



REGION FOCUSED TRAINING AND DIALOGUE PROGRAMS

GENERAL INFORMATION ON

CAPACITY DEVELOPMENT IN ENVIRONMENTAL
MANAGEMENT (AIR AND WATER POLLUTION CONTROL)
FOR MIDDLE EASTERN COUNTRIES
地域別研修「中東地域環境管理能力向上(大気汚染・水質汚濁防止)」
JFY2008

<Type: Solution Creation / 類型: 課題解決促進型>

NO. J0804178 / ID. 0884148

From November 2008 to August 2009

Phases in Japan: From January 19 to February 28, 2009

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

In Middle-eastern countries, air and water pollution is becoming serious as their industry develops and their urbanization increases, and there is an urgent need to address such serious pollution.

In this connection, discharging of contaminated water into the Mediterranean Sea, Red Sea and international rivers and transboundary air pollution are also problems to be addressed internationally at the same time domestically.

For what?

This program aims to improve the capacity of the central/local government organizations to formulate and execute the policy and regulations in the field of air and water pollution control.

For whom?

This program is offered to central/local governmental organizations related to air and water pollution control.

How?

Participants shall have opportunities in Japan and in their home countries to identify problems and find ways to address them. Participants will also formulate an action plan describing what they will do in their home countries to improve their air and water environment by applying the knowledge and technology gained in Japan.

II. Description

1. Title (J-No.): Capacity Development in Environmental Management (Air and Water Pollution Control) for Middle Eastern Countries (J0804178)

2. Period of program

Duration of whole program:	November 2008 ~ August 2009
Preliminary Phase: (in a participant's home country)	November 2008 ~ December 2008
Core Phase in Japan:	January 19 ~ February 28, 2009
Finalization Phase: (in a participant's home country)	March 2009 ~ August 2009

3. Target Regions or Countries:

Iran, Lebanon, Syria, Egypt, Saudi Arabia

4. Overall Goal:

Capacity to formulate policy and regulations is developed for the improvement of air and water environment.

5. Objective:

At the end of the program, the participants/participating organizations are expected to achieve the following;

This program intends that the participating organizations formulate a plan to improve their air/water environment by utilizing monitoring data.

(In JFY 2008)

- I. To achieve this program objective, participants are expected in Japan;
 - (1) To identify problems, especially the ones on which monitoring is already done but planning of countermeasures is yet to be made, in air/water environment in their home countries.
 - (2) To formulate a rough plan of countermeasures.
 - (3) To identify/clarify the contents of the training program in Japan for each of the following two (2) years.
- II. Following the above activities in Japan, in the participating organizations,
 - (1) A meeting is held to report on the performance of training in Japan.
 - (2) A rough plan to improve air/water environment is formulated for the activities of the following two (2) years.
 - (3) A report on the above activities of the participating organizations is made to JICA/GEC.

(In JFY 2009)

A plan is made to improve air environment of participating countries by utilizing monitoring data.

(In JFY 2010)

A plan is made to improve water environment of participating countries by utilizing monitoring data.

6. Eligible / Target Organization :

This program is designed for central/local government organizations related to environmental management (air and water pollution control).

7. Number of Participants :

7 participants in total.

Iran 1, Lebanon 1, Syria 2, Egypt 2, Saudi Arabia 1

8. Language to be used in this project: English

9. Contents:

This program for **JFY 2008** consists of the following components. Details on each component are given below:

<p>(1) Preliminary phase in a participant's home country (November 2008 ~ December 2008) <i>Participating organizations make required preparation for the program in the respective country.</i></p>	
Modules	Activities
Country Report	Formulation and Submission of Country Report

<p>(2) Core Phase in Japan (January 19, 2009 ~ February 28, 2009) <i>Participants dispatched by the organizations attend the program implemented in Japan.</i></p>		
Modules	Subjects/Agendas	Methodology
1)Environmental Issues in Participating Countries	(1)Country Report (2)Guidance to Action Plan making	presentation discussion lecture
2)History and Present Situation of Pollution in Japan and Osaka	to learn from the experience of Japan and Osaka (1) History and Present Situation (2) Policy, Regulations, and Standards. Impact on Human Health. Environment and Economy. (3) Air and Water Monitoring System	lecture, observation
3)Prevention Planning	(1)Air Pollution (Total Control, etc.) (2)Water Pollution (Total Control, etc.)	lecture
4)Investigation of Pollution Source	(1)Stationary Source (2)Mobile Source (3)Water Contamination Source	lecture, observation,
5)Planning Technology	(1) Forecasting (Air Monitoring, Meteorological Analysis, etc.) (2)Total Control of Water Contamination (3)Case Study	lecture,
6)Environmental Management	(1) Regulations and Guidance/Direction to Polluters. (2)Technical and Financial Support (3)Environmental Management System of Administrative Organizations and Factories (4)Case Study (5)Environmental Impact Assessment	lecture observation

7) Communication	(1) Data Analysis (2) Disclosure (3) Environmental Education (4) Others	lecture
8) Action Plan	(1) Action Plan Making In the Action Plan the participants identify problems, especially the ones on which monitoring is already done but planning of countermeasures is yet to be made, in air/water environment in their home countries, and a rough plan of countermeasures is proposed.	guidance discussion
9) Confirmation of Programs for the following two years	The identification/clarification of the contents of the training program in Japan for each of the following two years is made.	discussion

Tentative Schedule in Japan (Calendar Year 2009)

January 19 Arrival in Japan
January 20 Briefing
January 21-23 General Orientation
January 26-February 27 Technical Training
February 28 Departure from Japan

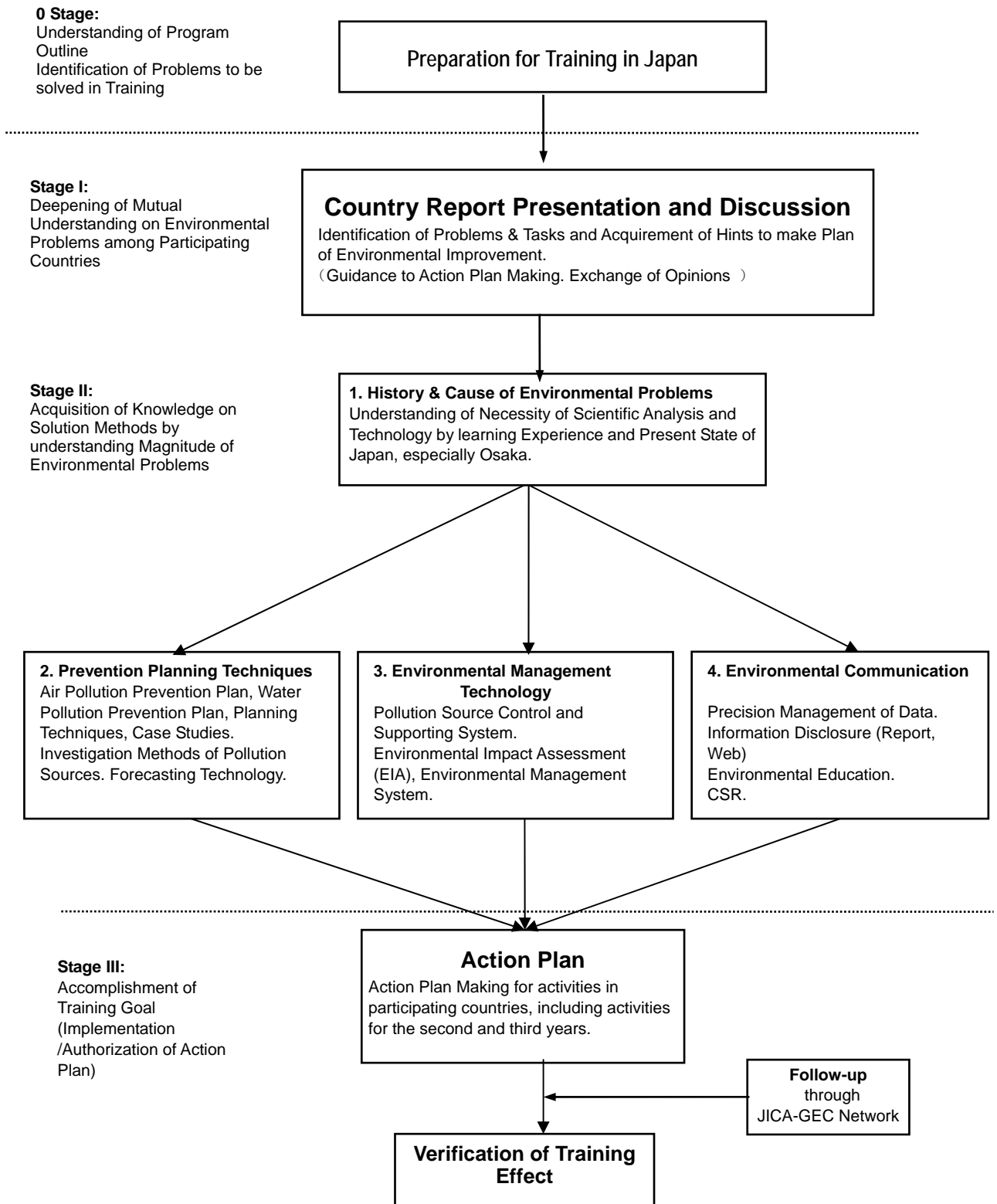
(3) Finalization Phase in a participant's home country

(March 2009 ~ August 2009)

Participating organizations produce final outputs by making use of results brought back by participants.

Modules	Activities
1) Report Meeting	The results of the core phase activities in Japan are shared among concerned people in the participating organization by meetings or other means.
2) Nomination of the second year participant and a rough plan of action for the improvement of air are made.	An appropriate candidate is selected to participate in the second year program in Japan which focuses on air pollution. A rough plan of action is made by the participating organization. This plan will be improved during the core phase activities in Japan.
3) Feed back to JICA	The result of the above activities is reported to JICA office.

Course Flowchart



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.
- (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) Current duties: Administrators who hold a managerial post in charge of both air and water environment in organizations of central or local government.
- (2) Experience in the relevant field: have more than five years experience in environmental administration.
- (3) Educational background: be a graduate of university with chemistry background or equivalent.
- (4) Language: have a competent command of spoken and written English, since participants are expected to actively express themselves in discussions conducted in English.
- (5) Health: must be in good health, both physically and mentally, to participate in the Program in Japan.
- (6) Must not be serving any form of military service.
- (7) Age: be less than fifty (50) years old.

3. Required Documents for Application

- (1) Application Form:** The Application Form is available at the respective country's JICA office or the Embassy of Japan.
- (2) 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.

- (3) Questionnaire and Country Report:** to be submitted with the application form. Fill in the forms in ANNEX of this General Information, and submit them along with the Application Form.

4. Procedure for Application and Selection :

(1) Submitting the Application Documents:

Closing date for application to the JICA Center in JAPAN: December 12, 2008.

Note: Please confirm the closing date set by the respective country's JICA office or Embassy of Japan of your country to meet the final date in Japan.

(2) Selection:

After receiving the document(s) through due administrative procedures in the respective government, the respective country's JICA office (or Japanese Embassy) shall conduct screenings, and send the documents to the JICA Center in charge in Japan, which organizes this project. Selection shall be made by the JICA Center in consultation with the organizations concerned in Japan based on submitted documents according to qualifications. *The organization with 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 country's JICA office (or Embassy of Japan) to the respective Government by **not later than December 22, 2008.**

5. Conditions for Attendance:

- (1)** to observe the schedule of the program,
- (2)** not to change the 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 the rules and regulations of their place of accommodation and not to change the accommodation designated by JICA, and
- (7)** to participate in the whole program including a preparatory 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:

(1) **Name:** JICA Osaka

(2) **Contact:** Mr. HATTORI Ippei (jicaosic@jica.go.jp)

2. Implementing Partner:

(1) **Name:** Global Environment Centre Foundation (GEC)

(2) **URL:** <http://gec.jp/ip/>

3. Travel to Japan:

(1) **Air Ticket:** The cost of a round-trip ticket between an international airport designated by JICA and Japan will be borne by JICA.

(2) **Travel Insurance:** Term of Insurance: From arrival to departure in Japan. *the traveling time outside Japan shall not be covered.

4. Accommodation in Japan:

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

JICA Osaka International Center (JICA OSAKA)

Address: 25-1, Nishi-Toyokawa-cho, Ibaraki-shi, Osaka 567-0058, Japan

TEL: 81-72-641-6900 FAX: 81-72-641-6910

(where "81" is the country code for Japan, and "72" is the local area code)

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

5. Expenses:

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

(1) Allowances for accommodation, living expenses, outfit, and shipping

(2) Expenses for study tours (basically in the form of train tickets.)

(3) Free medical care for participants who become ill after arriving in Japan (costs related to pre-existing illness, pregnancy, or dental treatment are not included)

(4) Expenses for program implementation, including materials

For more details, please see p. 9-16 of the brochure for participants titled

"KENSU-IN GUIDE BOOK," which will be given to the selected participants before (or at the time of) the pre-departure orientation.

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. ANNEX:

JFY2008
CAPACITY DEVELOPMENT IN ENVIRONMENTAL MANAGEMENT
(AIR AND WATER POLLUTION)

Country Report

Participants/Participating Organizations are requested to write Country Report briefly following the below format and submit it together with the Application Form.

1. Information on Participant (Nominee)

Country/City	Name
Organization	
Section/Position	
Work Experience Describe your current and past duties related to environmental management (air and water pollution control) with the period of each duty.	

2. Outline of Participating Organization

Year of Establishment	Number of Employees	Annual Budget(US\$)
Mission & Functions		
Target Area & Group		
Activity Area & Contents (Please Itemize)		

Relevant Organization

3. Information for Training of Capacity Development in Environmental Management

Item	Current Problems & Tasks	Related Laws & Regulations	Environmental Management Technique you are interested in	How & For What you will apply the gained Techniques	Future Action Plan (short & long term)
Air Pollution Monitoring					
Data Collection of Air Pollution Sources (Stationary)					
Data Collection of Air Pollution Sources (Automobiles)					
Air Pollution Control (present state)					
Prevention Plan of Air Pollution					
Water Pollution Monitoring					
Data Collection of Water Pollution Sources (Stationary)					
Water Pollution Control (present state)					

Prevention Plan of Water Pollution					
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Topics you want to discuss during Training in Japan.

Note: If the space is not enough, write in separate paper and attach.

Questionnaire

As we would like to know the present situation as regards air pollution and water pollution control in your country, you are kindly requested to answer the following questions and submit it together with the Application Form.

Name _____ Country _____

1. Outline

(1) Fill out the following table.

	Population	Area (km ²)	Number of factories	Number of automobiles
Nationwide				
The most polluted (air) city (City name: _____)				
The most polluted (water) city (City name: _____)				na

(2) Outline of Fuel & Energy Consumption and Water for Industrial Use

Source	Fuel types and proportion of total fuel consumption		
Factory	<input type="checkbox"/> Coal (%)	<input type="checkbox"/> Petroleum (%)	<input type="checkbox"/> Others (%)
Automobile	<input type="checkbox"/> Gasoline (%)	<input type="checkbox"/> Light oil (%)	<input type="checkbox"/> Others (%)

Water for Industrial Use	<input type="checkbox"/> River (%)	<input type="checkbox"/> Under ground water (%)
	<input type="checkbox"/> Others (%)	

2-1. Outline of Air Pollution

(1) List the three most serious air pollution problems in your country.

- ① _____
- ② _____
- ③ _____

(2) Fill in the following chart with reference to the city with the highest ambient contamination levels of the relevant substance.

Substance (air)	Unit	City	2000	2005	Latest (Specify year)	Main pollution source
SO ₂ (annual average)						
NO ₂ (annual average)						
SPM (annual average)						
CO (annual average)						
O ₃ (max an hour)						

2-2. Outline of Water Pollution

(1) List the three most serious water pollution problems in your country.

- ① _____
- ② _____
- ③ _____

(2) Fill in the following chart at each item with reference to the River or Lakes or Sea waters with the highest contamination levels of the relevant substance.

Substance (water)	Unit	Name of River/Lake/Sea	2000	2005	Latest (Specify year)	Main pollution source
DO (annual average)						
BOD (annual average)						
COD (annual average)						
SS (annual average)						

3-1. Air Pollution Control Measures

(1) Environmental quality standards for air

① Ambient air Quality Standards

Please tick the standard which you refer to:

- National standard Local standard

Substance	Standard values	Measuring methods
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SO ₂		
NO ₂		
SPM		
CO		
Photochemical oxidants (O ₃)		

② Emission standards

Please tick the standard which you refer to:

- National standard Local standard

Fill out the following table.

	Substance	Standard values	Measuring methods
Stationary source (e.g. Factory)	SO _x		
	NO _x		
	Dust		
Automobile exhaust	CO		
	Hydrocarbon		
	NO _x		
	Particulate matter		
	Lead compound		

(2) Laws and regulations on air pollution control

Give the name of the laws and regulations.

Please tick the following items.

Law applies to:		<input type="checkbox"/> Factory <input type="checkbox"/> Large scale building <input type="checkbox"/> Automobile <input type="checkbox"/> Others
System of control	Procedures required in advance	<input type="checkbox"/> Notification <input type="checkbox"/> Permission <input type="checkbox"/> Both of above
	Authority in charge	<input type="checkbox"/> Central government <input type="checkbox"/> Local branch of central government <input type="checkbox"/> Local government
	Method of emission monitoring	<input type="checkbox"/> On-the-spot inspection by administration such as central or local government <input type="checkbox"/> Report by undertaking concerned <input type="checkbox"/> Other
	Compulsory measurement	<input type="checkbox"/> No <input type="checkbox"/> Yes (Frequency: _____)

(3) Air pollution monitoring system

① How many monitoring stations are there in your country?

Show their locations.

Who administers monitoring stations? (Please tick.)

Government Local public organization

② Items and methods of measurement

Item	Measuring methods	Type
Sulfur dioxide (SO ₂)		<input type="checkbox"/> Auto <input type="checkbox"/> Manual
Nitrogen dioxide (NO ₂)		<input type="checkbox"/> Auto <input type="checkbox"/> Manual
Nitrogen monoxide (NO)		<input type="checkbox"/> Auto <input type="checkbox"/> Manual
SPM		<input type="checkbox"/> Auto <input type="checkbox"/> Manual
Carbon monoxide (CO)		<input type="checkbox"/> Auto <input type="checkbox"/> Manual
Hydrocarbon (HC)		<input type="checkbox"/> Auto <input type="checkbox"/> Manual
Photochemical oxidants (O ₃)		<input type="checkbox"/> Auto <input type="checkbox"/> Manual
Wind direction and velocity		<input type="checkbox"/> Auto <input type="checkbox"/> Manual

③ Is there a central monitoring station?

Yes No

If any, tick the method of collecting data.

By telemeter By person

Are there any data processing computers?

Yes No

3-2. Water Pollution Control Measures

(1) Environmental quality standards for water

① Ambient water Quality Standards (water)

Please tick the standard which you refer to:

National standard Local standard

Substance	Standard values	Measuring methods
pH		
DO		
BOD		
COD		
SS		

② Effluent standards

Please tick the standard which you refer to:

National standard Local standard

Fill out the following table.

	Substance	Measuring methods
Stationary source	pH	
	BOD	

(e.g. Factory)	COD	
	SS	

- (2) Laws and regulations on water pollution control
Give the name of the laws and regulations.

Please tick the following items.

Law applies to:		<input type="checkbox"/> Factory <input type="checkbox"/> Large scale building <input type="checkbox"/> Others
System of control	Procedures required in advance	<input type="checkbox"/> Notification <input type="checkbox"/> Permission <input type="checkbox"/> Both of above
	Authority in charge	<input type="checkbox"/> Central government <input type="checkbox"/> Local branch of central government <input type="checkbox"/> Local government
	Method of effluent monitoring	<input type="checkbox"/> On-the-spot inspection by administration such as central or local government <input type="checkbox"/> Report by undertaking concerned <input type="checkbox"/> Other
	Compulsory measurement	<input type="checkbox"/> No <input type="checkbox"/> Yes (Frequency: _____)

- (3) Water pollution monitoring system

- ① How many monitoring stations are there in your country?
Show their locations.

Who administers monitoring stations? (Please tick.)

- Government Local public organization

- ② Items and methods of measurement

Item	Measuring methods	Type
pH		<input type="checkbox"/> Auto <input type="checkbox"/> Manual
DO		<input type="checkbox"/> Auto <input type="checkbox"/> Manual
BOD		<input type="checkbox"/> Auto <input type="checkbox"/> Manual
COD		<input type="checkbox"/> Auto <input type="checkbox"/> Manual
SS		<input type="checkbox"/> Auto <input type="checkbox"/> Manual

- ③ Is there a central monitoring station?
 Yes No

If any, tick the method of collecting data.

- By telemeter By person

Are there any data processing computers?

- Yes No

4. Environmental Impact Assessment

(1) Are there any environmental impact assessment systems in your country?

Yes No (Please tick.)

If “Yes,” describe the assessment system of your country according to the example below.

(Example)

Project subject to assessment	Scale of project subject to assessment
(Ex) Construction or reconstruction of national expressways, national roads and other roads	(Ex) National roads with 4 lanes, 10km or more national expressway (all)

How often has the above assessment been applied? (times/year)

5. Topics for the Training

Itemize the subjects and technical skills you are particularly interested in acquiring during the training.

Note: If the space is not sufficient, please write in separate paper and attach.

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.

Welcome to JICA Osaka

Osaka International Centre of Japan International Cooperation Agency (JICA Osaka) extends a hearty welcome to all JICA participants.

1. Location of the centre in the Kansai region

JICA Osaka is located in Ibaraki City, Osaka prefecture, in the heart of the Kansai region. Ibaraki lies close to the ancient cultural centers of Kyoto and Nara, and to the commercial, industrial and economic center of Osaka, and the city of Kobe.

2. Orientation Programme & Japanese Language Course

(1) The four days after arrival at JICA Osaka are dedicated to an orientation programme, during which participants are introduced to JICA Osaka and its facilities, attend lectures on Japan's economy, society and culture, and participate in an international exchange programme with local communities.

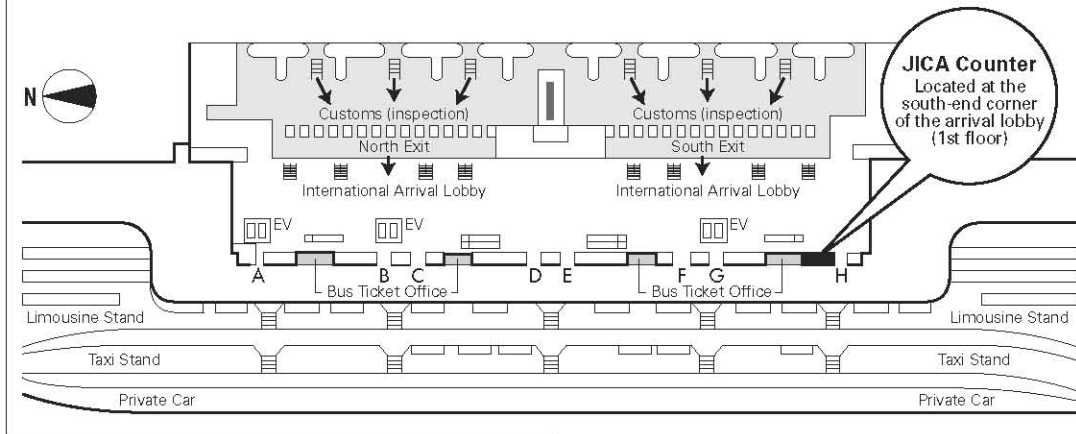
(2) It is desirable that participants acquire basic Japanese daily conversation for use in communication with training institution personnel and in other situations outside the scope of their technical training. JICA Osaka therefore offers:

- 1 an intensive Japanese language course as an integral part of the training programme in designated courses
- 2 an optional Japanese language course held in the evenings

3. Weekend Recreational Programme

Occasionally, at the weekends, JICA Osaka, in concert with community groups, organizes a programme of recreational activities and exchange events, including introductions to flower arrangement, tea ceremony, kimono wearing, handicrafts, and folk dancing, and visits to Japanese homes.

Map of JICA Counter in Kansai International Airport (KIX)



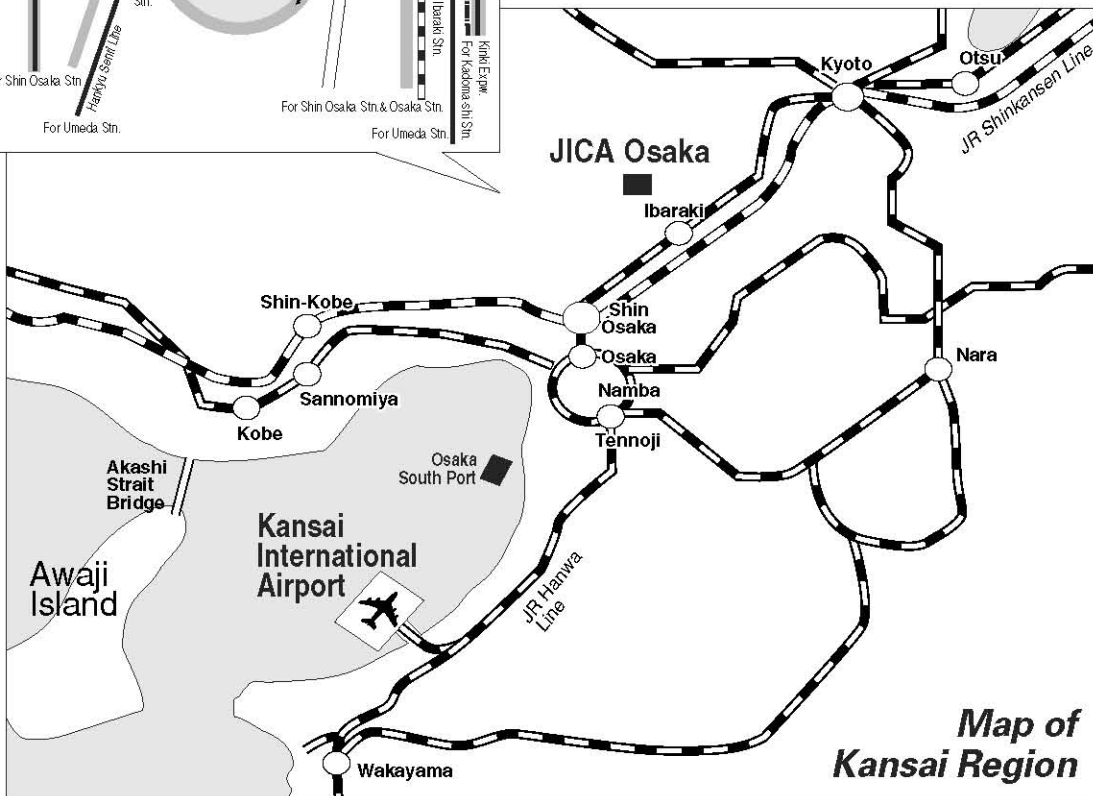
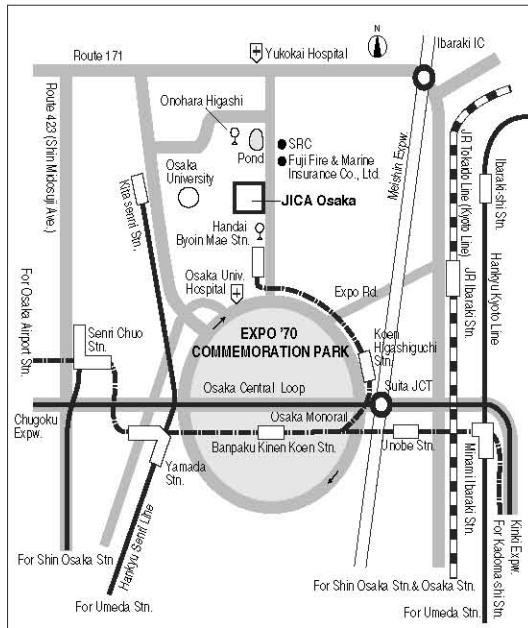
Upon arrival, participants should follow the procedure below:

1. Ride on Wing Shuttle (red elevated tram).
2. Pass through Immigration.
3. Collect baggage and pass through Customs Inspection.
4. Go to the JICA Counter located at the south-end corner of the arrival lobby (1st floor).

The staff at the JICA Counter will provide participants with a limousine bus ticket to Osaka Station (alight at Hotel New Hankyu).

At Osaka Station, a representative of the travel agency designated by JICA will meet the participant. The participant will be taken to JICA Osaka by taxi (with a taxi ticket), which takes approximately 30 minutes.

Map of the JICA Osaka Vicinity



Map of Kansai Region



CORRESPONDENCE

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

JICA Osaka International Center (JICA OSAKA)

Address: 25-1, Nishi-Toyokawa-cho, Ibaraki-shi, Osaka 567-0058, Japan

TEL: +81-72-641-6900 FAX: +81-72-641-6910