



【Online】

Knowledge Co-Creation Program (Group & Region Focus)

GENERAL INFORMATION ON

REINFORCEMENT OF METEOROLOGICAL SERVICES

課題別研修「気象業務能力向上」

JFY 2021

No. 201902295J001 & No. 202003273J001

Online Program Period

Group A: From January 17, 2022 to January 27, 2022

Group B: From January 31, 2022 to February 10, 2022

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

A variety of natural hazards including typhoons, floods, landslides and droughts has frequently manifested themselves in recent years. In addition, global climate risks have also emerged and threatened sustainable development.

To cope with such circumstances, it has become an important challenge for the meteorological authorities of each country to compile meteorological and climatological data and provide it effectively to authorities in charge of disaster risk reduction (DRR) and communities.

However, many meteorological authorities of developing countries still have some difficulties in providing basic meteorological services including data collection, analysis, forecasting and information dissemination contributing to effective DRR activities by DRR-related organizations.

In response to these situations, JICA has implemented this Knowledge Co-Creation Program in partnership with the Japan Meteorological Agency* (JMA), which is known as one of the most advanced meteorological services in the world. The program will be implemented ONLINE this year due to COVID-19 pandemic.

**JMA has contributed to capacity development for the authorities of National Meteorological and Hydrological Services (NMHSs) in developing countries for nearly 50 years. Started in 1973, this KCC program has hosted more than 350 participants from 75 countries, helping them play significant roles in promoting and leading meteorological services in their countries.*

(URL: <https://www.jma.go.jp/jma/indexe.html>)

For what?

The program aims to provide NMHSs with the relevant knowledge and key techniques (e.g. disaster risk reduction, satellite meteorology and climate information for advanced meteorological services) to improve their operational abilities.

For whom?

The program targets promising staff members, who are expected to lead NMHSs of the World Meteorological Organization (WMO), or its equivalent.

How?

The program mainly focuses on basic knowledge and technology on meteorological services. It consists of lectures, exercises and observations. In

addition, participants have opportunities to share their knowledge and experience with others from different countries in order to deepen their understanding of the issue.

II. Description

1. Title (J-No.): Reinforcement of Meteorological Services
(201902295J001 & 202003273J001)

2. Period of program

Duration of whole program:	December 2021 to February 2022
(1) Preliminary Phase:	December 2021
(2) Core Phase (Online)	
Group A:	January 17 to January 27, 2022
Group B:	January 31 to February 10, 2022

3. Target Regions or Countries

Group A: Cook Islands, Fiji, Philippines, Samoa and Vietnam

Group B: Bhutan, Cambodia, Mozambique, Pakistan, Sri Lanka and Thailand

4. Eligible / Target Organizations

The program is offered to NMHSs WMO Members, or its equivalent

5. Capacity (Upper Limit of Participants)

19 participants in total for FY2020 and FY2021

6. Language

English

7. Program Objective

To promote activities to reinforce the meteorological services of each country, with application of meteorological data/products such as satellite images and climate information.

8. Overall Goal

To contribute to reducing disaster risk on human society and natural ecosystem by compiling, analyzing and utilizing meteorological and climatological data effectively.

9. Expected Module Output and Contents

To achieve the Program Objective, participants are expected to;

- (1) Gain an overview of fundamental components of NMHSs and its roles in the context of disaster risk reduction in their countries.
- (2) Learn to produce several types of meteorological information for users utilizing key techniques.
- (3) Learn to produce climate information with climatology and global environmental data/products, and to brief users on such information.
- (4) Develop an Action Plan to address issues of their own NMHSs as outcome of the program.

The program consists of the components detailed below.

(1) Preliminary Phase

- From December 2021 to January 2022

Modules	For whom	What to do	Reference
(1) Questionnaire	<u>All Applicants</u>	-Complete ANNEX I and submit with Application Form	VI. ANNEX
(2) Country Report	<u>Accepted Candidates only</u>	-Prepare a country report presentation according to ANNEX II and submit to JICA. -All participants will deliver presentation at the beginning of the Core Phase.	VI. ANNEX
(3) Pre-Learning materials	<u>Accepted Candidates only</u>	-Complete the pre-learning materials	To be announced

(2) Core Phase [ONLINE]

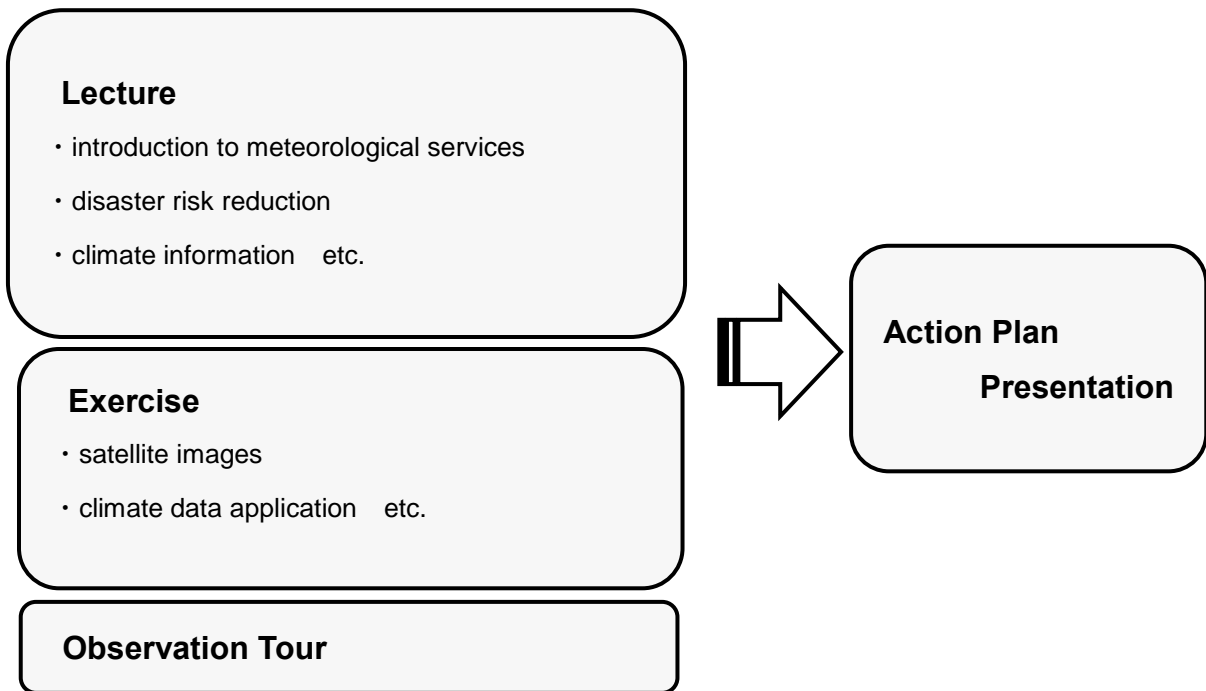
- Participants attend the program ONLINE.

Group A: January 17 to January 27, 2022

Group B: January 31 to February 10, 2022

Expected Outcome	Main Programs
(1) Gain an overview of fundamental components of NMHSs and its roles in the context of disaster management in their countries	<ul style="list-style-type: none">➤ General Introduction to Meteorological Services➤ Observation Tour of Operation Center
(2) Learn to produce several types of meteorological information for users utilizing key techniques	<ul style="list-style-type: none">➤ Public Weather Service➤ Disaster Risk Reduction➤ Weather Forecasting<ul style="list-style-type: none">1) Exercises in satellite meteorology
(3) Learn to produce climate information with climatology and global environmental data/products, and to brief users on such information	<ul style="list-style-type: none">➤ Climatology<ul style="list-style-type: none">1) Climate system2) Global warming3) Climate monitoring4) Long-range forecasting5) Exercises in processing climate data
(4) Develop comprehensive and concrete Action Plan to address issues of their own NMHSs	<ul style="list-style-type: none">➤ Presentation of Action Plan and discussion at the end of the Core Phase

Program Structure



Note:

**The participants are highly expected to share the lessons learned through this program with their supervisors and colleagues in their organizations after completion.*

**The content of the programs may be subject to change.*

**The program mainly focuses on basic knowledge and technology on meteorological services.*

III. Conditions and Procedures for Application

1. Expectations to Applying Organizations

- (1) The program is designed primarily for NMHSs or its equivalent aiming to address specific issues or problems identified in their operation. Applying organizations are therefore expected to use this program fully specifically for reinforcing their meteorological services.
- (2) 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.
- (3) Applying organizations are also expected to make the best use of knowledge acquired by the participants for the said purpose.

2. Nominee Qualifications

Applying organizations are expected to select the most qualified nominees who meet the following qualifications.

(1) Essential Qualifications

1) Present position:

Be meteorological officials classified as Meteorologists according to the World Meteorological Organization (WMO) personnel categories.

2) Occupational background:

Be presently engaged in meteorological services at NMHSs or its equivalent.

Note:

**Those who belong to other meteorological organizations aside from NMHSs may not be qualified.*

3) Work experience:

Have work experience of meteorological services for more than 3 years.

4) Academic record:

Have a Bachelor of Science and/or an Engineering degree.

5) Technical Requirement:

a. Computer Proficiency

- Basic computer skills such as, sending/receiving email with attachments, and using a web browser.
- Online course is delivered using the following services such as Web

Conferences (Zoom), Cloud Storage (Cornerstone), YouTube, etc. Online tutorial and support by JICA will be limited. The ability to be self-directed in learning new technology skills are required.

b. Internet Connection

- High Speed Broadband Connection (at least 2Mbps).

c. 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: 8GB 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)

d. 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.*

6) Language:

Have an excellent command of spoken and written English.

7) Health:

Be in good health physically and mentally, to participate in the program in Japan.

(2) Recommended Qualifications

1) Age:

Be under 40 years of age in principle.

2) Gender Consideration:

JICA promotes gender equality. Women are encouraged to apply for the program.

3. Required Documents for Application

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

** If you have any difficulties/disabilities which require assistance, please specify necessary assistances in the QUESTIONNAIRE ON MEDICAL STATUS RESTRICTION of the Application Form. Information will be reviewed and used for reasonable accommodation.*

- (2) **Attachments:** to be submitted with the Application Form.

(2)-1 **Photocopy of passport:** or other official ID if you do not possess a passport.

** Photocopy should include the followings: Name, Date of birth, Nationality and Sex.*

(2)-2 **Nominee's English Score Sheet:** if you have any official documentation of English ability. (e.g., TOEFL, TOEIC, IELTS)

(2)-3 **Questionnaire:** Fill in ANNEX I.

4. Procedures for Application and Selection

- (1) **Submission of Application Documents**

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

After receiving applications, the JICA overseas office (or the Embassy of Japan) will send them to **the JICA Center in Japan by November 26 (Fri), 2021.**

- (2) **Selection**

Primary screening is conducted at the JICA overseas office (or the Embassy of Japan) after receiving official documents from your government. The 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) Notification of Acceptance

Notification of the results will be made by the JICA overseas office (or the Embassy of Japan) **no later than December 13 (Mon), 2021.**

5. 〈For Accepted Candidates Only〉

Accepted Candidates who receive the Notification of Acceptance are required to prepare documents and materials for the Preliminary Phase as shown below.

(1) Documents to be submitted:

1) **ANNEX II** (Country Report)

-Deadline:

January 10 (Mon), 2022

-Contact Person:

Submit to Atsuko UDO (Ms.) (Udo.Atsuko@jica.go.jp / ticttee@jica.go.jp).

6. Conditions for Attendance

The participants of KCCP are required

- (1) to strictly observe the program schedule,
- (2) 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 program,
- (3) to observe the rules and regulations of the program implementing partners to provide the program or establishments,
- (4) **to be away from the daily work to undergo all the program** (*Consult with JICA overseas office if you prefer participating in the program from JICA overseas office*),
- (5) not to record or shoot the online programs and materials without JICA's permission,
- (6) not to engage in political activities, or any form of employment for profit,
- (7) 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 program,

- (8) 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, and
- (9) to refund allowances or other benefits paid by JICA in the case of a change in schedule.

IV. Administrative Arrangements

1. Organizer

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

(2) **Contact:** Atsuko UDO (Ms.) (Udo.Atsuko@jica.go.jp / tictree@jica.go.jp)

2. Implementing Partner

(1) **Name:** Japan Meteorological Agency (JMA)

(2) **URL:** <https://www.jma.go.jp/jma/indexe.html>

3. Expenses

The following expenses will be provided by JICA:

(1) Daily Allowances and Transportation Expenses

(2) Expenses for program implementation, including materials

4. Reference Information

Some introductory videos are viewable from the link below.

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

JICA Knowledge Co-Creation Program “Reinforcement of Meteorological Services”	
https://youtu.be/xZIWWULAvA	
JMA Meteorological Services in Japan	
https://youtu.be/kQa13U8TfOY	
Part I: Knowledge Co-Creation Program and Life in Japan	
English ver.	https://www.youtube.com/watch?v=SLurfKugrEw
Part II: Introduction of JICA Centers in Japan	
JICA Tokyo	https://www.jica.go.jp/tokyo/english/office/index.html

V. Other Information

Messages from the Concerned Partners for you:

Please refer the messages below for the applicants.

From Implementing Partner

The JICA KCCP "Reinforcement of Meteorological Services" has a long history over 45 years providing comprehensive lectures in meteorology, and our skilled instructors are waiting for you. In the past, there were totally about 350 graduates, and I find that many of them are now leading meteorological services in their own countries.

I expect that you and us will foster and deepen friendship through this program. Very looking forward to seeing you!

*Mr. SHIMPO Akihiko,
Head, Office of International Affairs,
Japan Meteorological Agency*

From Past Participant of Mozambique in 2019

To be honest I feel that is not easy and just to choose what I would consider as best learning in this JICA's program, since all training was of great of importance to me, my country, my organization as well. Through the program, it became much clear to me that for better quality of weather forecast, it is extremely important to follow accurately all procedures without under valuing any of them.

Since my return to home, I've had the opportunity to put into practice what I learned. Following my action plan, I am currently working on the project of FAO (Food and Agriculture Organization of the United Nations) as a representative of my department. The main target of this project is to develop weather forecast bulletin for Mabalane district in order to support local farmers in their activities.

Hope this program will be able to train more meteorologists and improve their services.

*Mr. Luis Adriano CHONGUE,
National Meteorology Institute, Mozambique*

VI. ANNEX

Annex I Questionnaire (for All Applicants)

Annex II Country Report (for Accepted Candidates Only)

ANNEX I - All Applicants

* Please submit this sheet **with the Application Form**.

Questionnaire

Country	Name
---------	------

1. **Detailed Work Experience:** Please provide the following information on your work experience at NMHS.

	Period (years)	Notes (if necessary)
Administration/management		
General/personnel/finance		
Observation (management)		
Forecasting (management)		
Observation (operation/analysis)		
Surface		
Upper-air		
Radar		
Other ()		
Weather forecasting (operation/analysis)		
Very-short-range forecasting		
Daily forecasting		
One-week forecasting		

NWP		
Use of NWP weather maps (Z500, T850, EPSgrams, etc.)		
Use of NWP guidance (bias correction, etc.)		
Use of graphical tools		
Programming of NWP guidance		
Programming of NWP models		
Climate services		
Climate monitoring		
Climate change projection		
PC experience		
Software (Word Excel PowerPoint)		
Internet/Email		
Programming		
FORTRAN		
C		
R		
Other (Indicate experience in the "Notes" column, e.g., bsh, perl, python.)		

ANNEX II - Accepted Candidates Only

1. Country Report

Please follow the instruction below for your **Country Report**.

1. Contents: Please cover the contents shown below.
2. Volume: within 10 slides
3. Format: MS Power Point is recommended
4. Submission: to Atsuko UDO (Ms.) (Udo.Atsuko@jica.go.jp / ticttee@jica.go.jp)
by January 10 (Mon), 2022

All the accepted candidates who receive the notification of acceptance are requested to prepare and submit “Country Report”.

At the beginning of the program, all participants are required to deliver a presentation based on their Country Reports. Visual aids (graphics, photos, etc.) are also encouraged.

(1) Objective

- 1) To share information about your NMHS with representatives of JMA and other participants in order to enhance mutual understanding.
- 2) To help you identify the critical issues of your NMHS to be addressed during the program.

(2) Contents

- 1) The meteorological and climatological characteristics of your country.
- 2) Major severe weather phenomena and natural disasters in your country, and your organization's activities to address such problems.
- 3) Your organization's position within your country's disaster management system, including the updated information on Disaster Management Act in your country.
- 4) Organizations such as ministries/agencies in charge of disaster risk management, media operators and local governments that directly receive weather warnings/advisories.
- 5) Major problems in your country (or organization) in the field covered by this program (satellite image analysis, climate-related information, etc.).
- 6) Personal views on further development of your NMHS.

- 7) Examples of weather bulletins such as weather forecasts, warnings and advisories issued by your NMHS.
- 8) Flowchart showing how warnings and advisories are disseminated from your NMHS to the community.

**Please attach an organizational chart to the 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 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.



CORRESPONDENCE

For enquiries and further information, please contact the JICA office or the Embassy of Japan. Correspondence can also be addressed to:

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