

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

GENERAL INFORMATION ON

Comprehensive Engineering on Water Supply Systems (A) 課題別研修「上水道施設技術総合(A)」

# JFY 2017

NO. J17-04072 / ID. 1784474

Course Period in Japan: From May 10th to July 15th, 2017

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.

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# I. Concept

### 1. Program Background:

The U.N. General Assembly declared in 2010 that access to safe drinking water and basic sanitation was a basic human right. However, 780 million people around the world lack access to safe drinking water, and as many as 2.5 billion lack access to improved sanitation facilities. As one of the Millennium Development Goals (MDGs), the international community strived to reduce the proportion of people lacking such access by half. And then, one of the Sustainable Development Goals' (SDGs) targets was set, stating "by 2030, achieve universal and equitable access to safe and affordable drinking water for all".

Many developing countries are still facing the challenges with lack of the human resources for management, operation and designing the water supply systems. As a member of the international community, JICA will be working to accelerate the progress towards improving the situation. In this context, this training program is designed to foster the practical engineers in water supply, mainly on designing.

### 2. For what?

This program helps participants master overall skill and knowledge related to planning, designing, and operation and maintenance for medium — large scale waterworks to secure safe and stable water supply, and to draw the tentative basic plan for water supply facilities, through which participants will resolve problems that respective organizations have encountered after they go back to their country.

#### 3. For whom?

This program is offered to core engineers responsible for water supply planning or designing in a water supply utility, national or local government.

### 4. How?

Participants shall have opportunities in Japan to build up the capacity of planning and designing water supply facilities through lectures, field visits and discussions.

Participants also draw the tentative basic plan for water supply facilities at the end of this course. This plan describes what should be done for the improvement of water supply facilities in their own countries.

# II. Description

# 1. Title (J-No.):

Comprehensive Engineering on Water Supply Systems(A) (J1704072)

### 2. Course Period in JAPAN:

May 10th to July 15th, 2017

# 3. Target Regions or Countries:

AFGHANISTAN, CAMBODIA, IRAQ, MYANMAR, PERU, RWANDA, ZAMBIA

### 4. Eligible / Target Organization:

Departments responsible for water supply planning or designing in a water supply utility, national or local government

# 5. Course Capacity (Upper Limit of Participants):

9 participants

# 6. Language to be Used in This Program:

English

### 7. Course Objective:

This program aims to master overall skill and knowledge related to planning, designing, and operation and maintenance for medium – large scale water supply system to secure safe and stable water supply.

#### 8. Overall Goal:

Safe and affordable drinking water is provided for all by planning and designing water supply works properly as well as resolving administrative issues on water supply system.

# 9. Expected Module Output and Contents:

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

(1) Preparation in participants' home countries (January to May, 2017) Nominees make required preparation for the program in the respective countries.

Modules	Activities			
To identify and define work- related problems on on medium – large scale water supply system beforehand	For all nominees Deadline: 10th March(Fri), 2017	To formulate and submit "Country Report"  *This report will be used as one of the nominees' screening materials.  (*See p.16 and Attachment 1)		
	For accepted participants ONLY Deadline: 11th May(Thu), 2017	To formulate and submit "Country Report" presentation  (*See p.17 and Attachment 2)		

(2) Course in Japan (May 10th to July 15th, 2017)
Participants dispatched by their organizations attend the program in Japan.

### Module1:

Water Source and Water Intake

### Module2:

Water Treatment and Water Quality

### Module3:

**Water Supply System** 

### Module4:

Administration and Management

### Module5:

Basic Plan for Water Supply Facilities

Module1: Water Source and Water Intake				
Contents	Details			
To master skills and knowledge related to water supply plans, water source and water intake	<ul> <li>Conservation and Monitoring of Water Quality</li> <li>Water Pollution of Water Resources</li> <li>Water Quality Control in Japan</li> <li>Automatic Water Quality Monitoring System</li> <li>Water Safety Plan</li> <li>Observation of Dam Site</li> <li>Intake Technology of Underground Water and Surface Water</li> <li>Planning and Design of Water Intake Facilities</li> <li>Biological Filtration Method against Iron, Manganese, Ammonium Nitrogen and Arsenic in Groundwater</li> </ul>			
Module2: Water Tre	atment and Water Quality			
Contents	Details			
To master skills and knowledge related to water treatment and water quality control	<ul> <li>Water Purification Technology and Water Quality Control of Tap Water</li> <li>Water Purification Process</li> <li>Operation and Maintenance of WTP</li> <li>Coagulation and Flocculation process</li> <li>Practice of Jar Test</li> <li>Removal of Pollutants by Chemical Coagulation</li> <li>Advanced Water Purification Technology / Membrane Process Technology</li> <li>Design, Operation and Maintenance of Membrane Filtration Plant</li> <li>Slow Sand Filtration System on WTP</li> </ul>			
Module3: Water Su	oply System			
Contents	Details			
To master skills and knowledge related to water supply system and water leak prevention	<ul> <li>Basic Theory of Pumping Equipment</li> <li>Construction, Operation and Maintenance of Water Supply Facilities</li> <li>Pipe Laying Method</li> <li>Mapping System and Water Asset Management</li> <li>Pipeline Mapping System</li> <li>Countermeasures against Water Leakage</li> <li>Water Leak Detection and Prevention</li> <li>Water Leak Detection Demonstration / Practice</li> <li>Observation of Manufacturing Factory (Pump, Valve, Joint, Pipe)</li> <li>Seismic Method of Water Supply Facilities</li> <li>Pipeline Network Analysis</li> <li>Water Demand Forecasting</li> <li>Hydraulics on Pipelines</li> <li>Basic Planning and Design for Pipeline Network</li> <li>Basic Planning and Design for Water Supply Systems</li> <li>Basic Planning and Design for Water Supply Facilities</li> </ul>			

Module4: Administration and Management			
Contents	Details		
To understand public administration, legal system, business management, tariff system and human resource development in the field of water supply	<ul> <li>Waterworks Management and Tariff System in Japan</li> <li>Water Bill Collection System / Meter Reading System</li> <li>Customer Service / Public Relations</li> <li>Water Supply in Japan / Water Works Law</li> <li>Administrative Improvement by Performance Indicators</li> </ul>		
Module5: Basic Plan for	Water Supply Facilities		
Contents	Details		
Through skills and knowledge from the training, to draw the basic plan for water supply facilities that resolves problems their organizations have encountered, and to share the plan in respective organizations.	<ul> <li>"Country Report" Presentation         (*See p.17 and Attachment 2)</li> <li>Presentation of the basic plan for water supply facilities</li> <li>"Improvement Plan" Presentation (*See p.18)</li> </ul>		

### 10. Planned Schedule:

As shown in the table below, this course includes field trip to Kinki Region (Kyoto, Osaka). The details are as follows.

\* TYPES of each program are as follows: L: Lecture, O: Observation, Prc: Practice, Prs: Presentation, D: Discussion

DATE		TYPE	General Orientation
May 10th	PM		Arrival
N4114-	AM		General Course Briefing
May 11th	PM		Program Orientation
May 12th	AM	L	General Orientation
	PM	L	General Orientation
May 13th		0	General Orientation
May 14th			
May 15th	AM		Opening Ceremony / Welcome Party
	PM	L	JICA's Cooperation for Stable Water Supply / Role of JWWA

May 16+b	AM	Prs	"Country Report" Presentation
May 16th	PM	Prs	"Country Report" Presentation
May 17th	AM	L	Water Supply in Japan
May 17th	PM	L	New Waterworks Vision and Important Waterworks policies
May 19th	AM	L	Water Resources Development
May 18th	PM	L	Japan's Water Environmental Administration
May 10th	AM	Prc	Basic Planning and Design for Pipeline Network
May 19th	PM	0	History of Japanese Water Supply
May 20th			
May 21st			
May 22nd	AM	Prs	City Report by Japanese Observers
May 22nd	PM	0	JWWA's Inspection and Certification Systems
14221	AM	L	Water Intake, Storage, Conveyance, Distribution Facilities and Supply Equipments
May 23rd	PM	L	Water Intake, Storage, Conveyance, Distribution Facilities and Supply Equipments
NA 244	AM	0	Valve Manufacturing Factory
May 24th	PM	0	Valve Manufacturing Factory
M 254	AM	0	Slow Sand Filtration Water Treatment Plant
May 25th	PM	0	Slow Sand Filtration Water Treatment Plant
M 264	AM	0	Water Source
May 26th	PM	0	Intake Weir / Membrane Filtration Plant
May 27th			
May 28th			
May 20th	AM	L	Water Leak Detection and Prevention in Tokyo
May 29th	PM	L	Water Leak Detection Demonstration and Practice
May 20th	AM	L	Customer Service / Tariff System in Japan
May 30th	PM	L	Water Billing Systems / Water Meter Reading
May 21th	AM	L	Current Situation of Water Purification Process in Developing Country and Applicable Technology
May 31th	PM	L	Current Situation of Water Purification Process in Developing Country and Applicable Technology
June 1st	AM	L	Consolidation of Water Treatment Plant
Julie 15t	PM	0	Construction Site of Water Treatment Plant
lune 2nd	AM	L	Pipe Laying Method
June 2nd	PM	0	Open Cut Method Pipe Laying Construction

June 3rd			
June 4th			
June 5th	AM	Prc	Interim Report on Improvement Plan
	PM	Prc	Interim Report on Improvement Plan
June 6th	AM	L	Water Purification process
	PM	L	Water Purification process
June 7th	AM	0	Water Quality Control in Yokohama-city
	PM	Prc	Jar Test (Optimization of Coagulation / Flocculation Process)
	AM	Ĺ	Asset Management System in Yokohama-City
June 8th	PM	L	Mapping System
	AM	L	Small-scale Water Management in Mountainous Area
June 9th	PM	0	Visit to Water Treatment Plant(Membrane Process, Ultraviolet Disinfecton) & Water Storage Facilities
June 10th			
June 11th			
l 124b	AM	L	Sound Management of Urban Water Operator
June 12th	PM	Prc	Discussion with Other Course's Participants
l 12th	AM	L	Water Pollution and Microorganism in Water Resouces
June 13th	PM	L	Management Non-Revenue Water in Developing Countries
1a 1.4th	AM	L	Water Demand Forecasting / Hydraulics on Pipelines
June 14th	PM	L	Water Demand Forecasting / Hydraulics on Pipelines
1 154	AM	L	Water Safety Plan
June 15th	PM	Prc	Water Safety Plan
1 464	AM	L	Ground Water Excavation Technology
June 16th	PM	Prc	Ground Water Excavation Technology
June 17th			Move to Tokyo
June 18th			
June 19th	AM	Prc	Hydraulic calculation of water treatment plant
Julie 19th	PM	Prc	Hydraulic calculation of water treatment plant
June 20th	AM	Prc	Hydraulic calculation of water treatment plant
Julie ZUIII	PM	0	Rapid Sand Filtration Water Treatment Plant
June 21st	AM	L	Basic Theory of Pumping Equipment
June 2131	PM	0	Basic Theory of Pumping Equipment
June 22nd	AM	L	Pipeline Network Analysis
	PM	Prc	Pipeline Network Analysis

June 23rd	AM	L.	Water Demand Forecasting / Hydraulics on Pipelines
Julie 231u	PM	L	Water Demand Forecasting / Hydraulics on Pipelines
June 24th			
June 25th	PM		
June 26th	AM	L	Basic Planning for Water Supply Facilities
	PM	L	Basic Planning for Water Supply Facilities
June 27th	AM	L	Basic Planning and Design for Water Supply Facilities (Mainly Hydraulic calculation)
Julie 27 th	РМ	Prc	Basic Planning and Design for Water Supply Facilities (Mainly Hydraulic calculation)
June 28th	AM	Prc	Basic Planning and Design for Water Supply Facilities
Julie 20th	PM	Prc	Basic Planning and Design for Water Supply Facilities
June 29th	AM	Prc	Basic Planning and Design for Water Supply Facilities
Julie 25th	PM	Prc	Basic Planning and Design for Water Supply Facilities
June 30th	AM	Prc	Basic Planning and Design for Water Supply Facilities
Julie Sotti	PM	Prc	Basic Planning and Design for Water Supply Facilities
July 1st			
July 2nd	PM		Move to Kyoto
July 3rd	AM	L	Water Management Plan and Public Relations of Kyoto City
July Stu	PM	0	Water Quality Monitoring System
July 4+b	AM	0	Polyvinyl Chloride Pipe Manufacturing Factory
July 4th	PM	0	Polyvinyl Chloride Pipe Manufacturing Factory
July E+b	AM	L	Grandwater Treatment Plant with Iron Bacteria
July 5th	PM	0	Grandwater Treatment Plant with Iron Bacteria
	AM	0	Ductile Cast Iron Pipe Manufacturing Factory
July 6th	PM	0	Provision for Earthquake Disaster and Anti-Seismic Construction Method / Advanced Water Treatment
July 7th	AM	0	Joint Manufacturing Factory
July 7th	PM		Move to Tokyo
July 8th			
July 9th	PM		
July 10th	AM	L	Customer serveice/Tariff System in Japan
July 10th	PM	L	Water Billing Systems/ Water Meter Reading
Indu 114	AM	Prc	Exercise on Water Supply Equipment Planning
July 11th	PM	Prc	Exercise on Water Supply Equipment Planning

July 12th	AM	Prc	Drafting "Improvement Plan"
	PM	Prc	Drafting "Improvement Plan"
1 1 421	AM	Prc	Drafting "Improvement Plan"
July 13th	PM	Prc	Drafting "Improvement Plan"
	AM	Prs	"Improvement Plan" Presentation
July 14th	PM		Evaluation Meeting / Closing Ceremony / Farewell Party
July 15th			Departure

# III. Conditions and Procedures for Application

### 1. Expectations for the Applying 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) In this connection, 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.
- **(4)** Applying organizations are also expected to be prepared to make use of knowledge acquired by the nominees for the said purpose.

#### 2. Nominee Qualifications:

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

- (1) be nominated by their government in accordance with the procedure mentioned in III -4,
- (2) be an engineer who is currently or expected to be engaged in the formulation of waterworks plan,
- (3) have more than 3 years of work experience regarding water supply systems (experience in civil engineering are preferred),
- (4) be university graduates from the faculty of engineering such as civil, sanitary, environmental, or have equivalent academic background,
- (5) be fluent in **English** enough to participate discussion and presentation,
- (6) be from 25 to 45 years of age (preferred),
- (7) be in good health (both physically and mentally), enough to participate in the program in Japan (pregnant nominees 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: 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) Nominee's English Score Sheet: to be submitted with Application Form. If you have any official documentation of English ability. (e.g., TOEFL, TOEIC, IELTS)
- (4) Country Report: to be submitted with Application Form. This report will be used as one of the applicants' screening materials. (\*See "V. Annex")

# 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 (or the Embassy of Japan) will send them to the JICA Center in JAPAN by 10<sup>th</sup> March(Fri), 2017

### (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. The applying organization with the best intention to utilize the opportunity of this program will be highly valued in the selection. Qualifications of nominees 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 <u>31<sup>st</sup> March(Fri)</u>, <u>2017</u>.

### 5. Document(s) to be Prepared by Accepted Participants:

The accepted applicants are expected to bring **USB to submit their "Country Report" Presentations** (Power Points etc.) since participants do presentations regarding "Country Report" at the beginning of the course in Japan. Each participant has about 20 minutes for the presentation including Q&A session.

(\*See "V Annex")

### 6. Conditions for Attendance:

The accepted applicants are required;

- (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 Tokyo International Center (JICA Tokyo)

(2) Contact: Mr.ISHIMARU Hiroki and Ms.SHIMADA Emiko (tictee@jica.go.jp)

### 2. Implementing Partner:

(1) Name: Japan Water Works Association (JWWA)

(2) URL: <a href="http://www.jwwa.or.jp/">http://www.jwwa.or.jp/</a>

(3) Remark: The JWWA is a nonprofit integrated organization consisting of memberships such as public water supply utilities, private companies, consultants, researchers and individuals related to this field in order to contribute to stable water supply as well as to promote sound waterworks development. Founded in 1904, JWWA is one of the largest organizations of water supply professionals in the world.

### 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 International 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)

Please refer to facility guide of JICA Tokyo at its URL:

http://www.jica.go.jp/english/about/organization/domestic/c8h0vm0000023sgf-att/tookyo facilities.pdf

- \* If there is no vacancy at <u>JICA Tokyo</u>, JICA will arrange alternative accommodations for the participants.
- \* The course includes field trips outside Tokyo in Japan. JICA will arrange hotels for the participants.

### 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 field trips (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 <u>not</u> included)
- (4) Expenses for program implementation, including materials
- \* Rain gears, clothes, pen-and-pencil set and camera will not be provided to participants. PC can be rented.
- \* For more details, please see the brochure for participants titled "KENSHU-IN GUIDE BOOK" (III. ALLOWANCES), which will be given before the departure.

### 6. Pre-departure Orientation:

A pre-departure orientation will be held at the respective countries' JICA offices or Embassies of Japan to provide participants with details on travel to Japan, conditions of the workshop, and other matters.

# V. Annex

# «For ALL Nominees - With Application Form»

- by 10th March(Fri), 2017

### 1. Country Report:

### (1) What is "Country Report"?

All nominees are required to submit "Country Report" with Application Form to the respective countries' JICA offices (or Embassies of Japan). This report will be used as one of the applicants' screening materials.

### (2) Why do we need "Country Report"?

The role of "Country Report" is to share the present issues of medium - large scale water supply system related to participants' organization with other participants and lecturers. Moreover, "Country Report" is supposed to assist Course Organizer, Implementing Partner and other lecturers to know about the details of participants' professional careers, present challenges and expectation toward the program.

# (3) Contents of "Country Report"

"Country Report" should be typewritten in English on A4 size paper. It is highly recommended to include graphs, figures and maps in your report.

Content includes Introduction, Country Information, Organizational Framework and Job Description, Water Supply, Customer Service, Water Billing, Relevant Laws and Regulations, Master Plan, Foreign Assistance, Priority Needs and Expectation toward the Program.

### (4) Form of "Country Report"

Please use "Attachment 1: Country Report"

# «For Accepted Participants-After receiving Acceptance Notification»

- by 11th May(Thu), 2017

# 2. Country Report Presentation:

### (1) What is "Country Report Presentation"?

The accepted applicants are expected to <u>bring USB to submit their "Country Report Presentation"</u> (Attachment 2) since participants do presentations regarding "Country Report" at the beginning of the course in Japan. <u>JICA will collect your "Country Report Presentation" in the Program Orientation on the 11<sup>th</sup> May(Thu).</u>

Each participant has about 20 minutes for the presentation including Q&A session.

### (2) Requirements of "Country Report Presentation"

In the presentation, please briefly explain the background information on your country, your organization and your job. Please put your emphasis on the problems your organization is facing, and possible solutions for that. And it is recommended to include photos, graphs, maps and statistic information to promote understandings and discussions among lecturers and participants.

# (3) Form of "Country Report Presentation"

Please use "Attachment 2: Country Report Presentation"

# «For Accepted participants - At the end of the program in Japan»

### 3. Improvement Plan:

### (1) What is "Improvement Plan"?

By the end of the training course in Japan, all participants are required to formulate "Improvement Plan". The plan should focus on something you may carry out upon return to your organization. Also it should be referred to the knowledge and skill which you have gained during this course. Therefore, "Improvement Plan" should be both concrete and practical. Participants are expected to make the plan by using the existing human and financial resources in your organization in the most efficient and effective way.

# (2) Why do we need "Improvement Plan"?

The role of "Improvement Plan" is to apply the gained knowledge from the course to your own actual situation upon return to your country. The preparing process itself will help you turn your ideas into feasible actions to improve the current situation.

### (3) Contents of "Improvement Plan"

"Improvement Plan" should focus on how to address challenges and to set one specific goal. The detail of how to formulate the "Improvement Plan" will be explained during the course. And the final version of the "Improvement Plan" will be elaborated through discussions with other overseas participants and Japanese experts during the program in Japan.

### (4) Form of "Improvement Plan"

More details are announced after the course in Japan starts.

### 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:

JICA Tokyo International Center (JICA TOKYO) Address: 2-49-5 Nishihara, Shibuya-ku, Tokyo 151-0066, Japan

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