



【Online Training Course】
Knowledge Co-Creation
Program
(Group & Region Focus)

GENERAL INFORMATION ON

ON-SITE WASTEWATER TREATMENT SYSTEM
課題別研修「分散型污水处理システム導入・普及」
JFY 2020

NO. 201902199J001 / ID. 201902199

Online Course Period: From January 25, 2021 to February 19, 2021

This information pertains to one of the JICA Knowledge Co-Creation Program (Group & Region Focus) 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.

‘JICA Knowledge Co-Creation Program (KCCP)’ as a New Start

In the Development Cooperation Charter which was released from the Japanese Cabinet on February 2015, it is clearly pointed out 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 center of mutual learning process.

I. Concept

Background

Due to rapid population growth and expansion of residential area, untreated night soil and wastewater discharge caused serious social problems: pollution to river, groundwater, or closed water area. Construction of sewerage system requires time and huge amount of money. The sanitary treatment of night soil and wastewater on-site is cost effective and possible countermeasures against various kinds of water pollution due to domestic wastewater; and will contribute to improve safe water environment.

This program offers comprehensive wastewater treatment systems: laws and regulation to control water pollution, methodology of night soil and wastewater treatment, and operation and maintenance of Johkasou.

For what?

This program is designed to improve on-site wastewater treatment (measure for domestic wastewater, biological treatment, operation and maintenance system) in participating countries and regions.

For whom?

This program is offered to administrative, engineering officers in charge of wastewater treatment with occupational experience of more than three (3) years in relevant field.

How?

Participants will learn techniques and know-how in the field through lectures, observations, practices, and discussions. At the end of the program, participants will be requested to submit an action plan, utilizing contents of the program.

II. Description

- 1. Title (Course-No.): On-Site Wastewater Treatment System (201902199J001)**
- 2. Course Period (Online)**
January 25, 2021 to February 19, 2021
- 3. Target Regions or Countries**
Bangladesh, Bhutan, Brazil, Cambodia, Egypt, Indonesia, Kenya, Laos, and Sri Lanka
- 4. Eligible / Target Organization**
This program is designed for governmental organization engaged in waste management.
- 5. Course Capacity (Upper limit of Participants)**
10 participants
- 6. Language to be used in this program**
English
- 7. Course Objective**
After successfully completed the course, participants will be able to formulate and propose action plans to improve on-site wastewater treatment (measure for domestic wastewater, biological treatment, operation and maintenance system).
- 8. Overall Goal**
The formulated action plan is actually implemented in the organizations.

9. Expected Module Outputs 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 Applying organizations are required to submit the Job Report and the Issue Analysis Sheet together with the application form for selection in Japan.	
Objectives	Activities
Job Report & IAS	Formulation and submission of the job report and the issue analysis sheet (IAS)

(2) Core Phase in Japan Participants dispatched by the organization to attend the Program implemented in Japan		
Expected Module Output	Subjects/Agendas	Methodology
Be able to explain the outline of policy and implementation system about municipal wastewater countermeasure in the national government and local government in Japan	<ol style="list-style-type: none"> 1. System of municipal wastewater treatment 2. Concept plan of municipal wastewater treatment 3. About the Johkasou policy in Japan 4. Formulation of municipal wastewater plan 	Lecture
Be able to explain the outline of decentralized wastewater treatment system, manufacturing, installation, maintenance and water quality management	<ol style="list-style-type: none"> 5. Overview of Johkasou 6. Maintenance of Johkasou 7. Overview of waste water treatment technology 8. Techniques of waste water treatment (oxidation ditch) 9. About structural standards of Johkasou 10. About qualification system of Johkasou management vendor et al. 11. Theory of sludge treatment 	Lecture
Be able to explain diffusion and expanding of decentralized wastewater treatment system	<ol style="list-style-type: none"> 12. Situation and problem of decentralized treatment system in developing country 13. Role and efforts of all japan private sewerage treatment association 14. Problem of promoting overseas of Johkasou 15. Citizen activity to protect nearby river 	Lecture
Be able to formulate municipal wastewater treatment plan utilizing Johkasou	<ol style="list-style-type: none"> 16. Write a report as Action Plan 	Exercise

Be able to examine and identify possible ideas to be applied for technical improvement.	17. Action Plan Presentation at participants' organizations	Exercise
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(3) Finalization Phase in a participant's home country Participants will apply knowledge and skills acquired in the training in their respective countries. This phase marks the end of the program.	
Expected Module Output	Activities
Implementation of the action plan	Proposals (Action plans) formulated by participants are thoroughly shared within their organizations, and discussed towards implementation.

Please refer to the attached schedule (Annex III). The schedule is subject to minor changes.

III. Conditions and Procedures for Application

1. Expectations from the Participating Organizations

- (1) This program is designed primarily for organizations that intend to address specific issues or problems identified in their operation. Participating organizations are expected to use the project for those specific purposes.
- (2) This program is enriched with contents and facilitation schemes specially developed in collaboration with relevant prominent organizations in Japan. These special features enable the project to meet specific requirements of applying organizations and effectively facilitate them toward solutions for the issues and problems.

2. Nominee Qualifications

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

(1) Essential Qualifications

- 1) Current Duties: Engineering officers in charge of wastewater treatment.
- 2) Experience in the relevant field: have more than three (3) years of experience in the field mentioned above.
- 3) Educational Background: be a graduate of university or equivalent level.
- 4) Language: have a competent command of spoken and written English which is equal to TOEFL iBT 100 or more (This workshop includes active participation in discussions, which requires high competence of English ability. Please attach an official certificate for English ability such as TOEFL, TOEIC, etc, if possible.)
- 5) Health: must be in good health, both physically and mentally

(2) Recommendable Qualifications

- 1) Be in relation with past or on-going JICA projects focusing on waste management.
- 2) Be familiar with engineering background.
- 3) Be familiar with PC operation, as there will be many chances for report writing and presentations.
- 4) Occupational experience of more than three (3) years in relevant field.
- 5) Age: between the ages of twenty-five (25) and forty-five (45) years

6) Gender Consideration:

JICA is promoting Gender equality. Women are encouraged to apply for the program.

3. Required Documents for Application

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

(2) **Photocopy of passport:** to be submitted with the application form, if you possess your passport which you will carry when entering Japan for this program. If not, you are requested to submit its photocopy as soon as you obtain it.

*The photocopy should include the followings:

Name, Date of birth, Nationality, Sex, Passport number and Expire date.

(3) **Nominee's English Score Sheet:** to be submitted with the application form, if you have any official documentation of English ability. (e.g., TOEFL, TOEIC, IELTS)

(4) **Job Report, and Questionnaire:** to be submitted with the application form. Fill in Annex I and II of this General Information, and submit it along with the Nomination Form. Job Report and Questionnaire are necessary documents for screening of an applicant.

4. Procedures for Application and Selection

(1) Submission of the Application Documents

Closing date for applications: **Please inquire to the JICA office (or the Embassy of Japan)**.

After receiving applications, the JICA office (or the Embassy of Japan) will send them to **the JICA Center in JAPAN** by **December 25, 2020.**

(2) Selection

After receiving the documents through proper channels from your government, the JICA office (or the embassy of Japan) will conduct screenings, and then forward the documents to the JICA Center in Japan. Selection will be made by the JICA Center in consultation with concerned organizations in Japan. *The applying organization with the best intention to utilize the opportunity of this program will be highly valued in the selection.* Qualifications of applicants who belong to the military or other military-related organizations and/or who are enlisted in the military will be examined by the Government of Japan on a case-by-case basis, consistent with the Development Cooperation Charter of Japan, taking into consideration their duties, positions in the organization, and other relevant information in a comprehensive manner.

(3) Notice of Acceptance

Notification of results will be made by the JICA office (or the Embassy of Japan) **not later than January 8, 2021.**

5. Conditions for Attendance

- (1) to strictly adhere to the program schedule.
- (2) not to change the program topics.

IV. Administrative Arrangements

1. Organizer

(1) **Name:** JICA KYUSHU

(2) **Contact:** Training Program Division (kicctp@jica.go.jp)

2. Implementing Partner

(1) **Name:** Kitakyushu International Techno-cooperative Association (KITA)

(2) **URL:** http://www.kita.or.jp/english/e_index.html

V. Other Information

1. Report and Presentation

(1) Job Report

Each applicant is required to submit his/her own Job Report

(2) Action Plan

Participants are required to write a report as Action Plan for the third week and forth week to express your idea and plan which you carry out after the training, reflecting the knowledge and method you acquire in the training.

2. Remarks

JICA training is implemented for the purpose of development of human resources who will promote the advancement of the countries, but not for the enrichment of individuals or private companies. Matters of a trade secret and patent techniques will remain confidential and inaccessible during the training.

Annex I

**On-Site Wastewater Treatment System
(JFY 2020)
Job Report**

Name: _____
Country: _____
Organization and present post: _____
E-mail: _____
FAX: _____

Remarks 1: The Report should be typewritten in English (12-point font, appropriately spaced, A4 size paper) and total pages of the report should be limited to 3 pages (not including organization chart).

Remarks 2: Please don't forget checking the analysis sheet.

Remarks 3: Each participant is requested to give presentation up to around 10 minutes based on this Job Report and Issue Analysis Sheet (IAS). With regard to IAS kindly make a presentation in detail so that all training staff will understand how you are facing challenges and why you attend this training course.

Remarks 4: It is also requested to prepare a POWERPOINT for the presentation. When you use PowerPoint, it is preferable to use letters more than 24 points and not to use pictures on the background.

Remarks 5: Please itemize your answer and make them specific.

1. Organization and main tasks (up to 1 page)

(1) Description of the organization

Name of organization:

Number of staff:

Main task of the organization:

Your task in the organization:

(2) Organization chart

Please draw a chart of your organization including the department (section) names with the number of staffs in it and mark where you are positioned. (The chart should be attached and not be counted in this page limit.)

(3) Description of your assignments to the training

2. Existing challenges in your section (up to 1 page)

(1) Challenges you are facing in your section (Please describe concrete details)

(2) Countermeasures for these challenges

(3) Obstacles in the process of solving those challenges

3. Expectations for the training course (up to 1 page)

(1) Most interesting subjects or topics in this training course and reasons why you pick up the subjects

(2) How do you expect to apply skills and knowledge according the listed items in Curriculum after you return to your home country?

(3) Other matters you are expecting for this course, if any
(Basically this training program is fixed and cannot be changed upon your request.)

Annex II

**On-Site Wastewater Treatment System
(JFY 2020)
Questionnaire**

Name: _____
Country: _____
Organization and present post: _____
E-mail: _____
FAX: _____

Remarks 1: The Questionnaire should be typewritten in English (12-point font, appropriately spaced, A4 size paper), and total pages of the report should be limited to 2 pages.

Remarks 2: Please itemize your answers and make them specific.

1. How has wastewater (night soil and gray water) been treated?
 - Treated by sewage plant
 - Night soil has been treated by septic tank while gray water left untreated
 - Night soil has dipped out from latrine while gray water left untreated
 - Both night soil and gray water have left untreated
 - Others (_____)

2. Has sewage been installed?
 - Yes No
 - If "yes," what is the diffusion rate of sewage?

3. Has sewage treatment plant been installed?
 - Yes No
 - If "yes," what is the method of treatment? (e.g., activated sludge process)

4. Is there any problem of getting safe water from river or groundwater because of pollution by night soil or gray water?
 - Yes No

5. Are there septic tanks in use?

Yes No

If "yes," what types are they?

()

How are the septic tanks maintained; and what are the methods of sludge withdrawal?

()

6. Have you ever heard of Johkasou which is capable of treating both night soil and gray water at the sometimes?

Yes No

Thank you for cooperation!

Annex III Tentative Schedule

"On-Site Wastewater Treatment System" Online Training Tentative Schedule	
Date	Name of Subject
1/25 (Mon.)	Course Orientation Domestic Wastewater Treatment System in Japan
1/26 (Tue.)	Concept of Wastewater Treatment System in Local Government
1/27 (Wed.)	Promoting Widespread Use of Domestic Wastewater Treatment Tank
1/28 (Thu.)	Formulation of Domestic Wastewater Treatment Plan
1/29 (Fri.)	Submit a Question Sheet
1/30 (Sat.)	
1/31 (Sun.)	
2/1 (Mon.)	Johkasou Type Approval System and Overseas Development
2/2 (Tue.)	Overview of Johkasou System
2/3 (Wed.)	Maintenance of Johkasou System
2/4 (Thu.)	Domestic Wastewater Treatment Technology
2/5 (Fri.)	Submit a Question Sheet
2/6 (Sat.)	
2/7 (Sun.)	
2/8 (Mon.)	Sludge Treatment Technology
2/9 (Tue.)	Qualification System for Johkasou Management Vendors
2/10 (Wed.)	Current Situation and Issues of Decentralized Wastewater Treatment System in Developing Countries
2/11 (Thu.)	Citizen Activities for River Conservation
2/12 (Fri.)	Submit a Question Sheet
2/13 (Sat.)	
2/14 (Sun.)	
2/15 (Mon.)	Feedback on Questions
2/16 (Tue.)	Feedback on Questions
2/17 (Wed.)	Write a Report as Action Plan
2/18 (Thu.)	Write a Report as Action Plan
2/19 (Fri.)	Submit a Report as Action Plan

For Your Reference

JICA and Capacity Development

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

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

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

Japanese Development Experience

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

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

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

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



CORRESPONDENCE

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

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