

Knowledge Co-Creation Program (Group & Region Focus)

GENERAL INFORMATION ON
DISASTER MANAGEMENT FOR SEDIMENT-RELATED DISASTERS
(LANDSLIDE, DEBRIS FLOW, FLASH FLOOD AND VOLCANIC MUDFLOW)
課題別研修「土砂災害防止マネージメント」
JFY 2019

NO. J1904171 / ID. 1984481 Course Period in Japan: From June 9, 2019 to July 13, 2019

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

Extreme events of weather and climate have intensified because of climate change. Earthquakes and volcanic eruptions bring devastating damage to various area of the world every year. In addition, due to over-population in big cities, urbanization, deforestation and excessive development etc., the damage and the human and economic loss caused by sediment disasters have increased. Thus the modern society has been exposed to sediment related natural disasters. It is thus an urgent issue for administrative organizations engaged in management of sediment –related disasters to strengthen their capacity to cope with disaster risk.

In the Third UN World Conference on Disaster Risk Reduction (WCDRR) held in March 2015, the Sendai Framework for Disaster Risk Reduction 2015-2030 (Post 2015 FDRR) was adopted. 7 global targets were agreed to achieve outcome and goal which were pursued in Post 2015 FDRR. This program will directly contribute to these 7 global targets. At the same time, this program is also expected to promote activities for Sustainable Development Goals (SDGs) which were adopted in UN summit in 2015, especially for goal 11 "Sustainable Cities and Communities" and goal 18 "Climate Action".

For what?

This program aims at strengthening of participant's capability on planning of effective countermeasures for sediment related disaster risk reduction (SRDRR).

For whom?

This program is designed for technology-based government officials such as civil engineers and geological engineers who are engaging in the development of countermeasures for SRDRR.

Educator and researcher in educational and academic research institutions such as universities are not qualified as the applicant for this program.

How?

This program consists of lectures on general introduction to Japanese disaster management and SRDRR, and a series of lectures and exercises of technologies and methods for SRDRR countermeasures. At the end of the program, participants will be required to consider countermeasures in their disaster sites and formulate a project to be implemented for the promotion of the feasible countermeasure after returning home.

II. Description

1. Title (J-No.)

Disaster Management for Sediment-related Disasters (Landslide, Debris Flow Flash Flood and Volcanic Mudflow) (J1904171)

2. Course Period in JAPAN

June 9, 2019 to July 13, 2019

3. Target Regions or Countries

Brazil, Iran, Malaysia, Myanmar, Nepal, Philippines, Sri Lanka and Viet Nam

4. Eligible / Target Organization

Organizations engaged in SRDRR activities are the target of this program. Educational and academic research institutions such as universities are outside of the scope of this program

5. Course Capacity (Upper limit of Participants)

8 participants

6. Language to be used in this program

English

7. Course Objective

Participants of this program are expected to improve their knowledge on comprehensive sediment management and be able to enhance their capacity to make countermeasures for SRDRR.

8. Overall Goal

The quality of countermeasures for SRDRR improves in participating countries.

9. Expected Module Output and Contents
This program consists of the following components. Details on each component are given below:

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Expected Module Output	Subjects/Agendas	
1. General knowledge on	(1) Administration of SDRRR.	
administration and activity of	 Disaster Countermeasures Basic Act & disaster prevention plan 	
_ SRDRR:	(2) General knowledge of SRDRR	
To understand and be able to	• Introduction of Sabo	
explain:	*SABO is a Japanese term that means SDRR.	
(1) general knowledge of SRDRR	SABO has become a global term due to the	
(2) administration of SDRRR.	advanced system that Japan has developed.	
	(1) survey for SRDRR	
	·urgent field survey on disaster site	
Basic and applied technology on countermeasures for SRDRR:	·identification of target area	
	·hazard mapping	
	·risk assessment	
To understand and be able to explain: (1) survey for SRDRR (2) planning for SRDRR.	(2) planning for SRDRR:	
	·structural and non-structural	
	countermeasures	
(3) designing (concept) for	·identification of countermeasures in target	
SRDRR	area	
	(3) designing (concept) for SRDRR	
	·project formulation	
	·urgent field survey on disaster site	
	·hazard mapping	
3. Exercise:	·risk assessment	
To understand and be able to explain practical countermeasures for SRDRR	·planning and design of SABO facilities	
	·setting up of rainfall index	
	·disaster imagination game (DIG) and	
	evacuation plan	
	·project formulation	
L		

<Structure of the program>

Subject 1. Disaster countermeasures basic act & disaster prevention plan

Subject 2. Introduction of Sabo

(Sediment Disaster Prevention Act, Sabo projects in Japan

and mechanism of sediment-related disasters and countermeasures)



Subject 3. Weather and hydrological observation and forecast

(visit to Japan Meteorological Agency)

Subject 4. Urgent field survey on disaster site (field work included)

Subject 5. Identification of risk area of sediment-related disasters

Subject 6. Estimation of affected area by sediment disaster for hazard map



Subject 7. Risk assessment



Subject 8. Warning and evacuation planning (disaster imagination game included)

Subject 9. Public awareness for appropriate response to alert

Subject 10. Set up of rainfall index for warning and evacuation

Subject 11. Development of low-cost Sabo facilities



Subject 12 Design of Sabo facilities (against debris flow)

Subject 13 Design of Sabo facilities (against landslide)

Subject 14. Design of Sabo facilities (against slope failure and rock fall)



Subject 15. Identification of effective countermeasures in target area

Subject 16. Fund raising for countermeasures

Subject 17. Project formulation



Presentation of formulated projects

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 program for those specific purposes.
- (2) This program is composed of contents and facilitation schemes developed in collaboration with relevant prominent organizations in Japan. These special features enable the program to meet specific requirements of applying organizations and effectively facilitate them toward solutions for the issues and problems.
- (3) Applying organizations are expected to nominate the most qualified candidates to address the said issues or problems, carefully referring to the qualifications described in section Ⅲ-2 below.

2. Nominee Qualifications

Applying Organizations are expected to select nominees who meet the following qualifications. Female staff are encouraged to apply for the program from the perspective of gender mainstreaming.

(1) Essential Qualifications

- 1) Applicants: government officials (technical officers) such as civil engineer and geological engineer who are engaging in the development of countermeasures for SRDRR.
- 2) Experience in the relevant field: <u>more than 7 years' experience</u> in the field of SRDRR
- 3) Educational Background: undergraduate degree
- 4) Language: competent command of spoken and written English. This workshop includes active participation in discussions, which requires high competence of English ability.
- 5) Health: must be in good health, both physically and mentally, to participate in the Program in Japan. Pregnant applicants are not recommended to apply due to the potential risk of health and life issues of mother and fetus.
- 6) PC skill: practical skill of <u>computer software "Excel" & "Power Point",</u> which are used in the exercise.

(2) Recommendable Qualifications

- 1) Age: under forty nine (49) years of age (in principle)
- 2) Position: position in which participant can negotiate with stake holders such as other public organizations and resident group
- *Others: As this program includes hard field work, it will be extremely difficult for pregnant women to participate. Therefore, from the aspect of maternal

3. Required Documents for Application

- (1) Application Form: The Application Form is available at the JICA office (or the Embassy of Japan).
 - * If you have any difficulties/disabilities which require assistance, please specify necessary assistances in the Medical History(1-(d)) of the Application Form. It may allow us to prepare better logistics or alternatives.
- (2) Attachments: to be submitted with the Application Form.

(2)-1 Photocopy of passport:

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.

*Photocopy should include the followings:

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

(2)-2 Nominee's English Score Sheet:

If you have any official documentation of English ability. (e.g., TOEFL, TOEIC, IELTS)

(2)-3 Country Report (please refer to "VI. ANNEX")

4. Procedures for Application and Selection:

(1) Submission of the Application Documents:

Closing date for application to the JICA office: April 2nd (Tuesday), 2019

Note: After receiving applications, the JICA office (or the Embassy of Japan) will send them to the JICA Center in JAPAN. Therefore please confirm the closing date set by the respective country's JICA office or Embassy of Japan of your country to meet the final date in Japan.)

(2) Selection:

After receiving the 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. 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 May 9th (Thursday) ,2019.

5. <For accepted applicants (participants) only>(1)Preparation for a presentation:

At the beginning of the program, all participants are required to make a 10-minute presentation on the Country Report of their respective countries.

After the presentation, discussion should be implemented to extract problems of SRDRR.

Accepted applicants will receive the Power Point format to follow for the presentation with the notification of acceptance to the program.

(2)Bringing relevant data

All participants are required to bring precipitation records (hourly, daily) and topographic maps of the disaster affected area. If you bring these data, you will be able to plan and design countermeasures of his/her own country making use of these data in the exercise and project formulation in this program.

Accepted applicants will have a Skype session with the implementing partner of this course and receive a guidance on your data, policy on project formulation (either structural or non-structural) and other issues.

6. Conditions for Attendance:

- (1) to strictly adhere to the program schedule.
- (2) not to change the program topics.
- (3) not to extend the period of stay in Japan.
- (4) not to be accompanied by family members during the program.
- (5) to return to home countries at the end of the program in accordance with the travel schedule designated by JICA.
- **(6)** to refrain from engaging in any political activities, or any form of employment for profit or gain.
- (7) to observe Japanese laws and ordinances. If there is any violation of said laws and ordinances, participants may be required to return part or all of the expenditure depending on the severity of said violation.
- (8) to observe the rules and regulations of the accommodation and not to change the accommodation designated by JICA.

Note: This program includes field study in mountainous areas. Therefore, accepted participants are recommended to bring clothes and shoes suitable for walking and exercise.

IV. Administrative Arrangements

1. Organizer:

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

Economic Infrastructure Development and Environment Division

(2) Contact: tictee@jica.go.jp

2. Implementing Partner:

SABO and Landslide Technical Center (STC) http://www.stc.or.jp/

3. Travel to Japan:

- (1) Air Ticket: The cost of a round-trip ticket between an international airport designated by JICA and Japan will be borne by JICA.
- **(2) Travel Insurance**: Coverage is from time of arrival up to departure in Japan. Thus traveling time outside Japan will not be covered.

4. Accommodation in Japan:

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

JICA Tokyo Center (JICA TOKYO)

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

TEL: 81-3-3485-7051 FAX: 81-3-3485-7904

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

If there is no vacancy at <u>JICA TOKYO</u>, JICA will arrange alternative accommodations for the participants. Please refer to facility guide of TIC at its URL, https://www.joutube.com/watch?v=jWyCOMj3IjE
http://www.jica.go.jp/english/contact/pdf/tic.pdf

5. Expenses:

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

- (1) Allowances for accommodation, meals, living expenses, outfit, and shipping
- (2) Expenses for study tours (basically in the form of train tickets.)
- (3) Free medical care for participants who become ill after arriving in Japan (costs related to pre-existing illness, pregnancy, or dental treatment are not included)
- (4) Expenses for program implementation, including materials

 For more details, please see "III. ALLOWANCES" of the brochure for participants
 titled "KENSHU-IN GUIDE BOOK," which will be given before departure for
 Japan.

6. Pre-departure Orientation:

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

VI. ANNEX: Country Report Guidance

<Purpose of Country Report>:

All applicants are required to submit the Country Report. The document is used for the selection of the candidate.

The Country Report is basic and essential information for the Japanese lecturers as well as the other participants of this program in order to understand followings as the background information.

- the present situation and problem to be solved of participating countries on SRDRR.
- ii) the responsibilities of the participants themselves and their offices where they belong.

<Guideline>:

The Country Report should respect the following:

- (1) Use the designated format below.
- (2) Written in Microsoft Word.
- (3) Number of pages should not exceed 5.
- (4) Font: Arial or Times New Roman, size 12.
- (5) Add some charts, graphs and/or pictures to better illustrate your country's situation.

<Format>:

Name of the Participant:
Country:
Organization:
Position/Title:
Email address
Skype address

1. Administrative Issues

1) Responsibilities of organization (department /division /section)

(Please describe the responsibilities of you and your organization, and attach the organization chart.)

2) Administrative structure, relationship and their roles among organizations

(Please describe the administrative structure regarding the sediment-related disaster management which includes prevention/mitigation, observation, warning, evacuation, and disaster relief etc. of the government as a whole.)

2. Landslide, debris flow, flash flood and volcanic mudflow and structural/non-structural countermeasures

1) Actual Situation (damages and countermeasures) in your Country

(Please describe damages by debris flow and landslide hazards as well as measures (structural measures and nonstructural measures) which have been taken in your country)

2) Issues to be solved

(Please describe issues of you and your country to be solved in order to manage sediment-related disasters in your country)

3. Public and private organizations in charge of various activities related to the sediment disaster

(Please fill in the blanks.)

- * ①Please describe all organizations of every particular item, if there are several organizations in charge.
 - 2If no organization is in charge of the activity, please describe 'none'.

Activity	Organization of Central Government	Organization of Local Government	Private sector including NPO/NGO
Prevention Measures (Structural Measures) for Sediment Disaster			
Observation/Monitoring (Soil Movement)			
Observation/Monitoring (Weather)			
Warning			
Evacuation			
Disaster Relief			
Disaster Education			

For Your Reference

JICA and Capacity Development

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

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

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

Japanese Development Experience

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

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

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

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



CORRESPONDENCE

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

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