Leading the world with trust

# 2019 JICA

## JICA Annual Evaluation Report

Japan International Cooperation Agency

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20-04

# JICA Annual Evaluation Report 2019 — INDEX

## Part I Project Evaluation System and Ex-post Evaluation Results of JICA



## Part 2 Enhancement of Project Effectiveness and Quality / Utilization and Learning of Evaluation



## Guide to JICA's Website



* This report uses a universal design font.

# Preface

Under our vision of “Leading the world with trust,” JICA set out its missions as to achieve “human security” and “quality growth” in accordance with the Development Cooperation Charter of the Government of Japan. Today’s global commitment to “leave no one behind,” which lies at the heart of the Sustainable Development Goals (SDGs), encompasses the core essence of our missions.

The main objectives of JICA’s project evaluation are; (1) to improve project operations by learning the lessons from the past project evaluations and (2) to ensure organizational accountability and transparency by publicizing evaluation results timely. We are enhancing both the quality and the strategy of our cooperation by leveraging the results of project evaluation.

This Annual Evaluation Report compiles an outline of JICA’s evaluation mechanisms and the results of JICA’s evaluations on its projects. This fiscal year 2019, we further tried to deepen our learning and accountability, by promoting thematic evaluations (comprehensive/cross-sectoral analyses), leveraging evaluation results in the PDCA cycle, and carrying out statistical analysis on evaluation results and impact evaluation. In line with international trends to accumulate and utilize knowledge, we have also striven to share JICA’s evaluation results with domestic and overseas stakeholders. These efforts are also highlighted in this report.

JICA often implements development projects in highly challenging environments, such as conflict-affected areas. Moreover, our operations require innovations to promote socioeconomic growth in developing countries amid rapid environmental changes and global technological advancements on a global scale. We are determined to challenge ourselves to achieve “human security” and “quality growth” by evaluating such projects properly and by making the best use of the lessons learned by our evaluation results.

The COVID-19 pandemic will profoundly affect the environment of development cooperation. This report summarizes JICA’s project evaluations conducted by the end of FY 2019 and does not cover the direct impact of COVID-19, therefore, we will carefully monitor its impact on our development cooperation activities from FY 2020 onwards.

We strongly hope this report will be widely shared and will help deepen your understanding of JICA’s activities. We would also like to thank you for your continued support and trust in JICA.

March 2020

KITAOKA Shinichi, President
Japan International Cooperation Agency (JICA)

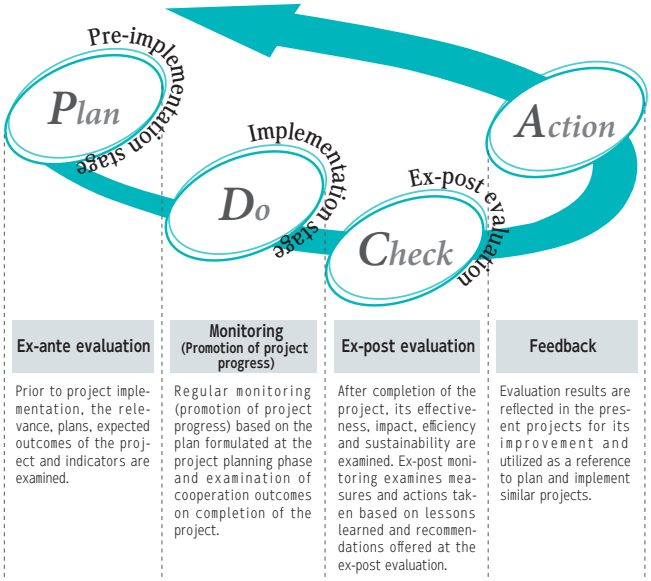
# JICA's Project Evaluation System and its Features

To improve its projects and ensure accountability to stakeholders, JICA implements project evaluation and comprehensive and cross-sectoral thematic evaluation for Technical Cooperation, ODA Loans and Grant Aid projects.

## Feature 1 Coherent evaluation methodologies and criteria among three schemes of cooperation throughout the project's PDCA cycle

The Project's PDCA (Plan, Do, Check, Action) cycle is an integral part of JICA's project evaluation. Regardless of the scheme of cooperation, such as Technical Cooperation, ODA Loans and Grant Aid, JICA monitors and evaluates at each project stage (planning, implementation, post-implementation and feedback) within a consistent framework.

Specifically, the evaluation framework reflects: (1) evaluation applying the evaluation criteria laid out by the Organisation for Economic Co-operation and Development/Development Assistance Committee (OECD/DAC) and internationally accepted an ODA evaluation methodology; and (2) publication of evaluation results in a uniform style by utilizing a rating system developed by JICA. The rating system and results are introduced pp.4-13.




### Evaluation Perspectives Using the Five DAC Criteria for Evaluating Development Assistance

| | |
|---|---|
| Relevance | Examine the extent to which the cooperation objectives are suited to the priorities and policies of the target group, recipient and donor: Does the goal of the projects meet the needs of beneficiaries? Are the activities and outputs of the program consistent with the overall goal and the attainment of its objectives? |
| Effectiveness | Measure the extent to which the program or project attains its objectives. |
| Impact | Examine positive and negative changes as a result of the project. This includes direct and indirect effects and expected and unexpected effects. |
| Efficiency | Measure the outputs in relation to the inputs to determine whether the project uses resources effectively to achieve the desired results. |
| Sustainability | Examine whether the benefits of the project are likely to last after the completion of the project. |

### Pre-implementation stage ("Plan" stage: ex-ante evaluation)

◎**Ex-ante evaluation:** JICA conducts ex-ante evaluations prior to project implementation to confirm needs and priorities of projects, examine project outlines and anticipated outcomes, and establish indicators to measure the outcomes from the perspective of the Five DAC Criteria. During the ex-ante evaluation, JICA also checks whether safeguards based on reviewed environmental and social considerations and lessons learned from the past projects are reflected appropriately in the projects.

◎**Utilization of ex-ante evaluation results:** The results of the ex-ante evaluation are reflected in subsequent decision-making on project designs and approaches. Once projects commence, monitoring and evaluations are conducted based on the evaluation plans and indicators set at the time of the ex-ante evaluation.

#### Number of Ex-ante Evaluation in FY 2018*1

| | |
|---|---|
| Technical Cooperation | 56 projects |
| ODA Loans | 36 projects |
| Grant Aid | 51 projects |

*1 Published as the ex-ante evaluations in FY2018 (as of February 2020).

#### Evaluation at Pre-Implementation Stage by Scheme

| Scheme | Technical Cooperation | ODA Loans | Grant Aid |
|---|---|---|---|
| Timing | Prior to project implementation | | |
| Preparation of ex-ante evaluation report*2 | All projects with contributions of 200 million yen or more | | Projects with contributions of 200 million yen or more implemented by JICA*3 |
| Principals of evaluation | Operational Departments of JICA, etc. (Internal Evaluation) | | |
| Evaluation perspective and method | Confirming existing needs and expected outcomes and verifying the project plans in light of the Five DAC Criteria | | |

*2 In principle, ex-ante evaluation report is prepared for all projects with contributions of 200 million yen or more and not prepared for those with less than 200 million yen.
*3 Evaluation of projects collaborated with international organizations is conducted by such international organizations.

## Post-implementation stage ("Check" stage: ex-post evaluation)

◎**Ex-post evaluation:** JICA conducts ex-post evaluation after completion of projects of which JICA's contribution is over 200 million yen, and disclose their results immediately to the public in an understandable form.*4

While projects of which JICA's contribution is less than one billion yen are conducted by JICA overseas offices, those with more than one billion yen*5 are evaluated by third-party evaluators (external ex-post evaluation) to ensure the evaluation more objective. For external evaluation, overall rating system*6 has been adopted to present the results in an easily understandable manner.

◎**Utilization of ex-post evaluation results:** The recommendations and lessons learned from these ex-post evaluations will be applied to improve the projects, as well as planning and implementing similar projects in future.

### Number of Ex-post Evaluation in FY 2018*7

| | |
|---|---|
| Technical Cooperation | (External Evaluation) 3 projects<br>(Internal Evaluation) 85 projects |
| ODA Loans | (External Evaluation) 34 projects<br>(Internal Evaluation) 0 project |
| Grant Aid | (External Evaluation) 31 projects<br>(Internal Evaluation) 14 projects |

*4 For projects with contributions of less than 200 million yen, their outcomes are confirmed at the project completion.
*5 For projects with contributions of less than 1 billion yen but those that are likely to gain valuable lessons, ex-post evaluations are conducted.
*6 Please refer to p.4 for the rating system.
*7 Evaluation results were confirmed in FY 2019 (as of February 2020). Such results were published as "Evaluation Results in FY 2018" on JICA's official website.

### Evaluation at Post-Implementation Stage by Scheme*8

| Scheme | Technical Cooperation | ODA Loans | Grant Aid |
|---|---|---|---|
| Timing | In principle, until 3 years after project completion | | |
| Targets | All projects with contributions of 200 million yen or more | | Projects with contributions of 200 million yen or more implemented by JICA |
| Principals of evaluation*9 | Third party (External Evaluation), JICA Overseas Office, etc. (Internal evaluation) | | |
| Evaluation perspective and method | Based on the Five DAC Criteria | | |

*8 Matters to be noted
- For projects which are implemented in several phases and those related to ODA Loans, relevant projects are integrally evaluated in principle.
- For projects of which outcome-based evaluations are not rational in terms of their implications and cost effectiveness, such projects are evaluated through output-based monitoring. This applies to Grant Aid for Human Resource Development Scholarship, for example.
- For projects which provide financial assistance or collaborate with international organizations under the scheme of ODA Loans and Grant Aid, JICA's ex-post evaluation is not conducted, in principle, from the perspective of development partnerships.

*9 For projects with contributions of 1 billion yen or more and those that are considered to be likely to gain valuable lessons, external evaluations are conducted. Internal evaluations are conducted by JICA's overseas offices for projects of which contributions are from 200 million yen to 1 billion yen.

## Feature 2 Comprehensive and cross-sectoral evaluation and analysis

JICA sets specific themes, such as region, sector and assistance methodology, and conducts comprehensive and cross-sectoral analysis in order to extracts trends and problems that are common to particular issues and derive features and good practices by comparing and categorizing projects. Such evaluation and analysis aim to extract recommendations and lessons, that are not available from ex-post evaluation of a single project. Furthermore, JICA also endeavors to develop new evaluation methodologies.

In FY 2019, JICA examined the evaluation methodologies applicable to JICA's support for internally displaced persons (p.30), a summary of Japan's ODA to China (p.32), qualitative comparative analysis (p.36) and more. Please refer to each page for their details.

## Feature 3 Ensuring objectivity and transparency

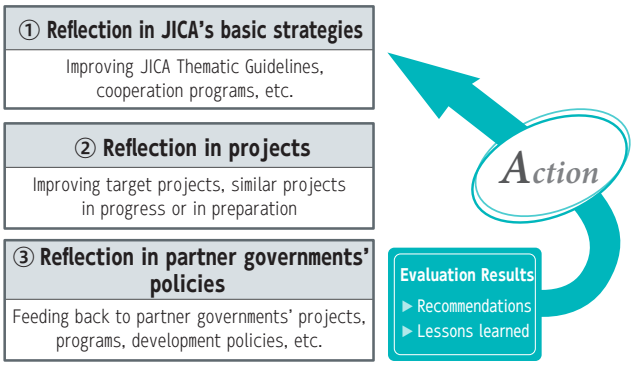
As described in "Post-implementation stage", JICA has incorporated external evaluation according to its project size as an effort to ensure objectivity and transparency of evaluation. Moreover, JICA tries to make efforts to increase transparency in its project evaluation by providing findings of the ex-post evaluation results on JICA's official website.

To improve the quality of evaluations, JICA has established mechanisms allowing the viewpoints of external parties to be reflected in the operations evaluation system. In this context, JICA receives advice on its evaluation policy, as well as the evaluation system and methodologies from the Advisory Committee on Evaluation consisting of third-party experts. Please refer to p.44 regarding the committee.

## Feature 4 Emphasizing the utilization of evaluation results

JICA's project evaluation focuses on improving the quality of evaluation to utilize the results for enhancing "Action" in the PDCA cycle, which is also utilized to feedback recommendations to improve the projects and lessons learned for ongoing and future similar projects. JICA intends to strengthen the feedback function further to reflect the evaluation results in JICA's cooperation strategies. At the same time, JICA makes efforts to reflect the evaluation results in its development policies, sector programs and the respective projects of recipient governments by feeding back the evaluation findings.

The case study on utilizing evaluation results is introduced in p.26.




**Results of the project evaluation are available on JICA's website** Related link https://www.jica.go.jp/english/our_work/evaluation/index.html

# Overview of the Ex-post Evaluation System

JICA conducts ex-post evaluations composed of external evaluations by third-party evaluators to ensure transparency and objectivity of project evaluations and internal evaluations primarily by JICA's overseas offices. This section introduces a summary and analytical result of ex-post evaluation in FY 2018.

## Ex-post evaluation system

JICA conducts evaluations by using a uniform evaluation methodology in all three schemes; Technical Cooperation, ODA Loan, and Grant Aid. In FY2018, the results of ex-post evaluations conducted were 68 external evaluations and 99 internal evaluations. In principle, projects costing one billion yen or more are subject to external evaluations by third-party evaluators based on the results of field surveys to assure objectivity and transparency of the evaluation. Meanwhile, for those projects costing 200 million yen or more and under one billion yen are subject to internal evaluations which are conducted by overseas office staff. (Refer to p. 10 for details of the internal evaluation)

## Rating system

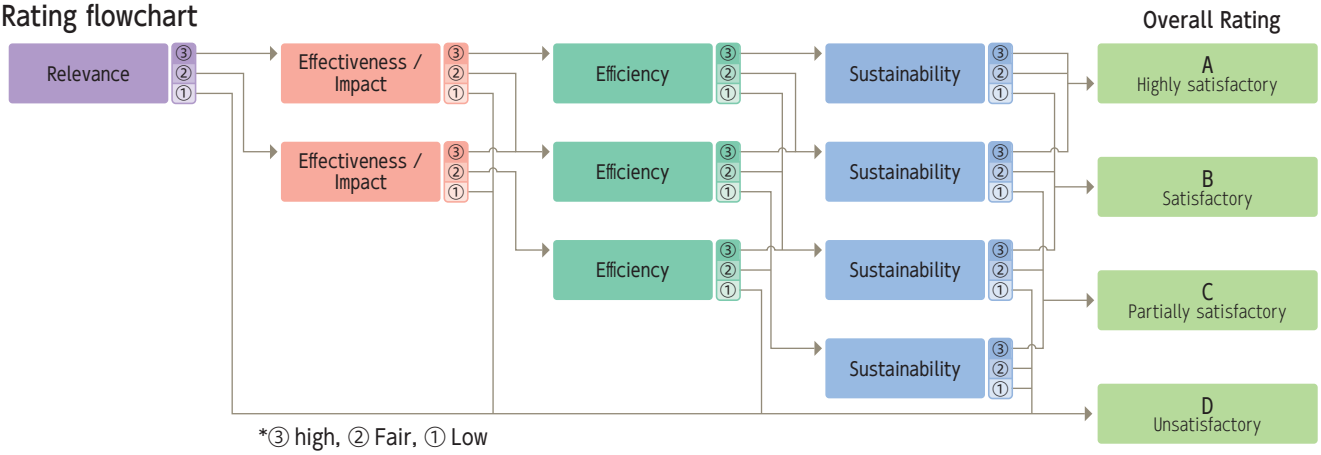
In the ex-post evaluation system, each project is assessed for its ① Relevance, ② Effectiveness/Impact, ③ Efficiency and ④ Sustainability in accordance with international standards (i.e. the Five OECD-DAC Evaluation Criteria). In the external evaluation process, projects are rated according to the following rating flowchart on a four-level scale of overall rating; A (highly satisfactory); B (satisfactory); C (partially satisfactory); and D (unsatisfactory).

Since the rating is used as means of indicating the effectiveness of the projects and applied to all projects in a uniform manner, it does not reflect other aspects such as difficulties in implementing projects.

### Overview of rating criteria and general perspectives

| Rating criteria and general perspectives | | Judgement Criteria | | |
|---|---|---|---|---|
| | | ③ (High) | ② (Fair) | ① (Low) |
| Relevance | Validity of aid (relevance with development policy of recipient country, Japan's ODA policy, and JICA's aid strategy) | Fully relevant | Partially relevant | Serious problems with consistency |
| | Relevance with development needs (needs of beneficiary, project area, and community) | | | |
| | Appropriateness of project plans, approaches, etc. (Relevance of project logics) | | | |
| Effectiveness / Impact | Achievement of expected project outcomes in target year (including utilization of facilities and equipment) | Objectives largely achieved, and outcomes generated (80% or more of plan) | Some objectives are achieved, but some outcomes are not generated (between 50% and 80% of plan) | Objectives achieved are limited and outcomes are not generated (less than 50% of plan) |
| | Status of indirect positive and negative outcomes | Indirect outcomes generated as expected / no negative impacts | Indirect outcomes generated have some problem / some negative impacts | Indirect outcomes generated have problem / grave negative impacts |
| Efficiency | Comparison of planned and actual project inputs, project period and project cost, etc. | Efficient (100% or less than the plan) | Partially inefficient (between 100% and 150% of plan) | Inefficient (exceeding 150% of plan) |
| Sustainability | Policy/political involvement (in case of Technical Cooperation) Institutional sustainability (mechanisms, division of roles, etc.) Technical sustainability (trainings, manuals, technical levels) Financial sustainability (availability of budgets, etc.) Operation and maintenance sustainability | Sustainability is ensured | Some problems exist, but there are prospects of improvement | Insufficient |

### Rating flowchart



## JICA's internal evaluation

Internal evaluation is conducted by overseas office staff and other JICA personnel of branch and regional departments in the Headquarters in charge of those projects costing 200 million yen or more and under one billion yen, adopting the same evaluation criteria with external evaluation and in accordance with the Five OECD-DAC Evaluation Criteria. As internal evaluation is literally conducted by JICA, the evaluation focuses on a "learning" perspective, such as drawing practical lessons taking into consideration of the project background to make them used for improving succeeding project implementation or formulating future projects.

Overseas offices allocate their staff by project to be evaluated and determine the evaluation result taking the process of defining evaluation framework, conducting field survey, completing the evaluation based on information and data collected, discussing with the implementing/executing agency of partner country and other activities.

The level of manpower and knowledge and experience in the evaluation varies among overseas offices. To ensure that they can take smooth steps throughout the internal evaluation process, the Evaluation Department develops evaluation criteria and manuals and provides various supports for improving evaluation capacity of staff concerned through trainings and preparing documents used during the evaluation process.
(Refer to p.12 for internal evaluation results for FY 2018)

### Implementation structure of internal evaluation

| | |
|---|---|
| Overseas office (Evaluator) | • Consider, revise and decide evaluation framework<br>• Prepare questionnaires and conduct field surveys<br>• Compile the result of field surveys and judge the evaluation result<br>• Feed the evaluation result back to the implementing/executing agency of the partner country<br>• Confirm, revise and decide the evaluation result |
| Evaluation Department (Evaluation support) | • Decide evaluation criteria and develop manuals and formats<br>• Examine and improve the whole internal evaluation system<br>• Support for preparing various evaluation documents<br>• Monitor overall evaluation progress<br>• Provide evaluation trainings (lectures and practices) |

Extension workers conducting a yield survey (Sustainable Rice Development Project in Sierra Leone)


A survey conducted by the overseas office (Research Partnership for the Application of Low Carbon Technology for Sustainable Development in India)

Sesame cultivation and harvested sesame (Social Inclusion through the Incentive to Produce Oleaginous Plants for the Generation of Bio-diesel in the State of Rio Grande do Norte, Brazil)

## New DAC evaluation criterion

OECD-DAC has conducted evaluations in accordance with its five criteria (Relevance, Effectiveness, Efficiency, Impact and Sustainability). However, in December 2019, it adopted the Six Evaluation Criteria by adding "Conference" to follow new trends in development assistance as well as responding to global issues. The new criterion, Coherence, assesses consistency and coherency of project with policies and norms of country, region and organization so that it brings a new evaluation perspective not only on the project result, but also on project implications based on various circumstances surrounding the project, such as SDGs and other international norms, peacebuilding and humanitarian assistance and donor coordination. In response to this change, JICA will revise its evaluation references to set our new evaluation criteria.

# External Evaluation Results for FY 2018

## Overall rating

The external evaluation results conducted in FY 2018 are as listed on p.8. Evaluations were conducted for 68 projects: 34 ODA Loan projects; 31 Grant Aid projects; and 3 Technical Cooperation projects.

Most of those projects receiving overall ratings were carried out in Southeast Asia, Africa and South Asia, and in sectors such as transportation, water resource/disaster risk reduction, natural resources/energy and education. The overall ratings of the 68 rated projects are: A for 33 projects (49%); B for 20 projects (29%); C for 11 projects (16%); and D for 4 projects (6%). A and B comprise about 80% while the total of C and D accounts for about 20 % of the total projects*1.

*1: These results are within the normal range of fluctuation. The average proportion of overall ratings A and B for projects completed between FY2003 and FY2018 was about 80%, ranging from 68% (FY 2014) to 91% (FY2015). The fluctuation of around 10% in the average ratio is attributable to the characteristics of projects (country, sector, scheme, etc.), which vary according to the fiscal year.

## Evaluation results in detail

Each criterion evaluated in the rated 68 projects were as follows:

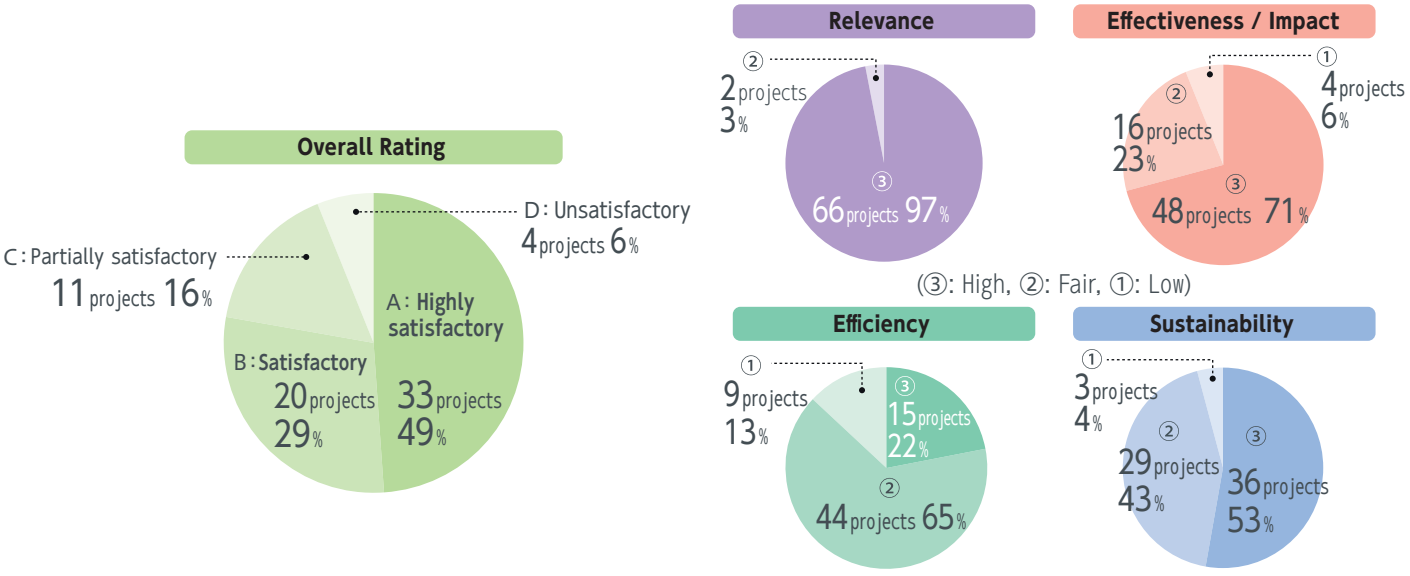
**Relevance:** 66 projects were rated as "③" (97%) and 2 projects were "②" (3%), which shows that all were aligned with Japan' s development policy and the partner country' s policies and development needs. Projects with evaluation result "fair" included problems related to appropriateness of project plans concerning the following points: "appropriateness of water collection and wastewater treatment methods chosen (sewage project)" and "issues of service quality and customer service (ICT project)".

**Effectiveness/Impact:** 48 projects were rated as "③" (71%), 16 projects "②" (23%), and 4 projects "①" (6%). The main factors behind the particularly low achievement of the project purpose include problems related to appropriateness of project plans and approaches concerning the following points: the achievement of project effects was not sufficient as expected (sewage and ICT projects) and the on-farm improvement was not successfully preceded due to delay in facility improvement and lack of funds, labor forces, equipment and other elements (irrigation project).

**Efficiency:** 15 projects were rated as "③" (22%), 44 projects "②" (65%), and 9 projects "①" (13%). The main factors behind the low rating were "climate conditions," "delays in procurement procedures," "partial change in design and plan," "land acquisition," "raise in the material and labor costs" and other factors.

**Sustainability:** 36 projects were rated as "③" (53%), 29 projects were "②" (43%), and 2 projects were "①" (4%). The main factors behind the low rating were issues such as "operation and maintenance system was not developed (an OM contractor under the PPP scheme was not selected)," "operation and maintenance plan was not formulated," "lack of the number of personnel" and "the technical level was insufficient."

JICA also strived to analyze Performance in the ex-post evaluation conducted in FY 2018 and attempted to extract reflecting points and good practices for planning and supervising the project by JICA, implementation agency and other concerning personnel. The analysis identified a case where JICA held discussions with the recipient government repeatedly from the project formulation stage and reached an agreement to incorporate joint management with residents and other new approaches into a forest project. Through JICA's efforts in working with the recipient government including senior officials during the project implementation, those approaches were recognized as effective and reflected in policies of other regions and the central government (Project No. 38 on p. 8). Other cases include the first ODA Loan project implemented in



a conflict-affected country in which JICA concluded a partnership agreement on the project implementation and management with UNDP which had implemented projects in that country to jointly monitor the project and provide technical supervision. As well as helping smooth project implementation, this experience was utilized for subsequent project supervisions (Project No. 47 on p. 8). From these results, lessons and good practices were learned that the project effects were likely to be achieved promptly if careful considerations were made from the planning stage. There was also a case that recipient government's effort against air pollution, including via ODA project, was highly regarded, receiving an award by the UN Climate Change Conference (Project No. 4 on p. 8)

We extract lessons to make them as reference for similar projects formulation in future based on the facts confirmed in these ex-post evaluations. Lessons extracted from the ex-post evaluation in FY 2018 include: choosing technology according to local context; setting appropriate indicators and implementing proper monitoring; strengthening the system and capacity of maintenance and management organizations; schemes collaboration; leveraging Japanese knowledge; eliminating risk factors to ensure sustainability when utilizing excellent products/technologies of Japanese small and medium-sized businesses; considering demand forecast model corresponding to multiple scenarios; importance of continuous public relation activities after the project completion (to attract private investment); efforts to increase the toll collection rate from an early stage; developing a mechanism to keep dialog with residents when constructing a large-scaled infrastructure; securing sustainability by establishing a waste disposal billing system involving slum dwellers, and; building a partnership between national and local governments.

The ex-post evaluations conducted in FY 2018 also include the introduction of effectiveness verification using satellite data (refer to Efforts to Improve Evaluation Methodology for details) and evaluation from the perspective of contributing to the achievement of SDGs (summarized in columns: Project No: 37, 38 and 48 on p. 8).

The Project for Upgrading Ferryboat in Yangon City in Myanmar


Income generation activity (making Sal leaf plates) under Orissa Forestry Sector Development Project in India

Banks of Hantra canal improved by the Flood Prevention Project of East Side of the Pasak River in Ayutthaya in Thailand

## External ex-post evaluation policy for FY 2019

For external ex-post evaluations to be conducted in FY 2019, JICA revised its external ex-post evaluation reference based on past feedbacks and other comments and explained the changes to concerning personnel in August 2019. Major revisions include that points to be noted which were shared by project were compiled from the gender mainstreaming perspective and the IRR recalculation method and concept were reorganized and compiled. JICA has also made efforts to improve evaluation methodology based on the international trend, and introduced Qualitative Comparative Analysis (QCA, refer to p. 36), a new evaluation method, in part of ex-post evaluations. Simultaneously, we are introducing a simplified external ex-post evaluation in parts of ex-post evaluation in FY 2019 on a trial basis to conduct ex-post evaluation more efficiently.

# List of Ratings for External Evaluations*1

In principle, external ex-post evaluation covers those projects of which contributions are 1 billion yen or more. Click on a project name to jump to see its ex-post evaluation report.

| Country | *2 Evaluation No. | *3 Project No. | *4 Scheme | Project name | Relevance | *5 Effectiveness | Efficiency | Sustainability | Overall rating |
|---|---|---|---|---|---|---|---|---|---|
| China | 1 | 1 | L | Higher Education Project (Hainan Province) | ③ | ③ | ① | ③ | B |
| | 2 | 2 | L | Jilin Province Jilin City Comprehensive Environment Improvement Project | ③ | ③ | ② | ③ | A |
| | 3 | 3 | L | Anhui Water Environmental Improvement Project | ③ | ③ | ② | ③ | A |
| | 4 | 4 | L | Gansu Province Lanzhou City Atmospheric Environmental Improvement Project | ③ | ③ | ② | ③ | A |
| | 5 | 5 | L | Guangxi Zhuang Autonomous Region Yulin City Water Environment Improvement Project | ③ | ③ | ② | ③ | A |
| | 6 | 6 | L | Ningxia Hui Autonomous Region Urban Water Environment Improvement Project | ③ | ② | ② | ② | C |
| Indonesia | 7 | 7 | L | Urgent Rehabilitation Project of Tanjung Priok Port | ③ | ② | ② | ③ | B |
| | 8 | 8 | L | Denpasar Sewerage Development Project (II) | ③ | ② | ② | ② | C |
| | 9 | 9 | L | Integrated Water Resources and Flood Management Project for Semarang | ③ | ③ | ② | ③ | A |
| Viet Nam | 10 | 10 | L | Higher Education Development Support Project on ICT | ③ | ② | ② | ③ | B |
| | 11 | 11 | L | Vinh Phuc Province Investment Climate Improvement Project | ③ | ③ | ② | ③ | A |
| | 12 | 12 | L | Cai Mep-Thi Vai International Port Construction Project (I) | ③ | ③ | ② | ③ | A |
| | | 13 | | Cai Mep-Thi Vai International Port Construction Project (II) | | | | | |
| | 13 | 14 | L | Transport Sector Loan for National Road Network Improvement (I) | ③ | ③ | ② | ③ | A |
| | | 15 | | Transport Sector Loan for National Road Network Improvement (II) | | | | | |
| | 14 | 16 | L | O Mon Thermal Power Plant Construction Project (E/S) | ③ | ② | ① | ③ | C |
| | | 17 | | O Mon Thermal Power Plant and Mekong Delta Transmission Network Project (I) | | | | | |
| | | 18 | | O Mon Thermal Power Plant and Mekong Delta Transmission Network Project (II) | | | | | |
| | | 19 | | O Mon Thermal Power Plant and Mekong Delta Transmission Network Project (III) | | | | | |
| | | 20 | | O Mon Thermal Power Plant and Mekong Delta Transmission Network Project (IV) | | | | | |
| | | 21 | | O Mon Thermal Power Plant Unit No. 2 Construction Project (I) | | | | | |
| | | 22 | | O Mon Thermal Power Plant Unit No. 2 Construction Project (II) | | | | | |
| | 15 | 23 | G | The Project for E-Customs and National Single Window for Customs Modernization | ③ | ③ | ③ | ③ | A |
| Philippines | 16 | 24 | L | Logistics Infrastructure Development Project through ODA Loans | ③ | ② | ② | ③ | B |
| | 17 | 25 | L | Pinatubo Hazard Urgent Mitigation Project (Phase III) | ③ | ② | ① | ③ | C |
| | 18 | 26 | L | Help for Catubig Agricultural Advancement Project | ③ | ① | ① | ② | D |
| Myanmar | 19 | 27 | G | The Project for Strengthening Human Development Institutions in Agriculture | ③ | ③ | ② | ② | B |
| | 20 | 28 | G | The Project for Development of ICT System for Central Banking | ③ | ③ | ② | ③ | A |
| | 21 | 29 | G | The Project for Upgrading Ferryboat in Yangon City | ③ | ③ | ③ | ③ | A |
| | 22 | 30 | G | The Project for Improvement of Nationwide Airport Safety and Security | ③ | ② | ② | ② | C |
| Laos | 23 | 31 | G | The Project for Improvement of Solid Waste Management in Environmentally Sustainable Cities | ③ | ③ | ② | ③ | A |
| | 24 | 32 | T | Laos Pilot Program for Narrowing the Development Gap towards ASEAN Integration (LPP) | ③ | ② | ② | ③ | B |
| | 25 | 33 | G | Thakhek Water Supply Development Project | ③ | ② | ③ | ② | B |
| Cambodia | 26 | 34 | L | Greater Mekong Telecommunication Backbone Network Project | ② | ① | ② | ① | D |
| | 27 | 35 | G | The Project for Construction and Rehabilitation of Small Hydro Power Plants in Rattanakiri Province | ③ | ③ | ③ | ③ | A |
| | 28 | 36 | G | The Project for Flood Protection and Drainage Improvement in the Phnom Penh Capital City (PhaseIII) | ③ | ③ | ③ | ② | A |
| | 29 | 37 | G | The Project for Improvement of Sihanouk Province Referral Hospital | ③ | ③ | ② | ② | B |
| Thailand | 30 | 38 | L | Mass Transit System Project in Bangkok (Purple Line) (I) | ③ | ② | ② | ③ | B |
| | | 39 | | Mass Transit System Project in Bangkok (Purple Line) (II) | | | | | |
| | 31 | 40 | G | The Rehabilitation Project of the Outer Bangkok Ring Road | ③ | ③ | ② | ③ | A |
| | 32 | 41 | G | The Flood Prevention Project of East Side of the Pasak River in Ayutthaya | ③ | ③ | ② | ③ | A |

*1 ③ : High, ② : Fair, ① : Low / A: Highly Satisfactory, B: Satisfactory, C: Partially Satisfactory, D: Unsatisfactory (Refer to p. 4)
*2 Evaluation No.: the number of evaluations conducted.
*3 Project No.: the number of projects evaluated.
*4 T: Technical Cooperation, L: ODA Loan, G: Grant Aid
*5 Effectiveness includes evaluation of impact.

| Country | *2 Evaluation No. | *3 Project No. | *4 Scheme | Project name | Relevance | *5 Effectiveness | Efficiency | Sustainability | Overall rating |
|---|---|---|---|---|---|---|---|---|---|
| Malaysia | 33 | 42 | L | Higher Education Loan Fund Project (III) | ③ | ③ | ③ | ③ | A |
| Papua New Guinea | 34 | 43 | G | The Project for Rehabilitation of Madang Town Market | ③ | ③ | ② | ② | B |
| East Timor | 35 | 44 | G | The Project for River Training for the Protection of Mola Bridge | ③ | ③ | ③ | ② | A |
| Tuvalu | 36 | 45 | G | The Project for Construction of a Cargo/Passenger Vessel | ③ | ③ | ③ | ② | A |
| Micronesia | 37 | 46 | G | The Project for Improvement of Domestic Shipping Services | ③ | ③ | ③ | ② | A |
| India | 38 | 47 | L | Hogenakkal Water Supply and Fluorosis Mitigation Project (L/A No. ID-P195) | ③ | ③ | ② | ③ | A |
| | | 48 | | Hogenakkal Water Supply and Fluorosis Mitigation Project Phase II (L/A No. ID-P204) | | | | | |
| | 39 | 49 | L | Orissa Forestry Sector Development Project | ③ | ③ | ③ | ③ | A |
| | 40 | 50 | L | Rengali Irrigation Project (I) | ③ | ③ | ① | ② | C |
| | | 51 | | Rengali Irrigation Project (II) | | | | | |
| | | 52 | | Rengali Irrigation Project (III) | | | | | |
| | 41 | 53 | L | Swan River Integrated Watershed Management Project | ③ | ③ | ③ | ② | A |
| | 42 | 54 | L | Hussain Sagar Lake and Catchment Area Improvement Project | ③ | ③ | ② | ③ | A |
| Bangladesh | 43 | 55 | L | Eastern Bangladesh Bridge Improvement Project | ③ | ③ | ① | ② | C |
| Sri Lanka | 44 | 56 | L | Vavuniya-Kilinochchi Transmission Line Project (Phase I) | ③ | ③ | ② | ③ | A |
| | | 57 | | Vavuniya-Kilinochchi Transmission Line Project (Phase II) | | | | | |
| | 45 | 58 | L | Eastern Province Water Supply Development Project | ③ | ③ | ② | ③ | A |
| Pakistan | 46 | 59 | G | The Project for Improvement of Airport Security | ③ | ① | ② | ① | D |
| Kyrgyz | 47 | 60 | G | Reconstruction of Kok-Art River Bridge on Bishkek-Osh Road | ③ | ③ | ② | ③ | A |
| | 48 | 61 | G | The Project for Improvement of the Equipment for Road Maintenance in Osh, Jalal-Abad, and Talas Oblasts | ③ | ② | ③ | ② | B |
| Iraq | 49 | 62 | L | Port Sector Rehabilitation Project | ③ | ③ | ② | ② | B |
| Romania | 50 | 63 | L | Turceni Thermal Power Plant Pollution Abatement Project | ③ | ③ | ② | ③ | A |
| Peru | 51 | 64 | L | Electric Frontier Expansion Project (Phase III) | ③ | ③ | ① | ② | C |
| | 52 | 65 | L | Iquitos Sewerage Improvement and Expansion Project | ② | ① | ① | ① | D |
| Uganda | 53 | 66 | G | The Project for the Rehabilitation of Hospitals and Supply of Medical Equipment in the Western Region in Uganda | ③ | ② | ② | ② | C |
| | 54 | 67 | G | The Project for Rebuilding Community for Promoting Return and Resettlement of Internally Displaced Persons in Acholi Sub-Region in Northern Uganda | ③ | ③ | ② | ② | B |
| Mozambique | 55 | 68 | G | The Project for the Construction of Monapo Primary Teacher Training Institute in Nampula Province | ③ | ③ | ② | ② | B |
| | 56 | 69 | G | The Project for Urgent Rehabilitation of Nacala Port | ③ | ② | ② | ③ | B |
| | 57 | 70 | T | The Project for Nacala Corridor Economic Development Strategies | ③ | ③ | ② | ② | B |
| Tonga | 58 | 71 | G | The Project for Introduction of a Micro-Grid System with Renewable Energy for the Tonga Energy Road Map | ③ | ③ | ③ | ③ | A |
| Kenya | 59 | 72 | L | Sondu-Miriu Hydropower Project Sang'oro Power Plant | ③ | ③ | ③ | ② | A |
| Panama | 60 | 73 | L | Panama City and Panama Bay Sanitation Project | ③ | ③ | ① | ③ | B |
| | | 74 | | Panama Metropolitan Area Wastewater Management Improvement Project | | | | | |
| Senegal | 61 | 75 | G | Project of Construction of Lower Secondary School in Louga Region and Kaolack Region | ③ | ③ | ② | ③ | A |
| Nigeria | 62 | 76 | G | The Project for Emergency Repair and Overhaul Works for the Jebba Hydro Power Station | ③ | ③ | ② | ② | B |
| Benin | 63 | 77 | G | Project for Construction of Public Primary Schools in Benin (Phase V) | ③ | ③ | ③ | ② | A |
| Ghana | 64 | 78 | G | The Project for Improvement of Power Distribution System in the Republic of Ghana | ③ | ③ | ② | ③ | A |
| Kenya | 65 | 79 | G | The Project for Rural Water Supply in Baringo County | ③ | ③ | ② | ② | B |
| Ethiopia | 66 | 80 | G | The Project for Rehabilitation of Trunk Road (Phase IV) | ③ | ③ | ② | ② | B |
| | 67 | 81 | T | Rural Resilience Enhancement Project | ③ | ② | ② | ② | C |
| Malawi | 68 | 82 | G | Project for Improvement of Blantyre City Roads (Phase I) | ③ | ② | ② | ② | C |
| | | 83 | | Project for Improvement of Blantyre City Roads (Phase II) | | | | | |
| | | 84 | | Project for Improvement of Blantyre City Roads (Phase III) | | | | | |

# Internal Evaluation Results for FY 2018

## Overall rating

The overall evaluation of 99 projects shows that approximately 70% delivered or exceeded the expected result at the time of ex-post evaluation. Among 99 projects, including 85 Technical Cooperation /Assistance projects and 14 Grant Aid projects, most were carried out in Southeast Asia and Africa in sectors such as agriculture, forestry and fishery, water resource/disaster reduction, health and medical care and transportation.

## Evaluation by criteria

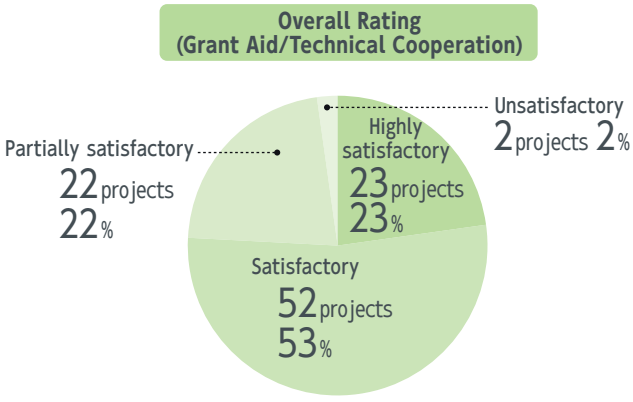
**Relevance:** No specific problem was observed in any of the projects and they were consistent with the policies of the Government of Japan and partner countries in meeting their development needs.

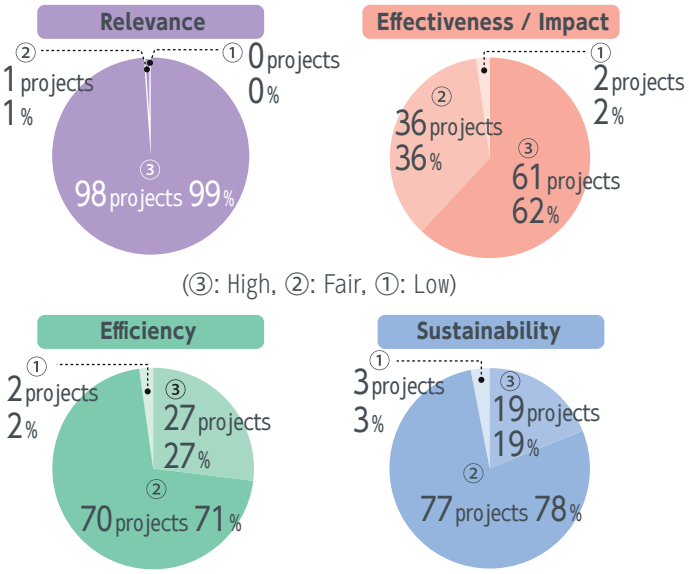
**Effectiveness/Impact:** Approximately 60% of projects achieved the expected outcomes, while the remaining 40% or so faced some challenges in achieving results.

The challenges observed in some Grant Aid projects include the fact that: (1) quantitative data was unobtainable, which hindered efforts to assess the project achievement; (2) damaged equipment provided in the project could not be repaired and remained unused because corresponding budgets of the executing agency were not allocated, and; (3) both the project purpose and overall goal were not achieved as planned, despite the projects achieving certain effects. With regards to Technical Cooperation/Assistance projects, in some cases: (1) the project purpose after changes due to organizational reform of the implementing agency and (2) both the project purpose and overall goal were not achieved as planned, although the projects achieved certain effects. Moreover, the project effects could not be fully verified at the time of the ex-post evaluation due to the vague definition, or the unavailability of data and information on indicators defined at the project planning stage.

**Efficiency:** Over 20% of the projects were completed within the planned period and cost. In case of Grant Aid projects, however, over 80% were affected by delays in facility construction, equipment procurement and customs clearance and the lack of progress in projects incurred by the recipient country meant the project period had to be extended. As for Technical Cooperation/Assistance projects, the cost exceeded the planned amount given the need for more activities to achieve the project purposes with the lack of progress in mind. Moreover, the project period was also extended due to the deteriorating local security circumstances, change in the plan or to achieve the project purposes.

**Sustainability:** Approximately 80% of projects were identified as having some challenges. As a frequent problem, around 60% were identified as being insufficiently financially sustainable, such as difficulty faced by implementing agencies in securing the necessary budget, while in terms of institutional sustainability, the second most frequent problem experienced was typically staff shortages. Other frequently observed challenges included technical-related areas, such as the retention of technologies transferred and the omission of routine inspections and repairs.




## Going Forward: Quality Improvement and Further Streamlining of Evaluation

JICA deploys third-party experts as part of an objective process to assess evaluation results and enlist their assistance in performing high-quality evaluations, improving succeeding projects and formulating future projects (more details on the following page). Improved organizational evaluation capacity is also facilitated by leveraging internal evaluation training sessions for overseas office staff, the in-house internship program (refer to p. 22) and other efforts. To conduct internal evaluations, efforts to streamline the process are also required simultaneously. Accordingly, JICA attempts to unify the evaluation of multi-phase projects and integrate evaluation across schemes such as Grant Aid and Technical Cooperation.

# Accountability and Quality Improvement in Internal Evaluation

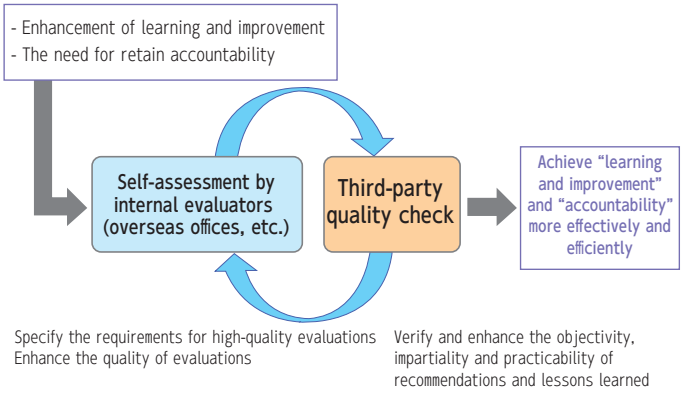
## Self-assessment and Third-party Quality Check

As part of efforts to enhance its internal evaluation function to achieve the evaluation objectives (fulfilling accountability and learning lessons for improvement) more effectively and efficiently, JICA has established evaluator' s self-assessment and external third-party quality check systems to ensure the quality of internal evaluations since introducing this evaluation system in FY 2010.

Specifically, JICA uses check sheets which define requirements and procedures for good and high-quality self-assessment evaluations and third-party quality checks. Following perspectives of examining the appropriateness of the evaluation process, the validity of ratings of each of the evaluation criteria (relevance, effectiveness/impact, efficiency and sustainability), the validity of the conclusions, recommendations and lessons learned and the consistency of the overall evaluation report, these checklists allow the following requirements and procedures which should be involved in quality evaluation to be confirmed: whether the evaluators conduct tasks with a full understanding of the evaluation framework; whether the evaluation report contains all the necessary information; whether the evidence on the ground to underpin judgements and factors is stated; whether the description is coherent; and whether evaluation constraints (if any) and their influence on the evaluation results are properly described. To improve their evaluation reports, the overseas offices (evaluators) try to tick off as many checklist items as possible during their evaluation process.

**Self-assessment:** Evaluators (e.g. overseas offices) reflect on their own internal evaluation reports midway through and after the evaluation process. Because the check sheet specifies what a high-quality evaluation entails, they can use its content to form guidelines for streamlining project evaluations, improving their evaluation reports and enhancing evaluations overall.

**Third-party quality check:** External third-party verify the evaluation reports compiled by internal evaluators (e.g. overseas offices) by examining the objectivity and impartiality of judgements and the specificity and practicability of the recommendations and lessons learned. The verification results are then sent to the evaluators (e.g. overseas offices) and used as feedback to improve internal evaluations in the future. These verification summaries are also publicly disclosed to enhance accountability.




## Quality check result in FY 2018

In FY 2018, JICA verified 59 of internal ex-post evaluations conducted in FY 2016 and analyzed as follows:

The third-party quality check judges that those evaluations with standardized points closer to 1.0 between 0.0 to 1.0 are appropriate*. As shown in Figure 1, the average standardized score for all evaluations verified is 0.905 in FY 2018, reflecting the high quality secured by JICA in its internal evaluation and self-assessment.

In each evaluation criteria, "Efficiency" has a high average score as well as small variation, indicating its high accuracy while that of "Sustainability" is low and deviates significantly. The wide deviation of "Effectiveness/Impact" suggests that these criteria may vary largely in the quality and accuracy of evaluation according to the evaluator (Figure 2).

The gap of results for each quality check item ("Relevance", "Effectiveness / Impact", "Efficiency", "Sustainability" and "Conclusions / Recommendations / Lessons Learned") between the self-assessment by internal evaluators (overseas office, etc.) and the third-party quality check was also measured.

It was eventually confirmed that the third-party quality check scored lower in (all items of) "Effectiveness / Impact" and "Sustainability" (finance in particular) compared to the self-assessment. JICA will strive to fill the gap by enhancing the self-assessment capacity and further improving the internal evaluations.

**Figure 1. Average standardized score and its standard deviation in all 59 evaluations**

| | Technical Cooperation | Grant Aid | All projects |
|---|---|---|---|
| Average | 0.902 | 0.913 | 0.905 |
| Standard deviation | 0.069 | 0.067 | 0.068 |

**Figure 2. Average standardized score and standard deviation in all 59 evaluations by evaluation criteria**

| | Overall | Relevance | Effectiveness / Impact | Efficiency | Sustainability | Conclusions/ Recommendations/ Lessons learned | General Matters |
|---|---|---|---|---|---|---|---|
| Average | 0.905 | 0.914 | 0.911 | 0.990 | 0.876 | 0.938 | 0.918 |
| Standard deviation | 0.068 | 0.097 | 0.148 | 0.044 | 0.124 | 0.092 | 0.155 |

* Standardized score calculation
The calculation elicits scores of 2 points, 1 point and 0 point if each item in the third-party quality check sheet is checked as "Yes", "Partly Yes" and "No", respectively. Those checked as "Not applicable" are not aggregated as raw scores. Standardized scores are defined as: (total raw score) / {(total number of check items) – (number of check items as "Not applicable") x 2}

**Figure 3. Gap analysis between the results of self-assessment and third-party quality check**

| Evaluation criteria | Gap between self-assessment and third-party QC | No. of check items (% for population) |
|---|---|---|
| Relevance | Third-party QC = Self-assessment | 210(73.7%) |
| | Third-party QC > Self-assessment | 25(8.8%) |
| | Third-party QC < Self-assessment | 20(7.0) |
| | "Not applicable" in Third-party QC | 30(10.5%) |
| Effectiveness/Impact | Third-party QC = Self-assessment | 266(77.8%) |
| | Third-party QC > Self-assessment | 22(6.4%) |
| | Third-party QC < Self-assessment | 54(15.8%) |
| | "Not applicable" in Third-party QC | 0 |
| Efficiency | Third-party QC = Self-assessment | 134(71.7%) |
| | Third-party QC > Self-assessment | 9(4.8%) |
| | Third-party QC < Self-assessment | 1(0.5%) |
| | "Not applicable" in Third-party QC | 43(23.0%) |
| Sustainability | Third-party QC = Self-assessment | 277(72.3%) |
| | Third-party QC > Self-assessment | 45(11.7%) |
| | Third-party QC < Self-assessment | 58(15.2%) |
| | "Not applicable" in Third-party QC | 3(0.8%) |
| Conclusions/ Recommendations/Lessons learned | Third-party QC = Self-assessment | 137(60.0%) |
| | Third-party QC > Self-assessment | 19(8.4%) |
| | Third-party QC < Self-assessment | 19(8.4%) |
| | "Not applicable" in Third-party QC | 53(23.2%) |
| General matters (57 projects x 3 criteria = 171 ex-post evaluations) | Third-party QC = Self-assessment | 116(67.8%) |
| | Third-party QC > Self-assessment | 26(15.2%) |
| | Third-party QC < Self-assessment | 11(6.4%) |
| | "Not applicable" in Third-party QC | 18(10.6%) |

# List of Internal Ex-post Evaluations

In principle, internal ex-post evaluation covers those projects of which contributions are from 200 million yen to 1 billion yen.
Click on a project name to jump to see its ex-post evaluation report.

| Country | *1 Evaluation No. | *2 Project No. | *3 Scheme | Project name |
|---|---|---|---|---|
| Indonesia | 1 | 1 | T | Project on the Service Improvement of the National Agency for Export Development (NAFED) |
| | 2 | 2 | T | Project on Capacity Development of Animal Health Laboratory |
| | 3 | 3 | TAP | Project on Building Administration and Enforcement Capacity Development for Seismic Resilience |
| | | 4 | TAP | Project on Building Administration and Enforcement Capacity Development for Seismic Resilience Phase 2 |
| | 4 | 5 | TAP | Project on Capacity Building for Restoration of Ecosystems in Conservation Areas |
| | 5 | 6 | T | Multi-Disciplinary Hazard Reduction from Earthquakes and Volcanoes in Indonesia |
| | 6 | 7 | T | The Project on Mangrove Ecosystem Conservation and Sustainable Use in the ASEAN Region |
| Cambodia | 7 | 8 | T | Project on Improving Official Statistics in Cambodia (Phase 2) |
| | | 9 | T | Project on Improving Official Statistics in Cambodia (Phase 3) |
| | 8 | 10 | TAP | Project for Improvement of Transmission System Operation and Maintenance |
| | 9 | 11 | T | Project for Strategic Strengthening of Small and Medium Enterprise (SME) Support System |
| | 10 | 12 | T | Freshwater Aquaculture Improvement and Extension Project Phase 2 |
| Laos | 11 | 13 | G | The Project for Modernization of Equipment for Transition to New CNS/ATM Systems |
| Viet Nam / Cambodia / Laos | 12 | 14 | T | Project for the Capacity Development for Transition to the New CNS/ATM Systems in Cambodia, Lao PDR, and Viet Nam |
| Viet Nam | 13 | 15 | T | Capacity development for NIHE to control emerging and re-emerging infectious diseases |
| | | 16 | T | Project for Capacity Development for Laboratory Network in Vietnam of Biosafety and Examination of Highly Hazardous Infectious Pathogens |
| | 14 | 17 | T | Northwest Region Rural Development Project |
| | 15 | 18 | TAP | Project for Strengthening of Tay Bac University for Sustainable Rural Development of the Northwest Region |
| | 16 | 19 | T | Sustainable Integration of Local Agriculture and Biomass Industries |
| | 17 | 20 | T | Project for Sustainable Forest Management in the Northwest Watershed Area |
| | 18 | 21 | T | Project for Strengthening Capacity of Inspection System for Ensuring Safety of Agro-Fishery Foods |
| | 19 | 22 | G | The Project for Development of Traffic Control System for Expressway in Hanoi |
| Myanmar | 20 | 23 | T | Project for Improvement of Road Technology in Disaster Affected Area |
| | 21 | 24 | G | The Project for Improvement of Road Construction and Maintenance Equipment in Rakhine State |
| | 22 | 25 | G | The Project for Improvement of Medical Equipment in General Hospitals in Yangon |
| Philippines | 23 | 26 | T | The Project for Prevention and Control of Leptospirosis in the Philippines |
| Thailand | 24 | 27 | T | The Project for Research and Development of Therapeutic Products against Infectious Diseases, Especially Dengue Virus Infection |
| | 25 | 28 | T | Research and Development for Water Reuse Technology in Tropical Region |
| | 26 | 29 | T | The Project on Capacity Development in Disaster Management in Thailand (Phase2) |
| Papua New Guinea | 27 | 30 | T | Project for Promotion of Smallholder Rice Production (Phase 1) |
| | | 31 | T | Project for Promotion of Smallholder Rice Production (Phase 2) |
| | 28 | 32 | T | Project for Enhancing Access and Capacity of EQUITV Program (EQUITV Phase 2) |
| Fiji | 29 | 33 | T | Waste Minimization and Recycling Promotion Project |
| East Timor | 30 | 34 | T | Irrigation and Rice Cultivation Project in Manatuto (Phase 1) |
| | | 35 | T | Irrigation and Rice Cultivation Project in Manatuto (Phase 2) |
| China | 31 | 36 | T | Environment Construction at Co-existent Areas of Human Beings and Crested Ibis |
| | 32 | 37 | TAP | The Project for Total Emission Control of Nitrogen Oxide in Atmosphere |
| | 33 | 38 | T | Project on Capacity Building for Occupational Health |
| | 34 | 39 | T | Integrated development model project for nature conservation in Jin Sha River Basin |
| | 35 | 40 | T | Project for Capacity Building of Reproductive Health and Family Care Service in Central and Western Region |
| | 36 | 41 | T | Project for Strengthening of Health Education for Prevention of Infectious Diseases through Family Health |
| Mongolia | 37 | 42 | T | Project for Capacity Development of Business Persons through Mongolia-Japan Center for Human Resources Development |
| | 38 | 43 | T | The Project for Capacity Development on Bridge Maintenance and Management |
| Armenia | 39 | 44 | T | Project for Development of Local Production and Promotion of Local Brands |
| India | 40 | 45 | T | The Study on Development and Management of Land and Water Resources for Sustainable Agriculture in Mizoram |
| | 41 | 46 | T | Research Partnership for Application of Low Carbon Technology for Sustainable Development |
| Pakistan | 42 | 47 | TAP | The Project for Improvement of Training Capacity on Grid System Operation and Maintenance |
| Nepal | 43 | 48 | T | Strengthening the Monitoring and Evaluation System in Nepal |
| | | 49 | T | Project for Strengthening the Monitoring and Evaluation System in Nepal Phase 2 |
| | 44 | 50 | G | The Project for Basic Education Improvement in Support of the School Sector Reform in Nepal |
| | 45 | 51 | T | Participatory Watershed Management and Local Governance Project |
| Afghanistan | 46 | 52 | T | National Agricultural Experiment Stations Rehabilitation Project |
| | 47 | 53 | T | Improvement of Rice-based Agriculture in Nangarhar Province |
| Sri Lanka | 48 | 54 | G | The Project for the Development of Intelligent Transport System for Expressways in Sri Lanka |
| | 49 | 55 | TAP | Urban Transport System Development Project for Colombo Metropolitan Region and Suburbs |

*1 Evaluation No.: the number of evaluations conducted.
*2 Project No.: the number of projects evaluated.
*3 T: Technical Cooperation, TAP: Technical Assistance Projects Related to Japanese ODA Loan, G: Grant Aid

| Country | *1 Evaluation No. | *2 Project No. | *3 Scheme | Project name |
|---|---|---|---|---|
| Brazil | 50 | 56 | T | Project of Social Inclusion through the Incentive to Produce Oleaginous Plants for the Generation of Bio-diesel in the State of Rio Grande do Norte |
| | 51 | 57 | T | Development of Genetic Engineering Technology of Crops with Stress Tolerance against Degradation of Global Environment |
| | 52 | 58 | T | The Project for Carbon Dynamics of Amazonian Forests |
| Peru | 53 | 59 | T | Project for Enhancement of Earthquake and Tsunami Disaster Mitigation Technology |
| | 54 | 60 | G | Project for Maintenance of the Equipment for Disaster Risk Management |
| Bolivia | 55 | 61 | T | Project for the Study on the Impact of Glacier Retreat on Water Resource Availability for the Cities of La Paz and El Alto |
| | 56 | 62 | G | Project for Procurement of Drinking Water in Rural Areas in the Departments of Beni and Pando |
| Nicaragua | 57 | 63 | T | Strengthening of Activities of Survey and Control for Chagas Disease |
| | 58 | 64 | T | The Project for the Study of National Transport Plan in the Republic of Nicaragua |
| Guatemala | 59 | 65 | T | The Project for the Capacity Development of Local Governments |
| Ethiopia | 60 | 66 | T | The One Village One Product Promotion Project |
| | 61 | 67 | T | The Project of Enhancing Development and Dissemination of Agricultural Innovations through Farmers Research Groups (FRGs) |
| Malawi | 62 | 68 | T | The Project for Enhancement of Operation and Maintenance for Rural Water Supply |
| Democratic Republic of the Congo | 63 | 69 | T | Project on Capacity Development for Bridge Management |
| | | 70 | G | Project of Improvement of the Marshal Bridge in Matadi |
| Madagascar | 64 | 71 | T | Rural Development Project through the Diffusion of Aquaculture of Tylapia in the Region of Boeny, Mahajanga |
| Egypt | 65 | 72 | T | The Project for Improvement of Management Capacity of Operation and Maintenance for SHAPWASCO |
| | 66 | 73 | T | The Project for Sustainable Systems for Food and Bio-energy Production with Water-saving irrigation in the Egyptian Nile Basin |
| | 67 | 74 | T | Project for Strengthening Water Management Transfer |
| | 68 | 75 | T | The Project for Improvement of Management Capacity of Operation and Maintenance for Water Supply Facilities in Nile Delta Area |
| | 69 | 76 | T | The Project for Enhancement of Competitive Strategy for Suez Canal |
| Tunisia | 70 | 77 | TAP | The project for the Development of Irrigated Area of Northern Tunisia |
| Croatia | 71 | 78 | T | Project for Risk Identification and Land-use Planning for Disaster Mitigation of Landslides and Floods in Croatia |
| Iraq | 72 | 79 | T | Project on Master Plan Study for Port Sector in Iraq |
| Iran | 73 | 80 | T | Establishment of Emergency Response Plan for the First 72 Hours after an Earthquake |
| | | 81 | T | Capacity Building for Earthquake Risk Reduction and Disaster Management in Tehran |
| Kosovo | 74 | 82 | T | Human Resource Development Project on Geo-spatial Information for Implementation of Spatial Plan of Kosovo |
| Turkey | 75 | 83 | T | Industrial Automation Technology (IAT) Extension Project for Central Asian/Middle East Countries |
| Bosnia and Herzegovina | 76 | 84 | T | Project for Herzegovina International Tourism Corridor Development and Environmental Conservation |
| Palestine | 77 | 85 | T | Strengthening Support System focusing on Sustainable Agriculture in Jericho and Jordan River Rift Valley |
| | | 86 | T | The Project on Improved Extension for Value-Added Agriculture in the Jordan River Rift Valley |
| Kenya | 78 | 87 | T | The project for Sustainable Smallholder Irrigation Development and Management in Central and Southern Kenya (SIDEMAN) |
| | 79 | 88 | T | Establishment of Rural Electrification Model Using Renewable Energy |
| | 80 | 89 | T | Smallholder Horticulture Empowerment and Promotion Unit Project |
| Nigeria | 81 | 90 | T | Project on Activation of Women Development Centres (WDCs) to Improve Women's Livelihood Phase 2 |
| Ghana | 82 | 91 | G | Project for the Development of Community-based Health Planning and Service Infrastructure in the Upper West Region |
| | 83 | 92 | T | Project for Strengthening Operational Capacity of Prevention of Mother-to-Child Transmission of HIV (PMTCT) |
| | 84 | 93 | G | The Project for Improvement of Access to Basic Education In Deprived Areas |
| | 85 | 94 | G | The Project for Introduction of Clean Energy by Solar Electricity Generation System |
| Sierra Leone | 86 | 95 | T | Integrated Project for Rural Health Improvement |
| | 87 | 96 | T | Sustainable Rice Development Project in Sierra Leone |
| Tanzania | 88 | 97 | T | Project for Institutional Capacity Strengthening for HIV Prevention |
| | | 98 | T | Health System Strengthening for HIV and AIDS Services Project |
| | 89 | 99 | T | Strengthening Development of Human Resource for Health |
| Mozambique | 90 | 100 | T | The Integrated Agricultural Development for Small Scale Farmers in Chokwe Irrigation Scheme |
| | | 101 | T | The Project for Rice Productivity Improvement in Chokwe Irrigation Scheme |
| | 91 | 102 | T | The Project for the Capacity Development of Road Maintenance in the Republic of Mozambique |
| | 92 | 103 | T | Project for Enhancement of the Capacity of Destination Marketing and Promotion through Strengthening the Linkage among Tourism Related Organizations |
| Senegal | 93 | 104 | T | Project for Sanitation and Hygiene Improvement in Rural Areas of Tambacounda, Kédougou and Matam Regions |
| | 94 | 105 | T | The Project for Promotion of Artisanal Activities through One Village One Product Programme (Project de Promotion de l'Artisanat a Travers le Programme Un Village Un Product) |
| Burkina Faso | 95 | 106 | G | A project of Primary School Construction (Phase IV) |
| | 96 | 107 | T | Digital Topographic Mapping Project in Burkina Faso |
| Uganda | 97 | 108 | G | The Project for Provision of Improved Water Source for Resettled Internally Displaced Persons in Acholi Sub-Region |
| Zambia | 98 | 109 | T | Health Capital Investment Support Project |
| | 99 | 110 | T | The Project for Scaling Up of Quality HIV and AIDS Care Service Management |

**External Evaluation: Highlights** | Out of the 68 external evaluations in FY2018, 3 external evaluations are selected based on geography, assistance scheme, and sector.

**India**

**ODA Loan**

# Hogenakkal Water Supply and Fluorosis Mitigation Project (Phase 1) & Hogenakkal Water Supply and Fluorosis Mitigation Project (Phase 2)

Provision of safe and reliable water supply services to all rural habitations in the Project area, thereby contributing to meeting the increasing water demand and mitigation of fluorosis in the concerned areas.

External Evaluator: Eriko Yamashita, Value Frontier, Co., Ltd.

| Overall | A |
|---|---|
| Effectiveness and Impact | 3 |
| Relevance | 3 |
| Efficiency | 2 |
| Sustainability | 3 |

## Project Description

**Loan amount / Disbursed amount:**
(Phase 1) 22,387 million yen / 16,885 million yen
(Phase 2) 17,095 million yen / 7,304 million yen

**Loan agreement:**
(Phase 1) March 2008
(Phase 2) March 2009

**Terms and conditions:**
Interest Rate:
- 1.20% for Construction of Water Supply Facilities, Fluorosis Mitigation and Capacity Building activities;
- 0.01% for Consulting Service
Repayment Period: 30 years (Grace Period:10 years)
Conditions for Procurement: General untied

**Final disbursement date:** July 2017

**Executing agency:**
Tamilnadu Water Supply and Drainage Board (TWAD)

**Overall Goal:**
Imrpove the living conditions of the residents in the Dharmapuri and Krishnagiri districts in the southern State of Tamil Nadu

**Project Purpose:**
Provide safe and reliable water supply services to meet the increasing water demand

**Output:**
Constructing water supply facilities sourced from the River Cauvery and providing fluorisis mitigation support

Hogenakkal Water Treatment Plant

## Effects of Project Impelementation (Effectiveness, Impact)

The target effect indicators, such as the served population, water supply amount, daily water availability amount per person, water supply hours and water quality, were all met. Accordingly, providing a reliable safe water supply that meets the national standard for drinking water has been achieved by the Project. The water supply facilities has been operated appropriately in accordance with its plan and there are no issues with operation indicators.

The residents' living conditions in the two districts have improved, as safe drinking water became available inside their living habitations which had previously suffered with chronical water shortages; the labour for water fetching was reduced, thus, allowing for the utilization of saved time and energy in other activities. As water collection is a job for women in many households in the area, the impact of living conditions improvement has been particularly substantial from the gender perspectives.

In addition, the result of urine sample analysis, conducted among the residents who had contracted fluorosis before the Project, confirmed that the number of fluorosis patients detected with more than 1mg/L in their urine decreased substantially after safe drinking water provision started by the Project. The residents in future generations are expected to reduce the fluorosis prevalence among them and accordingly to improve their health conditions. Moreover, this project implemented the fluorosis mitigation component as an official and integral part of the water supply project for the first time in India. It contributed to improving the fluorosis knowledge of doctors and school teachers in the area, resulting in their improved capacity to provide the appropriate medical treatment for the fluorosis-affected patients and to promote the fluorosis prevention in the area. Therefore, effectiveness and impacts of the Project are high.

## Relevance

The Project is consistent with India's national development and sector policies that uphold securing safe water to all and also with the development needs of the two districts that were suffering from chronic water shortage and were dependent on fluoride-contaminated groundwater. It was also consistent with Japanese ODA policies. Therefore, its relevance is high.

## Efficiency

Water supply facilities were fully constructed to provide necessary amount of water to all the residents in the area. While the Project cost was within the planned cost, the Project period was much longer than planned, due to the delayed authorization for water connection in two areas and the delayed implementation of the fluorosis mitigation component. Therefore, efficiency of the Project is fair.

## Sustainability

The facilities constructed by the Project are operated and maintained appropriately, and there are no major issues in institutional/organisational, technical, or financial aspects. Thus, sustainability of the Project is high.


Women collecting water at public fountains (PFs)


In this rural local body, PFs were constructed in front of each house


Educational posters on fluorosis, displayed in a classroom at primary school

## Conclusion, Lessons Learned and Recommendations

In light of the above, this Project is evaluated to be highly satisfactory.

While the executing agency (TWAD) fully ensures a reliable, appropriate amount of water supply to all local bodies, it is critically important to ensure equal water distribution capacity of the local bodies within their respective habitations. Establishment of an institutional support structure within TWAD, for the implementation of continuous and regular capacity building for local bodies in enhancing equal distribution, would be highly recommended.

On the other hand, operational independence for local bodies is guaranteed by India's relevant national policies. In the face of such circumstances, this Project was successful in constantly grasping the local level technical maintenance conditions through engineers' close collaboration between TWAD and the District government on daily basis. Besides the fact that beneficiaries can report to their local bodies when an issue arises, the District government has established a reporting structure in which beneficiaries can also request technical support directly to the District government by free phone and 24-hours a day. This has allowed TWAD and the District government to provide direct technical maintenance support to local level facilities that are under local bodies' responsibility, and minimized the Project's maintenance risks. This can be referred to as a model for planning other similar projects in other states facing similar risks caused by vulnerabilities of local bodies or communities, in consideration of sustainability.

In Tamil Nadu, a State order ensures no water charges for PF users. Although TWAD and District governments cannot fully recover the required O&M cost through this water charge system, there is a mechanism to recover the financial gap of O&M by various funds and subsidies, granted by the national and state governments in light of the national water policies that uphold that drinking water provision is considered one of the most fundamental rights of the population. On the other hand, house connection of all households in the entire local body should potentially contribute to the realization of equal water distribution as well as ensuring the Project's sustainability. As house connection fees are allegedly an obstacle for promoting house connection in the area, contemplating house connections for the entire project area, as an integral part of the project, should be considered for future similar projects as a lesson learned.

## Effect Indicator

| | | Baseline 2007 | Target 2015 2 years after completion | Actual 2017 Completion year | Actual 2018 1 year after completion |
|---|---|---|---|---|---|
| Population served (thousand) | | 910 | 3,238 | 3,342 | 3,376 |
| Total available amount of water supply ($m^3$/day) | | 40,875 | 152,799 | 144,185 | 160,075 |
| Water availability amount (liters per capital and per day) | Municipality | 37 | 90 | 90 | 90 |
| | Town Panchayat | 29 | 70 | 70 | 70 |
| | Habitation | 10 | 40 | 40 | 40 |
| (Additional indicators) Quality of treated water | Fluoride (mg/L) | Not available | Not defined | 0.1 | 0.1 |
| | Iron (mg/L) | | | Not detected | Not detected |
| | E. Coli (numbers) | | | Not detected | Not detected |
| | Turbidity (NTU) | | | 0.50 | 0.35 |
| | Manganese (mg/L) | | | Not detected | Not detected |

### Key Point of Evaluation

The success for construction of water supply facilities and keeping their high sustainability in all the rural habitations across the entire Project area, which consists of approximately 8,000 habitations, are attributed by high commitment of TWAD to the Project, in addition to the water supply importance in residents' daily lives.

An institutional initiative for TWAD engineers, called Change Management Group (CMG), was implemented before the Project during the 2000's, which aimed to transform TWAD to be a "people focused, community responsive, and publicly accountable organization." As an impact of CMG, plans for new rural water supply schemes are prepared and implemented through discussions with community; TWAD engineers also began mobilizing appropriate and sustainable strategies in consideration of different needs by various types of water users, including women and scheduled castes, resulting in the great enhancement of a "safe water supply for all". Furthermore, attitudinal change of TWAD engineers, toward community members and villagers, induced water service users to take ownership of their water supply schemes, therefore, contributed to promoting rural water governance.

The CMG, as a success model, was analysed and referred to as a case study on water governance by many international donors as well as development institutions. It was also referred to in a number of water sector reform cases not only by other states of India, but also by countries around the world. To disseminate the CMG model, Centre of Excellence for Change has been established in Chennai, the capital of Tamil Nadu, and the dissemination of its experience in the water sector is continuously promoted.

Independent State of Papua New Guinea

Grant Aid

# The Project for Rehabilitation of Madang Town Market

Promotion of distribution of agricultural and fishery products in the region through construction of new market facilities

External Evaluator: Keisuke Nishikawa, Japan Economic Research Institute Inc.

| Overall | |
|---|---|
| B | |
| Effectiveness and Impact | 3 |
| Relevance | 3 |
| Efficiency | 2 |
| Sustainability | 2 |

## Project Description

**Grant Limit / Actual Grant Amount:**
1,004 million yen / 999 million yen

**Exchange of Notes:**
October, 2013

**Project Completion:**
February, 2016

**Executing Agency:**
National Fisheries Agency

**Overall Goal:**
Madang's local economy will develop in a sustainable manner.

**Project Purpose:**
Good quality services will be provided as a central market in the Madang region.

**Output:**
New market facilities with an environment where local agricultural and fishery products will be distributed hygienically and efficiently will be constructed.

Entire view of the Madang Town Market

## Effects of Project Impelementation (Effectiveness, Impact)

Through this project, in addition to the full rehabilitation of dilapidated facilities, technical assistance was provided on the maintenance of facilities and equipment as well as financial management so that the market would be efficiently operated.

'The ratio of retailers running businesses in the facility with both flooring and roof', 'the number of sales units per floor area of 100m2 in market buildings', and 'the amount of tap water sold within the market' in the market had been set as the basic quantitative indicators to measure project effects. While the number of sales units per floor area of 100m2 in market buildings based on the number of vendors in the market fell slightly short of the target value, it was judged that sufficient effects were generated as a whole as the targets of other indicators were achieved. Additionally, qualitative effects were observed such as significant improvements in the hygienic environment and the environment for users that became clear through the interview survey with vendors and customers.

With regard to the impacts, while there were no data clearly indicating the causal relationship between this project and the regional economic development, the market has been extensively utilized also by the vendors from the inland region of Highland and has always been vibrant to the extent that even the buildings developed through this project were not providing sufficient room. It can be said that the market has been playing an essential role for local residents in terms of the distribution of vegetables, fruits, fresh fish, crafts, and so on. Also there were no issues in terms of environmental and social aspects as there were neither negative impacts to the natural environment nor resident resettlement / land acquisition cases having been caused through this project.

Therefore, it is judged that the effectiveness and impacts of this project are high.

## Relevance

In Papua New Guinea, there has generally been a strategy to shift from dependency on energy resources to income improvements in rural areas through the transformation to promote the agricultural, forestry and fishery sector in rural areas, and this project was consistent with this direction at both the time of planning and ex-post evaluation. Also, the Madang Town Market has been the only large market permanently installed to facilitate sales and purchases of agricultural and fishery products in the Madang region, and has consistently been of high significance for the local residents. Furthermore, this project was consistent with Japan's ODA policy for the Pacific region and Papua New Guinea at the time of planning. Therefore, this project is highly relevant as a whole.

## Efficiency

While there were slight changes to the outputs of this project, it was implemented mostly as planned and the project cost was within the plan (100% of the plan). On the other hand, regarding the project period, there was a delay of six months mainly due to the influences of the stranding of the vessel transporting the heavy equipment and materials of this project. In


Internal view of the market building


View of the fresh fish retail building


View of outdoor sales

addition, the actual opening of the market developed in this project was delayed by another six months as more time was required till the agreement between the provincial government and the urban local-level government was concluded, leading to the practical project period becoming 152% of the plan. Therefore, the efficiency of this project is fair.

## Sustainability

While there were no major problems found in the technical and financial aspects of operation and maintenance of the market constructed through this project, there were some issues in the organizational aspect, in terms of securing staff members for the Market Limited, and in the maintenance status. Therefore, the sustainability of the effects generated in this project is fair.

## Conclusion, Lessons Learned and Recommendations

In light of the above, this project is evaluated to be satisfactory.

As the lessons learned, there was a need for advance confirmation of the establishment of organizational structure conducive to the generation of project effects. In this project, the commencement of operation was delayed by half a year from the date of completion as the operating structure of the market after project completion had not been decided. Also, the majority of those related to the Madang Town Market instructed under the soft component of this project (except for one person) were not involved in the operation of the market after the Market Limited was set up. As the establishment of an appropriate operating structure is essential for the sufficient generation of project effects, it is desirable to have credible assurance on the structure for the generation and steady continuation of project effects during the planning stage. Moreover, it is important to provide technical instructions directly to those staff members to be engaged in operation and maintenance when the operating structure is confirmed.

As recommendations to the executing agency, the following points were raised: More stringent control of the sales booths for vendors; immediate repair of cracks on the ceiling panels; installation of a water tank in case of water supply suspensions; direct sales of ice for the fresh fish retail building, and ensuring of higher safety when crossing the public street between the agricultural market site and the fresh fish retail site.

### Changes in the Quantitative Indicators of This Project

| | Baseline | Target | Actual |
|---|---|---|---|
| | 2011 | 2018 | 2018 |
| | | 3 Years After Completion | 2 Years After Completion |
| Ratio of retailers running businesses in the facility with both flooring and roof | Approx. 34% | Approx. 80% | 80% |
| Number of sales units per floor area of 100 m² in market buildings | Approx. 15.6 units | Approx. 17.9 units | Based on the number of sales units: 17.7 units (Based on the number of vendors: 14.5 units) |
| Amount of tap water[Note] sold within the market | 0 | Approx. 60 tons/year | 75 tons/9 months (Jan. - Sep. 2018) |

Source: (baseline and target values) Ex-ante Evaluation Summary Report, Preparatory Survey Report, (actual values) responses from Madang Town Market Limited, and the result of actual counting at the time of ex-post evaluation
Note: Hygienic water used for washing, preventing desiccation, and keeping freshness of vegetables and fresh fish

### Results of Qualitative Survey on the Changes in Hygienic Environment of the Market

| | | Improved a lot | Improved a little | Same level | Worse |
|---|---|---|---|---|---|
| Waste management | Vendor | 85% | 10% | 5% | 0% |
| | Customer | 80% | 20% | 0% | 0% |
| Muddy conditions | Vendor | 95% | 0% | 5% | 0% |
| | Customer | 100% | 0% | 0% | 0% |
| Drainage functions | Vendor | 90% | 5% | 0% | 5% |
| | Customer | 95% | 0% | 5% | 0% |
| Odour | Vendor | 70% | 10% | 5% | 15% |
| | Customer | 80% | 20% | 0% | 0% |

Source: Results of the Qualitative Survey

### Key Point of Evaluation — Roles of a logistics hub as the essential part of the regional economy

While there were no data quantitatively verifiable, it was confirmed through the interviews with the executing agency, the Market Limited, vendors and customers that the large-scale market constructed in this project was playing a vital role for the stable distribution and transaction of agricultural and fishery products. Under the conditions where security was not necessarily stable, safety of vendors and customers was always ensured by surrounding the entire market with fences, and the number of vendors had increased to the saturation point of the whole market. Rules were displayed on notice boards at several locations in the market and were being strictly enforced. In the market, sales activities were carried out by vendors not only from the Madang region but also the inland region of Highland, and it was observed that the hygienic and well-disciplined market was playing a significant role for the smooth distribution of agricultural and fishery products.

This kind of market facility can be said to be playing an essential role in terms of vitalization of the regional economy and prevention of outmigration of the people from the region in the country where there is an issue of urbanization and the associated security deterioration. Following this project, a market rehabilitation project was being implemented in Alotau, the capital of Milne Bay Province, with JICA's assistance at the time of ex-post evaluation and a similar project was being planned in Kavieng, the capital of New Ireland Province. This indicates a reaffirmation of the significance of the functions of the market for the vitalization of regional economies throughout the country.

Ethiopia

Technical Cooperation

# Technical Cooperation for Emergency Development Planning "Rural Resilience Enhancement Project"

## Seeking for enhancement of resilience against droughts

External Evaluator: Mayumi Hamada, Foundation for Advanced Studies on International Development

| Overall | |
|---|---|
| C | |
| Effectiveness and Impact | 2 |
| Relevance | 3 |
| Efficiency | 2 |
| Sustainability | 2 |

## Project Description

**Total cost (Japanese side):**
1,394 million yen

**Period of cooperation:**
April 2012 – December 2015

**Partner country's implementing organizations:**
Bureau of Agriculture and Natural Resources Development, Conservation and Utilization, Ministry of Agriculture, Bureau of Agriculture and Natural Resources Development, Oromia Region, Somali Region Basin Development Bureau, Oromia Pastoralist Area Development Commission and Shebelle Irrigation Development Project Office

**The number of experts dispatched:**
29 persons (193.8M/M)

**Main equipment provided:**
Surveying vehicles, shovels, pickaxes, hoes, handcarts, etc.

**Overall Goal:**
1. The project's recommendations are referred / reflected in the process of establishing regional disaster-risk-management strategies.
2. The drought damage in the target areas is reduced.

**Project Purpose:**
In the Oromia and Somali Regions, recommendations are made to enhance the resilience of pastoralists, agro-pastoralists, and former pastoralists, based on the implementation of the pilot projects.

**Output:**
1. The pilot project is implemented in a pastoral area to enhance the resilience of pastoralists and agro-pastoralists (Borena, Oromia Region).
2. The pilot project is implemented in a pastoral area to enhance the resilience of former pastoralists (Gode, Somali Region).
3. The pilot project is implemented in erratic-rainfall areas to enhance farmers' resilience (erratic-rainfall area, Oromia Region).

Livestock market constructed in Oromia Region (Output 1)

## Effects of Project Implementation (Effectiveness, Impact)

This project was an instance of Technical Cooperation for Emergency Development Planning; it was aimed at providing recommendations for enhancing resilience of pastoralists, agro-pastoralists and ex-pastoralists, based on the implementation of the 3 pilot projects (Outputs 1-3) by its completion. Hence, the implementation situations of the 3 planned pilot projects were assessed as the achievement situations of the outputs, and the submission of appropriate recommendations based on them as Project Purpose. The effectiveness is high because the Outputs were achieved almost as planned and because Project Purpose was also achieved since the recommendations for enhancing the target group's resilience, based on the implementation of the 3 pilot projects, were submitted by the project's completion.

As for the achievement of the overall goal, the project's recommendations were referred when regional disaster risk management strategies were being formulated. However, decreases in drought damage by securing a certain level of income were not sufficiently achieved since the Outputs achieved by the pilot projects did not sufficiently continue after the project completion. On the other hand, positive indirect impacts appeared, such as improved quantities of water secured at rehabilitated ponds leading less frequency of pastoralists' move. Thus, the effectiveness and impact are assessed to be fair.

## Relevance

The project direction aimed at enhancement of resilience of the pastoralist, agro-pastoralists and ex-pastoralists against droughts in areas where the drought damage is serious is consistent with Ethiopian policies to strengthen resilience against natural disasters including drought, development needs in the target area where people are suffering from serious droughts, and Japan's aid policy which aimed at supporting measures and enhancement of resilience against natural disaster. Thus, the relevance is high.

## Efficiency

Both the project cost (127% compared with the plan) and project period (124%) exceeded the plan, although the project outputs were achieved by the project's completion. This was caused by the delay of the construction of irrigation facilities at Gode in Somali Region (Output 2). There are many reasons for the delay, while insufficient information collection during the planning stage largely affected. Thus, the efficiency is fair.

## Sustainability

The sustainability in terms of policy and political commitment is high, because disaster risk management and establishment of resilience are emphasized at the time of the ex-post evaluation. However, there are institutional/organizational problems. The information on the construction of irrigation facilities at Gode was not taken over when the regional implementing organization was restructured, and there is concern over the possibility of reflecting

the project's recommendations into the disaster risk management strategy. Also, some partial technical and financial problems are observed. Thus, the sustainability of the project's effects is assessed as fair.


Irrigation facility constructed in Somali Region


Irrigation facility constructed in Somali Region (Output 2)

## Conclusion, Lessons Learned and Recommendations

Based on the above, the project is assessed to be partially satisfactory.

As for the recommendation regarding Output 2's irrigation facilities, the Shebelle Irrigation Development Project Office should take immediate supportive action to maintain and rehabilitate the irrigation facilities by repairing the nonfunctional generators and pumps and damaged canals. For the above, the office should invite an engineer from the capital as needed. If it is difficult for the above implementing organization to do so alone, JICA should support it.

As for the lessons learned, firstly, when irrigation facilities and so forth are constructed as a part of Technical Cooperation for Emergency Development Planning, it is necessary to strengthen information collection in advance, compared with other emergency types of the same scheme. The project was implemented before sufficient information was collected during the planning stage on the irrigation facility construction in Gode, because urgency was emphasized. This resulted in the extension of the project's duration due to the problems which occurred during implementation. Secondly, when multiple components are combined into a single project, the extent to which the activities and effects are substantially connected should be assessed. If there is no substantial connection, they should not be forcibly combined, but should be independent projects if necessary. The project's 3 Outputs (components) are common in that they are aimed at enhancing resilience in rural areas, but their activities were not substantially related, so there would have been no problem even if they were conducted separately. Suppose Output 2 were an independent project, it might have been implemented for longer period, without any relation to the expected project duration for other Outputs.

### Table 1: Achievement of the Outputs

| Outputs | Major content | Achievement |
|---|---|---|
| 1. The pilot project is implemented in a pastoral area to enhance resilience of pastoralists and agro-pastoralists against droughts. (Component 1: Borena, Oromia Region) | 1) Community Based Projects (hereinafter, CBPs)<br>2) Rangeland improvement and pasture production<br>3) Dryland farming improvement16<br>4) Secondary livestock market construction | ◎ |
| 2. The pilot project is implemented in a pastoral area to enhance the resilience of former pastoralists against droughts. (Component 2: Gode, Somali Region) | 1) Construction of irrigation facilities at 4 sites in Gode<br>2) Procurement of equipment for pumping facilities<br>3) Soft components (establishment of WUAs (Water Users Associations), training for farmers, DAs (Development Agents), operators for the irrigation facilities) | ○ |
| 3. The pilot project is implemented in the erratic-rainfall area to enhance farmers' resilience against droughts. (Component 3: Erratic-rainfall area, Oromia Region) | 1) Development of WII<br>2) Training (for DAs, intermediary organizations, and insurance companies)<br>3) Extension of WII | ◎ |

Source: Questionnaires sent to the implementing agencies and the Ministry of Agriculture
Remarks: The grades for the achievement are as follows: ◎, The activities and results went beyond what was planned;○, the activities and results mostly occurred as planned;△, the activities and results neither went as planned nor deviated too far from the plan;×, the activities and results mostly did not occur as planned;××, the activities and results did not occur at all as planned.

### Table 2: Achievement of the Project Purpose (Overview of the Recommendations)

| Component | Overview of the Recommendations |
|---|---|
| Component 1 | The project's Final Report indicated that the RREP approach should be expanded because the project's effects had been acknowledged, and 21 specific recommendations in 7 categories were made regarding the expansion. |
| Component 2 | There were 10 recommendations in 6 categories made, including a deployment strategy on development projects in the areas where emergency aid will be provided, the utilization of construction machinery owned by the Ethiopian government, and more and the enhanced capacity of experts in agriculture for extending irrigation agriculture through pumping irrigation. |
| Component 3 | There were 10 recommendations, including specific points to keep in mind when selecting target sites; mobilizing DAs and district staff for awareness raising and extension activities for insurance; incorporating activities for extending insurance to the routine work of DAs; and establishing an implementation structure for monitoring weather data to be done by a third party. |

Source: Final Report P II-9-1–9-4, III-7-1–7-3, IV-7-1–7-3

### Table 3: Achievement of the Overall Goals

| Overall Goal | Indicator | Achievement |
|---|---|---|
| 1. The project's recommendations are referred/reflected in the process of establishing regional disaster risk management strategies. | 1-1 The project's recommendations are referred in the process of establishing regional disaster risk management strategies. | ○ |
| | 1-2 The project's recommendations are reflected in the process of establishing regional disaster risk management strategies. | × |
| 2. The drought damage is decreased in the target areas when drought occurs. | Securing a certain level of income for the pastoralists and agro-pastoralists in Borena, Oromia Region; the former pastoralists in Gode, Somali Region; and the farmers in the erratic-rainfall area of Oromia Region during droughts | △ |

Sources: The ex-ante evaluation sheet for the overall goals and their indicators (P3-P4); the questionnaires sent to the implementing agencies; and interviews of the DAs, WUAs, and villagers regarding the goals' achievement
Remarks: The ratings for the achievement are as follows: ◎, Achieved more than expected; ○, Achieved as much as expected;△, Neither achieved nor failed to achieve;×, Not achieved sufficiently;××, Not achieved at all

## Key Point of Evaluation — Activity Design to support people's self-sufficiency for enhancing sustainability

In the projects that other donor organizations supported, the cash-for-work approach (in which cash is paid for the work) is often adopted in participatory development, particularly when poor villagers conduct rehabilitation of small reservoirs and similar places. However, concerning the rehabilitation of small reservoirs and such in the Community Based Projects*1 (hereinafter referred to CBPs), the Japanese expert team chose not to make cash payments. This is because they emphasized sustainability in supporting the mutual help activities that had been traditionally conducted in the communities, so that they can continue after the project completion. As a result, the frequency with which the CBPs activities were implemented drastically increased. Also, during the workshop at the project site (which took place before the project's completion), the participants observed that the RREP approach was better than the cash-for-work approach in terms of both relevance and sustainability. It was pointed out that the cash-for-work approach, when applied as part of other projects by other donors carried in pastoralist areas, led to weaker social ties and less sense of collaboration - thereby resulting in lower relevance and sustainability. Thus, the daring decision not to pay, particularly in a country or region where other donor agencies take subsidies or use the cash-for-work approach, requires courage. However, the activities' designs for supporting people's self-sufficiency, based on sufficient information collection and a thorough comprehension of the sites' social and cultural aspects, resulted in securing sustainability.

*1: The approach of CBPs activities is "supporting various development activities routinely conducted by the communities," which was called as RREP (the abbreviation of the project name: Rural Resilience Enhancement Project) Approach by the project.

# Measures for Projects Evaluated as Having Issues

## Cambodia Greater Mekong Telecommunication Backbone Network Project

### 1 Overview of evaluation results and issues observed

The purpose of the Project is to improve telecommunication capacity and respond to the increasing telecommunication demand in the Growth Corridor, which encompasses Sihanoukville, Phnom Penh and Kampong Cham in Cambodia, by laying down an optical cable and installing related facilities and equipment in the region. It was an advanced effort at that time which incorporated an element of policy system improvement into an infrastructure development project. However, one of the project conditions, "establishing a regulatory body," required not only administrative decisions, but also legislative decisions, which made the condition extremely difficult to achieve. This caused significant delay in the Project and the executing agency lost its customer base to the competitors. Moreover, the organization has struggled with existing customer retention due to problems with the quality of service and insufficient customer response when a problem occurred. From the policy perspective, however, it was also confirmed that competition in the telecommunication service was promoted by liberalization and some customer benefits were realized, such as cheaper mobile phone service, after the regulatory body was established. Although it is difficult to verify the project impact, the Project is deemed to help maintain competition and streamline the telecommunication sector to some extent.

### 2 Recommendations and lessons learned

When incorporating policy system improvement into an infrastructure development project, it is vital to ensure that the improvements would be essential for the recipient country's reform, and that JICA focuses on the type of improvements that administrative organizations can directly respond to and make decisions for. Accordingly, lessons were learned that JICA should operate projects in a flexible manner to steadily achieve their project purpose by, for example, adjusting conditions based on the actual situations.

### 3 Measures to be taken by the JICA department in charge of the project

The ex-post evaluation pointed that while the executing agency has been promoting major institutional changes and innovations, it is important to establish and implement its strategy early, including budgetary measures, in order to retain existing customers and to attract new customers. JICA will follow up the progress of formulation and implementation of the strategy.

Local access cable (overhead line)

## The Philippines Help for Catubig Agricultural Advancement Project

### 1 Overview of evaluation results and issues observed

The objective of this project was to improve agricultural productivity and production in Catubig Valley in east-central part of Northern Samar Province by developing rural infrastructure such as irrigation facilities, thereby contributing to higher incomes for local farmers and improvement of public health and sanitation conditions in the area. The evaluation confirms certain effects of project implementation, such as improvement in the ease of travel as a result of road development as well as supply of safe water through the construction of water supply facilities. However, since irrigation and drainage facilities were not completed at the time of ex-post evaluation, rice was produced by farmers only in the limited regions. Since the project effect was limited at the time of ex-post evaluation, the effectiveness and impact of the project were evaluated to be low. Efficiency was evaluated to be low because the project cost and period significantly exceeded the plan while sustainability was as fair, reflecting some concerns about institutional aspect and the implementation status of operation and maintenance. In the light of the above, the project was evaluated to be unsatisfactory.

### 2 Recommendations and lessons learned

It was recommended that executing agencies and concerning organizations complete uncompleted part of irrigation facilities as early as possible, operate and maintain completed part of facilities, provide agricultural support service and keep taking anti-schistosomiasis and sanitation measures. It was also recommended that JICA follow up the progress after the project completion as the subject of ex-post monitoring and promote the collaboration between executing agencies and

concerning organizations. The following lessons were also learned: (i) implementation system for comprehensive agriculture and rural development should be examined sufficiently; (ii) risk factors of delays should be examined comprehensively based on the topography and weather conditions of the target area, and; (iii) planning sufficient countermeasures is preferred to increase the planted area in irrigation projects implemented in poverty areas.

### 3 Measures to be taken by the JICA department in charge of the project

Although the construction of irrigation and drainage facilities was yet completed, the loan of the project was terminated in 2013 and the Project was subsequently implemented under the Philippines' budget reflecting the intention of the Government of the Philippines. After the loan termination, JICA has made efforts to promote the project by attending stakeholder meetings to monitor the progress as well as supporting trainings for farmers to supervise construction of uncompleted irrigation and drainage facilities and increase their planted area. JICA will keep monitoring the progress of efforts made by executing agencies and related organizations and encouraging them as needed.

Main irrigation canal under construction in the Bulao Service Area

The completed Catubig Dam

## Peru Iquitos Sewerage Improvement and Expansion Project

### 1 Overview of evaluation results and issues observed

The purpose of this project was to drain and treat sewage, by improving and expanding the sewerage system in Iquitos in the Department of Loreto, one of the local cities in Peru, thereby contributing to improved sanitary conditions and living environment in the area.

However, connection pit installed in each household for separating rainwater and sewage introduced in those wastewater collection and treatment methods adopted at the project planning stage was not suitable to local circumstance. For this reason, the wastewater treatment plant constructed in the Project was not operated at the time of ex-post evaluation. Moreover, the city's sewerage connection ratio remained low and wastewater continued to be untreated. Therefore, the overall rating of the Project is unsatisfactory.

### 2 Recommendations and lessons learned

Although the executing agency is still facing many issues such as dispute with contractors, it was recommended that the agency strive to start operation at the minimum level (regular commissioning, operation of wastewater treatment facilities with gravity flow) to achieve proper facility maintenance. In addition, lessons were learned that it was preferable to examine whether separating rainwater and sewage was applicable when choosing the separating method after taking into consideration of local situations at the time of planning.

### 3 Measures to be taken by the JICA department in charge of the project

Regarding remaining necessary works, JICA has encouraged the Government of Peru repeatedly and provided technical supports by dispatching experts to restart the wastewater treatment plant operation as early as possible. Confirming the progress of efforts to restart the facility made by the Peruvian Government, we keep encouraging the government and providing technical supports.

Pumping station constructed by the Project

Wastewater treatment plant (trickling filter)

# Internal Evaluation: Highlights

## ▶ What an in-house intern*1 learned from internal ex-post evaluation - How to conduct operations effectively overlooking the whole project cycle -

During my in-house internship at the JICA Evaluation Department, I had the opportunity to oversee an internal ex-post evaluation for the Project on Service Improvement of NAFED in Indonesia (Technical Cooperation) as an evaluator. When applying for the internship program, I was interested in "conducting evaluations quantitatively, while understandable to the public and more story-based". However, in proceeding with the actual evaluation, I became strongly interested in linking the evaluation result to post-evaluation and "beyond".

### Intern Report
### [How to leverage evaluation result – importance of feedback to the implementing agency]

Evaluation is leveraged on various occasions in our everyday life - familiar examples include when rating restaurants and reviewing new products. Such consumer evaluations/feedbacks have a great impact on the decision-making of an enterprise to improve its business.

Recently, in particular, JICA has facilitated efforts to consolidate knowledge management to leverage lessons learned and recommendations from evaluations. As evaluation and analytical approaches, for example, JICA introduces an impact evaluation which scientifically measures highly-effective evidence-based intervention and ethnography. It reconstructs and contextualizes the reality of the "field" in a narrative style from the perspective of a wide-ranging stakeholders, not only the project beneficiaries, but also the supporters. However, the additional input in terms of corresponding time, budget and labor to implement such approaches on a larger scale makes it no easy task. Accordingly, an internal ex-post evaluation is conducted within the scope of existing resources for many projects to measure/analyze the project impact.

The ex-post evaluation of a Technical Cooperation project I conducted was no exception. I set out the evaluation policy/questions as usual in line with manuals developed by the Evaluation Department and included the available information in the evaluation report in line with the given procedures. However, rather than the checking process, what was most challenging for me was the need to identify "recommendations" as required to address or facilitate issues based on the evaluation result and "lessons learned", which were expected to be applicable to similar projects in future. In the project I was in charge of, most counterparts from the implementing agency had already relocated, hampering efforts to obtain sufficient answers to the questionnaire required for evaluation. In response, I collected the data required for the ex-post evaluation by interviewing the relevant organizations, using statistical data, observing the work space of the implementing agency and other arrangements. The fact that close cooperative relationship could not be maintained as was done during the project implementation hindered efforts to ensure a smooth ex-post evaluation. Moreover, although the mode of feedback on issues raised in the field survey to the implementing agency and how this feedback is leveraged by the implementing agency and the JICA overseas office to initiate concrete actions are important for fostering the priority "learning" for JICA in internal evaluation. It brought home to me how they are "considerable hurdles" requiring a substantial commitment to reconstruct the relationship between the implementing agency and overseas office and address issues.

### [To avoid "evaluation for evaluation" – the importance of building a relationship regularly –]

As a recommendation for all overseas offices to leverage internal ex-post evaluations, not only to meet accountability needs but also as a learning tool to initiate new project formulations, it is preferable to maintain the relationship with the implementing agency and ensure regular discussion after the project completion. Conventionally, JICA provides specific and feasible recommendations to the implementing agency to ensure project outcomes remain sustainable when the project is complete and strives to maintain the relationship with the implementing agency after completion. I realized that consolidating relationships like this was key to ex-post evaluations that would pave the way for effective "learning."

To practically apply learning from my in-house internship when I am assigned to an overseas office in future, I would like to keep them in mind.


A field survey conducted by an in-house intern
(the design of snack packages and furniture was developed and supported by an implementing agency)

Interview with an implementing agency

*1: A training system that helps junior staff other than the Evaluation Department staff learn about evaluation methods and the PDCA cycle, etc. by assisting with the actual internal ex-post evaluation and effectively perform their duties in future

## The One Village One Product Promotion Project in Ethiopia
## Lessons Learned from the Ex-post Evaluation

The Southern Nations, Nationalities and People's Regional State (SNNPR) in Ethiopia is rich with biodiversity and its climate, soil and water resources help agriculture thrive, with vegetables, fruit, spices, coffee and oilseeds produced in the SNNPR well-known nationwide. However, the scope of local farmers' activities did not extend to processing, distributing and marketing agricultural products, which were only consumed by the farmers. Accordingly, JICA implemented the One Village One Product Promotion (OVOP) Project in the SNNPR from 2010 to 2014 with the cooperation of the Ministry of Agriculture and provided training to distribute local products (ceramic products, honey products, cassavas, moringa, spices, mango jams, dairy products and fishes) by adding value to farmer groups in 22 villages.

In June 2019, a local consultant and JICA Ethiopia Office staff visited a village located within the project site to conduct an ex-post evaluation, but struggled to collect information from more villages and residents. Since many residents hesitated to share information on their income, their total income was ultimately based on the commodity price, production volume, production price and other variables.

The survey revealed that 15 (71%) out of 22 OVOP groups continued their activity and 13 OVOP groups of which (59%) have increased value added to local products by leveraging processing/packaging technologies acquired in training and having gained a profit from small-scale business.

On completion, the OVOP Project was officially transferred to a local government agency (Rural Job Opportunity Creation and Development Agency (RJOCDA)) to ensure the activity remained sustainable and in fact, no new groups were subsequently established. According to RJOCDA, their objective was to support mainly young unemployed groups, which only allowed for limited activities to support OVOP activity and which precluded efforts to effectively follow this up. Accordingly, the OVOP implementation plan for dissemination was not disseminated to areas outside the target village. Meanwhile, there are some successful business practices in the project site, within which village cooperative unions took the initiative to keep supporting OVOP activities without support from RJOCDA.

Lessons learned from this ex-post evaluation are that, to ensure sustainability after the project completion, sustained OVOP activities could be continued while working with farmers' and regional groups by appointing those groups rooted in localities like cooperative unions, rather than a higher-level agency like a ministry, as major managing agencies.

Farawacha Quality Pottery Processing and Marketing Cooperative


National staff of the JICA Ethiopia Office in charge of the evaluation

## The Project of Improvement of the Marshal Bridge in Matadi and the Project on Capacity Development for Bridge Management in Democratic Republic of the Congo (Evaluation for Technical Cooperation Project and Grant-Aid Project combined)
## The effect and sustainability of the Grant-Aid project were enhanced by Technical Cooperation project

The Matadi Bridge was constructed in 1983 and is the only bridge over the Congo River which encompasses the world's second largest river basin area. The project was implemented at the same time that the Akashi-Kaikyo Bridge was constructed in Kobe, Japan. The Matadi Bridge is a suspension bridge, covering a total span of 722 m and constructed with a Japanese ODA loan; leveraging cutting-edge Japanese technology at the time. Some 30 years after its construction however, in 2013, fundamental inspection and maintenance of the bridge and the need to foster young engineers became increasingly crucial, whereupon technical cooperation was implemented accordingly. Meanwhile, while the main suspension bridge cables dictate the lifespan of the bridge and temperature control within these cables is crucial to prevent corrosion, an internal inspection of the cable conducted under the Technical Cooperation project found deterioration due to corrosion was progressing. Accordingly, the Grant-Aid project was implemented to introduce the dry-air injection system to the bridge.

The ex-post evaluation was conducted for both the Grant Aid and Technical Cooperation projects simultaneously. It initially emerged that the power required for the dry-air injection system, which was provided under the Grant-Aid project and borne by the Democratic Republic of Congo side, was secured so that the humidity inside the main cable could be properly controlled. As well as ensuring that the equipment functioned properly, daily inspection by engineers fostered under the Technical Cooperation project was continued, to ensure any problems could be detected and addressed from an early stage.

The ex-post evaluation was conducted by a national staff of the JICA Democratic Republic of Congo Office. Under restricted conditions of unstable communication and with only one visit to the project site allowed, the national staff patiently made full use of the telephone to collect answers to questionnaires and relevant materials and successfully completed a careful evaluation and analysis. Eventually, it emerged that combining the Technical Cooperation project enhancing engineers' capacity for bridge operation and maintenance and the Grant-Aid project to install the complementary dry-air injection system helped extend the service life of Matadi Bridge. This case suggested that front-line awareness on the part of national staff could be reflected in the evaluation by getting the staff involved in formulating, implementing and evaluating the project as well as proving that the project effect could be enhanced by combining multiple schemes.

JICA President Kitaoka visited the Matadi Bridge in July 2019
Photo taken by Shinichi Kuno

Main cables with the dry-air injection system installed.
The city of Matadi located to the front.
Photo taken by Shinichi Kuno

# 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 issues.

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 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.

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

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<br>"2+4"<br>• 2 years of in-country education<br>• 4 years of studying abroad in Japan (as 1st-year undergraduate students) | Bachelor's<br>"2+3" Twinning<br>• 2 years of in-country education<br>• 3 years of studying abroad in Japan (as 2nd-year undergraduate transfer students)<br>Master's<br>• 2 years of studying abroad in Japan | Bachelor's<br>"3+2" Twinning<br>• 3 years of in-country education<br>2 years of studying abroad in Japan (as 3rd-year undergraduate transfer students)<br>Master's<br>• 2 years of studying abroad in Japan<br>Doctor's<br>• 3 years of studying abroad in Japan | Same as HELP3 |
| Number of participated students and graduates (Cumulative total) | Bachelor's: 291 | Bachelor's: 270<br>Master's: 79 | Bachelor's: 465<br>Master's: 68<br>Doctor's: 13 | Bachelor's: 359<br>Master's: 145<br>Doctor's: 23<br>(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 (action).

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 (O&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.

## 2 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."

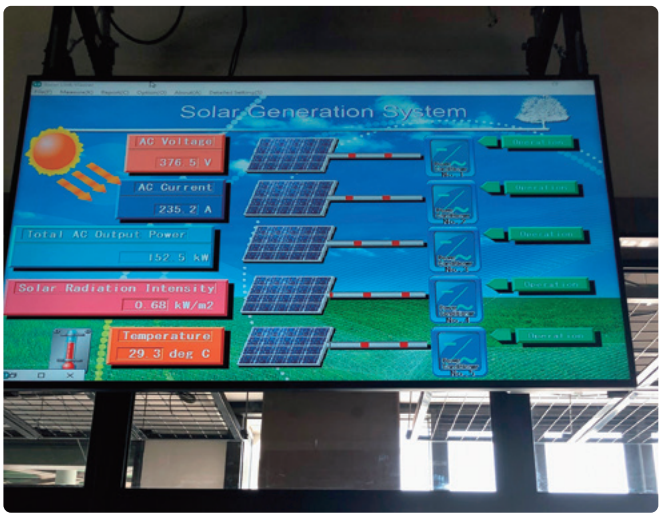
The ex-post evaluation extracted the following lessons learned:

"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 O&M."

## 3 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 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.



Display monitor under operation

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.

*1: 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.

*2: As of the end of 2018. UNHCR Global Trends 2019

*3: 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.

*4: UNHCR Global Trends 2018

*5: 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 40th 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.


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

### Case of Guiyang City

Guiyang City faced serious air pollution because of coal burning by heavy chemical plants. The concentration of sulfur dioxide ($SO_2$) 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 $SO_2$ 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 ($SO_2$) were reduced in the Guiyang City area (model district) (from 1996 to 2005)

**Cooperation under various schemes to advance the circular economy**

- 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 a first in China.

### 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 date.


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.

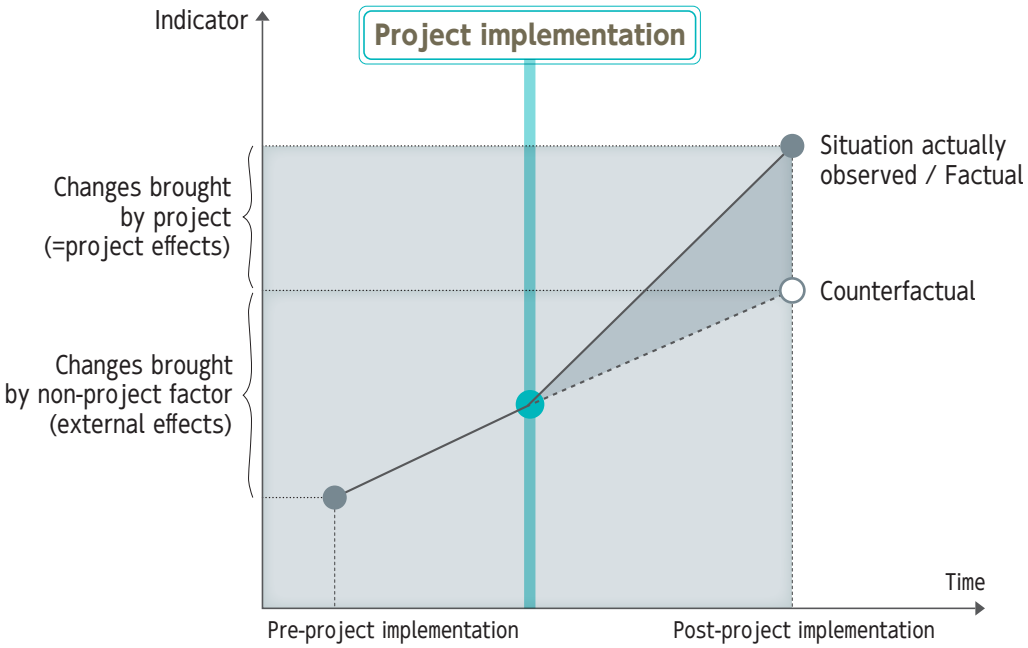
Many donor agencies have recently been promoting EBP and emphasizing the application of impact evaluation as its major tool to further enhance their project effectiveness and quality. JICA also emphasizes the application of impact evaluation throughout the organization; the operational department conducts 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




* 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.

A training session held at JICA

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 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)

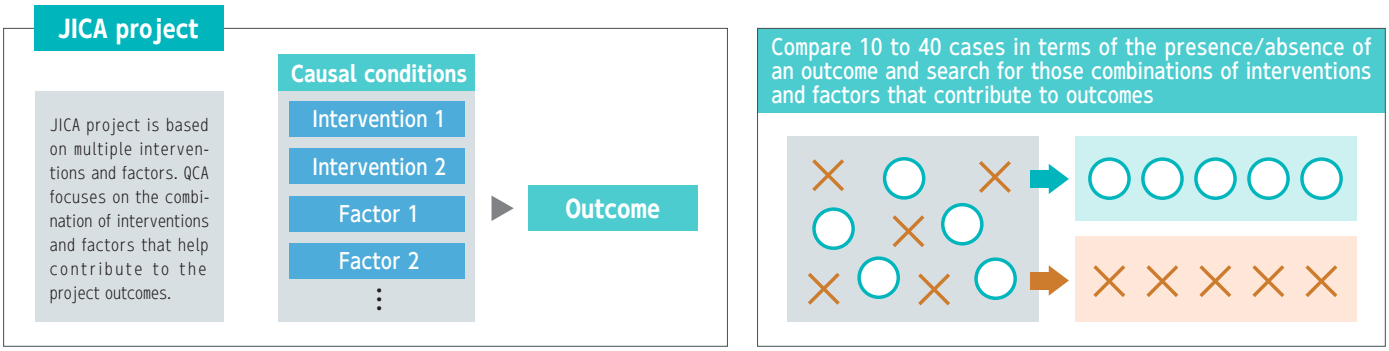
JICA has developed new methods to enhance project outcomes and improve project quality, as part of which, efforts have started to extract lessons by adopting Qualitative Comparative Analysis (QCA).

## 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 |
|---|---|---|---|---|
| A | Successful | Not intervened | Done | Presence |
| B | Unsuccessful | Intervened | Not done | Absence |
| C | Successful | Not intervened | Done | Presence |
| D | Successful | Intervened | Not done | Presence |
| E | Unsuccessful | Not intervened | Not done | Absence |
| F | Successful | Intervened | Done | Presence |
| G | Unsuccessful | Intervened | Not done | Absence |
| H | Successful | Not intervened | Done | Presence |
| I | Unsuccessful | Not intervened | Not done | Presence |
| J | Unsuccessful | Intervened | Not done | Presence |

Converting to 1 and 0

| Case | Causal condition 1 (Intervention/factor) | Causal condition 2 (Intervention/factor) | Causal condition 3 (Intervention/factor) | Outcome |
|---|---|---|---|---|
| A | 1 | 0 | 1 | 1 |
| B | 0 | 1 | 0 | 0 |
| C | 1 | 0 | 1 | 1 |
| D | 1 | 1 | 0 | 1 |
| E | 0 | 0 | 0 | 0 |
| F | 1 | 1 | 1 | 1 |
| G | 0 | 1 | 0 | 0 |
| H | 1 | 0 | 1 | 1 |
| I | 0 | 0 | 0 | 1 |
| J | 0 | 1 | 0 | 1 |

An example of dataset for Crisp-set QCA

## Case 1 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.

## Case study: 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 outcomes remained a challenge. Analysis recommended that ongoing efforts to address this challenge would remain necessary going forward.

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

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

* 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 7th 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

## Case 1 Verifying the Impact of the Project for Construction and Rehabilitation of Small Hydropower Plants Leveraging Satellite and GIS Data

Masamitsu Kurata, Metrics Work Consultants/Sofia University

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 efficiency and impact for an ex-post evaluation.

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.

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 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.

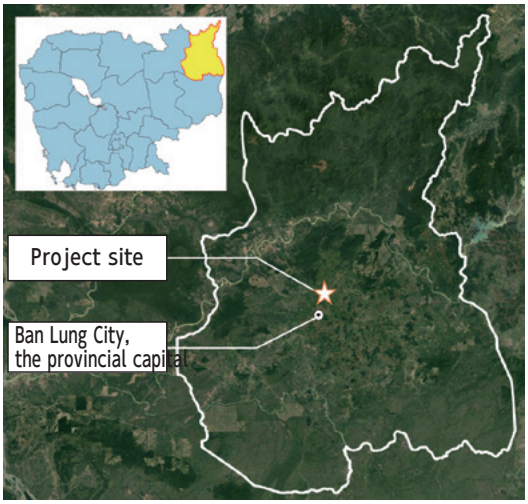



Figure 1 Project site (O'Chum District in Rattanakiri Province, Cambodia)

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.

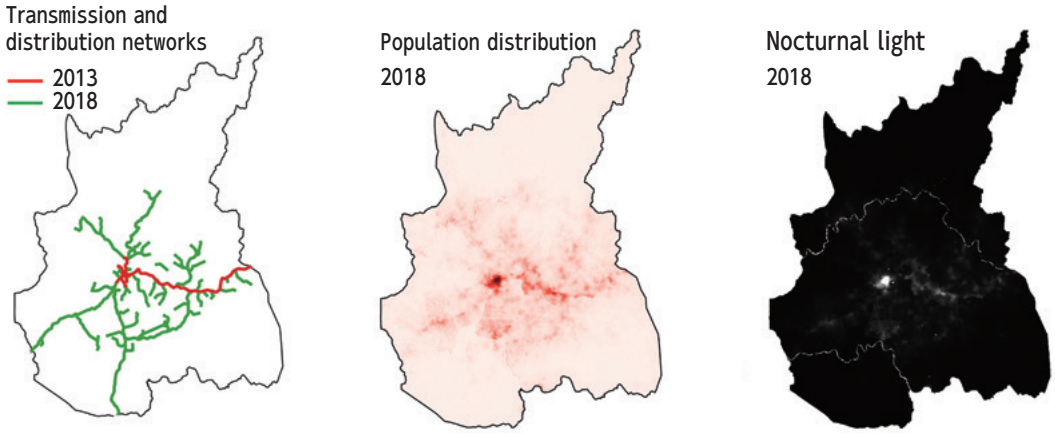



Figure 2 Satellite/GIS data used for the additional analysis

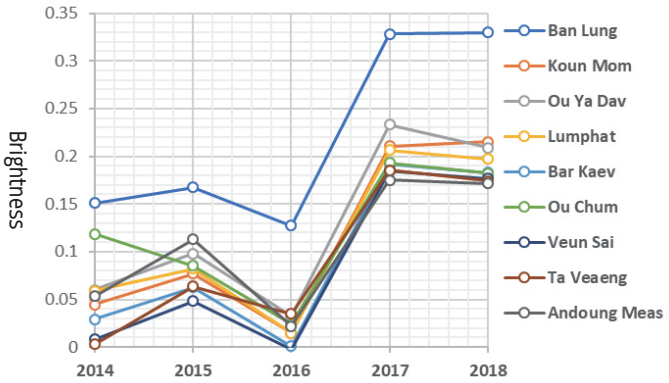



Figure 3 Change in nocturnal light (by district)

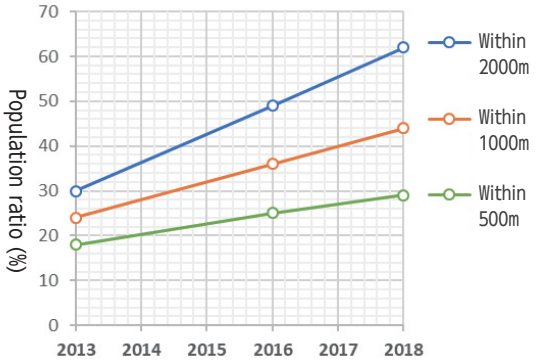



Figure 4 Changing population ratio residing within a certain range of the power network

## 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 | ②Netherlands | ③Germany | ④JICA | ⑤KOICA | ⑥EDCF | ⑦WBG | ⑧ADB |
|---|---|---|---|---|---|---|---|---|---|
| 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 |
| Application of Five DAC Criteria | | ○ | ○ | ○ | ○ | ○ | ○ | △ | ○ |
| Criteria other than Five DAC criteria*2 | Efficiency | ○ | | | | | | | |
| | Equity | ○ | | | | | | | |
| | Value for money | ○ | | | | | | | |
| | Replicability | ○ | | | | | | | |
| | Policy consistency | | ○ | | | | | | |
| | Project outcome | | | | | | | ○ | |
| | Donor performance | | | | | | | ○ | ○ |
| | Performance of implementing organizations | | | | | | | | ○ |
| | Quality of monitoring and evaluation | | | | | | | ○ | |
| | Quality of inception report | | | | | | | ○ | |
| | Risk to development outcome | | | | | | | ○ | |
| | Gender mainstreaming | | | | | ○ | | | |
| | Environmental impact | | | | | ○ | | | |
| | Safeguards compliance | | | | | | | ○ | |
| | Fiduciary | | | | | | | ○ | |
| | Unanticipated Impacts | | | | | | | ○ | |
| No. of evaluation types (by theme, sector, region, policy, etc.) | | 3 | 8 | 2 | 4 | 6 | 4 | 8 | 8 |
| Independence | Secure organizational independence | ○ | ○ | | ○ | | ○ | ○ | |
| | Secure independent function/activity | | | ○ | ○ | | | ○ | |
| | Introduce external personnel in evaluation | | | | ○ | ○ | | | |
| Capacity building | Advice and consultation | | | | | | | ○ | |
| | Development of reference document | | | | ○ | ○ | | ○ | |
| | Training (seminars, workshops) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | Training (online) | | | | | ○ | | | |
| | OJT for staff at evaluation unit | | | | | | | | ○ |
| | Employ consultants and researchers | | ○ | ○ | | | | | |
| Transparency | Disclose information via the website, etc. | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Management response | Prepare action plan | | | | | | ○ | ○ | |
| | Publish management response | | | | | | | | ○ |
| Knowledge management | Build a database | | ○ | | ○ | | | ○ | ○ |
| | Provide lectures and prepare theses | | ○ | | | | | | |

* 1: 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), ⑦ WBG: Independent Evaluation Group (IEG), World Bank Group (WBG), ⑧ ADB: Independent Evaluation Department (IED), Asian Development Bank (ADB)
* 2: 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.

## (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.

# 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 | Professor, Graduate School of Asian and African Area Studies, Kyoto University |
| Acting Chairperson | |
| Akifumi Kuchiki | Professor, College of Bioresource Sciences, Nihon University |
| **Members** | |
| Jun Ishimoto | Vice-Chairman, Engineering and Consulting Firms Association, Japan (ECFA) |
| Katsuji Imata | Board Chair, CSO Network Japan |
| Akira Kawaguchi | Director, International Cooperation Bureau, Keidanren (Japanese Business Federation) |
| Takashi 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 | 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:

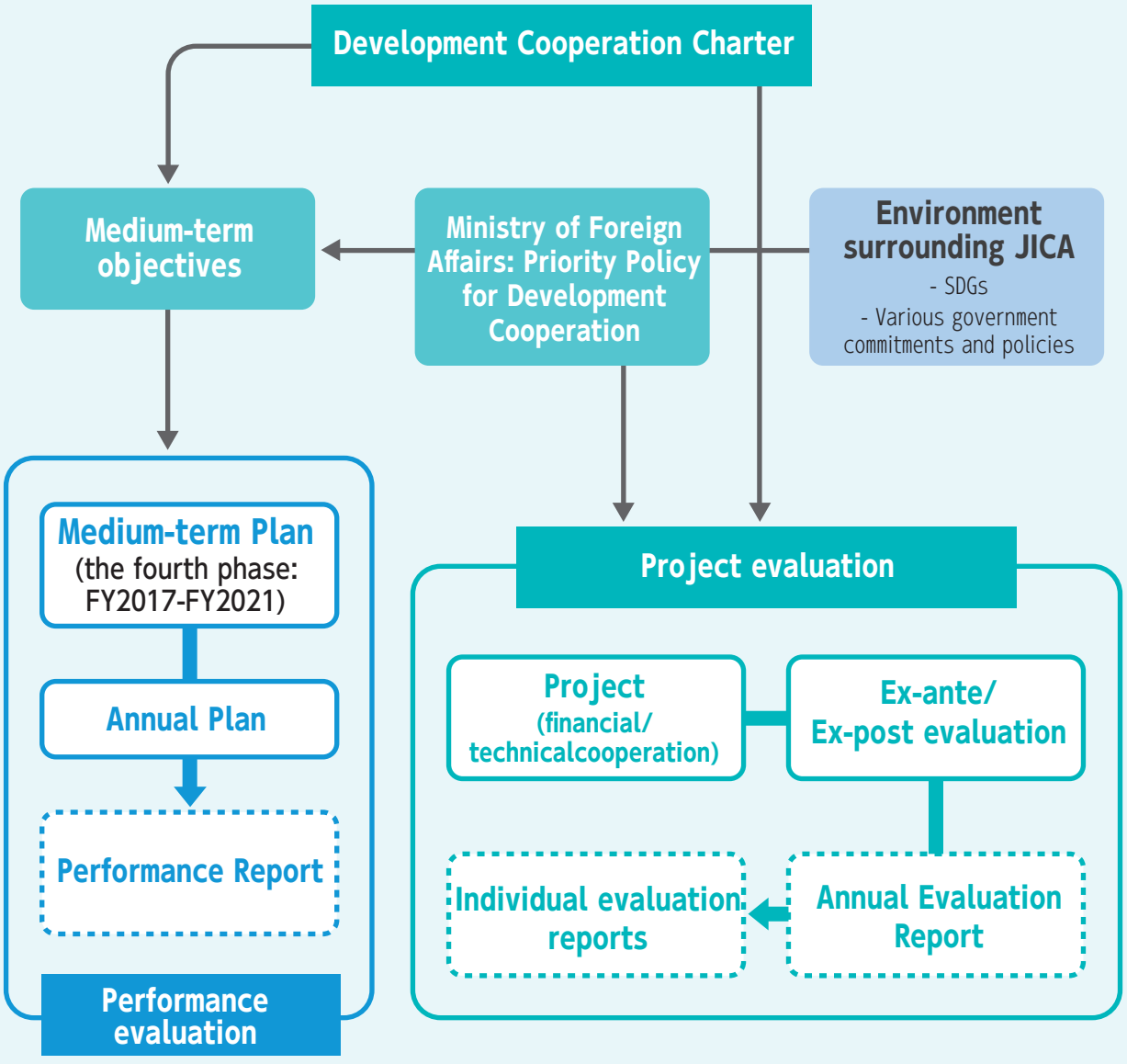
★The current Five DAC criteria were formulated and established in 1991, but given significantly changing global trends in international cooperation over the past 30 years, such as mobilization of private funds, these criteria need revising accordingly.

★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

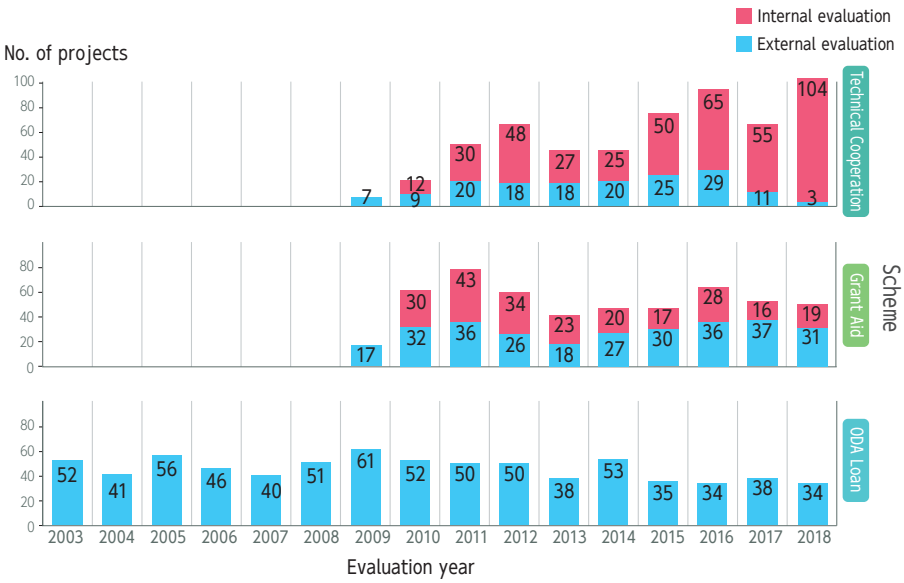
The rating system helps assess the performance of development projects and provides insights that shed light on the current situation and possible improvement approaches. The system is, however, subject to the following constraints; (1) it is based on the assessment to the scope of the DAC evaluation 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.



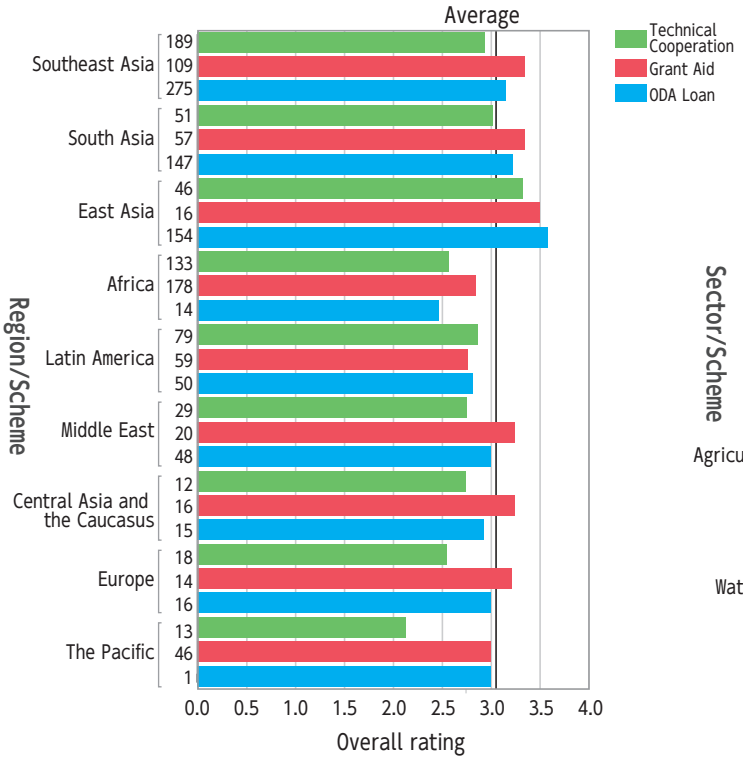

<Figure 1> Transition in the Number of External and Internal Evaluations per Fiscal Year by Scheme

### Inter-relation between the region and scheme

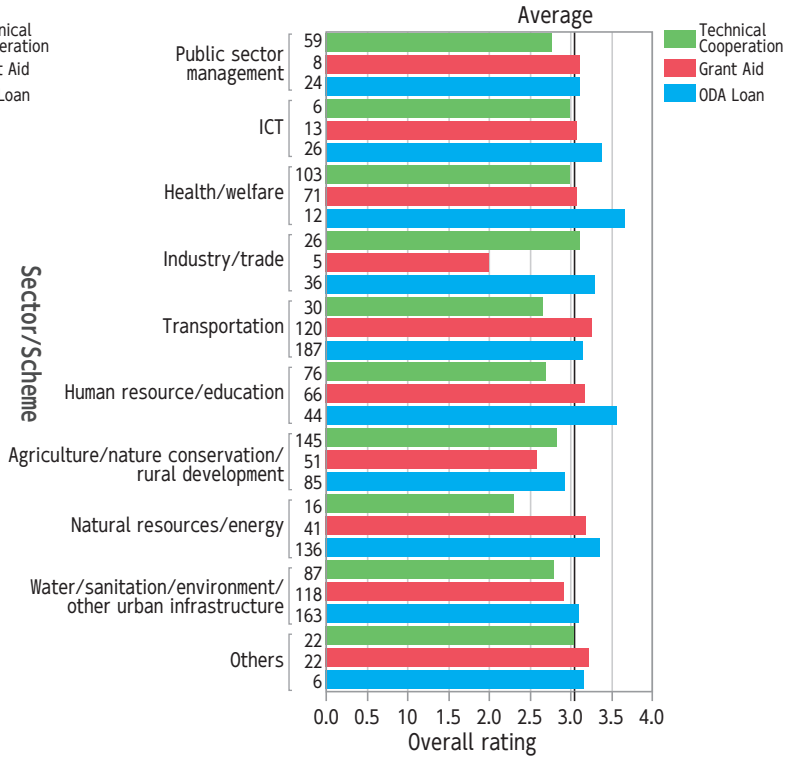
Figure 2 shows a portion of the efforts made to visualize the characteristics of evaluation results by region*4 and scheme by converting a four-grade overall rating (A to D): 4 points for A, 3 points for B, 2 points for C and 1 point for D. The bar length in the bar chart shows the average score (full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




<Figure 3> Overall rating by sector and scheme (external and internal evaluations)

* 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.

*4: 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, Mauritius, Mauritania, 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.

*5: ODA loans to China ended in 2007.

## 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.

*1: Refer to pp. 57-58 of the Annual Evaluation Report 2017.

*2: 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

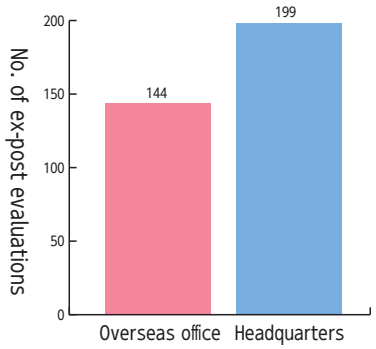
Conventionally, JICA has divided supervision of Technical Cooperation project implementation between the headquarters and overseas offices located within the project site*3. Projects requiring expertise and specialty are to be supervised by the Headquarters while those leveraging relationships with local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

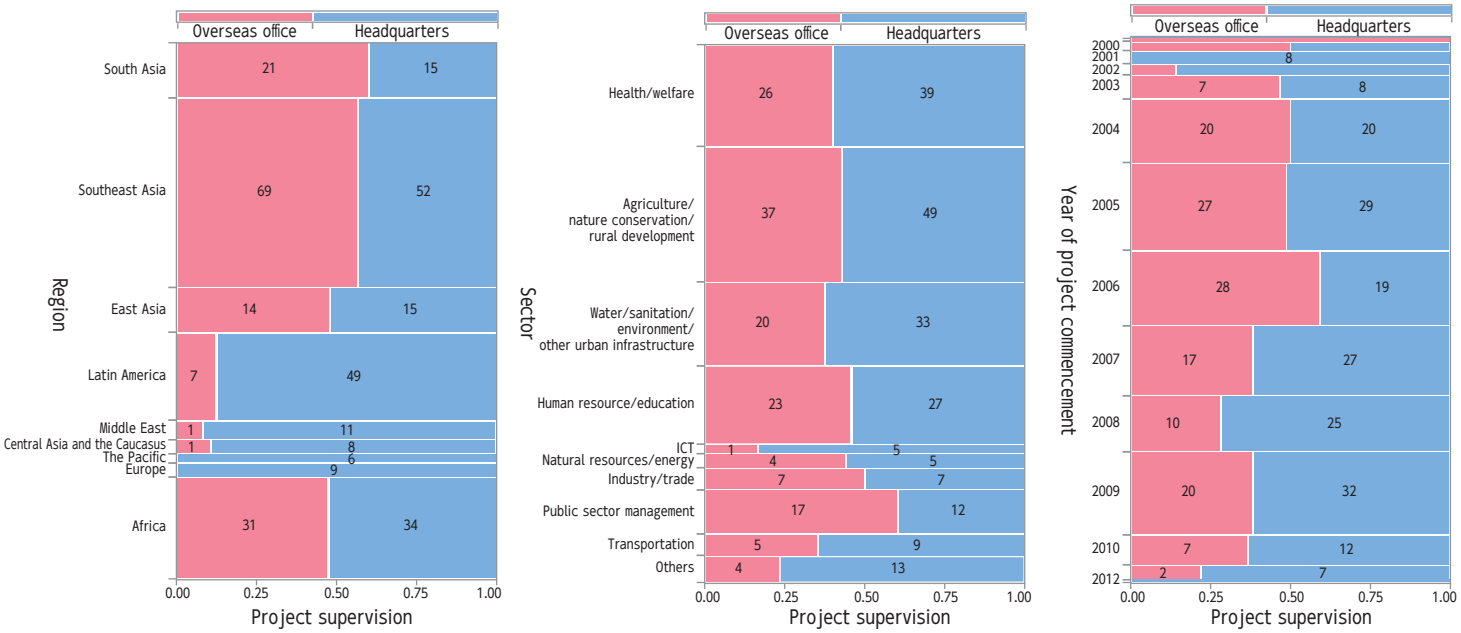
## Data and background

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




<a> By region

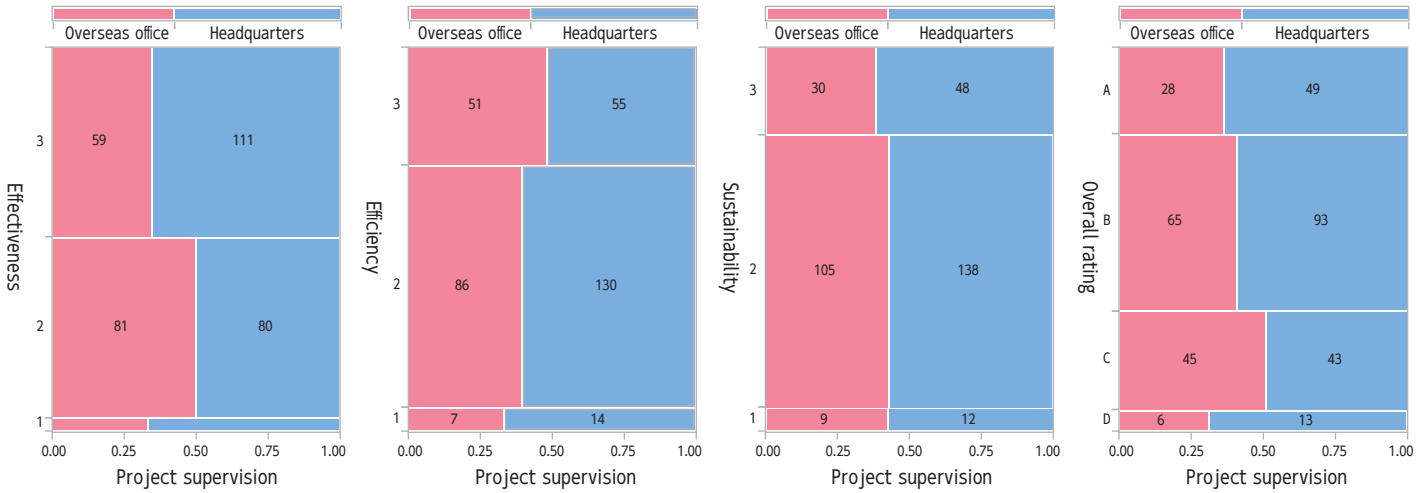
<b> By sector

<c> by year of project commencement

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

## ▸ 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.

*4: 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.
*5: 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 completion.

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.

# Guide to JICA's Website

## ■JICA Homepage

Japanese
▸https://www.jica.go.jp/index.html

English
▸https://www.jica.go.jp/english/index.html

## ■Evaluation

Japanese
▸https://www.jica.go.jp/activities/evaluation/index.html

English
▸https://www.jica.go.jp/english/our_work/evaluation/index.html

☐ Find out more on JICA's evaluation system

○ Overview
▸https://www.jica.go.jp/english/our_work/evaluation/about.html

○ JICA's Project Evaluations (Pamphlet)
▸https://www.jica.go.jp/english/our_work/evaluation/index.html

○ Project Progress Monitoring at Implementation Stages
▸https://www.jica.go.jp/english/our_work/evaluation/oda_loan/review/about.html

○ Pre-Implementation Stage (Ex-ante Evaluation)
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○ Thematic Evaluation, etc.
▸https://www.jica.go.jp/english/our_work/evaluation/tech_and_grant/program/index.html

○ Post-Implementation Stage
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○ Advisory Committee on Evaluation
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○ Evaluation Guides
▸https://www.jica.go.jp/english/our_work/evaluation/tech_and_grant/guides/index.html

☐ Search for Ex-post Evaluations (Ex-post Evaluation Report after 2008)

○ Search for project evaluations
▸https://www2.jica.go.jp/en/evaluation/index.php

☐ Read Past JICA Annual Evaluation Reports

○ JICA Annual Evaluation Reports
▸https://www.jica.go.jp/english/our_work/evaluation/reports/index.html

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○ Publication
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**JICA Annual Evaluation Report 2019 is also available on our website:**

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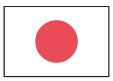



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