

### TRAINING CIRCULAR

Subject : A Group Training Course in Engineering on Water Supply Systems to be held in Japan from 19/05/2009 to 05/08/2009 (Core Phase).

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. The total duration of the programme is from March 2009 to August 2009, out of this, the Core Phase, from 19/5/2009 to 5/8/2009, will be held in Japan. The Preliminary Phase will be held in the candidate's home country. The details of the programme and the application form may be drawn from Ministry of Personnel, Public Grievances and Pensions website ([persmin.nic.in](http://persmin.nic.in)).

2. The Course is meant for Departments/ Divisions responsible for water supply planning or designing in national/local governments or other official bodies. The Course aims at enhancing the capacity of engineers who take leadership role in the planning and designing of water supply systems. Particular focus will be given to planning skill of water supply systems.

3. The candidate should currently be in a management position or a senior engineer who is currently or expected to be engaged in the formulation of waterworks plan; be engineers with more than 5 years of experience in water supply systems; be a university graduate from the faculty of engineering such as civil, sanitary, environmental, or have equivalent academic background; be between the ages of thirty and forty five years of age; be proficient in both written and spoken English; be in good health, both physically and mentally to undergo the training and not be serving in any form of military service.

4. The JICA covers the cost of a round-trip ticket between an international airport designated by JICA and Japan; travel insurance from arrival to departure in Japan; and includes allowances for accommodation, living expenses, outfit and shipping; expenses for study tours; free medical care for participants who may fall ill after arriving in Japan (costs related to pre-existing illness, pregnancy, or dental treatment are not included). The participants are not allowed to take any family member during the training course.

5. It is requested that the nomination of the suitable candidates may please be forwarded to this Department in accordance with the eligibility criteria and the terms and conditions of the JICA Circular dated 13<sup>th</sup> March 2009. The Ministry/ State Governments may sponsor the names of only Government/ Public Sector Undertaking functionary.

6. The nomination details should be submitted in the JICA's prescribed proformas (A2A3 Forms), duly authenticated by the Department concerned alongwith the country report.

7. The applications should reach this Department through proper channel not later than 29<sup>th</sup> May 2009. Nominations received after the prescribed date will not be considered. The circular inviting applications for training courses is available on this Department's website [persmin.nic.in](http://persmin.nic.in)

  
(Trishaljit Sethi)  
Director

: 2 :

To

- 1) Ministry of Water Resources, Shram Shakti Bhavan, New Delhi.
- 2) Ministry of Urban Development, Nirman Bhavan, New Delhi.
- 3) All State Governments/ Union Territories.  
[With the request to circulate it amongst the related organizations]
- 4) Director (Technical), NIC with the request to post the circular along with the JICA's circular and the enclosed application Proformas on the Department's website



S. NO. 1 (R)

Japan International Cooperation Agency  
(Government of Japan)

No. 25/GT-CP/2009

13<sup>th</sup> March, 2009

Dear Mr. R.K. Kharb

A Group Training Course in Engineering on Water Supply Systems will be held in Japan from 19<sup>th</sup> May, 2009 to 5<sup>th</sup> August, 2009, under the Technical Cooperation Programme of the Government of Japan.

We are forwarding herewith two 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 **31<sup>st</sup> March 2009**:-

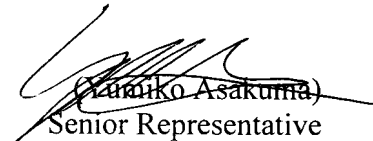
- (1) The Nomination Form A2A3 together with the medical history questionnaire,
- (2) The desired Country Report

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 17 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)  
Senior Representative

Encl: As stated above.

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

Copy to:-

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





DUP. No. - 23405/2009  
C-357/Eo(F)/09  
20/3/09



# TRAINING AND DIALOGUE PROGRAMS

## GENERAL INFORMATION ON

### ENGINEERING ON WATER SUPPLY SYSTEMS

集團研修「上水道施設技術」  
*JFY 2009*

<Type: Leaders Training Program / 中核人材育成型>  
NO. J09-00603 / Project ID: 0980944  
Phases in Japan : From May 19, 2009 to August 5, 2009

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.

# ***I. Concept***

## **Background**

The water supply is one of the most important basic human needs. However the needs are not satisfied in the most of developing countries due to lack of water supply facilities and systems. The water supply facilities and systems needs to be improved in the natural and social environment in each country. On the other hand, many developing countries have faced the challenge with lack of the human resources for management, operation and designing the water supply systems. In this context, this training program is designed to foster the practical engineer in water supply, mainly on designing.

## **For what?**

This program aims at contributing the capacity development on water supply. Particular focus shall be given to designing and planning skill of water supply systems.

## **For whom?**

Engineers/ Managers in the following organizations.

Departments / divisions responsible for water supply planning or designing in national or local government or other official body.

## **II. Description**

1. **Title (J09-00603):** Engineering on Water Supply Systems
2. **Period of program**  
**Duration of whole program:** March 2009 to August 5th 2009  
**Core Phase in Japan:** May 19th 2009 to August 5th 2009
3. **Target Regions or Countries :**  
Philippines, East Timor, Thailand, Vietnam, India, Bangladesh, Tajikistan, Palau, Iran, Egypt, Cabo Verde, Congo, Democratic Republic of the Congo, Cuba, Panama, Kenya, Ukraine
4. **Eligible / Target Organization :**  
Departments / Divisions responsible for water supply planning or designing in national / local governments or other official bodies
5. **Total Number of Participants :** 17
6. **Language to be used in this program:** English
7. **Program Objective:**  
This course aims at enhancing the capacity enhancement of engineers who take leadership role in the planning and designing of water supply systems.  
As for this course, particular focus shall be given to planning skill of water supply systems.

## 8. Expected Module Output and Contents:

This program consists of the following components. Details on each component are given below:

**(1) Preliminary Phase in a participant's home country**  
 (March to May 2009)  
*Participating organizations make required preparation for the Program in the respective country.*

Modules	Activities
<b>For All applicants</b>	
Country Report	Submission of the presentation file with application form by March 31, 2009 (See ANNEX I)
<b>Only for accepted participants</b>	
Action Plan (1 <sup>st</sup> draft)	Submission of the document file by May 19, 2009 (See ANNEX II)

**(2) Core Phase in Japan**  
 (19 May 2009 to 5 August 2009)  
*Participant dispatched by the organizations attend the Program in Japan.*

Expected Outputs	Program	Method
1) To master the skill of basic planning and design for water supply systems	<ul style="list-style-type: none"> <li>➤ Pipeline Network Analysis</li> <li>➤ Water Demand Forecasting</li> <li>➤ Hydraulics on Pipelines</li> <li>➤ Basic Planning and Design for Pipeline Network</li> <li>➤ Basic Planning and Design for Water Supply Systems</li> <li>➤ Basic Planning and Design for Water Supply Facilities</li> </ul>	Lecture / Exercise / Field visit

<p>2) To acquire necessary knowledge on planning and operation and maintenance on general water supply systems</p>	<ul style="list-style-type: none"> <li>➤ Conservation of Water Quality of Water Resources and Monitoring of Water Quality <ul style="list-style-type: none"> <li>➤ Water Pollution in Water Resources</li> <li>➤ Water Quality Control in Japan</li> <li>➤ Automatic Water Quality Monitoring System</li> <li>➤ Observation of Dam site</li> <li>➤ Water Quality Control for Developing Countries</li> </ul> </li> <li>➤ Requirements for Water Intake Facilities of Surface Water <ul style="list-style-type: none"> <li>➤ Planning and Design of Water Intake Facilities</li> <li>➤ Small River Intake Facility</li> </ul> </li> <li>➤ Utilization Measures of Groundwater Resources <ul style="list-style-type: none"> <li>➤ Groundwater Technology</li> <li>➤ Groundwater Exploration Method</li> <li>➤ Well Drilling Machine and Tool Manufacturing Factory</li> </ul> </li> <li>➤ Utilization Measures of Rain Water <ul style="list-style-type: none"> <li>➤ Rainwater Treatment / Reuse Facilities</li> </ul> </li> <li>➤ Water Purification Technology and Water Quality Control of Tap Water <ul style="list-style-type: none"> <li>➤ Water Purification Process</li> <li>➤ Operation and Maintenance of WTP</li> <li>➤ Coagulation and Flocculation process</li> <li>➤ Practice of Jar Test</li> <li>➤ Removal of Pollutants by Chemical Coagulation</li> <li>➤ Small Scale Water Treatment Plant for Groundwater</li> </ul> </li> <li>➤ Advanced Water Purification Technology and Membrane Process Technology <ul style="list-style-type: none"> <li>➤ Design, Operation and Maintenance of Membrane Filtration Plant</li> <li>➤ Construction and Operation of Advanced Water Treatment and Desalination</li> </ul> </li> <li>➤ Types and Layout of Water Distribution Facilities <ul style="list-style-type: none"> <li>➤ Operation and Maintenance of Water Distribution Facilities</li> </ul> </li> </ul>	<p>Lecture / Field Visit</p>
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	<ul style="list-style-type: none"> <li>➤ Construction of Water Supply and Water Distribution Facilities <ul style="list-style-type: none"> <li>➤ Pipe Laying Method</li> </ul> </li> <li>➤ Mapping System and Water Distribution Management <ul style="list-style-type: none"> <li>➤ Pipeline Mapping System</li> </ul> </li> <li>➤ Countermeasures and Practice of Water Leakage Prevention <ul style="list-style-type: none"> <li>➤ Water Leak Detection and Prevention</li> <li>➤ Water Leak Detection Demonstration / Practice</li> <li>➤ Water Leakage Reduction Countermeasures</li> </ul> </li> <li>➤ Anti-seismic Method of Water Supply Facilities <ul style="list-style-type: none"> <li>➤ Provision for Earthquake Disaster and Anti-Seismic Construction Method</li> </ul> </li> </ul>	
3) To learn systems related with water supply and functions and roles of related entities	<ul style="list-style-type: none"> <li>➤ Waterworks Management and Tariff System in Japan</li> <li>➤ Water Supply in Japan / Water Works Law</li> <li>➤ Water Resources Development</li> <li>➤ Observation of Manufacturing Factory</li> <li>➤ Sanitation Research Organization</li> <li>➤ Small-scale Hydraulic Power Generation Plant</li> </ul>	Lecture / Field Visit
4) To formulate an action plan based on 1) ~3) for the improvement of water utility in their own countries	<ul style="list-style-type: none"> <li>➤ Country Report Presentation (See Annex I)</li> <li>➤ Action Plan Presentation (See Annex II)</li> </ul>	Presentation / Exercise

## TENTATIVE SCHEDULE

### Remarks:

1. The schedule is subject to change.

2. Substantial Training Period: May 25-Aug 4

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 19	Tue		Visit to Japan
May 20	Wed	16:00-	Course Orientation
May 21	Thu		
May 22	Fri		
May 23	Sat		Day Off
May 24	Sun		Day Off
May 25	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 26	Tue	10:00-12:00	(L) Water Supply in Japan / Waterworks Law
		13:30-16:00	(L) Water Resources Development
May 27	Wed	9:30-16:30	(DZ) Country Report & Action Plan (1st ver.) Presentation
May 28	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 29	Fri	9:30-16:00	(L) Water Intake, Storage, Conveyance, Distribution Facilities and Supply Equipments
May 30	Sat		Day Off
May 31	Sun		Transfer (Tokyo→Sapporo)
Jun 1	Mon	10:30-11:30	courtesy call on Manager of Sapporo City Waterworks Bureau
		13:00-16:00	(L) Water Purification Process
Jun 2	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 3	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 4	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 5	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
Jun 6	Sat		Day Off
Jun 7	Sun		Day Off (Sapporo→Osaka)
Jun 8	Mon	10:00-15:00	(F) Ductile Cast Iron Pipe Manufacturing Factory
Jun 9	Tue	10:00-15:00	(LF) Small Scale Water Treatment Plant for Groundwater
Jun 10	Wed	9:30-16:00	(LF) Provision for Earthquake Disaster and Anti-Seismic Construction Method / Amagasaki WTP (Advanced Water Treatment)
Jun 11	Thu	9:00-17:00	8th International Symposium on Water Supply Technology in Kobe 2009
Jun 12	Fri	9:30-14:00	(F) Joint Manufacturing Factory
		15:30-18:30	Transfer (Kobe→Tokyo)
Jun 13	Sat		Day Off
Jun 14	Sun		Day Off
Jun 15	Mon	9:30-16:00	(L) Water Leakage Reduction Countermeasures
Jun 16	Tue	9:30-16:00	(L) Operation and Maintenance of Water Distribution Facilities
Jun 17	Wed	9:30-16:00	(L) Planning and Design of Water Intake Facility
Jun 18	Thu	9:30-16:00	(L) Removal of Pollutants by Chemical Coagulation / Water Quality Control
Jun 19	Fri	9:30-12:00	(L) Water Pollution in Water Resources
		13:30-16:00	(L) Water Quality Control in Japan
Jun 20	Sat		Day Off
Jun 21	Sun		Day Off

Jun 22	Mon	9:30-12:00	(L) Groundwater Exploration Method
		13:30-16:00	(L) Groundwater Exploration Method using Radioactivity
Jun 23	Tue	9:30-16:30	(L) Operation and Management of Water Distribution System / Ozonation System
Jun 24	Wed	9:30-12:00	(L) Pipe Laying using Method
		13:00-15:00	(F) Pipe Laying Construction
Jun 25	Thu	9:30-16:00	(L) Groundwater Technology
Jun 26	Fri	9:30-16:00	(DZ) Action Plan Report (2nd ver.) Presentation
Jun 27	Sat		Day Off
Jun 28	Sun		Day Off
Jun 29	Mon	10:00-16:30	(F) Waterworks related Facilities in Ohta City
Jun 30	Tue	10:00-15:00	(LF) Well Drilling Machine and Tool Manufacturing Factory
Jul 1	Wed	10:00-14:00	(F) Valve Manufacturing Factory
Jul 2	Thu	9:30-12:00	(L) Water Leak Detection and Prevention in Tokyo
		13:00-15:30	(FP) Water Leak Detection Demonstration / Practice
Jul 3	Fri	9:30-12:00	(L) Water Quality Control for Developing Country
		13:30-16:00	(L) Pumping Theory, Pump Manufacturing Factory
Jul 4	Sat		Day Off
Jul 5	Sun		Day Off
Jul 6	Mon	9:30-16:00	(LF) Sanitation Research Organization
Jul 7	Tue	9:30-16:00	(LF) Design, Operation and Maintenance of Membrane Filtration Plant
Jul 8	Wed	9:30-16:00	(L) Basic Planning for Water Supply Facilities
Jul 9	Thu	9:30-16:00	(L) Water Demand Forecasting / Hydraulics on Pipelines
Jul 10	Fri	9:30-16:00	(L) Pipeline Network Analysis
Jul 11	Sat		Day Off
Jul 12	Sun		Day Off
Jul 13	Mon	9:30-16:00	(P) Basic Planning and Design for Pipeline Network
Jul 14	Tue		
Jul 15	Wed		
Jul 16	Thu		
Jul 17	Fri		
Jul 18	Sat		Day Off
Jul 19	Sun		Day Off
Jul 20	Mon		Day Off
Jul 21	Tue	10:30-12:30	Transfer (Tokyo→Kitakyushu)
		15:00-17:00	(L) Waterworks of Kitakyushu City / Pipeline Mapping System
Jul 22	Wed	9:00-14:00	(F) Dam, River Estuary Barrage, Anou WTP etc.
		PM	Transfer (Kitakyushu→Naha)
Jul 23	Thu	10:00-12:00	(L) Waterworks of Okinawa Islands
		14:00-16:30	(LF) Chatan WTP (Advanced Water Treatment, Desalination)
Jul 24	Fri	9:30-16:00	(F) Dam and River Intake Facilities
Jul 25	Sat		Transfer (Naha→Tokyo)
Jul 26	Sun		Day Off
Jul 27	Mon	9:30-16:00	(P) Basic Planning and Design for Water Supply Facility - Mainly Hydraulic calculation
Jul 28	Tue	10:00-16:30	(LF) Rainwater Treatment / Reuse Facility
Jul 29	Wed	9:30-16:00	(P) Basic Planning and Design for Water Supply Systems
Jul 30	Thu	9:30-16:00	(PD) Preparation for Action Plan Report
Jul 31	Fri	9:30-16:00	(PD) Preparation for Action Plan Report
Aug 1	Sat		Day Off
Aug 2	Sun		Day Off
Aug 3	Mon	9:30-16:00	(DZ) Action Plan Report Presentation
Aug 4	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 5	Wed		Departure from Japan

### **III. Conditions and Procedures for Application**

#### **1. Expectations for the Participating Organizations:**

- (1) This project is designed primarily for organizations that intend to address specific issues or problems identified in their operations. Applying organizations are expected to use the program for those specific purposes.
- (2) In this connection, applying organizations are expected to nominate the most qualified candidates to address the said issues or problems, carefully referring to the qualifications described in section III-2 below.
- (3) Applying organizations are also expected to be prepared to make use of knowledge acquired by the nominees for the said purpose.

#### **2. Nominee Qualifications:**

##### **Essential Qualifications**

- (1) be nominated by their government in accordance with the official procedures,
- (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.**

#### **3. Required Documents for Application**

- (1) **Application Form:** The Application Form is attached to this General Information.
- (2) **“Country Report”:** to be submitted in accordance with ANNEX I.

#### **4. Procedure for Application and Selection :**

##### **(1) Submitting the Application Documents:**

Closing date for application to the JICA Tokyo: **March 31<sup>st</sup> 2009**

**Note: Please confirm the closing date set by the respective country’s JICA office or Embassy of Japan of your country to meet the final date in Japan.**

**(2) Selection:**

After receiving the document(s) through due administrative procedures in the respective government, the respective country's JICA office (or the Embassy of Japan) shall conduct screenings, and send the documents to the JICA Tokyo, which organizes this project. Selection shall be made by the JICA Tokyo in consultation with the organizations concerned in Japan based on submitted documents according to qualifications.

*The organization with intention to utilize the opportunity of this program will be highly valued in the selection.*

**(3) Notice of Acceptance**

Notification of results shall be made by the respective country's JICA office (or Embassy of Japan) to the respective Government by **no later than April 20<sup>th</sup> 2009.**

**5. Conditions for Attendance:**

- (1) to observe the schedule of the program,
- (2) not to change the program subjects or extend the period of stay in Japan,
- (3) not to bring any members of their family,
- (4) to return to their home countries at the end of the program in Japan according to the travel schedule designated by JICA,
- (5) to refrain from engaging in political activities, or any form of employment for profit or gain,
- (6) to observe the rules and regulations of their place of accommodation and not to change the accommodation designated by JICA, and
- (7) to participate the whole program including a preliminary phase prior to the program in Japan. Applying organizations, after receiving notice of acceptance for their nominees, are expected to make use of knowledge acquired by the nominees for certain purposes.

## IV. Administrative Arrangements

### 1. Organizer:

(1) **Name:** JICA Tokyo International Center

### 2. Implementing Partner:

(1) **Name:** Japan Water Works Association (JWWA)

Address: 4-8-9, Kudan-minami, Chiyoda-ku, Tokyo 102-0074, Japan

TEL: +81-3-3264-2307 FAX: +81-3-3264-2306

(2) **URL:** <http://www.jwwa.or.jp/>

(3) **Remark** \*The JWWA is a 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.

### 3. Travel to Japan:

(1) **Air Ticket:** The cost of a round-trip ticket between an international airport designated by JICA and Japan will be borne by JICA.

(2) **Travel Insurance:** Term of Insurance: From arrival to departure in Japan. The traveling time outside Japan shall not be covered.

(3) **Accommodation in Japan:**

JICA will arrange the following accommodations for the participants in Japan:

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

(where "81" is the country code for Japan, and "3" is the local area code)

If there is no vacancy at JICA Tokyo, JICA will arrange alternative accommodations for the participants. Please refer to facility guide of JICA Tokyo at its URL, <http://www.jica.go.jp/english/contact/domestic/pdf/welcome.pdf>

#### **4. Expenses:**

The following expenses will be provided for the participants by JICA:

- (1)** Allowances for accommodation, living expenses, outfit, and shipping
- (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.

#### **5. Pre-departure Orientation:**

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

# **VI. ANNEX:**

## **ANNEX I**

### **Engineering on Water Supply Systems (JFY 2009)**

#### *Country Report*

All applicants are required to prepare the Country Report providing the information on the following subjects, with accurate data because it 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 by March 31<sup>st</sup> 2009. 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 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 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) 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



#### 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 \_\_\_\_\_ ( $m^3$ )

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)



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 2003 and 2008, 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 2008.

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.

## ANNEX II

### **Engineering On Water Supply Systems (JFY 2009)**

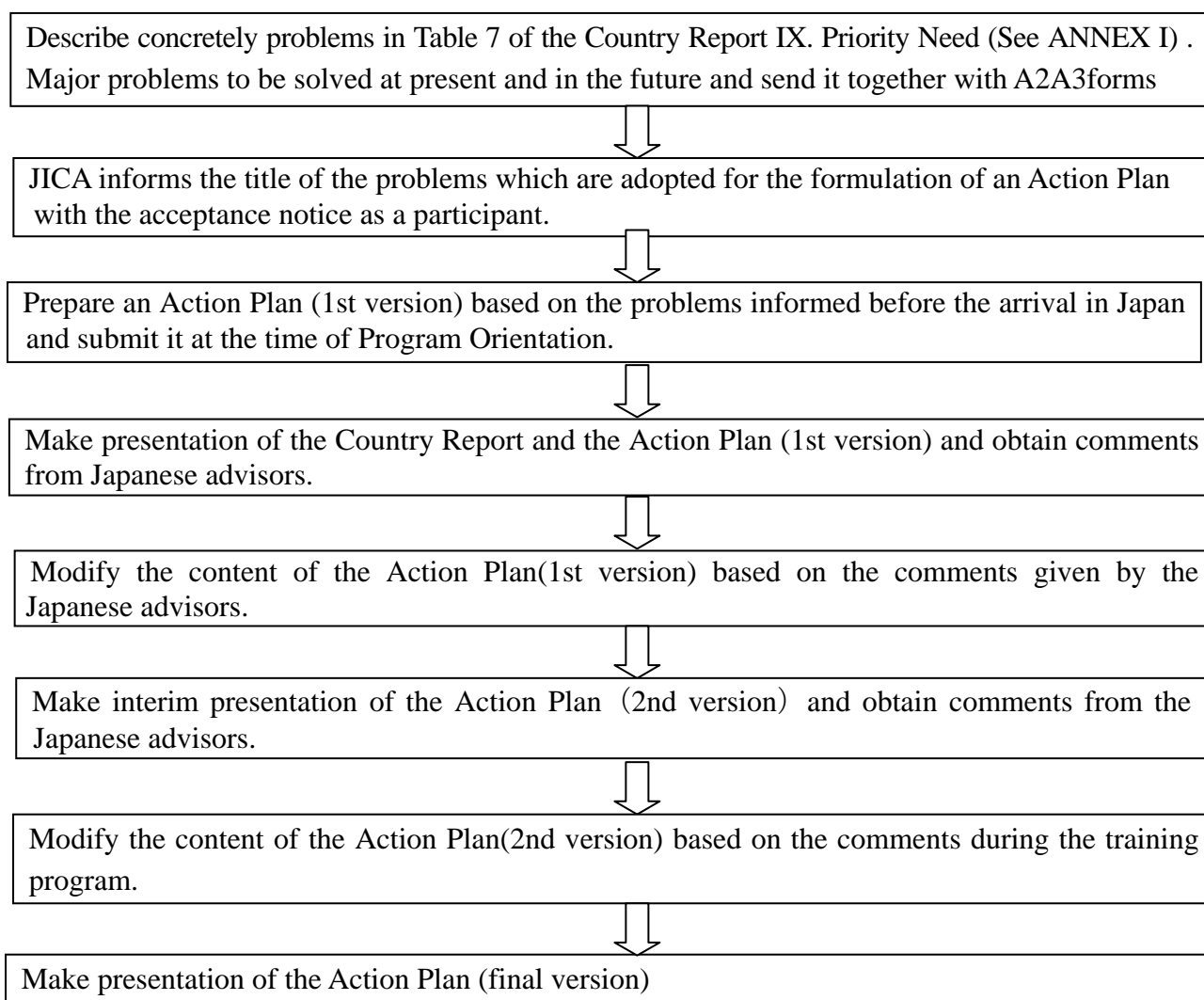
#### *Formulation of Action Plan*

##### 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:



### 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 audio visual equipments such as computer, overhead projector, VHS video player.

## ***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 and 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:

**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

## Guidelines of Application Form for the JICA Training and Dialogue Program

The attached form is to be used to apply for the training and dialogue programs of the Japan International Cooperation Agency (JICA), which are implemented as part of the Official Development Assistance Program of the Government of Japan. Please complete the application form while referring to the following and consult with the respective country's JICA Office - or the Embassy of Japan if the former is not available - in your country for further information.

### 1. Parts of Application Form to be completed

#### 1) Which part of the form should be submitted?

It depends on the type of training and dialogue program you are applying for.

##### >Application for Group and Region Focused Training Program

Official application and Parts A and B must be submitted.

##### >>Application for Country Focused Training Program including Counterpart Training Program

Part B will be submitted. Official application and Part A need not to be submitted

#### 2) How many parts does the Application Form consist of?

The Application Form consists of three parts as follows;

##### **Official Application**

This part is to be confirmed and signed by the head of the relevant department/division of the organization which is applying.

##### **Part A. Information on the Applying Organization**

This part is to be confirmed by the head of the relevant department/division of the organization which is applying.

##### **Part B. Information About the Nominee**

This part is to be completed by the person who is nominated by the organization applying.

The applicants for Group and Region Focused Training Program are required to fill in every item. As for the applications for Country Focused Training Program including Counterpart Training Program and some specified International Dialogue Programs, it is required to fill in the designated “**required**” items as is shown on the Form.

Please refer to the General Information to find out which type the training and dialogue program that your organization applies for belongs to.

### 2. How to complete the Application Form

In completing the application form, please be advised to:

- (a) carefully read the General Information (GI) for which you intend to apply, and confirm if the objectives and contents are relevant to yours,
- (b) be sure to write in the title name of the course/seminar/workshop/project accurately according to the GI, which you intend to apply,
- (c) use a typewriter/personal computer in completing the form, of which the electronic



version is available on the web site: <http://www.jica.go.jp/> \_\_\_\_\_, or write in **block letters**,

- (d) fill in the form in **English**,
- (e) use  or “x” to fill in the ( ) check boxes,
- (f) attach a picture of the Nominee,
- (g) attach additional page(s) if there is insufficient space on the form,
- (h) prepare the necessary document(s) described in the General Information (GI), and attach it (them) to the form,
- (i) confirm the application procedure stipulated by your government, and
- (j) submit the original application form with the necessary document(s) to the responsible organization of your government according to the application procedure.

Any information that is acquired through the activities of the Japan International Cooperation Agency (JICA), such as the nominee’s name, educational record, and medical history, shall be properly handled in view of the importance of safeguarding personal information.

### **3. Privacy Policy**

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#### **1) Scope of Use**

Any information used for identifying individuals that is acquired by JICA will be stored, used, or analyzed only within the scope of JICA activities. JICA reserves the right to use such identifying information and other materials in accordance with the provisions of this privacy policy.

#### **2) Limitations on Use and Provision**

JICA shall never intentionally provide information that can be used to identify individuals to any third party, with the following three exceptions:

- (a) In cases of legally mandated disclosure requests;
- (b) In cases in which the provider of information grants permission for its disclosure to a third party;
- (c) In cases in which JICA commissions a party to process the information collected; the information provided will be within the scope of the commissioned tasks.

#### **3) Security Notice**

JICA takes measures required to prevent leakage, loss, or destruction of acquired information, and to otherwise properly manage such information.

## Application Form for the JICA Training and Dialogue Program

### OFFICIAL APPLICATION

(to be confirmed and signed by the head of the relevant department / division of the applying organization)

**1. Title:** (Please write down as shown in the General Information)

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**2. Number:** (Please write down as shown in the General Information)

J	0		-					
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**3. Country Name:**

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**4. Name of Applying Organization:**

--

**5. Name of the Nominee(s):**

1)	3)
2)	4)

Our organization hereby applies for the training and dialogue program of the Japan International Cooperation Agency and proposes to dispatch qualified nominees to participate in the programs.

Date:		Signature:	
Name:			
Designation / Position			Official Stamp
Department / Division			
Office Address and Contact Information	Address:		
	Telephone:	Fax:	E-mail:

-----

**Confirmation by the organization in charge (if necessary)**

I have examined the documents in this form and found them true. Accordingly I agree to nominate this person(s) on behalf of our government.

Date:		Signature:	
Name:			
Designation / Position			Official Stamp
Department / Division			

## Part A: Information on the Applying Organization

(to be confirmed by the head of the department / division)

### 1. Profile of Organization

1) Name of Organization:

2) The mission of the Organization and the Department / Division:

### 2. Purpose of Application

1) Current Issues: Describe the reasons for your organization claiming the need to participate in the training and dialogue program, with reference to issues or problems to be addressed.

2) Objective: Describe what your organization intends to achieve by participating in the training and dialogue program.



**3) Future Plan of Actions: Describe how your organization shall make use of the expected achievements, in addressing the said issues or problems.**

**4) Selection of the Nominee: Describe the reason(s) the nominee has been selected for the said purpose, referring to the following view points; 1) Course requirement, 2) Capacity /Position, 3) Plans for the candidate after the training and dialogue program, 4) Plan of organization and 5) Others.**



**9) Contact Information**

Office	Address:	
	TEL:	Mobile (Cell Phone):
	FAX:	E-mail:
Home	Address:	
	TEL:	Mobile (Cell Phone):
	FAX:	E-mail:
Contact person in emergency	Name:	
	Relationship to you:	
	Address:	
	TEL:	Mobile (Cell Phone):
	FAX:	E-mail:

**10) Others (if necessary)**

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**4. Career Record**

**1) Job Record (After graduation)**

Organization	City/ Country	Period		Position or Title	Brief Job Description
		From Month/Year	To Month/Year		

**2) Educational Record (Higher Education)(required)**

Institution	City/ Country	Period		Degree obtained	Major
		From Month/Year	To Month/Year		

**3) Training or Study in Foreign Countries; please write your past visits to Japan specifically as much as possible, if any.**

Institution	City/ Country	Period		Field of Study / Program Title
		From Month/Year	To Month/Year	

**5. Language Proficiency (required)**

1) Language to be used in the program (as in GI)					
Listening	( ) Excellent	( ) Good	( ) Fair	( ) Poor	
Speaking	( ) Excellent	( ) Good	( ) Fair	( ) Poor	
Reading	( ) Excellent	( ) Good	( ) Fair	( ) Poor	
Writing	( ) Excellent	( ) Good	( ) Fair	( ) Poor	
Certificate (Examples: TOEFL, TOEIC)					
2) Mother Tongue					
3) Other languages ( )		( ) Excellent	( ) Good	( ) Fair	( ) Poor

<sup>1</sup> Excellent: Refined fluency skills and topic-controlled discussions, debates & presentations. Formulates strategies to deal with various essay types, including narrative, comparison, cause-effect & argumentative essays.

<sup>1</sup> Good: Conversational accuracy & fluency in a wide range of situations: discussions, short presentations & interviews. Compound complex sentences. Extended essay formation.

<sup>1</sup> Fair: Broader range of language related to expressing opinions, giving advice, making suggestions. Limited compound and complex sentences & expanded paragraph formation.

<sup>1</sup> Poor: Simple conversation level, such as self-introduction, brief question & answer using the present and past tenses.

## 6. Expectation on the applied training and dialogue program

1) **Personal Goal:** Describe what you intend to achieve in the applied training and dialogue program in relation to the organizational purpose described in Part A-2.

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2) **Relevant Experience:** Describe your previous vocational experiences which are highly relevant in the themes of the applied training and dialogue program. (required)

--

3) **Area of Interest:** Describe your subject of particular interest with reference to the contents of the applied training and dialogue program. (required)

--

### \*7. Declaration (to be signed by the Nominee) (required)

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

If accepted for the program, I agree:

- (a) not to bring or invite any member of my family (except for the program whose period is one year or more),
- (b) to carry out such instructions and abide by such conditions as may be stipulated by both the nominating government and the Japanese Government regarding the program,
- (c) to follow the program, and abide by the rules of the institution or establishment that implements the program,
- (d) to refrain from engaging in political activity or any form of employment for profit or gain,
- (e) to return to my home country at the end of the activities in Japan on the designated flight schedule arranged by JICA,
- (f) to discontinue the program if JICA and the applying organization agree on any reason for such discontinuation.
- (g) to consent to waive exercise of my copyright holder's rights for documents or products that are produced during the course of the project, against duplication and/or translation by JICA, as long as they are used for the purposes of the program.

Date:	Signature:
	Print Name:



## MEDICAL HISTORY AND EXAMINATION

### 1. Present Status

(a) Do you currently use any drugs for the treatment of a medical condition? (Give name & dosage.)

( ) No	( ) Yes >> Name of Medication ( _____ ), Quantity ( _____ )
--------	---

(b) Are you pregnant?

( ) No	( ) Yes ( _____ months )
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(c) Are you allergic to any medication or food?

( ) No	( ) Yes >>> ( ) Medication	( ) Food	( ) Other:
--------	----------------------------	----------	------------

(d) Please indicate any needs arising from disabilities that might necessitate additional support or facilities.

( _____ )
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*Note: Disability does not lead to exclusion of persons with disability from the program. However, upon the situation, you may be directly inquired by the JICA official in charge for a more detailed account of your condition.*

### 2. Medical History

(a) Have you had any significant or serious illness? (If hospitalized, give place & dates.)

Past:	( ) No	( ) Yes>>Name of illness ( _____ ), Place & dates ( _____ )
Present:	( ) No	( ) Yes>>Present Condition ( _____ )

(b) Have you ever been a patient in a mental hospital or been treated by a psychiatrist?

Past:	( ) No	( ) Yes>>Name of illness ( _____ ), Place & dates ( _____ )
Present:	( ) No	( ) Yes>>Present Condition ( _____ )

(c) High blood pressure

Past:	( ) No	( ) Yes
Present:	( ) No	( ) Yes>>Present Condition ( _____ ) mm/Hg to ( _____ ) mm/Hg

(d) Diabetes (sugar in the urine)

Past:	( ) No	( ) Yes
Present:	( ) No	( _____ ) Yes>>Present Condition ( _____ )
Are you taking any medicine or insulin?		( ) No ( ) Yes

(e) Past History: What illness(es) have you had previously?

( ) Stomach and Intestinal Disorder	( ) Liver Disease	( ) Heart Disease	( ) Kidney Disease
( ) Tuberculosis	( ) Asthma	( ) Thyroid Problem	
( ) Infectious Disease >>> Specify name of illness ( _____ )			
( ) Other >>> Specify ( _____ )			

(e') Has this disease been cured?

( ) Yes	( ) No (Specify name of illness) ( _____ )
( ) Yes	Present Condition: ( _____ )



**3. Other: Any restrictions on food and behavior due to health or religious reasons?**

--

I certify that I have read the above instructions and answered all questions truthfully and completely to the best of my knowledge.

I understand and accept that medical conditions resulting from an undisclosed pre-existing condition may not be financially compensated by JICA and may result in termination of the program.

Date:	Signature:
	Print Name: