JICA Program GENERAL INFORMATION
Course Number: 202003258J001/ 202006625J001

Online

Knowledge Co-Creation Program (Group and Region Focus)

Comprehensive Engineering on Water Supply Systems

Basic Planning and Design for Water Supply System (A)

Course Period:

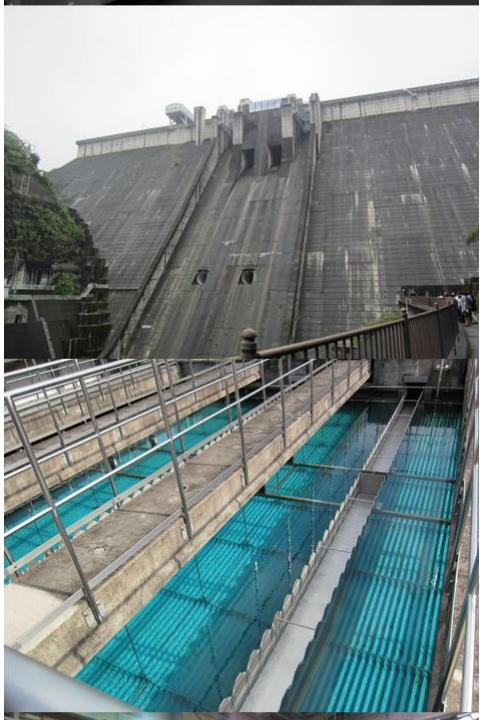
November 8- November 18, 2021

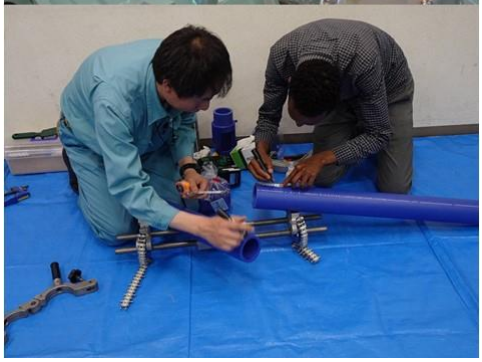
上水道施設技術総合：水道基本計画設計(A)

Would you like to get the "second water resource" by NRW * reduction?

Gain insight to
review the entire water supply systems
through NRW reduction
and learn how to improve water utilities.

* NRW: Non-Revenue Water





Outline

This program is designed **for mid-career engineers** in charge of water supply planning, design and operation for water utilities in national and local governments.

This program mainly **focuses on reviewing water supply systems, their planning and management techniques through Non-Revenue Water (NRW*)**. You will learn how approaches to reducing non-revenue water can affect the overall water system and the management of the water utility, and explore various methods.

The sessions include self-study, lectures, discussion and group work. It will be held **online (Zoom)**.

All the sessions are carried out **in English**.

The period of the program is **from November 8 to November 18, 2021.**

* Non-Revenue Water (NRW): Water that has been produced and is "lost" before it reaches the customer.

JICA Knowledge Co-Creation Program (KCCP)

The Japanese Cabinet released the Development Cooperation Charter in February 2015, stated that "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." We believe that this 'Knowledge Co-Creation Program' will serve as a foundation of mutual learning process.

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For What?

Background

Even though the Sustainable Development Goal (SDG) 6 aims to ensure access to water and sanitation for all by 2030, many developing countries still face many challenges in their water service.

One of the most important issues is NRW; improving NRW is a topic that affects the development of planning and operation of water supply systems as a whole, as well as the improvement of water resource scarcity and management issues.

Therefore, this program aims to help participants understand the meaning of NRW reduction from the perspective of the entire water supply systems, and to gain knowledge and ideas for improvement.

Objectives

To know how engineers can contribute to a comprehensive water supply system review through the reduction of NRW.

To Whom?

Job Areas and Organizations

This course is offered to technical departments responsible for water supply planning, design and operation in a water supply utility of national or local governments.

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

Targeted Countries

Cambodia, Laos, Lebanon, Marshall, Namibia, Peru, Philippine, Rwanda, Timor-Leste, Trinidad and Tobago

Participants who have successfully completed the program will be awarded a certificate by JICA.

When?

Online Program Period

From November 8, 2021
to November 18, 2021

Connection Test & Orientation:
November 4, 2021

Online Session

November 8 to November 16, 2021,
November 18, 2021

All participants will be connected via Zoom in following time zones.

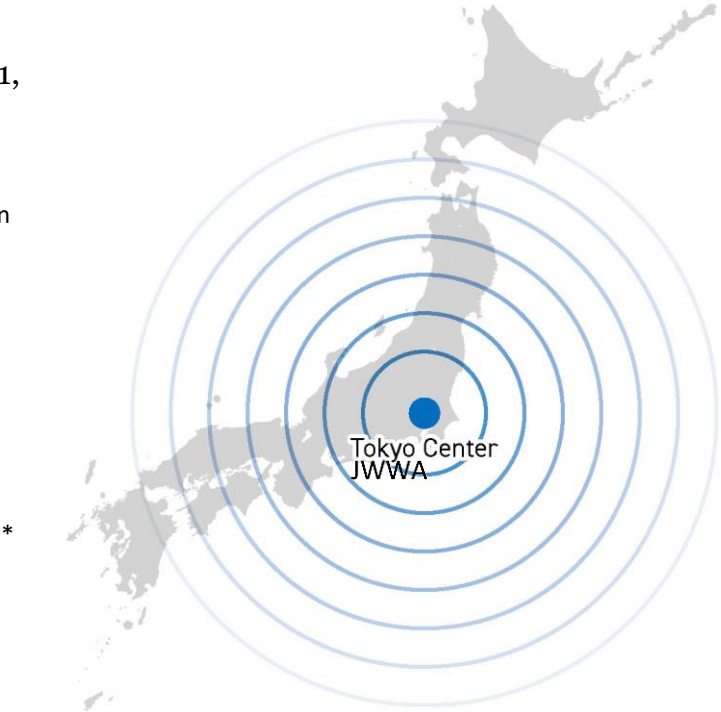
- Japan: 3:00PM to 5:30PM
- Timor-Leste: 3:00PM to 5:30PM
- Philippine: 2:00PM to 4:30PM
- Laos: 1:00PM to 3:30PM
- Marshall: 12:00PM to 2:30PM
- Lebanon: 8:00AM to 10:30AM
- Namibia: 8:00AM to 10:30AM
- Rwanda: 8:00AM to 10:30AM
- Trinidad and Tobago: 2:00AM to 4:30PM*
- Peru: 1:00AM to 3:30PM*

*Program content will be followed on demand.

Where?

This course will be carried out totally online, organized by JICA Tokyo Center and delivered from the Office of Japan Water Works Association (JWWA) in Tokyo by their operation.

You will receive essential materials for your self-study at your office or home. You are required to have a certain IT environment. For detail, see page 14.



How?

How to Learn

- Self-Study
- Interactive Q&A Session
- Lectures
- Online Field Visit
- Workshops
- Discussions
- Presentations

Language

English

Commitment to the SDGs

Program Structure

1. Submission of Country Report

Accepted applicants are required to formulate and submit a Country Report before the program starts.

2. Connection test and Orientation (Nov 4, 2021)

We conduct a connection test just before the program commencement to review the use of Zoom with the participants.

3. Tentative Program Schedule (2.5 hour/day)

Date	Content
Nov. 8, 2021	**Program Orientation**: Introduction of participants, Sharing Program Theme
	Lecture: History and Situation of Japanese Water Supply
Nov. 9, 2021	**Knowledge Sharing Session**: "Let's get to know the current state of Water Supply (Focusing NRW) in other countries!"
Nov. 10, 2021	**Case Study ~ Water Leak Detection and Prevention in Tokyo ~** "How did **Mega city Tokyo** achieve a reduction in the Leakage Ratio from 80% to 3%?"
Nov. 11, 2021	**Lecture/ Q&A/ Discussion:** "Let's think what we can do to improve our Revenue Ratio!"
Nov. 12, 2021	**Case Study and Group Work ~ Improvement Plan of Revenue Ratio in Rwanda (JICA Technical Cooperation Project) ~** "How do we combine various methods to prevent leakage and improve revenue?"
Nov. 15 2021	**Live Tour: Visit of a polyethylene pipe plant for water distribution** "Take an online tour with the instructor and ask questions directly to the factory staff!"
Nov. 16, 2021	**Lecture/ Q&A/ Discussion:** ~ Sustainable and Sound Management of Urban Water Operator ~ "What financial perspective is required of engineers as well?"
Nov. 17, 2021	**Self-Study (offline)** Preparation for presentation of last day
Nov. 18, 2021	**Knowledge Co-creating Session**: Ideas for application to our own countries
	Feedback, Closing

Instructors (more to be confirmed)

Mr. SUZUKI Chiaki

Program Leader, Lecturer

Researcher, Water Works Engineering General Institute,
Japan Water Works Association

He has more than 35 years of experience working at the Yokohama Waterworks Bureau from water purification plants to maintenance of water service pipeline. He was also involved in training many overseas engineers as a trainer, and dispatched to Syria and the Philippines as a JICA non-revenue water expert. He has taken to reduce non-revenue water in many technical projects such as Thailand, Pakistan, Rwanda, Saudi Arabia and other countries. Currently, he is working on the creation of ISO, the international standard for drinking water, wastewater and stormwater systems at the Japan Water Works Association.

Message:

Hand washing is an important precaution for COVID-19, but unfortunately, in many countries there is not much clean water coming out of the faucet. By preventing water leaks and reducing Non-Revenue Water, we will be able to supply more households. Many Japanese water utilities, including the Tokyo Metropolitan Waterworks Bureau, have spent many years and a lot of budget to reduce NRW. I hope you will learn from our experience and join your colleagues for achieving NRW reductions in your country.

Mr. MATSUI Yoji

Lecturer

Senior Advisor, Tokyo Water Co., Ltd

He achieved a BA in Economics from Tokyo Metropolitan University. He is now working for Tokyo Water Co., Ltd. and in charge of the capacity development project of water supply in Yangon city, Myanmar that is financed by JICA. Tokyo Water Co. is one of the subsidiary companies of Tokyo Metropolitan Waterworks Bureau (TMWB). He started working at TMWB in 1973 and had dedicated his efforts to its management until 2007, and occasionally engaged in JICA projects and KCCPs. In 2007-2015 he had worked for JWWA as Director of International Division and organized several IWA (International Water Association) workshops on “Water Tariff”, “Asset Management”, “Governance”, etc. Then he was admitted as an IWA Fellow in 2010.

Message:

I am looking forward to having discussion with other countries’ water people on water supply management, especially on Governance and Water Rate of each country.

Implementing Partner

Ms. YAMADA Sakura
Program Implementing Administrative Operator
Management Division Chief International Division, Training and International Department, Japan Water Works Association (JWWA)

Message:
This course has been implemented since 1968. Japan's water supply system was established about 130 years ago and there were a lot of challenges in the long history. We have knowledge of how to deal and solve the problems and have shared it with engineers through this course. Now it's your turn. Let's find clues in this program for solving water problems in your country together!

Coordinator

Ms. FUKADA Chiaki
Training Coordinator of KCCP
She has extensive experience in coordinating the Knowledge Co-Creation Program (KCCP), and has been the Training Coordinator for many courses in the field of infrastructure.

Program Officer

Ms. URABE Miki
Program Officer
Economic Infrastructure Development and Environment Division, Tokyo Center, Japan International Cooperation Agency (JICA)

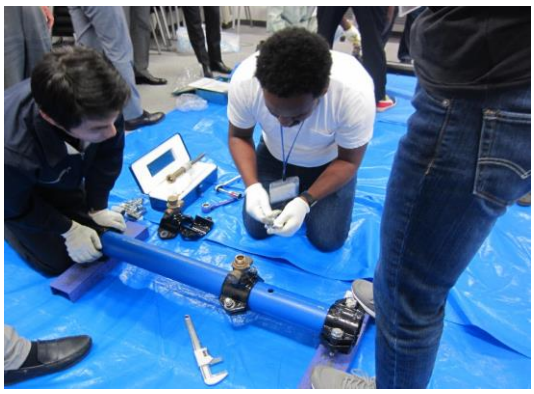
Message:
Hello, friends! Have you ever experienced struggling with financial barriers when faced with technical problems in water supply systems? In this program, we focus on NRW reduction as a key of the contribution by engineers to solving management challenges in water utilities. Let's gain a new perspective on your work through discussions with the lecturer and other participants. I look forward to meeting you!

Voice

Past Program Alumni Comments

Government official
Cambodia

All of the subjects are useful for water engineers. They will be helpful not only for water supply system but also for other fields (e.g. water quality management and waste water management). I think that the contents of the program about Water supply system and basic plan for water supply facilities were very important for my future career.



Government official
Rwanda

Through the program, I learnt that the provision of good service to customers is so important for the sustainability of water utilities. When customers get good services, they pay water bills happily. As a result, we will get enough revenues from customers to invest in other new projects to rehabilitate old facilities and to continue daily operation appropriately.

How to Apply

Program Details

- Program ID:
  202003258J001
  (202006625J001 for Lebanon)
- Course Period:
  November 8 to November 18, 2021.
- Location: Online

Contact

- Office: JICA Tokyo
- Contact:
  Ms. URABE Miki
- Email:
  Urabe.Miki2@jica.go.jp
- Language: English

Qualifications

1) **Current Duties:** be an engineer engaged in the planning, design and operation of water supply utilities.
2) **Educational Background and Experience in the relevant field:** be university graduates from the faculty of civil engineering, or have equivalent academic background and have more than 5 years of work experience regarding water supply systems.
3) **Language:** be fluent in English enough to participate in discussion and deliver presentation.
4) **Gender Consideration:** JICA is promoting gender equality. Women are encouraged to apply for the program.
5) **Attendance Requirement:** Participation in online program and submission of various assignments is an essential requirement for the completion of the course.
6) **Technical Requirements for the Online Course (Computer):**
   For more information, see next page.

Technical Requirements

Technology Proficiency

- Basic computer skills such as, sending/receiving email with attachments, and using a web browser.
- Online course is delivered using the following services; Web Conferences (Zoom), Cloud Storage (GIGAPOD), 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 5Mbps).

* Internet access charge incurred for this course shall be borne by your organization.

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)

Software (which may be required)

- Zoom Client for Meeting (https://zoom.us/download)

* In case you are using your office computer and use of Zoom is not authorized by your IT administrator, please notify JICA at the time of application.

Procedures

Application

Please submit the following documents to the JICA Office or the Embassy of Japan.
Deadline: October 11, 2021

- Application Form
- Water Supply Service Information Sheet (Annex of this GI)
- Photocopy of your passport or other official ID
- English Score Sheet (e.g. TOEFL, TOEIC, IELTS, if available)

Selection

JICA and the implementing organization will review the application documents and select the participants.

Notification of Results

The results will be notified through JICA Office by October 18, 2021.

*NOTE: Before beginning of this course, only accepted participants are required to prepare a Country Report.

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 course 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 adaptation, 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.

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.

Correspondence

For enquiries and further information, please contact the JICA office or Embassy of Japan.

Further, address correspondence to:

JICA Tokyo Center (JICA Tokyo)

Address: 49-5,Nishihara 2-chome, Shibuya-ku, Tokyo, 151-0066, Japan

TEL: +81-3-3485-7652

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