

The Role of JICS, Which Aims to Become an “Integrator” of International Cooperation

JICS Makes Aid and International Cooperation Tangible through Procurement for “Peace, Prosperity and a Better Future for Everyone.”

JICS formulates and implements international cooperation projects optimized in line with the needs of the front line showing that the ODA is implemented by Japan to achieve the Sustainable Development Goals (SDGs) and promote the priority policies for development cooperation pursued by the Government of Japan.

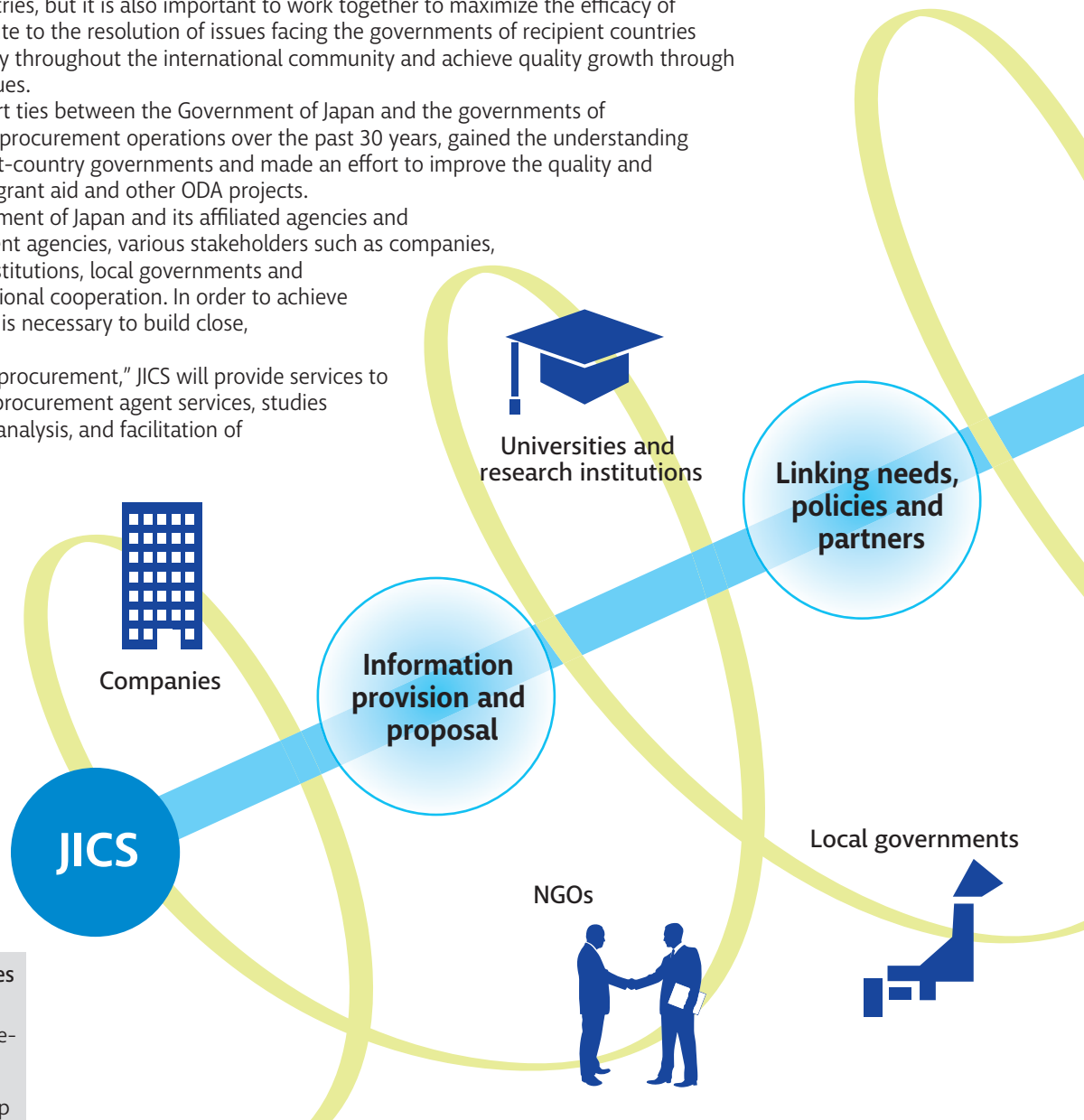
Targeting Approaches That Best Suit the Needs of the Front Line Under Close Cooperation Between Various Actors

Within ODA-related projects and other international cooperation, we must of course better understand the needs of recipient countries, but it is also important to work together to maximize the efficacy of projects in order to contribute to the resolution of issues facing the governments of recipient countries as well as peace and stability throughout the international community and achieve quality growth through efforts to address global issues.

JICS has worked to support ties between the Government of Japan and the governments of recipient countries through procurement operations over the past 30 years, gained the understanding and cooperation of recipient-country governments and made an effort to improve the quality and ensure the transparency of grant aid and other ODA projects.

In addition to the Government of Japan and its affiliated agencies and recipient-country government agencies, various stakeholders such as companies, universities and research institutions, local governments and NGOs participate in international cooperation. In order to achieve a total win for each actor, it is necessary to build close, cooperative relationships.

From the perspective of “procurement,” JICS will provide services to connect everyone through procurement agent services, studies (consulting), screening and analysis, and facilitation of executing ODA projects.



Operations through JICS' Procurement

Procurement Agent Services

- ▶ Procurement of products
- ▶ Procurement and management of construction
- ▶ Grant aid projects under private-public partnership

Studies (Consulting)
 Screening and analysis
 Facilitation of executing ODA projects
 Overseas business development support activity for Japanese enterprises

Handover ceremony of demining machine in Cambodia



Reconstruction of flood-affected school in Myanmar



Ophthalmology equipment for Nauru



Making Aid and International Cooperation Projects Tangible

Developing an environment for international peace, stability and prosperity

Addressing global issues toward achieving the SDGs and promoting human security

Aiming for "quality growth"

Grant Aid

Technical Cooperation

Loan Aid (ODA Loans)

Multilateral Aid (Assistance through International Organizations)

Economic Cooperation through Other Government Agencies, Private Funds, etc.

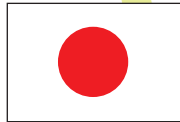
Recipient-country governments



Request for aid and cooperation

Implementation of Aid

Project formulation and implementation



Government of Japan, JICA, government agencies

International organizations



Achievements in ODA-Related Projects for 150 Countries and Regions




JICS' Strengths

- Knowledge about a wide variety of products, specifications and recipient countries
- Project management skills
- Multilingual staff proficient in English, French, Spanish, etc.
- Network of contacts in each country
- Know-how relating to public procurement


Development Cooperation and the Role of JICS in ODA

Main Operations in Which JICS Is Involved toward Achieving the Sustainable Development Goals (SDGs)*

Operations Implemented in Grant Aid, Multilateral Aid-Related Projects

<p>Procurement Agent Services</p>	<p>Procurement of Goods</p> <p>JICS determines the equipment specifications and delivery conditions based on data related to the materials and equipment, and information regarding the customs clearance procedures as well as the systems to receive and store imported goods in the recipient country. To ensure that equipment is delivered in accordance with the contract, JICS carries out checks before shipping and in the recipient country.</p>	<p>Main Procurement Details and SDGs</p> <ul style="list-style-type: none"> ▶ Food assistance (rice, wheat) ▶ Petroleum products, steel ▶ Medical and welfare equipment ▶ Equipment for disaster prevention ▶ Demining machines ▶ Vocational training equipment ▶ Next-generation vehicles ▶ Forest survey equipment ▶ Customs patrol boats, etc. 
<p>As the procurement agent on behalf of the recipient-country governments, JICS provides procurement services—including management of funds—and carries out project management.</p> <p>■ Necessity of a Procurement Agent</p> <p>To utilize funds—granted in accordance with Japan’s ODA rules—appropriately and expeditiously, a third-party organization that has a thorough knowledge of relevant rules carries out procurement procedures and manages the grant aid funds.</p>	<p>Procurement and Management of Construction</p> <p>Based on the needs of the recipient country, JICS together with a construction consultant determines the facilities specifications and the construction conditions for the project.</p> <p>During the construction period, JICS carries out project management.</p>	<p>Main Procurement Details and SDGs</p> <ul style="list-style-type: none"> ▶ Construction of elementary, junior high and teacher training schools ▶ Healthcare center construction ▶ Road renovations ▶ Project for introduction of clean energy by solar electricity, etc. 
<p>■ Main Operations</p> <p>JICS determines tender conditions by confirming the specifications for materials, equipment and facilities; the quantity of items; and delivery and construction conditions with the executing agency of the recipient country.</p> <p>JICS selects and enters into contracts with suppliers and construction companies through the tender process and supervises the contract fulfillment status of the contractors while managing the project’s funds.</p>	<p>Grant Aid Projects Under Public-Private Partnership</p> <p>Management of projects supporting businesses such as the construction, operation, and maintenance of facilities implemented by Japanese enterprises with expertise and urban infrastructure development cooperation leveraging Japan’s technologies and experience.</p>	<p>Main Procurement Details and SDGs</p> <ul style="list-style-type: none"> ▶ Project for Expansion of Water Supply in Cambodia and Project for Reduction of Non-Revenue Water in Myanmar 

Operations Implemented in Grant Aid, Technical Cooperation, ODA Loans, Multilateral Aid Related Projects, and Other Economic Cooperation by Government Agencies

<p>Studies (Consulting)</p>	<p>▶ JICS conducts surveys and analysis to propose optimal conditions for a project, such as the appropriateness of the needs, technical specifications and estimation. - Collaborative survey of geothermal development projects (Ethiopia, Indonesia), Preliminary survey for Cultural Grant Assistance</p>	
<p>Facilitation of Executing ODA projects</p>	<p>▶ In Grant Aid and Technical Cooperation, JICS supports project formulation and bidding, contracts, and delivery. - Cultural Grant Assistance</p> <p>▶ JICS supports JICA in the facilitation of procurement and disbursement procedures of ODA Loan projects - Japanese ODA Loan Projects Formulation and Implementation in South Asian Countries</p>	
<p>Screening and Analysis</p>	<p>▶ In terms of ODA Loans, JICS performs the primary check whether procurement-related documents prepared by the borrowing country comply with JICA guidelines, and conducts ex-post procurement audits and ex-post project assessment. - Primary check for procurement-related documents related to ODA Loans (In fiscal 2018, JICS conducted such checks in 533 cases on documents submitted by Anglophone, Francophone and Hispanophone country governments.)</p> <p>▶ JICS conducted screening of application documentation for Grant Assistance for Japan’s NGO Project and analyzed design supervision cost for Grant Aid projects.</p>	
<p>Overseas Business Development Support Activity</p>	<p>Utilizing grants from JICA, JETRO and the Ministry of Economy, Trade and Industry, JICS supports start-up companies and SMEs with outstanding technologies, products and know-how that can contribute to taking up new challenges in developing countries. JICS provides support for planning surveys and feasibility studies, negotiating with related parties and the formulation of business plans.</p> <p>▶ Overseas Business Development Support Activity “J-Partner,” Feasibility surveys and verification surveys by JICA (Peru, Viet Nam, Mexico, etc.)</p>	

Note: Sustainable Development Goals (SDGs): The development goals of the entire international community from 2016 to 2030, as listed in the “2030 Agenda for Sustainable Development” adopted at the United Nations Summit in September 2015.

JICS' Major Activities in Fiscal 2018

JICS engagement in international cooperation involves a variety of players, including governments of recipient countries, the Government of Japan and its affiliated agencies, and Japanese private-sector enterprises. JICS plays the role of "integrator" linking these various players.

Grant Aid

Non-Project Grant Aid Using SME Products: Commendation from the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) for Contribution to Disaster Prevention Using Japanese-Made Meteorological Observation Equipment



Project Overview

Development of meteorological observation points as part of disaster prevention measures promoted by the PAGASA

JICS has been procuring meteorological observation equipment produced by Japanese SMEs under Japan's Non-Project Grant Aid for Provision of Japanese SME's Products since 2012 in the Philippines, where many weather disasters occur.

- ▶ Counterpart of Agent Agreement: The Philippines' Department of Finance
- ▶ Japan's Non-Project Grant Aid for Provision of Japanese SME's Products Grant Amount: ¥200 million Exchange of Notes (Bilateral Agreement): March 18, 2013
- ▶ Japan's Non-Project Grant Aid for Provision of Japanese SME's Products Grant Amount: ¥250 million Exchange of Notes (Bilateral Agreement): March 26, 2015



Country Assistance Division 2,
First Management Department
Masatoshi Murao



Aerovane operation and maintenance training held at PAGASA office ↑

JICS Initiatives

Disaster Prevention Measures Spread with Greater Damage from Typhoons and Evaluation of Japanese SME Products

The Philippines is hit by typhoons every year and many lives are at risk. The damage caused by flooding is particularly severe, thus PAGASA is promoting the installation of meteorological observation equipment and flood warning systems in major rivers nationwide to reduce disaster risk. As part of this effort, PAGASA has recently requested that the Government of Japan provide the funds necessary to procure meteorological observation equipment that will form the basis of the flood warning system in the main river basin of Davao, Mindanao, and the Abulog River basin in the northern part of Luzon. Procurement and installation of equipment in Davao's main river basin has been completed, and we are quickly procuring equipment for the Abulog River basin. Japanese SME weather observation equipment, which is manufactured according to either World Meteorological Organization (WMO) international standards or Japan Meteorological Agency standards, is high quality and versatile and the solid reputation of this equipment is expected to grow the market for these products in this country. At the same time, this equipment meets expectations of the Government of



A water level gauge installed on a bridge →
downstream of the Davao River

Japan in terms of supporting the overseas expansion of SMEs through this scheme.

The Solid Reputation of JICS

Recognized for Effective Project Implementation, Including the Provision of Technical Information Based on Weather Observation Equipment Procurement Experience

In terms of measurement devices, PAGASA examined installation location, measurement accuracy and frequency with consideration for safe measurement as there are few changes in the flow path and river bed at important points in river management. JICS provided pertinent information collected from manufacturers and consultant opinions and quickly coordinated with relevant parties when changes were made regarding installation work, which was a burden for the other side. In March 2019, JICS was recognized with the "WIND VANE AWARD," the highest commendation for individuals and organizations contributing to PAGASA's efforts to reduce disaster risks and combat climate change. This reflects the high praise for JICS' important role in effectively implementing Japan's Non-Project Grant Aid for Provision of Japanese SME's Products that was very useful in providing high-quality disaster prevention and reduction-related services. We would like to express our sincere appreciation for the close cooperation among organizations and corporations in both countries.



JICS receives the "WIND VANE AWARD" →
plaque from Administrator, Mr. Malano (right)



Communication equipment for data reception ↑
installed at the PAGASA Davao branch

JICS' Major Activities in Fiscal 2018

Grant Aid

Economic and Social Development Programme: Retired Japanese Customs Patrol Boats Contribute to Ensuring Maritime Safety in Cambodia



Project Overview

Strengthening the Control of Illegal Activities at Sea

In response to a request from the General Department of Customs and Excise of Cambodia, which does not have high-speed patrol boats, the Government of Japan has decided to donate two retired customs patrol boats and the funds necessary for repairs and maintenance.

- ▶ Counterpart of Agent Agreement: Ministry of Economy and Finance, General Department of Customs and Excise of Cambodia
- ▶ Grant Amount: ¥500 million
- ▶ Exchange of Notes (Bilateral Agreement): April 8, 2018



Country Assistance Division 2,
First Management Department, others

Sae Fukushima Hiroshi Sato Takamasa Hisamoto

JICS Initiatives

Realizing Rapid Improvement Repairs and Delivery in Just Nine Months

In April 2018, after the Exchange of Notes was signed by the governments of both countries, JICS, as the procurement agent for the Government of Cambodia, replaced rigging for two customs patrol boats and quickly proceeded with overhauls of main engine, repainting the hull in the color of Cambodian customs (grey), marine transportation and onsite training, completing delivery by January 2019.

Utilizing Experience in the Procurement of Used Vessels to Effectively Implement Aid Funds

Procurement of used patrol boats requires special operations such as selecting the shipyards (bidding) for renovation and maintenance, transferring ownership, changing boat registry, and examining transportation methods to Cambodia. Even though boats are only moored, daily maintenance costs and mooring costs are incurred, thus prompt implementation was

necessary to effectively execute aid funds. JICS made use of its experience in the procurement of used vessels in Viet Nam and Myanmar and achieved speedy procurement with the support of the Customs and Tariffs Bureau of Japan's Ministry of Finance as well as each customs office and contractors.



Sea trial of the reborn customs patrol boat ↑
before it is transported to Cambodia

Economic and Social Development Programme: Improving National Roads in the Distribution Base of Djibouti and Aiming for "Stronger Connectivity" with Neighboring Countries



Project Overview

Improving Djibouti's Main Arterial Road, a Logistics Base in Northeastern Africa

In order to contribute to the smooth transportation of goods between Djibouti and Ethiopia, the Government of Japan will cooperate in the renovation of a section of road approximately 20 km from the border, which is most noticeable for its damage on National Road 1 connecting the two countries.

- ▶ Counterpart of Agent Agreement: Ministry of Foreign Affairs and International Cooperation of the Republic of Djibouti
- ▶ Grant Amount: ¥3.9 billion
- ▶ Exchange of Notes (Bilateral Agreement): November 28, 2018



Country Assistance Division 6,
Second Management Department
Hajime Midorikawa

JICS Initiatives

Realizing "Stronger Connectivity" through "Quality Infrastructure Investment"

This project aims for "stronger connectivity" between Djibouti and neighboring countries, and because the targeted section of road is a major road that is severely damaged and in need of major improvement, this project demands "speed" and "high quality." Because this project is in line with the priority policy of "Quality Infrastructure Investment" announced by the Government of Japan at "TICAD VI,"* JICS will implement this project under Japan's "visible assistance" system, in which Japanese corporations are involved in detailed design, construction, and construction supervision.

* TICAD: Tokyo International Conference on African Development

Speedy Selection of Construction Companies, Aiming for November 2020 Completion

In November 2018, after signing the Exchange of Notes between governments, JICS immediately selected a consultant as a



Conceptual drawing of National Road 1 repairs ↑
when complete (detailed design provided
by consultant Yachiyo Engineering Co., Ltd.)

procurement agent for the Government of Djibouti. While conducting field surveys and coordination with related organizations, JICS held a bidding briefing for the Japanese construction industry in January 2019, and after a bidding process entered into contracts with two construction companies (a joint venture between Dai Nippon Construction and Toda Corporation). JICS will conduct project management on this project, which is highly anticipated by Djibouti stakeholders, so that Japan's high-quality road improvement technologies are fully utilized.

Grant Aid

Grant Aid Project Under Public-Private Partnership: Developing Water Supply Facilities in Northern Cambodia



Project Overview

Cambodia's "National Strategic Development Plan" aims to achieve 100% access to safe drinking water in its urban areas by 2025, but the clean water supply coverage in Kampong Thom province still remains at 41%, thus the improvement of water supply capacity in the province is an urgent challenge. Against this backdrop, the Government of Japan supports the province through a Grant Assistance Project, adopting an idea of Public-Private Partnership and Japanese DBO* method, to improve such situation, as well as to promote Japanese companies' overseas expansion.

- ▶ Project Name: The Project for Expansion of Water Supply System in Kampong Thom
- ▶ Exchange of Notes (Bilateral Agreement): March 30, 2017
- ▶ Grant Amount: ¥3.271 billion
- ▶ Counterpart of Agent Agreement: Royal Construction Group (Cambodia) Co., Ltd., and Ministry of Industries and Handicrafts, Kingdom of Cambodia

* Design-build-operate (DBO): A comprehensive consignment of design, construction, maintenance, operation, etc., of public facilities, etc., to private business operators



First Project Management Division,
Third Management Department

Shinji
Hosoya

Yohei
Otomo

JICS Initiatives

Operators with Japan-Wide Support Structure Launch Facility Development

After the Exchange of Notes was signed by both governments, JICS was responsible for the procurement, management and fund management of the project as a procurement agent on behalf of the Government of Cambodia. In fiscal 2018, JICS conducted a selection procedure for Japanese companies responsible for the construction of water purification plants, intake weirs and water distribution networks, as well as the operation and maintenance of facilities after construction. In March 2019, a contract was signed with a business operator selected by tender (a consortium of multiple Japanese companies represented by Kubota Construction Co., Ltd.), and the first step toward overseas expansion of high-quality infrastructure technology in Japan began. Since it is important to gain the understanding of local residents when implementing the project, an explanatory meeting was held in December 2017 for local residents as part of the Environmental Impact Assessment (EIA). JICS will continue



Explanatory meeting for local residents ↑

to maintain appropriate supervision by making use of the experience and know-how gained through two projects under the same type of Grant Aid in Myanmar that are currently being implemented.

JICS Project-Related Activities

Contributing to the Expanded Partnership for Quality Infrastructure Initiatives

Grant Aid Project under Public-Private Partnership Seminar Held in Okinawa

At the 8th Pacific Islands Leaders Meeting held in Iwaki City, Fukushima Prefecture, in May 2018, government officials from Oceania expressed strong expectations for direct investment and business expansion from Japan. After consulting with the Ministry of Foreign Affairs, JICS organized a seminar titled "Supporting Japanese Company Infrastructure Development in Oceania using ODA Focused on Grant Aid Projects Under Public-Private Partnerships" held in Okinawa, an island prefecture that has many geographical commonalities with Oceania. Through this seminar, held in October 2018, JICS provided opportunities for companies to promote an understanding of how this scheme works and launch the first steps toward the creation of new business.

JICS has a track record that includes 68 projects such as Grant Aid for the Economic and Social Development Programme in Oceania over the past 10 years. Our strength is our solid grasp of local needs and the sound relationships with government institutions. Hence, we will continue to focus on spreading this scheme and supporting the implementation of projects created in this region to assist the infrastructure export policies of the Government of Japan.



After meeting with Royal Construction Group (Cambodia) Co., Ltd., and Ministry of Industries and Handicrafts ↑

Hosoya of JICS gives a presentation → at a seminar



Ongoing Operational Domain Expansion

Drawing on JICS' 30 years of experience as a procurement expert organization, we will make efforts to "link local needs" in new areas such as cooperation with international organizations, ICT education field surveys and support for the overseas expansion of private companies.



Japanese ODA Loans

Developing Electricity Infrastructure in Iraq as a Consultant to the United Nations Development Programme (UNDP)

Project Overview

Promoting Reconstruction of Electricity Sector in Kurdistan Region through Japanese ODA Loans with International Organization

Since the 1980s, war and economic sanctions have caused destruction and aging of Iraq's electricity infrastructure. Since the conclusion of the war in 2003, gradual progress has been made toward reconstruction but demand is still not being fully met. This project was partly supervised by the United Nations Development Programme (UNDP) as Electricity Sector Reconstruction Project in Kurdistan Region under Japanese ODA Loans.

▶ Contractee: United Nations Development Programme (UNDP)



Completed training center ↑



First Project Management Division,
Third Management Department

Kazunori
Ogaguchi

Kosuke
Tomoshige

JICS Initiatives

Leveraging Experience and Specialization in Japanese ODA Loans and Grant Aid to Execute Operations as a Consultant to International Organizations

In addition to forming joint ventures with an Australian company with strong technical expertise in the electricity sector, JICS entered into a consulting agreement with the UNDP in May 2016 to execute operations including support for overall project progress management, construction supervision, equipment delivery management, payment management and capacity building of the Regional Ministry of Electricity in Kurdistan.

This project, which uses the process of the Japanese ODA Loans, requires contract management and various support operations in accordance with JICA guidelines and standard documents. JICS contributed to the steady promotion of necessary procedures and the strengthening of the capacity of the executing agency by leveraging its experience and expertise of facilitating the smooth implementation and checking relevant documents and project management operations for grant aid projects.

In particular, as various stakeholders such as the UNDP, executing agency, JICA, collaborating companies and contracting partners operate in Iraq, Japan, Australia and other countries, JICS staff liaises with all related parties with agility and flexibility to ensure smooth progress. Staying in Erbil City on

rotation, which is classified as Threat Level 2*, every time staff moved around JICS took thorough safety measures such as gathering sufficient information about security conditions in the country and took all possible safety measures including preparing responses in the event of an emergency.

Realization of Business Effects in the Kurdistan Region and throughout Iraq

Under this project, the development funds are used for the construction of related facilities and procurement of related equipment in the substation and distribution sections necessary for the development of electricity infrastructure, construction of the training center for the staff of the executing agency, its maintenance, and training. All processes were completed before the expiration of disbursement period which was 2018. It is JICS' hope that this project will realize the effect and contribute to the creation of peace throughout the country.



JICS staff gives training completion certificates to trainee ↑



Iraqi executive staff visit Japan ↑ to express their appreciation

In December 2018, Deputy Minister, Mr. Hoger of the Kurdistan Regional Power Ministry (second from left) and two others visited JICS and thanked for its service when they made a courtesy visit to JICA headquarters.

* Threat Level 2 "Avoid Non-essential travel":
Based on "Overseas Travel Safety Information" website of Japan's Ministry of Foreign Affairs



Investigating the Potential for Japanese-Language Education Using ICT in the Japanese-Peruvian Community

- ▶ Investigative Research into Educational Networks Using ICT for the Japanese-Peruvian Community in the Republic of Peru
- ▶ Contractee: Ministry of Internal Affairs and Communications
- ▶ Implementation Period: October 31, 2018–March 31, 2019



Country Assistance Division 5,
Second Management Department
Masahiro Oshima and other staff
Coordinator in Peru: Claudia Lopez Rivera

Ministry of Internal Affairs and Communications Aims to Expand Overseas in the ICT Field

The Ministry of Internal Affairs and Communications has prioritized the overseas expansion of the ICT field as an important policy issue and decided to investigate the feasibility of spreading the Japanese language throughout Japanese-Peruvian Community using ICT.

Comprehensive Examination of Potential for Introducing Educational Cloud Platform

From November 2018 to March 2019, JICS, together with Japan Telecommunications Engineering and Consulting Service (JTEC), a general incorporated foundation that has a high level of knowledge in the network field, and NTT Learning Systems Corporation (NTTLS), which provides its own Japanese language learning application from cloud services, surveyed Japanese language education and networking as well as the usefulness of cloud services

in the Japanese-Peruvian community. As the community celebrates the 120th anniversary of Japanese emigration in 2019, further enhancement of Japanese language learning is required in the community. In addition to Japanese staff participating in the survey, JICS exchanged information with the Japanese-Peruvian Association through local staff in Peru and made proposals that helped to solve the issues by carefully examining requests.



Japanese-Peruvian Association members ↑
and investigation staff

Project for Nurturing New Industries in ASEAN and Japan: JETRO's Support for Japanese Companies Aiming to Commercialize Prosthetic Leg Production in the Philippines

- ▶ Project Name: Feasibility Study for 3D-Printed Prosthetic Legs Manufacturing and Related Solution Business
- ▶ Contractee: Japan External Trade Organization, Instalimb, Inc.
- ▶ Implementation Period: March 6, 2018–January 31, 2019



New Business Development Office
Yuta Kato

Overseas Business Development Support Service in Developing Countries

Through public offerings including JICA feasibility surveys/verification surveys and JETRO feasibility studies, JICS supports start-up companies and small- and medium-sized enterprises that not only have excellent technologies, products and know-how that contribute to international contributions but also take on challenges in developing countries and expand business overseas.

Leveraging Ability to Grasp Local Needs and Public Funding Know-How

Based on our experience implementing a wide variety of ODA projects, JICS can accurately grasp local needs and provide support for planning surveys and verification activities, negotiating with related parties

of partner countries and planning business plans to facilitate smooth commercialization and expand customer appeal. In addition, we are well versed in businesses that handle public funds and provide support for the realization of sound and sustainable overseas businesses with a high awareness of compliance.

Supporting Commercialization to Deliver Prosthetic Legs Created with 3D Printing Technology to the Philippines, Which Has Social Problems Related to Lifestyle Diseases such as Diabetes

JICS assisted a start-up company to commercialize low-priced and rapidly delivered prosthetic appliances in the Philippines using proprietary solutions composed of 3D printers and software. Through joint implementation of JETRO's "Project for Nurturing New Industries in ASEAN and Japan," while supplementing the company's resources and experience in handling public funds, JICS supported verification tests, manufacturing process verifications and license investigations necessary for commercialization in the Philippines, where there is a demand consisting of more than one million people, including patients with lower limb amputations due to diseases such as diabetes.



← Final report meeting on the results of the verification project held in Manila in January 2019

The test subject tries on →
the 3D-printed leg,
which he says is lighter than
the usual prosthetic leg and
looks more natural

