

No.12040/41/2013-FTC (Trg.)
Government of India
Ministry of Personnel, Personnel Grievances and Pensions
Department of Personnel and Training
[Training Division]

Block-4, Old JNU Campus
New Mehrauli Road, New Delhi-67
Dated July 12, 2013

TRAINING CIRCULAR

Subject: Group Training Course in 'Maintenance and Quality Management of Digital Studio Broadcast Equipment for Stable & Long-Life Operation' to be held in Japan.

The undersigned is directed to state that the Japan International Cooperation Agency (JICA) has invited applications for the above mentioned training programme to be held in Japan from October 20 to November 23, 2013 under the Technical Cooperation Programme of the Government of Japan.

2. The programme aims to solve the problems; TV stations are facing, by improving their management techniques for the maintenance of digital broadcasting equipment.
3. The program is offered to Broadcasting Organizations and related Governmental Organizations. The nominees for this course should be an Engineer working at Governmental or Government related TV Broadcasting Organizations, who are in a position of leader of section or equivalent rank; be university graduate or persons with an equivalent technical knowledge of Electronic Engineering and fundamental knowledge about digital engineering theory; have basic operation skills of computer including the use of Work, Excel, and other software; be under the age of forty (40) years; be fluent in spoken and written English; be in good health (both physically and mentally), not be a part of military service.
4. In addition, the following information in respect of the nominated officers may please be mentioned while furnishing the nomination:-
 - a) Whether attended any foreign training programme in the past? If so, the duration/detail thereof;
 - b) Whether cleared from vigilance angle;
 - c) Age;
 - d) Whether working in North East State/J&K;
 - e) A brief in 50-100 words justifying the nomination.
5. The course covers the cost of a round-trip air ticket between international airport designated by JICA and Japan; travel insurance from the time of arrival in Japan to departure from Japan; allowances for (accommodation, living expenses, outfit and shipping); expenses for JICA study tours and free medical care for participants who may fall ill after reaching Japan (costs relating to pre-existing illness, pregnancy, or dental treatment are not included).
6. It is therefore requested that the nomination of suitable candidates may please be forwarded **(in duplicate)** in JICA's prescribed form (available in **persmin.nic.in→DOPT→Training Wing→Circular→JICA**) to this Department duly authenticated by the HOD of the concerned department in accordance with the eligibility criteria.

...2/-

7. The applications should reach this Department through the Administrative Ministry/State Government not later than **July 31, 2013**. Nominations received after the prescribed date will not be considered. The details of the programme may be drawn from Ministry of Personnel, Public Grievances and Pensions' website (persmin.nic.in).


(N.K. Wadhwa)

Under Secretary to the Government of India
Tele.No.011-26165682

Copy to:

- a) The Secretary, M/o Information and Broadcasting, Shastri Bhawan, New Delhi-110001
- b) All State Governments/Union Territories(with request to circulate the same amongst their related Departments/Organizations),
- c) NIC with request to post the circular along with the JICA's circular on this Department's website.



TRAINING AND DIALOGUE PROGRAMS

**GENERAL INFORMATION ON
MAINTENANCE AND QUALITY MANAGEMENT OF DIGITAL
STUDIO BROADCAST EQUIPMENT FOR STABLE
& LONG-LIFE OPERATION**

**集団研修「スタジオ放送機器の長期に渡る安定運用のための品質
及び保守管理技術」**

JFY 2013

NO. J13-00889 ID: 1380116

From September 2013 to December 2013

Phase in Japan: From October 20, 2013 to November 23, 2013

This information pertains to one of the Training and Dialogue Programs 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.

I. Concept

Background

Television broadcasting is an efficient and inexpensive method of communicating information equally far and wide. In particular, television broadcasting is used to spread knowledge and promote enlightenment regarding education, health and sanitation, the environment, peace building, and democratization in developing countries. The visual aspect of television broadcasting shows great promise as an effective means of conveying information in regions with a low literacy rate.

The current major trend in television broadcasting around the world is the conversion to terrestrial digital broadcasting. Digital broadcasting is also making progress in developing countries, as the transition from analog to digital broadcasting equipment moves forward. The switch to digital broadcasting equipment in developed countries means an eventual end to the production and distribution of analog broadcasting equipment, which have been primarily manufactured and sold by developed countries. Therefore, the introduction of digital broadcasting equipment in developing countries will continue to expand.

However, a lingering concern is the construction and strengthening of regular maintenance systems to ensure the continued stable operation of broadcasting equipment. There is an increase in demand for technical training in operation, maintenance, and management methods for such equipment, including preventive maintenance as well as measures against failure in the digital broadcasting equipment that is introduced. Further, since the switch to digital equipment cannot be performed immediately for all broadcasting equipment, it will be necessary to maintain the existing analog equipment until a complete conversion is possible, during which time spare parts for analog equipment will become increasingly rare and hard to obtain.

For these reasons, systematic studying of maintenance methods and the know-how that we can provide regarding the switching and operation of broadcasting equipment in Japan, which has successfully made the transition to digital, will be extremely useful for the conversion from analog to digital in developing countries. Such information will assist in the stable operation of broadcasting equipment and therefore the stable operation of television broadcasting.

For what?

This program aims to solve the problems TV stations are facing by improving their management techniques for the maintenance of digital broadcasting equipment.

For whom?

This program is offered to broadcasting organizations and related governmental organizations.

II. Description

1. **Title (J-No.):** MAINTENANCE AND QUALITY MANAGEMENT OF DIGITAL STUDIO BROADCAST EQUIPMENT FOR STABLE & LONG-LIFE OPERATION (J12-00843)

2. **Period of program:**
Duration of whole program: September 2013 to December 2013
Preliminary Phase: September 21, 2013 to October 20, 2013
(in the participant's home country)
Core Phase in Japan: October 20, 2013 to November 23, 2013
Finalization Phase: November 24, 2013 to December 24, 2013
(in the participant's home country)

3. **Target Countries:**
Afghanistan, Djibouti, India, Myanmar, Papua New Guinea, Solomon Islands, South Sudan, Sri Lanka, Tonga and Uruguay

4. **Overall Goal**
To improve the education and living standard of people in developing countries by providing educational programs and sharing information through stable digital broadcasting with multi-functional services.

5. **Objective**
Systematic and effective implementation of maintenance and quality management of digital studio broadcasting equipment in TV broadcasting stations in developing countries

I To achieve this program objective, participants are expected in Japan:

(1) To understand the concept of quality management of broadcast studio equipment systems,
(2) To understand the outline of broadcast VTR and tapeless players/recorders to be able to service them periodically with the use of service manuals, and
(3) To understand the broadcasting equipment management system by using the dedicated software (Maintenance Management Program).
*”Maintenance Management Program” is available on only Windows.

II In participants' home country:
(4) To share with the organization the **Action Plan** (the quality control method for broadcasting equipment systems) made by the participant and hold discussions towards realization and implementation **as a Final report.**

6. **Eligible / Target Organization**
This program is offered to broadcasting organizations and related governmental organizations.

7. Total Number of Participants: 16

8. Language to be used in this project: English

9. Contents

The program consists of the following components:

(1) Preliminary Phase in participant's home country (September 21, 2013 to October 20, 2013) <i>Participants make required preparation for the Program in their respective countries.</i>	
Modules	Activities
Inception Report	Formulation and submission of Inception Report.

(2) Core Phase in Japan (October 20, 2013 to November 23, 2013) <i>Participants attend the Program implemented in Japan.</i>		
Module		
Output	Program/Details	Method of Guidance
(1) To understand the concept of quality management of broadcast studio equipment systems	Quality management of broadcast studio equipment systems	Lecture
	Measurement of digital video signals	Lecture Practice
	Visit a broadcast station	Observation
	Visit a broadcast equipment manufacturer	Observation
	Inter-BEE 2013 (Exhibition of International Broadcasting Equipment)	Observation
(2) To understand the outline of broadcast VTR and tapeless players/recorders to be able to service them periodically with the use of service manuals	Basics of video signals	Lecture
	Basic theory and format of VTR Theory of digital signal process and compression	Lecture
	Digital VTR theory	Lecture
	Utilization of service manuals	Lecture
	How to use periodic maintenance tools and measurement devices	Practice

	Practice of parts replacement and adjustment for periodic maintenance of VTR	Practice
	Overview of tapeless recording equipment and maintenance practice	Lecture Practice
(3) To understand the broadcasting equipment management system by using the dedicated software (Maintenance Management Program)	How to make a budget plan for periodic maintenance	Lecture Practice
	Order lead time and stock management of service parts	Lecture Practice
	How to accumulate know-how for repair and maintenance of broadcast equipment	Lecture Practice
	Operation and practice of maintenance management software for equipment and parts management	Observation Lecture Practice

Note: This content is subject to minor changes.

(3) Finalization Phase in participant's home country

(November 24, 2013 to December 24, 2013)

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

Output	Program/Details	
(4) To share with the organization the Action Plan (the quality control method for broadcasting equipment systems) made by the participant and hold discussions towards realization and implementation as a Final report	Action Plan made by the participant is shared in the organization and discussed towards realization and implementation. Creation and submission of a Final Report to JICA Tokyo is required.	

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 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 program to meet the specific requirements of applying organizations and effectively facilitate them toward solutions for their 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.

- (1) Present position, assignment:
Engineers, working at Governmental or Government-related TV broadcasting organizations, who are in a position of leader of section or equivalent rank.
- (2) Occupational Background:
Engineer with practical experience and skill as a broadcast content creation engineer, or a person in charge of the quality or maintenance management of TV broadcast equipment
- (3) Academic Record:
College or university graduates, or persons with an equivalent technical knowledge of electronic engineering and fundamental knowledge about digital engineering theory.
- (4) Computer skill:
Basic PC operation skills, including the use of Word, Excel, and other software
- (5) Age: Under forty (40) years of age, in principle
- (6) Language: Proficiency in spoken and written English
- (7) Health:
Must be in good health, both physically and mentally, to participate in the Program in Japan
- (8) Other prerequisites:
Must not be serving in any form of military services

3. Required Documents for Application

(1) **Nomination Form (Application Form):** The Application Form is available at the respective country's JICA office or the Embassy of Japan.

*Pregnancy

Pregnant participants are strictly requested to attach the following documents in order to minimize the risk for their health.

① letter of the participant's consent to bear economic and physical risks

② letter of consent from the participant's supervisor

③ doctor's letter with agreement of his/her training participation.

Please ask National Staffs in JICA office for the details.

(2) Job Report (Annex 1)

(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), please attach it (or a copy) to the application form.

4. Procedure for Application and Selection

(1) Submitting the Application Documents

Closing date for application to the JICA Center in JAPAN: **August 16, 2013**

Note: Please confirm the closing date set by the respective countries' JICA office or Embassy of Japan in 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 countries' JICA offices (or Japanese Embassy) shall conduct screenings, and send the documents to JICA TOKYO, which is organizing this program. Selection shall be made by JICA TOKYO in consultation with the organizations concerned in Japan based on submitted documents according to qualifications. Organizations with the intention to utilize the opportunity of this program will be highly valued in the selection.

(3) Notice of Acceptance

Notification of results shall be made by the respective countries' JICA offices (or Embassy of Japan) to the respective Governments **no later than September 4, 2013**

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

Before coming to Japan, only selected participants are required to submit the Inception Report (Annex 2). This report should be sent **to the following email address by October 7, 2013: Takahashi.Fumiko@jica.go.jp**

6. Conditions for Attendance:

- (1) To observe the schedule of the program,
- (2) Not to change program subjects or extend the period of stay in Japan
- (3) Not to bring any members of their family,
- (4) To return to their home countries at the end of the program in Japan according to the travel schedule designated by JICA,
- (5) To refrain from engaging in political activities, or any form of employment for profit or gain,
- (6) 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 training expenditures depending on the severity of said violation.
- (7) To observe the rules and regulations of their place of accommodation and not to change the accommodation designated by JICA, and
- (8) To participate in the whole program including a Preliminary Phase prior to the program in Japan. Applying organizations, after receiving notice of acceptance for their nominees, are expected to carry out the actions described in section II-9.

IV. Administrative Arrangements

1. Organizer: JICA Tokyo International Center (JICA TOKYO)

Implementing Partner: Sony Corporation

Address: 1-7-1 Konan, Minato-ku, Tokyo 108-0075, Japan

TEL: 81-3-6748-2680 FAX: 81-3-6748-2685

(81: country code for Japan, 3: area code)

2. 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

*Time spent traveling outside Japan shall not be covered.

3. Accommodation in Japan

JICA will arrange the following accommodations for 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)

If there is no vacancy at JICA TOKYO, JICA will arrange alternative accommodations for the participants. Please refer to facility guide for TIC at the following URL:

<http://www.jica.go.jp/english/contact/domestic/pdf/welcome.pdf>

4. 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. 8-16 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.

5. Pre-departure Orientation

A pre-departure orientation will be held at the respective countries’ JICA office (or Japanese Embassy), to provide participants with details on travel to Japan, the conditions of the program, and other matters.

V. Annexes

Annex 1 Job Report

Annex 2 Inception Report

Job Report

(Name: _____ /Country: _____)

E-mail address: _____**Notice**

This report contains very important information and will be used to select participants for the course. Those who do not submit this report will be at a disadvantage during the selection process. Therefore, please be sure to submit this report.

A. Applicant's Scope of Engineering Work

A-a. Please explain your present job. (Explain it in detail, i.e. your position, how many years in the position what kind of program you work at, etc.) What particular engineering field are you interested in?

Please indicate to whom you report in general, indicating the title in the total organization.

A-b. Applicant's Job Record: Please check or fill in each applicable column.

	Job Record			What kind of equipment do you usually operate? Please name the models.
	Operation	Maintenance	Years	
	(Yes/No)	(Yes/No)		
TV Camera				
Microphone Arrangement, Audio Mixing, DAW				
Lighting Arrangement				
VCR				
Camcorder (ENG/EFP)				
Other Recording Media (Server, Disk, Flash Memory, etc)				
Editing (Linear/Non-Linear)				
Video Location				
FPU				
Fly Away				
Master Control				
Transmission				
Other ()				

A- c . Computer experience

(1) What kind of computer systems have you used?

Operation System (OS)	Years
Windows	()
Macintosh	()
Other ()	()

(2) What kind of software have you used?

Software	Years
Word	()
Excel	()
Power Point	()
Other ()	()

B. Applicant's Scope of Managerial Work

B-a. Are you responsible for planning/designing engineering facilities at your station? Or are you part of a group that performs such functions?

If so, please describe your role in detail, ex. selection of facility, designing network, budget management, etc. How long have you served in such a role?

B-b. Do you play a role in educating/training junior staff members?

If so, please describe how such education is handled, ex. on-the-job Training, seminars, etc. How long and how often have you served in such a role?

B-c. Do you service the equipment in the studio periodically? (For example, clean the heads of VTR drums weekly, replace upper drums of VTRs every 2000 hours, etc.)

B-d. Do you use measurement tool for repair and maintenance work? (For example, oscilloscopes, audio analyzers, waveform monitors, etc.)

Inception Report

This Inception Report is used for sharing the applicant's current situation and issues with maintenance and quality management of studio broadcast equipment.

Note: Selected participants are required to fill in this form (Word) and submit it as an Inception Report to JICA (Tsuzuki.Hiromi.2@jica.go.jp) by October 5, 2012.

Each participant is also requested to prepare presentation material for the Inception Report Presentation (about 20 minutes per person) in Power Point.

- 1. Name of Applicant/ Organization of Applicant/ County**

- 2. Current Situation of Broadcasting in Applicant's Country**
 - 2.1** How many nationwide TV networks and Radio networks are there in the applicant's country, including both state-owned broadcasters and private broadcasters? Please name them and describe the major purpose of each network. (i.e. general, educational, sports, ...)

ex. TV Terrestrial (1 general and 1 educational channel both in analog and digital), Satellite (1 general and 1 educational both in analog and digital, 1 digital HD), Radio (1 general, 1 educational, 1 entertainment)
 - 2.2** Number of viewers and audiences/coverage rate of each network: terrestrial, satellite, and cable network.
 - 2.3** What is the TV penetration rate in your country? What is the penetration rate of electricity in your country?

- 3. Applicant's Organization**
 - 3.1** Organization chart of applicant's broadcasting station, including the number of personnel
 - 3.2** Facilities of applicant's organization

TV studio and post-production

 - 3.2.1** Number of studios, including usage (i.e. news, drama, etc.)
 - 3.2.2** Trouble Shooting Solution List

(*Please fill in the form on the following page.)
 - 3.2.3** Any other maintenance problems or issues you are facing at your current organization.

For example, budget issues, how to allocate the budget for maintenance,

availability of needed spare parts, where to buy parts, technical support or advice, appropriate skills to repair etc...

3.2.4 Equipment data for practice of Maintenance Management software (MMP).

(*Please fill in the form on the following page with Studio, Post-Production and/or Control Room at the Applicant's Organization.)

3.2.5 Current facilities and equipment at the applicant's organization (Studio, control room, editing room, etc.)

(*Please fill in the form on the following page.)

3.3 Broadcasting programs at applicant's organization:

Service hours, type of program, weekly timetable, in-house or local production rate, etc. of each network.

3.4 Broadcasting history of applicant's organization

3.2.2 Trouble Shooting Solution List (*Please attach the separate sheets.)

	Model Name (Number of sets) including manufacturer's name and model	Major trouble you experienced in the past and today.
VCR		
Camcorder (ENG/EFP)		
Other Recording Equipment (Disk, Server, Flash Memory, etc.)		
TV Camera		
Editing System (Linear, Non-linear)		
Audio System (Audio Mixer, Digital Audio Workstation)		
Other Equipment		

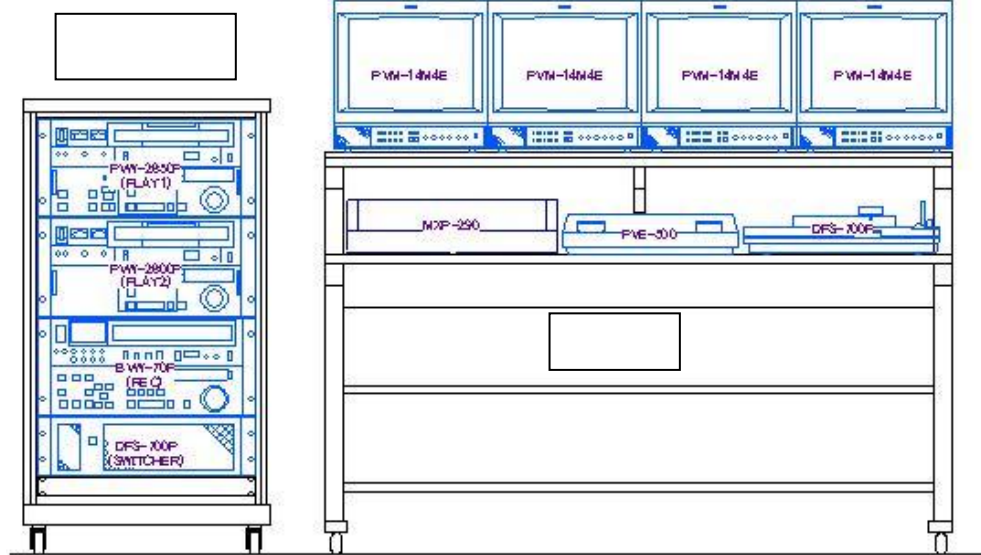
3.2.5 List of current facilities and equipment at the applicant's organization (Studio, control room, editing room, etc.)

Facility	Size	Equipment
(Ex.) Main Studio No 1	20m x 10m	Camera (Sony BVP-E10P)x3

3.2.4 Sample of Equipment data for practice of Maintenance Management software

Format of Inception Report(4/5)

Sample



Editing Room A

Location 1	Location 2	Location 3	ID	Manufacturer	Model	Serial #	Description	Note
Edit A	19" Rack		A9502013	Sony	PVW-2650P	10639	Betacam Player with DT	P1 VTR
Edit A	19" Rack		A9502014	Sony	PVW-2600P	10524	Betacam Player	P2 VTR
Edit A	19" Rack		A9202035	Sony	BVW-70P	273645	Betacam VTR	Rec VTR
Edit A	19" Rack		A9502021	Sony	DFS-500P	41214	DME	
Edit A	19" Rack		A9502022	Sony	BKDF-501P	40234	Trail and lighting board for DFS-500P	
Edit A	19" Rack		A9502023	Sony	BKDF-502P	40221	DSK board for DFS-500P	
Edit A	Table		A9205043	Sony	MPX-290	7630402	Audio Mixer	
Edit A	Table		A9205044	Sony	PVE-500	8104347	Editing Control Unit	
Edit A	Table		A9310035	Sony	PVM-14M4E	2003696	CRT Monitor	P1 Monitor
Edit A	Table		A9310036	Sony	PVM-14M4E	2068436	CRT Monitor	P2 Monitor
Edit A	Table		A9310037	Sony	PVM-14M4E	2078190	CRT Monitor	Rec Monitor
Edit A	Table		A9310038	Sony	PVM-14M4E	2083586	CRT Monitor	Program Out Monitor

Format of Inception Report(5/5)

3.2.4 Format of equipment data for practice of Maintenance Management software

Please use Excel and fill out the equipment data for all of your studios, editing rooms, control room, and ENG room.

Note: This equipment data will be used for the practice of Maintenance Management Program during the Core Phase in Japan.

Location 1	Location 2	Location 3	ID	Manufacturer	Model	Serial #	Description	Note

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 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