



# Knowledge Co-Creation Program (Group & Region Focus)

## GENERAL INFORMATION ON

**Volcanic Disaster Risk Reduction and Management  
for Central and South American Countries**  
**課題別研修「中南米地域 火山防災能力強化」**  
**JFY 2018**

**NO. J1804040 / ID. 1884500**

Course Period in Japan: From May 30, 2018 to July 5, 2018

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

## 1. Background

It has become under wide recognition that in preventing volcanic disaster, coordination among stakeholders - central/local government, academia, mass media, and residents is indispensable, in addition to the installation of anti-disaster facilities.

Central and South American countries, located at the eastern fringe of "The Pacific Ring of Fire" or the circum-Pacific belt where the Nazca, Cocos, South America and Caribbean Plates meet, possess certain number of active volcanoes.

Preparing for the potential disasters, those countries certainly have taken countermeasures such as the introduction of monitoring system, seismograph and hazard maps etc. However, it seems that installation of those facilities were not enough to secure inhabitants life, symbolized by the death of 25,000 people in the eruption of Nevado del Ruiz, in 1985.

Japan situated at the western fringe at the Pacific Ring of fire, also shares similar geographic situation to Central and South America. Especially Hokkaido has Mt. Usu, famous for its frequent eruption in the past 100 years. Under the circumstances, Japan has been accumulating with experiences and know-how for volcanic disaster management. The 2000 eruption of Mt. Usu with no casualties is one of the most symbolic cases in Japanese volcanic disaster prevention history, where all the local residents safely evacuated under the efficient collaborations among stakeholders in addition to the role/function of anti-disaster facilities.

This course is intended to assist in creating appropriate methods to minimize the damage of volcanic disaster and capitalize it as resources for regional promotion, achieving harmonious co-existence with volcanoes. Throughout the course, an experienced course leader, who has been playing key role in coordinating stakeholders in Mt. Usu regions, will guide the participants.

## 2. For what?

This program aims to create appropriate solutions for volcanic disaster management in participant's country so that the inhabitants will be able to co-exist with the environment.

## 3. For whom?

This course is offered to those engaged in volcanic disaster risk reduction and management on the ground.

## 4. How?

Lectures and site visits will be organized to understand the situation in Japan. Further, presentation, discussion, and workshop sessions will be held to deepen the understanding, and promote sharing ideas among participants.

At the end of training course, participants are expected to propose "Action Plan" to be implemented in respective countries / organizations.

## II. Description

**1. Title (J-No.):**

Volcanic Disaster Risk Reduction and Management for Central and South American Countries (J1804040)

**2. Course Period in JAPAN**

May 30 to July 5, 2018

**3. Target Regions or Countries**

Ecuador, El Salvador, Guatemala, Nicaragua, Perú, México

**4. Eligible / Target Organization**

Central / local governments, universities, research institutions, NGOs and private companies, which would be positioned as a part of a Disaster Risk Reduction Plan in participants' countries.

\* *In order to enhance the coordination among stakeholders, it is favorable that various organizations join from one country.*

**5. Course Capacity (Upper limit of Participants)**

9 participants

**6. Language to be used in this program**

Spanish

**7. Course Objective**

The plan to improve the capacity of volcanic disaster management is officially formulated by the participant's organization based on the proposed "Action Plan" by respective participants.

**8. Overall Goal**

Respective community or society's capacity against volcanic disaster risk reduction / management shall be improved, though the implementation of the formulated Action Plan\*.

\* *Action Plan is... A feasible plan of activities that every participant proposes, making the best use of learning in Japan, at the end of training course. Those should be implemented by participant themselves after the training in Japan.*

## 9. Expected Module Output 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

( up to May 2018)

*Participating organizations make required preparation for the Program in the respective country.*

- \* *Consultation with Ex-Participants is strongly recommended in order to prevent mismatch between participants' needs and training course, then get idea for Action Plan.*

Modules	Activities
Job Report Working Sheet	<ul style="list-style-type: none"> <li>•Preparation of Job Report, preferably under consultation within your organization See <b>Annex I, II, and III</b> for Job Report and Working Sheet Instructions and fill in all items.</li> <li>•Necessary arrangements for Job Report presentation</li> <li>•Consultation with Ex-Participants</li> </ul>

- \* *Based on Job Report, all the participants are requested to make presentation on Monday 4<sup>th</sup> June, in order to share the respective country's information in the field of volcanic disaster risk reduction and management. For details, please refer to p10 and p19.*

### (2) Core Phase in Japan

(June 1 2018 to July 4, 2018)

*Participants dispatched by the organizations attend the Program implemented in Japan.*

#### Module

- (1) To identify the issues of the volcanic disaster management in participants' country / area through understanding how to grasp volcanic disaster risk in Japan
- (2) To identify the issues of the volcanic disaster management in participants' country / area by understanding the disaster prevention plans and schemes in volcanic disaster vulnerable area in Japan.
- (3) To propose ideas for productive usage of volcanoes as resources for regional promotion by learning cases in Hokkaido
- (4) To propose appropriate and feasible "Action Plan"\* for volcanic disaster management in participants country/regions.

- \* *The Action Plan, which participants are going to propose must be FEASIBLE, therefore, it is recommended that participants bring relevant data, map, pictures, laws and regulations of your country*

## Structure of the program

\*This program is provisional and the schedule is subject to change without notice.

L: Lecture, P: Presentation, W: Workshop, D: Discussion, Pr: Practice

Date		Module	Type	Program	Venue
30-May	Wed		—	Arrival	JICA Sapporo
31-May	Thu			Briefing	
1-June	Fri		W	Program Orientation Course Introduction	
2-June	Sat				
3-June	Sun				
4-June	Mon		P	Job Report Presentation	
5-June	Tue	1,2	L	Volcanology (1)	
		1,2	L	Volcanology (2)	
6-June	Wed	1,2	L	Outline of Volcanic Disaster (1)	
		1,2	L	Outline of Volcanic Disaster (2)	
7-June	Thu	1,2	L	Outline of Volcanic Disaster (3)	
		1,2	L	Outline of Volcanic Disaster (4)	
8-June	Fri	1,2	L	Geological Disasters in Hokkaido	
		1,2	L	Outline of Japan's Administration on Disaster Risk Reduction	
9-June	Sat				
10-June	Sun				
11-June	Mon	1,2	L	Case Study: Recent Eruption of Mt. Usu	
		1,2,3	L	Outline of Geopark and Training Program	
12-June	Tue	1,2,3	L	Study Trip (1)	Mori Toya Date Sobetsu
13-June	Wed		D	- Outline of Volcanic Eruptions	
14-June	Thu		Pr	- Komagatake and Its Disaster	
15-June	Fri		- Case Study on Eruption of Mt. Usu in 2000		
16-June	Sat		- Climb Mt. Komagatake and Showa Shinzan		
		- Visit to Visitor Center, Volcano Science Museum, Disaster Risk Reduction Center in Date, Road Side Station in Sobetsu Town, etc.			
		- Discussion with residents			
		- Fieldwork with children			

17-June	Sun				JICA Sapporo
18-June	Mon				
19-June	Tue	1,2	L	Invisible Disasters and Disaster Mitigation	
		1,2	L	Large Scale Disasters and the Role of Local Publishers	
		1,2	L	Experiences from Eruption of Mt. Usu	
		1,2	D	Volcanic Disasters and the Role of Mass Media	
20-June	Wed	4	D	Mid-Term Discussion	
21-June	Thu	2	Pr	Kitchen Volcano Experiment	
		1,2	L	Science of Real Time Monitoring	
22-June	Fri	1,2	L	Volcanic Eruption Prediction and Disaster Risk Reduction; Case Study of Volcano Eruptions in the World and Risk Management	
		1,2	L	Risk Management of Tsunami and Volcanic Eruptions from the experience of 3.11	
23-June	Sat				
24-June	Sun				
25-June	Mon	1,2	L	Mudflow from Volcanoes in Hokkaido and Soil Erosion Control	
		3,4	W	Workshop	
26-June	Tue	1,2	L	Eruption of Mt. Tokachi and Volcanic Disaster Management	
		1,2	L	Disaster Reconstruction	
27-June	Wed	1,2	L	Study Tour (2)	
28-June	Thu		D	- Visit to Mt. Tokachi, Museum, Dam, Volcano Soil Erosion Control Center, etc.	
29-June	Fri		W	- Visit to an elementary school and Practical Training of Kitchen Volcano Experiment - Special Lecture: <i>Some of the participants will give a short presentation about examples of volcanic disaster risk reduction in their own country to local residents.</i>	
30-June	Sat				JICA

1-July	Sun				Sapporo
2-July	Mon	1,2	L	Organizational Structure of Disaster Risk Reduction in Hokkaido	
		1,2		Visit to Institute of Seismology and Volcanology	
		1,2		Visit to Volcano Observation and Warning Center at Sapporo Regional Headquarters, Japan Meteorological Agency	
3-July	Tue	1	L	Remote Sensing of Volcanic Processes	
		4	W	Workshop	
4-July	Wed	4	P	Action Plan Presentation	
				Closing Ceremony Closing Party	
5-July	Thu		—	Departure	—

**(3) Finalization Phase in a participant's home country**

*Participating organizations produce final outputs by making use of results brought back by participants. This phase marks the end of the Program.*

Modules	Activities
Implementation of your Action Plan	Application and implementation of the action plan back in respective home country.

### ***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

Senior staffs who are in charge of volcanic disaster risk reduction and land use. (Belonging organization can be governmental or non-governmental.)

###### 2) Experience in the relevant field

More than five (5) years' experience in the field of volcanic disaster risk reduction and management.

###### 3) Educational Background

Volcanology, Natural Disaster Management, etc.

###### 4) Language

Have a competent command of spoken and written Spanish (This Training Programs includes active participation in discussions, Action Plan development, thus requires high competence of Spanish 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.

##### (2) Recommendable Qualifications

Age: Between the ages of twenty-five (25) and fifty (45) years

### **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.

\* *Photocopy should include the followings:  
Name, Date of birth, Nationality, Sex, Passport number and Expire date.*

#### **(3) Job Report**

To be submitted with Application form (please refer "**ANNEX I**" and "**ANNEXI-1**").

### **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 will send them to **the JICA Center in JAPAN by April 12, 2018**.)

#### **(2) Selection**

After receiving the documents through proper channels from your government, the JICA office 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 May 9, 2018**.

## **5. Document to be submitted by accepted candidates**

### **(1) Job Report Presentation**

Every accepted candidate will have 20 minutes (including interpretation) to give an oral presentation based on the job report on Monday, 4<sup>th</sup> June. Please prepare for the presentation based on your Job Report and with reference to "**ANNEX II.**"

### **(2) Working Sheet**

Before coming to Japan, only accepted candidates are required to prepare a *Working Sheet*. All participants should fill in ALL "Items" referring to description examples in "**ANNEX III**" and "**ANNEX III-1.**"

## **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 training 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.

## IV. Administrative Arrangements

### 1. Organizer:

SUGIIOKA Rino (Ms.), JICA Hokkaido (Sapporo)

[Sugioka.Rino@jica.go.jp](mailto:Sugioka.Rino@jica.go.jp) / [sictp1-sub@jica.go.jp](mailto:sictp1-sub@jica.go.jp)

### 2. Implementing Partner:

To Be Determined

### 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 Hokkaido International Center (Sapporo) : HKIC

Address: Minami 4-25, Hondori 16-chome, Shiroishi-ku, Sapporo, Hokkaido, 003-8668, Japan

TEL: +81-11-866-8393 FAX: +81-11-866-8382

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

If there is no vacancy at HKIC, JICA will arrange alternative accommodations for the participants.

*HKIC Facility Guide: <https://www.jica.go.jp/sapporo/english/office/index.html>*

*Life in Hokkaido and JICA: <https://youtu.be/Ftx7wDI4QUw>*

### 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 "KENSU-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.

## V. Other Information

1. Japanese language program will be offered to the participants in JICA Hokkaido (Sapporo), to facilitate their daily life.
2. Participants who have successfully completed the course will be awarded a certificate by JICA.
3. At the end of the course, participants are required to prepare an "Action Plan" and make a presentation on it, which is an activity plan to be implemented after going back to home country with utilizing skills and knowledge obtained in Japan. For the convenience, JICA recommends each participant bring relevant data and reference documents which would be useful in making a well-grounded action plan.
4. Recreation
  - 1) Participants can use an indoor swimming pool and gymnasium located next to JICA Hokkaido (Sapporo). The charges are paid by JICA.



- 2) JICA encourages international friendship exchange between participants and local communities. Therefore, it would be helpful for participants to bring their national costumes and materials such as slides, videos, and music cassettes, which introduce the culture in their countries.

5. Equipment in JICA Hokkaido (Sapporo)  
JICA Center has following equipment for the participants.

*Private Room:*

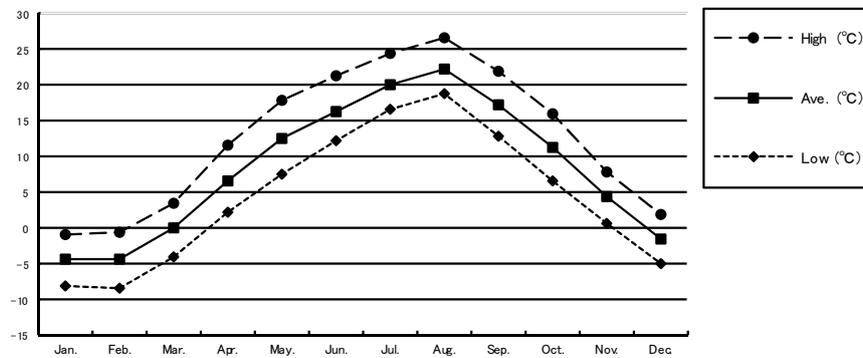
*Bed, Prefabricated Bath, Desk, Refrigerator, Hot pot, Bookshelf, Air Conditioning, In-room Safe, TV sets (CNN, NHK(BS), DVD/VHS Video Player)*

*Audio-Visual equipment for training:*

*Video recorder, Overhead projector, Slide Projector, Multimedia Projector (available to use Microsoft Power Point).*



## 6. Climate in Hokkaido



	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
High (°C)	-1	-0.8	3.4	11.4	17.8	21	24.2	26.3	21.7	15.9	7.8	1.7
Ave. (°C)	-4.4	-4.4	-0.2	6.5	12.2	16	19.8	22.1	17.1	11	4.1	-1.6
Low (°C)	-8.4	-8.5	-4.2	2.1	7.3	11.9	16.4	18.7	12.8	6.3	0.4	-5
Snow(cm)	58	83	64	2							5	28

Typical Seasonal Wear: (May- July) Long-sleeves, Short-sleeves, Light Jacket

## **VI. ANNEX I: Job Report**

### **1. INTRODUCTION**

This report plays a significant role because the objective of this training course is to create solutions for the issues that you/your organization face in volcanic disaster risk reduction and management. Also, this report will be used as a reference for selection.

### **2. PURPOSE**

To introduce and share information about your situation and issues of volcanic disaster risk reduction and management with the Course Leader and other lecturers.

### **3. INSTRUCTIONS**

- ✓ Deadline: should be submitted **with Application form.**
- ✓ Language: Spanish
- ✓ OS: Microsoft Word
- ✓ Slide size: A4 size paper (21 cm x 29.5 cm) in single spacing
- ✓ Maximum: 7 pages
- ✓ Please refer to "**VI. ANNEX I-1**" and cover ALL "Items."

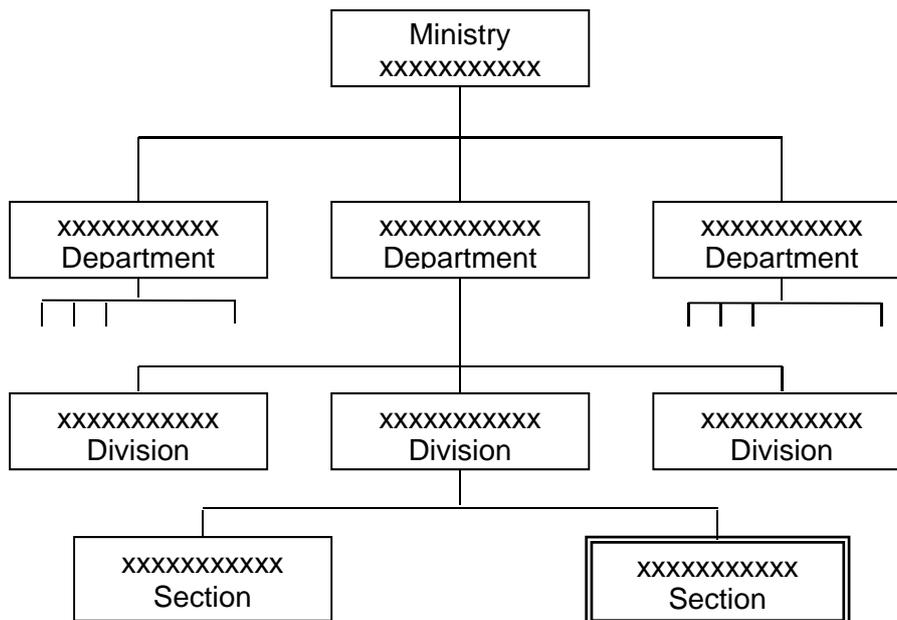
## VI. ANNEX I-1: Job Report Items

### 1) Basic information

Name	
Organization	
Position	
Country	
Outline of duties	

### 2) Outline of the participant's Organization

Referring to the example below, draw the chart of the organization and indicate the department/division/section with a double line (example)



### 3) Describe your record of participation in volcanic disaster managements.

Period	From	to
Name of volcano		
Your role in the activity		
Outline of duties:		

Period	Period
Name of volcano	Name of volcano
Your role in the activity	Your role in the activity
Outline of duties	

**4) Describe the situation of volcanic areas which is administered by applicant's organization.**

NOTE: It is advisable for participants to explain by using PHOTOS or MAPS which clearly show the volcanic areas' situation.

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**5) Describe the problems of volcanic disaster management in your country/area and give the reasons.**

No	Problems	Reasons
1		
2		

3		

**6) Describe your expectation of this training program.**

**7) Describe your future plans to apply expected results of the training program after returning to your country.**

## **VII. ANNEX II: Job Report Presentation**

### **1. INTRODUCTION**

Every accepted candidate will have 20 minutes (including interpretation) to give a job report presentation on Monday, 4<sup>th</sup> June. Please prepare for the presentation based on your Job Report and with following instructions.

### **2. PURPOSE**

To introduce and share information about your situation and issues of volcanic disaster risk reduction and management with the Course Leader, lecturers and participants from other countries.

### **3. INSTRUCTIONS**

- ✓ Deadline: **5 PM, Friday, 1<sup>st</sup> June, 2018**
- ✓ Submission: To Be Announced
- ✓ Language: Spanish
- ✓ OS: Microsoft PowerPoint
- ✓ Maximum: 5 slides

### **4. Required Items**

- 1) Your duties
- 2) How have you participated in volcanic disaster management? If you are not in charge of disaster management of a particular volcano, or you are in charge of disaster management generally, please describe how your organization has participated in volcanic disaster management.
- 3) Problems of your organization or your duties (apart from lack of manpower and budget)
- 4) Expectations of the course

### **5. Items should NOT include**

- 1) Information on all volcanoes in your country
- 2) General Information on your country such as population, industry, and etc.

### **6. NOTES**

- \* Tell us your main point.

Presentation time will be limited to 10 minutes (not including interpretation), so please prepare an appropriate presentation. Also, the Job Report submitted with your application form will be translated into Japanese and a course leader and other lecturers will read it before the presentation. In addition, the report will be printed out in full and given to all participants of the course. So, please make sure that you do NOT need to write about all of your report.

\* Use photographs and pictures.

Listeners are Japanese and participants from other countries. It is advisable to bring brochures and information materials introducing the situation of your country regarding volcanic disaster prevention for the other participants.

## **VIII. ANNEX III: Working Sheet**

### **1. INTRODUCTION**

Before coming to Japan, **only accepted candidates** are required to prepare a Working Sheet.

### **2. PURPOSE**

To introduce and share information about your county's situation regarding Monitoring, Alert and Evacuation of volcanic disasters with lecturers and other participants.

### **3. INSTRUCTIONS:**

- ✓ Deadline: **5 PM, Friday, 18<sup>th</sup> May, 2018 (Japan Time)**
  - ✓ Submission: [Sugioka.Rino@jica.go.jp](mailto:Sugioka.Rino@jica.go.jp) / [sictp1-sub@jica.go.jp](mailto:sictp1-sub@jica.go.jp)
  - ✓ Language: Spanish
  - ✓ Slide size: A4 size paper in single spacing
  - ✓ Maximum: 3 pages
- \* *For translation into Japanese in advance, please be sure to observe the submission date.*
- \* *For better understanding of your situation, we recommend that you bring material such as pictures, videos, PowerPoint slides and leaflets.*

## VIII. ANNEX III: Working Sheet

Llenen la lista en orden numérico, tomando el caso de Japón como referencia

### Institutos para el Monitoreo, Anuncio de Alertas y la Orden de Evacuación de Actividades Volcánicas

País : \_\_\_\_\_

Nombre : \_\_\_\_\_

Organización : \_\_\_\_\_

Tema	Resumen
<b>a. Nombre de Institutos para el Monitoreo y la Observación</b> (Brevemente y en orden numérico)	
<b>b. Lugar donde Hace la Evaluación Integral de los Datos Aportados por los Institutos de Monitoreo y la</b>	

<p><b>Observación, y Su Papel</b> (Brevemente y en orden numérico)</p>	
<p><b>c. Instituto para Decidir el Nivel de Alertas de Erupciones Volcánicas</b> (Brevemente y en orden numérico)</p>	
<p><b>d. Instituto que Emite la Alerta de Erupción Volcánica</b> (Brevemente y en orden numérico)</p>	
<p><b>e. Si Tienen el Sistema de Aceptar Advertencias y Evaluación de los Científicos en “c” y “d”, Escriban Sobre Su Contenido.</b> (Brevemente y en orden numérico)</p>	
<p><b>f. Decisión del Nivel de Erupción Volcánica y la</b></p>	

<p><b>Manera de Difundirlo</b> (Brevemente y en orden numérico)</p>	
<p><b>g. Instituto que Emite la Orden de Evacuación</b> (eje. Alcaldes de las Autoridades Ubicadas Cerca del Volcán) (Brevemente y en orden numérico)</p>	
<p><b>h. Si tienen la Atención Humana y Material de los Países Extranjeros, Escriban sobre Ella.</b> (Brevemente y en orden numérico)</p>	
<p><b>i. Elaboradores de Mapa de Peligros</b> (Brevemente y en orden numérico)</p>	
<p><b>j. Temas Principales en Cada Artículo</b> (Brevemente y en orden numérico)</p>	

## VIII. ANNEX III-1: Working Sheet (Example)

### Institutos para Monitoreo Volcánico, Anunciar alertas y Dar la Orden de Evacuación.

País : Japón

Elaborado por Yoshihiro SAWADA, Tadahide UI, Hiromu OKADA

Pertenencia : Agencia Meteorológica(retirado en 2004), Instituto para Política del Manejo de Crisis y Medio Ambiente

Tema	Resumen
a. Nombre de los Institutos para Monitoreo y Observación, y Sus Papeles (Mencionado brevemente en orden numérico)	<u>Agencia Meteorológica</u> : Realizan monitoreo y observaciones de volcanes en los centros de observación e información de volcanes a nivel nacional dividiéndolos en los áreas durante 24 horas. <u>Varias universidades incluyendo la Univ.Hokkaido, Institutos de investigaciones tales como el Instituto Nacional de Investigación de Ciencia de la Tierra y Prevención de Desastres(NIED) :</u> Observación permanente e investigación <u>Autoridad de Información Geoespacial de Japón(GSI) :</u> Monitoreo continuo de la deformación. <u>Guardia Costera de Japón:</u> Monitoreo periódico en las islas volcánicas y los volcanes submarinos. Los datos obtenidos por ellos se proporcionan a la Agencia Meteorológica a todas horas.
b. Evaluación Integral con los Datos Aportados por las Respectivas Instituciones, y Sus Papeles	El Consejo Coordinador para la Predicción de Erupciones Volcánicas (Agencia Meteorológica) está organizado. Sus miembros son de varias universidades tales como la de Hokkaido, NIED, Instituto Nacional de Tecnología y Ciencia Industrial Avanzada(AIST) , GIS, Guardia Costera de Japón, Instituciones Administrativas relacionadas con la prevención de Actividades Volcánicas tales como la Oficina de Gabinete, Ministerio de Terreno, Infraestructura, Transporte y Turismo y etc.. En 3 reuniones periódicas al año analizan los datos volcánicos a nivel nacional intercambiando las

	informaciones tales como los materiales de monitoreo, resultados de análisis e investigaciones, etc.. Dependiendo de la necesidad, hacen la evaluación integral de las actividades volcánicas y la publican. En el momento de respuesta a erupciones volcánicas, se organizan reuniones provisionales para discutir sobre el sistema de monitoreo y prevención volcánica correspondiendo con sus actividades .
c. Instituto que Decide el Nivel de Alertas de Erupción volcánica	Agencia Meteorológica
d. Instituto para Emitir Alertas de Erupción Volcánica	Agencia Meteorológica
e. Sistema de Aceptar Advertencias y Evaluación de los Científicos en "c" y "d"	Discutir sobre el asunto tomando advertencias de los miembros de "b" (especialmente los de las universidades ubicadas cerca de los volcanes correspondientes e instituciones de investigación.
f. Decisión del Nivel de Erupción Volcánica y Manera de Difundirlo	El nivel se decide por la Agencia Meteorológica y lo emiten a las autoridades locales. A través de las reuniones con medio de comunicación, se publica.
g. Instituto para Dar la Orden de Evacuación	Alcalde de cada municipalidad (dependiendo de casos, gobernador de prefecturas).
h. Atención de los Países Extranjeros	No
i. Elaboradores de Mapa de Peligros	Hay casos que se elabora por autoridades o el Consejo para la Gestión de Desastres Volcánicos asociado a sus autoridades con la orientación de los expertos volcánicos, y otros casos que autoridades o el Consejo asociado a ellas lo elabora a través de las empresas de consultorías con la

	orientación de los expertos volcánicos.
j. Temas Principales	<ol style="list-style-type: none"> <li>1) En "a" y "c", a veces es difícil obtener informaciones del cambio de comportamiento volcánico de manera detallada en localidades, porque principalmente la detección de eventos inusuales en los centros de monitoreo volcánico e informaciones está basada en los datos obtenidos por monitoreo telemétrico e instrucciones.</li> <li>2) En "a" y "c", es indispensable reforzar la capacitación para aumentar la capacidad del personal que se dedica al monitoreo volcánico, porque está limitado el número del personal con suficientes conocimientos y experiencias en los centros de monitoreo volcánico e informaciones sobre la vulcanología y las actividades volcánicas.</li> <li>3) En "a" y "c", <b>"en realidad el personal de la Agencia Meteorológica que toca el tema de actividad sísmica y de erupciones volcánicas no está bien preparado para trabajar con el conocimiento específico sobre estos temas. Es necesario cambiar radicalmente el sistema de empleo, teniendo a más poseedores de maestría en la sismología y la vulcanología, alentándolos a asistir a congresos asociados, estableciendo el sistema de dar más oportunidad de estudiar en otras universidades de Japón y aumentando la capacidad en la decisión de anunciar informaciones para mitigar desastres volcánicos"</b> (frase en 2015 citada de D.Sc.UI después de modificarla)</li> <li>4) En "c" y "d", hay poca acumulación de los datos pasados por monitoreo en muchos volcanes cuando los necesitan al decidir el nivel de alertas, aunque sólo con ellos no es posible decidir el nivel adecuado en todos los casos.</li> <li>5) En "e", es posible la respuesta cuando tenga el avance maderado en las actividades volcánicas, sin embargo en el momento en que las actividades muestren su rápido avance, da dificultad de corresponder.</li> </ol>

\*Tadahide UI(2015) : **"!Todavía no es momento inusual! Nos falta algo en el sistema de monitoreo"**, iRONNA, 17 de Junio, 2015  
<http://ironna.jp/article/1522>

## ***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.



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