



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

General Information on

Decentralized Wastewater Treatment System (Online)

課題別研修「分散型污水处理システム導入・普及」(遠隔)

JFY 2022

NO. 202107934J001

Online Course Period: From January 16, 2023 to February 14, 2023

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.)

Decentralized Wastewater Treatment System (202107934J001)

2. Course Period (Online)

January 16, 2023 to February 14, 2023

3. Target Regions or Countries

Brazil, Cambodia, Egypt, Ethiopia, India, Philippines, Republic of North Macedonia, 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)

8 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. 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. Domestic Wastewater Treatment System in Japan 2. Concept of Wastewater Treatment System in Local Government 3. Formulating the Municipal Domestic Wastewater Treatment Plan 4. Policy of Johkasou in Japan: Toward Widespread Use and Promotion of Johkasou 5. Virtual Tour of Night-soil Treatment Plant 	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"> 6. Overview of Johkasou 7. Sludge Treatment Technology 8. Wastewater Treatment Technology 9. Maintenance of Johkasou 10. Johkasou Manager System 11. Introduction Video of FujiClean Co., Ltd, Johkasou Manufacturer in Japan 	Lecture
Be able to explain diffusion and expanding of decentralized wastewater treatment system	<ol style="list-style-type: none"> 12. Performance Evaluation, Certification System of Johkasou and its Development in the World 13. Current Situation and Issues of Decentralized Wastewater Treatment System in Developing Countries 14. Citizen Activity to Protect River 	Lecture
Be able to formulate municipal wastewater treatment plan utilizing Johkasou	<ol style="list-style-type: none"> 15. Lecture on the Problem Solution using IAS and PDCA Cycle 16. Lecture on Action Plan 17. Discussions (Review) 18. Make an Action Plan 	Lecture, Exercise

Be able to examine and identify possible ideas to be applied for technical improvement.	19. Presentation by Former Participants and Discussion 20. Action Plan Presentation and Discussion	Lecture, 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 V). The schedule is subject to change.

III. Eligibility and Procedures

1. Expectations to 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 program 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 course 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 Proficiency: 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 to participate in the program.

Remote training implementation requirements:

- **Stable network environment**

- * Please consider to take this program under the same stable internet environment during the course period
- To be able to attend a Zoom Meeting at a designated time.
- To be able to use Microsoft Office(Excel, Word, PowerPoint)
- Preparation of computer with camera, earphone, and microphone

(2) Recommendable Qualifications

- 1) Be in relation with past or on-going JICA projects focusing on wastewater treatment.
- 2) Be familiar with engineering.
- 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 Equality and Women's Empowerment: Women are encouraged to apply for the program. JICA makes a commitment to promote gender equality and women's empowerment, providing equal opportunity for all applicants regardless of sexual orientation and gender identity.

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 or ID:** to be submitted with the application form
*The photocopy should include the followings:
Name, Date of birth, Nationality, Sex, Passport number and Expire date.
- (3) English Score Sheet:** to be submitted with the application form, if the nominees have any official documentation of English ability. (e.g., TOEFL, TOEIC, IELTS)
- (4) Job Report, Questionnaire and Issue Analysis Sheet (IAS):** to be submitted with the application form. Fill in Annex I, II and III of this General Information, and submit it along with the Application Form. Job Report, Questionnaire and Issue Analysis Sheet are necessary documents for screening applicants.

4. Procedures for Application and Selection

(1) Submission of the Application Documents

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

(All required material must arrive at **JICA Center in Japan** by **November 2, 2022.**

(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 December 2, 2022.**

5. Conditions for Participation

The participants of KCCP are required to strictly observe the course schedule.

IV. Administrative Arrangements

1. Organizer (JICA Center in Japan)

- (1) **Name:** JICA Kyushu Center (JICA KYUSHU)
(2) **Program Officer:** Mr. MIURA Sho (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

3. Information

Part I: Knowledge Co-Creation Program and Life in Japan	
English ver.	https://www.youtube.com/watch?v=SLurfKugrEw
French ver.	https://www.youtube.com/watch?v=v2yU9ISYcTY
Spanish ver.	https://www.youtube.com/watch?v=m7l-WIQSDjl
Russian ver.	https://www.youtube.com/watch?v=P7_ujz37AQc
Arabic ver.	https://www.youtube.com/watch?v=1iBQqdpXQb4
Part II: Introduction of JICA Centers in Japan	
JICA Kyushu	https://www.jica.go.jp/kyushu/english/office/index.html

V. Other Information

1. Report and Presentation

(1) Job Report & Issue Analysis Sheet (IAS)

Each applicant is required to submit his/her own Job Report & Issue Analysis Sheet following the instruction. Participants will explain their issues briefly in the first live session of the training in order to share knowledge and background with other participants as well as a course leader.

(2) Action Plan

Participants are required to make an Action Plan to express your idea and plan which you carry out after the training, reflecting the knowledge and method you acquire in the training. Action Plan will be presented at the end of the training. It will be explained in the orientation.

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

**Decentralized Wastewater Treatment System (JFY 2022)
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.)

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!

Issue Analysis Sheet (IAS)

Country: _____ Name: _____

No.	【A】* Issues that you confront.	【B】 Actions that you are taking.	
1			
	【 I 】 Task or The information that I need.	【 II 】 Useful information that I obtained /found.	【 III 】 Lecturer

No.	【A】* Issues that you confront.	【B】 Actions that you are taking.	
2			
	【 I 】 Task or The information that I need.	【 II 】 Useful information that I obtained /found.	【 III 】 Lecturer

No.	【A】* Issues that you confront.	【B】 Actions that you are taking.	
3			
	【 I 】 Task or The information that I need.	【 II 】 Useful information that I obtained /found.	【 III 】 Lecturer

【 I 】,**【 II 】**,**【 III 】** These columns will be filled during the training course

*You shall describe challenges you are facing in your section also in the Job Report. Among them, in column A, please describe only those issues you expect to solve utilizing information and knowledge being delivered in this training course.

Issue Analysis Sheet (IAS) Guidelines

1. What is IAS?

- (1) IAS is a tool to logically organize relationships between issues and contents of the training program in Japan.
- (2) IAS will help the nominee to clarify his/her challenges to be covered in each expected module output and to formulate solutions to them.
- (3) The sheet is to be utilized as a logical process control sheet to draw up improvement plans for the issues by filling out the sheet in phases from prior to the nominee's arrival through to the end of the training.
- (4) In addition, it is used for the course leader and lecturers to understand the issues that each participant is confronting, and provide him/her with technical advice, useful references and solutions through the training program in Japan.

2. How to fill out IAS?

- (1) Please describe the issues you confront in column "**A: Issues that you confront**".

You shall describe challenges you are facing in your section also in the Job Report. Among them, in column A, please describe only those issues you expect to solve utilizing information and knowledge being delivered in this training course. Prepare the separate rows for each problem; if necessary, please add new rows.

- (2) In column "**B: Actions that you are taking**", please describe actions that you are taking to solve the issues shown in "**Column A**".

This information is very important to carry out the training course and also to make Action Plan as a fruit of the training.

- (3) It's not necessary to fill in column "**I : Task or the information that I need**", column "**II : Useful information that I obtained/found**" and column "**III : Lecturer**". These columns shall be filled out during the training.

- (4) "**Column I**" shall be clarified and filled out in the subject "**Task extraction using IAS**" implemented at the earlier time in the training.

- (5) "**Column II**" and "**Column III**" shall be filled out during the training and you are required to present completed IAS in the subject "**Action Plan Presentation**".

Annex V Tentative Schedule

“Decentralized Wastewater Treatment System” Online Training

Tentative Schedule

Date	Name of Subject
1/16(Mon.)	Course Orientation, Lecture on Action Plan [Live]
1/17 (Tue.)	The Problem Solution using IAS
1/18(Wed.)	Former Participant’s Presentation on Action Plan Progress Task Extraction using IAS [Live]
1/19 (Thu.)	Domestic Wastewater Treatment System in Japan [Live]
1/20 (Fri.)	Decentralized wastewater treatment system and its legal framework in Japan
1/21(Sat.)	
1/22(Sun.)	
1/23(Mon.)	Formulating The Municipal Domestic Wastewater Treatment Plan
1/24(Tue.)	Saga City's Sewerage Service
1/25(Wed.)	Basic principle of Wastewater Treatment Technology [Live]
1/26(Thu.)	Small scale sewage treatment plant by natural power
1/27(Fri.)	Performance Evaluation, Certification System of Johkasou and its Development in the World
1/28(Sat.)	
1/29(Sun.)	
1/30(Mon.)	Discussion(Review) [Live]
1/31(Tue.)	Regulation and Operation of On-site Wastewater Treatment in Japan
2/1(Wed.)	Current Situation and Issues of Decentralized Wastewater Treatment System in Developing Countries
2/2(Thu.)	Maintenance of Johkasou System
2/3(Fri.)	JOHKASOU (private sewage treatment system)
2/4(Sat.)	
2/5(Sun.)	
2/6(Mon.)	Wastewater Treatment & Sludge Disposal [Live]
2/7(Tue.)	Virtual Tour of Night-soil Treatment Plant
2/8(wed.)	Water Quality improvement activities in the Onga River
2/9(Thu.)	Introduction Video of Fuji Clean Co., Ltd, Johkasou Manufacturer in Japan
2/10(Fri.)	Discussion(Review) [Live]
2/11(Sat.)	
2/12(Sun.)	
2/13(Mon.)	Action Plan Presentation and Discussion 1 [Live]
2/14(Tue.)	Action Plan Presentation and Discussion 2 [Live]

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 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.



Contact Information for Inquiries

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

JICA Kyushu Center (JICA Kyushu)

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Fukuoka 805-8505 Japan**

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