Japan-Mexico Training Program for the Strategic Global Partnership

General information on
Training Program of Arid Land Agricultural Technology in Mexico
（メキシコ乾燥地農業技術研修プログラム）
JFY 2025
Course No.: 202413392-J007
Course Period in Japan: From April 8th to October 9th, 2026

This information pertains to one of the JICA Knowledge Co-Creation Programs (Group & Region Focus) of the Japan International Cooperation Agency (JICA) 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)
The Japanese Cabinet released the Development Cooperation Charter in February 2015, which stated, *"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."* JICA believes that this 'Knowledge Co-Creation Program' will serve as a foundation of mutual learning process.

I. Concept

Background

In 1971, the Japan-Mexico Exchange Program has started, which mutually accepts students and young engineers from Mexico and Japan; in February 2010, based on the "Japan-Mexico Joint Statement Strategic Global Partnership in the 21st Century[1]", the Exchange Program was renewed into the Japan-Mexico Training Program for the Strategic Global Partnership. This program contains long-term courses (between three months and twelve months' period) and short-term courses (less than three months period). Currently, JICA accepts 50 Mexicans trainees annually under this scheme.

As we celebrate the 50th anniversary of this training program in 2021 with a value added of "Co-creation between Mexico and Japan", the course line-up has been completely reviewed, taking into account the compatibility with the eleven priority fields of PRONACES (National Strategy Program) set by Ministry of Science, Humanities and Innovation (In 2024 CONAHCYT changes its name to SECIHTI with the upgrading of the ministry) in Mexico, to response strong needs in the areas such as, Food security, and also traditional areas such as art and quality control are set.

This training program aims to develop Mexican human resources, through the implementation of training program based on the Japan-Mexico Joint Statement, thereby contributing to reinforcement establishment of the Mexico-Japan Strategic Global Partnership.

For what?

Development of feasible agriculture method in Mexican xeric environments, affected by degradation of water quality, and restricted access to energy and logistic facilities.

For whom?

Researchers and master's students interested in to develop economically feasible and environmentally sound hydroponic cultivation in Mexico.

How?

With research, practices and on-the-job training related to salt-tolerant plants for removal of salt from brined water, hydroponic cultivation technology increasing the productivity of regenerated water, photovoltaic energy generation, and logistic measures for market access of the products.

[1] https://www.mofa.go.jp/announce/announce/2011/2/PDF/0222_02_01.pdf

II. Description

1. **Title (Course No.202413392-J007)**
   Training Program of Arid Land Agricultural Technology in Mexico

2. **Course Duration in Japan**
   April 8th to October 9th, 2025 (Technical Training Period: May 8th to October 8th , 2025: about five months)

   April 8th : Arrival to Japan
   April 9th to May 6th Briefing, General Orientation and Intensive Japanese Language Class (at JICA Chubu Center)
   May 7th Moving to Tottori
   May 8th to October 8th: Technical Training Program (at Tottori University)
   October 9th: Departure from Japan

3. **Target Regions or Countries**
   Mexico

4. **Eligible / Target Organization**
   (1) Researcher or master's student in the specialties of agriculture, water resources management, xeric environment management, or other related areas
   (2) Belong to agriculture-related research institutes, universities, and private companies.
   (3) To be able to communicate in English fluently.

5. **Capacity (Upper Limit of Participants)**
   Four (4) participants

6. **Language**
   English

7. **Objective(s)**
   Development of feasible agriculture method in Mexican xeric environments, affected by degradation of water quality, and restricted access to energy and logistic facilities, learning hydroponic cultivation methods, as those as methods for self-accessing to energy and logistic facilities.

8. **Overall Goal**
   In order to contribute to the PRONACES established by SECIHTI in Mexico, special attention was paid to contents selection of the course. For this particular case, the course is aligned with the PRONACES' strategies such as "Water" and "Food sovereignty", specifically related to the development of technical, organizational and cultural alternatives that lead to the maximum possible saving of water for agricultural production, contributing to the reduction of water, energy and ecological footprints; and the strategy "Socioecological systems", specifically fosters the interdisciplinary or

transdisciplinary production practices that promote the sustainability of food systems with a socio-ecological approach.
The course is expected to contribute to the development of agricultural production in xeric environment of Mexico, pursuing water-saving hydroponic systems, contributing the reduction of ecological footprints, and promoting the sustainability of food systems.

9. Output and Contents

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

The general orientation and Japanese language training program are organized at the JICA Chubu Centre, prior to the technical training, in order to assist the participants in understanding Japanese way of thinking and adjusting themselves to life in Japan, and thus to facilitate effective training.

Expected Output	Subjects/Agendas	Methodology
Cultivation technology in xeric environments	Water-saving irrigation technology as a measure against water resource depletion.	Lecture / Practical training / Site Visit
	Soil management technology for sustainable arid land agriculture, with special focus on soil salinization.	Lecture / Practical training / Site Visit
	Crop hydroponic cultivation technology as a measure to improve water productivity.	Lecture / Practical training / Site Visit
	Crop quality diagnosis technology.	Lecture / Practical training
	Salt removal technology by plants (phytoremediation).	Lecture / Practical training
Energy generation	Renewable energy utilization technology for zero CO_2 emissions	Lecture / Practical training / Site Visit
Market access of products	Japanese-style shipping and sales channel formation to improve profitability	Lecture Site Visit

<Structure of the Course (Tentative) >

	Subjects	Objectives	Contents
Module 0	Preparation/Presentation of Job/Country Report.	Main issues of respective country/organization are identified.	—
	Introduction of research and other activities by lecturers.	To stimulate the participant's interest in the program.	—
Module 1	Water-saving irrigation technology as a measure against water resource depletion.	To understand the theory and methods of water-saving irrigation technology and put them into practice.	1) Learn basic theories of irrigated agriculture in arid lands. <Lecture> 2) Learn various water-saving irrigation planning methods. <Lecture> 3) Practice setting up, implementing, and monitoring water-saving irrigation systems in the field. <Practical training> 4) Observe land improvement areas (irrigated farmland, canals, dams, etc.). <Site Visit>
Module 2	Soil management technology for sustainable arid land agriculture, with special focus on soil salinization.	To master soil diagnosis methods based on an understanding of the characteristics of arid land soils and salinization.	1) Learn about the types and characteristics of arid land soils. <Lecture> 2) Learn about soil degradation due to salinization of irrigated farmland in arid lands. <Lecture> 3) Learn how to diagnose saline soils. <Practical Training> 4) Observation of soil management sites (dune fields, composting, paddy field soil management etc.). <Site Visit>
Module 3	Crop hydroponic cultivation technology as a measure to improve water productivity.	To master crop hydroponic cultivation technology based on an understanding of crop nutritional physiology.	1) Learn about water and nutrient absorption and growth of crops. <Lecture>. 2) Learn about factors that inhibit crop growth in arid lands. <Lecture> 3) Practice constructing a hydroponic cultivation system for crops. <Practical Training> 4) Observation of hydroponic cultivation and other institutional cultivation sites. < Site Visit >
Module 4	Crop quality diagnosis technology.	To acquire crop quality diagnosis methods using simple kits.	1) Learn about crop quality in arid lands. <Lecture> 2) Practice diagnosing quality (sugar content, leaf color, minerals, vitamin C, nitrate, etc.) using simple measurement kits. <Practical training>.
Module 5	Salt removal technology by plants (phytoremediation).	To acquire crop cultivation methods that realize crop production and soil salinization	1) Learn about salt damage and salt tolerance of crops. <Lecture> 2) Learn the mechanism of crops that absorb high salt content. <Lecture>

		reduction.	3) Practicing salt removal by crops. <Practical training>
Module 6	Natural energy power generation technology for zero CO_2 emissions.	To understand the resource evaluation and characteristics of power generation on renewable energy, and to practice the manufacturing and performing evaluation of a photovoltaic power system.	1) Learn about evaluation of natural energy resources. <Lectures and Practical training >. 2) Learn about the power generation evaluation of solar and wind power generation systems on arid farmland. <Lecture>. 3) Fabricate stand-alone photovoltaic power generation systems and evaluate their performance through power generation tests. <Practical training> 4) Observation of photovoltaic and wind power generation plants. < Site Visit >
Module 7	Japanese-style shipping and sales channel formation to improve profitability.	To learn Japanese-style shipping and sales channel formation to improve profitability of agricultural products.	1) Japanese shipping and marketing system for agricultural products. <Lecture> 2) Marketing of Japanese agricultural products. <Lecture> 3) Farmers organization to realize profitable sales - Focusing to Japanese farmers' cooperative and organization for each crop -. <Lecture> 4) Farmers organization and its supporting system - ・Advanced farmers, ・Japanese farmers' cooperative, ・Facilities for collection & shipment, ・Agricultural extension office -. < Site Visit >
Module 8	Preparation/Presentation of Action Plan	To apply the results of this course to their own duties after returning home country.	The lecturers in charge of Module closely related to the plan will give advice on how to prepare the plan.

III. Eligibility and Procedures

1. Nominee Qualifications

Applicants are expected to select nominees who meet the following qualifications.

【Remarks】: Each organization is requested to strongly encourage female candidates to apply for the course to accelerate the realization of gender equality and women's empowerment.

(1) Essential Qualifications

1) Current Duties: be a person who will promote Mexican agriculture including master or doctoral course student who studies agricultural science, agricultural producer, person whose work relates to agriculture, or person who is strongly willing to work for agriculture.

2) Experience in the Relevant Field: not to be required.

3) Educational Background: be a graduate of university
4) Language Proficiency: have a competent command to read, write and speak English.
5)Applicants must be fully committed to the training.
6) Health: must be in good health to participate in the program in Japan. To reduce the risk of worsening symptoms associated with respiratory tract infection, please be honest to declare in the Medical History. ※1 (QUESTIONNAIRE ON MEDICAL STATUS RESTRICTION of the application form) if you have been a patient of following illnesses; Hypertension / Diabetes / Cardiovascular illness / Heart failure / Chronic respiratory illness.

※1: Considering the length of the course exceeds six months and that during this period JICA could not offer proper health care assistance for periodical exams, medical appointments or eventual emergency care (if needed) required during gestation, pregnant applicants are not recommended to apply due to the potential risk of health and life issues of mother and fetus. Also, for the same reason, in case of the expected date of birth is during the course period, JICA could not accept the applicant, even if already selected.

(2) Recommended Qualifications

1) Age: less than about fifty (50) years
2) Gender Equality and Women's Empowerment: Women are encouraged to apply for the program. JICA makes a commitment to promote gender equality and women's empowerment, providing equal opportunity for all applicants regardless of sexual orientation and gender identity.

3. Required Documents for Application

(1) Application Form: The Application Form is available at **the JICA Mexico office**
* If you have any difficulties/disabilities which require assistance, please specify necessary assistance in the QUESTIONNAIRE ON MEDICAL STATUS RESTRICTION (1-(c)) of the application form. Information will be reviewed and used for reasonable accommodation.

(2) Photocopy of Passport: You should submit it 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.
*The following information should be included in the photocopy:
Name, Date of Birth, Nationality, Sex, Passport Number and Expiry Date

(3) English Score Sheet: to be submitted with the application form, if the nominees have any official English examination scores. (e.g., TOEFL, TOEIC, IELTS)

4. Procedures for Application and Selection

(1) Selection

Primary screening is conducted at the SECIHTI after receiving official documents from you. JICA Chugoku Center will consult with concerned

organizations in Japan in the process of final selection. Applicants with the best intentions to utilize the opportunity will be highly valued.

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

(2) Notice of Acceptance

SECIHTI will notify the results **not later than 8th December, 2025.**

5. Additional Document(s) to Be Submitted by Accepted Candidates

The accepted candidate may be required to prepare and submit an Inception Report. Please follow the instructions to be notified individually after the approval.

6. Conditions for Participation

The participants of KCCP are required

(1) to strictly observe the course schedule,

(2) not to change the air ticket (and flight class and flight schedule arranged by JICA) and lodging by the participants themselves,

(3) to understand that leaving Japan during the course period (to return to home country, etc.) is not allowed,

(4) not to bring any family members to stay with (Visit by the participant's family is not prohibited as long as the participation to the training program is not disturbed.),

(5) to carry out such instructions and abide by such conditions as may be stipulated by both the nominating Government and the Japanese Government in respect of the course,

(6) to observe the rules and regulations of the program implementing partners to provide the program or establishments,

(7) not to engage in political activities, or any form of employment for profit,

(8) to discontinue the program, should the participants violate the Japanese laws or JICA's regulations, or the participants commit illegal or immoral conduct, or get critical illness or serious injury and be considered unable to continue the course. The participants shall be responsible for paying any cost for treatment of the said health conditions except for the medical care stipulated in (3) of "5. Expenses", "IV. Administrative Arrangements",

(9) to return the total amount or a part of the expenditure for the KCCP depending on the severity of such violation, should the participants violate the laws and ordinances,

(10) not to drive a car or motorbike, regardless of an international driving license

possessed,

(11) to observe the rules and regulations at the place of the participants' accommodation,

(12) to refund allowances or other benefits paid by JICA in the case of a change in schedule, and

(13) In case of natural disaster or any possible contingency that makes unfeasible to conduct this course in Japan, it could be offered remotely (on-line).

IV. Administrative Arrangements

1. Organizer (JICA Center in Japan)

Center in charge: JICA Chugoku Center (JICA CHUGOKU)

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

2. Contact Information: Ms.Yukari HIRATA (cicttp@jica.go.jp）

3. Implementing Partner

(1) Name: Tottori University, Faculty of Agriculture

(2) URL: http://muses.muses.tottori-u.ac.jp/english/subject/leas/

(3) Remark: Prof. Satoshi YAMADA

4. Travel to Japan

(1) Air Ticket: In principle, JICA will arrange an economy-class round-trip ticket between an international airport designated by JICA and Japan.

(2) Travel Insurance: Coverage is from time of arrival up to departure in Japan. Thus traveling time outside Japan (include damaged baggage during the arrival flight to Japan) will not be covered.

5. Accommodation in Japan

JICA will arrange the accommodation(s) for the participants in Japan.

6. Expenses

The following expenses in Japan will be provided by JICA

(1) Allowances for meals, living expenses, and stopover.

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

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

(4) Expenses for program implementation, including materials.

(5) For more details, please see "III. ALLOWANCES" of the brochure for participants titled "KENSHU-IN GUIDE BOOK," which will be given before departure for Japan.

*Link to JICA HP (English/French/Spanish/Russian):
https://www.jica.go.jp/english/our_work/types_of_assistance/tech/acceptance/tr

aining/index.html

7. Pre-departure Orientation*

A pre-departure orientation will be held at respective country's JICA office, to provide Participants with details on travel to Japan, conditions of the course, and other matters.

*YouTube of "Knowledge Co-Creation Program and Life in Japan" and "Introduction of JICA Center" are viewable from the link below.
Image videos of 'Introduction of JICA Center (YouTube)' show the following information of JICA Centers: Location, Building, Entrance, Reception(Front desk), Lobby, Office, Accommodation(Room), Amenities(Hand dryer), Bathroom(Shower and Toilet), Toiletries, Restaurant, Laundry Room(Washing machine, Iron), ICT Room(Computer for participants), Clinic, Cash dispenser, Gym, Neighborhood

Part I: Knowledge Co-Creation Program and Life in Japan	
English ver.	https://www.youtube.com/watch?v=SLurfKugrEw
Spanish ver.	https://www.youtube.com/watch?v=m7I-WlQSDjI
Part II: Introduction of JICA Centers in Japan	
JICA Chubu	https://www.jica.go.jp/chubu/english/office/index.html
JICA Chugoku	https://www.jica.go.jp/chugoku/english/office/index.html

For Your Reference

JICA and Capacity Development

Technical cooperation is people-to-people cooperation that supports partner countries in enhancing their comprehensive capacities to address development challenges by their own efforts. Instead of applying Japanese technology per se to partner countries, JICA's technical cooperation provides solutions that best fit their needs by working with people living there. In the process, consideration is given to factors such as their regional characteristics, historical background, and languages. JICA does not limit its technical cooperation to human resources development; it offers multi-tiered assistance that also involves organizational strengthening, policy formulation, and institution building.

Implementation methods of JICA's technical cooperation can be divided into two approaches. One is overseas cooperation by dispatching experts and volunteers in various development sectors to partner countries; the other is domestic cooperation by inviting participants from developing countries to Japan. The latter method is the Knowledge Co-Creation Program, formerly called Training Program, and it is one of the core programs carried out in Japan. By inviting officials from partner countries and with cooperation from domestic partners, the Knowledge Co-Creation Program provides technical knowledge and practical solutions for development issues in participating countries.

The Knowledge Co-Creation Program (Group & Region Focus) has long occupied an important place in JICA operations. About 400 pre-organized course 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 is being customized by the different target organizations to address the specific needs, 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, as the first non-Western nation to become a developed country, built itself into a country that is free, peaceful, prosperous and democratic while preserving its tradition. Japan will serve as one of the best examples for our partner countries to follow in their own development.

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 a process of adoption and adaptation, of course, has been accompanied by countless failures and errors behind the success stories.

Through Japan's progressive adaptation and application of systems, methods and technologies from the West in a way that is suited to its own circumstances, Japan has

developed a storehouse of knowledge not found elsewhere from unique systems of organization, administration and personnel management to such social systems as the livelihood improvement approach and governmental organization. It is not easy to apply such experiences to other countries where the circumstances differ, but the experiences can provide ideas and clues useful when devising measures to solve problems.

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.

Contact Information for Inquiries

For inquiries and further information, please contact the JICA Mexico office or the Embassy of Japan. Further, address correspondence to:

JICA Chugoku Center (JICA CHUGOKU)

Address：3-1, Kagamiyama 3-chome, Higashi Hiroshima City, Hiroshima Prefecture 739-0046

Tel: 082-421-6310

Fax: 082-420-8082

Email: jicacic@jica.go.jp