

**F.No. 34/20/2008-EO(F)**  
Government of India  
Ministry of Personnel, P.G. and Pensions  
(Department of Personnel and Training)

New Delhi, the 18<sup>th</sup> March, 2008.

Subject: A Group Training Course in Engineering on Water Supply Systems to be held in Japan from 20<sup>th</sup> May, 2008 to 6<sup>th</sup> August, 2008.

The undersigned is directed to state that the Japan International Cooperation Agency (JICA) under the Technical Cooperation Programme of the Government of Japan has invited applications for a Group Training Course in Engineering on Water Supply Systems to be held in Japan from 20<sup>th</sup> May, 2008 to 6<sup>th</sup> August, 2008. The details of the programme and the application form may be drawn from Ministry of Personnel, Public Grievances and Pensions website ([www.persmin.nic.in](http://www.persmin.nic.in)). There are 16 slots available globally.

2. The course is meant for Engineers who are presently in a management position or a senior engineer who is currently or expected to be engaged in the formulation of waterworks plan with more than five(5) years of experience in water supply systems(Experiences in the Electrical and Mechanical fields are not considered as experience). He/She should be between 30 and 45 years of age, be in good health, both physically and mentally, to undergo the training, be fully capable to discuss, read and write in English and not be serving in the military.
3. The purpose of this group training programme is to develop capacity of engineers who take leadership role in the planning and design of water supply systems or operation and maintenance of water supply. Particular focus shall be given to planning skill of water supply systems.
4. The fellowship award covers a Round-trip air ticket between an international airport designated by JICA and Japan. Allowances for (accommodation, living expenses, outfits and shipping), expenses for JICA study tours, free medical care for participants who may fall ill after reaching Japan and expenses for programme implementation including materials.
5. The nomination details should be submitted in the JICA's prescribed proforma(A2A3) duly authenticated by the Department concerned. The application forms should be routed through the concerned Ministries/Departments/State Governments and it should also be certified by the Competent Authority that the institution is a Government institution.
6. The applications should reach the Department not later than **24<sup>th</sup> March, 2008**. Nominations received after the prescribed date will not be considered. The circular inviting applications for training course is available on this Department's website ([www.persmin.nic.in](http://www.persmin.nic.in)).

  
(Trishaljit Sethi)  
Director

1. M/o Water Resources, Shramshakti Bhavan, New Delhi-110001.
2. All the State Governments/Union Territories.
3. Director(Technical), NIC with the request to post the circular along with the JICA's circular on the Department's website.



For a better tomorrow for all.

Japan International Cooperation Agency  
(Government of Japan)

No. 17/GT-CP/2008

11<sup>th</sup> March, 2008

Dear Ms. Arun Prabha,

A Group Training Course in Engineering on Water Supply Systems will be held in Japan from 20<sup>th</sup> May, 2008 to 6<sup>th</sup> August, 2008, under the Technical Cooperation Programme of the Government of Japan.

We are forwarding herewith six copies of the General Information Booklet on the above offer. It is requested that the following documents of the selected candidate may please be submitted to this office by **28<sup>th</sup> March, 2008**:-

- (1) The Nomination Form A2A3 together with the medical history questionnaire,
- (2) The desired Country Report

Further details are available in the General Information Booklet. It may be noted that the completed Country Report is essential for screening of applications.

It is further informed that 16 slots are available globally for the said course and it would be much appreciated if you could take further necessary action and submit the nomination(s) of suitable candidate(s) to this office by the designated date.

With regards,

Yours sincerely,

  
(Yumiko Asakuma)  
Deputy Resident Representative

Encl: As stated above.

Ms. Arun Prabha  
Under Secretary (PSE and Trg.)  
Department of Economic Affairs  
Ministry of Finance  
North Block  
New Delhi

14/3  
MC VS

Copy to:-

- ✓ Mr. R.K. Kharb, Section Officer, Department of Personnel and Training, Ministry of Personnel, Public Grievances and Pensions, North Block New Delhi.



# TRAINING AND DIALOGUE PROGRAMS

**GENERAL INFORMATION ON THE GROUP TRAINING COURSE IN**

**ENGINEERING ON WATER SUPPLY  
SYSTEMS**

集團研修「上水道施設技術」

***JFY 2008***

**<Type: Leaders Training Program / 類型: 中核人材育成型>**

**NO. J0800675**

**Phase in Japan : From May 20, 2008 to Aug. 6 , 2008**

This information pertains to one of the Training and Dialogue Programs of the Japan International Cooperation Agency (JICA), which shall be implemented as part of the Official Development Assistance of the Government of Japan based on bilateral agreement between both Governments.

# *Preface*

The Japanese Government extends official development assistance (ODA) to developing countries to support self-help efforts that will lead to economic progress and a better life for the citizens of those countries.

Since its foundation in 1974, the Japan International Cooperation Agency (JICA) has implemented Japan's technical cooperation under the ODA program.

Currently, JICA conducts such activities as training, dispatch of experts, provision of equipment, project-type technical cooperation, development study, dispatch of cooperation volunteers (JOCV), survey and administration of capital grant aid programs.

The training program for overseas participants is also one of JICA's fundamental technical cooperation activities for developing countries. Participants come from overseas in order to obtain knowledge and technology in a wide variety of fields.

The objectives of the JICA training program are:

- (1) to contribute to the development of human resources who will promote the advancement of developing countries, and
- (2) to contribute to the promotion of mutual understanding and friendship.

# I. ESSENTIAL FACTS

Program Title (No.)	Engineering on Water Supply Systems (J-08-00675)
Target Organizations	Departments responsible for water supply planning or designing under water supply utility, national or local government (excluding mechanical and electric departments)
Outcome/ Purpose	To develop capacity of engineers who take leadership role in the planning and design of water supply systems or operation and maintenance of water supply. Particular focus shall be given to planning skill of water supply systems.
Outputs	Through the training course, participants are expected: 1). To master the skill of basic planning and design for water supply systems, 2). To acquire necessary knowledge on planning and operation and maintenance on general water supply systems, 3). To learn systems related with water supply and functions and roles of related entities, and 4). To formulate an action plan based on 1) ~ 3) for the improvement of water utility in their own countries.
Content (Numbers correspond to Numbers in the Outputs )	1) Planning and design for water supply systems 2) Outline of water supply systems (2-1) Conservation of Water Quality of Water Resources and Monitoring of Water Quality (2-2) Requirement for Intake facility of Surface Water (2-3) Utilization Measures of Groundwater Resource (2-4) Utilization Measures of Rain Water (2-5) Water Purification Technology and Water Quality Control of Tap Water (2-6) Advanced Water Purification Technology and Membrane Treatment Technology (2-7) Requirements for Sludge Treatment Facility (2-8) Requirements for Pumping Facility (2-9) Types and Layout of Water Distribution Facilities (2-10) Construction of Water Supply and Distribution Facilities (2-11) Mapping system and Water Distribution Management (2-12) Countermeasures and Practice of Water Leakage Reduction (2-13) Antiseismic Method of Water Supply Facilities 3) Systems related to Water Utility and Operation System 4) Formulation of an Action Plan
Number of Participants	16
Language	<b>English</b>
Duration of the Program	May 20, 2008 – August 6, 2008
Deadline for Application	<b>March 21, 2008</b> for acceptance by JICA office (or Embassy of Japan) Submission: (1) A2A3 Form (2) Country Report
Deadline for Acceptance Notice	<b>April 18, 2008</b>

Implementing Organizations	<p><b>1. Tokyo International Center (JICA TOKYO)</b>  Address: 2-49-5 Nishihara, Shibuya-ku, Tokyo 151-0066, Japan  TEL: +81-3-3485-7051 FAX: +81-3-3485-7904  (81: country code of Japan, 3: area code)</p> <p><b>2. Japan Water Works Association (JWWA)*</b>  Address: 4-8-9, Kudan-minami, Chiyoda-ku, Tokyo 102-0074, Japan  TEL: +81-3-3264-2307 FAX: +81-3-3264-2306  E-mail : kokusai@jwwa.or.jp</p> <p>*The JWWA is an international nonprofit integrated organization consisting of memberships, such as Public water supply utilities, Private companies, Consultants, Researchers and Individuals related to this field in order to contribute to stable water supply as well as to promote sound waterworks development. Founded in 1932, JWWA is the one of largest organization of water supply professionals in the world.</p>
Accommodations	<p><b>Tokyo International Center (JICA TOKYO)</b>  Address: 2-49-5 Nishihara, Shibuya-ku, Tokyo 151-0066, Japan  TEL: +81-3-3485-7051 FAX: +81-3-3485-7904  <a href="http://www.jica.go.jp/english/contact/pdf/tic.pdf">http://www.jica.go.jp/english/contact/pdf/tic.pdf</a></p> <p>If no room is available at JICA TOKYO, JICA will arrange alternative accommodations for the participants.</p>
Inputs by Japan (Allowances & Expenses)	<ol style="list-style-type: none"> <li>1. Round-trip ticket between an international airport designated by JICA and Japan.</li> <li>2. Allowances (accommodation, living expenses, shipping)</li> <li>3. Expenses for study tours  Basically paid in the form of train ticket(s) or chartered bus</li> <li>4. Free medical care for participants who become ill after arrival in Japan (costs related to pre-existing illness, pregnancy or dental treatment are not included)</li> <li>5. Expenses for program implementation including materials</li> </ol> <p>See the brochure, KENSHU-IN GUIDE BOOK p. 9-16, given to each selected candidate before (or at the time of) the pre-departure orientation.</p>

## ***II. CURRICULUM***

1. Planning of Water Supply Systems
  - 1). Pipeline Network Analysis
  - 2). Water Demand Forecasting
  - 3). Hydraulics on Pipelines
  - 4). Basic Planning and Design for Pipeline Network
  - 5). Basic Planning and Design for Water Supply Systems
  - 6). Basic Planning and Design for Water Supply Facilities
  
2. Outline of Water Supply Systems

\*Lectures on water resources different from those in participants' countries will be also given.

  - 1). Conservation of Water Quality of Water Resources and Monitoring of Water Quality
    - (a) Water Pollution in Water Resources
    - (b) Water Quality Control in Japan
    - (c) Automatic Water Quality Monitoring System
    - (d) Observation of Dam site
    - (e) Water Quality Control for Developing Countries
  - 2). Requirements for Water Intake Facilities of Surface Water
    - (a) Planning and Design of Water Intake Facilities
    - (b) Small River Intake Facility
  - 3). Utilization Measures of Groundwater Resources
    - (a) Groundwater Technology
    - (b) Groundwater Exploration Method
    - (c) Well Drilling Machine and Tool Manufacturing Factory
  - 4). Utilization Measures of Rain Water
    - (a) Rainwater Treatment / Reuse Facilities
  - 5). Water Purification Technology and Water Quality Control of Tap Water
    - (a) Water Purification Process
    - (b) Operation and Maintenance of WTP
    - (c) Coagulation and Flocculation process
    - (d) Practice of Jar Test
    - (e) Removal of Pollutants by Chemical Coagulation
    - (f) Small Scale Water Treatment Plant for Groundwater
  - 6). Advanced Water Purification Technology and Membrane Process Technology
    - (a) Design, Operation and Maintenance of Membrane Filtration Plant
    - (b) Construction and Operation of Advanced Water Treatment and Desalination
  - 7). Requirements for Sludge Treatment Facilities
    - (a) Sludge Treatment
  - 8). Requirements for Pumping installation
    - (a) Pumping Theory
  - 9). Types and Layout of Water Distribution Facilities
    - (a) Operation and Maintenance of Water Distribution Facilities
  - 10). Construction of Water Supply and Water Distribution Facilities
    - (a) Pipe Laying Method

- 11). Mapping System and Water Distribution Management
    - (a) Pipeline Mapping System
  - 12). Countermeasures and Practice of Water Leakage Prevention
    - (a) Water Leak Detection and Prevention
    - (b) Water Leak Detection Demonstration / Practice
    - (c) Water Leakage Reduction Countermeasures
  - 13). Antiseismic Method of Water Supply Facilities
    - (a) Provision for Earthquake Disaster and Anti-Seismic Construction Method
3. Systems related to Waterworks and Operation System
- 1). Waterworks Management and Tariff System in Japan
  - 2). Water Supply in Japan / Water Works Law
  - 3). Water Resources Development
  - 4). Observation of Manufacturing Factory
  - 5). Sanitation Research Organization
  - 6). Small-scale Hydraulic Power Generation Plant
4. Formulation of an Action Plan
- 1). Country Report Presentation (**Annex I**)
  - 2). Action Plan Presentation (**Annex II**)



## TENTATIVE SCHEDULE

### Remarks:

1. The schedule is subject to change.

2. Substantial Training Period: May 26-Aug 6

3. Lecture Time: Morning Session 9:30-12:00, Luncheon 12:00-13:30, Afternoon Session 13:30-16:00

4. References: (L)...Lecture (F)...Field Study (D)...Discussion (P)...Practice (Z)...Presentation

Date		Time	Contents
May 20	Tue		Visit to Japan
May 21	Wed	16:00-	Course Orientation
May 22	Thu		
May 23	Fri		
May 24	Sat		Day Off
May 25	Sun		Day Off
May 26	Mon	11:00-13:00	Opening Ceremony / Welcome Party
		13:00-14:00	(L) Role of JWWA
		14:00-16:00	(L) Waterworks Management and Tariff System in Japan
May 27	Tue	10:00-12:00	(L) Water Supply in Japan / Waterworks Law
		13:30-16:00	(L) Water Resources Development
May 28	Wed	9:30-16:30	(DZ) Country Report & Action Plan (1st version) Presentation
May 29	Thu	9:30-12:00	(P) Basic Planning and Design for Pipeline Network -Introduction-
		13:30-16:00	(L) Administrative Improvement by Performance Indicator
May 30	Fri	9:30-16:00	(L) Water Intake, Storage, Conveyance, Distribution Facilities and Supply Equipments
May 31	Sat		Day Off
Jun 1	Sun		Transfer (Tokyo → Sapporo)
Jun 2	Mon	10:30-11:30	courtesy call on Manager of Sapporo City Waterworks Bureau
		13:00-16:00	(L) Water Purification Process
Jun 3	Tue	9:30-12:00	(L) Waterworks of Sapporo City
		13:30-16:00	(L) Basic Planning for Water Supply Facilities in Sapporo City
Jun 4	Wed	10:00-12:00	(L) Water Quality Control on WTP
		13:00-16:30	(F) WTP, Intake, Dam and Automatic Water Quality Monitoring System
Jun 5	Thu	10:00-12:00	(L) Coagulation and Flocculation Process
		13:00-16:30	(P) Practice of Jar Test (Optimization of Coagulation / Flocculation Process)
Jun 6	Fri	9:00-10:30	(L) Operation and Maintenance of WTP
		10:30-11:00	(F) Nishino WTP
		11:00-12:00	(P) Operation and Maintenance of WTP
		13:00-13:30	(F) Nishino Water Intake Site
			Transfer (Sapporo → Tokyo)
Jun 7	Sat		Day Off
Jun 8	Sun		Day Off
Jun 9	Mon	9:30-16:00	(L) Water Leakage Reduction Countermeasures / Sludge Treatment
Jun 10	Tue	9:30-16:00	(L) Operation and Maintenance of Water Distribution Facilities
Jun 11	Wed	9:30-16:00	(L) Planning and Design of Water Intake Facility
Jun 12	Thu	9:30-16:00	(L) Removal of Pollutants by Chemical Coagulation / Water Quality Control
Jun 13	Fri	9:30-12:00	(L) Water Pollution in Water Resources
		13:30-16:00	(L) Water Quality Control in Japan
Jun 14	Sat		Day Off
Jun 15	Sun		Day Off
Jun 16	Mon	9:30-16:00	(L) Groundwater Technology
Jun 17	Tue	10:00-15:00	(LF) Pumping Theory, Pump Manufacturing Factory
Jun 18	Wed	10:00-16:30	(F) Waterworks related Facilities in Ohta City
Jun 19	Thu	10:00-15:00	(LF) Well Drilling Machine and Tool Manufacturing Factory
Jun 20	Fri	10:00-14:00	(F) Valve Manufacturing Factory
Jun 21	Sat		Day Off
Jun 22	Sun		Day Off
Jun 23	Mon	9:30-12:00	(L) Water Leak Detection and Prevention in Tokyo
		13:00-15:30	(FP) Water Leak Detection Demonstration / Practice
Jun 24	Tue	9:30-16:00	(L) Water Quality Control for Developing Country
Jun 25	Wed	9:30-12:00	(L) Pipe Laying using Shield Method
		13:00-15:00	(F) Shield Method Pipe Laying Construction
Jun 26	Thu	9:30-16:00	(PD) Action Plan (2nd version) Presentation
Jun 27	Fri	9:30-12:00	(L) Groundwater Exploration Method
		13:30-16:00	(L) Groundwater Exploration Method using Radioactivity
Jun 28	Sat		Day Off
Jun 29	Sun		Day Off

Jun 30	Mon	9:00-12:30	Transfer (Tokyo → Osaka)
		14:00-17:00	(F) Ductile Cast Iron Pipe Manufacturing Factory
Jul 1	Tue	10:00-15:00	(LF) Small Scale Water Treatment Plant for Groundwater
Jul 2	Wed	9:30-16:00	(LF) Provision for Earthquake Disaster and Anti-Seismic Construction Method / Amagasaki WTP (Advanced Water Treatment)
Jul 3	Thu	9:30-16:30	(L) Operation and Management of Water Distribution System / Ozonation System
Jul 4	Fri	9:30-14:00	(F) Joint Manufacturing Factory
		15:30-18:30	Transfer (Kobe → Tokyo)
Jul 5	Sat		Day Off
Jul 6	Sun		Day Off
Jul 7	Mon	9:30-16:00	(LF) Sanitation Research Organization
Jul 8	Tue	9:30-16:00	(LF) Design, Operation and Maintenance of Membrane Filtration Plant
Jul 9	Wed	9:30-16:00	(L) Basic Planning for Water Supply Facilities
Jul 10	Thu	9:30-16:00	(L) Water Demand Forecasting / Hydraulics on Pipelines
Jul 11	Fri	9:30-16:00	(L) Pipeline Network Analysis
Jul 12	Sat		Day Off
Jul 13	Sun		Day Off
Jul 14	Mon	9:30-16:00	(P) Basic Planning and Design for Pipeline Network
Jul 15	Tue		
Jul 16	Wed		
Jul 17	Thu		
Jul 18	Fri		
Jul 19	Sat		
Jul 20	Sun		Day Off
Jul 21	Mon		Day Off
Jul 22	Tue	10:30-12:30	Transfer (Tokyo → Kitakyushu)
		15:00-17:00	(L) Waterworks of Kitakyushu City / Pipeline Mapping System
Jul 23	Wed	9:00-14:00	(F) Dam, River Estuary Barrage, Anou WTP etc.
		PM	Transfer (Kitakyushu → Naha)
Jul 24	Thu	10:00-12:00	(L) Waterworks of Okinawa Islands
		14:00-16:30	(LF) Chatan WTP (Advanced Water Treatment, Desalination)
Jul 25	Fri	9:30-16:00	(F) Dam and River Intake Facilities
Jul 26	Sat		Transfer (Naha → Tokyo)
Jul 27	Sun		Day Off
Jul 28	Mon	10:00-16:30	(LF) Rainwater Treatment / Reuse Facility
Jul 29	Tue	9:30-16:00	(P) Basic Planning and Design for Water Supply Facility - Mainly Hydraulic calculation
Jul 30	Wed	9:30-16:00	(P) Basic Planning and Design for Water Supply Systems
Jul 31	Thu	9:30-16:00	(PD) Preparation for Action Plan Report
Aug 1	Fri	9:30-16:00	(PD) Preparation for Action Plan Report
Aug 2	Sat		Day Off
Aug 3	Sun		Day Off
Aug 4	Mon	9:30-16:00	(DZ) Action Plan Report Presentation
Aug 5	Tue	9:30-15:00	(DZ) Action Plan Report Presentation
		15:00-16:30	Evaluation on the Training Course / Closing Ceremony
		18:00	Farewell Party
Aug 6	Wed		Departure from Japan

### ***III. REQUIREMENTS FOR APPLICATION***

Applicants should:

- (1) be nominated by their government in accordance with the procedures mentioned in IV below,
- (2) be presently in a management position or a senior engineer who is currently or expected to be engaged in the formulation of waterworks plan,
- (3) be engineers with more than 5 years of experience in water supply systems,  
(\* Experiences in the Electrical and Mechanical fields are not considered as experience.)
- (4) be university graduates from the faculty of engineering such as civil, sanitary, environmental, or have equivalent academic background,
- (5) be fully capable of discuss, read and write in **English**,
- (6) be between 30 and 45 years of age
- (7) not be serving in the military, and
- (8) be in good health, both physically and mentally, to undergo the training. As the schedule in **this course includes many field works (trips) which are too hard for the pregnant body.**

#### **ATTENTION**

Participants are required:

- (1) not to change course subjects or extend the course period,
- (2) not to bring any members of their family,
- (3) to return to their home countries at the end of their course according to the international travel schedule designated by JICA,
- (4) to refrain from engaging in political activities or any form of employment for profit or gain, and
- (5) to observe the rules and regulations of their place of accommodation and not to change accommodations designated by JICA.

### ***IV. PROCEDURE FOR APPLICATION***

1. A government interested in nominating applicants for the course should fill in and forward one (1) original and three (3) copies of the Nomination Form (Form A2A3) for each applicant, to a JICA office (or Embassy of Japan) by **March 21, 2008**.
2. Country Report (**Annex I**)  
The Country Report (**Annex I**) should be typewritten in accordance with the designated format attached herewith and submitted with the nomination form by March 21 2008.
3. The JICA office (or Embassy of Japan) will inform the applying government whether or not the nominee's application has been accepted by no later than **April 18, 2008**.
4. Action Plan (1<sup>st</sup> version) (**Annex II**)  
Those who have been informed their acceptance are requested to prepare an Action Plan (1<sup>st</sup> version) based on the problems informed with their acceptance notice and submit it at the time of program orientation on May 21.

## V. OTHER MATTERS

### 1. A pre-departure orientation

A pre-departure orientation will be held at JICA overseas offices (or Embassies of Japan) to provide the selected candidates with details on travel to Japan, conditions of training, and other matters. Participants will see a video, *Training in Japan*, and receive a textbook and cassette tape, *Simple Conversation in Japanese*. A brochure, *KENSHU-IN GUIDE BOOK*, will be handed to each participant before (or at the time of) the orientation.

### 2. Country Report & Action Plan

In the course of training, each participant will be requested to make presentations on Country Report and Action Plan. Visual presentations are highly appreciated. Using Power Point and/or an OHP are recommended. Details on each presentation are following:

#### (1) Country Report and Action Plan (1<sup>st</sup> version) presentation

Contents: see **Annex I** (Country Report) and **Annex II** (Formulation of Action Plan)

Presentation date: May 28

Schedule: 30 minutes including 10 minutes for Q&A

Submission of soft data: at the time of program orientation on May 21

#### (2) Action Plan (final version) presentation

Contents: see **Annex II** (Formulation of Action Plan)

Presentation date: at the end of the training program

Schedule: 40 minutes including 10 minutes for Q&A

Submission of soft data: will be announced during the training

### 3. Participants who have successfully completed the course will be awarded a certificate by JICA.

## ANNEX I

### Engineering on Water Supply Systems (JFY 2008)

#### Country Report

All applicants are required to prepare the Country Report providing the information on the following subjects, with accurate data because this serves as the reference for the selection of applicants as participants

The Report should be typewritten in English and submitted together with the Nomination Form. Please use additional sheets of paper (A4 size), if necessary.

#### 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 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 your organization
  
3. Applicant's occupation ( Please choose one option 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) One who is expected to be a staff 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 your organization has responsibility

9. Service area of the applicant's organization (km<sup>2</sup>)

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 your 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 (m<sup>3</sup>)
  
4. Maximum daily water supply demand (m<sup>3</sup>/day)
  
5. Average water supply demand (m<sup>3</sup>/day)
  
6. Estimated total production volume (m<sup>3</sup>/day)
  
7. Number of treatment plants
  
8. Total capacity of treatment plants (m<sup>3</sup>/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 (m<sup>3</sup>)

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)			

**. 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



**. 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

**. 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

**. 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 2002 and 2007, 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 2007.

Please indicate with the mark ( ) for the situation of major constraints in Table 7.

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-6

Outline of Problem	Background to Efforts	,Present Status, etc

Please add sheets of paper for the description, if necessary.

## Engineering On Water Supply Systems (JFY 2008)

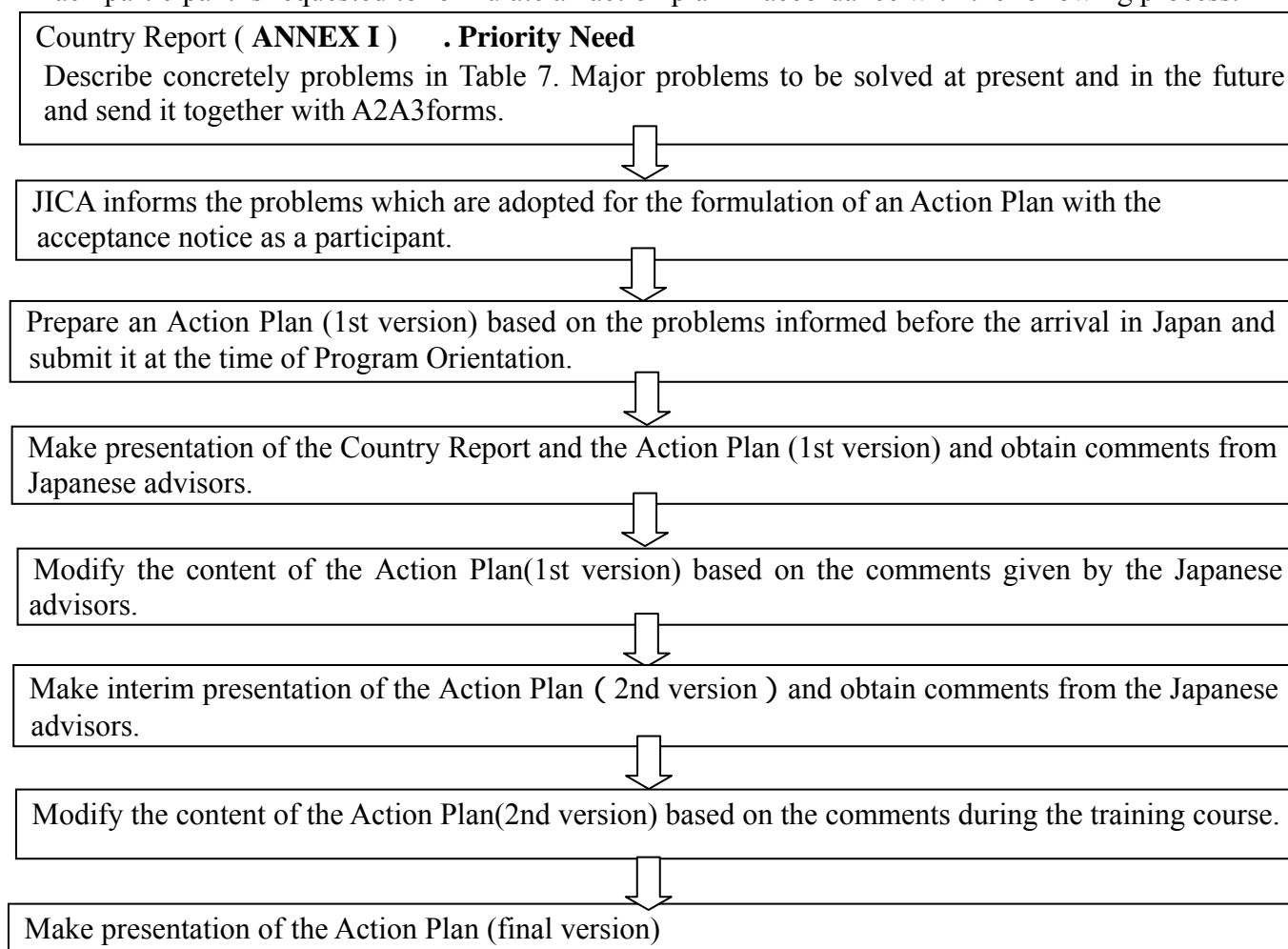
### *Formulation of Action Plan*

#### 1. 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:





### 3. Preparation of an Action Plan (1<sup>st</sup> version)

Prepare an Action Plan in English on about 2pages of A4, following the “4. Items to be described in the Action Plan (1<sup>st</sup> version)”

- 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, 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 (1<sup>st</sup> 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

Each Participant might have to collect 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 their stay in Japan.)

- 1) Each participant is required to formulate the final version of the Action Plan for which problems raised in the 1<sup>st</sup> version might be different.
- 2) Each participant is required to describe more detailed data in the final version.

### 6. Attention for the Action Plan Presentation

Each participant may use an overhead projector, VHS video player (Japanese type) and computer equipment (e.g. Power Point) are available.



Japan International Cooperation Agency (JICA)  
Tokyo International Center (JICA TOKYO)

Address: 2-49-5 Nishihara, Shibuya-ku, Tokyo 151-0066, Japan  
TEL: 81-3-3485-7051      FAX: 81-3-3485-7904

## Technical Cooperation by The Government of Japan

### Training Award of Japan International Cooperation Agency (JICA)

Application by the Government of

.....  
for a training course in the field of  
.....

Please provide one original  
and three copies.  
Please print or type.

(FOR JAPANESE OFFICIAL USE)

- Ordinary Group Course (集団コース) Course No. ....
- Special Group Course (一般特設) Course No. ....
- Country-focused Group Course (国別特設) Course No. ....
- Counterpart (カウンターパート) 専門家名 .....
- プロジェクト名 .....
- Ordinary Individual Course (個別一般)
- Others (C.S, 特別案件等)

Recent photo

**PART A** To be completed by the nominee.

<b>1 FULL NAME</b> (as in Passport, underline Family Name)				
(Family)	(First)	(Middle)		
<b>2 ADDRESS FOR CORRESPONDENCE</b>  Telephone : E-mail :	<b>4 DATE OF BIRTH</b>			<b>5 AGE</b>
	Month	Date	Year	
<b>3 NAME AND ADDRESS OF PERSON TO BE NOTIFIED IN CASE OF EMERGENCY</b>  Relationship to you: Telephone:		<b>6 SEX</b> <input type="checkbox"/> MALE <input type="checkbox"/> FEMALE		
		<b>7 MARITAL STATUS</b> <input type="checkbox"/> SINGLE <input type="checkbox"/> MARRIED		
		<b>8 NATIONALITY</b>		
		<b>9 RELIGION</b>		

**10 EDUCATIONAL RECORD**

Institution	City/Country	Years Attended		Qualification Obtained	Subject
		From	To		

**11 TRAINING OR STUDY IN FOREIGN COUNTRIES** (in relation to professional interests.)

Institution	City/Country	Period		Certificate/ Degree Awarded	Field of Study
		From	To		

**12 EMPLOYMENT RECORD**

1) Present Place of Employment

Name	Title of Present Job
	Date of Taking Up Post
Address	Type of Organization
	<input type="checkbox"/> Governmental/Public <input type="checkbox"/> Private <input type="checkbox"/> International <input type="checkbox"/> Others
Telephone:	
Telex/Fax:	

2) Previous Job

Name and Address of Organization	Description of Your Previous Job
Previous Title/Post and Dates(from/to)	

3) Describe briefly the work of your organization and the service it provides.

.....  
.....  
.....

4) Describe your own job.

.....  
.....  
.....  
.....  
.....

5) Explain how the proposed training will be of benefit to you in the work you will be doing on your return.

.....  
.....  
.....  
.....  
.....

**13 LANGUAGE PROFICIENCY**

1. English				
Listening	<input type="checkbox"/> excellent	<input type="checkbox"/> good	<input type="checkbox"/> fair	<input type="checkbox"/> poor
Speaking	<input type="checkbox"/> excellent	<input type="checkbox"/> good	<input type="checkbox"/> fair	<input type="checkbox"/> poor
Writing/Reading	<input type="checkbox"/> excellent	<input type="checkbox"/> good	<input type="checkbox"/> fair	<input type="checkbox"/> poor
2. Mother Tongue .....				
3. Other Language.....				
	<input type="checkbox"/> excellent	<input type="checkbox"/> good	<input type="checkbox"/> fair	<input type="checkbox"/> poor

**14 NOMINEE'S DECLARATION** To be signed by the nominee.

I certify that the statements made by me in this form are true and correct to the best of my knowledge.

If accepted for a training award, I agree:

- (a) not to bring any member of my family.
- (b) to carry out such instructions and abide by such conditions as may be stipulated by both the nominating Government and the Japanese Government in respect of this course of training.
- (c) to follow the course of study or training, and abide by the rules of the institution or establishments with which I undertake to study or train.
- (d) to refrain from engaging in political activities, or any form of employment for profit or gain.
- (e) to submit any progress report or evaluation questionnaires which may be prescribed.
- (f) to return to my home country at the end of my course of study or training.

I also fully understand that if granted a training award it may be subsequently withdrawn if I fail to make adequate progress, or for other sufficient cause including physical conditions determined by the Government of Japan.

Date: ..... Signature: .....

**PART B** To be completed by nominee's Director or Head of Department.

**OBSERVATIONS OF NOMINATING ORGANIZATION**

1 Describe what work the nominee will be expected to do on his return.

.....

.....

.....

2 Explain how the proposed training will be of benefit to the work of your organization.

.....

.....

.....

3 (For Non-Group Training only)

Describe:

1) Subject area of the training required.

.....  
.....  
.....  
.....  
.....

2) Special subjects which are particularly important and should be included in the training program (continue on an additional sheet if necessary).

.....  
.....  
.....  
.....  
.....

3) Period of training required (from/to).

.....

4) Notice required before nominee can be released from present post.

.....

**PART C** To be completed and signed by a responsible government official.  
**OFFICIAL NOMINATION**

I certify that:

I have examined the documents in this form and I am satisfied that they are authentic and relate to the nominee.

I accordingly nominate this person on behalf of the  
Government of .....

Date: ..... Signature: .....

Position: ..... Name:.....

Organization: .....

Official stamp

## MEDICAL HISTORY AND EXAMINATION FOR JICA TRAINING AWARD

MEDICAL HISTORY TO BE COMPLETED BY NOMINEE			
1 NAME OF NOMINEE(last name, first name, middle name)			
2 DATE OF BIRTH (mo/day/yr)	3 NATIONALITY	4 SEX _____ male _____ female	5 ADDRESS FOR CONTACT
6 NAME OF TRAINING COURSE/SEMINAR  _____			
7 LENGTH OF TRAINING COURSE/SEMINAR (weeks, months)  _____			

### 8 IMPORTANT NOTICE

Before you complete the Medical History Questionnaire, you are hereby notified that:

A medical condition resulting from an undisclosed pre-existing condition may not be financially compensated for by JICA and may result in termination of your training program.

I understand and accept the terms of this notice. \_\_\_\_\_ Yes \_\_\_\_\_ No

**9 NOMINEE WILL CHECK "YES" OR "NO" AND EXPLAIN**

	YES	NO		EXPLANATION
a.			Have you had any significant or serious illness or injury? (If hospitalized, give place & dates.)	
b.			Have you had any operations or advice by a physician to have an operation? (Give place & dates.)	
c.			Do you currently use any drugs for treatment of a medial condition? (Give name & dose.)	
d.			Have you ever been a patient in a mental hospital or sanitarium or treated by a Psychiatrist? (Give place & dates.)	

**10 NOMINEE WILL INDICATE "YES" OR "NO" TO EACH ITEM**

**DO YOU NOW HAVE OR HAVE YOU EVER HAD THE CONDITIONS LISTED BELOW?**

(Check each item, if yes, enclose the relevant condition with a circle.)

	YES	NO	CONDITION
a.			Asthma, emphysema, or other lung conditions
b.			Tuberculosis or live with anyone who has tuberculosis
c.			High blood pressure, heart disease
d.			Stomach, liver (hepatitis), gall bladder disease
e.			Kidney or bladder disease, stone or blood in urine
f.			Diabetes (sugar in the urine)
g.			Depression, excess worry, attempted suicide, or other psychological symptoms
h.			Acquired Immune Deficiency Syndrome (AIDS)
i.			Tumor, abnormal growth, cyst, or cancer
j.			Bleeding disorder, blood disease (sickle cell anemia)

**I CERTIFY THAT I HAVE READ THE ABOVE INSTRUCTIONS AND ANSWERED ALL QUESTIONS TRULY AND COMPLETELY TO THE BEST OF MY KNOWLEDGE.**

<b>11 PRINTED NAME OF NOMINEE</b>	<b>12 DATE</b>	<b>13 SIGNATURE OF NOMINEE</b>