



TRAINING AND DIALOGUE PROGRAMS

GENERAL INFORMATION

**Group Training Program
“Soil Diagnosis Technology for Sustainable Agricultural
Production and Environmental Conservation”**

**集団研修「持続的農業生産と環境保全のための土壌診断技術」
JFY 2010**

<Type: Trainers Training Program /人材育成普及型>

No. J10-00626 / ID. 1080850

From May 9, 2010 to July 31, 2010

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 the Governments of recipient country and Japan.

I. Concept

Background

Proper agricultural practices require the improvement and dissemination of soil analysis and diagnosis techniques in order to achieve appropriate farmland fertilization control and higher unit crop yields. Efforts toward the practice of sustainable agriculture are also needed. Countries where fertilizers are not sufficient require the introduction of simple fertility management techniques such as the effective use of livestock excreta and crop residue, as realized by cooperation between crop farmers and livestock farmers. This course aims to equip trainees with the skills necessary to perform basic soil analysis from chemical and physical viewpoints and to enhance their diagnostic abilities based on the analysis results obtained. Participants will also learn ways of using compost and analyze its characteristics to acquire the knowledge and skills needed for the dissemination of high-quality compost.

For what?

This program is designed to disseminate and instruct soil improvement and environmental conservation techniques for sustainable agriculture.

For whom?

This program is designed for researchers and engineers related to soil analysis in the agricultural organizations.

How?

Participants will have the opportunities to have 1) lectures, 2) practices, 3) site visits, and 4) discussions in order to achieve the program objective. Participants will also formulate an extension plan describing what the participants will do after they go back to home country putting the knowledge and ideas acquired and discussed in Japan.

II. Description

1. Title (J-No.):

Group Training Program on “Soil Diagnosis Technology for Sustainable Agricultural Production and Environmental Conservation” (J10-00626)

2. Period of Program:

May 9, 2010 to July 31, 2010

3. Target Countries and Allocated Number:

Mongolia (1 persons), Bolivia (1 person), Malawi (1 person), Zambia (1 person), Sri Lanka (2 person), Jamaica (1 person), Afganistan(1 person)

4. Eligible / Target Organizations:

Agricultural organizations considering the execution or introduction of soil analysis and diagnosis.

5. Total Number of Participants: 8 participants in total

6. Working Language: English

7. Program Objective:

Soil diagnosis (physical, chemical and biological) techniques and their usage are to be shared by researchers and engineers related to soil analysis in the target agricultural organizations.

8. Overall Goal:

Soil analysis and diagnosis techniques used by the target agricultural organizations is to be improved.

9. Expected Module Output and Contents:

This program consists of the following components:

(1)Preliminary phase in a participant’s home country (To submit the Inception Report by March 29, 2010,with the Application Form) The participating organizations make required preparation for the program in the respective country.	
Modules	Activities
Inception Report is formulated.	Formulation and submission of the Inception Report Please refer to <i>VI. ANNEX: Attachment-1.</i>

(2)Core phase in Japan The participants nominated by the participating organizations attend the program in Japan.		
Modules	Subjects	Activities
i) To be able to explain the relationships between agriculture and weather, terrain and soil conditions.	<ul style="list-style-type: none"> •Agricultural overview •Agriculture in the world 	Lectures, site visits
ii) To be able to explain the concepts and methods of soil diagnosis to achieve the stable production of high-quality agricultural produce.	<ul style="list-style-type: none"> •Introduction to soil diagnosis •Soil analysis •Utilization of soil diagnosis 	Practice, lectures, site visits
iii) To be able to explain the concepts and methods of	<ul style="list-style-type: none"> •Soil improvement techniques •Water quality and soil heavy metal analysis 	Practice, lectures, site visits

proper management and dissemination toward sustainable agriculture.	• Cooperation between farming and stockbreeding	
iv) To formulate extension plan (Interim Report) on dissemination of technology.	• Project Cycle Management • Instructions on writing Interim Reports	Practice, lectures

The schedule is subject to change due to the coordination of curriculum.

(3) Finalization phase in a participant's home country (August 2010 to October 2010) The participating organizations produce final outputs by making use of results brought back by the participants. This phase marks the end of the program.	
Module	Activities
To examine the extension plan and submit the Final Report.	Examination of applying the extension plan at the participating organizations, and progress of the implementation of the Plans, and Submission of the Final Report by October 31, 2010, based on the follow-up format provided during the program.

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 operations. 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, the 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: researchers, analyst, university teacher relating soil analysis,
- 2) Experience in the relevant field: more than three (3) years of experience in the fields of soil analysis or cultivation instruction,
- 3) Age: be over twenty-seven (27) and under forty (40) years of age,
- 4) Educational background: a university graduates or equivalent,
- 5) Language: competent command of spoken and written English, which is equal to TOEFL iBT* 72 (CBT** 200/PBT*** 533) or more (The program is commanded by English, therefore participants are requested to have sufficient English ability).

*iBT: Internet-Based Testing/ **CBT: Computer-Based Testing/

***PBT: Paper-Based Testing,

- 6) Health: be in good health, both physically and mentally, to undergo the field training,
*Pregnancy :

There is higher risk for pregnant women and people with chronic diseases to cause serious medical consequences when infected with the new Influenza A (H1N1) virus according to the past cases. Under the pandemic situations of the new Influenza, pregnant applicants shall not be accepted for the time being.

And applicants who suffer from chronic diseases, such as respiratory illness, cardiac disease, metabolic disease (diabetes, etc), renal dysfunction and immune insufficiency (systemic steroid administration, etc), shall not be accepted in principle. Please ask national staffs in JICA office for the details.

- 7) Must not be serving any form of military service.

3. Required Documents for Application:

- (1) **Application Form**: the Application Form is available at the respective countries' JICA Overseas Offices or the Embassies of Japan.
- (2) **Inception Report**: to be submitted with the Application Form. (Detailed information is provided in *VI. ANNEX: Attachment-1.*)
- (3) **Questionnaire** (*VI. ANNEX: Attachment-2*)
- (4) **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.

4. Procedure for Application and Selection:

(1) Submitting the Documents for Application:

The final date for application to the JICA Obihiro (the organizer of this program) in Japan: **March 29, 2010**

Note: Please confirm the closing date (submission date) set by the respective countries' JICA Overseas Office or the 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 governments, the respective countries' JICA Overseas Offices (or the

Embassies of Japan) shall conduct screenings of nominees, and send the documents to the JICA Obihiro in Japan. The final selection shall be made by the JICA Obihiro in consultation with the organizations concerned in Japan based on submitted documents according to qualifications. Organizations 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 countries' JICA Overseas Offices (or Embassies of Japan) to the respective Governments by **not later than April 12, 2010.**

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, 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:

JICA Obihiro International Center (JICA Obihiro)

(Address) 1-2, Minami 6-chome, Nishi 20-jo, Obihiro-city, Hokkaido, 080-2470, Japan

(Tel) 81(*)-155(**)-35-1210 (Fax) 81(*)-155(**)-35-1250

Note: *: country code for Japan, **: area code for Obihiro

(Email) jicaobic@jica.go.jp

(Website) www.jica.go.jp/english/

2. Implementing Partners:

Northern Regions Center (NRC)

Obihiro University of Agriculture and Veterinary Medicine

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.

Obihiro International Center (OBIC)

Address: 1-2, Minami 6-chome, Nishi 20-jo, Obihiro-city, Hokkaido,
080-2470, Japan

Tel.: 81(*)-155(**)-35-2001

Fax.: 81(*)-155(**)-35-2213

If no room is available at OBIC, JICA will arrange accommodations for the participants at the other appropriate places.

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,
- (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 countries' JICA Overseas Offices (or Embassies of Japan), to provide participants with details on travel to Japan, conditions of training, and other matters.

V. Other Information

1. Participants who have successfully completed the training program will be awarded a certificate by JICA.

2. School visit

For the purpose of the promotion of "international education", this training program includes a school visit to Japanese local elementary or junior high schools as well as communities. All the participants are requested to take part in this exchange program. To introduce your country, it is advisable for participants to bring some

- (1) musical instruments, and/or popular music CDs,
- (2) crafts,
- (3) photos of foods, clothes, housings, and families of participants (digital data are preferable) and so on.

There are also some cases to introduce their country's dances and games.

3. Medical history

In case you have or have had malaria, you are kindly requested to bring the medicine for malaria with you because it is quite difficult to obtain it in Japan.

4. Climate

The climate condition in Obihiro is given below. Participants are advised to prepare appropriate clothes.

		Winter		Spring			Summer			Autumn		Winter	
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Temperature (°C)	Maximum	-2.0	-1.0	3.4	11.3	17.6	20.4	23.7	25.1	21.2	15.4	7.7	1.1
	Average	-7.7	-6.8	-1.6	5.4	11.0	14.5	18.4	20	16	9.6	2.8	-3.7
	Minimum	-13.9	-13.2	-6.9	0.2	5.4	10.0	14.5	16.2	11.6	4.3	-1.9	-8.9
Humidity (%)		70	69	67	66	69	79	83	82	79	73	68	69
Precipitation (mm)		42.3	30.7	49.6	60.5	80.1	85.9	94.4	139.2	139.8	91.7	68.2	40.3

(Data: 1971~2000 year)

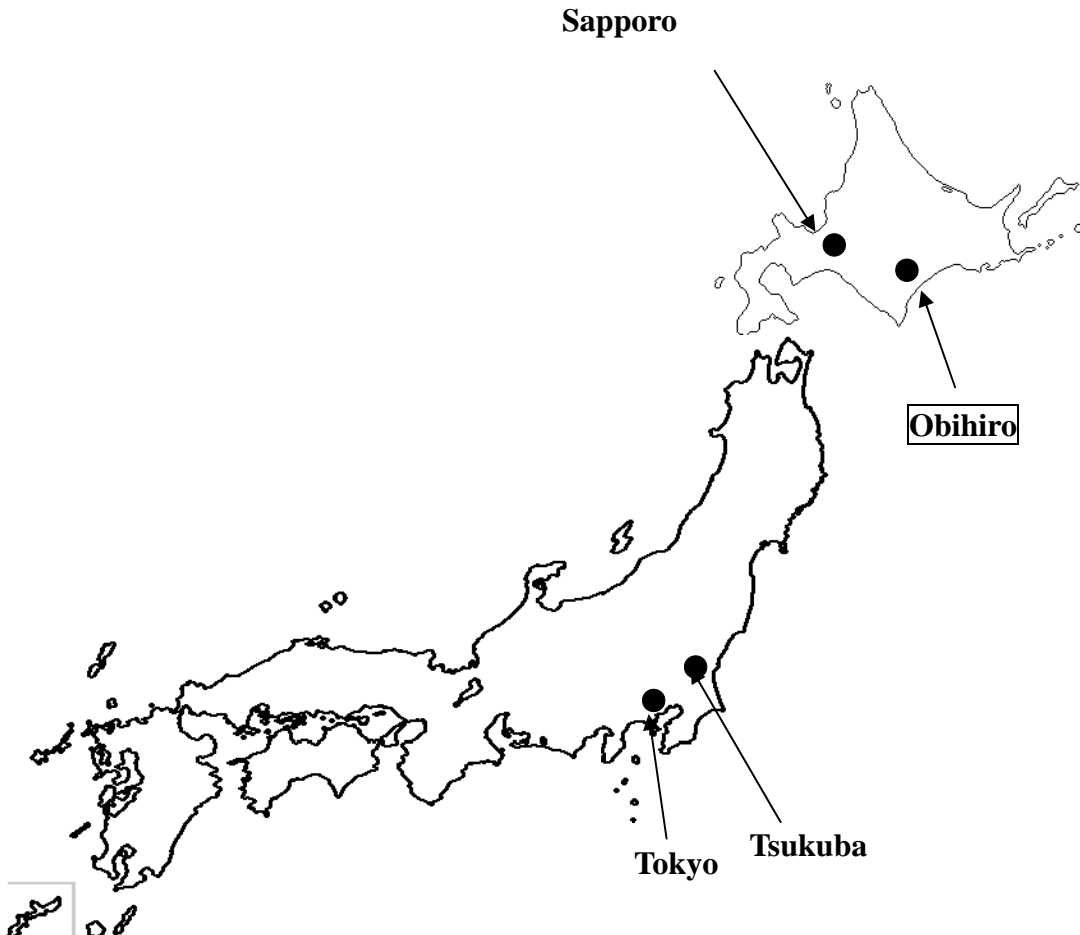
5. Study Trip

As a supplemental program, there is a study trip during your stay.

1. Tsukuba …Duration: About 4 days

Visit: National Institute for Agro-Environmental Science, Tsukuba University

2. Sapporo···Duration: About 4 day
Visit: Hokuren, Compost factory, etc.



VI. ANNEX:

Attachment-1

Inception Report

With the Application Form, the applicants should submit an Inception Report on their current job.

This Report will be used for the screening of successful applicants as well as for the selection of the most suitable training subject for the participants. Applicants who do not attach their Inception Reports and Questionnaires to the Application Form will not be duly considered.

a. Purpose

- (1) To clarify issues and problems presently faced in their work in order to facilitate the acquisition of knowledge and ideas leading to solutions during the training program.

- (2) To provide advance information regarding issues and problems faced by participants to lecturers and organizations concerned with the program as a point of reference in finding solutions.

b. Contents

- (1) Name of training program
- (2) Name of applicant
- (3) Name of organization
- (4) Organization chart
- (5) Roles of the organization and the department to which the applicant belongs
- (6) Introduction of work that the applicant has been in charge of for the last one year
- (7) Problems with which the applicant is facing in their present job in terms of soil management
- (8) Subjects in which the applicant is particularly interested on this program and the reasons

c. Layout

Typewritten in English, 3-5 pages (12-point font, double spaced, A4 size paper)

d. Presentation

The Inception Report is presented by each participant using MS PowerPoint at the beginning of the program.

- (1) The time allocation for each presentation of the Inception Report will be about 8-10 minutes.
- (2) It is advisable to bring some materials such as pictures or other visual aids to show your country's agricultural situation.

Questionnaire about Basic Agricultural Information

Country: _____

Name: _____

Please answer following questions within 5 pages' report and submit it with the Application Form.

- (1) Monthly average of temperature, precipitation and evaporation for a year
- (2) Topographic condition of agricultural land :area and its ratio of flat land (less than 3°), gentle slope land (3°-8°), and slope land(8°-15°)
- (3) Category of cultivation and its ratio: rice, upland crops, fruits, vegetables, etc.,
- (4) Species of upland crops, cropping sequence, yield per 0.1 hectares
- (5) Size of farm land per farm household
- (6) Amount of fertilizer applied for farm land per 0.1 hectares
- (7) Provide the distribution map and classification table of the main soils in your country, as well as analytical values for your physical and chemical properties, if available
- (8) Name of official methods of soil physical and chemical analysis used at your institution(or in your country)
- (9) Method and criteria of soil diagnosis used in your country, provide also examples for them
- (10) Soil improvement technology used in your country
- (11) The way of dissemination in agricultural techniques especially related to soil diagnosis in your country

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, the Training and Dialogue 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:

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