

# GROUP AND REGION-FOCUSED TRAINING

#### **GENERAL INFORMATION ON**

AIR POLLUTION SOURCE MANAGEMENT 課題別研修「大気汚染源管理」

JFY 2015

NO. J15-04126 / ID. 1584787 Course Period in Japan: From May 10, 2015 to June 27, 2015

This information pertains to one of the Group and Region-Focused Training 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**

Through rapid industrialization and urbanization in recent years, developing countries are facing various environmental problems due to delay in promotion of appropriate measures such as restrictions and monitoring systems of pollutants. Particularly among urban areas, where 40% of population in developing countries live, air pollution has been threatening not only health conditions of people but also economic activities taking place in the area.

After formulating "Environmental Conservation Initiative for Sustainable Development (EcolSD)" in 2002, Japan has promoted ODA focusing on environmental problems, especially those related to air pollution. Moreover, industrial cities in Japan such as Kitakyushu City, where the training course will be taking place, has its own experiences and histories of coping with those pollutants throughout the period of high economic growth.

This training program intends to transfer methodologies and techniques for air pollution control. Participants are able to acquire practical knowledge and techniques, as the city government and private enterprises in Kitakyushu City have accumulated various technologies and experience in the field through their history of pollution control and international cooperation.

#### For what?

This program aims to improve air pollution management in participating countries and regions.

#### For whom?

This program is offered to the staffs in charge of air pollution control in central / local governmental organizations.

#### How?

Participants shall have opportunities to identify approaches and strategies to ensure program effectiveness, enhance financial security, and improve organizational viability. Participants will also formulate an action plan describing what the participant will do after they go back to home country putting the knowledge and ideas acquired and discussed in Japan among others into their on-going activities.

# II. Description

#### 1. Title (J-No.)

Air Pollution Source Management (J1504126)

#### 2. Course Period in JAPAN

May 10, 2015 to June 27, 2015

#### 3. Target Regions or Countries

Bosnia and Herzegovina, China, Egypt, India, Sri Lanka, and Viet Nam

#### 4. Eligible / Target Organization

This program is designed for governmental organizations in charge of air pollution control.

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

10 participants

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

English

#### 7. Course Objective

Participants will be able to formulate and propose action plans for improvement of air pollution source management, utilizing contents of the training program.

#### 8. Overall Goal

Formulated action plans are implemented in each country.

#### 9. Expected Module Output and Contents

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

# (1) Preliminary Phase in a participant's home country

(January 2015 to April 2015)

Applying organizations are required to submit the Job Report and the Issue Analysis Sheet (IAS) together with the application form for selection in Japan.

Expected Module Output	Activities
Job Report & IAS is formulated	Formulation and submission of the job report and the Issue Analysis Sheet with the application form

#### (2) Core Phase in Japan

(May 10, 2015 to June 27, 2015)

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

	Expected Module Output	Subjects	Methodology
1)	Participants will be able to explain the administrative system for air pollution control in Japan.	<ul> <li>History of industrial pollution and present condition</li> <li>Air pollution control law</li> <li>Competence inspection in the factories</li> <li>Automobile exhaust gas emission</li> </ul>	Lecture, Site Visits, Exercise
2)	Participants will be able to explain the method of air pollution monitoring and pollutant analysis.	<ul> <li>Air pollution monitoring</li> <li>Air pollutant analysis</li> <li>Dust</li> <li>Sulfur oxides and nitrogen oxides</li> <li>Fluorine compounds</li> <li>Automobile exhaust gas analysis</li> </ul>	Lecture, Site Visits, Exercise
3)	Participants will be able to explain the technologies for air pollution prevention.	<ul> <li>Cleaner production</li> <li>Dust collector</li> <li>Desulfurization and denitrification</li> <li>Factory Visits</li> </ul>	Lecture, Site Visits, Exercise
4)	Participants will be able to formulate an action plan for air pollution source management.	<ul> <li>Elaboration and presentation of the job report</li> <li>Elaboration and presentation of action plan</li> <li>Formulation of final report</li> </ul>	Lecture, Workshop, Consultation, Presentation

Please refer to the attached schedule (Annex-4). The schedule is subject to minor changes.

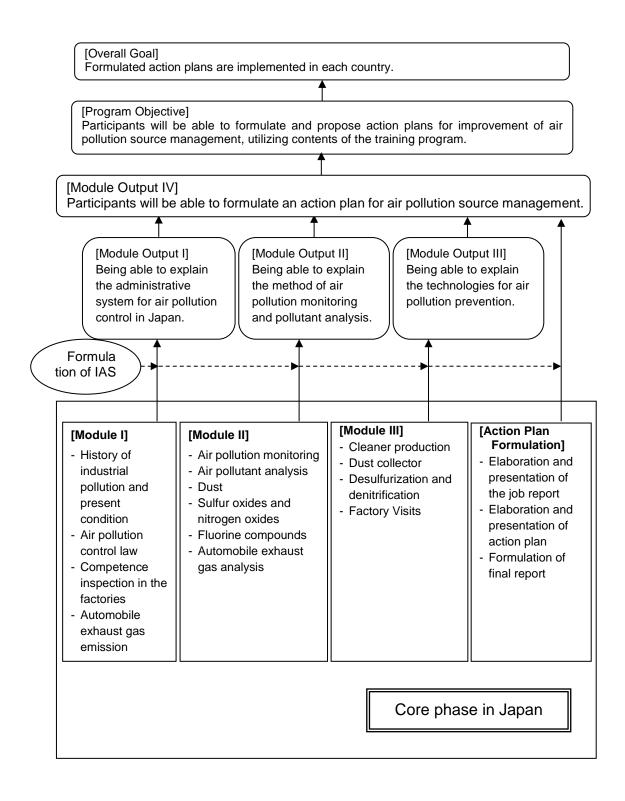
### (3) Finalization Phase in a participant's home country

(After returning home country)

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

Expected Module Output	Activities
To discuss and promote the action plans in the participants' organizations.	Application and implementation of the action plan back in the participant's country.

#### 10. Course Structure



## 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 project to meet specific requirements of applying organizations and effectively facilitate them toward solutions for the issues and problems.

#### 2. Nominee Qualifications

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

- (1) Essential Qualifications
  - Current Duties: be an staffs in charge of air pollution control at a central / local governmental organization
  - 2) Experience in the relevant field: have more than 3 years of experience in relevant field
  - 3) Educational Background: be a graduate of university or equivalent level, preferably with a background of engineering or science.
  - 4) Language: have a competent command of spoken and written English which is equal to TOEFL iBT 100 or more (This workshop includes active participation in discussions, which requires high 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.
    - \*Please note that this training course includes site visits, therefore, a lot of physical exercises will be required.
  - 6) Must not be serving any form of military service.

#### (2) Recommendable Qualifications

- 1) Expectations for the Participants: preferably be in relation with past or on-going JICA projects targeting air pollution management.
- 2) Age: between the ages of twenty-five (25) and fifty (50) years

#### 3. Required Documents for Application

(1) Application Form: The Application Form is available at the 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 permission of her training participation.

Please ask JICA Staff for the details.

(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 & Questionnaire and Issue Analysis Sheet (IAS)

To be submitted with the application form. Fill in Annex I and II of this General Information, and submit it along with the Application Form. Job Report & Questionnaire and IAS are necessary documents for screening of an applicant. Each participant will be required to present his/her Job report & Questionnaire and IAS in approx. 10 minutes in an early stage of the course. Visual materials such as PowerPoint and pictures may be helpful for your presentation if you bring them. When you use Power Point, it is preferable to use letters more than 24-point and not to use pictures on the background. An applicant should submit his/her IAS with approval of his/her superior and an IAS without approval of an applicant's superior is not accepted.

#### 4. Procedures for Application and Selection

(1) Submitting 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 March 20, 2015.

#### (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.

#### (3) Notice of Acceptance

Notification of results will be made by the JICA office (or the Embassy of Japan) **not later than April 10, 2015.** 

#### 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 Kyushu, Training Program Division

(2) E-mail: kicttp@jica.go.jp

#### 2. Implementing Partner

to be announced

#### 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 Kyushu International Center (JICA KYUSHU)

Address: 2-1, Hirano 2-chome, Yahata Higashi-ku, Kitakyushu City, Fukuoka Prefecture 805-8505, Japan

TEL: +81-93-671-6311 FAX: +81-93-671-0979

(where "81" is the country code for Japan, and "93" is the local area code)

If there is no vacancy at <u>JICA Kyushu</u>, JICA will arrange alternative accommodations for the participants. Please refer to facility guide of JICA Kyushu with URL; http://www.jica.go.jp/english/contact/domestic/

#### 5. Expenses

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

- (1) Allowances for accommodation, meals, living expenses, outfit, and shipping
- (2) Expenses for study tours (basically in the form of train tickets.)
- (3) Free medical care for participants who become ill after arriving in Japan (costs related to pre-existing illness, pregnancy, or dental treatment are not included)
- (4) Expenses for program implementation, including materials

For more details, please see "III. ALLOWANCES" of the brochure for participants titled "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 (or Japanese Embassy), to provide participants with details on travel to Japan, conditions of the workshop, and other matters.

# V. Other Information

#### 1. Reports Presentation

(1) Job Report & Questionnaire and Issue Analysis Sheet (IAS)

As written in the previous page, each nominee is required to submit his/her own Job Report & Questionnaire and IAS following the instructions. Accepted participant will have a presentation of his/her Job Report & Questionnaire and IAS up to 10 minutes at the earlier stage of the training program in order to share knowledge and background with other participants as well as the course leader and lectures. Visual materials such as Power Point and pictures may be helpful for your presentation if you bring them with you. When you use Power Point, it is preferable to use letters more than 24 points and not to use pictures on the background.

#### (2) Action Plan

Accepted participants are required to formulate an action plan at the end of the training program in Japan to show your ideas and plans, which you carry out after return home, reflecting the knowledge and method acquired from the training. Each participant will have 10 minutes for presentation.

#### (3) Related Data

Upon arrival in Japan, participants are requested to bring following documents, data, and statistics as much as available, as they will be highly helpful when formulating reports:

- a. Numbers and types of companies that are causing air pollutions.
- b. Data and statistics (if possible) regarding air pollution (density of NOx, SOx etc.).
- c. Related laws and regulations (either in your language or in English).

#### (4) Bring own laptop computer

The participants are kindly requested to bring their laptop computer for making reports, if they have one.

#### 2. International Exchange Program with local communities

JICA encourages international exchange between JICA participants and local communities. Participants will have a chance to visit elementary schools or junior high schools. Therefore, participants are recommended to bring their national costumes or crafts and materials such as CDs and photographs that will make the exchange program more fruitful.

#### 3. Remarks

JICA training is implemented for the purpose of development of human resources who will promote the advancement of the countries, but not for the enrichment of individuals or private companies. Matters of a trade secret and patent techniques will remain confidential and inaccessible during the training.

# VI. ANNEX

- 1. Job Report & Questionnaire (Annex-1)
- 2. Issue Analysis Sheet (IAS) (Annex-2)
- 3. List of Subjects (Annex-3)
- 4. Training schedule (tentative) (Annex-4)

#### Annex-1

# Air Pollution Source Management (JFY 2015) Job Report & Questionnaire

Name: Country: Organization and present post: E-mail: FAX:

- Remarks 1: The Report should be typewritten in English (12-point font, appropriately spaced, A4 size paper) and total pages of the report should be limited to 3 pages (not including organization chart).
- Remarks 2: Please don't forget to check the analysis sheet
- Remarks 3: Each participant is required to have presentation in 10 minutes based on this Job Report at the early stage of the training for the purpose of making the training more effective and fruitful by comprehending the situations and problems of the participants each other.
- Remarks 4: It is also requested to prepare a PowerPoint for the presentation. When you use PowerPoint, it is preferable to use letters more than 24 points and not to use pictures on the background.
- Remarks 5: Please itemize your answer and make them specific.
- 1. Organization and main tasks (up to 1 page)
  - (1) Main tasks of the organization
     (Please include annual turnover or product amount, name of products and number of employees)
  - (2) Organization chart:
    - Please draw a chart of your organization including the department (section) names with the number of staffs in it and mark where you are positioned. (The chart should be attached and not be counted in this page limit.)
  - (3) Brief description of your assignments.
- 2. Existing problems in your section (up to 1 page)
  - (1) Current problems you are facing in your section (Please describe concrete details).
  - (2) Countermeasures for these problems
  - (3) Obstacles in the process of solving those problems
- 3. Expectations for the training course (up to 1 page)
  - (1) Most interesting subjects or topics in this training course and reasons why you pick up the subjects:
  - (2) How do you expect to apply skills and knowledge according the listed items in Curriculum after you return to your home country?
  - (3) Other matters you are expecting for this course, if any:

(Basically this training programme is fixed and cannot be changed upon your request.)

4. Which of the following specialized technologies have you learned?

Please check to signify "YES" or "NO".

		YES		NO	
(1)	Chemical engineering	(	)	(	)
(2)	Environmental engineering	(	)	(	)
(3)	Hygiene engineering	(	)	(	)
(4)	Civil engineering	(	)	(	)
(5)	Mechanical engineering	(	)	(	)
(6)	Electrical engineering	(	)	(	)
(7)	Computer science	(	)	(	)
(8)	Others ( )	(	)	(	)

Note: Under" (8) Others" please specify subjects not covered by items (1) to (7).

5. Which of the following represent your practical work experiences? Please fill in the years of your occupational experience.

	Years	s of
	expe	rience
Air pollution control administration	(	)
Operation and maintenance of air pollution prevention	(	)
facilities		
Air pollution monitoring	(	)
Air pollutant analysis	(	)
Chemical analysis	(	)
Environmental engineering	(	)
Chemical engineering	(	)
Hygiene engineering	(	)
Information processing (computer programming)	(	)
Electrical engineering	(	)
Mechanical engineering	(	)
Civil engineering	(	)
Others ( )	(	)
	Operation and maintenance of air pollution prevention facilities	Air pollution control administration

Note: Under "(13) Others" please describe any practical experience that might be related to air pollution source management but not covered by items (1) to (12).

#### **Issue Analysis Sheet (IAS) Guidelines**

#### 1. What is IAS?

- (1) IAS is a tool to logically organize relationships between issues and contents of the training program in Japan.
- (2) IAS will help the nominee to clarify his/her challenges to be covered in (1) each expected module output and to formulate solutions to them.
- (3) The sheet is to be utilized as a logical process control sheet to draw up improvement plans for the issues by filling out the sheet in phases from prior to the nominee's arrival through to the end of the training.
- (4) In addition, it is used for the course leader and lecturers to understand the issues that each participant is confronting, and provide him/her with technical advice, useful references and solutions through the training program in Japan.

#### 2. How to fill out IAS?

- (1) Please describe the issues you (your organization) confronts in column "A: Issues that you (your organization) confront(s) "
  - ★ Prepare the separate rows for each problem; if necessary, please add new rows.
- (2) In column "B: Actions that you (your organization) are (is) taking", please describe actions that you (your organization) are taking to solve the issues shown in "Colum A"
  - This information is very important to carry out the training course and also to make Action Plan as a fruit of the training.
- (3) In order to solve issues, you (your organization) need various types of information, so you hope to participate in this training course.
  - The main purpose of this training course is to provide the information you need. The contents of this course is shown in (2) of **II-9** (Expected Module Outputs and Contents, p3). Referring to the "List of Subjects" (Annex-3), please extract subjects from which you expect to get useful information you need, and write their Subject No. in column "C:Subjects No"
  - ★ You can input as many subjects as you think the subjects are related.
  - ★ You do not need to input "Subject Titles" into the chart, but only "Subject No."

# Issue Analysis Sheet (IAS)

<b>[</b> A]	Issues that you (your organization) confront(s)	No	【B】Actions that you (your organization) are (is) taking.	【C】Subject No.*)
1				
2				
3				

[C] Please write the Subject No.\*) you most expect to get the information you need.

<sup>\*)</sup> Please refer the Number of Subject/Agenda shown in the tables of the Annex-3.

#### Annex-3

# **List of Subjects**

(L: Lecture, P: Practice)

No	Training		Subjects	Expected Module	H	lour
	subject			Output	┙	Р
Ι	Administr	1.	Air pollution control law	Participants are	33	6
	ative	2.	History of industrial pollution and	able to		
	system		present condition	understand the		
	for air	3.	Inspection and measurement on	administrative		
	pollution		plants	system for air		
	control	4.	Outline of automobile pollution	pollution control		
			countermeasure	in Japan.		
		5.	Visit to environmental museum			
		6.	Approaches for Low-Carbon			
			Society by the City of Kitakyushu			
		7.	Introduction to Environmental			
			Issues			
		8.	Motor vehicle inspection system in			
			Japan			
		9.	"Ube Model" and Environmental			
			Partnership			
П	Air	1.	Air pollution monitoring	Participants are	9	21
	pollution	2.	Theory and Application of Diffusion	able to		
	monitorin	3.	Air pollutant analysis	understand the		
	g and	4.	Analytical Instruments for Organic	air pollution		
	pollutant		Micro-pollutants	monitoring and		
	analysis	5.	Dust, sulfur oxides and nitrogen	air pollutant		
			oxides analysis	analysis method.		
		6.	Hazardous compounds (Chlorine			
			and Fluorine) analysis			

Technologies for air 3. Cleaner production technology pollution prevention n prevention n power station, chemical factory, automobile factory, automobile factory, plant  Technologies for air pollution prevention (visit to cement factory, steel manufacturing factory, automobile factory, LNG supply factory)  Technologies for air pollution prevention prevention prevention prevention.	51
air pollution preventio preventio power station, chemical factory, steel manufacturing factory, automobile factory, factory)  3. Cleaner production technology understand the technologies for air pollution prevention prevention prevention prevention prevention prevention prevention.	
pollution preventio 4. Technologies for air pollution preventio prevention (visit to cement factory, thermal power station, geothermal power station, chemical factory, steel manufacturing factory, automobile factory, LNG supply factory)  5. Household garbage incineration	
preventio prevention (visit to cement factory, air pollution prevention.  n thermal power station, geothermal power station, chemical factory, steel manufacturing factory, automobile factory, LNG supply factory)  5. Household garbage incineration	
n thermal power station, geothermal prevention.  power station, chemical factory, steel manufacturing factory, automobile factory, LNG supply factory)  5. Household garbage incineration	
power station, chemical factory, steel manufacturing factory, automobile factory, LNG supply factory)  5. Household garbage incineration	
steel manufacturing factory, automobile factory, LNG supply factory)  5. Household garbage incineration	
automobile factory, LNG supply factory)  5. Household garbage incineration	
factory) 5. Household garbage incineration	
5. Household garbage incineration	
plant	
IV     Job     1. Formulation and make presentation     Participants are     0	27
report of Job report and Action plan able to formulate	
and job report and	
Action action plan for air	
plan pollution source	
management.	
V   Study   1. Minamata	27
tours 2. Tokyo and Kyoto	
VI   Others   1. Course orientation	15
International exchange program	
with local communities	
3. Evaluation meeting	
4. Closing ceremony	
	147
Sub Total 48	

(Note) The curriculum may be subject to minor changes.

# Training schedule (tentative)

	Date		Contents
	11	Mon	JICA Orientation
			JICA Orientation
			International exchange program with local communities, KITA Guidance
	13	Wed	Course Orientation
	14	Thu	Preparation of Job Report
		Fri	Air Pollution Control Law in Japan
			Holiday
	17		Holiday
			Air pollution Control Law in Japan, Presentation of Job Report
1 1		Tue	
1 1			The public of air collusion by outgraphic subject and projector
	20	Wed	Approaches for Low-Carbon Society by the City of Kitakyushu,
May.		Thu	Environmental Protection of the Local Government and Business
	21		Enterprises in the City of Kitakyushu, Observation of the air pollution
			monitoring system in Kitakyushu City,
	22	Fri	Control of sulfur oxides and nitrogen oxides, Visit to Environmental
		Sat	Holiday
			Holiday
			Introduction to Environmental Issues
			Dust, SOx, NOx measurment
			Dust, SOx, NOx measurment
			Analytical Instruments for Organic Micro-pollutants
		Fri	Formulation of the action plan, Environmental protection in Ube City
		Sat	Holiday
			Holiday
			Analysis of chlorine and fluorine compounds
			Visit to Kyushu Electric Power Co., Ltd., Shinnkokura Power Station, Visit
		Tue	to Kitaksyushu Liquefied Natural Gas Co., Ltd.
	3	Wed	Dust collection technology
		Thu	
		Fri	Dust collection technology
	6	Sat	Holiday
	7	Sun	Holiday
	8	Mon	Formulation of the action plan, Visit to Mitsubishi Materials Co. Kyushu
	9	Tue	Visit to Mitsubishi Chemical Corporation, Kurosaki Plant
	10	Wed	Introduction of CP, Visit to Nippon Steel Corporation, Yawata Works
	11	Thu	Formulation of the action plan, Visit to houshold garbage incineration
	12	Fri	Formulation of the action plan, Visit to JGC Catalysts and Chemicals Ltd.
Jun.	13	Sat	Holiday
Juli.	14	Sun	Holiday
	15	Mon	Formulation of the action plan, Visit to Automobile Inspection Office
		Tue	Visit to Kyushu Electric Power Co., Ltd., Kanda Power Station, Visit to
	16		Nissan Co., Ltd.,
	17	Wed	Visit to Hattcyobaru Geothermal Power Plant
		Thu	Visit to Minamata Disease Museum
	19	Fri	Formulation of the action plan
	20	Sat	Holiday
	21	Sun	Leave Kitakyushu for Tokyo
			Theory and Application of Diffusion
		Tue	Visit to DKK-TOA CORPORATION, Leave Tokyo for Kyoto
	24	Wed	Visit to HORIBA Ltd., Leave Kyoto for Kitakyushu
	25	Thu	Evaluation of trainee's attainment (Final test)
1 [	26	Fri	Final evaluation meeting, Presentation of Action Plan, Closing Ceremony

#### 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 Kyushu International Center (JICA KYUSHU) Address: 2-2-1 Hirano, Yahata-Higashiku, Kitakyushu-shi, Fukuoka, 805-8505, Japan

TEL: +81-(0)93-671-8346 FAX: +81-(0)93-663-1350 URL: http://www.jica.go.jp/kyushu/index.html