

JICA Knowledge Co-Creation Program for Long Term Participants (JICA Development Studies Program)

General Information on

Human Resources Development in the Mining Sector

(KIZUNA Program)

JFY2025

長期研修 「資源分野の人材育成プログラム」(資源の絆プログラム)

This handout provides an overview of the "Human Resources Development in the Mining Sector (KIZUNA Program)" program/course, which is one of Japan International Cooperation Agency (JICA)'s Knowledge Co-Creation Program (Long-Term). The program will be implemented as part of the Official Development Assistance of the Government of Japan based on bilateral agreement between respective governments.

The objective of the Knowledge Co-Creation Program (Long-Term) is to offer opportunities to people from developing countries to study at higher educational institutions in Japan and to help them build their network of people. This is intended to assist in the human resource development plans of the governments of developing countries and Japan, and eventually to expand and strengthen bilateral ties between the developing countries and Japan.

1. Background

Mineral resources development is one of the most effective means for developing countries to develop their industries. The effect of mineral resources development has a tgreat impact on the society and economy of the countries concerned. It often comes with infrastructure development and regional development. And it also contributes to developing human resources, such as engineers and technicians, in various fields related to the mineral industry.

The global demand for mineral resources is expected to increase in line with the long term prospects for world economic growth. Under these circumstances, developing countries with mineral resource potential are striving to promote mining industries. These countries are placing more importance on mining activities to support future economic development.

However, governments of developing countries need more capacity and knowledge to promote and regulate mining companies. In order for foreign mining companies to make decisions to participate in mineral businesses of developing countries, there are many aspects that need to be clarified, such as the existence of sound legal systems and their enforcement, basic geological information, infrastructure, political and/or social risk, and security risk.

In the meantime, developing countries endowed with mineral resources require a great amount of capacity and knowledge for their sustainable development, such as proper mineral resources management, establishing sound legal systems, and aspects of resource exploration such as closing mines, mine safety, mine pollution countermeasures, socioeconomic measures surrounding mines, public finance system, and environmental measures.

What is JICA Knowledge Co-Creation Program (KCCP)

The Japanese Cabinet released the Development Cooperation Charter in June 2023, 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.

What is JICA Development Studies Program (JICA-DSP)

JICA-DSP is being carried out by JICA as part of official development assistance (ODA) by the government of Japan. JICA-DSP is offered for international scholars accepted as the participants of JICA's Human Resource Development Project who are enrolled in a degree program at a Japanese university.

https://www.jica.go.jp/dsp-chair/english/dsp/overview/index.html

2. Objectives

The objective of Human Resources Development for Governmental Officers and Researchers in Mineral Resources Rich Countries is to develop human resources such as governmental officials, educators and researchers who contribute to the mining development in developing countries. This program offers opportunities for such personnel to study at graduate courses for master's degree / doctor's degree in Japanese graduate schools as international students (hereafter referred to as participants) and experience internships at Japanese companies and institutions.

Beyond acquisition of skills and knowledge, this program also aims to have the participants understand and familiarize themselves with Japanese systems in business. The expected outcome of the program is to develop a network of potential contributors to the mining development in the developing countries.

In order to grow up human resources who can be leaders in promoting resource development in countries with natural resource potential, governmental officials are first priority to be selected.

3. Course Outline

- (1) Program Title: **Human Resources Development in the Mining Sector (KIZUNA Program)**
- (2) Language of the Program: English
- (3) Contents of the Program

| Orientation | Participants have orientation at the beginning of the program, including briefing session about the KIZUNA Program, courtesy call to related organizations, etc. |
|---|---|
| Research Student Program (6 months) | The preparatory period as a research student up to 6 months will be added in principle. Participants are required to prepare for entrance examination of the respective |

| | graduate course. Research students are also able to participate in lectures, receive instruction from supervisors. | | |
|------------------------|--|--|--|
| | Note: | | |
| | - Participants who failed entrance examination is | | |
| | required to return to their home countries. | | |
| | - Necessity of research student program will be | | |
| | considered based on interviews with professors of | | |
| | respective Japanese universities. | | |
| | Master's degree course / Doctor's degree course | | |
| | - Lecture and practice | | |
| Graduate Course | - Research works for the thesis | | |
| Program | - Field research in Japan and/or home country | | |
| (2 or 3 years) | * Field research is to be planned in accordance with | | |
| | the research theme and upon consultation with the | | |
| | supervisor. | | |
| | - JICA short-term (Spring/Summer) program: Mining | | |
| | Policy and Management Course, observation tours to | | |
| Additional Special | sites, institutions and firms in Japan. | | |
| Program | - Internship: Participants have internship program in | | |
| (Short-term | Japanese companies / institutions during their stay in | | |
| Programs and | Japan, and it is recommendable to conduct before | | |
| Internship) | graduation. Only when arrangements are made, | | |
| | internship after graduation, up to 6 months, will be | | |
| | considered. | | |

4. Duration

| | From: End of Sep. 2025 | |
|---------------------------------------|--|--|
| Master's Degree Course Participant | To: End of Sep. 2028(maximum) | |
| | - 6 months(maximum) as a research student if necessary | |
| | - 2 years as a master's course student | |
| | - Overall duration shall not exceed 3 years, in principle. | |
| | From: End of Sep. 2025 | |
| Doctor's Degree Course Participant | To: End of Sep. 2029 (maximum) | |
| | - 6 months as a research student if necessary | |
| | - 3 years as a doctor's course student | |
| | - Overall duration shall not exceed 4 years, in principle. | |

5. Number of Participants

- (1) Around 25 participants from all the target countries.
- (2) Target Countries
 - Mining: Indonesia, Philippines, Vietnam, Cambodia, Laos, Malaysia, Fiji, Papua New

Guinea, Mongolia, Kazakhstan, Uzbekistan, Tajikistan, Kirgis, Bolivia, Ecuador, Peru, Argentine, Brazil, Chile, Botswana, Mozambique, Madagascar, Zambia, Tanzania, Zimbabwe, Namibia, Malawi, Angola, South Africa, DR Congo, and Serbia

■ Geothermal: Indonesia, Philippines, Papua New Guinea, Bolivia, Ecuador, Peru, El Salvador, Nicaragua, Tanzania, Kenya, Ethiopia, and Djibouti

(3) Target Participants

This program is designed for the following two types of personnel.

| Governmental Officials (Technocrats) | Technocrats who take part in policy making and administration related to mineral resources development in central/regional government, governmental research institutions or other related public organizations in the mining/geothermal sector, and they are first priority as it states in 2. Objectives. Mainly for Master's degree, but also Doctor's degree. |
|--|---|
| Educators/ Researchers | Individuals who are responsible for education and research in the mining/geothermal sector in higher education and TVET (Technical and Vocational Education and Training) institutions in target countries. Mainly for Doctor's degree. |

6. Language to be used in this Program

English

7. Fields of Study at Japanese Universities

This program targets fields listed as below.

Economic Geology / Energy Geology / Sedimentology / Petrology

Applied Geophysics / Exploration Geophysics

Geochemistry

Reservoir Engineering

Resources Production and Safety Engineering

Engineering Rock Mechanics / Mining Machinery

Mining Technology / Mining Method

Petroleum and Geothermal Engineering / Energy Resources Engineering

Mineral Processing and Recycling / Environmental Remediation

Please be sure to visit the website of listed university below to choose your desired course and supervisor to apply. If you are not sure about appropriate university to apply for, please contact to JICA.

<List of Universities>

- Graduate School of International Resource Sciences, Akita University https://www.akita-u.ac.jp/shigen/eng/index.html
- Graduate School of Engineering Science, Akita University

- https://www.riko.akita-u.ac.jp/en/
- Graduate School of Engineering, Kyushu University https://www.eng.kyushu-u.ac.jp/e/
- Graduate School of Engineering, Hokkaido University
 https://www.eng.hokudai.ac.jp/english/division/graduate.php
- Department of resources and Environmental Engineering, Graduate School of Creative Science and Engineering, Waseda University http://www.cse.sci.waseda.ac.jp/en/
- Department of Civil and Earth Resources Engineering, Graduate School of Engineering, Kyoto University http://www.ce.t.kyoto-u.ac.jp/en
- Department of Urban Management, Graduate School of Engineering, Kyoto University https://www.um.t.kyoto-u.ac.jp/en
- Graduate School of Environmental Studies, Tohoku University http://www.kankyo.tohoku.ac.jp/en/
- Department of Systems Innovation, Graduate School of Engineering, The University of Tokyo
 - http://www.u-tokyo.ac.jp/en/academics/graduate_schools.html
- Graduate School of Life and Environmental Sciences, University of Tsukuba https://www.life.tsukuba.ac.jp/en/

9. Additional Programs for KIZUNA participants

Participants whose major is mining need to attend Short-term (Summer) Program (Mining Policy and Management) and every participant is required to participate Short-term (Spring) Program (Observation Tours) and to join an internship program at related company / institutions. Every program will be held during the course or a vacation period. All programs are carried out in English. Cost to attend the program will be borne by JICA. Details of internship schedule will be considered through consultation with supervising professor and/or JICA.

10. Application Qualifications and Requirements

Applicants shall satisfy the following requirements: Please bring the original copy of documents when you come to Japan.

| (1) Nationality | Citizens of the target countries |
|-----------------|--|
| (2) Education | For Master's degree course: - At least 16 years of academic background or equivalent |

| | - A bachelor's degree | |
|----------------------------------|--|--|
| (0) \\(\(\) \\(\) | For Doctor's degree course: - At least 18 years of academic background or equivalent - A Master's degree | |
| (3) Working Experience /Status | Applicants from government sectors / educators must; have more than 2~3 years of working experience at their current organizations obtain permission for application and securing reinstatement from their current organizations | |
| (4) English Proficiency | Adequate English proficiency, both in written and oral communication, in order to complete the Master's / Doctor's degree. Applicants should submit any one of the English scores (TOEFL, IELTS or TOEIC). | |
| (5) Understanding of the Program | Applicants are required to have clear understanding of the objectives of the program, and have a strong will to contribute to the development of the mining sector in their home countries as well as to strengthen the linkage between their countries and Japan after returning home country. | |
| (6) Others | Applicants must be both physically and mentally fit for the program, Applicants must not be receiving nor plan to receive other scholarship during the program, Applicants might be required to attend the activities on the weekends / holidays in unavoidable circumstances (ex. official exam). Applicants must physically come to Japan to carry out research activities to complete this program. Gender Equality and Women's Empowerment: JICA seeks more female applicants due to the past records of fewer applications from women. JICA is committed to promoting gender equality and women's empowerment, and provides equal opportunities for all applicants regardless of their sexual orientation or gender identity. | |

11. Procedures and Required Documents for Application

Candidates must be selected as JICA's official candidate through JICA's internal selection procedure and must pass the general entrance examination of the university they have applied to, including examinations to enter the applicants' desired master's degree or Ph.D. degree course. To do so, each each applicant is required to submit the following documents by the deadline set by JICA Office in the applicants' country.

Application Documents

- (1) Application Form (Annex 1) consists of;
 - Declaration of desired university placement: 1st and 2nd choice
 - Personal Information
 - Education Background
 - Work Experience
 - Details of Current and Previous Employment
 - Career Plan after completion of KIZUNA program (Annex 2)
 - Research plan (Annex 2)
 - Medical History
 - Declaration
- (2) Undergraduate degree graduation certificate / master's degree completion certificate
 - * Prepare the undergraduate certificate if you apply master's course. Also, prepare the master's one if you apply doctor's course.
 - * Officially certified copies of the original.
 - * Written in English or accompanied with official translation in English.
- (3) Academic transcript
 - * Prepare the undergraduate transcript if you apply master's course. Also, prepare the master's one if you apply doctor's course.
 - * Must contain all the grades earned in the university.
 - * Officially certified copies of the original.
 - * Written in English or accompanied with official translation in English.
- (4) A copy of valid passport with photo (for checking nationality, name, sex, and date of birth. National ID and birth certificate are acceptable if you do not have valid passport. Certified English translation must be attached if ID is not written in English).
- (5) ID Photo (4 cm×3 cm) must be pasted on application form.
- (6) Score of English proficiency examination See "10. Application Qualifications and Requirements", "(4) English Proficiency". If you have any problem or question, please contact to JICA.
- (7) Health certificate (when the participant applied to the entrance examinations or within 6 months before arrival in Japan,

| whichever is later) |
|----------------------|
| whichever is later) |

JICA shall determine whether the candidate is eligible to participate in training in Japan. JICA shall make a decision on acceptance or rejection based on several factors such as entrance examination results, planned number of participants, medical examination results and others. Reason for the decision will not be disclosed.

12. Application Period

Complete set of application documents must be submitted to JICA Office in your country before and no later than the end of Dec. 2024.

13. Selection Procedures

- * Any costs incurred during the selection procedures including travel expenses to selection venues will NOT BE COVERED by JICA.
- * The reasons for disqualification on each selection procedure will NOT BE DISCOLSED.
- (1) Selection Procedures

[1st Step] Screening of the Application Documents by JICA

Period: Jan. 2025

JICA will conduct screening whether the applicants meet the program's purpose and qualification set by JICA. JICA will share the information of qualified applicants with Japanese university.

[2nd Step] Screening of the Application Documents by Universities

Period: Feb. 2025

Japanese universities will examine the documents to match applicants with the courses / supervisors, and may select candidates for the 3rd selection.

[3rd Step] Interview by University and JICA

Period: Mar. 2025 - Apr 2025

Venue: Online (You may have an interview at JICA Office in your country)

Applicants who passed 2nd Step will have an interview through online meeting with faculty member of the Japanese university and JICA Headquarters (Tokyo).

- (2) Announcement of result of the selection

 JICA will inform candidates with result of the selection through JICA Office in your country
 by the end of Apr 2025
- (3) Others

- JICA might offer the candidate universities that are not stipulated in the "Declaration of desired university placement" in the Application Form as the result of matching process.
- Candidate applicants must follow each university's application procedure after the selection process mentioned above. If the applicants withdraw their applications after their official applications to the universities, applicants must inform their withdrawal to the university by letter.

14. Expenses To Be Borne By JICA

Under the JICA Long-term Trainee Allowance standards, JICA will cover expenses and allowance to participants accepted to the program/course. See the table below for further details. Note that the payments (e.g. for tuition, research support expenses, school support expenses) will not be paid to the accepted participants themselves, but directly to the university or other relevant institutions.

| Expense category | Payment amount | Payment frequency |
|-------------------------------------|-----------------------------------|----------------------------|
| Tuition (official examination fees, | Actual costs | According to the request |
| entrance fees, course fees) | | from universities |
| Living Allowance* | JPY 117,000–148,000 per month* | Every month via university |
| Airfare | Actual costs | Upon arrival in Japan |
| Alliaro | | and upon returning home |
| Outfit Allowance** | JPY100,000 | Once (upon arrival in |
| Outilit Allowance | | Japan) |
| Moving Allowance*** | Up to JPY164,000-224,000 | Once (during the training |
| Wie ving / wie wantee | | period)** |
| | - Actual costs (up to | |
| Research Support Expenses**** | JPY360,000 per year) | |
| Tresearch Support Expenses | - Expenses for overseas | |
| | field survey and internship | |
| Madical care for participants who | In accordance with the | |
| Medical care for participants who | provisions of the medical | |
| become ill after arriving in Japan | insurance | |

^{*}Varies according to living area in Japan, type of accommodation, etc.

15. Expenses Not To Be Borne By JICA

JICA will not bear costs other than the allowances described above. JICA is not responsible for the following expenses especially:

- (1) Passport fees (for re-issuance and extensions, etc.)
- (2) Visa fees of a transit country and transportation expenses to obtain Visa
- (3) Transportation expenses to obtain Japanese Visa
- (4) Domestic travel expenses at the applicant's home country
- (5) Departure tax
- (6) Airport tax/airport facility charges outside of Japan, including third countries
- (7) Customs duty
- (8) Excess baggage charges
- (9) Compensation for lost and/or damaged baggage
- (10) "No show charge" to the transit airport hotel (non-refundable)
- (11) Lost ticket fee

^{**}Once, after opening bank account in Japan. As it takes several weeks to have the bank account opened, it is strongly recommended to bring cash for personal expenses during the period.

^{***}Depending on the accommodation facility. Consultation with the university is required.

^{****}Research Support Expenses are allowed to be provided via the university and be disbursed with the consultation and approval of the applicant's supervisor.

- (12) Accommodation fee for day-use hotel in return flight
- (13) Transportation expenses other than official programs
- (14) Telephone bill or mini-bar tab at accommodation
- (15) Medical costs related to pre-existing illness, pregnancy, and dental treatment
- (16) Medical cost related to the same illness over 180 days
- (17) "National Health Insurance" fee

Note: If participant/accepted applicant does not follow the regulation of JICA, the participant may have to bear such other cost of necessary expenses.

16. Conditions for Participation

The accepted applicants/participants of KCCP are required

- (1) to understand that participants must physically come to Japan to participate in this program at the date designated by JICA,
- (2) not to change the air ticket (and flight class and flight schedule arranged by JICA) and lodging by the participants on their own,
- (3) not to change course subjects or extend the course period,
- (4) to understand that inviting participant's family members is not recommended before their stay in Japan has passed more than 6 months,
- (5) to return to their home country on the designated flight by JICA, when they finish the program/course or when it is deemed impossible to finish the program within the program period, or when the participant is not successful on the regular course examination,
- **(6)** 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,
- (7) to enroll and complete JICA-DSP online courses, when you receive JICA's instructions to do so.
- (8) to observe the rules and regulations of the program implementing partners to provide the program or establishments, ("Plagiarism" especially is taken severely by enrolling university, regardless of whether it is direct plagiarism or self-plagiarism and participants may be subjected to disciplinary action such as suspension),
- (9) not to engage in political activities, or any form of employment for profit,
- (10) to agree to be discontinued of the program, should the participant (a)violate Japanese laws, JICA's regulations, or University's regulations, (b)commit illegal or any type of immoral conduct including sexual harassment, (c)become critically ill or seriously injured, after arrival in Japan.
- (11) to be responsible for paying any cost for treatment of the said health conditions except for the medical care expenses described in the table of "11. Expenses To be borne by JICA,"
- (12) to return the total amount or a part of the expenditure for KCCP depending on the severity of such violation, should the participants violate the laws and ordinances,
- (13) not to drive a car or motorbike, regardless of an international driving license possessed,

- (14) to observe the rules and regulations at the place of the participants' accommodation,
- (15) to refund allowances or other benefits paid by JICA in the case of a change in schedule,
- (16) to accept that 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,
- (17) to submit a Health Certificate in JICA format at the participant's expense, when the participant applied to the entrance examinations or within 6 months before arrival in Japan, whichever is later.
- (18) to accept to submit a second Health Certificate in JICA format if deemed necessary by JICA. The cost of acquiring the Health Certificate will be borne by JICA unless it is required due to the candidates' fault.
- (19) to promptly resubmit your medical history, If there are changes in your health condition, such as pregnancy or a pre-existing disease,
- (20) to be in good health to participate in the program. In order to reduce the risk of worsening symptoms associated with respiratory tract infection, please be honest when consulting the doctor for your Health Certificate,
- (21) not to be receiving nor plan to receive another scholarship during the program,
- (22) to understand not to make other applications for different JICA training courses at the same time, and
- (23) to understand that the maximum duration of "Overseas research" and "Temporary Leave (leaving Japan for private purpose)" is 60 days, in principle.
- (24) to accept to take tuberculosis related inspections organized by JICA after arriving in Japan and to submit the results to JICA and university.
- (25) to approve the following conditions on summary of my thesis;
 - ① Summary of the thesis shall be kept at JICA.
 - ② Summary of the thesis can be read by anyone who made a request to JICA.
 - ③ Summary of the thesis can be used for publication by JICA or JICA website.
 - ④ Taking Photocopy of the thesis shall be allowed by anyone with JICA's permission.

17. Other Information

- (1) Laptop PC
 - Participants are strongly recommended to bring their own laptop to conduct their research.
- (2) Expenses

Please be noted that the "arrival allowance" is paid one or two weeks after opening bank account in Japan. Therefore, JICA strongly recommends bringing approximately 100,000 JPY (about 800 USD • • • depending on the rate) from your home country to bear the expenses that will be incurred before these allowances are paid after arrival in Japan.

(3) Research Samples

Participants are recommended to bring their research samples and data. Please consult to your supervisor and check the import regulations.

18. Annex

Annex 1. Application Form

Annex 2. Research & Career plan



CORRESPONDENCE

For enquiries and further information, please contact your nearest JICA office.