



TRAINING AND DIALOGUE PROGRAMS

GENERAL INFORMATION ON

Promotion and Dissemination of Biomass Utilization Technology

(**集団研修「バイオマス利用技術普及」**)

JFY 2013

NO. J13-00808, Program No: 1380249

Phase in Japan : From January 6th to February 15th, 2014

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.

Executive Summary of the General Information

Title	Promotion and Dissemination of Biomass Utilization Technology (J13-00808)	
Program Objective	Participants will acquire necessary methodology to formulate effective and efficient utilization plan of biomass resources through grasping quantity of reserves and availability of biomass resources in respective countries/area.	
Period	From January 6th, 2014 to February 15th, 2014	
Target Organization	Administrative organization in charge of planning/promoting/implementing utilization of biomass and/or researchers in public researching institutes or universities	
Target Countries	Thailand, Bangladesh, Sri Lanka, Fiji, Jordan, Kenya, Sudan, Serbia, Albania, Kosovo, Bosnia and Herzegovina, Moldova, Ukraine, Georgia, Argentina	
Total No. of Participants	Seventeen (17) participants	
Nominee Qualifications	<p>Essential Qualifications;</p> <ol style="list-style-type: none"> 1) Current Duties: be administrative officials presently engaged in planning of biomass utilization / research officials involved in planning process of biomass utilization / presently work as an adviser to planning and promoting biomass utilization 2) Language: have a sufficient command of English enough to give an oral presentation and write a report in English 3) Health: be in good health, both physically and mentally, to undergo the course of training 4) Five or more years of continued future service at the current organization 5) Must not be serving any form of military service 	
Required Documents & Deadline	Application Form with Country Report	November 22th, 2013
	Assignments for the Accepted Participants	Preparation for Job /Country Report Presentation (Making the presentation material using Microsoft Power Point based on the Job/Country Report which is submitted at the application) Submission Dead Line : Before/On arriving Japan
Notice of Acceptance	November 29th, 2013	
JICA Center in Charge	JICA Chugoku International Center Ms. Hisakatsu OKUDA (cictp@jica.go.jp)	

I. Concept

Background

Problems of natural resources depletion and climate change are two major issues which the earth is currently going through in the field of energy and global environment. To face the problems immediate measure must be taken, such as promoting utilization of sustainable energy resources.

Especially, utilization of biomass resources is required to be introduced and disseminated due to the following reason:

- Effectively utilizing biomass resources locally which can easily be found in developing countries can lead to reduction of usage of fossil fuel.
- It can contribute to solving the above 2 major issues as well as making such effect as income increase of rural areas, improvement of quality of life, foreign exchange saving etc..

However, it is at the same time pointed out that is utilizing biomass resources without sufficient and appropriate knowledge regarding resources, technology and system could cause destruction of environment and more creation of greenhouse gases.

In conjunction with the above situations, this program which aims to realize the effective utilization of biomass resources is implemented.

For what?

This program is implemented aiming to provide training participants with deeper understanding on biomass resources, technology and system, and necessary knowledge for introducing biomass in developing countries.

For whom?

This program is offered to staff of administrative organization in charge of planning/promoting/implementing utilization of biomass and/or researchers in public researching institutes or universities.

How?

Participants shall have opportunities in Japan to identify approaches, methods and technologies regarding utilization of biomass resources as well as to formulate the plan for biomass utilization systems through lectures, discussion, observation, and report making.

II. Description

1. Title (J-No.):

“Promotion and Dissemination of Biomass Utilization Technology”
(J13-00808)

2. Period of program

January 6th 2014 to February 15th 2014

3. Target Regions or Countries:

Thailand, Bangladesh, Sri Lanka, Fiji, Jordan, Kenya, Sudan, Serbia, Albania, Kosovo, Bosnia and Herzegovina, Moldova, Ukraine, Georgia, Argentina

4. Overall Goal:

Utilization plan of sustainable biomass resources will be formulated and adopted in participants' respective countries, thus contribute to build pro-environmental society.

5. Program Objective:

Participants will acquire necessary methodology to formulate effective and efficient utilization plan of biomass resources through grasping quantity of reserves and availability of biomass resources in respective countries/area.

6. Eligible / Target Organization :

This program is designed for staff of administrative organization in charge of planning/promoting/implementing utilization of biomass and/or researchers in public researching institutes or universities.

7. Total Number of Participants :

Seventeen (17) participants

8. Language to be used in this project :

English

9. Expected Output and Contents:

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

(1) Before arriving at Japan	
<i>Participating organizations make required preparation for the Program in the respective country.</i>	
Expected Output	Activities
Job / Country Report	Formulation and submission of Job / Country Report

(2) Training in Japan	
(January 6th, 2014 to February 15th, 2014)	
<i>Participants dispatched by the organizations attend the Program</i>	
Expected Output	Subjects/Agendas and Methodology
1) Participants will be able to explain types and composition/classification/ characteristics / collection of available biomass resources.	Through lectures, observation and practical works, the participants will learn types of biomass resources and understand composition/classification/characteristics/collection of available biomass resources.
2) Participants will be able to explain utilization technology of various biomass resources.	Through lectures, observation and practical works, the participants will learn and understand principal, characteristics, efficiency and technology of each energy conversion; physical, thermochemical, and biochemical conversion.
3) Participants will be able to implement formulating biomass utilization system.	Through lectures, observation and practical works, the participants will learn and understand how to formulate and evaluate system design utilizing biomass resources by conducting system design based on mass balance and energy balance.
4) Participants will prepare Action Plan based on the skills and knowledge gained in Japan.	At the end of this program, participants will make an action plan on how to share and promote skills and knowledge gained from this program. Through this program, participants are expected not only to understand the experiences of Japan but also to implement the skills and knowledge gained in Japan after returning home.

(3) After returning to a participant's home country
<i>Participating organizations produce final outputs by making use of results brought back</i>

<i>by participants. This phase marks the end of the Program.</i>	
Expected Output	Activities
To implement an action plan (progress report)	Participants are to implement the relevant activities based on the action plan which was made during the program. Also, participants must submit the progress report to JICA by the end of May 2014.

(Subject to partial alteration)

<Structure of the program>

1. Preliminary phase (activities in your home country)

Preparation of the Job/ Country report

2. Core Phase (activities in Japan): Topic outline (subject to changes)

1st week (6th Jan - 10th Jan) : Briefing & Orientation, Job/Country Report Presentation, Lectures, discussion

- (1) Arriving Japan on January 6th
- (2) Briefing and Program Orientation
- (3) Job/Country Report Presentation
- (4) Lectures on Basic concept of biomass utilization

2nd week (14th Jan – 17th Jan) : Attending conference

- (1) Attending “Conference on Biomass Science” in Kochi City

3rd week (20st Jan - 24th Jan) : Lectures, discussion and site visits

- (1) Lectures on Biomass Resources

4rd week (27st Jan - 31th Jan) : Lectures, discussion and site visits

- (1) Lectures on biomass energy conversion methodology (thermochemical, biochemical conversions)
- (2) Lectures on Biomethanation and Ethanol Fermentation

5th week (3rd Feb. - 7th Feb.) : Lectures, discussion and site visits

- (1) Lectures on Biomass Utilization System
- (2) Lectures on Energy Balance for the Income and Expense
- (3) Lectures on Economical Evaluation of Bioenergy
- (4) Lectures on Life Cycle Assessment

6th week (10th Feb – 13th Feb) : Practical work and report making

- (1) Practical works on designing and evaluating of biomass utilization system
- (2) Final report making
- (3) Final report presentation

Leaving Japan on 15th February

The program will include following site visits:

- Biomass related research center and plant
- Wood pellet production and utilization systems
- Supercritical water gasification pilot plant
- Food Waste Fermentation and Gasification
- Biodiesel production plant, etc.

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 this program for those specific purposes.
- (2) This program is enriched with contents and facilitation schemes specially developed in collaboration with relevant prominent organizations in and Japan. These special features enable the training program to meet specific needs of participating 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 this program by carrying out the activities of the Post-Program Phase described in section II -9.

2. Nominee Qualifications:

Participating organizations are expected to select nominees who meet the following qualifications.

(1) Essential Qualifications

- 1) Those nominated by their government in accordance with the proper application procedure;
- 2) Current Duties: be administrative officials presently engaged in planning of biomass utilization / research officials involved in planning process of biomass utilization / presently work as an adviser to planning and promoting biomass utilization
- 3) Language: have a sufficient command of English enough to give an oral presentation and write a report in English
- 4) Health: be in good health, both physically and mentally, to undergo the course of training
- 5) Five or more years of continued future service at the current organization
- 6) Must not be serving any form of military service.

(2) Recommendable Qualifications

- 1) Educational Background: be bachelor's or master's degree holders;
- 2) Experience in the relative field: have more than three (3) years' experience in the field of above mentioned;
- 3) Age: be between the ages of twenty-five (25) and forty (50) years.

3. Required Documents for Application

(1) Application Form

The Application Form is available at the respective country's JICA office or Embassy of Japan.

*Pregnancy

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

- ① letter of the participant's consent to bear economic and physical risks
- ② letter of consent from the participant's supervisor
- ③ doctor's letter with agreement of her training participation.

Please ask National Staffs in JICA office for the details.

(2) Job/Country Report for Selection

Respective applicants are required to submit his/her own **Job/Country Report** using the form attached to this General Information as ANNEX. Please fill and submit it together with the Application Form mentioned above.

(*Applicants are strongly required to typewrite the Application Form and Job/Country Report. There are many applicants disqualified from the selection because of the illegible handwriting in 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 22th, 2013.**

Note: The deadline set by the respective country's JICA office (or Embassy of Japan) is earlier than this date. Please confirm the local deadline to meet the closing 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 Embassy of Japan) 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.

(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**

November 29th, 2013.

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 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

IV. Administrative Arrangements

1. Organizer:

(1) Name: JICA Chugoku (JICA Chugoku International Center)

※"Chugoku" is the name of the region consisting of five (5) prefectures in western part of Japan's main island. JICA Chugoku is in charge of implementing JICA's projects/programs in the region.

(2) Contact: Ms. Hisakatsu OKUDA (cicctp@jica.go.jp)

2. Implementing Partner:

The Graduate School of Engineering, Hiroshima University/Biomass Technology Research Center (BTRC)

URL: <http://home.hiroshima-u.ac.jp/bprc/index-e.html>

3. Travel to Japan:

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

(2) Travel Insurance: Term of Insurance is from arrival to departure in Japan.

*The traveling time outside Japan shall not be covered.

4. Accommodation in Japan:

<Japan>

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

JICA Chugoku International Center (JICA Chugoku)

Address: 3-3-1 Kagamiyama, Higashi-hiroshima, Hiroshima
739-0046 Japan

TEL: 81-82-421-5800 FAX: 81-82-420-8082

(where "81" is the country code for Japan, and "82" is the local area code)

If there is no vacancy at JICA Chugoku, 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. 8-16 of the brochure for participants titled “KENSU-IN GUIDE BOOK,” which will be given to the selected participants before (or at the time of) the pre-departure orientation.

6. Pre-departure Orientation:

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

V. Other Information

1. During the Job / Country Report Presentation Session in Japan, representative will be given 10 minutes for his/her presentation and 10 minutes for questions and answers. PC (Power Point) is available to assist the presentation.
2. It would be appreciated if participants could bring materials, in addition to the reports, that show the situation of biomass utilization in your country such as photographs, photo slides and books. The reports are expected to be used as materials for presentation and for discussions during the course period.

VI. ANNEX

Job / Country Report

Participants are requested to prepare a job / country report on the following issues before arriving in Japan. These documents are requested to be typewritten in English on A4 size paper at maximum of 20 pages.

I. Nominee's Information	
1. Full Name	[Family] [First] [Middle]
2. Organization	
3. Title of your present job	
II. Description of Your Organization	
1. Missions and works of your Organization (Summarize in items)	
2. Works that you are in charge of in your organization. (Summarize in items)	
3. Organizational chart	* Please attach the chart and circle where you belong.

III. Condition of Biomass Utilization of Your Country / Area	
<p>1. Biomass resources and its utilization, present condition and future outlook</p>	
<p>2. Laws or Systems for promoting utilization of and research of biomass resources</p>	
<p>3. Special topics of the biomass utilization, especially your practice or research</p>	

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 Chugoku International Center (JICA CHUGOKU)
Address: 3-3-1 Kagamiyama, Higashi-hiroshima, Hiroshima, 739-0046 Japan
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