## How to leverage evaluation results for project supervision?

Accumulating and internationally disseminating knowledge – challenges while implementing projects, sharing efforts and finding the way forward -

#### From learning and improvement to dissemination

Learning lessons for improvement is one of the evaluation objectives. Here, the aim is to organize difficulties and problems, or cause of failures in past projects and leverage the applicable feedback to the project operation and management in future. The JICA Evaluation Department leverages learning within the organization but also shares and disseminates lessons learned via an international platform - the Global Delivery Initiative (GDI) - to ensure development practitioners can broadly utilize them.

#### What is the GDI?

The GDI is a knowledge platform shared by the international development community, which has been operated since 2014 with the World Bank as secretariat. It is a space in which to share systematic analytical results focusing on "What works? Why? How?", with a total of 42 partners currently on board, including international organizations, bilateral organizations, think tanks, private funds and NGOs. It classifies delivery challenges in development projects and organizes operational knowledge related to how challenges are tackled; paving the way for development practitioners to enhance projects improvement by expediting their access to the GDI. The standout GDI feature is scope to clarify common project management issues across specified countries/regions and thematic boundaries. It also thoroughly systematizes, organizes and shares details of project failures and issues faced, including those with problems piling up or ultimately ended in failure, via knowledge management and encourages users to strive to prevent any recurrence of similar

The GDI provides the following four products to enrich platform contents to share with development practitioners as potential challenges arise when projects are implemented: (1) DeCODE (a tool for organizing historical data and accessing the relevant database); (2) Global Delivery Library (an online library of case studies); (3) Community of Practitioners (online networking among development practitioners) and (4) Action Learning Program (providing online training with case studies, etc.).

#### JICA's contribution to the GDI

Following a request from the GDI, the JICA Evaluation Department shared past ex-post evaluation reports (English) with the GDI as well as providing process analysis results of the Delhi Mass Rapid Transport System Project in India, the Strengthening Management for Health in Nyanza Province in Kenya, the Project for Construction of Manmunai Bridge in Sri Lanka and other relevant projects as case studies. Ex-post evaluation reports and case studies to date are published on DeCODE and Global Delivery Library, respectively, as reference benchmarks for practitioners.

In February 2019, JICA officially became a GDI partner and was

assigned to co-chair the GDI Advisory Board and GDI Steering Committee. Then, in November the same year, it participated in the annual conference held in Tunisia. This conference has a theme of "Service delivery in Fragile, Conflict and Violence fields" and focused on sharing experiences and lessons learned on how they implemented projects smoothly and successfully rendered services to beneficiaries in conflict-affected areas, despite the many hindrances, particularly security. A Senior Advisor from the JICA Evaluation Department then gave a presentation detailing how JICA addressed the complex challenges involved in rendering services to the Transition Authority in Mindanao, the Philippines.

### Field views to the world

The participation of national staff, who involves as donor in home country development projects and faces the various implementation challenges, was particularly noteworthy throughout this Conference. A national staff of the JICA Philippines Office posted about her experience participating in the GDI Conference via the GDI blogs: "Based on my seven-year experience as practitioner in the conflict-affected areas in Mindanao, the trust built with project partners led to the success of JICA projects. Even though, with the implementation of a new project, JICA is currently facing a different delivery challenge: how to design our project activities aligned with project partners in the middle of a transition process, JICA is fully committed to the Bangsamoro transition process with trust built through the project. It was certainly useful to be able to use a Delivery Lab session, a platform for collective brainstorming on actionable solutions to address challenges in implementation, to gather suggestions for how to tackle these challenges". National staff in other countries also participated in the Conference and exchanged their views in lively fashion. JICA would like to provide insights into common management challenges and issues across countries and continue to leverage them to improve project operations via sharing with and participating in the GDI.



JICA participants in the GDI Annual Conference in Tunisia in November 2019

### What was learned from failure cases?

### Challenge in project implementation

Meeting the need for transparency, JICA also discloses those projects evaluated as having issues, including those where issues were recognized during the project implementation but could not be solved by the time of ex-post evaluation. On the other hands, there are some projects that issues were identified during the ex-post evaluation, but the expected project effects were still achieved a few years later at times. Accordingly, it is also worth noting that useful lessons for succeeding similar projects or others under implementation can be extracted, particularly by tracking the process toward recovering projects effects and analyzing how issues were addressed.

#### Learning from cases of success and failure alike

In the world of development assistance, we tend to focus on learning from successes such as "East Asian Miracles" (World Bank), however, in response to JICA's presentation on process analysis during the Japan Society for International Development (JASID) held in November 2018 (in Tsukuba city, Japan), one question was raised that how "We could learn, not only from cases of success but also the more from failure cases". Accordingly, during the 20th JASID Spring Conference (on the theme of "Questioning Development from a Tsunami-Affected City") held in Rikuzentakata city in June 2019, the JICA Evaluation Department organized a round table discussion entitled "the Scope and Possibility of 'the Study of Failure in ODA". During this session, JICA discussed with wide-ranging participants, including academia and ODA stakeholders and addressed the question of whether "the Study of Failure in ODA" was applicable beyond administrative infallibility, under the Japanese context that failure of public projects is tend to be unacceptable.

#### What was learned from JASID

Comments from the floor include: development projects which would change society should be evaluated from a long-term perspective, not a static one of looking back on the past from the certain point; it is important to confirm unintended effects as well as intended project effects; some projects rated as low under the DAC evaluation criteria would be successful if other criteria such as environmental and human rights were added; ODA has relatively matured systems by extracting lessons learned every time when problematic projects were identified (e.g. drafting/revising guidelines and establishing an opposition system with environmental and social considerations in mind), and meta-analysis which increases the abstraction of lessons learned from each project could involve the study of failure.

### Scope and possibility of the study of failure

Based on the above, the JICA Evaluation Department would like to create opportunities between practitioners to enhance what is learned from not only successful cases, but also more challenging and important projects, by extracting lessons learned after longer and more multi-faceted processes are analyzed. Specifically, we will seek in-depth learning from infrastructure development projects under a public and private partnership involving many stakeholders, community development where any project effects achieved take time, peacebuilding involving many issues for project implementation and other areas.



A round table discussion held at a Japanese room within the Rikuzentakata Global Campus

## Cases of leveraging lessons in the PDCA cycle

## - Drawing on experience in preceding projects and lessons learned from past similar projects -

To address what have become complicated development issues, JICA must implement projects effectively and efficiently by leveraging lessons accumulated throughout past project results. Acknowledging this, JICA focuses on improving the action portion of the PDCA cycle by leveraging experience from past projects and lessons learned from the evaluation results for ongoing or similar projects going forward as feedback.

Two projects from the external evaluation in FY 2018 are introduced, as effective examples of good practice that were implemented effectively and efficiently by leveraging such experience and lessons.

### **Uganda (Grant Aid)**

# The Project for the Rehabilitation of Hospitals and Supply of Medical Equipment in the Western Region in Uganda

The objective of this project is to improve services provided by Regional Referral Hospitals (hereinafter referred to as RRHs) in the Western Region of Uganda by constructing facilities and procuring equipment for the RRH in this region, and thereby contribute to increasing the accessibility to, and quality of, regional medical services and ensuring that the regional referral system functions effectively. The three targeted RRHs in the project were: Kabale RRH, Hoima RRH and Fort Portal RRH.

Before implementing this project, JICA had implemented similar projects in the Eastern Region (the Project for the Improvement of Health Facilities and Supply of Medical Equipment in the Eastern Region (I) (2005), and (II) (2006)) and Central Region (the Project for the Rehabilitation of Hospitals and Supply of Medical Equipment in the Central Region in Uganda (2010)) of Uganda. The lessons learned from these projects were reflected in the project plan.

The Eastern Region projects provided only initial operational instruction on the procured equipment for a very short period, which subsequently resulted in ongoing technical issues when using the equipment. Based on this experience, the project implemented a "soft component" (hereinafter referred to as "SC") training for the knowledge and technologies required to maintain, operate and manage the procured equipment, including basic knowledge about the role and function of each equipment, daily and periodic maintenance methods, and technical guidance in clinical practice, to ensure they remained in continued use.

Meanwhile, since the risk of infection caused by cleaning and hygiene aspects were highlighted in the Central Region project, such as blood left on the floor of the operation ward, the project introduced a large high-pressure steam sterilizer in the operation ward, improved of the Centralized Supply Sterilized Department system and training on the maintenance of sterilization equipment via SC. Moreover, JICA Overseas Cooperation Volunteers were dispatched and conducted 5S (Sort, Set, Shine, Standardize and Sustain) activities in each RHH. Thanks to the SC training, the equipment was largely used effectively and hygiene conditions were improved on completion of the project. Each RHH continues the 5S activities after JICA Overseas Cooperation Volunteers returned,

helping maintain cleaning and hygiene conditions in the facilities. As described, it is important to ensure the project remains sustainable by considering the project contents after referring to lessons learned from past similar projects at the planning stage and following up on outcomes by using other schemes strategically.



Constructed OT (Hoima RRH)



Outpatients Department Building of the Hoima RRH

## Malaysia (ODA Loan)

## **Higher Education Loan Fund Project**

Malaysia had promoted the Look East Policy (LEP) since 1982, which was advocated by the Prime Minister Mahathir. In 1983, Japan started providing assistance including the dispatching of instructors for pre-study abroad preparatory instructions in Malaysia, and has since then continuously accepted Malaysian students to support the "Look East Policy Study Abroad Program" of the Public Service Department of Malaysia. Additionally, since 1993, Japan assisted the in-country education and study abroad for Malaysian students in science and technology through ODA loan projects "Higher Education Loan Fund Project" (HELP1)" in which the MARA Education Foundation (Yayasan Pelajaran MARA: YPM) acted as the executing agency. In 1999 and 2006, the "Higher Education Loan Fund Project (II)" (HELP2) and the "Higher Education Loan Fund Project (III)" (HELP3) were also respectively initiated.

All three Higher Education Loan Fund Projects under the ODA loan scheme centered on facilitating the development of engineers with advanced skills and strong work ethic by implementing a program that combines in-country education with undergraduate study abroad in Japan and programs for postgraduate study abroad in Japan for Malaysian students in science and technology. The study abroad mechanism was amended based on lessons learned from preceding projects as follows:

- ▶HELP1 adopted a "2+4" system in which students would first receive two years of in-country preparatory instructions in Malaysia and then spend four years at a Japanese university where they would enroll as first-year students after taking an entrance examination.
- ▶Since studying abroad in Japan would cost more than studying abroad in Western countries, HELP2 introduced a "twinning" system and adopted a "2+3" system in which students would first receive two years of in-country education (one year of preparatory instructions and the first-year undergraduate education) and then spend three years at a Japanese university where they matriculate as second-year transfer students after taking a transfer examination. Furthermore, HELP2 particularly emphasized the development of talents who would engage in development and research and initiated a master's level study abroad program.
- ▶HELP3 adopted a "3+2" system in which students would receive three years of in-country education (one year of preparatory instructions



Graduates who serve as in-country education instructors in the subsequent domestic project in Malaysia (Fingers indicating his or her own phase)

and the first- and second-year undergraduate education) and then spend two years at a Japanese university where they matriculate as third-year transfer students after taking a transfer examination. HELP3 extended the duration of in-country education to three years and granted the diploma certificate (mentioned above) certified by the Malaysian government. Students could enroll in a Japanese university after obtaining the credit of basic subjects which many students generally failed to obtain. Accordingly, the percentage of Malaysian students acquiring a degree increased. HELP 3 also add doctoral-level study abroad program to support the continuation and development of the study abroad program by preceding HELPs.

Thanks to these programs which were refined based on the experience of preceding phases, a high percentage of Malaysian students acquired a degree and many graduates have since gone on to play active roles in fields of science and engineering or development, research and design works. The MARA Education Foundation, the executing agency in all three projects, has continuously implemented the Malaysia Japan Higher Education Program (MJHEP), which modeled the "3+2" twinning system. Thanks to the efforts made and arrangements of the relevant personnel over many years, the project has boosted the Malaysian economy and helped promote friendly relationship between Malaysia and Japan.

#### Project outlines

	HELP1	HELP2	HELP3	MJHEP	
Type of implementation (Loan agreement)	ODA loan project (May 1992)	ODA loan project (April 1999)	ODA loan project (March 2006)	Malaysian domestic project	
Executing agency	MARA Education Foundation	MARA Education Foundation	MARA Education Foundation	MARA Education Foundation	
Period	1993 to 2004	1999 to 2009	2005 to 2015	2011 to 2023	
Program	Bachelor's "2+4"  • 2 years of in-country education • 4 years of studying abroad in Japan (as 1st-year undergraduate students)	Bachelor's "2+3" Twinning • 2 years of in-country education • 3 years of studying abroad in Japan (as 2nd-year undergraduate transfer students) Master's • 2 years of studying abroad in Japan	Bachelor's "3+2" Twinning • 3 years of in-country education 2 years of studying abroad in Japan (as 3rd- year undergraduate transfer students) Master's • 2 years of studying abroad in Japan Doctor's • 3 years of studying abroad in Japan	Same as HELP3	
Number of participated students and graduates (Cumulative total)	Bachelor's: 291	Bachelor's: 270 Master's: 79	Bachelor's: 465 Master's: 68 Doctor's: 13	Bachelor's: 359 Master's: 145 Doctor's: 23 (Number of graduates through March 2019)	

### Practical Case of Leveraging the PDCA Cycle Grant Aid Project in Afghanistan

# The Project for Introduction of Clean Energy by Solar Electricity Generation System

### - from Check to Action -

JICA resumed projects in Afghanistan in 2001. At that time, the security situation was relatively stable, but it had subsequently been deteriorated year by year because of intensified conflicts, resulting in restrictions on travel to the project site. Accordingly, JICA had to decide to suspend ex-post evaluations. Even under such circumstances, JICA conducted external/internal ex-post evaluations on a pilot basis to fulfill its accountability and sought how we could secure both safety and conducting evaluation under various restrictions caused by conflict. An ex-post evaluation of the Project for Introduction of Clean Energy by Solar Electricity Generation System (Grant Aid) in Afghanistan is a case of conducting as a format of internal evaluation as part of aforementioned pilot activity, which was taken in charge by a national staff of JICA Afghanistan Office and led from ex-post evaluation (check) to follow-up cooperation

Based on this pilot activity, we organized the way to conduct ex-post evaluations in conflict-affected Afghanistan and have fully conducted ex-post evaluations since 2019.

### 1 Background

In Afghanistan, the power demand rapidly increased in the progress of reconstruction of the country. While the needs for stable power supply had been growing, the household electrification remained at low level of 20% in the urban area and 13% in the rural area (2009). Given such circumstance, this project was implemented to enhance power generation capacity, diversify energy sources and increase awareness among the people of Afghanistan and the policy decision makers of the country on utilization of renewable energy by procuring and installing of Photovoltaic (PV) system as well as training technical experts at the Hamid Karzai International Airport (HKIA), as a gateway of the country, thereby contributing to demonstration of initiatives of Japan to promote efforts among both developed and developing countries for climate control. Specifically, a set of PV systems (99 PV panels, power generation capacity: 245 kWp, the annual power generation volume: approximately 400MWh) was installed within the premise of the parking lot in front of the HKIA terminal building. Also, training on basic knowledge about the PW system and its operation and maintenance (0&M) were conducted. Moreover, the display monitor indicating the meteorological data and power volume generated by the PV system was installed at the departure lounge of international flights of the HKIA in order to increase public awareness on the PV power generation. The installation work was completed in November 2011, and the system operation started to operate subsequently.

### Issues and lessons learned revealed by the ex-post evaluation

In 2016, the JICA Afghanistan Office conducted the ex-post evaluation of the project internally by the above-mentioned national staff. Although it was the first ex-post evaluation for the staff, he could complete the evaluation with the help of the Office and the Evaluation Department without being significantly affected by security situation since the project site was located inside the HKIA. The overall rating of the project was evaluated as "satisfactory," while some issues were also pointed out as followed.

#### <Overall rating>

"The project has achieved its objectives to enhance power generation capacity and to diversify energy source by the PV system installed by the project. It has also partially achieved an increase in public awareness on utilization of renewable energy, but not fully demonstrated Japanese initiatives for climate control. As for sustainability, there is a concern about major repair due to the limited capacity of the O&M staffs of HKIA. No budget for the O&M of the PV system has been specifically allocated. In addition, the display monitor has not been repaired though the PV system itself has been well functioning without problems, so far."

The ex-post evaluation extracted the following lessons learned:

"In countries like Afghanistan where there are limited capacity of economic infrastructure such as power system due to the conflicts, effectiveness of the project supporting installation of infrastructure or equipment not requiring higher and complicated skills and knowledge for O&M can be high since the countries do not have sufficient human capacity for 0&M."

### Follow-up in response to the evaluation result

With the above evaluation result, the JICA Afghanistan Office, together with the Afghanistan Government personnel and relevant departments of the JICA Headquarters, started considering the repair of procured equipment under the follow-up cooperation. Other than the display monitor, those pieces of equipment to be repaired included PV panel support and panel mount which had been deformed due to wind pressure exceeding the design strength, and a unit of power conditioner on which failure was found. Since power generation capacity of the power conditioner was expected to go below the planned volume if the failure of the power conditioner was expanded, concerning parties shared the recognition that its repair was urgently needed to maintain the capacity.

After starting the consideration, there was a constraint that a



Display monitor under operation

Japanese repairer was not allowed to be dispatched to the site due to a safety reason. Concerning parties discussed and decided to make the HKIA technical staff and local repairers learn technology and knowledge needed for repair in Japan. The national staff accompanied them to ensure the technology transfer.

As a device in the training in Japan, the technology needed for repairing PV panel mount was acquired using a full-size model. As for repair of the display monitor, trainees started from determining the cause to identify failures as early as possible with the support of the HKIA technical staff since the monitor not only had a malfunction in the large screen but also was not functioning as a system. Eventually, problems were identified in the system visualizing input signals on the display monitor, while no abnormality was found in the input signals.

Subsequently, trainees examined how they would repair practically, which clarified that the repair work only by local technical staff would be very difficult. Accordingly, the system was simplified based on the lessons learned in the above ex-post evaluation.

Specifically, the data on power generation status and electricity usage displayed on the large screen via complicate systems was once displayed on a commercially-available PC, which was connected to the large screen. This made system operation remarkably easier, which allowed maintaining most parts only by local technical staff and repairers. Furthermore, government public relations and advertisement became displayable by incorporating another program into the PC, helping increase awareness effects.

In this way, repair of the display monitor and PV panel mounts were completed in May 2019. Currently, the large screen installed in the departure lounge of international flights of the HKIA displays effects realized by the project in real time, and many airport users see them every day, contributing to raising awareness of using renewable energy in Afghanistan and demonstration of initiatives of Japan concerning climate control.



### Voice of the national staff of the JICA Afghanistan Office

"With this experience, I learned how evaluation linked to project improvement in the course of project PDCA cycle. Throughout a series of follow-up cooperation for repairing system failures, we had focused on continuous and reliable operation of the system in Afghanistan. Those personnel of the Afghanistan Civil Aviation Authority and the HKIA staff who were dispatched to Japan could learn from Japanese experts about installation and operation of display monitor and data collection system as well as the system maintenance and management in future, and acquired technologies. It can be said that this case embodies how the project PDCA cycle enhance the project sustainability."

## A study on JICA's contribution and direction in assisting the internally displaced persons

- Based on revised DAC evaluation criteria and global trends in assisting refugees / internally displaced persons -

Dr. Naohiko Omata, Oxford Department of International Development, the University of Oxford.

This section will introduce a discussion by Dr. Naohiko Omata, Associate Professor at the Department of International Development at the University of Oxford concerning JICA's role and an ex-post evaluation of two projects assisting internally displaced persons (IDPs) in Uganda, based on consistency with international trends in refugee assistance, the interrelation between refugees assistance and IDPs assistance and the perspective of coherence\*1, including synergy with other donors.

### 1. International trends in refugee assistance and the situation in Uganda

#### State of global aid for forced migration

The number of forced migrants, an acknowledged global issue, exceeds 70 million worldwide\*2 and mass influxes of refugees from various countries have tremendous impact on public services such as social infrastructure, educational and health care in host countries and regions. The concept of Responsibility-Sharing has emerged in the "Global Compact on Refugees" to reduce the burden on refugee countries by collectively addressing refugee issues through an international community, taking into account the current concentration of refugees in developing regions.

Alongside protracted refugee issues, the concept of 'Humanitarian-Development Nexus' (which references the crossover between humanitarian and development assistance) is also repeatedly emphasized throughout the Global Compact. Although refugee assistance conventionally came within the scope of humanitarian assistance, it must be reconsidered from a development perspective, such as their self-reliance and support, since the average length of time a refugee spends in a host country as a refugee is currently over 20 years.

#### Limited attention to internally displaced persons

Around 26 million refugees are recorded as having fled from their country of origin and around 41.3 million of a total of over 70 million forced migration victims, namely about 60%, are IDPs. IDPs are those who have been displaced from their homes or areas of residence due to armed conflict, human rights abuses, natural or man-made disasters, etc., but who are still living within the country without crossing borders. Nevertheless, the level of attention that IDPs received from the international community is relatively low compared to the attention paid to refugees.

Unlike refugees, who flee their own country and fall under the protection of the international community, internally displaced populations fall under the sovereignty of their country of origin, and so essentially retain the same rights in their evacuation

destinations as before they sought refuge. For this reason, the responsibility of protecting IDPs lies fundamentally with the home government. In reality, however, the governments of countries with a large number of internally displaced persons very often lack the ability to support their own displaced persons.

Also, IDPs do not have specialised international aid agencies like UNHCR. Ultimately, an organized response to support IDPs has been gradually discussed amongst the United Nations organisations, and policy was decided to address the issue applying the Cluster Approach\*3 in 2006. However, IDPs remains a blind spot for donor countries, reflecting insufficient coordination among aid organizations and other problems.

#### Uganda's refugee problem and situation in northern Uganda

As of the end of 2018, the total number of refugees in Uganda has reached about 1.2 million \*4. The figure has scored close to five times over the past 5 to 6 years and many of the refugees originate from South Sudan. Most of the 0.8 million or so South Sudanese refugees reside in the Northern Region of Uganda, where the two projects to be analyzed were implemented.

The UNHCR provides insufficient financial support to hosting countries of South Sudanese refugees, including Uganda. Meanwhile, Uganda has limited economic capacity.

In addition to refugees in such great number, Northern Uganda also faces the issue of IDPs. Uganda has experienced a civil war that has continued for more than 20 years since the 1980s, saw the number of IDPs peak at close to 1.8 million people. However, UNHCR assistance was discontinued in around 2012 and current assistance for IDPs is limited. The situation of poverty in the Northern and Eastern Regions, in particular, has been deteriorating and progress in terms of socioeconomic infrastructure development for social services (water, electricity, education and medical care)\*5 in village areas is slower than elsewhere.

<sup>\*1:</sup> Coherence was a concept that was originally adopted by some donors in the assessment of humanitarian assistance and peacebuilding, The purpose of this study is to determine whether the role and the coodination of donors and policy consistency, can be ensured. Coherence was added to the revised DAC evaluation criteria in December 2019.

<sup>\*2:</sup> As of the end of 2018. UNHCR Global Trends 2019

<sup>\*3:</sup>In the cluster approach, an assigned 'lead' agency of each cluster coordinates the needs assessment, prioritization, and response plan creation for each field, clarify their responsibilities, and avoid gaps and duplications. It is introduced on a country-by-country basis and the cluster lead organisation is flexibly determined according to the circumstances of each country.

<sup>\*4:</sup> UNHCR Global Trends 2018

<sup>\*5:</sup> According to the Poverty Assessment of the World Bank in 2016. From 2006 to 2013, the proportion of poverty groups living in the two regions increased significantly from 68 to 84%. Compared to elsewhere, the level of human capital - including the education level - in the Northern and Eastern Regions of Uganda remains low.

### 2. Ex-post evaluations of two projects

#### (1) The Project for Provision of Improved Water Source for Resettled Internally Displaced Persons in Acholi Sub-Region

There is no doubt that this project contributed to improving the water supply situation in the target areas and enhancing the living environment.

However, if the water supply service is unable to provide sufficient water to the community, it is likely that it will develop into a source of internal conflict, as members of the community compete for limited water. Within a community of scarce resources, the lack of careful donor planning has led to conflicts between beneficiaries. It is recommended for JICA to retroactively re-examine to what extent these points were discussed as potential risk factors during project planning stage.

In terms of enhancing sustainability, there is also a need to strengthen partnerships with community-rooted organizations capable of following up the situations from the field. Recently, the UNHCR is also advocating efforts to consolidate partnerships with "community-based organisations" (Community-based organisations is a generic name of the organization formed to improve the lives of local communities) which were established by refugees or local residents. close cooperation with local community-based organisations will become even more important for JICA in order to ensure sustainability. At the same time, such effort can be also

relevant to improve 'Policy Coherence' and 'Collaboration' with other donors to create synergies.

#### (2) The Project for Rebuilding Community for Promoting **Return and Resettlement of Internally Displaced** Persons in Acholi Sub-Region in Northern Uganda

When returning and resettling in the original residence, the key for IDPs is whether they could receive a quality education and reliable medical system there. Based on the author's survey on the decision-making process for returning refugees in East and West Africa, they decide to return and resettle by comprehensively considering their economic activity and how much scope their family/child has to access to education and health/medical services after returning as a set of conditions, on the premise that peace and security will return. In other words, no reconstruction of conflict-affected communities and resettlement will be possible in the true sense without a compelling hopeful vision for the future, The author has observed numerous cases where IDPs and refugees who repatriated after the conflict had to leave their home village or land once again and become refugees or IDPs due to an absence of livelihoods and of basic services such as education and medical care. In light of these points, the contribution that this project has made can be evaluated beyond quantitative analysis alone.

### 3. Refugee assistance roles which JICA can fulfil

As above, considering the limited capacity of the Ugandan government, and the lack of interest in and little assistance provided to internally displaced persons by international organizations, it can be said that both of JICA's grant projects have generated significance and value that cannot be measured by the DAC evaluation standards. In other words, these projects have played a substantial role in narrowing the 'aid gap' to which the international community has not been able to respond.

The concept of 'Responsibility Sharing' has been mainstreamed in the international humanitarian and refugee regimes nowadays. Nevertheless, effective measures for achieving its implementation have not been seen yet. In reality, certain regions and countries are particularly burdened with significant numbers of forced migrants. Uganda is a typical example of this trend. JICA will be able to boost complementarity with other donors by focusing on supporting IDPs and in the process, boost the concept of Responsibility-Sharing in a wider sense.

There are several key considerations for JICA as it seeks to build a meaningful presence in assisting IDPs and creating complementarity. JICA should keep clarifying its vision or strategy for supporting the IDPs and comparative advantage of JICA's support compared to other development organizations.



An outpatient ward improved by the project (Padel District)



An access road and river crossings and road-drainage culverts improved by the project (Omoro District)

# Review on JICA's cooperation in China

## - from the perspectives of environmental management and infectious disease -

On the occasion of the 40th anniversary of the commencement of Japan's ODA to China, JICA conducted a comprehensive review on its cooperation, especially in the field of environment and infectious disease. As these themes are "cross-border issues", this review analyzed the impact on Chinese Society by JICA cooperation outcomes, and provided recommendations on future Japan-China cooperation as well as suggestions on how to cooperate with countries graduating from ODA.

#### Purpose of Review

The year 2019 marks the 40<sup>th</sup> anniversary of the Official Development Assistance to China (hereinafter, "ODA to China") which began in 1979. Aiming to help develop the Chinese economy, the ODA to China started with infrastructure improvement and the transition to a market economy. In the 1990s, meanwhile, assistance was extended to address environmental and other domestic problems (disparity, aging, etc.) worsening amid ongoing urbanization. Since the 2000s, the focus of cooperation has shifted to global issues (cross-border environmental issues, infectious disease, etc.); affecting not only those inside China but also Japanese citizens themselves. While Japan's ODA to China will be discontinued after those projects newly adopted in FY 2018 are completed, Japan's long-time development assistance to China has promoted China's development and helped consolidate in Japan-China relations.

This thematic evaluation reviewed Japan's ODA in environmental management and infectious disease sectors and strove to obtain a clear picture of how Japan's cooperation to China has contributed to the development of Chinese society. The review collected opinions from a wide range of stakeholders in Japan and China via interviews and on-site surveys, in addition to literature review.

#### Analytical result

#### 1) Environmental management

Japan had provided cooperation to environmental issues in China leveraging multiple ODA Loan, Grant Aid and Technical Cooperation schemes. In this thematic evaluation, analysis of air pollution measures and waste management was conducted and the following ripple effects on Chinese society were ultimately revealed: (i) environmental measures in China (government/businesses) were promoted; (ii) environmental related laws were developed; and (iii) opinion exchanges were promoted at various levels such as academic, businesses and government officials.

Improving infrastructure and monitoring equipment under ODA Loans and Grant Aid and technical consultation and advising businesses (as pollution sources) and training for government officials under Technical Cooperation helped pave the way to develop and enhance the comprehensive environmental management capacity and promote domestic environmental measures. Moreover, countermeasures and technology / know-how on environmental problems experienced by Japan to date were shared in human resource development and other projects, through which Japan had supported the development of new environmental policies in China. Further, the ODA to China had largely helped when it came to promoting collaboration and personnel exchanges between local governments of both countries as well as private-sector exchanges.

#### Case: Air pollution measures in model cities

To help counter the issue of worsening environmental pollution in China, the "Japan-China Environmental Development Model Cities Plan" was proposed at a Japan-China summit held in 1997. Following the plan, the "Chongqing / Dalian / Guiyang Environmental Model City Project" (ODA Loan, 2001) was initiated to implement air pollution measures on a preferential and intensive basis and develop environmental management capacity in the model cities. Their outcomes were summarized by "the Japan-China Environmental Development Model Cities Plan" Committee in the form of a recommendation to disseminate the outcomes to other cities. The model city project in Guiyang showed particularly remarkable outcomes and is recognized as a project that changed the environmental awareness of the leaders of local government, improved environmental management technology and private company to put corporate environmental measures into practice.

#### Case of Guiyang City

Guiyang City faced serious air pollution because of coal burning by heavy chemical plants. The concentration of sulfur dioxide (SO<sub>2</sub>) in particular far exceeded the grade II of national air environment standards applied to urban residential zones. Acid rain comprised 21% of annual precipitation due to SO2 and nitrogen oxides (NOx), mainly from factories, and Guiyang City was regarded as an "acid rain city"

#### Infrastructure development to improve the atmospheric environment (ODA Loan)

Under the Guiyang Environmental Model City Project, air pollution treatment, gas supply facility construction and other subprojects were implemented; targeting factories in seven locations that had been pollution sources and supporting efforts to improve air pollution and other issues in Guiyang City.

More than 80% of air pollutants (SO<sub>2</sub>) were reduced in the Guiyang City area (model district)



- Cooperation to formulate a masterplan as part of "The Research of Measures for Air Pollution in Guiyang" from 2003 to 2004 (Development Study)
- Cooperation to establish ordinances via circular economy training in Japan in 2005 (Knowledge Co-Creation Program) Dispatching experts in the atmospheric environment and circular economy and providing technical consultation and advice to businesses located in Guiyang City (Technical Cooperation)
- In May 2002, ahead of other cities, the Guiyang City was ratified by the State Environmental Protection Administration as the first circular economy-based ecological pilot city
- In November 2004, the Guiyang City Regulation on the Establishment of a Circular-Economy-Based Ecological City as



Environmental Model City Project (Guiyang) [Outline] Implementation period: March 2000 to October 2012 Executing agency: Provincial Government of Guiyang Project cost: 14.435 billion yen

#### 2) Infectious disease

When starting the ODA to China in 1979, 80% of the whole population in China was in rural area and healthcare services did not adequately cover to the whole population. Under such circumstances, the Chinese Government decided to construct new hospitals to modernize healthcare services as part of its Open-Door Policy, whereupon the China-Japan Friendship Hospital was established via Japan's Grant Aid and hospital administrators and doctors/nurses were trained through a Technical Cooperation project. The China-Japan Friendship Hospital was designated as one of the top referral hospitals of China in 1993, and later selected as one of the "Top 10 hospitals" in Beijing and the "Top 100 hospitals" nationwide. Amid the severe acute respiratory syndrome (SARS) outbreak in 2003, Japan dispatched a Japan Disaster Relief Team and advised on countermeasures against hospital infection which helped control the disease as the designated hospital.

The spread of SARS had been attributable to hospital infections caught by doctors and other medical practitioners from their patients. Once the situation had returned to normal, the "Hospital Infection Control Project in Guangzhou" was implemented in Guangzhou, from where SARS originated, and the experiences of Guangzhou and the Friendship Hospital were shared domestically to support efforts to prevent secondary infections at medical institutions. Moreover, infrastructure facility improvement, human resource development and other assistance were provided via ODA Loans to support improvement in vulnerability for the public health system.\*1

It was also assessed that the Family Health Projects\*2, which got underway after the 2000s within the framework of alleviating poverty, established a health promotion model which prevents the diseases including infectious disease at community and household levels, and helped enhance public health services at grassroots level.

The China-Japan Friendship Hospital has been developed as one of the top referral hospitals in China and has been giving advice local hospitals in China. It has also supported various exchanges as a Japan-China cooperation platform.

- \*1: Although the emergence of SARS has not been confirmed since 2004, infections of Bird Flu and Ebola hemorrhagic fever were observed while Coronavirus disease 2019 (COVID-19) emerged in 2020. The World Health Organization (WHO) and international community need to further cooperate in responding to new outbreaks of these emerging infections/diseases.
- \*2: Such as the Project for Strengthening of Health Education for Prevention of Infectious Diseases through Family Health



Nationwide simultaneous vaccine administration (during a Technical Cooperation project in the 1990s)

#### Case: Japan's contribution to eradication of polio

Following the WHO polio eradication resolution in 1988, the Chinese Government working vigorously towards an aim of polio eradication. In the "Polio Control Project" (Technical Cooperation), which commenced in 1991, Japanese experts visited fields nationwide, starting from Shandong Province, to engage in strengthening acute flaccid paralysis (AFP) surveillance/polio laboratory diagnosis, early detection of patient/prevention of spreading, promoting vaccination and other activities. At the same time, through Grant Aid projects JICA provided vaccines and refrigerating facilities/laboratory equipment for transporting vaccines. Moreover, JICA shared practical recommendations based on actual circumstances with the Chinese Government, WHO and other stakeholders, with the relevant organizations Japan contributed to eradicate polio in China that had accounted for 85% of polio patients in the Western Pacific Region.

#### **Lessons Learned and Recommendations**

From this analysis, "the need to build and maintain organizational and human networks" emerged as a lesson. To maintain the project outcomes and ripple effects achieved in Chinese society through long-term cooperation under ODA and further maintain and refine preferential relations between both countries, it is considered important to create and maintain networks that not only involve project counterparts but also encompass local governments, academic institutions, businesses and NPOs/NGOs of both countries.

#### Symposium

On December 11, 2019, A symposium entitled "ODA to China and Japan-China Relations – history of its 40 years and toward new Japan/China cooperation -" was held in Beijing, China. The report presented by the JICA Evaluation Department on this analysis showed how a series of Japanese cooperation in areas of environmental management and infectious diseases was important in helping underpin Sino-Japanese relations and contributed to solve development issues in China. Participants had considerable expectations of the new Japan-China cooperation going forward based on the cooperation to



Presentation at the Symposium on Japan's ODA to China held in Beijing

## Impact Evaluation\*

To further enhance project effectiveness and quality, JICA has been promoting Evidence-Based Practice (EBP) and applying impact evaluation as its effective tool.

Many donor agencies have recently been promoting EBP and emphasizing the application of impact evaluation as its major tool to further enhance their project effectiveness and quality. JICA also emphasizes the application of impact evaluation throughout the organization; the operational department conducts impact evaluation in the health, education and infrastructure sectors collaborating with the Evaluation Department while the JICA Research Institute promotes academic researches on impact evaluation aiming at disseminating the result to academia.

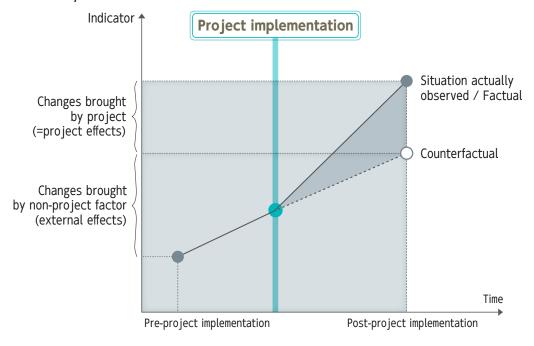
Impact evaluation precisely assesses the changes caused in target societies by intervention (i.e., specific measures, projects, or development models to improve and solve development issues). To grasp project effects in a precise manner, it requires comparison between situations which are actually observed (Factual) and counterfactual situations which would have appeared in the absence of the project (intervention). However, it is not a simple work to understand counterfactual situations because "ex-ante" conditions and situations outside the target area, which are compared before and after the intervention to verify the project effectiveness, are often different from

counterfactual situations. Accordingly, efforts are made to remove evaluation bias to ensure reliable impact evaluation result by applying a Randomized Controlled Trial (RTC), which carefully chooses an ideal control group indicating a counterfactual situation before the intervention, or utilizing various statistical analyses.

Since impact evaluation requires additional costs and high expertise for its analysis, JICA examines the priority based on evaluation purposes and needs and selectively conducts impact evaluation on selected projects. Impact evaluation will be actively incorporated into those projects to apply a new approach or expand its scale in future so that reliable evidence obtained from the impact evaluation is expected to be utilized for project implementation and policy-making in partner countries.

In FY 2019, JICA conducted a capacity enhancement training course, "Impact Evaluation: Toward Evidence-Based Practice (EBP)", for development consultants and those who were involved in international cooperation projects to develop human resources toward promoting the implementation of impact evaluation (see the Column), as well as evaluating impact of a vocational training project in Rwanda.

#### Conceptual Diagram of the Impact Evaluation: Comparison of situation actually observed and counterfactual situation



<sup>\*</sup> The definition of the term "impact" in impact evaluations differs from "impact" used in the five OECD-DAC Evaluation criteria. The latter is defined as "positive and negative, primary and secondary long-term effects produced by a development intervention, regardless of those directly or indirectly, intended or unintended"(overall concept of "outcomes") while the former refers to effects produced by a project more directly including the "outcomes" described in the criteria.



### Human resource development toward promoting the implementation of impact evaluation

Key to further promoting the implementation of impact evaluations is securing human resources capable of planning, implementing and supervising impact evaluations properly and leveraging the result. Given the growing demand for such impact evaluations, the need for such human resources is paramount. Accordingly, JICA conducted a capacity enhancement training course, "Impact Evaluation: Toward Evidence-Based Practice (EBP)", to help nurture such human resources.

Following on from last year, two courses - a seven-day basic course and a four-day practical course were set for FY 2019 and 47 trainees in total (29 and 18 trainees for the basic course and practical course, respectively) took part from development consulting firms, local governments, universities and more.

The training curriculum was based on tried and tested international textbooks on impact evaluation and lectures and training sessions provided by universities and international organizations. The basic course mainly centered on the basic impact evaluation concept and causal inference, various impact evaluation designs, including Randomized Controlled Trials (RCT), calculation of the sample size, data needed in impact evaluation and the collection method and various points to be noted for implementation.

The practical course covered more practical contents, such as advanced impact evaluation topics, data analysis methods and exercise simulating the practical work. RCT was an area of particular focus in the training format and the following contents were explained, while introducing JICA's cases and the enriched practical experience of lecturers: A theoretical description of RCT; statistical analytical methods; how to





A training session held at JICA

practically implement them, frequently occurring front-line issues and how to address them. This was a unique training course in Japan, bringing participants systematically up to speed on impact evaluation using both theoretical and practical approaches in what was an invaluable opportunity. Moreover, both courses involved far more than simple classroom learning alone. To ensure the trainees can understand the lectures and practically leverage them, the course structure and format were also carefully configured, e.g. allocating extra time for groupwork exercises using actual cases and confirmation tests.

Despite an intensive training course with varied contents, trainees showed high levels of satisfaction and highly rated evaluations. Many commented that they would like to disseminate insights obtained throughout the course within their organization and their counterparts and leverage such knowledge in projects with which they were involved. Some past trainees were also involved in implementing impact evaluation, while leveraging training course knowledge obtained.

As far as JICA projects are concerned, more effective international cooperation projects are expected to be possible by actively incorporating these impact evaluation insights.



### Nobel Prize in Economic Sciences: leveraging impact evaluation to reduce poverty

As one of the top global priorities, poverty reduction is the first of the Sustainable Development Goals. The Development Cooperation Charter of Japan also acknowledges the task of "reducing poverty, especially eradicating absolute poverty, as the most fundamental development challenge". The Nobel Prize in Economic Sciences in 2019 spotlighted the international community striving for poverty reduction, and was eventually awarded to three scholars: Professors Esther Duflo and Abhijit Banerjee of the Massachusetts Institute of Technology (MIT) and Michael Kremer of Harvard University. Their experimental approach to clarify effective policies to help reduce global poverty, namely RCT, saw them honored with the award.

Professors Banerjee and Duflo, together with their colleagues, established the Abdul Latif Jameel Poverty Action Lab (J-PAL) in 2003 and have vigorously advanced policy evaluation using RCT in cooperation with NGOs and governments of developing countries. Professor Kremer and other prominent economists worldwide have also joined in J-PAL and made their presence felt in development policy to great effect. Over and above poverty reduction alone, J-PAL has publicized a number of research projects on priority international development issues, such as education, health, agriculture, microfinance and gender. When awarding, Professor Duflo commented that the three winners represented the numerous researchers dedicating themselves to poverty issues. Meanwhile, the fact that establishing J-PAL as the basis for the impact evaluation using RCT reflects how the contribution of international development has been acknowledged.

JICA has also introduced RCT to verify project effects since the late 2000s to build effective development models in various areas such as education, maternal and child health, waste management and financial inclusion. In June 2018, JICA concluded a partnership agreement with J-PAL and Pratham, an Indian NGO collaborating with J-PAL for many years, for the basic education sector, agreeing to strengthen cooperation in projects and research. Addressing the "School for All" projects, which JICA implemented in West Africa and elsewhere, Pratham introduced an educational method to 180,000 school children in 1,650 schools in Madagascar and 10,000 school children in 101 schools in Niger on a pilot basis after clarifying its effectiveness in cooperation with J-PAL, which saw average test scores soar. JICA will continue to partner such organizations and aim to implement projects via multi-faceted approaches.



A signing ceremony to mark the partnership agreement with J-PAL and Pratham

## **Extracting Lessons by Applying Qualitative** Comparative Analysis (QCA)

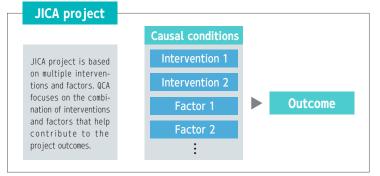
JICA has developed new methods to enhance project outcomes and improve project quality, as part of which, efforts have started to extract lessons by adopting Qualitative Comparative Analysis (QCA).

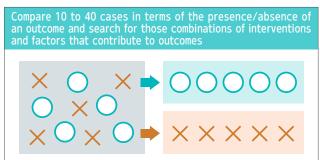
# ▶ What is QCA?

QCA is a method used to infer the combination of causal conditions\*1 surrounding a project (e.g. intervention of JICA project, factors such as capacity of the recipient country) that could contribute to the project outcome. Specifically, as reflected by the QCA acronym, it is an "analysis (A)" that involves categorizing and "comparing (C)" successful and unsuccessful cases\*2 using "qualitative (Q)" information such as the "presence/absence of an outcome" to extract patterns of causal conditions that contribute to project outcomes.

While quantitative analysis involves collecting samples and verifying the average effect of an intervention in a certain group, QCA allows to analysis of the small number of cases\*3 to be conducted as it uses characteristic cases as data, such as "successful/unsuccessful", not average cases. Another feature of QCA is that this method is relatively easy to adopt since QCA do not require advanced mathematical/statiscal knowledge and hurdles of cost and period are low.

- \*1: "Causal conditions" in QCA refers to those conditions that contribute to outcomes.
- \*2: Quantitative data can also be used for categorization/comparison.
- \*3: While it depends on the number of causal conditions, QCA can be conducted with around 10 to 40 cases in general.





#### Conceptual QCA description

Among several QCA methods, one representative method that is easily interpreted is Crisp-set QCA, using only binary data (1 and 0). It creates a dataset for each case by allocating information on successful (1) or unsuccessful (0) intervention and the presence (1) or absence (0) of an outcome. Analyzing the relationship between (0) and (1) based on Set Theory, QCA extracts patterns of causal conditions that

contribute to outcomes.

JICA has started attempts to identify which causal conditions among multiple factors surrounding a project contribute to the outcome, by using QCA methods. This annual report will introduce two cases applying QCA this fiscal year.

Case	Causal condition 1 (Intervention/factor)	Causal condition 2 (Intervention/factor)	Causal condition 3 (Intervention/factor)	Outcome	
Α	Successful	Not intervened	Done	Presence	
В	Unsuccessful	Intervened	Not done	Absence	
С	Successful	Not intervened	Done	Presence	
D	Successful	Intervened	Not done	Presence	
Е	Unsuccessful	Not intervened	Not done	Absence	
F	Successful	Intervened	Done	Presence	
G	Unsuccessful	Intervened	Not done	Absence	
Н	Successful	Not intervened	Done	Presence	
- 1	Unsuccessful	Not intervened	Not done	Presence	
J	Unsuccessful	Intervened	Not done	Presence	

Case	Causal condition 1 (Intervention/factor)	Causal condition 2 (Intervention/factor)	Causal condition 3 (Intervention/factor)	Outcome	
Α	1	0	1	1	
В	0	1 0		0	
С	1	0	1	1	
D	1	1	0	1	
Е	0	0	0	0	
F	1	1	1	1	
G	0	1	0	0	
Н	1	0	1	1	
I	0	0	0	1	
J	0	1	0	1	

An example of dataset for Crisp-set QCA

Converting to



### Study on causal conditions that contirbute to forest regeneration in an afforestation project in India

As well as forest regeneration, JICA's project in the forest sector in India aims to reduce poverty among local residents who depend on forest resources. It includes a number of interventions not exclusive to afforestation activities, such as establishing a joint forest association, providing small-scale infrastructure and promoting small loans. In addition, factors which are not an intervention, such as change in the







Changing in a target village (November 2006, November 2011 and November 2017, from left to right)

natural environment and socioeconomic conditions are also related to forest regeneration. However, the specific combinations of factors contributing to forest regeneration remained unrevealed. Thus, JICA used 24 villages in Tamil Nadu State for cases in order to apply QCA to the Tamil Nadu Afforestation Project Phase 2, for which an External Ex-post evaluation was conducted in FY 2017.

From the QCA results, six interventions were considered to contribute to forest regeneration, including small-scale infrastructure improvements, although the result is limited to the scope of the surveyed 24 cases.

Another result of the QCA shows that the establishing consensus about the project between the joint forest association, which consists of villagers, in each village and the Department of Forest, the implementing agency, likely contributes to forest regeneration.

JICA currently conducts QCA surveys outside Tamil Nadu State to extract more generalized lessons from the forest projects in India.



## Case 2

### Study on the relation between "soft component" and sustainability in the JICA Grant Aid project

Using QCA, JICA examined whether intangible cooperation ("soft components"), such as technical supervision for operation and maintenance and awareness-raising activity of beneficiary citizens in the recipient country under its grant aid project, would contribute to the sustainability of project outcomes after the project completion.

Grant Aid projects mainly entail tangible forms of cooperation such as facility construction and equipment procurement, but there are cases where outcomes were not satisfactorily achieved as expected after constructing a facility or handing over equipment due to a shortage of operation and maintenance capacity of the recipient country. Accordingly, soft component is provided as needed as part of the project. However, what type or combination of soft component contribute to sustainability of outcomes has not been identified, since the number of target projects remains insufficient for a quantitative survey. Based on this background, JICA examined the relation between soft component and the sustainability of project outcomes by applying QCA.

In selecting target cases for QCA, 119 projects implementing soft component were firstly extracted among those grant aid projects which finished the ex-post evaluation and have the rating of sustainability. Subsequently, to clearly compare each sustainability rate, QCA was applied to 32 grant aid projects rated at either ③ High or ① Low of sustainability, excluding the rate of ② Fair.

Eventually, a combination is extracted by QCA which indicates that

when soft component for "technical supervision for project implementation" was not carried out, adding soft component of "technical suervision for operation" and "strengthening recipient country's system and management" would enhance sustainability. In other words, projects without "technical supervision for project implementation" could suggest that the recipient country has already gained sufficient technical level in general. Under such circumstances, The QCA result suggested that use and maintenance of materials and equipment newly procured under grant aid and technical supervision focusing on facility operation and maintaining and strengthening the organizational system involved would help effectively ensure the project sustainability.

For the water sector, it was also suggested that combining soft component of "technical supervision for operation and management" and "raising awareness and educational activities for community residents" would enhance sustainability. Projects in the water sector involve various occasions requiring understanding and cooperation on the part of residents, including connections between each house and water pipe, water tariff collection and a change in the water supply method (from well to water service, etc.). It was suggested in such cases that awareness-raising and educational activities for community residents, would be as important to sustaining project outcomes as technical supervision.

### Leveraging QCA in future

QCA is deemed as a method simply extracting useful lessons for project stakeholders, which tries to identify as various pattern contributing to an outcome by comparing multiple cases. Meanwhile, it also has a limitation to directly apply the result to other projects, due to the fact that certain causal conditions of a small number of cases are arbitrarily compared and given the difficulty in generalizing the suggestions obtained. While recognizing such essential limitations associated with the method, JICA will keep striving to extend the application of QCA, including its use for extracting lessons, through organizing internal/external study groups and establishing manuals.



A study group held in JICA

## **Process Analysis**

JICA has been trying to find ways to integrate findings from project evaluations to improve project management. In these attempts, we have not only assessed project results (outcomes) but also actively analyzed project processes (how the project process affected the delivery of the outcomes) to enhance learning.

This year, JICA has analyzed project implementation issues (i.e. delivery challenges) in the Project on Strengthening of Multi-Disciplinary Teams (MDTs) for Protection of Trafficked Persons in Thailand (2009 - 2014) using the GDI case study methodology (refer to p.24 for the outline).

Moreover, JICA presented its process analysis activities, including the abovementioned project, at international conferences and to relevant societies, the specific details of which are shown below.



### Project on Strengthening of Multi-Disciplinary Teams (MDTs) for Protection of Trafficked Persons in Thailand (Technical Cooperation)

ASEAN Integration in 2015 had triggered an inflow of funds and human resources to the Greater Mekong Sub-region (Thailand, Cambodia, Laos, Myanmar, Vietnam and southern China). At the same time, the increasing incidence of cross-border trafficking in persons (TIP) has become a concern, and strengthening anti-TIP efforts has become a shared challenge for the region. The Project on Strengthening of Multi-Disciplinary Teams (MDTs) for Protection of Trafficked Persons in Thailand (2009-2014) was a JICA initiative that broke new ground in terms of addressing human trafficking. Examination of delivery challenges and their outcomes allowed for insights able to be utilized in subsequent projects efficiently and effectively, including the Project on Capacity Development on Assisting Victims of Trafficking in the Greater Mekong Sub-regional Countries (2015-2019). Eventually, three delivery challenges in the project were identified: (1) coordination across project stakeholders; (2) capacity to provide effective services and (3) project design and management. The measures taken by the project stakeholders in response are described in the frame below.

This analysis was conducted by an official of the U.S. Department of Labor dispatched to the JICA Evaluation Department as a Mansfield Fellow. Thanks to the analysis conducted by this third party, JICA's strengths, challenges, and distinctive features could be reaffirmed during this project.

#### 1. Coordination across project stakeholders

Since various organizations are involved in protecting TIP victims and supporting their self-sustaining efforts, coordination among them is crucial. Although MDTs had already coalesced in Thailand prior to the project getting underway, some issues had been acknowledged including: the relative power of each organization, top-down hierarchical structure, as well as the lack of incentives and resources to collaborate across stakeholders to support victims. Under such circumstances, Japanese experts, based in the Ministry of Social Development and Human Security (as the Executing Agency) office, frequently communicated with said Ministry and the relevant organizations. Additionally, in an effort to build interpersonal relationships with personnel from such organizations, they held workshops and meetings at carefully chosen, isolated venues to encourage attendance for the entirety of any such event. These unique relationship-building efforts earned the trust of those at the leadership level from the Executing Agency (e.g. Director of the Bureau of Anti-Trafficking in Women and Children (BATWC)) and successfully built a leadership-driven culture of the government system. The BATWC Director pressured its frontline staff to coordinate with other project stakeholders from an early stage, as well as participating in meetings from beginning to end to pressure other department staff into following suit. This can be considered an effective approach to leverage the top-down bureaucratic structure.

#### 2. Capacity to provide effective services

When the project started, MDT members lacked insights into the members' roles. Moreover, the difficulty of identifying victims, complex laws, government personnel transfers/turnover, complex needs of Thai returnee victims, and other factors all impeded providing protection and support for self-sustaining efforts for victims.

Meanwhile, practical operational guidelines were developed, and victim-centered approaches were applied during the project. To further promote inter-agency collaboration, the definition of an MDT and the roles and responsibilities of each member were clarified to ensure that the knowledge and cooperation of anti-TIP efforts were maintained, even when government personnel were replaced due to transfer or turnover. Moreover, engaging prosecutors and lawyers in training sessions for MDT members helped foster understanding among other MDT members of the types of information they needed to collect for victims to enable prosecution as well as gain access to services. MDT members could fill capacity gaps by appreciating each other's strengths and relying on each other.

#### 3. Project design and management

To promote the sustainability of the Executing Agency, no new full-time dedicated personnel were deployed for this project. However, this also resulted in increasing workload of the existing personnel of the Executing Agency and, further, the progress of projects was delayed due to their pre-existing seasonal workload. Moreover, while project management in line with the Project Design Matrix (PDM) has been effective in areas where past examples could be leveraged, such examples were limited for this project, since it was the first of its kind at JICA and the project struggled to build a proper monitoring system. Given these challenges, aforementioned Japanese experts were embedded in the government partner office and strove to nurture trust and a relationship with relevant officers while carrying out activities at both central and provincial MDTs simultaneously by jointly proceeding with a project survey, planning, implementation, and evaluation. These efforts paved the way to develop a system which saw provincial activities progress, even when central MTD operations had stagnated. Although indicators of the project purpose (effective

protection of trafficked persons) were revised and improved several times during the period of cooperation, it had been hard to set concrete, and appropriate indicators which meant monitoring project



Members of a self-help support group (two women on the right) counseling a trafficked girl (on left)

outcomes remained a challenge. Analysis recommended that ongoing efforts to address this challenge would remain necessary going



Thai MTD members participating in training for the child abuse prevention program which can be leveraged to protect trafficked persons

### ► Report from the 2019 Asian Evaluation Week

From September 2 to 6, 2019, the Asian Evaluation Week (AEW) took place in Kunming, China which is an international event to share evaluation information targeting the Asia-Pacific regions. This event was jointly sponsored by the Asian Development Bank (ADB) and the Chinese Ministry of Finance.

In its fourth year, under the theme of "Quality Evaluation for Better Results: Local, National, Regional Perspectives," the AEW saw approximately 260 participants from over 60 countries, from not only the Asia-Pacific regions but also Africa, Latin America, Europe, and elsewhere. JICA held an independent session and presented the details of its efforts in process analysis under the theme of "Process Analysis: JICA's Initiative for Quality Evaluation for Better Results." During the session, JICA outlined process analysis and introduced cases of the Delhi Mass Rapid Transport System Project in India, in which rapid project ethnography\* was applied and the Project on Strengthening of Multi-Disciplinary Teams (MDTs) for Protection of Trafficked Persons in Thailand using GDI case study methodology. Regarding the former case, a representitive of the Delhi Metro Rail Corporation, the Executing Agency of the project, also participated. He presented social changes,

specifically for Delhi citizens, after the project completion which sparked interest on the part of many participants for the importance of analysis, which went over and above confirming the level of realizing project outcomes.



The JICA session held during the Asian Evaluation Week

<sup>\*</sup> One of the approaches to process analysis. Based on the concept of Project Ethnography, a method used to record the implementation process of a development project using ethnography - a means of field study in anthropology, the period, contents, workload and other elements are simplified to allow them to be implemented within JICA's work. For details and a case study of this methodology, please refer to the following URL: https://www.jica.go.jp/english/our\_work/evaluation/process.html



### Report from the 7<sup>th</sup> Global Assembly of the International Development Evaluation Association

From October 2 to 4, 2019, the International Development Evaluation Association (IDEAS), the Czech Evaluation Society and other partners jointly organized the biennial IDEAS Global Assembly. Under the theme of "Evaluation for Transformative Change: Bringing experiences of the Global South to the Global North\*," approximately 290 people attended including European personnel engaged in evaluation and government personnel of developing countries. "Transformative change" as referred to in the theme, is defined as "the process whereby positive development results are achieved and sustained over time by institutionalizing policies, programmes, and projects within national strategies" (UNDP, 2011).

JICA held a parallel session and presented the case of the Delhi Mass Rapid Transport System Project in India, in which the transformative changes were identified. Promoted among civil societies and those involved in the project, behavioral changes (such as the Code of Conduct, safety measures and women's empowerment) were recognized by applying process analysis, prompting JICA to report encouragement to apply the findings to other similar projects. The presentation was well received by participants, who perceived the project as a good example realizing sustainable development effects.

\* "Global South" mainly refers to developing countries while "Global North" is mainly European countries and regions.



### Report from the 20th Annual Conference of the Japan Evaluation Society

From December 7 to 8, 2019, the 20th Annual Conference of the Japan Evaluation Society was held at Kochi University. As part of the program, JICA organized a session to present its evaluation efforts. During the session, a GDI case study was introduced, benchmarking the "Project on Strengthening of Multi-Disciplinary Teams (MDTs) for Protection of Trafficked Persons" in Thailand. The importance of this analysis was reflected in particular by the insights for international development practitioners due to rarity and extreme serverity of the delicate issues of anti-TIP. JICA reported that it helped improve JICA projects for such issues, which have spread from Thailand to the Mekong Subregion.

## Leveraging Satellite and GIS Data in Project Evaluations



Verifying the Impact of the Project for Construction and Rehabilitation of Small Hydropower Plants Leveraging Satellite and GIS Data

JICA is currently promoting efforts to leverage data acquired from satellite and geographic information system (GIS) to evaluate projects. Satellite data allows us to comprehend the status of various natural environments and socioeconomic activities, which could be useful information sources, particularly when collecting data on operation and effect indicators is difficult or there is a need to understand the wider

The JICA Evaluation Department has verified the additional impacts of a highway improvement project in Laos and a minor irrigation improvement project in India, using data of nocturnal lights and the state of vegetation in cultivated land observed by satellite. For FY 2019, the Project for Construction and Rehabilitation of Small Hydropower Plants in Rattanakiri Province in Cambodia (Grant Aid) was analyzed using satellite/GIS data.

efficiency and impact for an ex-post evaluation.

The project constructed a small hydropower plant and renewed facilities of an existing small hydropower plant, aiming to provide stable power supply in Rattanakiri Province in northeastern Cambodia (Figure

Project site

Ban Lung City, the provincial capi

Figure 1 Project site (O'Chum District in Rattanakiri Province, Cambodia)

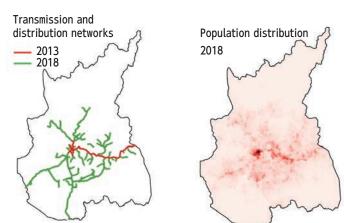
Masamitsu Kurata, Metrics Work Consultants/Sofia University

1). The result of an ex-post evaluation conducted in FY 2019 shows that the maximum output of the plant achieved its target. Although the operating rate and gross annual energy output did not achieve their target due to low rainfall and other external factors, improvement of their actual figures is expected in the future.

Meanwhile, since the project site was near Ban Lung City, the provincial capital located in the center of the province, the project was highly evaluated by part of the urban residents and large power users. However, the extent to which its impact has been felt by rural residents in remote areas remains unclear. Accordingly, additional analysis was conducted on this occasion by combining nocturnal light data observed from a satellite and GIS data, which indicates a geographic distribution of population and the transmission and distribution network (Figure 2). The following two aspects, in particular, were verified: (1) whether nocturnal brightness, which correlates with economic activity, is likely to increase in remote areas as well as the provincial capital, and; (2) the extent to which proximity to transmission and distribution networks, which indicates the level of access to electric power, has improved.

Measuring the change in nocturnal light in nine provincial districts revealed increased nocturnal light across the board on completion of the project in 2017 and 2018 (Figure 3). This means that power demand increased, not only in the provincial capital area but also uniformly elsewhere, suggesting increased economic activities. Moreover, while extending transmission and distribution network to remote areas thanks to the project implementation (the left part of Figure 1), access to electric power has steadily improved as the population ratio residing within 1 km of the network, for example, increased around twofold, from 24% in 2013 to 44% in 2018.

In this case, descriptive statistics of the entire province and each district were mainly analyzed using solely freely-available open data, with reduced evaluation cost and enhanced reproducibility in mind. As platforms now become widespread, paving the way to use a range of satellite/GIS data as big data, the potential to leverage this data to evaluate international cooperation projects is soaring.



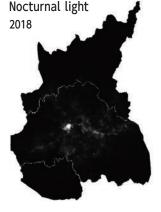


Figure 2 Satellite/GIS data used for the additional analysis

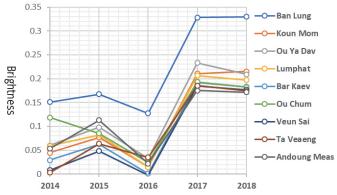


Figure 3 Change in nocturnal light (by district)

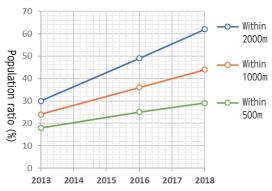


Figure 4 Changing population ratio residing within a certain range of the power network



### Presenting the case of using satellite/GIS data at academic societies

JICA presented this case entitled "Verifying the effects of international cooperation projects using satellite data: an analysis of the Project for Construction and Rehabilitation of Small Hydropower Plants in Cambodia" during the 2019 joint international conference of the Japan Society for International Development and the Japan Association for Human Security Studies (November 16 and 17, at the Komaba Campus, the University of Tokyo) and the 20th Annual Conference of the Japan Evaluation Society (December 7 and 8, at the Monobe Campus, Kochi University). While positive opinions were gained from commentators and participants regarding the usefulness and further applications of satellite/GIS data, the importance of combining field survey and qualitative analysis to determine qualitative aspects of people's living condition that were not measurable by satellite data was underlined.



Presentation at the Japan Society for International Development



### Case 2 Leveraging Satellite Data to Assess the Increase in Agricultural Productivity

Major approaches to develop the agricultural sector include improving the irrigation facility and technological extension about agricultural products, which is expected to see the cultivated area expand and boost yields. To confirm such effects continuously, data collected using consistent measuring methods before and after a project is needed. In developing countries, however, challenges include a lack of statistical data developed, low reliable data - even if available – as well as other issues. Further, for projects where limited agricultural land is targeted but widely dispersed, collecting data becomes even costlier in time and labor terms.

In response, satellite data has been analyzed in the Project for Profitable Irrigated Agriculture in Western Bago Region in Myanmar (Technical Cooperation) to facilitate the use of satellite data in this and similar projects by establishing and disseminating a yield forecasting system using satellite data that allows information to be collected regularly, homogeneously and over the whole area.

The project aims to boost agricultural production in the target area. Since it was launched, farmland judgement and cultivated area estimation by crop have been attempted using spatial information technology (Sentinel-2 and other optical sensors) with the cooperation of JAXA, etc.

As a fresh attempt, the project has introduced a method to measure its impact using satellite data at the mid-term stage to verify whether the method would also be applicable for estimating crop yields as well as judging farmland area and calculating the cultivated area by crop. Specifically, the rice cultivation area is estimated as a portion of the

target analysis area using the field survey result and satellite data. After that, the estimation is compared with the rice yields, vegetation index, cultivation history, and conditions of cultivated land and cultivation obtained from the field survey, and the high-yield land area and total yields are calculated as project evaluation indicators. In addition, the project plans will be established as an evaluation model after judging whether the method applied can be extended throughout the entire target area. The analytical result is currently sorted out, based on which suggestions on how to leverage satellite data in future project monitoring and ex-post evaluation are expected to emerge. JICA will keep promoting project improvement by introducing new evaluation methods.



Estimating crop yields by unit acreage sampling

## **International Comparison of Evaluation Systems of** DAC members and JICA's Evaluation System

JICA's project evaluation is based on the evaluation criteria laid out by the Organisation for Economic Co-operation and Development/Development Assistance Committee (OECD-DAC). This section will compare the evaluation systems of JICA and other DAC members and describe characteristics of the JICA evaluation system and international evaluation trends.

\* The data is based on *Evaluation Systems in Development Co-operation: 2016* (hereinafter referred to as the "DAC Report"), which was prepared from questionnaires and surveys designed to obtain feedback from DAC members on evaluation. Eight countries/organizations (as shown in the right-hand table) are selected as benchmarks in terms of budget and scale of entity. The data follows the DAC Report, whereas the latest data from each organization might vary.

### (1) Human resources and budget

The total full-time staff in the central evaluation unit of JICA ranks third (29), after the World Bank (111) and the Asian Development Bank (51). As for the budget for evaluations, DFID of UK is the highest, at around 1.9 billion yen, followed by JICA (approximately 0.8 billion yen) among donor countries.

### (2) The number of evaluations conducted

As for the number of evaluations, the World Bank annually conducted 220 evaluations which was the highest in total, followed by JICA with 126 cases. JICA extensively covered project evaluations, which were above the certain level of project budget both in technical and financial corporation projects. While the 2010 DAC survey showed that only 49% of DAC members conducted project evaluations, the figure rose to 76% in 2016.

### (3) Type of evaluation

The Asian Development Bank (ADB) and the World Bank have eight types of evaluation, including policy/strategy evaluations and program evaluations. JICA, meanwhile, has four types of evaluations prioritizing the coverage of project evaluations while focusing on and selecting thematic evaluations.

### (4) Duration of evaluations work plan

The DAC Report points out that the longer period of evaluation work plan enables the greater improvement of the strategy if an organization can utilize the evaluation results for the formulation of the strategy. In other words, extending the evaluation work period gives organizations sufficient time to conduct evaluations based on organizational priorities and leverage the results for formulating strategy. JICA and three other countries/organizations have one year evaluation work plan, while the other three countries and organizations have multiple years evaluations work plan, including five years of the UK.

### (5) Evaluation criteria

Three countries and organizations, including JICA, only apply the Five DAC criteria in their evaluation. Five countries and organizations adopt evaluation criteria other than the Five DAC criteria while the World Bank and the ADB set out additional criteria to measure donor performance.

### (6) Independence

DAC members share the common view on protecting valuators from project stakeholders. Most members have independent evaluation sections, apart from operational ones. JICA carries out external evaluations (refer to p. 4) for all the projects above 1 billion yen or more contributions.

### (7) Capacity building

Many countries and organizations organize evaluation-related seminars and training courses, a variety of online training tools as well. JICA conducts trainings of impact evaluation (refer to p. 35) and evaluation seminars for its domestic and overseas staff.

### (8) Transparency

Most countries and organizations disclose information on line and other communication channels. JICA publishes project evaluation (reports refer to p. 8 and p. 12).

### (9) Management response

Most multilateral organizations institutionalize management responses to ensure that evaluation results are reflected in their activities. Some organizations enhance the transparency of management response, not only by publishing the action plans based upon the recommendations of the evaluation reports, but also by disseminating the progress of monitoring of the action plans in their processes.

#### International comparison of evaluation systems in eight countries/organizations

Selected DAC members for comparison*1		①UK	② Netherlands	③ Germany	4 JICA	⑤ KOICA	6 EDCF	⑦ WBG	® ADB
Staffing		16	26	16	29	7	5	111	51
Budget		1,875 mil. yen	311 mil. yen	273 mil. yen	820 mil. yen	137 mil. yen	77 mil. yen	4,218 mil. yen	1,363 mil. yen
Annual number of evaluations		28	10-15	100	126	15-16	10-11	220	11-20
Period of evaluation planning (or evaluation strategy)		5 years	N.A.	3 years	1 year	1 year	1 year	1 year	3 years
Арр	Application of Five DAC Criteria		0	0	0	0	0	Δ	0
	Efficiency	0							
	Equity	0							
	Value for money	0							
	Replicability	0							
	Policy consistency		0						
	Project outcome							0	
	Donor performance							0	0
Criteria other than Five DAC	Performance of implementing organizations								0
criteria*2	Quality of monitoring and evaluation							0	
	Quality of inception report							0	
	Risk to development outcome							0	
	Gender mainstreaming					0			
	Environmental impact					0			
	Safeguards compliance							0	
	Fiduciary							0	
	Unanticipated Impacts							0	
No. of evaluatio	n types (by theme, sector, region, policy, etc.)	3	8	2	4	6	4	8	8
	Secure organizational independence	0	0		0		0	0	
Independence	Secure independent function/activity			0	0			0	
	Introduce external personnel in evaluation				0	0			
	Advice and consultation							0	
	Development of reference document				0	0		0	
Capacity	Training (seminars, workshops)	0	0	0	0	0	0	0	0
building	Training (online)					0			
	OJT for staff at evaluation unit								0
	Employ consultants and researchers		0	0					
Transparency	Disclose information via the website, etc.	0	0	0	0	0	0	0	0
Management	Prepare action plan						0	0	
response	Publish management response								0
Knowledge	Build a database		0		0			0	0
management	Provide lectures and prepare theses		0						

<sup>\* 1:</sup> ① UK: The Research & Evidence Division, Evaluation Department, Department for International Development (DFID), ② Netherland: Policy and Operations Department (IOB), ③ Germany: Corporate Evaluation Unit, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), ④ Japan: JICA, ⑤ Korea, Evaluation Office, Korean International Cooperation Agency (KOICA), ⑥ Korea: Evaluation Team Economic Development Cooperation Fund (EDCF), 🛭 WBG: Independent Evaluation Group (IEG), World Bank Group (WBG), 🖲 ADB: Independent Evaluation Department (IED), Asian Development Bank (ADB)

### (10) Knowledge management

Many countries and organizations develop and utilize a range of knowledge management tools such as document databases and web portals. JICA accumulates the lessons of projects and gives feedbacks to the future projects.

### (11) Quality assurance

Many countries and entities, including JICA, formulate evaluation guidelines. Some countries and organizations also assess evaluation quality, certify evaluations and conduct peer reviews.

### (12) Ex-ante evaluation

The DAC Report states that ex-ante evaluations are integral parts of the PDCA (Plan, Do, Check, and Action) cycle of operational evaluations, but only six out of 46 DAC members conducted it over the past five years. JICA's ex-ante evaluation is introduced as an example of simplified one in the DAC Report.

### Lessons for JICA through the comparison of evaluation systems of donors

Comparing evaluation systems among DAC members is a useful and objective way of understanding JICA's evaluation system. Through this comparison we recognize that the advantage of JICA is the comprehensive coverage of project evaluations and the challenge is to utilize the evaluation results for JICA's overall strategy.

We will ensure our accountability of evaluations and make much more efforts to utilize the evaluation results by referring the practices of other donors.

<sup>\* 2:</sup> Prepared by the JICA Evaluation Department based on evaluation guidelines and other data of each country/organization published on their website and other sources (as of 2018). Items other than \*\*2" were prepared by the JICA Evaluation Department based on the DAC Report.

# **Advisory Committee on Evaluation**

JICA established the Advisory Committee on Evaluation to enhance the evaluation quality, strengthen feedback of evaluation results and ensure accountability.

The Committee includes experts in international cooperation and those with evaluation expertise from international organizations, academia, NGOs, media and private sector groups.

The meetings involve discussion of various activities related to JICA's project evaluation, as well as focusing on how JICA has responded to advice and recommendations issued by the Committee to date. Below are the main points discussed in the meetings in FY 2019.

**List of Committee Members** (as of January 2020)

Chairperson					
Motoki Takahashi	nashi Professor, Graduate School of Asian and African Area Studies, Kyoto University				
Acting Chairperson					
Akifumi Kuchiki	Akifumi Kuchiki Professor, College of Bioresource Sciences, Nihon University				
Members					
Jun Ishimoto	Vice-Chairman, Engineering and Consulting Firms Association, Japan (ECFA)				
Katsuji Imata	mata Board Chair, CSO Network Japan				
Akira Kawaguchi	kira Kawaguchi Director, International Cooperation Bureau, Keidanren (Japanese Business Federation)				
Takashi Kurosaki	akashi Kurosaki Professor, Institute of Economic Research, Hitotsubashi University				
Satoko Kono President, ARUN LLC					
Tetsuo Kondo	Director, United Nations Development Programme (UNDP) Representation Office in Tokyo				
Mika Funakoshi	Journalist (Former Deputy Editor, Digital contents Section, Kyodo News)				
Kiyoshi Yamaya	Kiyoshi Yamaya Professor, Doshisha University Graduate School of Policy and Management				



## > In-Committee Discussions

#### Report on recent JICA project evaluation activities (1) Sharing of project evaluation results beyond

## organizational boundaries

The Spring Conference of the Japan Evaluation Society: Qualitative Comparative Analysis (QCA) with the case of the forest project in India, process analysis (bridge project in Sri Lanka) and efforts in the peacebuilding project using Problem-Driven Iterative Adaptation (PDIA) were introduced.

Sharing information with the Global Delivery Initiative (GDI), the World Bank Group's knowledge platform: as well as introducing good practice examples from JICA, GDI cases were disseminated regularly to share within JICA.

#### (2) Building evaluation capacity

JICA introduced evaluation practices and sector analysis examples during the ODA Evaluation Workshop held by the Ministry of Foreign Affairs as part of efforts to boost evaluation capacity in developing countries (held in Thailand in 2019).

Internal evaluation third-party quality checks (QCs): third-party reviews on process and judgement in internal evaluations conducted by overseas offices and domestic centers were all reported.

An internal evaluation award system was launched and incentives to enhance the evaluation capacity of overseas offices and national staff were introduced.

#### **Exchanging views on the revised DAC evaluation criteria**

Discussions on revising evaluation criteria which were examined by the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development to adapt the Agenda 2030 adopted by the UN in 2015 were introduced.

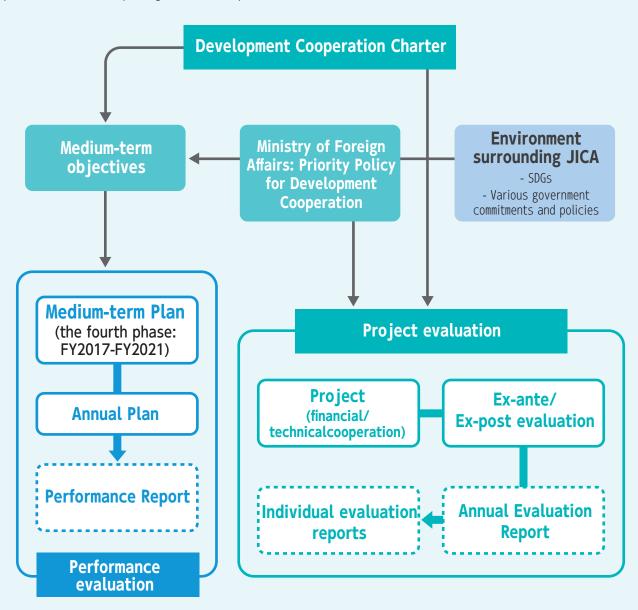
The major views of the Committee members were as follows:

- ★The current Five DAC criteria were formulated and established in 1991, but given significantly changing global trends in international cooperation over the past 30 years, such as mobilization of private funds, these criteria need revising accordingly.
- ★Evaluation starts with envisioning the outcome. Although inputs generate outputs, the purpose of ex-post evaluation under the ODA schemes involves confirming and analyzing whether they are firmly linked to outcomes. Consideration of this point should be what underpins the revision of the DAC Evaluation Criteria on this occasion.
- ★Japan's international contribution scheme remains limited and ODA is one such limited example. Accordingly, international norms are also deemed a key part of evaluation criteria. JICA should conduct future evaluations by recognizing this point as one of the important perspectives.



### **Performance evaluation**

Following the Act on General Rules for Incorporated Administrative Agencies, JICA is obliged to prepare a medium-term plan for achieving the medium-term objectives assigned by the competent minister, evaluate the annual plan yearly and conduct self-evaluation, as distinct from individual project evaluations. Accordingly, JICA has conducted performance evaluation and published the results since 2003, with the current medium-term plan covering the period from FY 2017 to FY 2021. JICA has also established an advisory committee on performance evaluation separating from the Advisory Committee on Evaluation.



Link to relevant reports (in Jpanese) → https://www.jica.go.jp/disc/jisseki/index.html

## Statistical Analysis of Ex-post Evaluations

JICA has been engaging in statistical analysis of ex-post evaluations to determine trends in terms of project performance and gain insights from the ratings to improve project design and implementation.



## ▶ 1. An Overview of the Statistical Analysis

#### **Background and objective**

JICA has conducted ex-post evaluations based on coherent methodologies and criteria, including the Five OECD-DAC Criteria, for all three assistance schemes of Technical Cooperation, ODA Loan and Grant Aid. As of FY2019, the number of ex-post evaluations had reached 1,826 (refer to p.4 for the rating criteria, perspectives and rating flowchart for external evaluation).

This statistical analysis aims to analyze past ex-post evaluations quantitatively to determine relevant trends and gain insights to improve project design and implementation.

#### Target of this statistical analysis

This statistical analysis was conducted on 1,826 evaluations, comprising 1,184 external evaluations\*1 from FY2009 to 2019 and ODA Loans of external evaluation\*2 from FY2003 to 2019 (i.e. 731 ODA Loans, 291 Grant Aid and 162 Technical Cooperation Projects) as well as 642 internal evaluations (229 Grant Aid and 413 Technical Cooperation Projects) from FY2010 to 2017. The ratings were analyzed for a total of 1,804 projects (i.e. 719 ODA Loans, 515 Grant Aid and 570 Technical Cooperation Projects) excluding 22 projects without a sub-rating.

#### Method

Among all of the 1,826 evaluations shown in Figure 1 as the total evaluations per fiscal year, overall distribution and trends in regions, sectors and schemes of 1,804 evaluations with overall ratings are visualized by applying the descriptive statistical method.

\* Analyses of factors potentially influencing evaluation results in the three schemes are ongoing by creating a regression model (multivariate analysis).

#### Note

The rating system helps assess the performance of development projects and provides insights that shed light on the current situation and possible improvement approaches. The system is, however, subject to the following constraints; (1) it is based on the assessment to the scope of the DAC evaluation criteria and not evaluates aspects such as donors' roles and contributions; (2) difference is not fully adjusted, which relates to the various issues the projects faced, such as the innovative nature of assistance nor the environments where the projects were implemented (e.g. fragile state); and (3) it only assesses the results of past activities but not ongoing endeavor nor potential outcomes. Therefore, the rating itself cannot capture everything which was happened in development projects.

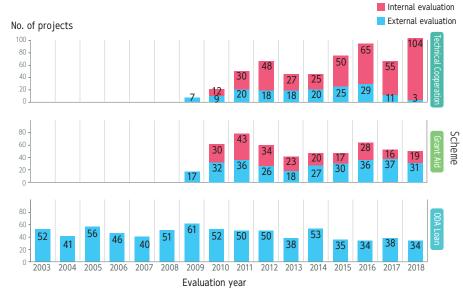
- \*1: ODA Loans include Yen Loan and Private Sector Investment Finance, although projects under the latter finance have not yet reached the timing for ex-post evaluation. Therefore, ODA Loans referred to in this analysis mean Yen Loans.
- \*2: External evaluation target projects with assistance of one billion yen or more and those likely to provide useful lessons learned.
- \*3: Ex-post evaluations of Yen Loans conducted by the former Japan Bank for International Cooperation and rated by their evaluation results.



### ▶ 2. Analytical Result (Descriptive Statistics): Trends and Distributions of External and Internal Evaluations

#### Number of evaluations

As shown in Figure 1, the rating system was first adopted to evaluate ODA Loans in FY2003, and a total of 731 projects evaluated in the 15 years up to FY2018, all of which were externally evaluated. Although ex-post evaluations of ODA Loan projects took place before FY2002, they were not rated and mainly internal evaluations. External and internal evaluations were introduced to Grant Aid and Technical Cooperation projects from FY2009 and 2010, respectively. To date, a total of 520 Grant Aid projects (291 external and 229 internal evaluations) and a total of 575 Technical Cooperation projects (162 external and 413 internal evaluations) have been evaluated. The ratio of each scheme relative to all ex-post evaluations were: ODA Loans (40%), Grant Aid (28%) and Technical Cooperation (31%). Meanwhile, the ratio of internal evaluation in Grant Aid and Technical Cooperation projects were 229 out of 520 projects (44%) and 413 out of 575 projects (72%), respectively, representing relatively high percentages, given the numerous projects including those with less than one billion yen for project cost.



<Figure 1> Transition in the Number of External and Internal Evaluations per Fiscal Year by Scheme

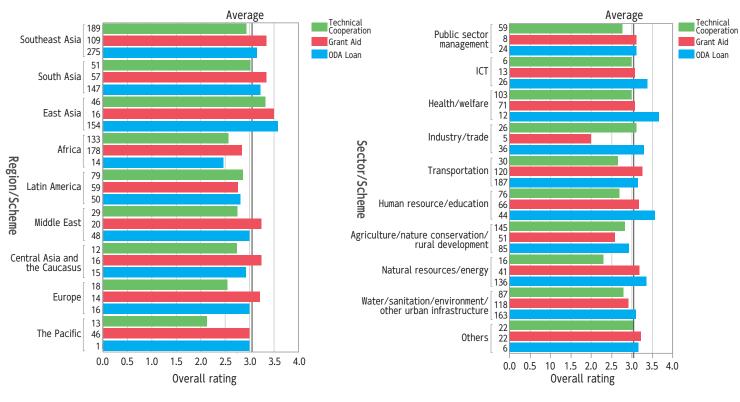
#### Inter-relation between the region and scheme

Figure 2 shows a portion of the efforts made to visualize the characteristics of evaluation results by region\*4 and scheme by converting a four-grade overall rating (A to D): 4 points for A, 3 points for B, 2 points for C and 1 point for D. The bar length in the bar chart shows the average score (full score: 4 points, overall average: 3.05 points) while the figures on the left side indicate the number of projects implemented.

The total score of each region suggests that the average overall rating of all three schemes is high in East Asia, with many A-rated, reflecting the trend whereby ODA Loan projects in China \*5 are likely to show preferable ex-post evaluation results. Conversely, the score in Africa is relatively low throughout all schemes, with proportionately greater incidence of C and D, assuming that it reflects issues of vulnerable countries and conflict-affected regions and reflecting the challenge of selecting the right projects and formulation with which to

implement projects in the region. Factors of those projects with a lower score in each region, such as ODA Loan in Africa and Technical Cooperation in Oceania, will be searched for using regression analysis and adjusting for the various factors involved in the project.

Figure 3 indicates a relatively unsatisfactory overall rating in sectors such as "Grant Aid in Industry/Trade" and "Technical Cooperation in Natural Resource/Energy" by observing ex-post evaluation scores by sector and scheme overall. Even if statistical methods are not applicable for issues arising in areas where fewer projects are currently implemented, their backgrounds are searched qualitatively at the same time by applying qualitative comparative analysis (QCA, refer to p. 36) and process analysis (refer to p. 38). JICA will keep striving to formulate optimal projects by finding tips to help solve universal issues and leveraging experience and knowledge accumulated while bringing new analytical methods into the mix more effectively.



<Figure 2> Overall rating by region
 (external and internal evaluations)

JICA Annual Evaluation Report 2019

<sup>\*</sup> The average is calculated by converting the four-grade overall rating of A, B, C and D into 4, 3, 2 and 1 points, respectively.

<sup>\*4:</sup> Each region includes the following countries: Southeast Asia: Indonesia, Cambodia, Thailand, the Philippines, Vietnam, Malaysia, Myanmar, Laos and East Timor; Oceania: Kiribati, Samoa, Solomon, Tuvalu, Tonga, Vanuatu, Papua New Guinea, Palau, Fiji, Marshall Islands and Micronesia; East Asia: Republic of Korea, China and Mongolia; Central Asia and the Caucasus: Azerbaijan, Armenia, Uzbekistan, Kazakhstan, Kyrgyz, Georgia, Tajikistan and Turkmenistan; South Asia: Afghanistan, India, Sri Lanka, Nepal, Pakistan, Bangladesh, Bhutan and Maldives; Latin America and the Caribbean: Argentine, Antigua and Barbuda, Ecuador, El Salvador, Guyana, Cuba, Guatemala, Grenada, Costa Rica, Colombia, Jamaica, Suriname, Saint Christopher and Nevis, Saint Vincent and the Grenadines, Saint Lucia, Chile, Dominica, Dominican Republic, Nicaragua, Haiti, Panama, Paraguay, Barbados, Brazil, Belize, Peru, Bolivia, Honduras and Mexico; Africa: Angola, Uganda, Eswatini, Ethiopia, Eritrea, Ghana, Gabon, Cameroon, Gambia, Guinea, Guinea-Bissau, Kenya, Democratic Republic of Congo, Zambia, Sierra Leone, Djibouti, Zimbabwe, Sudan, Seychelles, Senegal, Tanzania, Togo, Nigeria, Namibia, Niger, Burkina Faso, Burundi, Benin, Botswana, Madagascar, Malawi, Mali, Mauritaina, Mozambique, Rwanda, Lesotho and Republic of South Africa; Middle East: Algeria, Iran, Egypt, Saudi Arabia, Syria, Tunisia, Palestine, Morocco, Jordan and Lebanon; and Europe: Albania, Ukraine, Kosovo, Slovakia, Serbia, Turkey, Bulgaria, Poland, Bosnia and Herzegovina, Moldova, Montenegro, Romania and Republic of North Macedonia.

<sup>\*5:</sup> ODA loans to China ended in 2007.



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# ► Analytical results (multivariate analysis): factors influencing evaluation results (Technical Cooperation)

JICA examines the interrelation between ex-post evaluation results and their variations using regression analysis by selecting variations describing ex-post evaluation results (overall rating and four of the Five DAC Criteria (relevance, effectiveness, efficiency and sustainability) of past projects.

In FY2017, financial cooperation projects (Grant Aid and ODA Loan) were analyzed\*1, targeting 343 projects except those with project cost estimation was less than 200 million yen but resulted over 200 million

yen, and those with multiple phases evaluated simultaneously, considering bias against samples. Among those analytical results, this annual report will introduce the "differences in evaluation between technical cooperation projects managed by headquarters and overseas offices" which are consistently confirmed as statistically significant\*2 by multiple regression models and deemed relevant to discussions of improving schemes in future.

<sup>\*2:</sup> Those with significance of p<0.05 involving multiple models and samples which simultaneously controlled variants influencing project evaluation ratings including countries and sectors.



### ▶ Project management and supervision by the Headquarters or Overseas Office

Conventionally, JICA has divided supervision of Technical Cooperation project implementation between the headquarters and overseas offices located within the project site\*3. Projects requiring expertise and specialty are to be supervised by the Headquarters while those

leveraging relationships with local counterparts or accumulated local insights are supervised by the overseas office. On this occasion, relations between their characteristics and achievement and sustainability of project effects were analyzed.

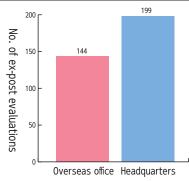
\*3: The department assigned to oversee a project is decided when approving the project. After the project approved to be implemented, the relevant department/office is consistently responsible for managing the project, including such steps as preparatory survey based on a request from recipient government, project implementation and supervision.



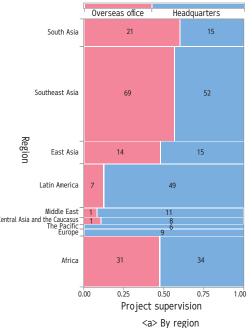
### Data and background

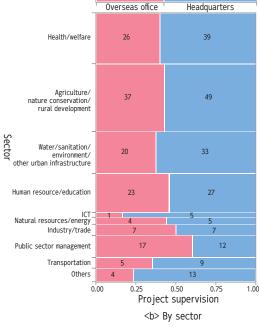
Considering biases, this report covers 342 out of 402 technical cooperation projects for which subjected to ex-post evaluations after FY2009. Overall, more projects were supervised by the Headquarters than by overseas offices (Figure 4).

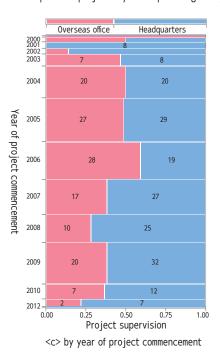
One regional trend observed involved fewer projects supervised by overseas offices in Latin America, and, though the number of evaluation cases is small, the Middle East, Central Asia and the Caucasus, and Europe. What also emerged was that despite the ratio of projects supervised by overseas offices and the Headquarters share almost even from 2003 and 2006, except pre-2002 when evaluated projects were very few, the number of projects supervised by overseas office subsequently declined after 2007(Figure 5).



<Figure 4> The number of technical cooperation projects by the supervising entity







<Figure 5> Proportion of technical cooperation project supervision (overseas office/Headquarters)

<sup>\*1:</sup> Refer to pp. 57-58 of the Annual Evaluation Report 2017.

## Analytical results

In terms of effectiveness, supervision by the headquarters is consistently rated more favorably, while other evaluation criteria

(relevance, efficiency and sustainability) show no significant statistical differences, following analyses using multiple models.



<Figure 6> Sub-ratings by the supervising entity (overseas office/headquarters) of technical cooperation projects

## ► Study - relation between effectiveness\*4 and proficiency level of PDM\*5 -

Effectiveness is rated based on the achievement level of indicators for outcomes set out during the ex-ante evaluation. When a gap arises between planned and actual outcomes in the course of implementing a project due to various factors, it is important to revise indicators for outcomes on PDM in line with current circumstances to assess project effectiveness properly.

When the PDM needs to be revised, such change is made by the Headquarters or overseas office, depending on which entity is overseeing and supervising the project. The overseas office has an advantage in distance and can respond to events there flexibly by leveraging close communication with project stakeholders. However, it may not ultimately take part in revising PDM because consensus is deemed to be built among the relevant parties through daily communication.

Conversely, the Headquarters can exploit insights into thematic issues given its abundant accumulated knowledge from many projects, including those in other countries. Moreover, the Headquarters staff are familiar with reviewing PDM from a thematic perspective when visiting the project site as well as administrative procedures to record and document any revisions and background details. These are regarded as background details and explain why the effectiveness of projects supervised by the Headquarters is rated higher than for those handled by overseas offices.

<sup>\*5:</sup> The Project Design Matrix, which organizes project structure for technical cooperation projects describing the overall goal, project purpose, outcomes and each individual indicator.



### Future insights

Recently, technical cooperation projects are decided to be supervised basically by the Headquarters. However, projects are expected to implement by promoting close communication with counterparts in the recipient country and enhancing project sustainability by sustaining relationships locally after project

Overseas offices have more field-based advantages like close

communication with counterparts or prompt and agility responses, while the Headquarters has greater expertise and is more familiar with administrative procedures. From the project management perspective, it is a key to consider how will we generate their synergy. Accordingly, JICA will keep analyzing factors influencing the ex-post evaluation results while considering the varying proficiencies of PDM design concept and revising procedures.

<sup>\*4:</sup> It might be believed that project difficulty is, in some way, attributable to the variable rating for effectiveness between those projects supervised by overseas offices and the Headquarters, although the possibility is regarded to be low.