



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

GENERAL INFORMATION ON

ROAD MAINTENANCE (B)  
課題別研修「道路維持管理 (B)」  
*JFY 2018*

NO. J18-04168 / ID. 1884539

Course Period in Japan: From September 12<sup>th</sup>, 2018 to October 20<sup>th</sup> 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 (KCC) Program’ as a New Start

In the Development Cooperation Charter which is 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**

There is no doubt that the improvement of roads is essential for national economic development. Although developing countries have been rapidly proceeding with the improvement of urban roads, using large national budgets and receiving development assistance from foreign countries, inappropriate management and maintenance due to financial difficulties and lack of technology has continuously caused early damage, which in turn has caused excessive traffic congestion and accidents. To manage and maintain roads appropriately, it is essential to regard roads as national assets, grasp and assess the conditions of road structures, predict the financial condition, and consider what measures to carry out and when and where to carry them out. Moreover, it is necessary to manage roads efficiently according to plan within a limited budget (asset management). Appropriate asset management leads to efficient, effective, and appropriate distribution of taxes collected from the people and provision of better public services. In addition, it becomes possible to use foreign countries' assistance most effectively.

Sapporo City experienced rapid urbanization. To solve the problem of managing and maintaining roads, it introduced not only the corrective-type method of "repairing damaged parts" but also the preventive method of "starting repair when damage is small and using roads as long as possible." Sapporo City has been proceeding with measures based on asset management to reduce costs. Referring to the example of Sapporo City, this training course is provided so that the participants can learn how to perceive the design/construction and preventive maintenance of roads with consideration for the management and maintenance system and lifecycle cost. This will enable them to contribute to the improvement of the management and maintenance system to ensure smooth and safe traffic flows in developing countries.

## **For what?**

This program aims to contribute to the improvement of the road management and maintenance system to ensure comfortable and safe urban road service in the participants' countries. The participants are highly expected to actively participate in the course to propose improvement plans of the road management and maintenance system in their governments.

## **For whom?**

This program is designed for the central and local government officials in charge of road management and maintenance.

## **How?**

Participants shall have opportunities in Japan to learn essential knowledge and techniques for road management and maintenance systems through lectures, observations, exercises and discussions by learning the case of Sapporo City. Each participant are required to propose an Action Plan describing what he / she is expected to do after going back to his / her home country, making the best use of the knowledge and ideas acquired and discussed in the program.

## ***II. Description***

**1. Title (J-No.):** Road Maintenance (B) (J18-04168)

**2. Course Period in Japan**

**Core Phase in Japan:** September 12, 2018 to October 20, 2018

**3. Target Regions or Countries**

Cambodia, Sri Lank, Swaziland, Pakistan, Philippines, Brazil, Viet Nam, Malawi, Liberia, Lesotho, El Salvador

**4. Eligible / Target Organization**

This program is designed for the central and local government officials in charge of road management and maintenance.

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

10 participants

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

**7. Program Objective:**

Analyzing the challenges in terms of road maintenance system, necessary and sound countermeasures are proposed with utilizing the outcomes of the training in Japan.

**8. Overall Goal:**

Based on the Action Plan proposed by the participants, necessary measures are taken for establishing or improving/strengthening operation and maintenance system for road maintenance and management.

## 9. Expected Module Output and Contents:

This program consists of the following components. Details on each component are given below:

<b>(1) Preliminary Phase in a participant's home country</b> (May to August 2018)	
Modules	Activities
Analyze current situation and problems on road maintenance and management system in respective country/organization	Preparation and submission of Job Report

<b>(2) Core Phase in Japan</b> (September 12 to October 20, 2018)		
Module	Subjects/Agenda	Methodology
Analyze current situation and problems on road maintenance and management system in respective country/organization	(1) Presentation on Job Report (2) Situation and problems analysis based on Job Report (3) Group discussion on the M&M system of road in respective country/organization	Presentation Workshop Discussion
Understand necessary knowledge and basic techniques for road maintenance and management system through the experience of Japan and local government (including road asset management system).	<ul style="list-style-type: none"> <li>· The concept of "road M/M cycle (Inspection, evaluation, planning implementation and monitoring etc.)"</li> <li>· Road M/M plan, implementation system in Japan and local areas.</li> <li>· Preventive and effective road M/M planning</li> <li>· Road M/M works (Inspection, evaluation etc.) in Japan and local areas.</li> </ul>	Lecture Observation Discussion
Examine the appropriate and sustainable O&M system and M/M planning of road be reference to the experiences of Japan and the other countries	<ul style="list-style-type: none"> <li>· Implementation of road M/M works and countermeasure works against disaster, etc.</li> <li>· Road construction plan to archive the effective road maintenance and management after operation</li> </ul>	Lecture Site-visit  Discussion

Examine necessary measures for improving road maintenance and management as an Action Plan	· Preparation and presentation of the action plan	Presentation Discussion
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<b>Finalization Phase in a participant's home country (October 2018 to April 2019)</b>
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Expected Module Output	Activities
- Implementation of the Action Plan -	-Sharing and finalizing the "Action Plan" in the participant's organization.

### **10. Follow-up Cooperation by JICA**

In this program, JICA might extend follow-up support to participating organizations that intend to develop the result of the project further. Please note that the support shall be extended selectively based on proposals from the participating organizations.

### **III. Conditions and Procedures for Application**

#### **1. Expectations for 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 program to meet specific requirements of applying organizations and effectively facilitate them toward solutions for the issues and problems.
- (3) As this program is designed to facilitate organizations to come up with concrete solutions for their issues, participating organizations are expected to make due preparation before dispatching their participants to Japan by carrying out the activities of the Preliminary Phase described in section II -9.
- (4) Participating organizations are also expected to make the best use of the results achieved by their participants in Japan by carrying out the activities of the Finalization Phase described in section II -9.

#### **2. Nominee Qualifications**

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

##### **Essential Qualifications**

##### **1) Current Duties:**

- Engineer in charge of planning, design, construction or maintenance and management of urban road in central or local government.
- Person who is able to implement his/her Action Plan after the training course in Japan.

**2) Experience in the relevant field:** have more than five (5) years' practical experience including the field of road management and maintenance.

**3) Educational Background:** be university graduates or persons who have equivalent technical qualifications in this field.

**4) Language:** ideally have a competent command of spoken and written English which is equivalent to TOEFL CBT 200 or more (This program includes active participation in discussions, action plan development, thus requires good competence of English ability. Please attach an official certificate for English ability such as TOEFL, TOEIC etc, if possible).

**5) Health:** must be in good health, both physically and mentally, 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.

#### **3. Required Documents for Application**

**(1) Application Form:** The Application Form is available at the respective country's 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) Nominee's English Score Sheet:** to be submitted with the application form. If

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

**(4) Job Report:** to be submitted with the Application form (Please refer ANNEX).

#### **4. Procedure for Application and Selection :**

##### **(1) Submitting the Application Documents:**

Closing date for application to the JICA Center in JAPAN: **August 3, 2018**

**Note: 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 document(s) through due administrative procedures in the respective government, the respective country's JICA office (or Japanese Embassy) shall conduct screenings, and send the documents to the JICA Hokkaido(Sapporo).. Selection shall be made by the JICA Hokkaido(Sapporo) in consultation with the organizations concerned 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 shall be made by the respective country's JICA office (or Embassy of Japan) to the respective Government by **not later than August 17, 2018.**

#### **5. 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:

(1) **Name:** JICA Hokkaido(Sapporo)

(2) **Contact:** Kimura.Eri@jica.go.jp (Tateyama-Chinatsu@jica.go.jp)

### 2. Implementing Partner:

• **Name:** Sapporo City

URL: <http://www.city.sapporo.jp/city/english/index.html>

### 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:** Term of Insurance: From arrival to departure in Japan. The traveling time outside Japan shall not be covered.

### 4. Accommodation in Japan:

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

JICA Hokkaido(Sapporo) International Center (JICA Hokkaido(Sapporo))

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 "11" is the local area code)

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

JICA Hokkaido (Sapporo) has the 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)

\***ATTENTION:** There are no slippers or towels. Soap, shampoo & conditioner, toothpaste & toothbrush, razor, detergent, sewing kit and CD-R can be purchased at the front desk.

### 5. Recreation

(1) Participants can use an indoor swimming pool and gymnasium located next to JICA Hokkaido. The charges are paid by JICA.

(2) JICA encourages international friendship exchanges between participants and local communities. Therefore, it would be helpful for participants to bring national costumes and materials such as slides, videos, and music cassettes which explain cultures in their countries.

### 6. Expenses:

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

(1) Allowances for accommodation, 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 p. 9-16 of the brochure for participants titled "KENSU-IN GUIDE BOOK," which will be given to the selected participants before (or at the time of) the pre-departure orientation.

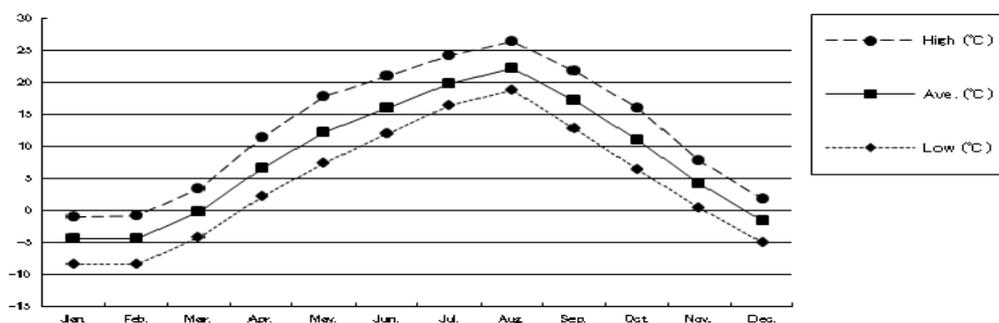
## **7. Pre-departure Orientation:**

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

8. Japanese language program will be offered to the participants in JICA Hokkaido (Sapporo), to facilitate their daily life.
9. Participants who have successfully completed the program in Japan will be awarded a certificate by JICA.
10. 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.

### 11. Climate in Sapporo



	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 (September- October): Long-Sleeves, Thick Jacket, Sweater, Coat, Gloves.

## VI. ANNEX

### Job Report

Participants are requested to prepare a job report on the following issues and submit it with application form to JICA. This Report shall be used for selection of participants.

The report should be prepared in **English** and in the format of **Microsoft Power Point**, since all the participants are expected to make a presentation on it after they arrive in Japan. In addition, since all the reports will be translated into Japanese in advance, your prompt submission of the report will be highly appreciated. Expected contents of the report are given below:

#### 1. Purpose

To introduce, and share information about your situation and issues of road management with lecturers and participants.

#### 2. INSTRUCTIONS:

- 1) Should be written in **English** by using such as Microsoft PowerPoint” etc. Hand writing is unacceptable.
- 2) Should cover **ALL** “Items” below
- 3) Based on the Job Report, **every participant** will have around 10 minutes to give an oral presentation at the beginning of the course.

**NOTE:** It is highly recommendable for participants to send PHOTOS (especially those which clearly show the problems in road conditions). Please be advised to include the detailed “PHOTOS” which clearly show the road condition or relevant materials, which will be highly useful to know the situation of road maintenance in respective country.

#### 1. Personal information

- 1-1 Name
- 1-2 Nationality
- 1-3 Name of Organization
- 1-4 Present post (title, ToR, relevance to the training course)

#### 2. Country Basic Information of Road Maintenance

- 2-1. Matters related to road administration
  - Legal on the road (major legal requirements)
  - Standards of the road (road width, base course, etc.)
  - Road budget (percentage of the cost of new construction projects and maintenance costs)
  - Each ToR of Road maintenance department in Ministry and branch office
  - Exist of the plan for road construction and road maintenance and management
- 2-2. Matters related to road statistics
  - Road extension and percentage of paving (by road type)
  - Volume of major highways and traffic (by vehicle type)

2-3. On the domestic construction industry matters  
-Procurement of construction materials such as asphalt and concrete  
-The level of domestic construction enterprises (concerning construction contracts, the percentage of construction companies in the country including design work / construction and maintenance done by its own domestic construction companies or not such as big construction supported by aid donor)

3. Individual focus

3-1. Issues facing in your organization (Technical or Administrative aspect)

3-2. Expectation to the training program for solving the issues/problems

3-3. Theme which you would like to propose as Action Plan

Note: Please see 'What is Action Plan' below.

※ **What is Action Plan**

**(1) Purpose of Action Plan:**

- ① To analyze and describe problems to be solved.
- ② To identify and elaborate practical and comprehensive activities or what can be done by the participating organizations to solve the problems.

**(2) Contents of Action Plan:**

① **Introduction:**

Please describe the reasons for choosing the subject, and also to tell us which specific information from the training you think is useful for the activities in your AP.

② **Purpose:**

Please describe the purpose of your AP.

③ **Target Group:**

Please describe a group of people or organizations to whom your AP is targeted in order to solve the identified problems.

④ **Expected Output:**

Please describe specifically the output, which is expected to be seen after your AP is fulfilled.

⑤ **Essential Activities:**

Please describe activities that are necessary in order to achieve the expected output mentioned in paragraph 4.

⑥ **Division of Responsibilities:**

Please describe the name of organization or department expected to be in charge of the activities mentioned in 5. If many people or organizations are involved, please don't forget to indicate their relationship.

⑦ **Financial Resources:**

Please identify the budget source for each activity with an estimated figure in US\$ or EUR.

⑧ **Anticipated Inhibitors:**

Please describe potential hurdles that are likely to arise when you carry out the activities of your AP.

⑨ **Schedule:**

Please attach a timetable for the activities mentioned in paragraph 5.

**(3) Presentation of Action Plan**

Towards the end of the training program in Japan, participants have opportunity to present the Action Plan in sharing session. 15-20 minutes are allocated for each participant. This presentation are divided by two parts: the first 10-15 minutes for the presentation and the following 5 minutes for discussion among the participants.

As a medium for presentation, **power-point** is recommended.

## Appendix

<https://www.jica.go.jp/sapporo/english/office/index.html>

Please check our website written by English!

The screenshot shows the JICA website's page for the Hokkaido International Center in Sapporo. At the top left is the JICA logo and the text "Japan International Cooperation Agency". To the right is a search bar with "Google™ Custom Search" and social media sharing icons. Below the search bar is a navigation menu with items: Home, About JICA, News & Features, Countries & Regions, Our Work, Publications, and Investor Relations. The main content area has a breadcrumb trail: Home > About JICA > Organization > Domestic Offices > Hokkaido International Center (Sapporo). The page title is "Hokkaido International Center (Sapporo)". On the left is a sidebar menu with categories: About JICA (Mission Statement, President's Desk), Organization (JICA Headquarters, Overseas Offices), Domestic Offices (Library, ODA and JICA, History), and a "More" link. The main content features a photograph of the building and two text blocks: "JICA Hokkaido International Center (Sapporo) was established in 1996, located in Sapporo City, the largest city in Hokkaido Prefecture. Hokkaido is famous for beautiful nature, fresh foods, snowy winter and indigenous Ainu culture, attracting both domestic and international tourists." and "JICA Hokkaido has a wide variety of training programs such as agriculture, forestry, fisheries, environment, and tourism, receiving approximately 900 participants from developing countries around the world annually."

## ***For Your Reference***

### **JICA and Capacity Development**

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

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

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

### **Japanese Development Experience**

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

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

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

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



***CORRESPONDENCE***

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

**JICA Hokkaido International Center (JICA Hokkaido)**

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

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