

F.No.12040/02/2019-FTC/IR
Government of India
Ministry of Personnel, Public Grievances and Pensions
Department of Personnel and Training
[Training Division]

Block-4, Old JNU Campus, New Delhi-110067

Dated: 08.02.2019

TRAINING CIRCULAR

Subject: Knowledge Co-Creation Program on “Renewable Energy in Grid – Mainly on Photovoltaic” to be held in Japan from 16.06.2019 to 27.07.2019 under the Technical Cooperation Program of the Government of Japan (**Submission Deadline-25.03.2019**).

The undersigned is directed to state that the Japan International Cooperation Agency (JICA) has invited applications for Knowledge Co-Creation Program on “Renewable Energy in Grid – Mainly on Photovoltaic” to be held in Japan from 16.06.2019 to 27.07.2019 under the Technical Cooperation Program of the Government of Japan.

2. The program aims at learning necessary knowledge technologies, and policies to adequately introduce, promote, maintain and manage PV generation for the effective use of solar energy, especially local grid system and local or national grid connected system for power source diversity.
3. The applying organizations are expected to nominate officers in charge of introduction, promotion, maintenance and management of photovoltaic generation systems at the concerned organizations with more than 2 years of experience in this field; must be a university graduate with engineering; have competent command over spoken and written English; must be in good health (both physically and mentally); be between 30 and 50 years old. More information may be seen in the general information brochure.
4. In addition, the following information in respect of the nominated officers may please be mentioned while furnishing the nomination:-
 - a) Whether attended any foreign training program in the past? If so, the duration/details thereof;
 - b) Whether cleared from vigilance angle;
 - c) Age;
 - d) Whether working in North East State/J&K;
 - e) A brief in 50-100 words justifying the nomination.
5. The course covers the cost of a round-trip air ticket between international airport designated by JICA and Japan; travel insurance from the time of arrival in Japan to departure from Japan; allowances for (accommodation, living expenses, outfit and shipping); expenses

for JICA study tours and free medical care for participants who may fall ill after reaching Japan (costs relating to pre-existing illness, pregnancy, or dental treatment are not included).

6. It is, therefore, requested that the nomination of suitable candidates may please be forwarded (**in two copies**) to this Department in JICA's prescribed format duly authenticated by the HOD of the concerned Ministry/Department in accordance with the eligibility criteria.

7. The applications should reach this Department through the Administrative Ministry/Department not later than **25.03.2019**. Nominations received after the prescribed date may not be considered. An advance copy from the applying organization for nomination(s) and the application form(s) can be sent to the JICA India Office via courier or email at bapalahema.id@jica.go.jp or ShekarD.ID@jica.go.jp. The details of the program (General Information Brochure) and application form may be drawn from the website of DoPT at link <http://persmin.gov.in/otraining/index.aspx>.



(Rajendra Prasad Tewari)

Under Secretary to the Government of India

Tele no: 26165682

To

- a) Secretary, Ministry of New and Renewable Energy, CGO Complex, Lodhi Road, New Delhi-110003.
- b) Secretary, Ministry of Power, Shram Shakti Bhawan, New Delhi-110001.
- c) Chief Secretaries to State Governments/Union Territories (with request to circulate the same amongst related Departments/Organizations under them).
- d) Senior Representative, Japan International Cooperation Agency, 16th Floor, Hindustan Times House, 18-20 Kasturba Gandhi Marg, New Delhi -110001.
- e) NIC with request to post the circular along with the JICA's circular on this Department's website.



Knowledge Co-Creation Program (Group & Region Focus)

GENERAL INFORMATION ON

RENEWABLE ENERGY IN GRID

-MAINLY ON PHOTOVOLTAIC- (A)

課題別研修「再生可能エネルギー導入計画

-太陽光発電を例として-(A)」

JFY 2019

NO. J1904049 / ID. 1984603

Course Period in Japan: From June 16, 2019 to July 27, 2019

This information pertains to one of the JICA Knowledge Co-Creation Program (Group & Region Focus) 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.

‘JICA Knowledge Co-Creation Program (KCCP)’ as a New Start

In the Development Cooperation Charter which was released from the Japanese Cabinet on February 2015, it is clearly pointed out that *“In its development cooperation, Japan has maintained the spirit of jointly creating things that suit partner countries while respecting ownership, intentions and intrinsic characteristics of the country concerned based on a field-oriented approach through dialogue and collaboration. It has also maintained the approach of building reciprocal relationships with developing countries in which both sides learn from each other and grow and develop together.”* We believe that this ‘Knowledge Co-Creation Program’ will serve as a center of mutual learning process.

I. Concept

Background

In combating global environmental problems, effective use of natural energy in line with the promotion of renewable energy use is becoming increasingly significant.

Among renewable energy sources, solar power generation is expected to be a promising growth industry in a low carbon society, and its demand is expanding as performance is improved and price is declined by recent technological developments.

Whereas solar power can be generated directly from **Photovoltaic** (PV) or indirectly using **Concentrated Solar Power** (CSP), this course places an emphasis on PV. PV generation system consists of solar panels, controllers, and storage batteries, and it generates electric power from photovoltaic energy. Since the technology is relatively simple to handle, photovoltaic generation is widely prevailing.

On the other hand, problems related to inadequate installment, maintenance and management are growing, thus it is important that government and related institutions provide sufficient guidance. Japanese resources depend heavily on imports and the nation has been making efforts to develop alternative energy. Japan started the development of renewable energy a quarter of century ago and it has now become one of the world leaders in the field of PV generation through collaborations between industry, government and academia.

Based on Japanese PV generation technology, this program offers a place of mutual study among participants engaged in electrification based mainly on PV generation.

For what?

This program aims at learning necessary knowledge technologies, and policies to adequately introduce, promote, maintain and manage PV generation for the effective use of solar energy, especially local grid system and local or national grid connected system for power source diversity.

For whom?

This program is intended for officials who develop and manage PV generation projects at central/rural governmental organization and electric power generation public corporation.

How?

Participants will have the opportunity to attend lectures, participate in experiments, practical training, visits to and training at private enterprises, discussions and presentations on the technology of photovoltaic generation, storage, control, electricity consumption, etc. In this program, not only will participants learn Japanese technology in this field, but learn from each other's experiences. Through these activities, participants will acquire systematic technologies for photovoltaic generation as well as an understanding of the prospects and issues concerning the effective use of photovoltaic energy in ones' own countries.

II. Description

1. Title (J-No.):

Renewable Energy in Grid -Mainly on Photovoltaic- (A) (J1904049)

2. Course Period in Japan

From June 16, 2019 to July 27, 2019

3. Target Countries: 8 countries

Algeria, Brazil, Egypt, India, Mongolia, Paraguay, Sri Lanka and Tunisia

4. Eligible / Target Organization

This program is intended for Energy policy departments or the Power Authority of the central and local government in charge of introduction, promotion, maintenance and management of PV generation.

5. Course Capacity (Upper limit of Participants):

8 participants

6. Language to be used in this program:

English

7. Overall Goal

Photovoltaic generation will be adequately introduced, promoted, maintained and managed for the effective use of solar energy.

8. Course Objective

Participants understand the theory and practice of photovoltaic generation and apply them to action plans for the introduction, promotion, maintenance and management of photovoltaic generation systems.

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 <i>Participating organizations make required preparation for the Program in the respective country.</i> | |
|---|--|
| Expected Module Output | Activities |
| Job Report (running form) | Preparation of Job report in running form for the presentation in Japan. Job report contains the following matters: <ul style="list-style-type: none"> * Energy Situation in your country * Organization and main tasks * Expectations for the training course * Issues facing |

| (1) Core Phase in Japan (From June 16, 2019 to July 27, 2019) <i>Participants dispatched by the organizations attend the Program implemented in Japan.</i> | | | |
|--|------------------------------------|---|---------------------------------------|
| Objective | Subject | Contents | Methodology |
| To be able to explain basics of PV generation technology | Part I PV generation technology | (1) Fundamentals of renewable energy technology (2) Outline of PV Generation technology (3) Exercise for Estimation of Solar Radiation and Power Generation (4) PV system designing (5) Maintenance for PV array & system (6) Lead acid storage battery (7) Economic Evaluation for PV Systems (8) Current situation and issues of Solar PV systems in developing countries (9) Visit to Large scale Mega solar power plant | Lectures, Field Study |
| To be able to explain grid system technology | Part II Power system technology | (10) Basics of grid & grid interconnection (11) Practice for understanding of Grid & Grid Interconnection (12) Outlines of Japanese grid-interconnection code (13) Utilization of electric cars for grid stabilization (14) Exercise for Calculation of Battery System Capacity (15) Example of micro grid projects (16) Effort toward Hydrogen Society (17) Exercise on Optimization Grid with RE (HOMER) (18) Visit to •Akagi Laboratory of Central Research Institute of Electric Power •Sodium Sulfur (NAS) Batteries •Load dispatching Center | Lectures, Practice, Field Study |

| | | | |
|--|---|--|---------------------------------|
| | | •Model house | |
| To be able to explain policy and operation of renewable energy, especially photovoltaic generation | Part III Japan's policy & measures on renewable energy | (19) Global trends in Solar PV Development and its Support Scheme (20) Conditions and Policy to Spread PV Power Generation (21) Key Points for Sustainable Solar PV Systems (22) Examples of PV Promotion Actives by participants (23) Policy for PV generation spread (24) Approaches to renewable energy by KEPCO (25) Construction quality management of PV system (26) Visit to •Visit to Eco Town •Visit to Environment Museum | Lectures, Practice, Field Study |
| To be able to make action plan and improve skills of policy planning | Part IV Practical training to draw up an action plan | (27) Presentation of job report (28) Guidance on recognition of issues (29) Review of lecture contents (30) Preparation of action plan (31) Presentation of action plan | Lectures, Practice |

(3) Finalization Phase in a participant's home country

Participating organizations produce Final Report by making use of results brought back by participants. This phase marks the end of the Program.

| Expected Module Output | Activities |
|--|--|
| Action Plan and/or Revised Strategic Plan and Guidelines are approved in the participant's organization. | Application and implementation of Action plan back in the participant's country. |

III. Conditions and Procedures for Application

1. Expectations from 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) Participating organizations are 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 “Expected Module Output and Contents”.

2. Nominee Qualifications

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

(1) Essential Qualifications

1) Target Organization:

Department of energy policy of central government, local government organization and Public Service Corporation.

2) Target personnel:

<Position> Applicants in charge of introduction, promotion, maintenance and management of photovoltaic generation systems at the Target organizations mentioned above.

*Persons engaged in research on renewable energy at universities etc. are not included

<Experience> Applicants are engaged in photovoltaic generation systems for more than 2 years.

<Education Background> Applicants must have a background of engineering.

<Language> Applicants must have a competent command of spoken and written English, which is equal to TOEFL iBT 100 or more.

(This workshop includes active participation in discussions, which requires high competence of English ability. Please attach an official certificate for English ability such as TOEFL, TOEIC, etc, if possible).

<Health> Applicants must be in good health, both physically and mentally, to participate in the Program in Japan. Pregnant applicants are not recommended to apply due to the potential risk of health and life issues of mother and fetus. Please note that this training course includes site visits, therefore many physical exercises will be required.

Participant who came to Japan making any false declaration for Medical History of Application from will terminate the training program and return home.

(2)Recommendable Qualifications

- 1) <Experience> Applicants are engaged in photovoltaic generation systems for more than 3 years and must have minimum knowledge of engineering such as PV generation, PV system, PV generation facilities and electrical power network system and micro-grid.
- 2) Expectations for the participants: Preferably, be in relation with past or on-going JICA projects targeting energy efficiency and conservation.
- 3) Age: be between the ages of thirty and fifty years old.
- 4) Gender Consideration:
JICA is promoting Gender equality. Women are encouraged to apply for the program.

3. Required Documents for Application

(1) Application Form: The Application Form is available at **the JICA office (or the Embassy of Japan)**.

* If you have any difficulties/disabilities, which require assistance, please specify necessary assistances in the Medical History (1-(d)) of the application forms. It may allow us (people concerned in this course) to prepare better logistics or alternatives.

(2) Job Report and Issue Analysis Sheet (IAS) (ANNEX I & III)

- To be submitted with application form. Job Report and IAS are necessary documents for screening of applicants.
- Each participant will be required to present IAS in approx. 10 minutes in an early stage of the course. Visual materials such as PowerPoint and pictures may be helpful for your presentation if you bring them.
- When you use PowerPoint, it is preferable to use letters more than 24-point and not to use pictures on the background.
- **An applicant should submit an IAS with approval of his/her superior and an IAS without approval of an applicant's superior is not accepted.**
- The purpose of an IAS is to logically organize relationships between challenges of an applicant's organization and contents of fields to be covered in a training course.
- The sheet is to be utilized as a logical process control sheet to draw on improvement plans for challenges by filling out the sheet in phase from prior to a participant's arrival in Japan through the end of training.
- **Participants accepted to the course are requested to bring this IAS in electronic file when coming to Japan.**

(3) Photocopy of passport:

To be submitted with the application form, if you possess your passport which you will carry when entering Japan for this program. If not, you are requested to submit its

photocopy as soon as you obtain it.

*Photocopy should include the followings:

Name, Date of birth, Nationality, Sex, Passport number and Expire date.

(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)

4. Procedure for Application and Selection

(1) Submitting the Application Documents

Closing date for applications: **Please inquire to the JICA office (or the Embassy of Japan.)**

(After receiving applications, the JICA office (or the Embassy of Japan) will send them to **the JICA Center in JAPAN by Friday April 12, 2019.**)

There is a possibility that your application will be not accept due to overdue deadline

(2) Selection

After receiving the documents through proper channels from your government, the JICA office (or the embassy of Japan) will conduct screenings, and then forward the documents to the JICA Center in Japan.

Selection will be made by the JICA Center in consultation with concerned organizations in Japan. The applying organization with the best intention to utilize the opportunity of this program will be highly valued in the selection.

Qualifications of applicants who belong to the military or other military-related organizations and/or who are enlisted in the military will be examined by the Government of Japan on a case-by-case basis, consistent with the Development Cooperation Charter of Japan, taking into consideration their duties, positions in the organization, and other relevant information in a comprehensive manner.

<Screening criteria>

Participants are selected, based on Job Report and essential qualification as mentioned in section III-2-(1) in this document. Criteria is followings as listed below;

- ✓ Job Report (Measurement of understanding level of current situation in your country, basic PC skill and English level)
- ✓ Issue Analysis Sheet (Measuring the validity of the analyzed tasks)
- ✓ Current Duty
- ✓ Background of Education
- ✓ Well motivated personnel to implement Action Plan(s) after the training in Japan

(3) Notice of Acceptance

Notification of results will be made by the JICA office (or the Embassy of Japan) **not later than Monday May 13, 2019**.

5. Conditions for Attendance

- (1) To strictly adhere to the program schedule.
- (2) Not to change the program topics.
- (3) Not to extend the period of stay in Japan.
- (4) Not to be accompanied by family members during the program.
- (5) To return to home countries at the end of the program in accordance with the travel schedule designated by JICA.
- (6) To refrain from engaging in any political activities, or any form of employment for profit or gain.
- (7) 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.
- (8) To observe the rules and regulations of the accommodation and not to change the accommodation designated by JICA.

IV. Administrative Arrangements

1. Organizer

(1) **Name:** JICA Kyushu Center

(2) **Contact:** kictp@jica.go.jp

2. Implementing Partner

(1) **Name:** To Be Determined

(2) **URL:**

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:** Coverage is from time of arrival up to departure in Japan. Thus traveling time outside Japan will not be covered.

4. Accommodation in Japan

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

JICA Kyushu Center (JICA KYUSHU)

Address: 2-2-1, Hirano, Yahata Higashi-ku, Kitakyushu-shi, Fukuoka 805-8505,
JAPAN

TEL: 81-93-671-6311 FAX: 81-93-671-0979

(where “81” is the country code for Japan, and “93” is the local area code)

If there is no vacancy at JICA KYUSHU, JICA will arrange alternative accommodations for the participants. Please refer to facility guide of JICA KYUSHU at its URL,
<http://www.jica.go.jp/kyushu/english/office/index.html>

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 “III. ALLOWANCES” of the brochure for participants titled “KENSU-IN GUIDE BOOK,” which will be given before departure for Japan.

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

1. Report and Presentation

(1) Job Report & Issue Analysis Sheet (IAS)

Each applicant is required to submit his/her own Job Report & Issue Analysis Sheet following the instruction. Participants will have a presentation of his/her Job Report & Issue Analysis Sheet up to 10 minutes at the earlier stage of the training in order to share knowledge and background with other participants as well as instructors. Visual materials such as Power Point and pictures may be helpful for your presentation if you bring them with you.

(2) Action Plan

Participants are required to make an Action Plan at the end of the training to express your idea and plan, which you carry out after your return, reflecting the knowledge and method you acquire in the training. Each person will have 10 minutes for presentation. In addition, participants are required to complete IAS by the end of the training and present it at the Action Plan Presentation.

2. Participants who have successfully completed the program will be awarded a **certificate by JICA**.
3. For the promotion of mutual friendship, JICA Kyushu 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.
4. Participants are recommended to bring **laptop computers** for your convenience. During the program, participants are required to work on the computers, including preparation of Action Plans, finalizing Country report etc.
5. Allowances will be deposited to your temporary bank account in Japan after 2 to 5 days after your arrival to Japan. It is highly advised to **bring some cash** in order to spend necessary money for the first 2 to 5 days stays after your arrival.
6. It is very important that your currency must **be exchanged to Japanese Yen** at any transit airport, Narita International Airport in Tokyo. It is quite difficult to exchange money after that, due to no facility or time during the training program.
7. The field trip is arranged during the training program. It would be convenient if you **bring small bag**.
8. **The Japanese Language lesson** is programed at the first stage of the training course in order to get knowledge of Japanese phrases required for living in Japan.
9. **The General orientation** is programed to provide basic knowledge of Japanese general situation to Participants and to promote technical training before the start of technical training.

VI. ANNEX

- I. Job Report
- II. Issue Analysis Sheet
- III. Issue Analysis Sheet (IAS) Guidelines
- IV. Sample Training Schedule (for reference)

ANNEX- I

| | |
|--------------------------------|--|
| Name of Training Course | RENEWABLE ENERGY IN GRID -MAINLY ON PHOTOVOLTAIC- (A) |
| Name of Applicant | |
| Name of Country | |

Job Report

Remarks 1: The Report should be typewritten in English (12-point font, A4 size paper), and total pages of the report should be limited to 5 pages (not including organization chart).

Remarks 2: Each participant will have a meeting with course leader based on this Job Report and IAS at the early stage of the training in order to make training more effective and fruitful by comprehending each participant's situations and problems.

Remarks 3: Please itemize your answer and make them specific.

1. Energy Situation in your country (up to 1 page)

- Primary energy consumption rate (circle graph)
- Energy self-sufficient rate
- Electric power consumption rate (circle graph)
- Electrification cover rate
- Gap between electric power supply & demand
- Electricity charges (for residence & Industry), Coke charge (for 350 ml can)
- Enactment & enforcement situation of renewable energy law &/or regulation

2. Organization and main tasks (up to 1 page)

(1) Main tasks of the organization

(2) Organization chart:

Please draw a chart of your organization including the department (section) names with the number of staffs in it and mark where you are positioned.

(The chart should be attached and not be counted in this page limit.)

Please describe a duty of each department (section) briefly.

(3) Brief description of your assignments.

(4) Problems in your job

3. Expectations for the training course (up to 1 page)

- (1) Your purpose of participating in this course
- (2) Subjects of the course which you are interested in the most
- (3) How do you expect to apply skills and knowledge that you will gain through the module (refer to Annex III) to tackle problems in your home country?
- (4) Other matters which you are expecting to obtain from the course

4. Have you ever learned the following subjects in your work? We want to know your work experience. Please check either "Yes" or "No".

If your answer is "Yes", please fill out the number of years you have engaged in the respective work under the item "Years".

| No | Subjects | Yes | No | Years |
|----|---|-----|----|-------|
| 1 | Energy policy, law, or regulation | | | |
| 2 | Renewable energy without PV generation | | | |
| 3 | PV system promotional activities | | | |
| 4 | Installation of PV generation facilities | | | |
| 5 | Electrical power network system and/or micro-grid | | | |
| 6 | Others | | | |

If you check "6) Others", please specify subject associated with solar power technology, not covered in items "1)" to "5)".

ANNEX- II**Issue Analysis Sheet (IAS)**

Country _____ Name _____

| No. | 【A】* Issues that you confront(s). | 【B】 Actions that you are taking. | |
|-----|---|--|-------------------------|
| 1 | | | |
| | 【 I 】 Task or The information that I need. | 【 II 】 Useful information that I obtained /found. | 【 III 】 Lecturer |
| | | | |

| No. | 【A】Issues that you confront(s). | 【B】 Actions that you are taking. | |
|-----|---|--|-------------------------|
| 2 | | | |
| | 【 I 】 Task or The information that I need. | 【 II 】 Useful information that I obtained /found. | 【 III 】 Lecturer |
| | | | |

| No. | 【A】Issues that you confront(s). | 【B】 Actions that you are taking. | |
|-----|---|--|-------------------------|
| 3 | | | |
| | 【 I 】 Task or The information that I need. | 【 II 】 Useful information that I obtained /found. | 【 III 】 Lecturer |
| | | | |

【 I 】,【 II 】,【 III 】 These columns will be filled during the training course.

***You shall describe challenges you are facing in your department also in the Job Report. Among them, in column A, please describe only those issues you expect to solve utilizing information and knowledge that will be delivered in this training course.**

Issue Analysis Sheet (IAS) Guidelines

1. What is IAS?

- (1) IAS is a tool to logically organize relationships between issues and contents of the training program in Japan.
- (2) IAS will help the nominee to clarify his/her challenges to be covered in each expected module output and to formulate solutions to them.
- (3) The sheet is to be utilized as a logical process control sheet to draw up improvement plans for the issues by filling out the sheet in phases from prior to the nominee's arrival through to the end of the training.
- (4) In addition, it is used for the course leader and lecturers to understand the issues that each participant is confronting, and provide him/her with technical advice, useful references and solutions through the training program in Japan.

2. How to fill out IAS?

- (1) Please describe the issues you (your organization) confront(s) in column "**A: Issues that you (your organization) confront(s)**".

You shall describe challenges you are facing in your section also in the Job Report. Among them, in column A, please describe only those issues you expect to solve utilizing information and knowledge being delivered in this training course. Prepare the separate rows for each problem; if necessary, please add new rows.

- (2) In column "**B: Actions that you (your organization) are (is) taking**", please describe actions that you (your organization) are taking to solve the issues shown in "**Column A**".

This information is very important to carry out the training course and also to make Action Plan as a fruit of the training.

- (3) It's not necessary to fill in column "**I : Task or the information that I need**", column "**II : Useful information that I obtained/found**" and column "**III : Lecturer**". These columns shall be filled out during the training.

- (4) "**Column I**" shall be clarified and filled out in the subject "**Task extraction using IAS**" implemented at the earlier time in the training.

- (5) "**Column II**" and "**Column III**" shall be filled out during the training and you are required to present completed IAS in the subject "**Action Plan Presentation**".

ANNEX- IV**Sample Training Schedule**

*The schedule is subject to changes

| | | Morning (9:30-12:30) | Afternoon (13:30-16:30) |
|---------------|-----|--|--|
| | | | |
| 16-Jun | Sun | Arrival to Japan | |
| 17-Jun | Mon | JICA Briefing | Program Orientation |
| 18-Jun | Tue | General Orientation/ Japanese politics and administration | General Orientation/ Japanese economy Japanese Language lesson 1 |
| 19-Jun | Wed | Exchange program | Course orientation |
| 20-Jun | Thu | Basics of PV Generation | Discussion of Action Plan Title |
| 21-Jun | Fri | Current Situation and Issues of Solar PV Systems in Developing Countries | Key Points for Sustainable Solar PV Systems |
| 22-Jun | Sat | JICA Bus Tour, AP Preparing day | |
| 23-Jun | Sun | Free | |
| 24-Jun | Mon | Guidance of job report | Guidance of job report |
| 25-Jun | Tue | Outline of PV Generation Technology | Effort toward Hydrogen Society Visit to Kitakyushu Environment Museum |
| 26-Jun | Wed | Conditions and Policy to Spread PV Power Generation | Conditions and Policy to Spread PV Power Generation |
| 27-Jun | Thu | Policy for PV Generation Spread 1 | Approaches to Renewable Energy by KEPCO |
| 28-Jun | Fri | Policy for PV Generation Spread 2 | Job Report Presentation |
| 29-Jun | Sat | Free | |
| 30-Jun | Sun | Free | |
| 1-Jul | Mon | Basics of Grid & Grid Interconnection | Visit to Large-scale Mega Solar Power Plant |
| 2-Jul | Tue | Maintenance for PV Array & System | Maintenance for PV Array & System |
| 3-Jul | Wed | Economic Evaluation for PV Systems 1 | Preparation for Exercise of Estimation of Solar Radiation and Power Generation |
| 4-Jul | Thu | Economic Evaluation for PV Systems 2 | Sodium Sulfur (NAS) Batteries |
| 5-Jul | Fri | Lead acid storage battery | Exercise for Calculation of Battery System Capacity |
| 6-Jul | Sat | Explanation of practice in the afternoon | Practice for understanding of Grid & Grid Interconnection |
| 7-Jul | Sun | free | |

| | | Morning (9:30-12:30) | Afternoon (13:30-16:30) |
|--------|-----|---|--|
| 8-Jul | Mon | free | |
| 9-Jul | Tue | Explanation of Solar Radiation & Power Generation | Exercise for Estimation of Solar Radiation and Power Generation |
| 10-Jul | Wed | Exercise for Estimation of Solar Radiation and Power Generation | Examples of PV Promotion Actives by participants |
| 11-Jul | Thu | Utilization of Electric Cars for Grid Stabilization | Review of Grid interconnection |
| 12-Jul | Fri | Kitakyushu ⇒ Tokyo | Visit to Load dispatching Center |
| 13-Jul | Sat | Free | |
| 14-Jul | Sun | Free | |
| 15-Jul | Mon | Tokyo ⇒ Kofu | |
| 16-Jul | Tue | Outlines of Japanese Grid-Interconnection Code | Visit to Akagi Laboratory of Central Research Institute of Electric Power Kofu⇒Tokyo |
| 17-Jul | Wed | PV system Designing | Exercise of PV system Designing |
| 18-Jul | Thu | Example of micro grid projects | Global trends in Solar PV Development and its Support Scheme |
| 19-Jul | Fri | Construction quality management of PV system | Visit to Model House |
| 20-Jul | Sat | Tokyo⇒Kitakyushu | AP Preparing day |
| 21-Jul | Sun | Free | |
| 22-Jul | Mon | Guidance on Action Plan | Guidance on Action Plan |
| 23-Jul | Tue | Review of PV Grid Interconnection | Visit to Eco Town |
| 24-Jul | Wed | Fundamentals of Renewable Energy technology 1 | Exercise on Optimization Grid with RE (HOMER) |
| 25-Jul | Wed | Fundamentals of Renewable Energy technology 2 | Summary of the course |
| 26-Jul | Thu | Evaluation Meeting | Action Plan Presentation Closing Ceremony Farewell Party |
| 27-Jul | Sat | Departure from Japan | |

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 Kyushu Center (JICA KYUSHU)

**Address: 2-2-1, Hirano, Yahata Higashi-ku, Kitakyushu-shi, Fukuoka,
805-8505, Japan**

TEL: +81-93-671-6311 FAX: +81-93-671-0979

Guidelines of Application Form for the JICA Training and Dialogue Program

The attached form is to be used to apply for the training and dialogue programs of the Japan International Cooperation Agency (JICA), which are implemented as part of the Official Development Assistance Program of the Government of Japan. Please complete the application form while referring to the following and consult with the respective country's JICA Office - or the Embassy of Japan if the former is not available - in your country for further information.

1. Parts of Application Form to be completed

1) Which part of the form should be submitted?

It depends on the type of training and dialogue program you are applying for.

>Application for Group and Region Focused Training Program

Official application and Parts A and B including Medical History and Examination must be submitted.

>>Application for Country Focused Training Program including Counterpart Training Program

Part B including Medical History and Examination will be submitted. Official application and Part A need not to be submitted

2) How many parts does the Application Form consist of?

The Application Form consists of three parts as follows;

Official Application

This part is to be confirmed and signed by the head of the relevant department/division of the organization which is applying.

Part A. Information on the Applying Organization

This part is to be confirmed by the head of the relevant department/division of the organization which is applying.

Part B. Information About the Nominee including Medical History and Examination

This part is to be completed by the person who is nominated by the organization applying. The applicants for Group and Region Focused Training Program are required to fill in **every item**. As for the applications for Country Focused Training Program including Counterpart Training Program and some specified International Dialogue Programs, it is required to fill in the designated "**required**" items as is shown on the Form.

Please refer to the General Information to find out which type the training and dialogue program that your organization applies for belongs to.

2. How to complete the Application Form

In completing the application form, please be advised to:

- (a) carefully read the General Information (GI) for which you intend to apply, and confirm if the objectives and contents are relevant to yours,
- (b) be sure to write in the title name of the course/seminar/workshop/project accurately

according to the GI, which you intend to apply,

- (c) use a typewriter/personal computer in completing the form or write in **block letters**,
- (d) fill in the form in **English**,
- (e) use ☒ or % to fill in the () check boxes,
- (f) attach a picture of the Nominee,
- (g) attach additional page(s) if there is insufficient space on the form,
- (h) prepare the necessary document(s) described in the General Information (GI), and attach it (them) to the form,
- (i) confirm the application procedure stipulated by your government, and
- (j) submit the original application form with the necessary document(s) to the responsible organization of your government according to the application procedure.

Any information that is acquired through the activities of the Japan International Cooperation Agency (JICA), such as the nominee's name, educational record, and medical history, shall be properly handled in view of the importance of safeguarding personal information.

3. Privacy Policy

1) Scope of Use

Any information used for identifying individuals that is acquired by JICA will be stored, used, or analyzed only within the scope of JICA activities. JICA reserves the right to use such identifying information and other materials in accordance with the provisions of this privacy policy.

2) Limitations on Use and Provision

JICA shall never intentionally provide information that can be used to identify individuals to any third party, with the following three exceptions:

- (a) In cases of legally mandated disclosure requests;
- (b) In cases in which the provider of information grants permission for its disclosure to a third party;
- (c) In cases in which JICA commissions a party to process the information collected; the information provided will be within the scope of the commissioned tasks.

3) Security Notice

JICA takes measures required to prevent leakage, loss, or destruction of acquired information, and to otherwise properly manage such information.

4. Copyright policy

Participants of the JICA Training and Dialogue program are requested to comply with the following copyright policy;

Article 1. Compliance matters with participants' drafting of documents (various reports, action plans, etc.) and presentations (report meetings, lectures, speeches, etc.)

1. Any contents of the documents and presentations shall be created by themselves in principle.

2. Comply with the following matters, if you, over the limit of quotation, have to use a third person's work (reproduction, photograph, illustration, map, figure, etc.) that is protected under laws or regulations in your country or copyright-related multinational agreements or the like:

- (1) Obtain license to use the work on your own responsibility. In this case, the scope of the license shall meet the provisions of Article 2.
- (2) Secure evidential material that proves the grants of the license and specifies the scope of the license.
- (3) Consult with the third party and perform the payment procedure on your own responsibility regarding negotiations with a third person about the consideration for granting the license and the procedure for paying the consideration,.

Article 2. Details of use of works used for training

- (1) The copyright on a work that a participant prepares for a training course shall belong to the trainee. The copyright on the parts where a third party's work is used shall belong to the third party.
- (2) When using texts, supplementary educational materials and other materials distributed for the JICA training courses, participants shall comply with the purposes and scopes approved by each copyright holder.

**Application Form for the JICA Training and Dialogue Program****OFFICIAL APPLICATION**

(to be confirmed and signed by the head of the relevant department / division of the applying organization)

1. Title: (Please write down as shown in the General Information)

| |
|--|
| |
|--|

2. Number: (Please write down as shown in the General Information)

| | | | | | | | | |
|---|---|--|---|--|--|--|--|--|
| J | 0 | | - | | | | | |
|---|---|--|---|--|--|--|--|--|

3. Country Name:

| |
|--|
| |
|--|

4. Name of Applying Organization:

| |
|--|
| |
|--|

5. Name of the Nominee(s):

| | |
|----|----|
| 1) | 3) |
| 2) | 4) |

Our organization hereby applies for the training and dialogue program of the Japan International Cooperation Agency and proposes to dispatch qualified nominees to participate in the programs.

| | | | |
|--|------------|----------------|---------|
| Date: | | Signature: | |
| Name: | | | |
| Designation / Position | | Official Stamp | |
| Department / Division | | | |
| Office Address and Contact Information | Address: | | |
| | Telephone: | Fax: | E-mail: |

Confirmation by the organization in charge (if necessary)

I have examined the documents in this form and found them true. Accordingly I agree to nominate this person(s) on behalf of our government.

| | | | |
|------------------------|--|----------------|--|
| Date: | | Signature: | |
| Name: | | | |
| Designation / Position | | Official Stamp | |
| Department / Division | | | |

Part A: Information on the Applying Organization

(to be confirmed by the head of the department / division)

1. Profile of Organization**1) Name of Organization:****2) The mission of the Organization and the Department / Division:****2. Purpose of Application****1) Current Issues: Describe the reasons for your organization claiming the need to participate in the training and dialogue program, with reference to issues or problems to be addressed.****2) Objective: Describe what your organization intends to achieve by participating in the training and dialogue program.**



3) Future Plan of Actions: Describe how your organization shall make use of the expected achievements, in addressing the said issues or problems.

4) Selection of the Nominee: Describe the reason(s) the nominee has been selected for the said purpose, referring to the following view points; 1) Course requirement, 2) Capacity /Position, 3) Plans for the candidate after the training and dialogue program, 4) Plan of organization and 5) Others.

Part B: Information about the Nominee

(to be completed by the Nominee)

NOTE>>>The applicants for Group and Region Focused Training Program are required to fill in every item. As for the applications for Country Focused Training Program including Counterpart Training Program and some specified International Dialogue Programs, it is required to fill in the designated “required” items as is shown below.

1. Title: (Please write down as shown in the General Information) (required)

| |
|--|
| |
|--|

2. Number: (Please write down as shown in the General Information) (required)

| | | | | | | | | |
|---|---|--|---|--|--|--|--|--|
| J | 0 | | - | | | | | |
|---|---|--|---|--|--|--|--|--|

Attach the nominee's photograph (taken within the last three months) here
Size: 4x6
(Attach to the documents to be submitted.)

3. Information about the Nominee(nos. 1-9 are all required)

1) Name of Nominee (as in the passport)

Family Name

| | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

First Name

| | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

Middle Name

| | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

| | | | | | |
|--|--------------------------|--|-------|------|-----|
| 2) Nationality (as shown in the passport) | | 5) Date of Birth (please write out the month in English as in “April”) | | | |
| 3) Sex | () Male () Female | Date | Month | Year | Age |
| 4) Religion | | | | | |

6) Present Position and Current Duties

| | | | | | | | |
|--|------|-------|------|--|------|-------|------|
| Organization | | | | | | | |
| Department / Division | | | | | | | |
| Present Position | | | | | | | |
| Date of employment by the present organization | Date | Month | Year | Date of assignment to the present position | Date | Month | Year |
| | | | | | | | |

7) Type of Organization

| | | |
|---------------------------|------------------------------|-----------------------|
| () National Governmental | () Local Governmental | () Public Enterprise |
| () Private (profit) | () NGO/Private (Non-profit) | () University |
| () Other () | | |

8) Outline of duties: Describe your current duties

| |
|--|
| |
|--|

9) Contact Information

| | | |
|-----------------------------|----------------------|----------------------|
| Office | Address: | |
| | TEL: | Mobile (Cell Phone): |
| | FAX: | E-mail: |
| Home | Address: | |
| | TEL: | Mobile (Cell Phone): |
| | FAX: | E-mail: |
| Contact person in emergency | Name: | |
| | Relationship to you: | |
| | Address: | |
| | TEL: | Mobile (Cell Phone): |
| | FAX: | E-mail: |

10) Others (if necessary)

| |
|--|
| |
|--|

4. Career Record
1) Job Record (After graduation)

| Organization | City/ Country | Period | | Position or Title | Brief Job Description |
|--------------|------------------|--------------------|------------------|-------------------|-----------------------|
| | | From Month/Year | To Month/Year | | |
| | | | | | |
| | | | | | |
| | | | | | |

2) Educational Record (Higher Education)(required)

| Institution | City/ Country | Period | | Degree obtained | Major |
|-------------|------------------|--------------------|------------------|-----------------|-------|
| | | From Month/Year | To Month/Year | | |
| | | | | | |
| | | | | | |
| | | | | | |

3) Training or Study in Foreign Countries; please write your past visits to Japan specifically as much as possible, if any.

| Institution | City/ Country | Period | | Field of Study / Program Title |
|-------------|------------------|--------------------|------------------|--------------------------------|
| | | From Month/Year | To Month/Year | |
| | | | | |
| | | | | |
| | | | | |

5. Language Proficiency (required)

| | | | | | |
|--|---------------|----------|----------|----------|--|
| 1) Language to be used in the program (as in GI) | | | | | |
| Listening | () Excellent | () Good | () Fair | () Poor | |
| Speaking | () Excellent | () Good | () Fair | () Poor | |
| Reading | () Excellent | () Good | () Fair | () Poor | |
| Writing | () Excellent | () Good | () Fair | () Poor | |
| Certificate (Examples: TOEFL, TOEIC) | | | | | |
| 2) Mother Tongue | | | | | |
| 3) Other languages () | () Excellent | () Good | () Fair | () Poor | |

¹ Excellent: Refined fluency skills and topic-controlled discussions, debates & presentations. Formulates strategies to deal with various essay types, including narrative, comparison, cause-effect & argumentative essays.

¹ Good: Conversational accuracy & fluency in a wide range of situations: discussions, short presentations & interviews. Compound complex sentences. Extended essay formation.

¹ Fair: Broader range of language related to expressing opinions, giving advice, making suggestions. Limited compound and complex sentences & expanded paragraph formation.

¹ Poor: Simple conversation level, such as self-introduction, brief question & answer using the present and past tenses.

6. Expectation on the applied training and dialogue program

1) Personal Goal: Describe what you intend to achieve in the applied training and dialogue program in relation to the organizational purpose described in Part A-2.

2) Relevant Experience: Describe your previous vocational experiences which are highly relevant in the themes of the applied training and dialogue program. (required)

3) Area of Interest: Describe your subject of particular interest with reference to the contents of the applied training and dialogue program. (required)

***7. Declaration (to be signed by the Nominee) (required)**

I certify that the statements I made in this form are true and correct to the best of my knowledge.

If accepted for the program, I agree:

- (a) not to bring or invite any member of my family (except for the program whose period is one year or more),
- (b) to carry out such instructions and abide by such conditions as may be stipulated by both the nominating government and the Japanese Government regarding the program,
- (c) to follow the program, and abide by the rules of the institution or establishment that implements the program,
- (d) to refrain from engaging in political activity or any form of employment for profit or gain,
- (e) to return to my home country at the end of the activities in Japan on the designated flight schedule arranged by JICA,
- (f) to discontinue the program if JICA and the applying organization agree on any reason for such discontinuation and not to claim any cost or damage due to the said discontinuation.
- (g) to consent to waive exercise of my copyright holder's rights for documents or products that are produced during the course of the project, against duplication and/or translation by JICA, as long as they are used for the purposes of the program.
- (h) to approve the privacy policy and the copyright policy mentioned in the Guidelines of Application.

JICA's Information Security Policy in relation to Personal Information Protection

JICA will properly and safely manage personal information collected through this application form in accordance with JICA's privacy policy and the relevant laws of Japan concerning protection of personal information and take protection measures to prevent divulgence, loss or damages of such personal information.

Unless otherwise obtained approval from an applicant itself or there are valid reasons such as disclosure under laws and ordinances, etc., and except for the following 1.-3., JICA will neither



provide nor disclose personal information to any third party. JICA will use personal information provided only for the purposes in the following 1.-3 and will not use for any purpose other than the following 1.-3 without prior approval of an applicant itself.

1. To provide technical training to technical training participants from developing countries.
2. To provide technical training to technical training trainees from developing countries under the Citizens Cooperation Activities..
3. In addition to 1. and 2. above, if the government of Japan or JICA determines necessary in the course of technical cooperation.

| | |
|-------|-------------|
| Date: | Signature: |
| | Print Name: |

MEDICAL HISTORY AND EXAMINATION
1. Present Status

(a) Do you currently use any drugs for the treatment of a medical condition? (Give name & dosage.)

| | |
|-----------------------------|--|
| <input type="checkbox"/> No | <input type="checkbox"/> Yes >> Name of Medication (), Quantity () |
|-----------------------------|--|

(b) Are you pregnant?

| | |
|-----------------------------|---|
| <input type="checkbox"/> No | <input type="checkbox"/> Yes (months) |
|-----------------------------|---|

(c) Are you allergic to any medication or food?

| | |
|-----------------------------|--|
| <input type="checkbox"/> No | <input type="checkbox"/> Yes >>> <input type="checkbox"/> Medication <input type="checkbox"/> Food <input type="checkbox"/> Other: |
|-----------------------------|--|

(d) Please indicate any needs arising from disabilities that might necessitate additional support or facilities.

| |
|---|
| () |
| <i>Note: Disability does not lead to exclusion of persons with disability from the program. However, upon the situation, you may be directly inquired by the JICA official in charge for a more detailed account of your condition.</i> |

2. Medical History

(a) Have you had any significant or serious illness? (If hospitalized, give place & dates.)

| | | |
|----------|-----------------------------|--|
| Past: | <input type="checkbox"/> No | <input type="checkbox"/> Yes>>Name of illness (), Place & dates () |
| Present: | <input type="checkbox"/> No | <input type="checkbox"/> Yes>>Present Condition () |

(b) Have you ever been a patient in a mental hospital or been treated by a psychiatrist?

| | | |
|----------|-----------------------------|--|
| Past: | <input type="checkbox"/> No | <input type="checkbox"/> Yes>>Name of illness (), Place & dates () |
| Present: | <input type="checkbox"/> No | <input type="checkbox"/> Yes>>Present Condition () |

(c) High blood pressure

| | | |
|----------|-----------------------------|--|
| Past: | <input type="checkbox"/> No | <input type="checkbox"/> Yes |
| Present: | <input type="checkbox"/> No | <input type="checkbox"/> Yes>>Present Condition () mm/Hg to () mm/Hg |

(d) Diabetes (sugar in the urine)

| | | |
|----------|-----------------------------|--|
| Past: | <input type="checkbox"/> No | <input type="checkbox"/> Yes |
| Present: | <input type="checkbox"/> No | <input type="checkbox"/> Yes>>Present Condition () |
| | | Are you taking any medicine or insulin? <input type="checkbox"/> No <input type="checkbox"/> Yes |

(e) Past History: What illness(es) have you had previously?

| | | | |
|---|--|--|---|
| <input type="checkbox"/> Stomach and Intestinal Disorder | <input type="checkbox"/> Liver Disease | <input type="checkbox"/> Heart Disease | <input type="checkbox"/> Kidney Disease |
| <input type="checkbox"/> Tuberculosis | <input type="checkbox"/> Asthma | <input type="checkbox"/> Thyroid Problem | |
| <input type="checkbox"/> Infectious Disease >>> Specify name of illness () | | | |
| <input type="checkbox"/> Other >>> Specify () | | | |

(e) Has this disease been cured?

| | |
|------------------------------|---|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No (Specify name of illness) |
| | Present Condition: () |

3. Other: Any restrictions on food and behavior due to health or religious reasons?

| |
|--|
| |
|--|

I certify that I have read the above instructions and answered all questions truthfully and completely to the best of my knowledge.

I understand and accept that medical conditions resulting from an undisclosed pre-existing condition may not be financially compensated by JICA and may result in termination of the program.

| | |
|-------|-------------|
| Date: | Signature: |
| | Print Name: |