



TRAINING AND DIALOGUE PROGRAMS

GENERAL INFORMATION ON

Urban Solid Waste Management by Local government

集団研修「地方自治体における都市廃棄物処理」

JFY 2008

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

NO. J08-00885

From August 2008 to April, 2009

Phase in Japan: From August 19, 2008 to October 22, 2008

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

Most familiar day-to-day public services are the responsibility of local government. Local government plays a significant role in the growth of society as a whole, as well as in the stability and improvement of people's daily life.

A series of solid waste management such as planning, collection, intermediate treatment, recycling and final disposal is one of the most important basic services supporting the healthy and comfortable life of residents.

In Japan, local governments are engaged in regulation and guidance based on statutes, by monitoring, measuring and controlling in the field of solid waste management.

Improved standards of living, an increase in industrial activity and heavily populated urban area, particularly in developing countries have led to a greater volume and wider variety of waste, a problem in developing waste disposal facilities due to reasons such as the difficulty of finding suitable sites and the opposition of nearby residents. Illegal dumping of industrial waste is also a problem.

To address the issues such as to reduce waste and promote recycling, local governments play an active role as above mentioned. However, not only local governments but also their communities which discharge wastes must work together to achieve the issues effectively.

As a form of assistance by Japan in response to the issues, JICA has conducted a training course in cooperation with Osaka city which has rich experience of solid waste management including collaboration with communities.

For what?

This course aims to enhance local governments' (or national governments' sections which support local governments) capacity development in the field of urban solid waste management.

For whom?

This program is offered to Local governments (or national governments' sections which support local governments' organizations) in charge of urban solid management waste.

How?

Participants shall have opportunities to identify issues and problems for solid waste management. Based on the information, participants will learn knowledge & skills of urban waste countermeasures through the introduction of detailed actual conditions of waste treatment in major Japanese cities, mainly focused on Osaka city. Also they will 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.)

Urban Solid Waste Management by Local government
(J0800885)

2. Period of program

From August 19, 2008 to October 22, 2008

3. Target Regions or Countries:

Belize, El Salvador, Jamaica, Maldives, Mongolia, Pakistan, Sri Lanka, Timor Leste, Turkey, Uruguay, Vanuatu and Viet Nam

4. Overall Goal:

In participatory countries, effective and efficient solid waste management plan is designed and operated.

5. Objective:

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

This course aims for more effective and efficient waste management plan to be proposed and discussed in participatory countries and organizations based on the action plans designed by participants.

I. To achieve this program objective, participants are expected;

- (1) To realize issues on solid waste managements and get hints to address them through exchange the information and ideas with lecturers and/or other participants
- (2) To acquire knowledge and skills of urban waste countermeasures through the introduction of detailed actual conditions of waste treatment in major Japanese cities, mainly focused on Osaka city
- (3) To explain the role of citizens and the importance of the collaboration between local government and citizens
- (4) To design action plans which propose some solutions towards the issues and problems on solid waste managements of each participatory country.

II. In participants' home country, it is also expected that the interim report is approved by the organization concerned.

6. Eligible / Target Organization :

This program is offered to Local governments (or national governments' sections which support local governments' organizations) in charge of urban solid management waste.

7. Total Number of Participants :

10 participants from target countries in total are expected to participate in this course

8. Language to be used in this project: English

9. Contents:

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

(1) Preliminary Phase in a participant's home country <i>Participating organizations make required preparation for the Program in the respective country.</i>	
Modules	Activities
Country Report	Formulation and submission of Country Report

(2) Core Phase in Japan (August 19, 2008 to October 22, 2008) <i>Participants dispatched by the organizations attend the Program implemented in Japan.</i>		
Modules	Subjects/Agendas	Methodology
1) Realization of issues and problems on solid waste management	Country report presentation and respective lectures	Presentation and Discussion
2) Study of waste treatment, from planning to final disposal	(1) Waste treatment planning	Lecture and Observation
	(2) Waste collection	
	(3) Intermediate treatment	
	(4) Waste incineration	
	(5) 3R (Reduce, Reuse, Recycle)	
3) Role of citizens and the importance of the collaboration between local government and citizens	(6) Final disposal	Lecture, Observation and Exercise
	(1) Role of citizens and collaboration between local government and citizens	
4) Writing up of Action Plan	(2) Environmental education and public awareness to reduce waste	Exercise, Presentation and Discussion
	(1) Consolidation of the course	
	(2) Design and presentation of Action Plan	

(3) Finalization Phase in a participant's home country <i>Participating organizations produce final outputs by making use of results brought back by participants. This phase marks the end of the Program.</i>	
Modules	Activities
Implementation of the Interim report (action plan)	Application and implementation of the action plan (interim report) back in the participant's country and submission of its final report by April, 2009 based on the follow-up questionnaire to be provided during the program in Japan.

<Structure of the program>

1. Preliminary phase (activities in your home country): Preparation of the country report as Annex 2.

2. Core Phase (activities in Japan)

The curriculum for 2008 is now under the designing. Curriculum below is for the course 2007 and subject to change for 2008.

Curriculum	
1	Current situation and problems with waste management in developing countries <ul style="list-style-type: none">(1) Problems of waste management developing countries(2) Waste management plan and research in developing countries(3) Outline of waste hygiene in developing countries
2	Current situation and problems of waste management in Japan <ul style="list-style-type: none">(1) General discussion<ul style="list-style-type: none">① Environmental administration and waste management② Waste administration in Japan③ Trends in Waste Management and Changes in Environment-related Services④ Changes in waste management laws and environment-related services (Law)⑤ Outline of waste administration in Osaka City<ul style="list-style-type: none">▪ Organizational Structure of Osaka City Environment Management Bureau▪ Master Plan of Osaka City Government▪ Outline of waste disposal in Osaka City (Budget)▪ Outline of waste disposal in Osaka City (Collection/Transport)▪ Environmental Education for Elementary School Children and Citizens▪ Outline of waste disposal in Osaka City (Beautification Promotion)▪ Public Participation ('No Waste' Leaders, Town Beautification)▪ Outline of industrial waste control(2) Itemized discussion<ul style="list-style-type: none">① Collection and transport work<ul style="list-style-type: none">▪ Time and motion study▪ Transfer facilities and transfer operation▪ Outline of collection work at Environment Management Center<ul style="list-style-type: none">Observation of waste collection▪ Selection and Maintenance of Waste Collection Trucks▪ Analysis of Composition of Waste② Intermediate treatment work<ul style="list-style-type: none">▪ Outline of intermediate treatment facilities (Incineration)<ul style="list-style-type: none">Observation tour at incineration plant

	<ul style="list-style-type: none"> ▪ Waste Reduction through Recycling in Osaka City Observation tour of recycling and sorting centre ▪ Outline of Composting ③ Final disposal <ul style="list-style-type: none"> ▪ Outline of sanitary landfill technology ▪ Observation tour at a landfill in Fukuoka City ▪ Selection of a Landfill Site/Practice in Designing a Landfill Site ▪ Operation and Maintenance of Landfill Sites ④ Waste that requires special treatment <ul style="list-style-type: none"> ▪ Outline of hazardous waste ▪ Disposal of medical waste/Visit to hospital waste treatment plant (Medical waste incineration plant) ▪ Disposal of construction waste ▪ Outline of industrial waste control ▪ Efforts for disposal of industrial waste/Visit to PCB treatment Plant ⑤ Waste that requires special treatment <ul style="list-style-type: none"> ▪ On-site experience of 'Town Cleaning Partners' activities ▪ On-site experience of 'Zero Waste' leaders activities
<p>3 Others</p>	<ul style="list-style-type: none"> ◇ Opening ceremony ◇ Course orientation ◇ Lecture by UNEP on “Integrated Solid Waste Management” ◇ Introduction of GEC, Access to Environmental Information on Internet <ul style="list-style-type: none"> ▪ Evaluation on GEC's Data Base ◇ Country report presentation <ul style="list-style-type: none"> ▪ Country report preparation ◇ Mid-term Evaluation ◇ Mid-term Review ◇ Technical Forum <ul style="list-style-type: none"> ▪ Preparation for Technical Forum ◇ Action plan presentation <ul style="list-style-type: none"> ▪ Action plan preparation ▪ Preliminary Evaluation of Action Plan ◇ Evaluation meeting, closing ceremony ◇ Transfer for business trip

3. Final Phase (activities in home country)

Participants are expected to implement the action plan (interim report) and report on progress within six (6) months after the end of the phases in Japan.

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: be engineers or administrative officials of waste management experience or an equivalent level of knowledge who will continue working in the same field after the training course

*The priority is given to local government's staffs; however national government's staffs can be selected if they are in charge of the supporting local governments' waste management because the course aims at enhancing the capacity development of local governments, which are on the front lines of waste management.

2) Experience in the relevant field: have more than 3 years' experience in the field of 1)

3) Age: between 30 (thirty) and 45 (forty-five) years old

4) Language: have a competent command of spoken and written English which is equal to TOEFL CBT 250 or more (Experience has shown that many participants find themselves unable to make progress in their training because of inadequate knowledge of 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.

3. Required Documents for Application

- (1) **Application Form:** The Application Form is attached to this General Information.
- (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) **Country Report:** to be submitted with the application form. Fill in Annex of this General Information, and submit it along with the Nomination Form.

4. Procedure for Application and Selection :

(1) Submitting the Application Documents:

Closing date for application to the JICA Center in JAPAN: June 18, 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 July 18, 2008.**

5. Country Report -- to be submitted together with the application

Before coming to Japan, applicants should prepare a report on the present situation of their field of study and interest in their own country. This country report should be typewritten (A4 size, Applicants should prepare the report to use the formats as attached in ANNEX (Personal Profile, Organization Profile and Matrix). and submit together with the Nomination Form. The submitted report is used for screening of applicants and as training material.

Note: As presentations of Country Reports to be conducted during the course are vital to achieving effective results through the training, participants are kindly required to bring their country reports contained on CD-ROM together with the following items listed below.

- 1) A good many materials, including photographs and slides, to provide a clearer explanation of sites of waste sources, collection, transport, intermediate treatment (if applicable) and final disposal (land fill, etc.) in the waste management process of the participant's country. (Discussions for the purpose of improvements will be conducted among participants, instructors and others following presentations.
- 2) An explanation of personal motive for participation in the training, issues

specific to the participant's country about which he or she wishes to learn, and what concrete actions for improvement the participant will take upon completion of the course. (See ANNEX in detail.)

6. GEC-JICA Websites

All the participants in this group-training program are kindly requested to check the G.I. (General Information) on both websites, before coming to Osaka, and to abide by what is indicated therein, as required.

◀URL Addresses▶

① JICA Osaka International Centre (JICA Osaka):

<http://www.jica.go.jp/worldmap/english.html#osaka>

② Global Environment Centre Foundation (GEC):

http://gec.jp/gec/gec.nsf/en/Activities-JICA_Training-Top

Note: Be sure to refer to “Details of the Training course (General Information)”.

7. 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, and
- (6) to observe the rules and regulations of their place of accommodation and not to change the accommodation designated by JICA.

IV. Administrative Arrangements

1. Organizer:

(1) **Name:** JICA OSAKA International Center

(2) **Contact:** Mr. HIHARA Kazutomo (Hihara.Kazutomo@jica.go.jp)

Ms. SHIMOMURA Makiko (osictp3-kadaibetsu-1@jica.go.jp)

2. Implementing Partner:

Global Environment Centre Foundation (GEC)

Address: 2-110 Ryokuchikoen, Tsurumi-ku, Osaka 538-0036, Japan

Tel: 81(*)-6(**)-6915-4121 Fax: 81(*)-6(**)-6915-0181

Osaka City Environment Bureau

Address: 1-5-1 Abenosuji, Abeno-ku, Osaka 545-8550, Japan

Tel: 81(*)-6(**)-6630-3121 Fax: 81(*)-6(**)-6630-3580

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

(*) country code of Japan (**) area code

URL: <http://www.jica.go.jp/worldmap/english.html#osaka>

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.

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.

ANNEX

Country Report

*Please keep in mind that it should be clear, concise. However you can expand the space of each row and column of the format, if necessary.

1. Personal Profile

Country / City:	Name:
Organization name:	
Position/title:	
Your experience on the Urban Solid Waste Management (*Not only your present position but also previous jobs related with solid waste management. Please write years that you had been engaged in those jobs too.):	

2. Organization Profile

Year of establishment:		Number of staff:		Annual budget(US\$):	
Purposes/Goals:					
Major target group/area:					
Major area/type of activities (*An itemized style):					
Major associated organizations:					

3. “Matrix” of individual course objectives (column) and conditions in your organization / responsible areas corresponding to the course objectives (row)

*This part is connected with the training components as shown at TRAINING FLOWCHART on page 3.

Item	Problems and current topics	Related laws and regulations	What specific interests do you have within the technical and theoretical features?	What specifically are your expectations back home to apply the method? And why?	Future plans of your organization (e.g. short term or long term)
Waste treatment planning					
Waste collection					
Intermediate treatment					
Waste incineration					
3R(Reduce, Reuse, Recycle)					
Final disposal					

Topics you would like to discuss during the course	
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* Please attach the following data

- (1) Country data (area, population and population density, topography, climate, society, economic conditions, main industries, etc.)
- (2) Amount of waste output
- (3) Types of waste
- (4) Organization chart of waste management showing each stage in the process including planning, construction of facilities, collection and disposal (please specify your current position)
- (5) Number of employees in each waste management division
- (6) Waste management method chart
- (7) Number and type of collection/haulage vehicles
- (8) Method of intermediate treatment and final disposal and the amount of waste at each stage
- (9) Map with location of waste collection and disposal areas marked
- (10) Budget (i.e. national, regional)

(Notes)

Country Report presentation at the start of the course is vital to achieving effective results through the training.

The following must be prepared without fail for the Country Report presentation.

- 1) All points in the process of waste (garbage) management including sources, collection, transport (intermediate treatment, if applicable) and final disposal (land fill, etc.). (Participants are requested to prepare a large volume of materials (including photographs and slides), preferably contained on CD-ROM together with the Report, to be brought with them to Japan to provide a clearer explanation of sites of waste sources, collection, transport, intermediate treatment (if applicable) and final disposal (land fill, etc.) in participant countries during presentation of Country Reports. Discussions for the purpose of improvements will be conducted between participants, instructors and others following presentations.
- 2) As indicated in the ANNEX, each applicant must also prepare an explanation of their personal motive for participation in the training, issues specific to the participant's country about which he or she wishes to learn, and what specific actions for improvement the participant will take upon completion of the course.