

Knowledge Co-Creation Program (Group & Region Focus)

GENERAL INFORMATION ON

Executive Seminar for Grid Operators 課題別研修「系統運用事業者幹部職員研修」 JFY 2017

NO. J17-04295 / ID. 1784591 Course Period in Japan: From October 4th, 2017 to October 28th, 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 was released from the Japanese Cabinet in 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

Our everyday lives depend on reliable and affordable energy supply to develop equitably. A stable power supply system supports all sectors and has close relation to human and economic development. It is one of the United Nations' Sustainable Development Goals to ensure universal access to affordable, reliable and modern energy services.

Some countries in Asia and Africa still have been suffering from chronic shortage of power supply and frequent blackout due to their inefficient power system. Situation in power generation recently has been somehow improved in other developing countries, together with IPP by private investment. Yet even in some countries where power is generated enough, quality and stable power supply is still a serious issue, due to the low quality of power transmission, transformation, and distribution system. These sectors have a large room to develop further.

Japan has developed stable power supply system and networks to support its economic and human development, with continuous effort to realize high-level efficiency and cleanliness. This Program is designed for managers of the grid operating companies and related governmental organizations to deepen their knowledge on power system engineering and related technology in Japan. It also aims at building networks among such key players in power sectors, including Japanese power companies, in order to achieve effective and stable power supply in their respective countries.

For what?

This program offers managers from grid operators/governmental organizations a chance to strengthen their knowledge on Japanese practice in power grid operations and manufacturers, so that they would able to achieve appropriate planning and operation of the grid.

For whom?

This program is offered to the management level personnel (eg. department head of each section) in national grid operators and related governmental organizations.

How?

Participants shall have opportunities to study Japanese power systems through lectures and observation to Japanese Power Company's operation and manufacturers' technologies. They also have sharing session to discuss their own issues on grid operation.

II. Description

1. Title (J-No.):

Executive Seminar for Grid Operators (J17-04295)

2. Course Period in JAPAN October 4 to October 28, 2017

3. Target Regions or Countries

Iraq, Indonesia, Cambodia, Sierra Leone, Nigeria, Nepal, Pakistan, Papua New Guinea, Bangladesh, Philippines, Brazil, Myanmar, Morocco, Rwanda, South Africa, Mongolia

4. Eligible / Target Organization

This program is designed for national grid operators or equivalent governmental organizations in power sector.

- 5. Course Capacity (Upper limit of Participants) 17 participants
- 6. Language to be used in this program: English

7. Course Objective:

The action plan for appropriate planning and operation of power grid is created utilizing knowledge acquired through this program, and it is shared and carried out in participants' organization.

8. Overall Goal

Electric power supply and its quality will be improved in in each country.

9. Expected Module Output and Contents:

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

Expected Module Output	Subjects/Agendas	Methodology
To clarify issues and opportunities concerning the power system in home country.	Inception Report Presentation (using Microsoft Power Point) and discussion	Presentation and Discussion
To be able to share the knowledge on the grid system and operation practices in Japan.	Overview of system operation in Japan, including power system reform	Lecture Field visit

To be able to share the knowledge and technology of power system planning.	 (1) System planning (eg. transition of power system expansion in electric company) (2) Function of engineering department and system operation department. Allocation of roles between utility company and contractor 	Lecture Field visit
To be able to share the knowledge and technology of power system operation.	 (1) System reliability (eg. supply-demand control, voltage regulation, mitigation of cascading blackout, trans-regional operation) (2) Role of power system division and affiliated company in power system operation and maintenance (3) Challenges and opportunities on interconnection of renewable energy. 	Lecture Field visit
(1) System reliability (eg. supply-demand control, voltage regulation, mitigation of cascading blackout, trans-regional operation)To be able to share the knowledge and technology of(2) Quality Control of equipment (3) Quality Control of power transmission facilities		Lecture Field visit
To formulate * Action Plan formulation on planning, designing, operation and	(1) Guidance & workshop for creating the Action Plan	Workshop
maintenance of power system in each home country	(2) Presentation of the Action Plan	Presentation and Discussion

*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 his/her country.

<Structure of the program>

Topic Outline (Subject to minor changes)

1st week (Oct. 5 – 6)

- Program Orientation
- Lecture on Outline of Electric Power Industry in Japan
- Presentation of Inception Report

2nd week (Oct. 10 – 13)

- Lectures on Japanese Power Grid System Planning and Operation Japanese Power Company.
- Observation of Load Dispatching and Control Center, Substation of Japanese power company
- > Courtesy call and discussion with JICA head quarter and JEPIC.

3rd week (Oct. 16 – 20)

- Lecture on the total quality management (TQM) in Japan
- Observation of Japanese manufacturers (Low Electrical Power Loss Type Conductor, Adjustable Speed Pump for pumped storage power plant, etc.)

4th week (Oct. 23 – 27)

- Observation of Japanese manufacturers (insulator, SCADA, protection relay, etc.)
- Observation of power plants
- Opinion Exchange and Presentation of Action Plan

III. Conditions and Procedures for Application

1. Expectations for the Participating Organizations:

- (1) This program is designed primarily for organizations that are willing to address specific issues or problems identified in their operation. Participating organizations are expected to utilize 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.

2. Nominee Qualifications:

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

(1) Essential Qualifications:

1) Current Duties: Executives or management level (eg. department head of each section) in national grid operators or relevant governmental organizations.

2) Experience in the relevant field: Have <u>at least 15 years of experience</u> in the field of grid operation.

3) Educational Background: Graduates of engineering faculty of university or equivalent.

4) Language: Smooth communication in English.

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:

1) Age: Between the ages of forty (40) and fifty-five (55) 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) Country Reports (VI ANNEX): To be submitted with the Application Form. Typewritten in English in double spacing (about 6 to 9 pages of A-4 size). The latest annual report published by the applicant's organization should also be attached, only if and when available in English.

** Notes: Applicants are strongly expected to typewrite the documents. There are many applications disqualified from the selection because of the illegible letter in those documents.

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** <u>August 4, 2017.</u>)

(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 <u>August 25, 2017.</u>**

5. Document(s) to be submitted by accepted participants:

(1) **Inception Report** should be sent to JICA Kansai International Center via e-mail (ksictp1@jica.go.jp cc with Oi.Yoshiko@jica.go.jp) by **September 20**, **2017.** The Report should be prepared using the Microsoft Power Point and consists of the following points. (Detailed information is provided in VII ANNEX.)

- 1. Outline of your country (Statistical Data)
- 2. The organization of the electric power sector Role of your organization and your duty
- 3. Current situation of electric power and distribution facilities (Summary the information in the Country Report)
- 4. Present issues and the causes in electric power distribution
- 5. Measures and plan to tackle those issues and problem
- 6. Your target/expectation to attend this Program in Japan

Note: Presentation: Each participant will have a chance to give a presentation by summarizing the Inception Report just after arriving in Japan to help Japanese lecturers and other participants understand the issues in participants' country and their needs. Each participant will be given about 20 minutes (15 minutes presentation by participants and 5 minutes discussion). The visual items such as pictures in presentation are recommended.

(2) **Action Plan:** The participants are to formulate the Action Plan during the the program and will present it in the end of the program in Japan. Guidance and workshops are organized during the program in order to assist the participants to create the Action Plan.

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 program expenditure depending on the severity of said violation, and
- (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 Kansai

(2) Contact: ksictp1@jica.go.jp and Oi.Yoshiko@jica.go.jp

2. Implementing Partner:

- (1) Name: Japan Electric Power Information Center, Inc. (JEPIC)
- (2) URL: <u>http://www.jepic.or.jp</u>

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 Kansai

Address: 1-5-2, Wakinohama-kaigandori, Chuo-ku, Kobe, Hyogo 651-0073, Japan

TEL: 81-78-261-0397 FAX: 81-78-261-0465

(where "81" is the country code for Japan, and "78" is the local area code)

If there is no vacancy at <u>JICA Kansai</u>, JICA will arrange alternative accommodations for the participants. Please refer to facility guide of JICA Kansai at its URL, https://www.jica.go.jp/kansai/english/office/index.html

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 <u>not</u> included), and
- (4) Expenses for program implementation, including materials.

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

6. Pre-departure Orientation:

A pre-departure orientation will be held at the respective country's JICA office, to provide participants with details on travel to Japan, conditions of the participation in the program, and other matters.

V. Other Information

- 1. Participants who have successfully completed the program will be awarded a certificate by JICA.
- 2. For the promotion of mutual friendship, JICA Kansai encourages international exchange between JICA participants and local communities, including school and university students as a part of development education program. JICA participants are expected to contribute by attending such activities and will possibly be asked to make presentations on the society, economy and culture of their home country.
- 3. Participants are recommended to bring laptop computers for your convenience, if possible. During the program, participants may be asked to fill in some format by using computers. Most of the accommodations have internet access. Also, there is a computer room in JICA Kansai where 14 desk-top computers are available with internet access. (Note: Some of the sites for field visit may not have internet access.)
- 4. Allowances, such as for accommodation, living, clothing, and shipping, will be deposited to your temporary bank account (opened by JICA) 2 to 5 days after your arrival in Japan. It is highly advised to bring some cash / traveler's check in order to cover necessary expense for this period.
- 5. It is very important that your currency must be exchanged to Japanese Yen at any transit airport or Kansai International Airport (KIX) in Osaka, Japan soon after your arrival. It is quite difficult to exchange money after that, due to limited availability of facility or time during the program.



Country Report

Information and Data on Basic Energy and Power of your Country

<u>All applicants</u> are expected to fill the form and submit it <u>with the Application</u> <u>Form</u> to JICA office in your country by <u>August 4th, 2017.</u>

Country:

Name:

1. Utility

(a) Major Electric Power Utilities(Public or Private)

(b) System of Electric Power Utilities

Situation of deregulation

Situation of unbundling the transmission and distribution sectors

- 2. Availability of Energy Resources
- (a) Reserve of fossil energy (if endowed) in Year 20?? (Specify the year of data)

Fossil Energy	Estimated Amount of Reserve	Unit
Coal		Ton
Oil		Barrel
Natural Gas		m ³

(b) Potential of Renewable Energy

Forms of Renewable Energy	Estimated Amount of Potential	Unit
Biomass in Year 20??		_ 3
(Specify the year of data)		Ton or m ³
Hydropower in Year 20??		
(Specify the year of data)		MW

Form of Renewable Energy	Annual Average Irradiation	Unit
Photovoltaic		kWh/m²/day

Form of Renewable Energy	Annual Average Wind Speed with Specific Site Names (Please select several representative sites)	Unit
Wind Power		meter/Second

3. Annual Production of Fossil Energy (if produced)

Forms of Fossil	Amount of Annual	Year of	Unit
Energy	Production	Production	
Coal			Ton
Oil			Barrel
Natural Gas			m ³

4. Primary Energy Supply¹ by Forms of Energy in Year 20?? (Specify the year of data)

Unit: Joule or specify unit

	Forms of Energy	Primary Energy Supplied	Percentage
Fossil	Coal		
Energy	Oil		
	Natural Gas		

¹ Primary energy is the energy that exists in nature without processing for or converting to secondary energy. Primary energy can be divided into three categories, fossil energy, natural energy and nuclear energy. Primary energy supply is the total amount of energy supplied to a nation.

	Sub-Total	
	Hydro	
Natural Energy	Biomass	
	Solar	
	Wind	
	Geothermal	
	Sub-Total	
	Nuclear	
	Total	100 %

5. Final Energy Consumption² by Sectors in Year 20?? (Specify the year of data)

	Offit. Solie of specify drift		
Sectors	Final Energy Consumption	Percentage	
Industry Sector			
Social and Household Sector			
Transportation Sector			
Total		100 %	

Unit: Joule or specify unit

² Final energy consumption is a total amount of energy actuary consumed by the industry sector, the social and household sector, and the transportation sector in a nation as the form of primary energy, or the form of secondary energy that was converted or processed from primary energy. Secondary energy includes petroleum products such as petrol and kerosene, and electricity generated by thermal power.

6. Installed Capacity of Power Generation Facilities (National Grid Connected) in a year of 20?? (Specify the year)

Generation Facilities	Installed	Share
	Capacity (MW	(%)
	or kW)	
Hydropower ³ in Total		
Conventional Hydropower over 10 MW		
Small Hydropower between 10 MW and 1 MW		
Mini Hydropower between 999 kW and 100 kW		
Micro Hydropower less than 99kW		
Thermal Power in Total		
Diesel Power		
Coal fired Steam Turbine		
Oil fired Steam Turbine		
Gas fired Steam Turbine		
Gas Turbine (Single Cycle)		
Gas Turbine (Combined Cycle)		
Renewable Energy except for hydropower in Total		
Grid connected Photovoltaic Systems		
Grid connected Wind Power		
Grid connected Biomass Generation		
Other forms of grid connected renewable energy (Please specify)		
Overall Total		

Generating Capacity per Capita (kW/Capita)

 Electricity Generated by Grid Connected Generation Facilities in Year 20?? (Specify the year of data)

Generation Facilities	Electricity Generated (MWh)	Share (%)
Hydropower		
Thermal Power		
Renewable Energy except for		
Hydropower		
Total		100 %

 $^{^3}$ Different countries use different definition to categorize hydropower. If your county has its own definition, you can use it and specify the definition in the table.

8. Electricity Consumed by Sectors in Year 20?? (Specify the year of data)

Sectors	Electricity Consumed (MWh)	Percentage (%)
General Household		
Commercial		
Industry		
Agriculture		
Government		
Total		100 %

Sales per Capita	(kWh/Capita)	
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- 9. Structure of Power System Supervision and Control
- (a) Frequency Control

Centralized Operation at CLDC (Central Load Dispatching Center) or Not?

(b) Power System Control

Supervised voltage level and Control center supervising

(c) Manufacturer of SCADA System

10. Combined Power System Losses in Year 20?? (Specify the year of data)

MWh
MWh
MWh
%
MWh
MWh
%

- 11. Conceptual diagram of power flow from generating facilities to the customers
- (a) Classification of Voltage for Interconnection (Transmission and Distribution)
- (b) Transmission Line Route Length (km)

200kV or over	
Under	
total	

(c) Distribution Line Route Length (km)

High Voltage	
Low Voltage	
total	

12. Household Electrification Rate

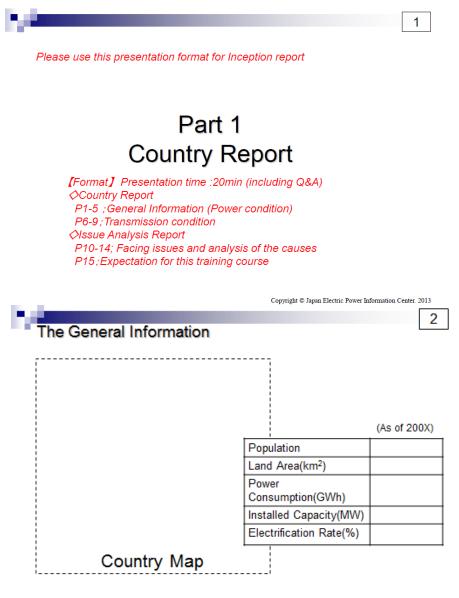
National Average of Household Electrification Rate (=Connected Households / Total Number of Households)	%
Rural Electrification Rate (=Connected Households in Rural Area / Total Number of Households in Rural Area)	%
Urban Electrification Rate (=Connected Households in Urban Area / Total Number of Households in Urban Area)	%



Inception Report

<u>Accepted participants</u> are requested to prepare an Inception Report, referring to the following format (Microsoft Power Point) as an example. The Report should be sent to JICA Kansai International Center via e-mail (ksictp1@jica.go.jp cc with <u>Oi.Yoshiko@jica.go.jp</u>) by <u>September 20, 2017</u>. Please make sure you meet the deadline, as the information in your report is valuable for the resource persons to adjust their lecture contents in advance.

NOTE: Participants in this program are requested to make a presentation on their inception report for about 20 minutes at the beginning of Core Phase in Japan.



Source: Google Map

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Power Su	ppiy Cysi	enn oom	party nan	ie, orga	
					lization
Generation					
					
Transmission					
Distribution					
Distribution					
Customers					
Installed	Conceitre	DewerCe			
					(As of 2
nstalled Capa			Power_Cor	sumptions	5_(GVVD)
(0				(O	2
(G	iraph)			(Graph	U
Total;	Ν	1	Total		GW
		······································			
nstalled Capacity	Hydro	Thermal	Nuclear	Others	Total
MWO	De side stiel	Communial	Industrial	045	
	Residential	Commercial	Industnal	Others	Total
ower Consumption	1				
Power Consumption GWh)			Copyrig	ht O Japan Electric P	ower Information
Power Consumption (GWh)			Copyrig	ht O Japan Electric P	ower Information
Power Consumption (GWh)	tions, Pov	ver Grid	Copyrig	át O Japan Electric P	ower Information
GWh)	tions, Pov	ver Grid	Copyrig	dot O Japan Electric P	ower Information
(GWh)	tions, Pov	ver Grid	Copyrig	ht O Japan Electric P	ower Information
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Outline of Distribution System (Overhead) 0 HV Line Voltage; 66kV, 157kV, 275kV, 500kV **①HV** Line Transformer (Urban) 30MVA x 3 1 (Rural) 10MVA~20MVA x 3 Distribution Substation Voltage; 6.6kV, 22kV Ø MV Line Isolated Neutral System 1.Transformer 2 Relay OCR (Over Current Relay) DGR (Directional Ground Fault Relay) 2.Relay 3 Pole Concrete, Steel, Wooden Wire AI, Cu (Insulated) 2 MV Line 3. Wire, Switch, Pole Switches Type; AS(Air), VS(Vacuum) Operation; Automatic, Manual 4.Transformer 4 LV Line Voltage;100V, 100/200V, **③LV** Line 10, 30, 50, 75, 100 (kVA) Transformer 4 5 Meter Mechanical, Electrical, (Smart meter) 5.Watt Hour Meter 6 Supply 1q3w 200/100V, 1q2w 100V, System 303w 200V △6.Customer Copyright © Japan Electric Power Information Center, 2013

Transmission Facilities (Pictures)

Equipment	I	lumber
Tower		units
Circuit Length	000 <mark>kV</mark>	circuit-km
Lengui	000 <mark>kV</mark>	circuit-km
	000 <mark>kV</mark>	circuit-km
Transformer	000 KV	MVA
	000KV	MVA
	000kV	MVA

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Transmission Loss

(1) Historical Data

Year	FY2007	FY2008	FY2009	FY2010	FY2011
Distribution Loss (%)					

(2)Detail of Loss

Technical · approx. % Non Technical ... approx. %

(3)Measure for Loss Reduction

6

2 M -				9
Reli	ability (SAIDI	SAIFI), Caus	e of Power Fa	ailure
		FY2010	FY2011	FY2012
	SAIDI ^{%1}			
	SAIFI ^{%2}			
Total n	umber of failures			
Cause	Lightning			
	Tree contact			
	Bird and Beast			
	Wind/ Rainstorm			
	Old facilities			
	Human Caused			
	Unknown			
	Others			
	1 System Average Inte 2 System Average Inte		ex (times/year · custom	
λ÷.				10

Part 2 Issue Analysis Report

 Image: Copyright © Japan Electric Power Information Center. 2013

 Facing Issues (1)

 Organization
 AA Engineer. OO Dept. XXX Electric Power Company

 Current
 1. • • •

 Duties
 2. • • •

 3. • • •

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Facing Issues (1)

Ъ÷

lssue No.1	High Transmission Loss (Example)
Cause	1. ••• 2. ••• 3. •••
Counterm easure	1. ••• 2. ••• 3. •••

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Facing Issues (2)

lssue No.2	Power Quality (Example) • Low Voltage at HV customers • Voltage fluctuation
Cause	1. ••• 2. ••• 3. •••
Counterm easure	1. ••• 2. ••• 3. •••

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Facing Issues (3)

lssue No.3	Human Accident (Example).
Cause	1. ••• 2. ••• 3. •••
Counterm easure	1. ••• 2. ••• 3. •••

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de la		•	15
Exp	ectation for t	his Training Course	
No.	Topic	Detail	
1			
2			
0			
3			

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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, Knowledge Co-Creation programs (until 2015, so called "training"), JOCV programs, etc.

Within this wide range of programs, Knowledge Co-Creation 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 Embassy of Japan. Further, address correspondence to:

JICA Kansai International Center (JICA Kansai)

Address: 1-5-2, Wakinohama-kaigandori, Chuo-ku, Kobe, Hyogo 651-0073, Japan TEL: +81-78-261-0397 FAX: +81-78-261-0465