



# TRAINING AND DIALOGUE PROGRAMS

## GENERAL INFORMATION ON

### **SOLID WASTE MANAGEMENT BY LOCAL GOVERNMENT (B)**

**集団研修「地方自治体における廃棄物処理(B)」**

***JFY 2011***

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

**NO. J11-00696 / ID. 1180111**

**From December 2011 to May 2012**

**Phase in Japan: From January 9 to March 3, 2012**

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 developing countries, the volume of general waste has been increased by the rapid concentration of the population with active consumption in urban areas. Those wastes have been accompanied by severe contamination of air and water environment. Therefore, it is an urgent need to take countermeasures against those wastes.

Though waste treatment measures are carried out in those countries, the waste treatment system is still insufficient. As a form of assistance by Japan in response to these issues, JICA has been conducting a training course in cooperation with Osaka City for upgrading the capacity for waste management.

According to the report on “State of World Population 2007” released by UN Population Fund, urban population is estimated to be over 4.9 billion and 80 % of the urban population is anticipated to reside in developing countries in 2030. Under the circumstances, there is a concern that such fast-paced population concentration in urban areas will worsen the environmental problems. Among others, issues related to waste management is serious and that is why it is of a great importance to continuously offer support for solving problems on waste management in developing countries.

Since local governments play a significant role in practical solid waste management, a program with its focus on the role of local governments has been proposed and approved for its effective use of accumulated expertise of Japan.

## **For what?**

This program aims to enhance the capacity of local governments' (or national government's sections which support local governments) and related organizations in the field of urban solid waste management.

## **For whom?**

This program is offered to local governments or related organizations engaged in urban solid waste management of a model area designated by each participating country.

## **How?**

Participants shall have opportunities to identify issues and problems for solid waste management through workshop, and to learn about various countermeasures and the cooperation between local governments and citizens, through lectures, observations and exercises. In the end they will formulate an action plan for improving the situation. This plan will describe how to solve issues related to waste management, making use of what participants will have learned in this program.

## ***II. Description***

**1. Title (J-No.): Solid Waste Management by Local Government (B) (J1100696)**

**2. Period of program**

**Duration of whole program:** December 2011 to May 2012

**Preliminary Phase:** December 9, 2011 to January 8, 2012  
(in a participant's home country)

**Core Phase in Japan:** January 9 to March 3, 2012

**Finalization Phase:** March 2012 to May 2012  
(in a participant's home country)

**3. Target Regions or Countries**

Armenia, Bangladesh, Bhutan, Bosnia and Herzegovina (2), China, Guatemala, Kosovo, Pakistan (2), Philippines, Sri Lanka (2)

**4. Eligible / Target Organization**

This program is designed for local governments and related organizations engaged in solid waste management.

**5. Total Number of Participants**

13 participants

**6. Language to be used in this program:** English

**7. Program Objective:**

A draft plan for improvement of solid waste management will be formulated by a local government of an area.

**8. Overall Goal**

Plan for improvement of solid waste management will be designed based on the trial result of the draft plan.

## 9. Expected Module Output and Contents:

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

<b>(1) Preliminary Phase in a participant's home country</b> (December 9, 2011 to January 8, 2012) <i>Participating organizations make required preparation for the Program in the respective country.</i>	
Expected Module Output	Activities
Inception report is formulated	Formulation and submission of Inception Report with application form (c.f. VI.ANNEX.) Collection of data and preparation for "Inception report presentation" held at the first stage of program in Japan

<b>(2) Core Phase in Japan</b> (January 9 to March 3, 2012) <i>Participants dispatched by the organizations attend the Program implemented in Japan.</i>		
Expected Module Output	Subjects/Agendas	Methodology
1. To grasp the reality and issues on waste management and to extract practical hints for solution through exchanging views among participants	(1) Sharing the information and ideas through report presentation and discussion (2) Presentation of information on waste (type and composition)	Presentation Discussion
	(3) Waste administration in Japan (4) Laws and services	Lecture and Observation
2. To be able to explain the current state of measures against waste taken by a local government for the effective use in each country. (Planning, effective collection and transportation method, sanitary treatment/disposal method, treatment of hazardous waste etc.)	(1) Current situation of waste treatment (2) Waste treatment planning (3) Waste reduction through recycling (3) Analysis of type, composition and amount of waste for future estimate (4) Collection and transportation (5) Current situation of sorting (6) Purposes and methods of Intermediate treatment (incineration, shredding, separation or resources-recovery) (7) Final disposal – landfill sites (8) Hazardous waste	Lecture Observation and Exercise

3. To be able to explain the roles of and cooperation among citizens, businesses, and local governments for the appropriate waste management	Local government (1) Waste reduction activity (2) Sorting center	Lecture Observation
	Consumers ' participation (1) Waste reduction (2) Composting by Consumers' Co-op (3) "My Bag" campaign by supermarkets Business establishments' participation (4) Recycling facility for waste home appliances (5) PET bottle compression and recycling facility (6) Biogas recycling facility (7) Cement factory (8) Recycling of paper and glass bottles	Lecture Observation
4. Action plan (interim report featuring the improvement plan) is formulated to solve issues related to waste management based on the reality of each country	(1) Action Plan formulation (2) Action Plan guidance (3) Presentation of Action Plan	Workshop Consultation Presentation

**(2) Finalization Phase in a participant's home country**

**(March 4 2012 to May 31, 2012)**

*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
5. Action Plan will be studied by each participating organization	Explanation of the action plan (interim report) as a start for the implementation back in the participant's country and submission of its final report compiled by the participating organization by May 31, 2012 to JICA.

**<Structure of the program>**

1. Preliminary phase (activities in your home country): Preparation of the country report.
2. Core phase (activities in Japan): Curriculum is subject to minor changes.

Curriculum		(L) and (D) (hours)	(O) (hours)
①	Current situation and problems of waste treatment in Japan		
Overview	▪ Waste treatment in Japan	3	
	▪ Current situation	2	
	▪ Laws and services	3	
	▪ Hazardous waste and specially controlled municipal solid waste	2	
	▪ Operation flow of waste treatment	3	
②	Particulars		
Waste reduction	▪ Waste home appliance depot and recycling facility		5
	▪ PET bottle compression, packing and recycling facility		5
	▪ Waste reduction measures of local governments	10	
	▪ Cooperation of businesses / System for paid service		5
	▪ Analysis of refuse composition for future estimate	7	
	▪ Designing of municipal solid waste management plan and case study	5	
Sorted collection	▪ Present situation of sorted collection (classification etc.)	5	
	▪ Waste collection site (Sorted collection)		8
Intermediate treatment	▪ Purpose and method of intermediate treatment	5	
	▪ Disposal of medical waste		2
	▪ Heat recovery process		7
	▪ Biogas production facility		2
	▪ Composting of kitchen garbage	2	5
Final disposal	▪ Type and control of landfill site	5	
	▪ Landfill site of PHOENIX project	2	13
	▪ Cement factory (using incineration residue) etc.		5
Recycling	▪ Recycling facilities (paper, glass bottles etc.)		10

③ Others		
	▪ Course orientation / program and general orientation	4
	▪ Country report presentation session	5
	▪ Exchange of views	11
	▪ Workshop for Action Plan making / Presentation	23
	▪ Evaluation meeting / Transfer	11
Total hours		108
		67

(L) Lecture (D) Discussion and Exercise (O) Observation

### 3. Finalization phase (activities in home country):

Participants are expected to present the action plan (interim report) for the study in the participating organization. The participating organization should submit final report containing the result of study to JICA local office in respective country by January 31, 2012.

### 10. Follow-up Cooperation by JICA:

In this program, JICA might extend follow-up support to participating organizations that intend to develop the result of the program further. Please note that the support shall be extended selectively based on proposals from the participating organizations.

### ***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 program for those specific purposes.
- (2) This program is enriched with contents and facilitation schemes specially developed in collaboration with relevant prominent organizations in Japan. These special features enable the program to meet specific requirements of applying organizations and effectively facilitate them toward solutions for the issues and problems.
- (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) Essential Qualifications**

- 1) Current Duties: be an administrative officer/ technical officer of a model local government or related organization engaged in solid waste management. Officers of the national government, in charge of supporting local governments, are also qualified.
  - 2) Experience in the relevant field: have more than 3 years' experience in the field of solid waste treatment or have equivalent level of knowledge.
  - 3) Educational Background: be a graduate of university or equivalent.
  - 4) Language: have a competent command of spoken and written English. (This program includes active participation in discussions, and work shop for action plan (interim report), 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.
- ※Pregnancy :  
Pregnant participants are strictly requested to complete the required procedures before departure in order to minimize the risk for their health. The procedures include ①letter of the participant's consent to bear



economic and physical risks ②letter of consent from the participant's supervisor ③letter of consent from your Embassy in Japan, ④medical certificate. Please ask National Staffs in JICA office for the details.

6) Must not be serving any form of military service.

## **(2) Recommendable Qualifications**

- 1) Expectations for the Participants: Participants should stay engaged in solid waste management after the program.
- 2) Age: must be less than forty-five (45) years

## **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) Inception Report:** to be submitted with the Application Form. Please use the format attached in Annex of this General Information, and submit it 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: **November 9, 2011**

**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 program. 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 9, 2011.**

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

None

**6. Conditions for Attendance:**

- (1) to follow 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 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,
- (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 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 and section III -4.

## IV. Administrative Arrangements

### 1. Organizer:

(1) **Name:** JICA Hyogo

(2) **Contact:** Program Division (jicahic-kenshukakuju@jica.go.jp)

### 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. The traveling time outside Japan shall not be covered.

### 3. Accommodation in Japan:

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

JICA Hyogo International Center (JICA HYOGO)

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

TEL: 81-78-261-0341 FAX: 81-78-261-0342

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

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

### 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. 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.

### 5. 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. Participants who have successfully completed the seminar will be awarded a certificate by JICA.

2. For the promotion of mutual friendship, Hyogo International Center encourages

international exchange between JICA participants and local communities, including school and university students as a part of development education program. JICA participants are expected to contribute by attending such activities and will possibly be asked to make presentations on the society, economy and culture of their home country.

3. There is a computer room in JICA Hyogo where sixteen desk-top computers have the internet access. Each guest room also has the access by LAN cable. It is advisable to bring lap top computer in order to avoid congestions.

## **VI. ANNEX:**

### **Solid Waste Management by Local Government**

**(JFY 2011)**

### **Inception Report**

All the applicants are requested to prepare Inception Report on the following issues and submit e-data of **1. Personal Profile**, **2. Organization Profile**, and **3. Matrix** to JICA together with Application Form.

#### **1. Personal Profile**

Country / City:	Name:
Name of organization:	
Your present position / Title:	
Your experience on Urban Solid Waste Management (*Not only your present position but also previous jobs related with solid waste management. Please write years that you have been engaged in these jobs.):	

#### **2. Organization Profile**

Year of establishment:		Number of staff:		Annual budget (US\$)	
Mission::					
Major target group/area:					
Major area / type of activities (By item):					

### 3. Matrix

Item		Present situation	Issues and problems	Related laws and regulations	What specific interests do you have?
<b>Reduction</b>					
<b>Waste treatment planning</b>					
<b>Collection and transportation</b>					
<b>Intermediate treatment</b>	<b>Incineration</b>				
	<b>Shredding</b>				
	<b>Separation or resources-recovery</b>				
	<b>Composting</b>				
<b>Recycling</b>					
<b>Final disposal</b>					

*\* Accepted participants are requested to explain their inception report at the start of the program. It is recommendable that participants utilize power-point, visual aids, etc. for the clear and more effective explanation.*

*Since the next item is expected to contain a large volume of data, accepted participants are advised to bring CD-ROM or USB saving all the data, to Japan. It is not necessary to send Data to JICA Hyogo in advance.*

### 4. Relevant Data

- 1) Country data (area, population, population density, topography, climate, society, economic conditions, main industries, etc.)
- 2) Information on amount of waste output, type of waste and the current trend of a target area (if possible, past 5 years' data is preferable.)
- 3) Organization chart of waste management (each stage in the process including planning, construction of facilities, collection and disposal. Please specify your current position.)
- 4) Number of employees in each waste management division
- 5) Waste management method chart
- 6) Number and type of collection/haulage vehicles
- 7) Method of intermediate treatment and final disposal with the waste amount at each stage
- 8) Map with location of waste collection and disposal areas marked
- 9) Explanatory photos

## *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 Hyogo International Center (JICA HYOGO)**

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

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