



# **【Online & In-Japan】 Knowledge Co-Creation Program (Group & Region Focus)**

## **GENERAL INFORMATION ON**

### **OPERATION AND MAINTENANCE OF URBAN WATER SUPPLY SYSTEM (WATER QUALITY AND PURIFICATION) (A)**

#### **課題別研修「都市上水道維持管理(浄水・水質)(A)」**

*JFY 2023*

**Course No.: 202208472J001**

**Online Course Period: June 1st, 2023 - June 11th, 2023**

**Course Period in Japan: June 12th, 2023 - July 5th, 2023**

\*In the context of the COVID-19 pandemic, please note that there is still a possibility the course period will be changed, shortened, or the course itself will be changed to online program only.

This information pertains to one of the JICA Knowledge Co-Creation Programs (Group & Region Focus) of the Japan International Cooperation Agency (JICA) implemented as part of the Official Development Assistance of the Government of Japan based on bilateral agreement between both Governments.

#### **JICA Knowledge Co-Creation Program (KCCP)**

The Japanese Cabinet released the Development Cooperation Charter in February 2015, which stated, *“In its development cooperation, Japan has maintained the spirit of jointly creating things that suit partner countries while respecting ownership, intentions and intrinsic characteristics of the country concerned based on a field-oriented approach through dialogue and collaboration. It has also maintained the approach of building reciprocal relationships with developing countries in which both sides learn from each other and grow and develop together.”* JICA believes that this ‘Knowledge Co-Creation Program’ will serve as a foundation of mutual learning process.

# ***I. Concept***

## **Background**

Safe accessible water is indispensable for human lives, improving health, reducing poverty, social well-being and sustainable development. Yet more than 1.8 billion people still do not have access to safe water, which leads to death of millions of people every year. Particularly rapid urbanization in many developing countries is increasing pressure on public institutions to provide adequate supplies of clean water to populations.

In its endeavor to reconstruct and modernize after the World War II, Japan has gone through the process of trial and error in developing urban water supply system. Such experiences have been accumulated as lessons learned.

## **For What**

This program aims to support the organizations in their attempt to develop the urban water supply system. Participating organizations are expected to fully utilize the knowledge, skills and a solution plan explored and acquired by their leading staff to participate in this course.

## **For Whom**

This program is designed for field engineers in urban drinking water supply management currently engaged in water quality and purification.

## **How**

(1) Participating organizations are requested to prepare a Pre-Study Report to identify facing issues in urban water supply system, with special focus on water quality and purification. Participants are expected to recognize clear missions or assignments of what to acquire from the program.

(2) Through the lectures and observation of the urban water supply system of Osaka City and other cities in Japan, participants are expected to formulate the Action Plan in order to address the issues in their organization.

(3) Participating organizations are required to establish a program by their own initiatives to disseminate techniques and knowledge brought back by participants. It is also expected that participants are provided with enough support to carry out their Action Plan.

### **Sustainable Development Goals (SDGs)**

The 2030 Agenda for Sustainable Development (the 2030 Agenda) is a set of international development goals from 2016 to 2030, which was adopted by the UN Sustainable Development Summit held in September 2015. As a development cooperation agency, JICA is committed to achieving the SDGs. This program is linked to and will contribute to the realization of following goals under Sustainable Development Goals (SDGs).



Goal 1, by 2020, build the resilience of the poor and these in vulnerable, situations and reduce their exposure and vulnerability to climate related extreme events and other economic social and environmental shocks and disasters.

Goal 5, enhance the use of enabling technology, in particular information and communication technology, to promote the empowerment of women.

Goal 6, ensuring access to water and sanitation for all, with “achieving universal and equitable access to safe and affordable drinking water for all by 2030” as one of the targets.

## II. Description

**1. Title (No.):** Operation and Maintenance of Urban Water Supply System  
(Water Quality and Purification) (A) (202208472J001)

**2. Course Period:**

- 1) Online: June 1st, 2023 - June 11th, 2023
- 2) in Japan: June 12th, 2023 - July 5th, 2023

**3. Target Regions or Countries:**

Bangladesh, Honduras, Malawi, Peru, Samoa, Timor-Leste, Zambia

**4. Eligible / Target Organization :**

This program is designated for counterpart organizations or their related organizations of Japan's bilateral cooperation program.

**5. Course Capacity (Upper limit of Participants) :**

7 participants

**6. Language to be used in this program :**

English (Including Japanese with English interpretation)

**7. Program Objective:**

To develop engineers' capacity to take an essential role in the field of water quality and purification, by sharing applicable knowledge and skills gained in the program among the engineers and technicians in their countries. The applicable knowledge and skills acquired in Japan are to be shared among the engineers and technicians in their home countries.

**8. Overall Goal:**

Capacity of urban water supply maintenance and management in participating countries and regions is improved.

**9. Expected Module Output and Contents:**

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

<b>(1) Preliminary Phase: in a participant's home country (Feb.2023-May.2023)</b> <i>Participating organizations make required preparation for the Program in the respective country.</i>		
Output	Contents	Method
1) Clarify issues particularly in terms of <b>Goal 6 of SDGs</b> faced by the participating organizations and identify the learning needs / specific assignment for participants	(1) Preliminary discussion in the organizations	Discussion in the organization
	(2) Participants to recognize clear assignment and tasks for the program	Discussion in the organization
	(3) Submission of Inception Report	Report preparation
	(4) Submission of Pre-Study Report	Report preparation
<b>(2) Core Phase: Online Program (Jun.1st, 2023 to Jun.11th, 2023)</b>		

<i>Participants join the On-demand and Online program in the respective country.</i>		
Output	Contents	Method
2) Participants can explain methods of water quality and purification as well as operation and maintenance techniques utilized in Osaka City, Kobe city and other organizations.	(1) Water Treatment (introduction of water treatment plant, water quality, etc.) Operation and Maintenance (leakage detection and repair, non-revenue water, etc.)	E-learning
	(2) Needs assessment discussion (participants have interview with Japanese experts to clarify the exact needs for the program)	Online discussion

<b>(3) Core Phase: In-Japan Program (Jun. 12th, 2023 to Jul. 5th, 2023)</b> <i>Participants dispatched by the organizations join the Program in Japan.</i>		
Output	Contents	Method
3) Participants can explain methods of water quality and purification as well as operation and maintenance techniques utilized in Osaka City and other organizations.	(1) (2) Water Treatment (introduction and visit to water treatment plant, methodology of water quality control, theory of chlorination , comprehensive water treatment)	Lecture/ Observation
	(2) Needs assessment discussion (participants have interview with Osaka City experts to clarify the exact needs for the program)	Discussion
4) Participants are able to explain tips on operation and maintenance of purification plant and administration of water supply business.	(1) Operation and maintenance of Purification Plant	Lecture/Practice/ Observation
	(2) Operation and maintenance of Intake and Distribution Facilities	Lecture/Practice/ Observation
	(3) Maintenance of mechanical, electrical and measuring instruments and water quality control	Lecture/Practice/ Observation
5) Participants can find out measures to improve and/or solve current issues and problems.	(1) Consultation	Q&A report Discussion
6) Action Plan is formulated to disseminate knowledge and techniques on water quality and purification.	(1) Action Plan formulation	Self-learning/ Discussion
	(2) Action Plan presentation	Presentation/ Demonstration

**(4) Finalization Phase: in a participant's home country**

*Participating organizations implement the Action Plan by making use of knowledge & skills brought back by participants. This phase marks the end of the Program.*

*Participating organizations are required to submit **Progress Reports** by Oct.31, 2023.*

Output	Contents	Method
7) The Action Plan is implemented in participating organizations within three months after participants' return.	Implementation of dissemination program	Dissemination program
	Progress Report on dissemination program	Submission of the report to JICA local offices.

## &lt;Tentative Program Schedule&gt;

Date (2023)	program	Method
1 <sup>st</sup> week Jun.1 (Thu) to Jun.4 (Sun)  Online	<u>Lecture:</u> ① Outline of Water Supply in Japan ② Outline of Japanese Waterworks Association ③ Operation and maintenance of facilities ④ Water transmission and distribution system that does not easily generate non-revenue water ⑤ Outline of water supply devices ⑥ GIS ⑦ Water charge ⑧ Leakage survey  <b>Needs Discussion</b> for finding out Issues	On-demand by Cornerstone          Online discussion (zoom)
2 <sup>nd</sup> week Jun.5 (Mon) to Jun.11 (Sun)  Online	<u>Submission:</u> Pre-study report (2 <sup>nd</sup> time)  <b>Discussion</b> at Japan side only	Cornerstone  N/A
3 <sup>rd</sup> week Jun.12 (Mon) to Jun.18 (Sun)  In-Japan	Orientation PCM Workshop <b>Consultation</b> for finding out solution <b>Action Plan formulation</b>	Workshop Discussion Consultation Self-learning
4 <sup>th</sup> week Jun.19 (Mon) to Jun.25 (Sun)  In-Japan	- Visit Water Meter manufacturer - Visit Water Treatment Plant (WTP) slow filter plant - Observation of operation & maintenance of mechanical and electrical equipment. - Water purification training - Visit water distribution plant, reservoir, slow filter  <b>Action Plan formulation</b>	Lecture Site-visit Practice  Self-learning
5 <sup>th</sup> week	- Operation control of WTP (sand sampling, test	Site-visit

Jun.26 (Mon) to Jul.2 (Sun)  In-Japan	filter, sludge volume analysis etc.) - Presentation by Osaka city manufacturers - Observation: Environmental education at school	Lecture Practice
6 <sup>th</sup> week  Jul.3 (Mon) to Jul.5 (Wed)  In-Japan	<b>Action Plan presentation</b>	Presentation

※subject to change without prior notice

**10. Action Plan:** Participants are required to formulate “Action Plan” in the Program in Japan and to implement the plan after their return by following manners as one of the outputs of the Program.

**(1) Objective of the Action Plan:** To improve the technical issues of participating organizations by disseminating knowledge and information learnt in the program in Japan.

**(2) Target of the Action plan:** Engineers/technicians and/or management in the participating organizations or its related organizations.

**(3) Contents to be covered in the plan:**

- a) Related technical issues in the participating organization,
- b) Knowledge and information applicable to improve the issues,
- c) Relationship between the knowledge/information and the issues of the participating organization (How it can be applied),
- d) Goals to be achieved by dissemination of such knowledge/information,
- e) Specific target of the plan
- f) Methods and measures for dissemination of such knowledge/information, and
- g) Evaluation methods of achievement of the goals

**(4) Main practitioner of the Action Plan:** Participants

**(5) Role of participating organization:**

- a) To select responsible persons who should strategize and implement the Action Plan by their own initiatives in addition to participants,
- b) To support achievement of the Action Plan, and
- c) To evaluate status and degrees of achievement of the Action Plan.

\*In case the Progress Report is not submitted by any organization by October 31, 2023, JICA may suspend acceptance of participants from that organization in the future.

### ***III. Eligibility and Procedures***

#### **1. Expectations to the Applying Organizations**

- (1) This course is designed primarily for organizations that intend to address specific issues or problems identified in their operation. Applying organizations are expected to utilize the program for those specific purposes.
- (2) This course is enriched with contents and facilitation schemes specially developed in collaboration with relevant prominent organizations in Japan. These special features enable the course to meet specific requirements of applying organizations and effectively facilitate them toward solutions for the issues and problems.
- (3) As this program is designed to facilitate organizations to come up with concrete solutions for their issues, participating organizations are expected to make due preparation before dispatching their participants to Japan by carrying out the activities of the Preliminary Phase described in section II-9.
- (4) Participating organizations are also expected to make the best use of the results achieved by their participants in Japan by carrying out the activities of the Finalization Phase described in section II-9.

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

Applying Organizations are expected to select nominees who meet the following qualifications.

##### **(1) Essential Qualifications:**

- 1) Current Duties: Administrative officials of Senior technical staff engaged Water Quality and Purification in the Government who will continue working in the same field after the course.
- 2) Experience in the relevant field: have more than 5 years' engagement in the field of 1).
- 3) Educational Background: University graduates or equivalent.
- 4) Language: have a competent command of spoken and written English which is equal to TOEFL CBT 250 or more (This KCCP includes active participation in discussions, action plan (interim report) development, thus requires high competence of English ability. Please attach an official certificate for English ability such as TOEFL, TOEIC etc. if possible.)
- 5) Technical Requirements for the Online Course (Computer)

##### **Technology Proficiency:**

- Basic computer skills such as, sending/receiving email with attachments, and using a web browser.
- Online course may be delivered using the following services, Web Conferences (Zoom), Learning System (Cornerstone), and YouTube. (Online tutorial and support by JICA will be limited. The ability to be self-directed in learning new technology skills are required.)



**Internet Connection:**

-High Speed Broadband Connection (at least 2Mbps) from the participant's office or home.

\*Internet access charge incurred for this course shall be borne by you, except in JICA Kansai Center.

**Hardware (Minimum Requirement):**

- Regular access to a computer, either from your home or from your office.
- Operating System: Windows or Mac OS (Updated version is preferred).
- Processor: Intel Core 2 Duo or higher; 2GHz or higher
- Memory: 4GB of RAM or higher
- Hard Drive Space: 5GB free disk space
- Browser: Google Chrome is preferred browser. (Edge, Firefox, Safari can be used)
- Others: Webcam Microphone, and Audio output Device (Speaker or Headset)

\*In some cases, Smartphone (Android OS or Apple iOS) can be used as substitute of PC. You can also use it at GIS learning session.

- 6) Health: must be in good health to participate in the program in Japan. To reduce the risk of worsening symptoms associated with respiratory tract infection, please be honest to declare in the Medical History (QUESTIONNAIRE ON MEDICAL STATUS RESTRICTION of the application form) if you have been a patient of following illnesses; Hypertension / Diabetes / Cardiovascular illness / Heart failure / Chronic respiratory illness.
- 7) Attendance Requirement: Participation both of Online and In-Japan program and submission of various assignments is an essential requirement for the completion of the course.

**(2) Recommendable Qualifications:**

- 1) Age: **between the ages of twenty-five (25) and fifty (50) years.**
- 2) Gender Equality and Women's Empowerment: Women are encouraged to apply for the program. JICA is committed to promoting gender equality and women's empowerment, and provides equal opportunities for all applicants regardless of their sexual orientation or gender identity.

**3. Required Documents for Application**

**(1) Application Form:** The Application Form is available at **the JICA overseas office (or the Embassy of Japan)**

**(2) Photocopy of Passport or ID:** Photocopy should include Name, Date of Birth, Nationality, Sex, Passport number and Expire date.

**(3) English Score Sheet (Photocopy):** to be submitted with the application form, if the nominees have any official English examination scores. (e.g., TOEFL, TOEIC, IELTS)

**(4) Inception Report “Water Supply Service Information Sheet”:** to be submitted with the application form. The contents of the sheet is referred to **ANNEX I**.

#### **4. Procedures for Application and Selection**

##### **(1) Submission of the Application Documents**

Closing date for applications: **Please confirm the local deadline with JICA overseas office (or the Embassy of Japan).**

All required documents must arrive at **JICA Center** **by April 7th, 2023 (Fri).**

##### **(2) Selection**

Primary screening is conducted at the JICA overseas office (or the embassy of Japan) after receiving official documents from your government. JICA Center will consult with concerned organizations in Japan in the process of final selection. Applying organizations with the best intentions to utilize the opportunity will be highly valued.

The Government of Japan will examine applicants who belong to the military or other military-related organizations and/or who are enlisted in the military, taking into consideration of their duties, positions in the organization and other relevant information in a comprehensive manner to be consistent with the Development Cooperation Charter of Japan.

##### **(3) Notice of Acceptance**

The JICA overseas office (or the Embassy of Japan) will notify the results **not later than May 1st, 2023 (Mon).**

#### **5. Additional Document to be submitted by accepted participant:**

“**Pre-Study Report**” to be submitted **by May 19th, 2023 (Fri).**

Only accepted participants are required to prepare the report (See **ANNEX II** for further details). This Report should be submitted by uploading on JICA-VAN (JICA's Cornerstone) by participant, or directly sent to JICA at [Nishiji.Ayumi@jica.go.jp](mailto:Nishiji.Ayumi@jica.go.jp) and [jicaksic-unit@jica.go.jp](mailto:jicaksic-unit@jica.go.jp) by email.

## **6. Conditions for Participation**

The Participants of KCCP are required:

- (1) to strictly observe the course schedule,
- (2) not to change the online program topics,
- (3) not to record or share the online contents without JICA's permission,
- (4) to comply with the use conditions of copyrighted works by each copyright holder, when using texts and other materials distributed for KCCP,
- (5) not to change the air ticket (and flight class and flight schedule arranged by JICA) and lodging by the participants themselves,
- (6) to understand that leaving Japan during the course period (to return to home country, etc.) is not allowed (except for programs longer than one year),
- (7) not to bring or invite any family members (except for programs longer than one year),
- (8) 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 the course,
- (9) to observe the rules and regulations of the program implementing partners to provide the program or establishments,
- (10) not to engage in political activities, or any form of employment for profit,
- (11) to discontinue the program, should the participants violate the Japanese laws or JICA's regulations, or the participants commit illegal or immoral conduct, or get critical illness or serious injury and be considered unable to continue the course. The participants shall be responsible for paying any cost for treatment of the said health conditions except for the medical care stipulated in (3) of "5. Expenses", "IV. Administrative Arrangements",
- (12) to return the total amount or a part of the expenditure for the KCCP depending on the severity of such violation, should the participants violate the laws and ordinances,
- (13) not to drive a car or motorbike, regardless of an international driving license possessed,
- (14) to observe the rules and regulations at the place of the participants' accommodation, and
- (15) to refund allowances or other benefits paid by JICA in the case of a change in schedule.

## ***IV. Administrative Arrangements***

### **1. Organizer (JICA Center in Japan)**

**(1) Center:** JICA Kansai Center (JICA Kansai)

**(2) Program Officer:**

Ms. NISHIJI Ayumi, Training Program Division

(E-mail: [Nishiji.Ayumi@jica.go.jp](mailto:Nishiji.Ayumi@jica.go.jp), [jicaksic-unit@jica.go.jp](mailto:jicaksic-unit@jica.go.jp))

### **2. Implementing Partners:**

**(1) Name: Osaka Municipal Waterworks Bureau**

URL: <https://www-city-osaka-lg-jp> (English)

**(2) Name: Kyoto City Waterworks Bureau**

URL: <https://www-city-kyoto-lg-jp.i-server.com/> (English)

**(3) Name: Osaka Water General Service Co., Ltd.**

(affiliated with Osaka Municipal Waterworks Bureau)

URL: <https://www.owgs.co.jp/> (Japanese only)

#### **(4) Remark:**

Osaka City's water supply system became only the fourth modern supply system in the country when it was inaugurated in November 1895. Numerous expansion programs in line with the growth of the city's area and population have since brought the system's supply capacity up to its current daily level of 2.43 million m<sup>3</sup>.

Kyoto City almost relies on Lake Biwa as water source and intakes by the Lake Biwa Waterway, and partially on the Uji River. The raw water is purified in three purification plants (Keage, Matsugasaki and Shin-Yamashina). Purified water is distributed by distribution pipes and supplied from water supply equipment that leads to the residential areas.

### **3. Travel to Japan:**

**(1) Air Ticket:** In principle, JICA will arrange an economy-class round-trip ticket between an international airport designated by JICA and Japan.

**(2) Travel Insurance:** Coverage is from time of arrival up to departure in Japan. Thus, traveling time outside Japan (include damaged baggage during the arrival flight to Japan) will not be covered.

#### 4. Accommodation in Japan:

Basically, JICA will arrange the following accommodation(s) for the participants in Japan:

JICA Kansai Center (JICA Kansai)  
Address: 1-5-2, Wakinohama-kaigandori, Chuo-ku, Kobe, Hyogo 651-0073, Japan  
TEL: 81-78-261-0383 FAX: 81-78-261-0465  
(where “81” is the country code for Japan, and “78” is the local area code)

If there is no vacancy at JICA Kansai, JICA will arrange alternative accommodations for the participants. Please refer to facility guide of Kansai Center at its URL:

<https://www.jica.go.jp/kansai/english/office/index.html>.

#### 5. Expenses:

The following expenses in Japan will be provided by JICA

- (1) Allowances for meals, living expenses, outfit, and shipping and stopover.
- (2) Expenses for study tours (basically in the form of train tickets).
- (3) Medical care for participants who become ill after arriving in Japan (the costs related to pre-existing illness, pregnancy, or dental treatment are not included).
- (4) Expenses for program implementation, including materials.
- (5) For more details, please see “III. ALLOWANCES” of the brochure for participants titled “KENSU-IN GUIDE BOOK,” which will be given before program starts.

\*Link to JICA HP (English/French/Spanish/Russian):

[https://www.jica.go.jp/english/our\\_work/types\\_of\\_assistance/tech/acceptance/training/index.html](https://www.jica.go.jp/english/our_work/types_of_assistance/tech/acceptance/training/index.html)

#### 6. Pre-departure Orientation:

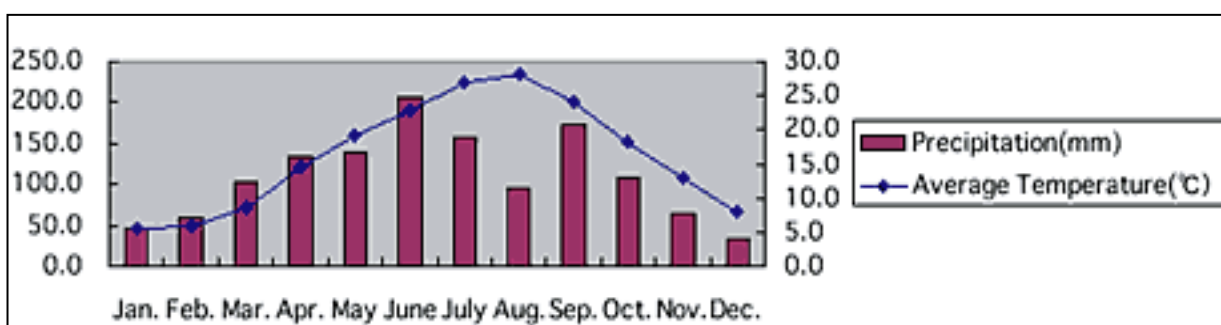
A pre-departure orientation will be held at the respective country’s JICA office (or the Japanese Embassy), to provide participants with details on travel to Japan, conditions of the course, and other matters.

YouTube of “Knowledge Co-Creation Program” and “Introduction of JICA Center” are viewable from the link below.

Part I: Knowledge Co-Creation Program and Life in Japan	
English ver.	<a href="https://www.youtube.com/watch?v=SLurfKugrEw">https://www.youtube.com/watch?v=SLurfKugrEw</a>
Spanish ver.	<a href="https://www.youtube.com/watch?v=m7I-WIQSDjI">https://www.youtube.com/watch?v=m7I-WIQSDjI</a>
Part II: Introduction of JICA Centers in Japan	
JICA Kansai	<a href="https://www.jica.go.jp/kansai/english/office/index.html">https://www.jica.go.jp/kansai/english/office/index.html</a>

## V. Other Information

1. Participants who have successfully completed the program will be awarded a certificate by JICA.
2. For the promotion of mutual friendship, JICA Kansai encourages international exchange between JICA participants and local communities, including school and university students as a part of development education program. JICA participants are expected to contribute by attending such activities and will possibly be asked to make presentations on the society, economy, and culture of their home country.
3. Participants are required to prepare a laptop and bring it to Japan. During the Online program, participants are required to join the live sessions and study on-demand learning material, etc. The computers will be also used in In-Japan program for preparing Action Plans. JICA Kansai Center has an internet access.
4. Participants are requested to bring comfortable shoes and outfit suitable for walking during field visits / activities / field trip. Also, a thermometer and enough masks for the stay is also required due to the situation of the COVID-19.
5. Allowances, such as for living, outfit, and shipping, will be deposited to participants' temporary bank account (opened by JICA) 2 to 5 days after their arrival in Japan. It is highly advised to bring some cash in order to cover necessary expense for other period.
6. It is very important that some of your currency must be exchanged to Japanese Yen at any transit airport or Kansai International Airport (KIX) in Osaka, Japan soon after your arrival. It is quite difficult to exchange money after that, due to limited availability of facility or time during the program.
7. The climate in June and July in Japan is usually between moderate to hot, and usually humid and muggy as the climate graph below indicates.



\* Short/long-sleeved shirts and/or light jackets are considered most suitable as typical seasonal wears.

\*A suit and a tie or similar style of clothing may be needed for some formal occasions.

# **ANNEX I : Inception Report** ***“Water Supply Service Information Sheet”***

- ※ Please submit this report along with the Application Form **by April 7th, 2023.**
- ※ **Please submit in the specified Excel file sent separately.**
- ※ Please provide information about where your organization has jurisdiction such as district/city/country.

## **Water Supply Service Information Sheet**

### **1. Personal Information**

- (1) Your Name  
(2) Email Address  
(3) Country  
(4) Date of Birth  
(5) Sex  
(6) Religion


- (7) Working experience in JICA projects  
(Have you ever related with any JICA project/expert? If yes, please describe the name of project(s) and/or expert. If not, please put "None". )

- (8) Area of Interest

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> NRW management  | <input type="checkbox"/> Asset management        | <input type="checkbox"/> Water distribution management              |
| <input type="checkbox"/> Tariff system   | <input type="checkbox"/> Mapping system          | <input type="checkbox"/> Human resources development                |
| <input type="checkbox"/> Customer service  | <input type="checkbox"/> Plumbing work           | <input type="checkbox"/> Planning&design of water supply systems    |
| <input type="checkbox"/> Water treatment   | <input type="checkbox"/> Inspection&certificaton | <input type="checkbox"/> Business administration of water utilities |
| <input type="checkbox"/> Water resource development  |  |   |
| <input type="checkbox"/> Others: Please specify ( <span style="border: 1px solid black; display: inline-block; width: 150px; height: 1.2em; vertical-align: middle;"></span> ) |  |   |

## 2. Organization Profile and Job Description

### ***Organization Profile***

(1) Name of the organization

(2) Mission of the organization

(3) Type of the organization

(4) Number of Staff

### ***Job Description***

(1) Department/Division

(2) Present Position

(3) Date of employment by the present organization

(4) Date of assignment to the present position

(5) Outline of duties: Describe your current duties

(6) Challenge of your duties: what is current issue/challenge on your own duty?



### 3. Water Supply

#### Target Area

Please choose one area/country, and answer following questions based on the area/country.

- If you're working in Ministry/organizations which are responsible for whole country, please use the data of whole country.
- If you're a municipal/local government officer, please choose specific city/area/region you're responsible for.

(1) Target area

(ex. Whole country of Thailand, Bangkok metropolis,  
City of Chiang Mai, etc.)

#### Water Resource and Treatment

(1) Composition of water resource

Surface water	<input type="text"/>	%
Groundwater	<input type="text"/>	%
Spring water	<input type="text"/>	%
Others	<input type="text"/>	%

(2) Maximum daily water supply demand

 m<sup>3</sup>/day

(3) Average daily water supply demand

 m<sup>3</sup>/day

(4) Total daily capacity of treatment plants

 m<sup>3</sup>/day

(5) Main treatment process

Please specify the treatment process, if you choose "Others" (  )

#### Water Distribution

(1) Total length of distribution pipe

 km

(2) Material of distribution pipe

#### Water Supply Service

(1) Service Area

 km<sup>2</sup>

(2) Population in service area

 people

(3) Number of connections

 connections

(4) Service population

 people

(5) Coverage ratio

 #DIV/0!

(6) Supply duration per day

 hours/day

(7) Material of service pipe

(8) Water pressure at tap

 MPa (※1 MPa=10 bar)

(9) Customer meter installation ratio

 %

(10) Frequency of meter reading

## Non-Revenue Water

(1) Non-Revenue Water Ratio  %

(2) Water Balance Sheet: Please fill the following water balance sheet, if available.

System Input Volume	Authorized Consumption	Revenue Water	Billied Authorized Consumption	<input type="text"/>	%
			Unbillied Authorized Consumption	<input type="text"/>	%
	Water Losses	Non- Revenue Water	Apparent Losses (Commercial Losses)	<input type="text"/>	%
			Real Losses (Physical Losses)	<input type="text"/>	%

## Tariff System & Business Administration

(1) Average tariff per unit volume in USD  USD/m<sup>3</sup>

※Please calculate average tariff per unit volume assuming monthly household consumption as 20m<sup>3</sup>(Calculation method by IWA)

(2) Tariff collection ratio  %

(3) Operating revenue per year  USD/year

(4) Net profit/loss per year  USD/year

(5) Number of staffs per 1,000 connections  #DIV/0! staffs/1,000 connections

## **ANNEX II : “Pre-Study Report”** (Accepted participants only)

- ※ Participants are required to formulate “Action Plan” in the program, and to implement in participating organization after the course.
- ※ Object of the plan is to improve the technical issues of participating organization by disseminating knowledge and information learnt in the program.
- ※ Therefore, participants are required to clarify issues particularly in terms of **Goal 6 of SDGs**, faced by the participating organizations and identify the learning needs.
- ※ Format of the report will be provided after participant is finalized.
- ※ The report must be submitted by uploading JICA-VAN (JICA's Cornerstone) or be sent directly to JICA at [Nishiji.Ayumi@jica.go.jp](mailto:Nishiji.Ayumi@jica.go.jp) and [jicaksic-unit@jica.go.jp](mailto:jicaksic-unit@jica.go.jp) **by May 19th, 2023** by email.

## **For Your Reference**

### **JICA and Capacity Development**

Technical cooperation is people-to-people cooperation that supports partner countries in enhancing their comprehensive capacities to address development challenges by their own efforts. Instead of applying Japanese technology per se to partner countries, JICA's technical cooperation provides solutions that best fit their needs by working with people living there. In the process, consideration is given to factors such as their regional characteristics, historical background, and languages. JICA does not limit its technical cooperation to human resources development; it offers multi-tiered assistance that also involves organizational strengthening, policy formulation, and institution building.

Implementation methods of JICA's technical cooperation can be divided into two approaches. One is overseas cooperation by dispatching experts and volunteers in various development sectors to partner countries; the other is domestic cooperation by inviting participants from developing countries to Japan. The latter method is the Knowledge Co-Creation Program, formerly called Training Program, and it is one of the core programs carried out in Japan. By inviting officials from partner countries and with cooperation from domestic partners, the Knowledge Co-Creation Program provides technical knowledge and practical solutions for development issues in participating countries.

The Knowledge Co-Creation Program (Group & Region Focus) has long occupied an important place in JICA operations. About 400 pre-organized courses 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 is being customized by the different target organizations to address the specific needs, 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, as the first non-Western nation to become a developed country, built itself into a country that is free, peaceful, prosperous and democratic while preserving its tradition. Japan will serve as one of the best examples for our partner countries to follow in their own development.

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 a process of adoption and adaption of course, has been accompanied by countless failures and errors behind the success stories.

Through Japan's progressive adaptation and application of systems, methods and technologies from the West in a way that is suited to its own circumstances, Japan has developed a storehouse of knowledge not found elsewhere from unique systems of organization, administration and personnel management to such social systems as the livelihood improvement approach and governmental organization. It is not easy to apply such experiences to other countries where the circumstances differ, but the experiences can provide ideas and clues useful when devising measures to solve

problems.

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.



**Contact Information for Inquires**

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

**JICA Kansai Center (JICA Kansai)**

**Address: 1-5-2, Wakinohama-kaigandori, Chuo-ku, Kobe, Hyogo 651-0073, Japan**

**TEL: +81-78-261-0383 FAX: +81-78-261-0465**