



TRAINING AND DIALOGUE PROGRAMS

GENERAL INFORMATION ON

EFFICIENT AND ENVIRONMENT-FRIENDLY MINING AND RECYCLING FOR METAL RESOURCES 集团研修「環境に配慮した効率的資源開発・利用に関する研修」 *JFY 2009*

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

NO. J09-00957 / ID. 0980882

From July 2009 to March 2010

Phases in Japan : From Sep. 27, 2009 to Dec. 6, 2009

This information pertains to one of the Training and Dialogue Programs of the Japan International Cooperation Agency (JICA), which shall be implemented as part of the Official Development Assistance of the Government of Japan based on bilateral agreement between both Governments.

I. Concept

Background

Mineral resources are essential to industrial and economic activities, and for those developing countries that have mineral deposits in their territories, it is quite important to promote their mining activities in order to facilitate the effective utilization of those resources for their economic development as well as for the acquisition of foreign currencies.

Mining development projects would not only create new industries but also create other benefits for each society including improvement of infrastructure and basic social systems, economic development of rural regions, and human resources development in various fields. Thus, socioeconomic influences from mining activities are enormous. On the other hand, we should pay attention to negative influences also, including social and environmental disruption such as water pollution, environmental change of indigenous communities when development projects move into their inhabited areas, and the destruction of forests, for instance. Therefore, in order to enable sustainable mining development, it is important to take appropriate measures without delay.

It can be found that rapid increase of foreign or private capital involved in mining activities in developing countries. Those countries consider their mineral deposits to be important state assets and the key for prosperity. At the same time, however, even if privatization has been accelerated, the governments continue to have the initiative in planning development projects, and mining policies and governmental organizations play an important role in decision-making on liberalization or privatization policy on promoting mining and investment. Therefore, those governments are expected to implement effective measures comprehensively to promote their mining development.

For what?

This program aims to provide knowledge and skills regarding efficient and environment-friendly mining and recycling, which are the outputs of this program in order to be shared and promoted among his/her organizations.

For whom?

This program is offered to officers in the department of mining engaging on mining policies facilitating mining development projects including prevention mining pollution and recycling comprehensively in government or governmental organization.

How?

Participants shall have opportunities in Japan to learn about efficient and environment-friendly mining and recycling through lectures, observations, exercises and discussions. Participants shall also formulate an action plan on dissemination activities of skills and knowledge gained from the training program in Japan.

II. Description

1. Title (J-No.): Efficient and Environment-Friendly Mining and Recycling for Metal Resources (J0900957)

2. Period of program

Duration of whole program:	July 2009 to March 2010
Preliminary Phase: (in a participant's home country)	July 2009 to September 2009
Core Phase in Japan:	September 27 to December 6, 2009
Finalization Phase: (in a participant's home country)	December 2009 to March 2010

3. Target Regions or Countries

Albania (2), Bolivia, Cambodia (2), Laos, Mongolia, Pakistan, Solomon, South-Africa , Uzbekistan(2)

4. Eligible / Target Organization

This program is designed for department of metal resources engaging on mining policies facilitating mining development projects including prevention mining pollution and recycling comprehensively in government or governmental organization.

5. Total Number of Participants

12 participants

6. Language to be used in this program: English

7. Program Objective:

Officers of metal resources sector in the government of developing countries obtain Knowledge and skills to promote and facilitate mining projects with efficient and environment-friendly mining and recycling. The knowledge and skills obtained in Japan will be shared with their colleagues in their countries.

8. Overall Goal

Efficient and environment-friendly mining development is promoted and mining projects planned are accelerated with appropriate measures in their countries..

9. Expected Module Output and Contents:

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

(1) Preliminary Phase in a participant's home country (July 2009 to September 2009) <i>Participating organizations make required preparation for the Program in the respective country.</i>	
Expected Module Output	Activities
Country report is formulated	Formulation and submission of Country Report A sample of Country Report is attached as ANNEX 1.

(2) Core Phase in Japan (September 27, 2009 to December 6, 2009) <i>Participants dispatched by the organizations attend the Program implemented in Japan.</i>		
Expected Module Output	Subjects/Agendas	Methodology
To understand and re-recognizing the importance of natural resources in participants countries	(1) History that natural resources development like minerals contributes to modernization of the developed countries in the 19th and 20th centuries.	Lecture
	(2) Presentation and discussion on participants' country report on the situation and problems of mining sector in their countries.	Presentation
To obtain the knowledge and technologies of efficient mining development	(1) How to extract minerals from ore efficiently. Here rare metals are supposed as many countries pay attention to it.	Lecture
	(2) Site visits to see the sites to help understand the theories and ideas which participants obtained from lectures.	Observation
To understand the technologies and laws for environment protection and recycling	(1) History and experiences on the mining pollution from mining activities and how Japan over-come it.	Lecture
	(2) Method for recovery of metals including rare metals from waste like e-waste that is called Urban Mines nowadays.	Lecture
To enhance the knowledge and skills to promote adequate mining and recycling	(1) How to evaluate the mining project.	Lecture
Preparation and Presentation of Dissemination Plan	(1) Preparation of Action plan (2) Presentation of Action Plan At the end of this program, participants will make a action plan on how to share and promote skills and knowledge gained from this program.	Workshop Consultation Presentation

(3)Finalization Phase in a participant’s home country
Participants (ting) with their 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
To implement a dissemination plan	Participants are to implement the dissemination activities based on the action plan which was made during the program. Also, participants must submit the progress report within 3 months.

III. Conditions and Procedures for Application

1. Expectations for the Participating Organizations:

- (1) This project is designed primarily for organizations that intend to address specific issues or problems identified in their operations. Applying organizations are expected to use the Program for those specific purposes.
- (2) In this connection, applying organizations are expected to nominate the most qualified candidates to address the said issues or problems, carefully referring to the qualifications described in section III-2 below.
- (3) Applying organizations are also expected to be prepared to make use of knowledge acquired by the nominees for the said purpose.

2. Nominee Qualifications:

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

(1) Essential Qualifications

- 1) Current Duties: be officials working for government or governmental organization, engaging on non-ferrous metal mining policies including mining development, prevention mining pollution and recycling comprehensively. The training is inadequate for a coal or iron-ore engineer or technician.
- 2) Experience in the relevant field: have more than 3 years' practical experience in the field of mining policy
- 3) Educational Background: be a graduates of engineering faculty of university or equivalent
- 4) Language: have a competent command of spoken and written English, especially reading comprehension, workshop includes active participation in discussions, action plan (interim report) development, thus requires high competence of English ability. Please attach an official certificate for English ability such as TOEFL, TOEIC etc, if possible)
- 5) PC skill: have a competent command of using PC
- 6) 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 (1) letter of the participant's consent to bear economic and physical risks (2) letter of consent from the participant's supervisor (3) letter of consent from your Embassy in Japan, (4) medical certificate. Please ask National Staffs in JICA office for the details.
- 7) Must not be serving any form of military service.

(2) Recommendable Qualifications

- 1) Age: be under forty (40) years old

3. Required Documents for Application

- (1) Application Form:** The Application Form is available at the respective country's JICA office or the Embassy of Japan.
- (2) Nominee's English Score Sheet:** to be submitted with the application form. If you have any official documentation of English ability (e.g., TOEFL, TOEIC, IELTS), please attach it (or a copy) to the application form.
- (3) Questionnaire:** to be submitted with the application form. Please refer to the ANNEX "Q/N & Country Report", and submit it along with the application form.
- (4) Country Report:** to be submitted with the application form (detailed information is provided in the ANNEX "Q/N & Country Report").

4. Procedure for Application and Selection :

(1) Submitting the Application Documents:

Closing date for application to the JICA Center in JAPAN: July 27, 2009

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 August 27, 2009.**

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

Participants are requested to prepare a country report and make a presentation(s) to introduce information regarding mining of each countries. The report should be typewritten in English on A4 size paper (21 cm x 29.5 cm) or MS word/Power Point data.

6. Conditions for Attendance:

- (1) to observe the schedule of the program,
- (2) not to change the program subjects or extend the period of stay in Japan,
- (3) not to bring any members of their family,
- (4) to return to their home countries at the end of the program in Japan according to the travel schedule designated by JICA,
- (5) to refrain from engaging in political activities, or any form of employment for profit or gain,
- (6) to observe the rules and regulations of their place of accommodation and not to change the accommodation designated by JICA, and
- (7) to participate the whole program in Japan.

IV. Administrative Arrangements

1. Organizer:

(1) **Name:** JICA Tohoku

(2) **Contact:** Mr. SUZUKI Tomoyoshi (thictad@jica.go.jp)

2. Implementing Partner:

(1) **Name:** International institute for mining technology (MINETEC)

(2) **URL:** <http://minetec.sakura.ne.jp/>

(3) **Remark:** MINETEC was established in 1970 as an independent, nonprofit foundation authorized by the Ministry of Economy, Trade and Industry (METI). Its main purpose is training of domestic and overseas engineers, technicians or planners for mining activities involved in the mining industry.

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:

Kosaka Gold Palace

Address: 9-3 Furudate, Kosaka Kouzan, Kosaka-machi, Kazuno-gun, Akita-ken 017-0202 Japan

TEL: 81-186-29-3833 FAX: 81-186-29-3843

(where "81" is the country code for Japan, and "186" is the local area code)

JICA Tokyo International Center (JICA TOKYO)

Address: 2-49-5 Nishihara, Shibuya-ku, Tokyo 151-0066, Japan

TEL: 81-3-3485-7051 FAX: 81-3-3485-7904

(where "81" is the country code for Japan, and "3" is the local area code)

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

5. Expenses:

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

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

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

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

(4) Expenses for program implementation, including materials

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

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

6. Pre-departure Orientation:

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

V. Other Information

Visa to enter Japan will be arranged and issued at Japanese Embassy in candidates’ respective countries.

If there is no Japanese Embassy or Councilor in the country, please contact JICA office or Japanese Embassy in neighbor countries.

VI. ANNEX:

EFFICIENT AND ENVIRONMENT-FRIENDLY MINING AND RECYCLING FOR METAL RESOURCES (JFY 2009)

Q/N & Country Report

[Q/N(Questionnaire)]

Participants are requested to submit a questionnaire with the application form which is screening the participants. This Questionnaire should be typewritten in English(A4 size paper) in accordance with the format indicated as follows.

Note: An application not accompanied with a complete questionnaire cannot be considered.

- (1) Name of participant:
- (2) Country:
- (3) Course you graduated from:
 - A. Mining Technology
 - B. Technology of exploration
 - C. Processing Technology
 - D. Technology of Metallurgy
 - E. Others
- (4) Describe your graduation thesis briefly(within 500 words):
- (5) State your fields of interest and the reason thereof(within 100 words)
- (6) If you have studied abroad, inform its country(ies) and periods
Country : _____
Period: From ___ to ___
- (7) Inform any available information (food restriction due to health /religious reasons), if you have.
- (8) Inform your body size for your uniform during the program
Height: _____ cm Weight: _____ kg
Shoe size: _____ cm
(If you are not familiar with centimeter-size, please write your size with a note of "American" or "European" measures.

[Country Report]

Participants are requested to prepare a country report on the following issues and submit it along with the Application Form by July 27, 2009. The report should be typewritten in English on A4 size paper (21 cm x 29.5 cm) or MS word/Power Point data. It would be appreciated if participants could bring economic and social statistics or development plans of their country in addition to the country report, when they come to Japan. Due to the time limitation on

the presentation (30 minutes for each), the participants are requested to highlight major problems in the presentation.

Note: It is advisable to use audio visual equipments such as movies, slides, pictures, or Power Point when presenting the country report.

1. Background information

Background information	
(1)	Name of participant and country
(2)	Overview of organization which participants belong to.

2. Topics : (please prepare your report on all of the following four topics)

Topic 1: Economic statistics

- a) The role of mining industry in the overall economy of your country

Topic 2: Mining statistics:

- a) Ore reserves and the amount of production, domestic consumption and export
- b) The activities of major mines (place, the kind of minerals, the amount of production, etc)
- c) The capacity of mineral processing and smelting

Topic 3: Mining policy:

- a) The name and structure of mining organizations
- b) Domestic taxation system concerning foreign investment
- c) Domestic policies concerning mining industry
- d) Environmental protection

Topic 4: Technical and financial cooperation from foreign countries in the field of mining industry :

- a) The name of countries
- b) The kind of cooperation

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 Tohoku Branch (JICA TOHOKU)

**Address: 15th Floor, Sendai Dai-ichi Seimei Tower Bldg.4-6-1 Ichiban-cho,
Aoba-ku, Sendai-shi, Miyagi-ken, 980-0811 Japan2**

TEL: +81-22-223-5775 FAX: +81-22-227-3090

E-mail: thictad@jica.go.jp