. Average hours of water availability to most people (hrs/day)
 7. Number of industrial connections
 8. Number of commercial connections
 9. Number of other connections
 10. Annual number of customer complaints
 11. Annual public relations expenditure
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VI. Water Billing

1. Estimated unaccounted-for water (m^3/day)
2. Percentage of metered water (%)
3. Annual number of meters replaced or repaired
4. Name of authority which determined the water rate
5. Year of the implementation of the current water rate
6. Name of the system used for the calculation of water rate
7. Water rate against the amount of consumption (Please choose one option from the followings.)
 - (a) Progressive
 - (b) Digressive
8. Frequency of reading of water meter (every days)
9. Billing period (months)
10. Collection method of water bill (Please describe:)

11. Average amount of water consumption by domestic (residential) customers

(1) Volume (m³/month)

(2) Water rate (USD/month)

12. Percentage of water charges against the total living expenses for the average domestic customers (%)

13. Please attach the table of the present water tariff

14. Relevance between sewerage bill and water bill (Percentage of sewerage bill surcharge on water bill) (% of water bill)

VII. Relevant Laws, Regulations and Master Plan

1. Laws and regulations (Please describe the outline of the relevant laws and regulations regarding water supply in **Table 4**.)

[Table 4]

Name of Law or Regulation	Year of Legislation	Purpose/Description

2. National development plan and its sector plan in waterworks

Please describe the outline of plan(s) in the **Table 5** and attach a copy of Sector Plan in English.

[Table 5]

Name of Plan	Target Period	Outline of Content
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VIII. Foreign Assistance

Please describe the outline of foreign assisted programs in the last 10 years in **Table 6**.

[Table 6]

Name of Donor	Year	Grant/Loan	Amount of Fund	Outline of Program/Project

IX. Priority Needs

1. Major constraints

The constraint factors listed may prevent the participant's sector from accelerated development. Mark the appropriate boxes so that they will show whether these factors represent a very severe, severe or moderate impediment to the overall development of the entire sector. Constraints are usually inter-related. Also, constraints ranking is subjective and will vary depending on the agency that makes the evaluation. However, it may be possible to determine the relative importance among them.

The purpose of ranking the constraints is to identify what kind of efforts should be made to remove or reduce the most severe ones. If the ranking changes appreciably in 5 or 10 years, it means that a certain degree of success has been achieved in the constraint-reduction endeavor.

Please indicate with the mark (✓) for the situation of major constraints in the table below.

[Table 7]

Constraints	Rating of constraints		
	Very Severe	Severe	Moderate

1. Lack of definite government policy for the sector			
2. Funding limitations			
3. Inadequate or Outmoded legal framework			
4. Inappropriate institutional framework			
5. Inadequate water resources			
6. Insufficient knowledge of water resources			
7. Inadequate cost-recovery framework			
8. In sufficiency of trained personnel			
(1) Professional			
(2) Sub-professional			
9. Lack of planning and design criteria			
10. Inappropriate technology			
11. Intermittent water service			
12. Operation and maintenance			
13. Logistics			
14. Import restrictions			
15. Non-involvement of communities			
16. Insufficient health education efforts			
17. Others (specify):			

2. Technical/Management problems (Please explain technical or management problems your department/organization currently experiencing in **Table 8.**)

[Table 8]

Outline of Problem	Applied Countermeasure

3. Problems to be solved at present and in the future (Please describe concretely as many items as possible including even minutia because this is utilized for the decision of strategies of action plan.)

[Table 9]

Outline of Problem	Background to Efforts	,Present Status, etc
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X. Expectation toward the Program.

Any comments and requests are appreciated.

(Please add sheets of paper for the description if necessary.)

END.

Attachment 2
ACCEPTED Participants

**- by 11th
May, (Thu)
2017**

Comprehensive Engineering on Water Supply Systems

Country Report Presentation

- 1. Country:**
- 2. Name:**
- 3. Position:**
- 4. Organization:**



Country Report Presentation

- ✿ Each applicant is kindly requested to make presentation of Country Report (M/S Power Point file with **less than 15 slides** which cover the following 5 topics about the individual water supply company/public water supply authority to which the participant belongs.
- ✿ Presentation time: **20 minutes (including 5min Q&A)**
- ✿ 5 topics:
 - ✿ 1. Management of Water Quality
 - ✿ 2. Reduction of Non-Revenue Water
 - ✿ 3. Customer Service
 - ✿ 4. Water Billing
 - ✿ 5. Major Recent Achievement in Improvement of Water Supply Services/Management
- ✿ 5 topics should include the content of “Current situation and major problems, Current actions against the problems and any achievement.



General Country Profile: Background

- ✿ Body sentence of the profile / Background

Whole Country:

Area : km²

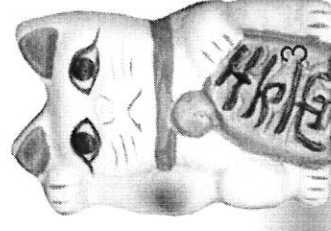
Population : Habitants

Coverage Water Supply: %

Selected Water Supply System/City:

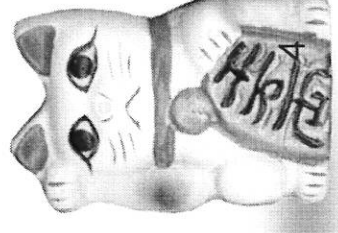
Service Area : km²

Population Served: million/ thousand



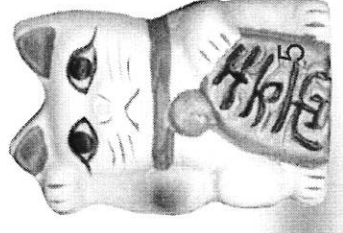
My Mission (sharing among participating friends)

- ✿ Mission of my organization is
- ✿ My mission in the organization is
- ✿ My actual job to achieve the mission is



1. Management of Water Quality

- Body sentence



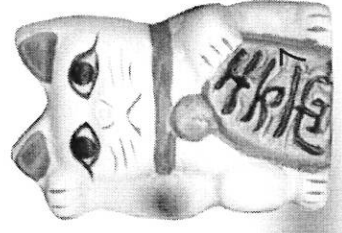
2. Reduction of Non-Revenue Water 1

- ⚙️ Constitution of Non-revenue Water (If you have the data, please fill in the table)

System input volume	Authorized consumption	Revenue water	Billed authorized consumption	xx m ³ /year (%)
	Water losses	Non Revenue Water (NRW)	Unbilled authorized consumption (ex. fire fighting, cleaning)	xx m ³ /year (%)
			Apparent losses (Unauthorized consumption (i.e. Illegal use), Customer metering inaccuracies)	xx m ³ /year (%)
			Real losses (Leakage)	xx m ³ /year (%)

2. Reduction of Non-Revenue Water 2

- Body sentence



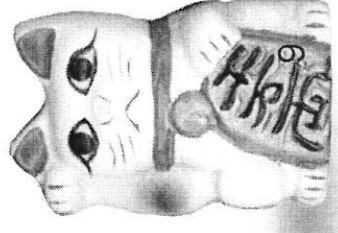
3. Customer Service

- Body sentence



4. Water Billing

- Average amount of water consumption by domestic (residential) customers volume (m³/month)
- Average of tariff collection rate (USD/month)
- ⚙ Body sentence

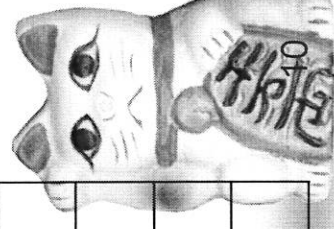


5. Major Recent Achievement in Improvement of Water Supply Services/Management (PART1)

Please fill in variation of the indicators below based on your situation!

(Example)

INDICATORS	2004 or 2005	2014 or 2015	Goals for 2025
Staff/1,000 connections	22	3.2	2
Production capacity (m³/day)	65,000	300,000	400,000
Water quality standards	None	WHO Guidelines	WHO Guidelines
Coverage area	20%	90%	95%
Supply duration (hr/day)	10	24	24
Supply pressure	0.2 bar	2.5 bars	2.5 bars
Number of connections	26,88	191,092	300,000
NRW	72%	6.2%	4.5%
Collection ratio	48%	99.9%	99.9%
Staff number	4,200	611	700



5. Major Recent Achievement in Improvement of Water Supply Services/Management (PART2)

- Body sentence

