

- 12
- (2) Expenses for study tours (basically in the form of train tickets).
 - (3) Free medical care for participants who become ill after arriving in Japan (costs related to pre-existing illness, pregnancy, or dental treatment are not included)
 - (4) Expenses for program implementation, including materials
For more details, please see p. 9-16 of the brochure for participants titled "KENSU-IN GUIDE BOOK," which will be given to the selected participants before (or at the time of) the pre-departure orientation.

6. Pre-departure Orientation:

A pre-departure orientation will be held at the respective countries' JICA offices (or the Embassies of Japan), to provide participants with details on travel to Japan, conditions of the workshop, and other matters.

VI. ANNEX:

ANNEX I

Comprehensive Engineering on Water Supply Systems Country Report

All applicants are required to prepare the Country Report providing the information on the following subjects with accurate data. **This report will be used for the selection of applicants.**

The Report should be typewritten in English and submitted together with the Application Form by **April 17th, 2013**. Please use additional sheets of paper (A4 size) if necessary.

Important Notice

- The **accepted participants** will need to prepare **presentation material (Power Point)** based on the Country Report and send it to **ticttee@jica.go.jp** (JICA Tokyo) by **May 28th, 2013**.
- Each participant will have a chance to present their report in the first week of this course. (Length of presentation per participant; 20 minutes of presentation and 10 minutes of Q & A session)
- In the presentation, please briefly explain the background information on your country, your organization and your job. Please put your emphasis on the problems your organization is facing, and possible solutions for that. **Also include the contents of Action Plan 1st draft (see the Annex II).**
- The important part of the presentation is to share your experiences in an actual project in your countries with Japanese experts and participants from other countries.

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

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 among 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 among 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(Please attach the chart of applicant's organization)

14. Organization chart (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. Proportion of water resources(%)
 - Surface water : (%)
 - Groundwater: (%)
 - Others: (%)
3. Total amount of annual water supply (m³)
4. Maximum daily water supply demand (m³/day)
5. Average water supply demand (m³/day)
6. Estimated total production volume (m³/day)
7. Number of treatment plants
8. Total capacity of treatment plants (m³/day)
9. Water Quality

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)		

10. Main treatment process (Please choose one option from among the followings.)
 - (a) Conventional
 - (b) Slow Sand Filter
 - (c) Others (Please describe:)

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

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

12. Frequency of bacteriological tests

(Please choose one option from the followings and describe the number.)

- (a) daily (_____ times/day)
- (b) weekly(_____ times/week)
- (c) monthly(_____ times/month)
- (d) annually(_____ times/year)

13. Distribution pipes

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

14. Storage capacity _____ (m³)

15. Water leakage ratio _____ (%)

16. Leakage control _____

17. Annual number of repaired leakage points _____

18. Typical Problems

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

VI. Water Billing

1. Estimated unaccounted-for water (m³/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 and Regulations, 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

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 Need

1. Major constraints

The constraint factors listed may prevent the applicant's sector from accelerated development. Mark the appropriate boxes so that they will show whether these factors represent very severe, severe or moderate impediments 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 constraints-reduction endeavors.

If changes occurred between 2006 and 2011, all constraints including those that have not changed, should be entered in the table to give a full picture of the situation in the end of 2011.

Please indicate with the mark x for the situation of major constraints in **Table 7**.

2)

Table 7

Constraints	Ranking 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. Insufficiency 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

Please add sheets of paper for the description if necessary.

ANNEX II

Comprehensive Engineering on Water Supply Systems

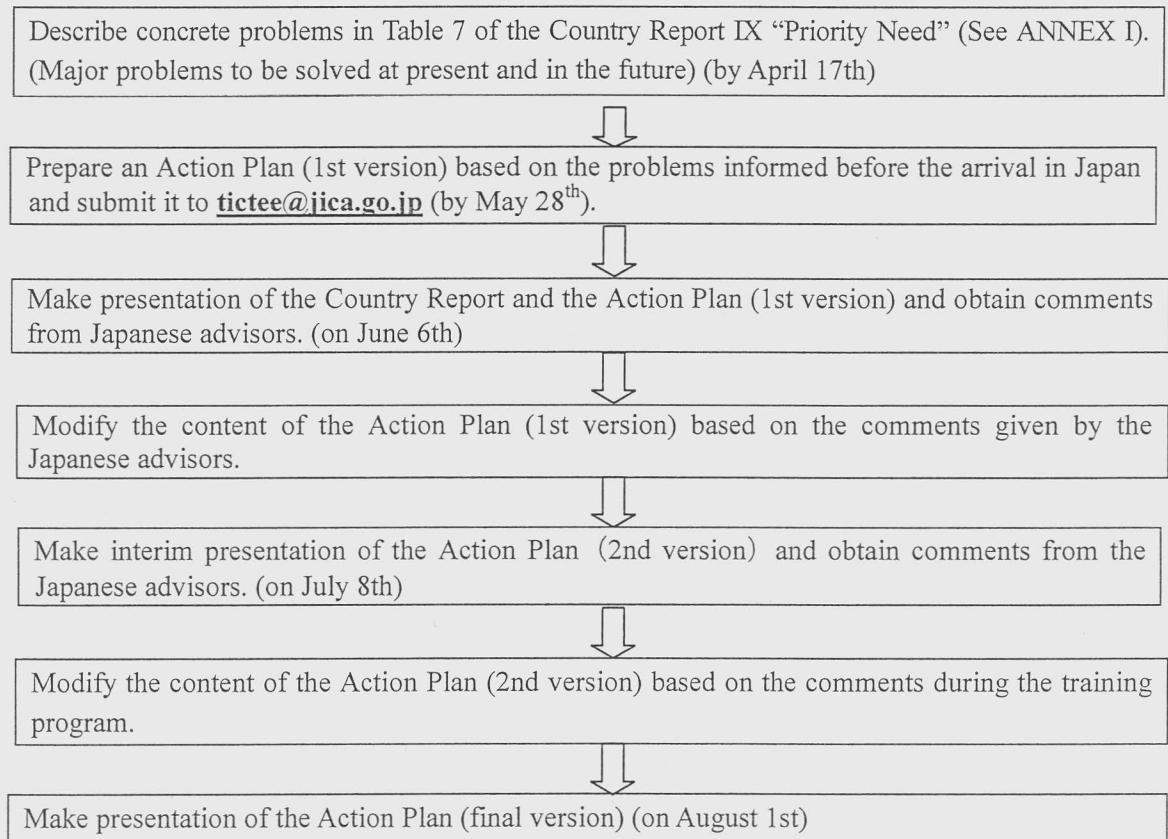
Action Plan

1. Description of Action Plan

Each participant is requested to formulate an action plan at the final stage of the training course, making best use of the knowledge and experience you have acquired through the course. The objectives of the program are to make sure what he/she have obtained through the training course and to learn how to propose his/her ideas in his/her organization in the future. Attention has to be drawn to the region regarding water supply in your country.

2. Process

Each participant is requested to formulate an action plan in accordance with the following process:



The schedule is subject to change.

3. Preparation of an Action Plan (1st version)

Prepare an Action Plan in English about 2 pages of A4, following the "4. Items to be described in the Action Plan (1st version)." Also please include it in the first presentation.

- (1) Collect the latest data, charts, maps, documents, etc. for the preparation of the action plan. (Collect them as electronic data.)
- (2) Make a **feasible plan** of the section which the applicant belongs to in the applicant's organization.
- (3) Set a target of the plan and deliberate how to achieve it.
- (4) Evaluate the resources (the number of persons, budget, equipment, etc.) to make the plan feasible to run.
- (5) Estimate how long it will take to complete the plan.
- (6) Investigate problems or obstacles in implementing the action plan and clarify the feasibility of the plan.

4. Items to be described in the Action Plan (1st version).

- (1) Name of the Plan
- (2) Participant's Name
- (3) Present Status
- (4) Concrete Problems
- (5) Method of Problem Solution
- (6) Contents of Concrete Actions and Objectives to be attained
- (7) Period of the Action
- (8) Necessary Facilities and Equipment
- (9) Budget to be estimated
- (10) Significance of the Plan

5. Attentions to be made for the modification of the Action Plan until the last version

- (1) The theme of the Action Plan could be changed from the initial theme during the modification process.
- (2) Each participant is required to utilize more detailed data in the final version than the initial version by collecting data, plans, maps, documents, etc. for the modification of his/ her Action Plan. For that purpose, he/she has to assure the acquisition route of information from the division which he/she belongs to by means of e-mail. (The participants will be able to use e-mail at almost all accommodations during the stay in Japan.)
- (3) Each participant is required to submit the "new information list*" regularly during the course, and utilize the list as reference to formulate the Action Plan.
* On the new information list, each participant should describe new information obtained during the course.

For Your Reference

JICA and Capacity Development

The key concept underpinning JICA operations since its establishment in 1974 has been the conviction that "capacity development" is central to the socioeconomic development of any country, regardless of the specific operational scheme one may be undertaking, i.e. expert assignments, development projects, development study projects, training programs, JOCV programs, etc.

Within this wide range of programs, Training Programs have long occupied an important place in JICA operations. Conducted in Japan, they provide partner countries with opportunities to acquire practical knowledge accumulated in Japanese society. Participants dispatched by partner countries might find useful knowledge and re-create their own knowledge for enhancement of their own capacity or that of the organization and society to which they belong.

About 460 pre-organized programs cover a wide range of professional fields, ranging from education, health, infrastructure, energy, trade and finance, to agriculture, rural development, gender mainstreaming, and environmental protection. A variety of programs are being customized to address the specific needs of different target organizations, such as policy-making organizations, service provision organizations, as well as research and academic institutions. Some programs are organized to target a certain group of countries with similar developmental challenges.

Japanese Development Experience

Japan was the first non-Western country to successfully modernize its society and industrialize its economy. At the core of this process, which started more than 140 years ago, was the "adopt and adapt" concept by which a wide range of appropriate skills and knowledge have been imported from developed countries; these skills and knowledge have been adapted and/or improved using local skills, knowledge and initiatives. They finally became internalized in Japanese society to suit its local needs and conditions.

From engineering technology to production management methods, most of the know-how that has enabled Japan to become what it is today has emanated from this "adoption and adaptation" process, which, of course, has been accompanied by countless failures and errors behind the success stories. We presume that such experiences, both successful and unsuccessful, will be useful to our partners who are trying to address the challenges currently faced by developing countries.

However, it is rather challenging to share with our partners this whole body of Japan's developmental experience. This difficulty has to do, in part, with the challenge of explaining a body of "tacit knowledge," a type of knowledge that cannot fully be expressed in words or numbers. Adding to this difficulty are the social and cultural systems of Japan that vastly differ from those of other Western industrialized countries, and hence still remain unfamiliar to many partner countries. Simply stated, coming to Japan might be one way of overcoming such a cultural gap.

JICA, therefore, would like to invite as many leaders of partner countries as possible to come and visit us, to mingle with the Japanese people, and witness the advantages as well as the disadvantages of Japanese systems, so that integration of their findings might help them reach their developmental objectives.



CORRESPONDENCE

For enquiries and further information, please contact the JICA office or the Embassy of Japan. Further, address correspondence to:

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