

2018

JICA

JICA Annual Evaluation Report

Leading the world with trust

Japan International Cooperation Agency

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JICA

JICA Annual Evaluation Report 2018 — INDEX

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Preface

“Leading the world with trust.” JICA announced its new vision in 2017.

With the announcement of our new vision, we have reaffirmed JICA’s two major missions of realizing human security and quality growth. We will keep working on international cooperation proactively in partnership with a range of domestic and international stakeholders to realize a world in which no one is left behind.

The main objectives of JICA’s project evaluation are: (1) To improve project operations by learning the lessons from the past projects and (2) To ensure organizational accountability and transparency by publicizing evaluation results timely. To enhance both the quality and the strategy of our cooperation under the vision of “Leading the world with trust,” we are leveraging the results of project evaluation.

A decade has passed since JICA and the Overseas Economic Cooperation Operations of the then Japan Bank for International Cooperation consolidated and formed the new JICA in 2008. The establishment of the new JICA enabled to implement Japan’s Official Development Assistance (ODA) in an integrated manner. Since then, JICA has established an integrated evaluation system for its Technical Cooperation, ODA Loan and Grant Aid projects and worked on both publicizing more comprehensive evaluation results and learning from the evaluation results and lessons.

This Annual Evaluation Report compiles the results of JICA’s evaluations on its projects and includes an outline of JICA’s evaluation mechanisms and the results of ex-post evaluations conducted by the third-party evaluators. This fiscal year 2018, we further promoted the process analyses focused on project implementation process, improved evaluation methods from various perspectives and carried out statistical analysis on evaluation results and impact evaluation. In line with international trends such as accumulating and utilizing knowledge, we also shared JICA’s knowledge with domestic and overseas stakeholders. Some of these efforts are highlighted in this report.

In many cases, JICA implements development projects in very challenging environments such as conflict-affected areas, and our operations require innovations to promote socioeconomic progress in developing countries amid rapid environmental changes and technological advancements on a global scale. Given the difficulties and ambitious goals of these projects, such projects are sometimes difficult to achieve high ratings in the project evaluation. Even so, we are determined to continue challenging ourselves to advance development of the world by making the best use of the lessons learned by our evaluation results to maximize our cooperative efforts.

We strongly hope this report will be broadly 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 2019

Shinichi Kitaoka, President
Japan International Cooperation Agency (JICA)

JICA's Project Evaluation System

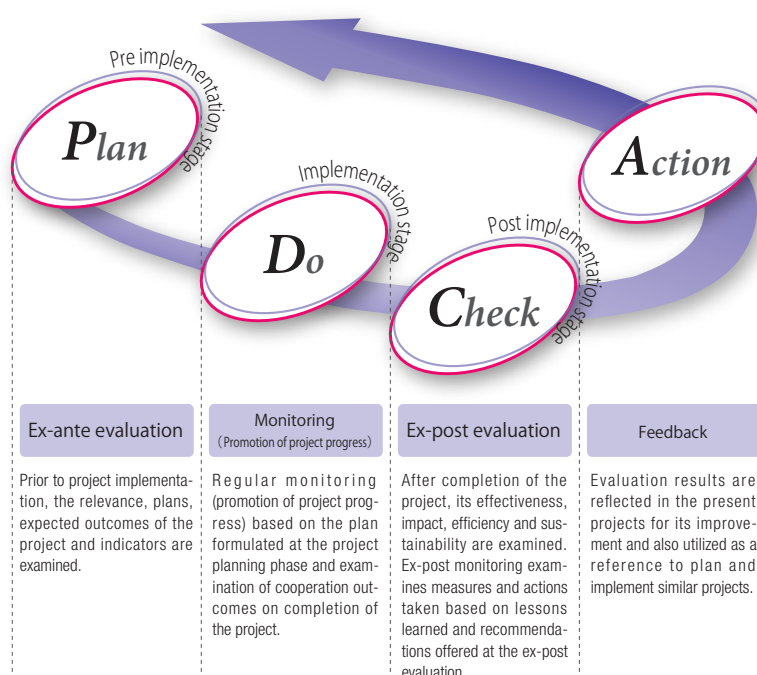
To improve its projects and ensure accountability to stakeholders, JICA implements project evaluation and comprehensive and cross-sectoral thematic evaluation for Technical Cooperation, ODA Loans and Grant Aid projects.

1

Evaluation throughout the project's PDCA cycle

The PDCA cycle is a management tool that promotes continuous improvement of project activities and JICA's operations. It has four steps: Plan, Do, Check and Action.

For all projects, JICA's project evaluation is conducted based on the PDCA cycle, regardless of the scheme of cooperation. Considering characteristics of the scheme of cooperation, such as the assistance period and timeframe to obtain expected results, JICA monitors and evaluates at each project stage (planning, implementation, post-implementation and feedback) within a consistent framework. By evaluating and monitoring projects at each stage of the PDCA cycle, it aims to improve the development effects. Details of the types of evaluation are introduced in p.4-5.



2

Coherent methodologies and criteria among three schemes of cooperation

JICA adopts an evaluation system using methodologies and criteria applicable to all schemes of assistance. JICA aims to conduct the evaluation and utilize the findings based on a consistent philosophy and a standard evaluation framework, while taking the differences in characteristics among each assistance scheme (Technical Cooperation, ODA Loans, and Grant Aid) into consideration.

Specifically, the evaluation framework reflects: (1) Monitoring and evaluation based on the PDCA cycle; (2) Evaluation applying the Five DAC Criteria for Evaluating Development Assistance laid out by the OECD-DAC (Organisation for Economic Co-operation and Development/ Development Assistance Committee) and internationally accepted as an ODA evaluation methodology; and (3) Publication of evaluation results in a uniform style by utilizing a rating system developed by JICA. The rating system and results are introduced in p.8-11.

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.

The JICA project evaluation system has the following five features:

- 1 Evaluation throughout the project's PDCA cycle
- 2 Coherent methodologies and criteria among three schemes of cooperation
- 3 Comprehensive and cross-sectoral evaluation and analysis
- 4 Ensuring objectivity and transparency
- 5 Emphasizing the utilization of evaluation results

3

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 extract trends and problems that are common to particular issues and derive features and good practices by comparing and categorizing projects. With such a different approach of evaluation/analysis, it aims 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 2018, JICA examined the evaluation methodologies applicable to Technical Cooperation for Development Planning (p. 45), visualization of project beneficiaries (p. 46) and application of satellite data (p. 48). JICA also identified the lessons learned for project management in conflict-affected countries and areas (p. 42). Please refer to each page for their details.

4

Ensuring objectivity and transparency

JICA has incorporated external evaluation according to its project size to ensure objectivity and transparency in evaluating effects of project implementation. 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.

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.6 regarding the committee.

5

Emphasizing the utilization of evaluation results

JICA's project evaluation focuses on utilizing the results for improving the quality of "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.

① Reflection in JICA's basic strategies

Improving JICA Thematic Guidelines, cooperation programs, etc.

② Reflection in projects

Improving target projects, similar projects in progress or in preparation

③ Reflection in partner governments' policies

Feeding back to partner governments' projects, programs, development policies, etc.

Evaluation Results

- ▶ Recommendations
- ▶ Lessons learned

Action

—Results of the project evaluation are available on JICA's website—

Related link

▶ <https://www.jica.go.jp/activities/evaluation/index.html>

Pre Implementation Stage (Ex-ante Evaluation)

To examine aspects such as existing needs for projects, JICA conducts ex-ante evaluations.

◇ What is 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 results of ex-ante evaluations

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 FY2017*1

Technical Cooperation	76 projects
ODA Loans	54 projects
Grant Aid	77 projects

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		

*1 Published as the ex-ante evaluations in FY2017 (as of February 2019).

*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 (Ex-post Evaluation)

JICA conducts ex-post evaluations to evaluate completed projects comprehensively and examine whether the project's effectiveness, impact and sustainability will continue to manifest after project completion.

◇ What is ex-post stage 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 results of ex-post evaluations

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 Performed in FY2017*7

Technical Cooperation	(External Evaluation) 11 projects (Internal Evaluation) 75 projects
ODA Loans	(External Evaluation) 38 projects (Internal Evaluation) 0 project
Grant Aid	(External Evaluation) 37 projects (Internal Evaluation) 20 projects

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		

*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.8 for the rating system.

*7 Evaluation results were confirmed in FY 2018 (as of February 2019). Such results were published as "Evaluation Results in FY 2017 on JICA's website.

*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.

Impact Evaluation^{*1}

To further enhance project effectiveness and quality, JICA has been promoting evidence-based practice (EBP) and emphasizing the application of impact evaluation as its major 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 irrigation 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 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. Analyzing these two situations allows to grasp changes brought by project precisely and obtain more outstanding and reliable evidence compared with applying

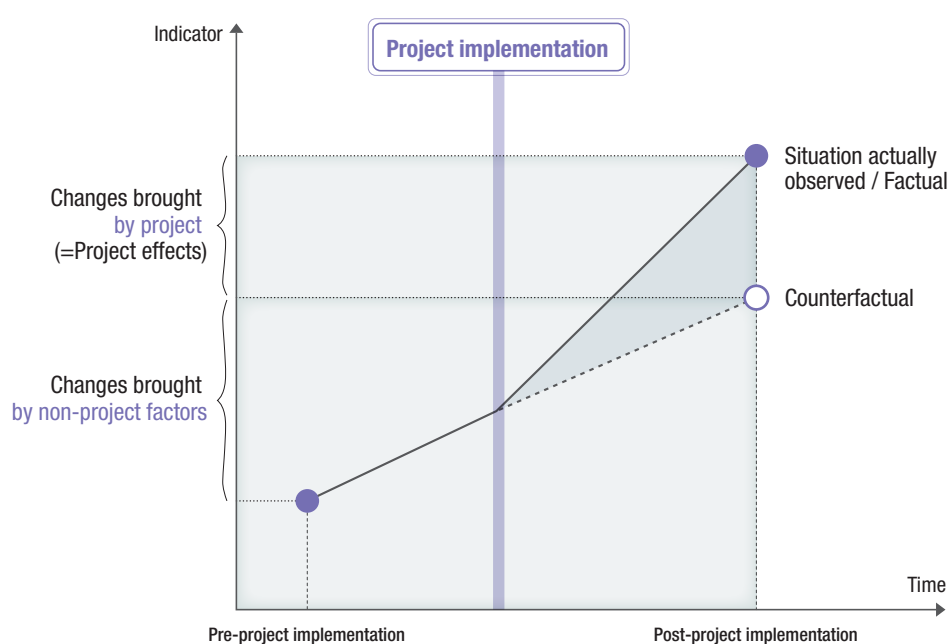
those methodologies that simply analyze before and after projects.

Since impact evaluation requires additional costs and high expertise for its analysis, JICA examines the priority based on evaluation purposes and needs and 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 management and policy-making in partner countries.

In FY 2018, impact evaluations were conducted on several projects, including the Picture Books through Reading-Aloud Activities aiming to improve environmental and hygiene educations in India (refer to pp. 54 for their evaluation result). Moreover, 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, as described in p.55.

^{*1} 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, 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.

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



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 expertise in evaluation from international organizations, academia, NGOs, media and private sector groups.

In two meetings held in FY 2018, various activities related to JICA's project evaluation and JICA's responses to advice and recommendations by the Committee provided in the past were discussed. Below are the main points discussed in the meetings in FY 2018.

List of Committee Members

(as of January 2019)

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
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
Masaichi Nosaka	Researcher, Yomiuri Research Institute, The Yomiuri Shimbun
Yasukiyo Horiuchi	Deputy Director, International Cooperation Bureau, Keidanren (Japanese Business Federation)
Kiyoshi Yamaya	Professor, Doshisha University Graduate School of Policy and Management

Suggestions and Recommendations from the Committee	Actions Taken by JICA
Evaluation method improvement and analysis, learning and feedback of evaluation results	
<ul style="list-style-type: none"> •With the recognition that emerging issues are not measurable using the conventional Five DAC Criteria alone, efforts should be made to evaluate challenging operations by considering different evaluation methods from other perspectives. •To evaluate a set of outcomes like a cooperation program, as well as evaluating each project, unified evaluation methods applicable for multiple projects should be considered. •Useful results cannot be obtained from quantitative evaluations unless they are quantified with proper methodology. Quantifying indicators is important but quantitative evaluation alone may not suffice. Accordingly, effective evaluation should be achieved by maintaining a balance with qualitative evaluation. 	<ul style="list-style-type: none"> •Given diversified development issues and assistance schemes, JICA has been considering evaluation methods commensurate with their characteristics. While the Five DAC Criteria constitute the standard perspective for unified and reliable project evaluation, JICA keep challenging from perspective of operation evaluation such as gender perspective (p. 47), consideration of evaluation method together with improving the project management method (p. 42) and other aspects. •Many existing JICA cooperation programs cover relatively broad areas with a longer implementation period. The question of how such programs are evaluated has become relevant and JICA is striving to conduct ex-post evaluation of multiple projects with the same purpose in a unified manner. We attempt to conduct unified ex-ante/-post evaluations for multiple projects under different schemes, such as ODA Loan and Technical Cooperation projects, or Grant Aid and Technical Cooperation projects. •As well as conventional ex-post evaluations of individual projects; assessing both quantitative and qualitative indicators, JICA will keep striving to deepen both quantitative and qualitative analyses by applying an impact evaluation (p. 54) for the former and process analysis (p. 52) focusing on project formulation and implementation process for the latter.
Accountability to citizens and sharing of project evaluation results beyond organizational boundaries	
<ul style="list-style-type: none"> •Not only to leverage past evaluation results and lessons learned for future projects within JICA but also to receive external understanding, JICA should actively share how ex-post evaluation and lessons learned are specifically leveraged for subsequent project formulation and implementation to explain that JICA follows its PDCA cycle in a clearer way. 	<p>JICA has published ex-post evaluation reports which set out the individual project results and lessons learned. We also identify/analyze cross-sectoral lessons with specific themes, which have also been shared through this report (p.42). Moreover, through statistical analysis based on past ex-post evaluations (p.56), JICA will keep striving not only to leverage individual project results and lesson learned but also to gain feedback to project implementation policy for realizing project formulation in line with the overall thrust of cooperation. JICA will strive to share project evaluation results that transcend organizational boundaries.</p>
Review of the decade after the organizational integration in 2008 and future challenges	
<p>During the 2018 milestone for the decade elapsed since the merger between JICA and overseas economic cooperation operations of the then Japan Bank for International Cooperation in 2008, external advisors shared their review of JICA's operational evaluation over the decade and their insight into future issues.</p> <ul style="list-style-type: none"> •Evaluating development effects by faithfully following the Five DAC Criteria over the last decade is a precious organizational asset. Given that JICA's assistance is to develop recipient countries, the mission of the project evaluation is to confirm and analyze their development effect. •Summarizing and reviewing the background and history of improvement of previous project evaluations will help consolidate and improve the project evaluation. As well as selecting and focusing on evaluations with the limited resources in mind, there is also a need to clarify the evaluation policy as an organization and avoid excessively sticking to international trends. •We request that JICA retain an evaluation for operations, not as an end to itself. Despite attempting various evaluation methods, the true purpose of evaluation involves contributing to operational improvement, rather than devising any new evaluation method. We expect evaluations and proposals that are useful in the field. 	

Related links:

The past suggestions and recommendations from the Committee are available on the JICA website.
 ▶ <https://www.jica.go.jp/activities/evaluation/iinkai/index.html>



Efforts to Improve Project Evaluation

Project evaluation values assessing project effects to improve future projects and make development assistance more effective as well as ensuring accountability. This section describes the efforts made by JICA in FY2018 to improve its project evaluation for these purposes.

Promoting the use of evaluation results and lessons

1. Using evaluation results and lessons at the project planning stage

To promote the use of evaluation results and lessons learned from past projects, there is a need to incorporate the results and the latest lessons at the project planning stage. JICA strives to leverage them at the project planning stage, and considered leveraging measures are described in the ex-ante evaluation sheet.

2. Feedback of evaluation results to applying statistical analysis of projects

Based on around 1,600 (internal and external) accumulated ex-post evaluations, JICA has conducted statistical analysis to provide feedback to improve project planning and implementation since FY 2014. The statistical analysis intend to improve project implementation by identifying successful/unsuccessful factors. Refer to p. 56 for the analytical results in FY 2018.

3. Efforts for EBPM

Evidence-Based Policy Making (EBPM) has recently become a worldwide trend and involves verifying a causal relationship (evidence) between past measures taken and their results for more effective policy making. To promote the further use of results and lesson learned in past projects, JICA has also striven to closely analyze a causal relationship (grounds = evidence) between development projects implemented and methodologies applied and their results through the impact evaluation to formulate a more

effective development plan and project implementation. Refer to p. 54-55 or specific details of the impact evaluation.

4. Collaboration/cooperation with international organizations

To promote the use of project evaluation results and lessons learned, JICA has boosted international sharing of knowledge and experience by participating in the Global Delivery Initiative (GDI)*¹ led by the World Bank and incorporating the results from JICA's process analysis results into its online database for case study examples. This database involves deploying the evaluation results of international development institutions as case studies, categorizing various delivery challenges in project implementation under common criteria and visualizing in a user-friendly manner, to share knowledge and experience globally.

5. Sharing of evaluation results, lessons learned and analytical results

JICA to distributes the latest analytical results and studies related to project evaluation at the Japan Evaluation Society, the Japan Society for International Development, international conference and on other occasions to expand sharing and leverage the knowledge and experience obtained. JICA engaged actively in coordination with emerging aid donors by participating in the Asian Evaluation Week and the North-East Asia Development Cooperation Forum, in particular, held in China and South Korea, respectively. Refer to p. 52 for the activities in FY 2018.

*1: Referring to the platform led by the World Bank to promote international knowledge management and sharing. (<http://globaldeliveryinitiative.org/>)

Improvement of the evaluation, method and system

6. Integrated ex-ante/-post evaluations of Grant Aid and Technical Cooperation projects

Evaluation of existing cooperation programs is challenging, given the relatively broad scope of development purpose and longer implementation period. With more practical perspectives, JICA has striven to conduct ex-ante and ex-post evaluations of multiple projects with the same purpose and in an integrated manner.

As well as conducting ex-post evaluations integrating the ODA loan and Technical Cooperation projects to date, from this year JICA will attempt to conduct integrated ex-ante and -post evaluations of Grant Aid and Technical Cooperation projects that share the same purpose.

7. Analysis from perspectives other than the Five DAC Criteria

While JICA's project evaluation is based on the Five DAC Criteria, analyses from other perspectives are also expected to identify useful

lessons to further improve project formulation and implementation in future.

Focusing on the process of achieving project outcomes, JICA has recently promoted process analysis for this purpose. Refer to p. 52 for details.

8. Securing the quality of internal ex-post evaluation

In principle, JICA overseas offices initiate internal ex-post evaluations for projects involving contributions of less than 1 billion yen. To ensure its quality, staff assigned to overseas offices has training in internal ex-post evaluations before being stationed abroad. Where necessary, officers of the Evaluation Department are dispatched to an overseas office to provide training and supervision on internal evaluations. JICA also implements third-party quality checks to verify the objectivity and impartiality of evaluation judgements. Refer to p. 39 for details.

Others

9. Training programs and seminars to develop human resources for evaluations

JICA continues to organize training programs and seminars on external ex-post evaluation references and on evaluation methods for external evaluators conducting ex-post evaluations. JICA has also continued providing impact evaluation training sessions (p. 55) to strengthen the capacity of development consultants and other practitioners involved in JICA operations.

The capacity of internal human resources for project evaluations has also been developed. As well as various staff training sessions, JICA organizes feedback seminars to share updated insights and lessons learned from the completed evaluation results in the previous year to

encourage the staff to utilize evaluation results and lessons learned.

10. Efforts to achieve the Sustainable Development Goals (SDGs)

The need to strengthen the capacity of developing countries to measure outcomes is stated in the 2030 Agenda for Sustainable Development, which set out the Sustainable Development Goals. As part of our project evaluation, JICA has been supporting efforts to improve the project evaluation capacity in each country through joint evaluations with the Thai and Philippine governments (p. 34).

JICA has also been striving to list SDGs Global Indicators (provisionally) on JICA Indicator References to help set indicators of individual projects; taking SDGs into consideration.

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 2017.

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 FY2017, the results of ex-post evaluations conducted were 86 external evaluations and 95 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. 38 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

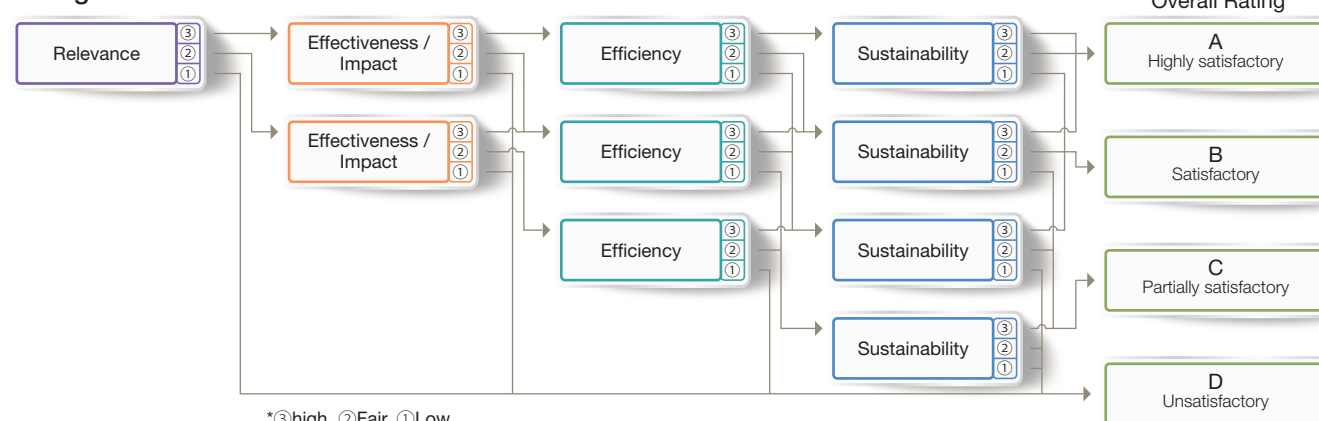
(highly satisfactory); B (satisfactory); C (partially satisfactory); and D (unsatisfactory).

Although the rating is useful as means of indicating the effectiveness of the projects, it does not reflect all 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



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.38 for internal evaluation results for FY 2017)

Implementation structure of internal evaluation

Overseas office (Evaluator)	<ul style="list-style-type: none"> Consider, revise and decide evaluation framework Prepare questionnaires and conduct field surveys Compile the result of field surveys and judge the evaluation result Feed the evaluation result back to the implementing/executing agency of the partner country Confirm, revise and decide the evaluation result
Evaluation Department (Evaluation support)	<ul style="list-style-type: none"> Decide evaluation criteria and develop manuals and formats Examine and improve the whole internal evaluation system Support for preparing various evaluation documents Monitor overall evaluation progress Provide evaluation trainings (lectures and practices)



A field survey conducted by the Overseas Office staff (Support to the improvement of school management through Community Participation in Niger (School for all) Phase 2)



A field survey conducted by the Overseas Office staff (Project for Maternal and Child Health in Quetzaltenango, Totonicapan, and Solola in the Republic of Guatemala)



A field survey conducted by the Overseas Office staff (Secondary Science and Mathematics Teachers' Project in Uganda)

External Evaluation Results for FY2017

Overall rating

The external evaluation results conducted in FY2017 are as listed on p.11. Evaluations were conducted for 86 projects: 38 ODA Loan projects; 37 Grant Aid projects; and 11 Technical Cooperation projects.

Most of those projects receiving overall ratings were carried out in Africa, Southeast Asia and South Asia, and in sectors such as transportation, natural resources/energy, water resource/disaster risk

reduction and education.

The overall ratings of the 80 rated projects are: A for 34 projects (42%); B for 27 projects (34%); C for 16 projects (20%); and D for 3 projects (4%). A and B comprise 76% while the total of C and D accounts for 24 % of the total projects*1.

Rating results per criteria (③: High, ②: Fair, ①: Low)

Each criteria evaluated in the rated 80 projects were as follows:

Relevance: 77 projects were rated as “③” (96%) and 3 projects were “②” (4%), 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 and approaches concerning the following points: “Insufficient consideration of relocation plan for stakeholders in accordance with the facility improvement”, “Inadequate consideration of risks that cause crucial impact on achieving the project effect” and “Setting the items to be borne by the recipient country which was infeasible for the implementation agency with a vulnerable implementation system.”

Effectiveness/Impact: 57 projects were rated as “③” (71%), 22 projects “②” (28%), and 1 projects “①” (1%). The main factors behind the particularly low achievement of the project purpose include “infrastructures constructed by the project were not sufficiently utilized.” Meanwhile, the achievement of development effects were limited and uncertain in some projects received their overall ratings as “Low” due to their unclear target values or data collection was difficult during the ex-post evaluation.

Efficiency: 20 projects were rated as “③” (25%), 52 projects “②” (65%), and 8 projects “①” (10%). The main factors behind the low rating were “Delays in procurement procedures”, “Change in design,” “Land acquisition”, “Raise in the material costs”, “Extended project period due to delay in achieving the project purpose” and other factors.

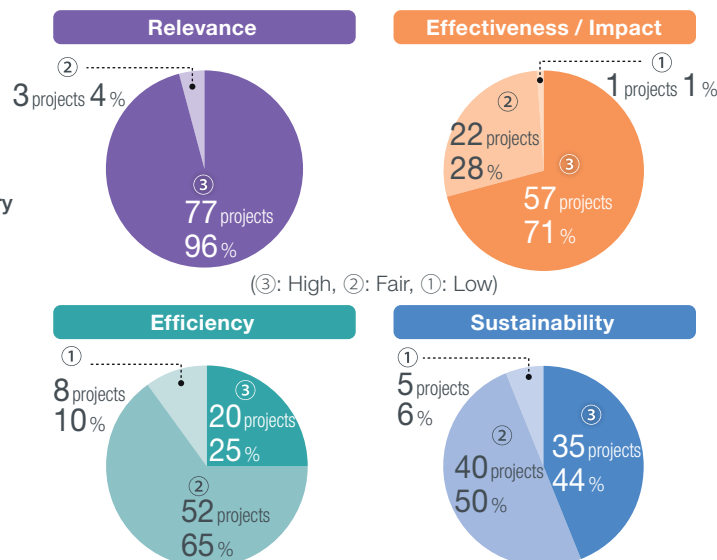
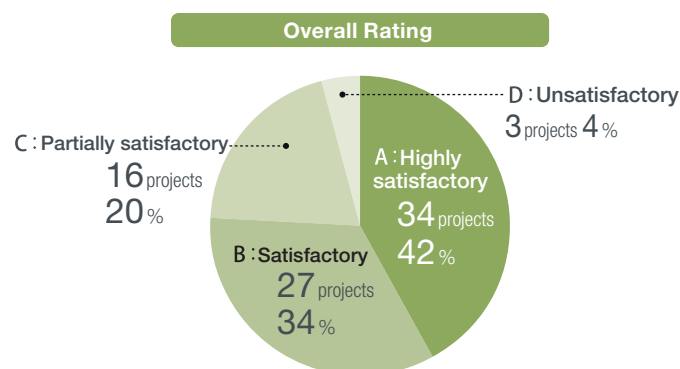
Sustainability: 35 projects were rated as “③” (44%), 40 projects were “②” (50%), and 5 projects were “①” (6%). Those rated as ① were two Technical Cooperation and three Grant Aid projects. The main factors behind the low rating were issues such as “Operation and maintenance system was insufficient/not developed”, “Lack of the number of personnel” “Lack of operation and maintenance costs” and other issues.

In FY 2017, external ex-post evaluation was conducted for 6 Program Type Japanese ODA Loan projects in which their relevance and effectiveness/impact were assessed. 5 projects were rated as ③ and 1 project as ② in terms of the project relevance while 4 projects were ③ and 2 projects were ② regarding their effectiveness/impact.

JICA also strived to analyze Performance in the ex-post evaluation conducted in FY 2017 and attempted to extract reflecting points and good practices for planning and supervising the project by JICA, implementation agency and other concerning personnel. Eventually, although the achievement of project effects was limited due to insufficient considerations during project planning. JICA’s performance for addressing issues by leveraging the fund of other donor and the Government of Japan was introduced. From this result, lessons were learned that the project effects were likely to be achieved promptly if careful considerations were made from the planning stage.

JICA has developed a mechanism to reflect lessons learned from the evaluation results. In formulating new projects, lessons learned from the ex-post evaluation are referred by any means necessary and responsive measures for similar issues are described. JICA has also conducted statistical analyses of overall ratings and evaluation results by each evaluation criteria to comprehend the trends by scheme, region and sector (p. 56). The analytical results are not only utilized for project formulation and supervision but also made use for improving the external ex-post evaluation reference which is a guideline for evaluation judgement and factor analysis of evaluation results. JICA strives to leverage learnings from ex-post evaluation for project formulation and supervision, thereby contributing to effective and efficient achievement of the project effects.

*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 FY2016 was 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.



List of Ratings for External Evaluations^{*1,2}

The following ratings were given by evaluators in external evaluation in FY 2017.

Country	No.	Scheme	Project name	Relevance	Effectiveness	Efficiency	Sustainability	Overall rating
Viet Nam	1	L	Red River Bridge Construction Project (I) (II) (III) (IV)/ Hanoi City Ring Road No.3 Construction Project	③	③	②	③	B
	2	L	Power Transmission and Distribution Network Development Project	③	③	②	③	A
	3	G	The Project for Reconstruction of Bridges in the Central District (Phase II), (Phase III)	③	③	③	②	A
	4	L	Small-Scale Pro Poor Infrastructure Development Project (III)	③	③	①	③	B
Indonesia	5	L	Lower Solo River Improvement Project (1)	③	③	①	③	B
	6	L	Keramasan Power Plant Extension Project	③	③	②	③	A
	7	G	The Project for Urgent Reconstruction of East Pump Station of Pluit in Jakarta	③	③	②	③	A
Laos	8	G	The Project for Improvement of National Road No.9 as East-West Economic Corridor	③	③	③	③	A
	9	G	Mini-Hydropower Development Project	③	②	②	②	C
	10	L	Second Poverty Reduction Support Operation/ Third Poverty Reduction Support Operation/Budget Strengthening Support Loan/Ninth Poverty Reduction Support Operation	③	②	N.A	N.A	N.A
Myanmar	11	G	The Project For Improvement Of Medical Equipment In Hospitals In Yangon And Mandalay	③	③	③	①	B
	12	G	Project For Upgrading the Health Facilities In Central Myanmar	③	②	③	②	B
	13	T	The Major Infectious Diseases Control Project Phase 1 & 2	③	③	②	③	A
Cambodia	14	G	The Project For Flood Disaster Rehabilitation and Mitigation	③	③	③	②	A
	15	T	Technical Service Center for Irrigation System Project -Phase 2 / The Improvement of Agricultural River Basin Management and Development Project (TSC3)	③	③	②	②	B
Philippines	16	L	Development Policy Support Program - Investment Climate	②	③	N.A	N.A	N.A
	17	L	Post Disaster Stand-by Loan	③	③	N.A	③	N.A
	18	T	The disaster Risk Reduction and Management Capacity Enhancement Project	③	②	②	②	C
Thailand	19	L	Chao Phraya River Crossing Bridge at Nonthaburi 1 Road	③	③	②	③	A
※ 5 China	20	L	Sichuan Water Environmental Improvement Project	③	③	②	③	A
	21	L	Henan Province Nanyang City Comprehensive Environment Improvement Project	③	③	①	③	B
	22	L	Hunan Municipal Solid Waste Treatment Project	③	③	②	③	A
	23	L	Anhui Municipal Solid Waste Treatment Project	③	③	②	③	A
	24	L	Higher Education Project (Liaoning Province)	③	③	①	③	B
	25	L	Inner Mongolia Autonomous Region Hohhot City Atmospheric Environmental Improvement Project (I) (II)	③	③	③	③	A
	26	L	Guizhou Province Environment Improvement and Education Project	③	③	①	③	B
	27	L	Xinjiang Environmental Improvement Project (I) (II)	③	③	②	③	A
India	28	L	Tamil Nadu Investment Promotion Program	③	③	N.A	N.A	N.A
	29	L	Tamil Nadu Afforestation Project (II)	③	③	③	②	A
	30	L	The Karnataka Sustainable Forest Resource Management and Biodiversity Conservation Project	③	③	②	③	A
	31	L	Transmission System Modernization and Strengthening Project in Hyderabad Metropolitan Area	③	③	②	③	A
	32	L	Rajasthan Minor Irrigation Improvement Project	③	②	②	②	C
	33	L	Haryana Transmission System Project	③	③	②	③	A
Sri Lanka	34	L	Water Sector Development Project and Water Sector Development Project (II)	③	③	②	②	B
	35	L	Poverty Alleviation Micro Finance Project II	③	③	②	③	A
Bangladesh	36	G	The Project for Construction of Manmunai Bridge	③	③	③	②	A
	37	L	Small Scale Water Resources Development Project	③	③	②	③	A
	38	L	Central Zone Power Distribution Project	③	③	②	②	B
	39	L	Grid Substations and Associated Transmission Lines Development Project	③	③	②	③	A
	40	G	The Programme for Improvement of Solid Waste Management in Dhaka City toward the Low Carbon Society	③	③	②	③	A
Pakistan	41	L	Dadu-Khuzdar Transmission System Project	③	③	①	②	C
	42	L	Rural Roads Construction Project (II) (Sindh)	③	②	②	②	C
	43	G	The Project for Rehabilitation of Medium Wave Radio Broadcasting Network in the Islamic Republic of Pakistan	③	③	③	②	A
	44	G	Project for the Improvement of Water Supply System in Abbottabad	③	②	②	②	C
	45	L	Energy Sector Reform Program and Energy Sector Reform Program (II)	③	②	N.A	N.A	N.A

*1 ③ :High, ② :Fair, ① :Low / A:Highly Satisfactory, B:Satisfactory, C:Partially Satisfactory, D:Unsatisfactory (Refer to p.8)
 *2 External evaluations are for projects costing 1 billion yen or more and other projects deemed to provide valuable insight.
 *3 T:Technical Cooperation, L:ODA Loan, G:Grant Aid
 *4 Effectiveness includes evaluation of impact.
 *5 ODA loans to China ended with the six Loan Agreements in December 2007.

Country	No.	Scheme	Project name	Relevance	Effectiveness	Efficiency	Sustainability	Overall rating
Tunisia	46	L	Private Investment Credit Project	③	②	②	③	B
	47	G	The Project for Desalination of Groundwater In Southern Region	③	②	②	③	B
Morocco	48	L	Watershed Management Project	③	②	②	③	B
Senegal	49	G	Project of Development of Health Infrastructure in the Regions of Tambacounda and Kedougou	③	②	②	②	C
	50	T	Project for Reinforcement of Health System Management in Tambacounda and Kedougou Regions	③	②	②	②	C
	51	G	Project for Construction of Classrooms for Primary and Secondary Schools in Dakar and Thiès Regions	③	③	②	②	B
Mali	52	G	Project For Construction of Bamako Central Fish Market	②	①	③	②	D
Guinea-Bissau	53	G	The Project for Construction of Schools in Bissau	③	③	②	②	B
Ethiopia	54	G	The Project for Replacement of Awash Bridge on A1 Trunk Road in the Federal Democratic Republic of Ethiopia	③	③	②	②	B
Djibouti	55	G	The Project for the Provision of Waste Management Equipment	③	②	②	②	C
	56	G	The Project for the Improvement of Fire Fighting and Rescue Equipment of Djibouti City	③	③	③	②	A
Democratic Republic of the Congo	57	G	Project for Expansion of INPP Kinshasa Provincial Direction	③	③	②	③	A
	58	T	Project on Development of Capacity of Instructors at the National Institute of Professional Preparation	③	③	②	③	A
Uganda	59	G	The Project for Rural Electrification Phase 3	③	③	③	③	A
Rwanda	60	G	The Project of Improvement of Substations and Distribution Network	③	③	②	②	B
Kiribati	61	G	The Project For Expansion Of Betio Port	③	③	③	②	A
Palau	62	G	The Project For Enhancing Power Generation Capacity In The Urban Area In The Republic Of Palau	③	③	③	③	A
Tajikistan	63	G	The Project for Improvement of Equipment for Road Maintenance in Khatlon Region and Districts of Republican Subordination	③	②	②	②	C
	64	G	The Project for Improvement of Water Supply System in Honiara and Auki	③	②	②	②	C
Solomon Islands	65	G	The Project for the Improvement of Radio Broadcasting Network for Administration of Disaster Prevention	③	②	②	②	C
Vanuatu	66	G	The Project for the Redevelopment of Vila Central Hospital	③	③	③	①	B
Mongolia	67	G	The Programme for Ulaanbaatar Water Supply Development in Gachuurt	③	②	③	③	A
Egypt	68	L	Kuraymat Integrated Solar Combined Cycle Power Plant Project (I) (II)	③	②	①	③	C
Sudan	69	T	Frontline Maternal and Child Health Empowerment Project/Frontline Maternal and Child Health Empowerment Project Phase 2	③	③	②	②	B
Nicaragua	70	G	The Project for Construction of the Santa Fe Bridge in the Republic of Nicaragua	②	②	②	③	C
Cuba	71	T	Improvement of the Capacity on Urban Solid Waste Management in Havana City	③	②	②	②	C
Peru	72	L	North Lima Metropolitan Area Water Supply and Sewerage Optimization Project (I)	③	③	②	③	A
	73	L	Irrigation Sub-Sector Project	③	③	②	②	B
Bolivia	74	T	Project of Establishment of Implementation System of Sustainable Rural Development Phase 2	③	③	③	②	A
	75	T	Project of Value-added Agriculture and Forestry for Improvement of the Livelihood of Small scale farmers in Northern La Paz	③	②	①	①	D
Lesotho	76	G	The Project for the Construction of New Secondary Schools and Upgrading of Facilities in Existing Secondary Schools	③	③	②	②	B
Mozambique	77	G	The Project for the Construction of Secondary Schools in Nampula Province in the Republic of Mozambique	③	③	②	②	B
Zambia	78	G	The Project for the Improvement of the Living Environment in the Southern Area of Lusaka	③	③	③	①	B
	79	T	Rural Extension Services Capacity Advancement Project - Through PaVIDIA Approach-	③	③	②	②	B
Palestinian Authority	80	G	The Jericho Wastewater Collection, Treatment System and Reuse Project	②	②	②	②	D
Bhutan	81	L	Rural Electrification Project	③	③	②	③	A
Cameroon	82	G	The 5th Project for Construction of Primary Schools	③	③	②	②	B
Tanzania/Rwanda	83	G	The Project for Construction of Rusumo International Bridge and One Stop Border Post Facilities	③	③	③	②	A
Tanzania	84	G	The Project for Widening of New Bagamoyo Road	③	③	②	②	B
	85	T	Project for Capacity Development for Regional Referral Health Management / Project for Capacity Development in Regional Health Management Phase II	③	②	③	①	C
Jordan	86	L	Fiscal and Public Service Reform Development Policy Loan	③	③	N.A	N.A	N.A

External Evaluation: Highlights

Out of the 86 projects evaluated in FY2017, 10 external evaluations are selected based on geography, assistance scheme, and sector.

Kingdom of Bhutan (ODA Loan)

Overall

A

Effectiveness and Impact	3
Relevance	3
Efficiency	2
Sustainability	3

Rural Electrification Project

Contribution to Gross National Happiness (GNH) by promoting rural electrification

External Evaluator: Mitsue Mishima, OPMAC Corporation

Project Description

Loan amount / Disbursed amount:
3,576 million yen / 3,237 million yen

Loan agreement: May, 2007

Terms and conditions:

Interest: 0.01%

Repayment Period (Grace Period): 40 Years (10 Years)

Conditions for Procurement: General Untied

Final disbursement date: June, 2015

Executing agency:

Department of Renewable Energy, Ministry of Economic Affairs (DRE)

Project Objectives

Overall Goal:

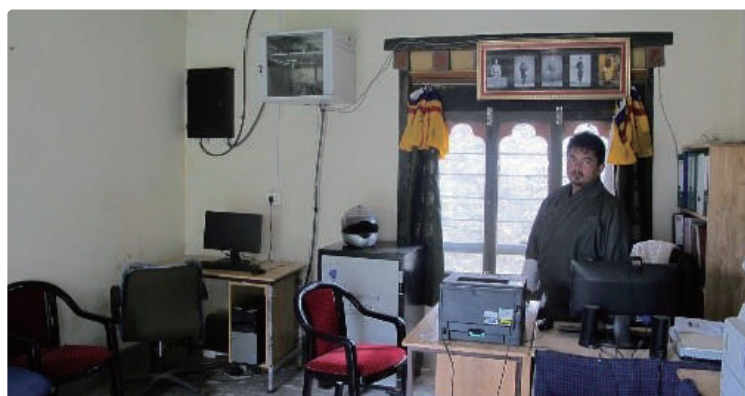
Contribution to an improvement in the living environment and the promotion of economic and social activities of rural residents in the high poverty rate areas

Project Purpose:

To improve access to electricity for unelectrified households and other institutions

Output:

To develop medium voltage (33kV/11kV) and low voltage power distribution networks in rural areas



Langthel Gewog Community Center, Trongsa Dzongkhag



Class Room in Central School, Mendelgang Gewog, Tsirang Dzongkhag



General Shop in Logchina Gewog, Chukha Dzongkhag

Effects of Project Implementation (Effectiveness, Impact)

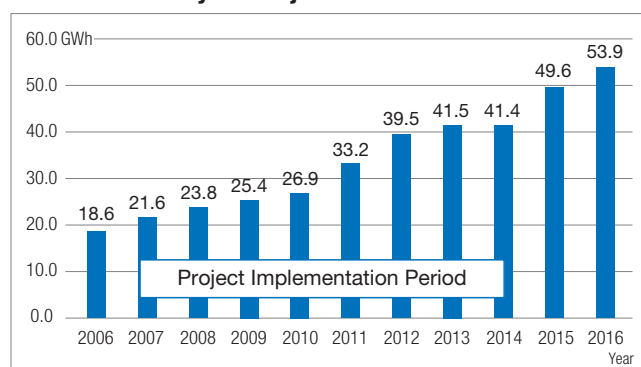
In rural areas of targeted 10 Dzongkhags, 16,241 households were electrified, exceeding the planned target numbers of 15,322 households. In addition, the project contributed to improvement of national electrification rate, with the evidence that number of rural households in project target areas accounts for approximately 18% of national rural households, while rural electrification rate was significantly improved from 56.3% before the project implementation to 97% at the time of project completion. Electrification consumption in the project areas increased by more than twice, 53.9 GWh in 2016 from 21.6GWh in 2007 and it can be considered that this increase entailed the effect of the project. Although other donors' support for rural electrification promoted the significant improvement in rural electrification rate, it is possible to say that the fact that the content of rural electrification master plan supported by JICA prior to this project was linked to immediate implementation was one of the promoting factors. As a result of qualitative survey of the project showed that

vitalization of various socio-economic activities such as reduction of the housework, increase of study time in early morning and evening time, enhanced efficiency in agricultural work, improvement in education, health, and public administration services. These contributed to promoting "Gross National Happiness (GNH)", a unique concept set out by the Royal Government of Bhutan as the principle of national development. Therefore, effectiveness and impact of the project are high.

Relevance

Rural electrification has been prioritized continuously in the concept of GNH of Bhutan, long term vision in "Vision for Peace, Prosperity, and Happiness (formulated in 1999)" based on it, and five-year national development plan since the project appraisal. From the viewpoint of rural households, needs for electrification has been high. The project also aligns with the Japanese ODA policy. Thus, the relevance of the project is high.

Figure: Rural Domestic Electricity Consumption Trend Covered by the Project



Source: BPC "Power Data Book" (2016) p.34-70, total power consumption in rural households target dzongkhags only.

Efficiency

Outputs of the project were almost as planned. On the other hand, due to the project areas covering the mountain locations without road connections, there was delay in transportation of equipment and materials and therefore the project period exceeded 18 months from the planned one (68 months). Accordingly, efficiency is fair.

Sustainability

Bhutan Power Corporation Limited (BPC), operation and maintenance (O&M) agency of the project, has developed O&M system by increasing number of staffs along with rapid rural electrification and nurturing the technicians in each area where are difficult to have access, at the same time has made efforts to enhance technical capacity of the staff. Financial situation is sound, and the sustainability of the project is high.

Conclusion, Lessons Learned and Recommendations

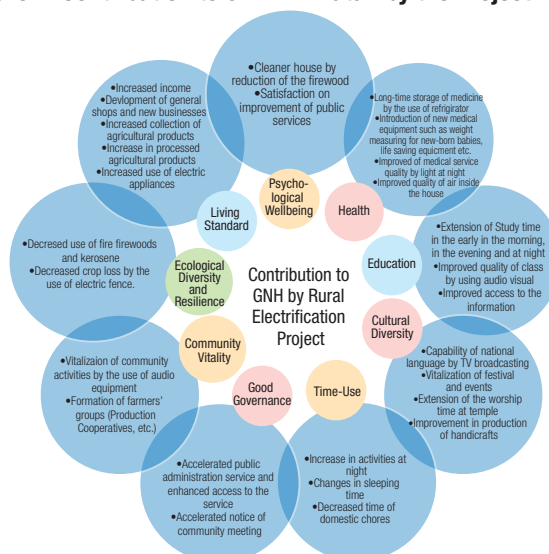
In the light of above, this project is evaluated to be highly satisfactory.

Key Point of Evaluation

Background for Realizing the Project Effect and Impact at Early Timing

Rural Electrification Project in Bhutan is one example which realized issues to be examined and considered upon formulation of rural electrification project, proposed by the JICA Theme Evaluation "Study on Economic and Social Effects Indicators of Rural Electrification(2013)". Such issues suggested by this study were to examine the viewpoints from the both sides of electricity suppliers and consumers, regarding 1. Relevancy of Electrification, 2. Effectiveness of Electrification (Socio-economic effects) and 3. Sustainability of Electrification. As for the first point, there were high priority for rural electrification by the government and high needs from rural residents. In the second point, there were formulation of highly effective and useful rural electrification master plan, high commitment for project implementation by the Ministry of Economic Affairs and power company, and introduction of new electric equipment in education, health and public administration facilities and purchase of agricultural production and manufacturing machines, supported by relevant ministries. In respect to the third point, there were considerations in support for enhancing O&M

Figure 2: Contribution to GNH in Bhutan by the Project



Source: Result of qualitative interview for the Ex-post evaluation on the Project

It can be said that the project effectiveness and impact were emerged early timing because of the support by JICA for highly effective and useful master plan and technical cooperation for capacity development for O&M agency, and considerations and the support by the Bhutanese government in electrification tariff setting, promoting school and public administration equipment and introducing the agricultural work machines, etc., since before and after the project implementation. In conclusion, to formulate a highly effective plan that meets the needs of the recipient country at the time of project planning is critical, that is, to examine the multiple aspects such as the human and technical capacities of the recipient country during construction and the O&M phase after completion of the project, as well as special consideration to electricity tariff for rural residents and the potential for socio-economic development in the target areas and reflecting them to the plan.

capacity of power company and affordable level of connection fee and electricity tariff for the rural electricity consumers.

In the study for formulating rural electrification master plan by JICA, in view of needs of the Bhutanese side and their capacity for planning, the content of master plan was proposed and conducted to cover nationwide area not limiting to the only pilot areas and to make a feasible plan for immediate implementation. As a result, this plan greatly contributed for promoting rural electrification in Bhutan. In terms of strengthening O&M capacity, not only support for construction of the facilities, but also JICA technical cooperation and rural technicians training by Asian Development Bank were conducted at the same time. On the other hand, the Bhutanese government made efforts for improving the education health, public administration services. As observed, related projects were implemented from both side of donors and recipient country in a timely manner. This led to realization of project effect and impact at early timing.

Democratic Socialist Republic of Sri Lanka (ODA Loan)

Overall

A

Effectiveness and Impact	3
Relevance	3
Efficiency	2
Sustainability	3

Poverty Alleviation Micro Finance Project II

Contributing to poverty alleviation through value added credit scheme by applying capacity development of the beneficiaries

External Evaluator: Yumiko Onishi, IC Net Limited

Project Description

Loan amount / Disbursed amount:
2,575 million yen / 2,561 million yen

Loan agreement: July 2008

Terms and conditions: Interest rate:
0.65% (0.01% for consulting services),
repayment period: 40 years (grace period of 10
years), condition for procurement: general untied

Final disbursement date: November 2015

Executing agency:
Central Bank of Sri Lanka (CBSL)

Project Objectives

Overall Goal:

Contributing to poverty alleviation and social and economic stabilization in northeast and the surrounding areas with high poverty ratio

Project Purpose:

Increasing the income of people living in poverty

Output:

Providing credit to the poor in the target areas and carrying out training for Participating Financial Institutions (PFI), Participating Agencies (PA) and beneficiaries



Business activity: tailoring



Business activity: dairy husbandry



Records kept by the development society



Under construction food processing plant of a development society

Effects of Project Implementation (Effectiveness, Impact)

In the project, microfinance was provided to the poor for income generating activities through the PFIs. Together with the credit, trainings for the beneficiaries such as bookkeeping and entrepreneurship development were conducted.

Due to high demand for the credit from the beneficiaries, the number of loans (150,535) and the total amount of approved loans (3,213 million Sri Lankan rupees (SLR)) have significantly exceeded the target figures. Ratio of beneficiaries who applied for loans more than twice was 10% against the target of 90%; however, the target figure set based on the earlier project was ambitious. Some of the beneficiaries took subsequent loans from other credit schemes. Repayment rate by beneficiaries on time is almost the expected rate. Ratio of beneficiaries who have crossed above the poverty line is 98%, significantly exceeding the target figure of 50%. By participating in the project, the PFIs appeared to build experience and knowledge in microfinance. In addition to contributing to the poverty alleviation, the project brought about several positive impacts through the activities of beneficiary groups and development societies*¹ such as improving the saving habit and improving skills of the beneficiaries. Therefore, effectiveness and impact are high.

Relevance

From the time of the appraisal to ex-post evaluation, the Government of Sri Lanka included poverty alleviation as one of the policy targets. Although the population living in poverty has reduced since 2002 in Sri Lanka, according to the 2016 statistics, out of the 14 target districts, eight have higher poverty ratio than the national average, indicating that poverty remains an issue. The project was relevant with the Japan's ODA policy at the time of the appraisal, and therefore, its relevance is high.

Efficiency

Credits were provided through the PFIs to individuals who belong to beneficiary groups. Although credit from PFIs through PAs was also considered, because monitoring of PAs was difficult, the credit through PAs was not implemented. While the project cost was within the planned amount, the project period exceeded the plan because of increased credit component; and thus, the efficiency is fair.

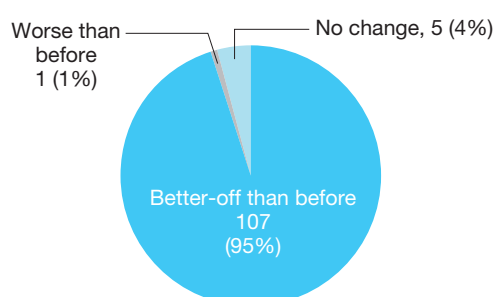
Sustainability

Operation of the revolving fund for the project was completed in 2018. Field officers recruited in the project and PFI staff are recovering

Operation and Effect Indicators

	Target	Actual	Remarks
	2015	2017	
	2 Years After Completion	2 Years After Completion	
a) Number of loans	75,000	150,535	Inclusive of loans given from the revolving fund of the project for the target and the actual.
b) Total amount of approved loans	SLR 2,000 million	SLR 3,213 million	Exclude revolving fund for the target and the actual.
c) Ratio of beneficiaries who apply for loans more than twice	90%	10%	Inclusive of loans given from the revolving fund for the actual.
d) Repayment rate by beneficiaries on time	90%	93%	—
e) Ratio of beneficiaries who have cross passed above the poverty line	50%	98%	Result obtained from the quantitative survey conducted in the ex-post evaluation for the actual.

Figure: Current Economic Status Compared to 10 Years Ago (from quantitative survey*)



*Quantitative survey targeted top three districts from Northern and Eastern Provinces and another three from surrounding areas by ranking the 13 target districts by most number of loans. After the ranking, the beneficiaries from top four PFIs with most number of credit were targeted. In the end, 113 beneficiary households were selected using multistage sampling.

the debts and required manpower is secured. No issues are seen in technical and financial aspects. There are no issues in repayment from the beneficiaries to the PFIs and from the PFIs to the CBSL. Therefore, the sustainability of the project is high.

Conclusion, Lessons Learned and Recommendations

From the above, the overall evaluation of the project is highly satisfactory.

The project implemented a credit scheme with value addition called

“Credit Plus” instead of simply providing low-interest credit to the poor. Through various trainings and activities of beneficiary groups and development societies, the technical skills of beneficiaries were enhanced in addition to improvement of life skills and women acquiring leadership skills. Moreover, the involvement of PFI staff at the field level such as the field officers recruited for the project played a key role. In the places that saw greater involvement of field officers, the beneficiary groups and development societies continued to be active even after the project ended. Some societies have introduced social welfare activities for their members and envision the development society playing a larger role.

When operating credit schemes, as in the case of this project targeting the poor, incorporating programs designed to improve the beneficiaries’ technical and life skills is recommended. Maximizing the effect of such programs requires the assistance for allocating human resources and establishing systems backed by the strong commitment of the institutions operating the scheme.

*1 In the project, to put in place a system for continuing microfinance after the project completion, development societies are established, amalgamating several beneficiary groups. A development society is made up by between five to eight beneficiary groups (the beneficiary groups established by the PFI).

Key Point of Evaluation

Activities and Future Path for the Development Societies

In the project, development societies were established to continue offering microfinance after the project ended by amalgamating several beneficiary groups. The development societies collect a certain amount of money from the members regularly, and, using the saving as capital, they lend to the members (and sometimes to non-members). Several development societies that have built a track record on saving and other activities have taken bulk loans from financial institutions and on-lend to the individual society members. As seen, the development societies are serving as small development banks in the villages. Some of the societies whose members understand their objectives and importance and have a

strong track record have a clear vision to develop into village-level financial institutions.

In addition, some of the development societies are providing services such as funeral funds and financial assistance for emergencies as social welfare to their members. To strengthen the members’ cohesiveness and attract new membership, some of them are organizing cultural events in the village. Others are marketing agricultural produce. Members of a development society in Jaffna have taken up food processing and are using the interest income from internal lending to build a processing center.

Republic of the Union of Myanmar (Technical Cooperation)

The Major Infectious Diseases Control Project Phase 1 & 2

Creating a nationwide impact through a decade-long strategic cooperation

Tomoko Tamura, Kaihatsu Management Consulting, Inc.

Overall

A

Effectiveness and Impact	3
Relevance	3
Efficiency	2
Sustainability	3

Project Description

Total cost: 【Phase 1】 1,240 million yen 【Phase 2】 689 million yen

Period of cooperation:

【Phase 1】 January 2005 – January 2012

(Period of extension out of the above period: January 2010 – January 2012)

【Phase 2】 March 2012 – March 2015

Partner country's implementing organizations:

Department of Public Health, Ministry of Health and Sports

The number of experts dispatched:

【Phase 1】 Long term: 11 persons; Short term: 54 persons

【Phase 2】 Long term: 6 persons; Short term: 18 persons

The number of technical training participants:

【Phase 1】 In Japan: 25 persons; in the third-party countries: 52 persons

【Phase 2】 In Japan: 0 persons; in the third-party countries: 10 persons

Main equipment provided:

HIV/AIDS: Test equipment, test kits/ consumables, refrigerator for blood bank and renovation of a training room

Tuberculosis(TB): X-ray machines / projectors, microscopes, fluorescence microscopes, consumables, and computers

Malaria: Malaria test kits, micro pipettes, malaria treatment drugs, long-lasting insecticidal nets, computers, GIS software and renovation of an entomology laboratory

Project Objectives

Overall Goal:

【Phase 1】

HIV/AIDS Control: HIV transmission is reduced nationwide.

TB Control: New TB infection is controlled in Yangon and Mandalay regions

Malaria Control: Malaria control is strengthened beyond the project sites.

【Phase 2】

HIV/AIDS Control: Transmission of HIV and syphilis due to blood transfusion is prevented.

TB Control: To halt and reverse the TB incidence by the year of 2015.

Malaria Control: National Malaria Control Program (hereinafter referred to as "NMCP")*1 is strengthened.

Project Purpose:

【Phase 1】

HIV/AIDS Control: National AIDS Program (hereinafter referred to as "NAP")*2 is strengthened.

TB Control: TB control in Yangon and Mandalay regions is improved.

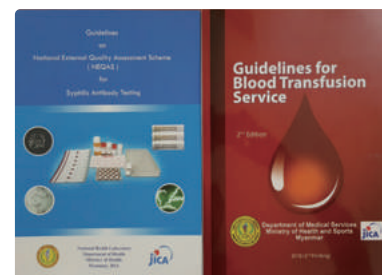
Malaria Control: NMCP is strengthened.

【Phase 2】

HIV/AIDS Control: NAP is strengthened for preventing HIV transmission through blood transfusion in collaborated with National Health Laboratory and National Blood Center, and for managing data.

TB Control: TB control in Yangon and Mandalay regions is improved.

Malaria Control: Implementation/ monitoring capability of NMCP are strengthened in the project area.



Guidelines for blood safety



A volunteer conducting a malaria test (left)



A volunteer for TB control

[HIV/AIDS Control Component]

Effects of Project Implementation (Effectiveness, Impact)

Project Purpose, strengthening functions of NAP, was realized at large, by preventing HIV and syphilis infection from donated blood, and introduction and expansion of the external quality control of HIV and syphilis tests. Overall Goal was also achieved at large, because HIV prevalence of donated blood was maintained at the expected level, and HIV prevalence among the adult population showed a decreasing trend, although data for syphilis prevalence among the adult population was not available. There was also an impact of strengthening functions of National Blood Center and National Health Laboratory. Therefore, effectiveness and impact of this component are high.

Sustainability

The measures introduced by the project, such as the blood donor screening system, implementation and reporting of National External

Quality Assessment for HIV and syphilis test twice a year, have been continued, and they are most likely to be continued in the future, too. No major problems have been observed in the organizational, technical, and financial aspects. Therefore, sustainability of this component is high.

[TB Control Component]

Effects of Project Implementation (Effectiveness, Impact)

Level of achievement of Project Purpose, improvement of TB control in Yangon and Mandalay regions, was moderate in both Phase 1 and 2. Number of TB patients in these regions, which was the indicator of the Overall Goal, was not increased up to 2015 and shows a downward trend as expected. The impact that the project had given to Overall Goal was somewhat limited. Therefore, effectiveness and impact of this component are fair.

Sustainability

The measures introduced by the project, such as the sputum smear microscopy by the Lot Quality Assurance System, community-based TB care, drug seller referral^{*3}, and sputum smear microscopy at the peripheral medical facility, have been continued and expanded. They are most likely to be continued in the future, too. No major problems have been observed in the organizational, technical, and financial aspects. Therefore, sustainability of this component is high.

【Malaria Control Component】

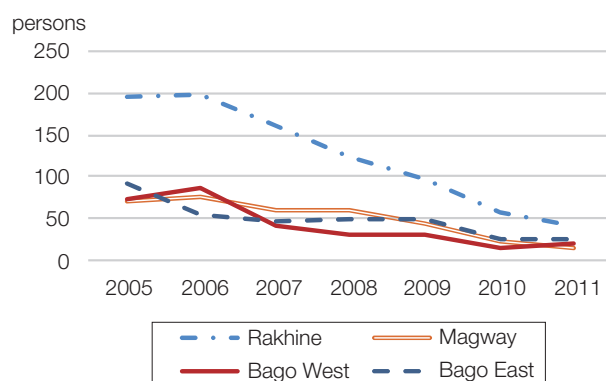
Effects of Project Implementation (Effectiveness, Impact)

Project Purpose (strengthening of NMCP) and Overall Goal (reduction of malaria in-patients, serious and complicated cases and malaria deaths) were achieved; and the planned effect was realized. This was led by introduction and expansion of the community-based malaria control program, report preparation and data analysis using microstratification maps, development and utilization of various databases, distribution and management of supplies for malaria control by the pull-system^{*4} and others. Therefore, effectiveness and impact of this component are high.

Sustainability

The community-based malaria control program conducted by basic health staff and community health workers, distribution and management of supplies for malaria control by the pull system, usage of the databases for volunteers and patients and analysis by microstratification maps using GIS, were conducted at the time of ex-post evaluation. They are most likely to be continued in the future, too. No major problems have been observed in the organizational, technical, and financial aspects. Therefore, sustainability of this component is high.

Number of Malaria Deaths



Source: NMCP

【Common for all 3 components】

Relevance

Throughout the project implementation period, HIV/AIDS, TB and malaria control were priority issues of the country, and the need to strengthen measures for the control was high; the project was consistent with Myanmar's development policies and development needs. Implementation of the project was urgent and duly consistent with Japan's ODA assistance policy to the country, which was promoting assistance for truly humanitarian needs. Therefore, the relevance of this project is high.

Efficiency

The actual project cost of Phase 1 exceeded the plan (146%); however, it cannot be measured whether the increase of inputs was corresponding to the increase of outputs, because the planned amount of project cost for the extension period is unknown. The actual amount of project cost exceeded the planned amount for the Phase 2 (120%). From this, it was evaluated that the project cost exceeded the plan. The project period was evaluated "as planned", by comparing the total period expected for the two phases, which were calculated at the time of planning for each phase, with the actual period of both phases. Therefore, efficiency of the project is fair.

Conclusion, Lessons Learned and Recommendations

From the above results, this project is evaluated as "highly satisfactory".

The lessons learned from the project are as follows. When a project aims at geographical expansion of a program developed in pilot areas, it is important to show its versatility by implementing it in areas other than the pilot areas. In addition, if the project aims at nationwide expansion of the program, it is useful to positively share the result of the program implementation and its effectiveness with the implementing agency of the project and other development partners, let them recognize effect of the program, and encourage them to incorporate it to their policies and systems.

Ministry of Health and Sports is recommended to (1) further improve blood safety by enhancing institutions for blood transfusion service, such as assigning dedicated staff at major Blood Transfusion Units (HIV/AIDS Control Component); and (2) improve accuracy of syphilis test by regular and more frequent technical guidance (HIV/AIDS Control Component). National TB Program^{*5} is recommended to make sure placement of staff in-charge of sputum smear microscopy at station hospitals and give necessary training for the staff, so that they can re-establish the function of the test at the hospitals (TB control component).

*1 NMCP is the implementing organization for malaria control under the Vector-borne Disease Control in the Disease Control Division of the Department of Public Health.

*2 NAP is the implementing organization for HIV/AIDS control in the Diseases Control Division of the Department of Public Health.

*3 In drug seller referral, drug stores or pharmacies refer TB patients to health facility.

*4 In the pull-system, the receivers of the supplies for malaria control make request and pick up the supplies in accordance with their status of stock and necessity; whereas in the push-system, the supplies are distributed uniformly to the receivers.

*5 National TB Program (NTP) is the implementing organization for TB control established under the Disease Control Division of the Department of Public Health.

Key Point of Evaluation

An idea on how to apply five criteria and rating to the evaluation of a project containing 3 components

It was important to decide how the five criteria should be applied to the evaluation of this project. Usually, the five criteria are applied to a project; however, there are three components in the project. Then, I decided that it is more appropriate to apply the five criteria to each component, because these components were implemented independently. This decision helped me to

show evaluation results and their justification clearly; and made the evaluation report more reader-friendly. The result of evaluation of the three components by the five criteria provided me with an adequate basis to conclude an overall rating for the project.

Djibouti (Grant Aid)

Overall

A

Effectiveness and Impact	3
Relevance	3
Efficiency	3
Sustainability	2

The Project for the Improvement of Fire Fighting and Rescue Equipment of Djibouti City

“Protect citizens’ lives from fire” – citizen’s trust to fire stations greatly increased

External Evaluator: Shima Hayase, I.C. Net Limited

Project Description

Grant limit / Actual:
736 million Yen / 635 million Yen

Exchange of notes: March, 2013

Project Completion: September, 2014

Implementing agency:
National Civil Protection Bureau (Directeur
National de la Protection Civile; DNPC)

Project Objectives

Overall Goal:
To protect citizens and their lives, safety and assets from disasters such as fires and to contribute to community security

Project Purpose:
Aiming to improve fire fighting capabilities in Djibouti City

Output:
To replace and to strengthen the fire fighting and rescue equipment implemented by the ODA grant aid project in 1998.



DNPC Headquarters



Water tanks in the Sans-fil Fire Station



The emergency call center in the DNPC

Effects of Project Implementation (Effectiveness, Impact)

After strengthening fire pumps and fire tank trucks by this project, enough equipment enable to dispatch the force for second fire site though a force is already deployed for first fire site. Therefore “a target fire response time to attend another fire site” was achieved.*¹ Moreover, a target time for arrival and fire dousing commencement was achieved by the introduction of small vehicles in areas with narrow streets.*² Also other fire fighting and rescue vehicles have demonstrated the expected target function.

According to the result of the qualitative survey conducted to assess the impact of the project, all the residents and shop owners responded that they had more trust in fire fighting capabilities after experiencing fire. At the time of planning, even a fire broke out, residents and shop owners did not report fires to a fire station as they did not have trust that a fire engine would be dispatched. This was a problem at the time. However, majority of the respondents reported to a fire station after the project, so the trust in the new fire fighting capacity has improved.

Moreover, the firefighters answered that the equipment supplied by the project were far better than fire fighting and rescue equipment owned by other African countries, and that are the pride of the fire fighters.

The project implementation yielded expected effects, thus the effectiveness and impacts are high.

Relevance

Djibouti faces an increased risk of fire outbreak and engulfment because of the weather conditions (it has little rainfall and has hot dry wind blowing in summer time), and over population of the city. Moreover, response to diverse problems such as increasing high-rise buildings and facilities dealing with hazardous materials, traffic accidents on highways was expected.

The objective of the project was consistent with the national development plans of Djibouti, the development needs, and Japan’s ODA policies. Thus its relevance is high.

Efficiency

Provision of equipment and an initial operational training for instructors of the implementing agency were implemented as planned. The Inputs planned by Djibouti side, such as transportation and registration of vehicle were conducted smoothly. Also necessary fuel for operation and water for fire-fighting supplied sufficiently. Both the project cost and the project period were within the plan. Thus the project efficiency is high.

Response Time Required to Attend another Fire Site

	Baseline (2012)	Target (3 rd year after the completion of the project)	Actual (2015-2018)
Situations	Dispatch from another fire site where force attended ^{*3}	Dispatch from a fire station	Dispatch from a fire station
Time	6 to 10 minutes	3 to 6	2 to 4 minutes

Sources: baseline and target provided by JICA's material, and actual by the implementing agency in the questionnaire

Response Time for Arrival to Fire Dousing

	Baseline (2012)	Target (3 rd year after the completion of the project in 2018)	Actual (2015-2018)
Estimated Situation	Arriving at a location 200-300m away from a fire site by a medium-sized vehicle	Arriving at a location 80-120m away from a fire site by a small vehicle	Now possible to arrive at a location 80-120m away from a fire site by small vehicles
Number of Extended Hoses	10-15 hoses	4-6 hoses	80m : 6 hoses (4 big / 2 small) 100-120m : 7 hoses (6 big / 1 small)
Time Required	5-7 minutes with two fire fighters (7-12 minutes with one firefighter)	2-3 minutes	1.5 to 3 minutes with two fire fighters. 3-6 minutes with one fire fighter

Sources: baseline and target provided by JICA. Actual from an interview at the implementing agency.

Notes1: Target at the time of planning was calculated based on an assumption that the length of a small vehicle's hose was 40% of the length of a medium-sized vehicle's hose

Notes2: At the time of planning it took one minute to extend one hose. Thus it was estimated that there would be a reduction of five hoses if a small vehicle could get a 100m closer to a fire site compared with a middle-sized vehicle. It was also estimated that a 2.5 minute shortened duration would be achieved with two crew members operating extended hoses.

Note3: in order for controlling water dousing capability and pressure, use big hose (with diameter of 75mm) and small hose (45mm) in combination. The length of big and small hoses are the same (20 meters)

Change in Trust in Fire Fighting Capabilities

Do you think your trust in fire fighting capabilities has changed through experiencing fires	Residents (Number)	Shop owners (Number)	Ratio
Trust has become stronger	8	4	92%
Trust has become stronger to some extent	1	0	8%
No change	0	0	0%
Trust has become weaker	0	0	0%
Trust has become greatly weaker	0	0	0%
No response	0	0	0%

Source: A qualitative survey of residents and shop owners

Response at the Time of Fire Outbreak

How did you respond to a fire when you noticed it? (Multiple answers possible)	Residents (Number)	Shop owners (Number)	Ratio
Reported to a fire station	4	2	46%
Escaped from the building	5	0	38%
Told neighbors and people in the buildings about fire outbreak	2	1	23%
Waited to be extinguished inside the buildings	3	0	23%
Went to see the fire	2	0	15%
Tried to extinguish the fire	0	1	8%
Did not do anything	0	0	0%
No response	1	0	8%

Source: A qualitative survey of residents and shop owners

Sustainability

The implementing agency has a clear line of command, sufficient personnel, and established cooperation relationship with other disaster / emergency organizations.

No major problems have been observed in fire-fighting and vehicle operation and maintenance technics, and financial aspects. However, there are some problems in equipment management conditions. Therefore the sustainability of the project is fair.

Conclusion, Lessons Learned and Recommendations

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

As a lesson learned, when it comes to selecting vehicles, specific type suited to purpose should have been chosen. The four ambulances out of the vehicles provided by the project are used little because the interiors are too small for rescue activities. On the other hand, they are tall in height and have good suspension. Thus they are used for rescue activities on bad roads. Among all the four ambulances, JICA and

DNPC should have chosen some vehicles which has large interior space.

As a recommendation for implementing agency, vehicle maintenance should be strengthened. All vehicles are maintained ready for dispatch. However, some pump trucks have developed a water leaks because the hose connection areas have become corroded and water is leaking when fires are doused. The connection parts have not been replaced. And the flood lights of a rescue truck have an electrical system failure which has not been addressed. Since those vehicles are still used without repairing, the maintenance section of the implementing agency is expected to solve the problems as soon as possible.

*1 Time for arrival and fire dousing commencement

*2 Aimed at shortening time required before fire dousing by getting closer to a fire site through the introduction of small vehicles

*3 At the time of planning, DNPC owned 17 vehicle units. However, due to leaking and corrosion of tanks only 10 units were usable. In the case when the second fire broke out, the force that had already at the first fire had to deploy from the site to another.

Key Point of Evaluation

The implementing agency's own efforts contributed to increase project's effects

This project was aiming to improve fire fighting capabilities in Djibouti City by replacing and strengthening the fire fighting and rescue equipment. The below efforts by the implementing agency in parallel with the project greatly contributed to increase project effects.

(1) Securing water for fire-fighting operations swiftly:

Director of the implementing agency visited Kobe for JICA's training in Japan in the past, and learned the role and the importance of water tanks. A total of 8 water tanks were installed in each fire stations and the city, and helped to reduce the loss time for securing water at the fire site.

(2) Organizational reform of the implementing agency:

The agency introduced a retirement and a recruitment system. It increase the number of firefighters with a more positive attitude to training, high morale and good physical strength. This helped

the agency to strengthen the fire fighting system.

(3) Cooperation with related institutions:

In order to protect its citizens and ensuring community safety in a comprehensive way, the implementing agency cooperated with police, military, hospitals where the injured people are transported, Ministry of Agriculture that prioritizes water supply for fire-fighting operations, and Djibouti Electric Company that shuts down power around fire sites in order to prevent electric shock to the citizens or firefighters during the operations.

Moreover, an awareness campaign for fire prevention in summer when many fires break out, and rescue drills in hotels using ladder trucks are organized in collaboration with Djibouti city. Also fire fighters have proposed a review of building standards for fire prevention.

Kingdom of Morocco (ODA Loan)

Overall

B

Effectiveness and Impact	2
Relevance	3
Efficiency	2
Sustainability	3

Watershed Management Project

Contribution to natural resources conservation, erosion controls and livelihood improvement of the local population through afforestation and livelihood improvement activities

External Evaluator: Maki Hamaoka, Foundation for Advanced Studies on International Development

Project Description

Loan amount / Disbursed amount:
3,165 million yen / 1,793 million yen

Loan agreement: March, 2007

Terms and conditions:

Interest Rate 0.75%
Repayment Period 40 years
(Grace Period) (10 years)
Conditions for Procurement General Untied

Final disbursement date: November, 2015

Executing agency:

Ministry of Agriculture, Fisheries, Rural Development, Water and Forests, High Commissariat for Water and Forest and Combating Desertification (HCEFLCD)
(Haut Commissariat aux Eaux et Forêts et à la Lutte Contre la Désertification, Ministère de l'Agriculture, de la Pêche Maritime, du Développement Rural et des Eaux et Forêts)

Project Objectives

Overall Goal:

To contribute to natural resources conservation and to poverty alleviation in the regions of Chaouia Ourdigha (OM Watershed) and Allal El Fassi Dam Upper Watershed in the region of Fès-Boulemane (AEF Dam Upper Watershed)

Project Purpose:

To restore degraded land and improve the livelihood of the local population in the target watersheds

Output:

To carry out integrated watershed conservation activities such as afforestation and livelihood improvement activities of the local population in the target watersheds



Forest of Thuya improved by the project



Check dams constructed to suppress the outflow speed of surface soil

Effects of Project Implementation (Effectiveness, Impact)

Among the three operation and effect indicators, those of afforestation area and quantity of planting achieved their target values sufficiently. The actual value of the survival ratio after planting was greatly different from year to year. The survival ratio after planting of the assisted regeneration from 2008 to 2016 was 3% in the lowest year, 87% in the highest in the OM Watershed, 3% in the lowest year, 64% in the highest year in the AEF Dam Upper Watershed. The achievement degree against the target value (60%) of survival ratio of each planting year was 59% and 68% on average respectively. Evaluated comprehensively, the achievement degree was judged to be fair. Positive impacts were recognized such as an increase in income and diversification of income sources brought by the livelihood improvement activities. A decrease in the quantity of forest resources collected and illegal logging as a result of change in consciousness of the local population through awareness-raising activities and livelihood improvement activities were also recognized. Change in consciousness of the local population was brought by the improvement of relations between the administration and the local population and the establishment of confidence between them. Officials of the administration, utilizing communication skills acquired in the participatory approach training organized by the project in dialogue with the local population, explained patiently the benefit of the livelihood improvement activities and that the appropriate use and conservation of forest resources would lead to the

sustainable use of resources. As a result, the relationship between the local population and the administration changed from "tense" to "trusting."

Among the operation and effect indicators, afforestation area and quantity of planting indicate the achievement result at a certain "point" whereas the survival ratio after planting indicates the degree of afforestation after a certain "period." In this ex-post evaluation, as a result of evaluating the average of the achievement level of the survival ratio after planting against the target value (60%) of the survival ratio of each planting year (60%), the effectiveness/impact was judged to be fair.

Relevance

This project has been highly relevant to Morocco's development plan focusing on comprehensive watershed conservation, development needs for forest regeneration and suppression of flood occurrence, as well as to Japan's ODA policy that focused on addressing environmental issues as a priority area. Therefore, its relevance is high.

Efficiency

Outputs for the project were mostly realized as planned. As regard to the project cost, the project was implemented with about 63% of the planned cost due to the fact that the cost for consulting services was much lower than the planned cost and to the fluctuation of exchange rate. On the other hand, the project period was extended for one year to promote the loan disbursement and to strengthen the output of the watershed conservation

Target and Actual Values for Operation and Effect Indicators (accumulation)

		Target	Actual							Attainment degree (compared to 2016)
		2015	2011	2012	2013	2014	2015	2016	2017	
		1 year after completion	5th Year	6th Year	7th Year	Completion Year	1 year after completion	2 years after completion	3 years after completion	
Indicator 1 Afforestation area (ha) (accumulation)										
1-1 Assisted regeneration	OM Watershed	1,200	1,150	1,350	1,350	1,450	1,550	1,600	1,650	133%
	AEF Dam Upper Watershed	1,879	1,150	1,800	2,200	2,406	1,879	2,767	3,597	147%
	Total	3,079	2,300	3,150	3,550	3,856	3,429	4,367	5,247	142%
1-2 Afforestation for protection	OM Watershed	2,690	1,390	1,890	2,390	2,610	2,710	2,910	3,010	108%
	AEF Dam Upper Watershed	3,675	2,400	3,100	3,850	3,950	3,775	4,325	5,062	118%
	Total	6,365	3,790	4,990	6,240	6,560	6,485	7,235	8,072	114%
Indicator 2: Quantity of planting (seedlings) (accumulation)										
2-1 Assisted regeneration	OM Watershed	288,000	425,170	505,170	505,170	551,420	591,420	611,420		175%
	AEF Dam Upper Watershed	704,625	635,729	1,016,979	1,257,113	1,319,613	1,319,613	1,655,613		178%
	Total	992,625	1,060,899	1,522,149	1,762,283	1,871,033	1,911,033	2,267,033		178%
2-2 Afforestation for protection	OM Watershed	1,344,462	931,893	1,302,493	1,675,889	1,854,849	1,914,849	2,034,849		125%
	AEF Dam Upper Watershed	1,836,765	1,585,219	2,060,569	2,598,769	2,661,269	2,715,269	3,034,450		141%
	Total	3,181,227	2,517,112	3,363,062	4,274,658	4,516,118	4,630,118	5,069,299		134%
Indicator 3 Survival ratio after planting (%)										
3-1 Assisted regeneration	OM Watershed	60%	3%	87%	N.A.	60%	32%	27%		
	AEF Dam Upper Watershed	60%	36%	28%	29%	60%	No plantation	63%		
3-2 Afforestation for protection	OM Watershed	60%	3%	29%	18%	37%	65%	20%		
	AEF Dam Upper Watershed	60%	36%	39%	33%	60%	No plantation	64%		

Source: Documents provided by the executing agency

Note: The survival ratio after planting indicates a survival ratio of seedlings in the target area certain period after their planting. Since the project targeted the survival ratio of one year after planting, the survival ratio of the above table is survival ratio of each planting year.

activities further. Although the project cost was within the plan, the project period exceeded the plan. Therefore, efficiency of the project is fair.

Sustainability

Required manpower for operation and maintenance of the execution agency is secured at central, regional and provincial levels and there is no issue with the institutional aspect. The executing agency conducts monitoring after afforestation and maintenance of structures such as check dams and filter fences without problems and there is no issue with technical aspects. There is no issue with financial aspects since the government of Morocco has allocated its own budget for successor projects after the project completion. Therefore, sustainability of the project effects is high.

Conclusion, Lessons Learned and Recommendations

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

As lessons learned, since the target values of the operation and effect indicators may be reached before the project completion, it is desirable to review the indicators not only at the mid-term, but also at least once a year, while checking the achievement status of the indicators and making a

prospect of the achievement of the indicators for the target year and then to revise the target value in its early achievement. It is also important to verify the usual monitoring method and frequency of the indicators in the target country at the time of the project appraisal and then to consider a mechanism that allows appropriate monitoring and evaluation of the operation for each project.

As a whole, positive changes such as a decrease in the quantity of forest resources collected and illegal logging were recognized as a result of compliance with grazing bans agreed by the local population. However, in the OM Watershed, limited area of the project, community associations to receive compensation for grazing bans were not formed due to the disagreement of the local population. As a result, no compensation was paid in the OM Watershed. It is recommended for the executing agency concerned with the OM Watershed periodically to visit communes where the local population has not agreed with grazing bans by collaborating with officials of other administrative sectors, to continue dialogue with the local population and to conduct awareness-raising activities with view to thoroughly inform about the law on the grazing method established in 2016. Then it is also recommended for it to strengthen monitoring of illegal grazing and logging.

Key Point of Evaluation

For Effective Project Management with Operation and Effect Indicators

Among the operation and effect indicators of the project, those on the afforestation area and the amount of planting reached their target values 2-3 years before the target year (2015) and when the one-year extension from December 2013 to December 2014 for project activities decided, a revision of the target values to be achieved two years after the project completion year (2016) was not conducted. In the ex-post evaluation, the evaluator confirmed officials of the executing agency involved in the project from the appraisal whether the achievement status of the indicators were analyzed and the trend of the indicators was predicted during the

project implementation. The evaluator also referred to reports with descriptions about indicators such as mid-term, project completion review and minutes of the National Monitoring Committee. However, it was not possible to assume the target value as of 2016. In addition, there were no alternative data. As a result, in the ex-post evaluation, effectiveness was evaluated comprehensively through comparison of the target and actual values of the operation and effect indicators and also through analysis of promoting factors such as the continuation of similar projects by the own budget of the government of Morocco that recognized the effect of this project.

Socialist Republic of Viet Nam (ODA Loan)

Small-Scale Pro Poor Infrastructure Development Project (III)

Contributing to poverty reduction by small-scale infrastructure improvement in road, electricity, water supply, and irrigation in rural areas in 36 provinces

External Evaluator: Takako Haraguchi, OPMAC Corporation

* Reinforcement member for this ex-post evaluation. Affiliation is i2i Communication, Ltd.

Overall

B

Effectiveness and Impact	3
Relevance	3
Efficiency	1
Sustainability	3

Project Description

Loan amount / Disbursed amount:
17,952 million yen / 17,280 million yen

Loan agreement: November 2009

Terms and conditions:

Interest Rate

-Construction: 1.2% (except for water supply),

0.55% (water supply)

-Consulting Services: 0.01%

Repayment Period (Grace Period)

-Construction: 30 years (10 years) (except for

water supply), 40 years (10 years) (water supply)

-Consulting Services: 30 years (10 years)

Conditions for Procurement: General Untied

Final disbursement date: February 2016

Executing agency:

Ministry of Planning and Investment (MPI)

Project Objectives

Overall Goal:

Poverty reduction in rural areas in Viet Nam

Project Purpose:

To facilitate the transportation of goods to markets, to improve access to public services (electricity and water supply), and to increase agricultural productivity in the target areas

Output:

Small-scale infrastructure development in road, electricity, water supply, and irrigation (Implementation of a total of 141 subprojects in 118 districts in 36 provinces. In two districts in two provinces, pilot projects were implemented involving the multi-faceted construction of small-scale infrastructure in multiple sectors as well as Rural Promotion Center that would serve as the center of training and other activities.)

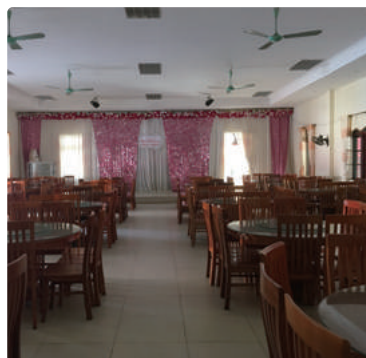
* The number of subprojects increased from a total of 104 subprojects in 93 districts in 36 provinces.



Road to mountain villages (Kon Tum Province)



Reservoir and dam head works for irrigation (Kon Tum Province)



Rural Promotion Center whose operation is outsourced to the private sector (Dien Bien Province)



Interviewing a beneficiary (Dien Bien Province)

Effects of Project Implementation (Effectiveness, Impact)

A total of 141 subprojects have mostly achieved the targets, with some exceptions, concerning their utilization and effects. The qualitative study confirmed the improvement in the transportation of goods to markets, access to public services, and agricultural productivity through utilization of the constructed infrastructure in almost all subprojects visited (24 subprojects in six provinces). Specifically, we collected cases such as reduction of the travelling time from a mountain village to the district center (from three days on foot to three and a half hours by motorcycle), increase in productivity of rice due to irrigation (two times to four times increase), and cultivation of new crops (rubber and coffee) by expanding agricultural land, among others. Known reasons for failures to attain the expected effects in some subprojects included road traffic restrictions due to natural disasters (road), sluggish demand (water supply), and farmers maintaining single cropping due to social traditions (irrigation). In addition, one of the two Rural Promotion Centers constructed in the pilot projects has not been adequately used for the lack of capabilities of the local government, while the other Center, by having its operation outsourced from the local government to a private company, has expanded the facilities and recruited office tenants through this company, and has been actively used for local events and training for the residents and the local governments.

The attainment of the expected impacts such as the improvement in agricultural income, the reduction in agricultural cost, and the betterment

of quality of life was confirmed. There has been no significant negative impact on the natural environment, and no serious problem was observed in the resettlement and land acquisition, which were all small in scale. Therefore, the effectiveness and impacts of the project are high.

Relevance

Poverty reduction through small-scale infrastructure development in rural areas is mostly consistent with Viet Nam's development policy and development needs as well as with Japanese aid policy. Also, it was appropriate that the project selected the provinces and districts where the poverty rate was relatively high as the target areas for subprojects. Therefore, the relevance of the project is high.

Efficiency

Both the project cost and the project period significantly exceeded the plan. Apart from the increase in the outputs (the implementation of additional subprojects), the main reason for the increase in the project cost and the project period was the rise in construction cost reflecting material price hike. The delay caused by the shortage of funds resulted in further inflation of the construction cost. A road subproject (one of the originally-planned subprojects) was incomplete as of March 2018. Therefore, the efficiency of the project is low.

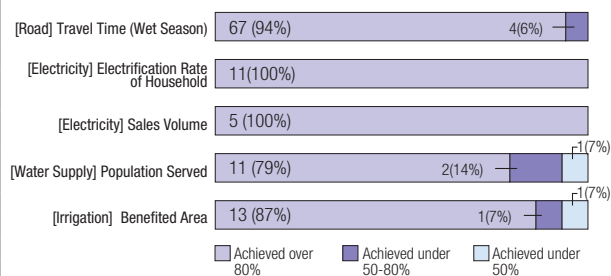
Status of Achievement of Operation and Effect Indicators (Mean or total values of all subprojects)

[Sector] Indicator Name (Unit)		Baseline	Target	Actual
		2009	2017	2017
		Year of Detailed Design	2 Years after Completion	2 Years after Completion
Operation Indicator				
[Road] Annual Average Daily Traffic Volume (PCU/Day) (Mean)	New Construction	0	Provincial Road 1,425 District Road 380	Provincial Road 900 District Road 556
	Improvement	Provincial Road 221 District Road 132	Provincial Road 394 District Road 340	Provincial Road 357 District Road 357
[Electricity] System Average Interruption Duration (Minute/Household/Year) (Mean)		888	334	460
[Water Supply] Population Served (Person) (Total)		31,556	337,932 (319,508)	324,743
[Irrigation] Benefited Area (ha) (Total)	New Construction	0	1,017 (867)	748
	Improvement	32,299	33,842 (32,962)	32,962
[Irrigation] Planted Area by Crop (ha) (Total)	Rice	51,005	60,361 (58,001)	56,816
	Maize	5,248	5,615 (5,465)	5,379
Effect Indicator				
[Road] Travel Time (Wet Season) (Index) (Mean)		100	23	22
[Road] Travel Time (Dry Season) (Index) (Mean)		100	33	32
[Electricity] Electrification Rate of Household (%) (Mean)		31	100	100
[Electricity] Sales Volume (MWh) (Total)		978	5,316 (2,274)	8,703
[Water Supply] Turbidity (NTU)	Tuan Giao	50	50	50
	Others	2-200	2 or lower	0.03-2 (Mean 1.59)
[Irrigation] Major Crop Yield (t) (total)	Rice	238,075	333,056	320,819
	Maize	24,479	27,730	26,361
[Irrigation] Major Crop Unit Yield (t/ha) (Mean)	Rice	4.68	5.42	4.89
	Maize	3.84	4.54	4.17

Source: Ex-ante evaluation sheet; documentation provided by JICA; documentation provided by the executing agencies; subproject questionnaire responses (The number of valid responses was 75 cases out of 89 for road, 11 cases out of 14 for electricity, 16 cases out of 17 for water supply, and 15 cases out of 18 for irrigation)

Note: The target for indicators was marked as "to be reviewed in the detailed design" at the time of appraisal; the baseline and target were both revised during the detailed design. This table shows the revised target. Since the values in parentheses under "Target" do not include the target values for those subprojects that did not respond to the questionnaire in the ex-post evaluation, those values can properly be compared to actual values.

Number of Subprojects by Achievement Level for Key Operation and Effect Indicators (Breakdown of Valid Responses)



Source: Same as the left table.

Note: Due to rounding, the total may not be 100%.



A woman heading to the maize field. After the road improvement, she no longer needs to leave her house before sunrise to go to the market. (Dien Bien Province)

Sustainability

The organizational structure for operation and maintenance (O&M) of each subproject was clearly defined with the allocation of the necessary workforce and the O&M costs within the available budget. As all subprojects were typical small-scale rural infrastructure, there was no problem in the technical aspect of O&M. The status of O&M of the subprojects visited was mostly good. Therefore, the sustainability of the project effects is high.

Conclusion, Lessons Learned and Recommendations

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

The recommendations include the followings. First, the executing agency is recommended to swiftly complete the unfinished construction of the road

subproject. Second, regarding the Rural Promotion Center that is not highly utilized, the provincial government is recommended to implement the revitalization plan that it formulated to make better use of the Center. In this relation, JICA is recommended to consider utilizing the Center's facilities itself when undertaking some activities in the province going forward.

As for the lessons learned, first, when constructing a center for a region, the executing agency could consider outsourcing the operation of the center to a private company with high management capabilities. Outsourcing would be a feasible option especially when the center is of a general-purpose, like in this project, rather than for a specific institution. Second, in a project with dispersed sites and in which the weight of the recipient country's funds is high, JICA and the executing agency are recommended to thoroughly monitor the situation until the completion of the project even after the end of the loan disbursement period.

Key Point of Evaluation

Project Impacts on a Hill Tribe Ethnic Minority Group - Case Study in Dien Bien Province

Dien Bien Province, located in the northwest, has had a high poverty rate among the project target areas, and since it was one of the priority areas, we visited the province for the qualitative study in an attempt to directly hear from the beneficiaries who belong to ethnic minority groups. Ethnic minorities occupied a large number of populations of the province, and the subproject sites of this project were also settlements of hill tribe ethnic minorities. We had obtained preliminary knowledge of their production activities and lives and then interviewed the residents belonging to one of such minority groups.

We got many opinions from the residents on the high effectiveness of this project, such as the convenience of movement by road improvement and the improvement of access to social services. At the same time, it was found that there were some subprojects that were effective as the habit of the hill tribe and its change coincided with the subproject contents and other subprojects

in which the effect did not appear as the contents did not match such habit and change. The former cases confirmed through interviews included the followings. In a village where childbirth at home had been common, the residents came to be aware of safety of utilizing health facilities. It was during such a period when the road was improved by this project, and the interviewee could visit a hospital in the town and gave birth there. Regarding life and culture, interviewees said that it became easier for them to visit their relatives who had settled in distant areas.

On the other hand, the irrigation subproject was an example of the latter. Although the government encouraged double cropping of rice, many residents were maintaining traditional rain-fed agriculture practices and tended to rely on food aid in the case of shortage of production. As a result, the expansion of arable land and cropping were not carried out as planned.

Cameroon (Grant Aid)**Overall****B**

Effectiveness and Impact	3
Relevance	3
Efficiency	2
Sustainability	2

The 5th Project for Construction of Primary Schools

Contributing to an Improvement in the Educational Environment in the North West Region through the Construction of Robust and Safe “Japanese Schools”^{**1}

External Evaluator: Tomoyuki Sho, IC Net Limited

Project Description

Grant limit / Actual Grant amount:
966 million yen / 966 million yen

Exchange of notes: July 2011

Project Completion: May 2014

Implementing agency:
Ministry of Basic Education, Division of Planning,
Projects and Cooperation

Project Objectives

Overall Goal:
Contributing to a reduction of disparities in primary education across regions and an improvement in its quality

Project Purpose:
Enhancing the learning environment for students in the North West Region

Output:
Rebuilding temporary and dilapidated classrooms and providing school furniture in the North West Region



Classroom Buildings



A Classroom



A Class in Session

Effects of Project Implementation (Effectiveness, Impact)

This project has rebuilt temporary and dilapidated classrooms and provided school furniture to enhance the learning environment for students in the North West Region.

Owing to the completion of the project, 202 robust and continuously usable classrooms were newly built (106% of the target) and the number of students who are able to learn in the fine environment increased by approximately 12,120. (Three classrooms at two target schools were, however, unusable at the time of ex-post evaluation after having been damaged by arsons due to the Anglophone Crisis^{**2}.) Moreover, securing the safe storage spaces of teaching materials and administrative documents has created an environment that enables teachers to prepare for classes smoothly and thus contributed to more effective classroom teaching. Furthermore, the creation of the bright environment where teachers and students can more easily concentrate on the class has raised the motivation of both of them. Consequently, the students' performance, such as the success rate of the First School Learning Certificate/Certificat d'Études Primaires examination, has improved. Contrary to what the project expected, the female student-friendly, gender-separated toilets have not been materialized in many schools. Yet, the constructions of sanitary toilet facilities have had positive impacts on the students' health and hygienic conditions, as demonstrated by a decrease in the number of the registered infections of students. In light of the above, the effectiveness and impact of

the project are high.

Relevance

In Cameroon, after primary education had become free of charge, the construction of facilities could not catch up with a dramatic increase in the number of students, and a shortage of classrooms became severe. Moreover, many existing classrooms at public elementary schools were semi-permanent or temporary buildings, and there was particularly high demand for improving those facilities in the North West Region, where the percentage of permanent classrooms was low. The project was consistent with Cameroon's national development policy, education sector strategy, and development needs at the times of planning and ex-post evaluation, as well as Japan's aid policy at the time of planning. Therefore, its relevance is high.

Efficiency

Because of the occurrence of budget surplus, two two-story classroom buildings and two toilet facilities, as well as educational furniture, were additionally procured in this project. Although the project cost was within budget (98% of the plan), the project period exceeded the extended planned period after the additional procurement by one month (103% of the plan after extension). Therefore, the efficiency is fair.

Number of Classrooms that Can be Used Continuously at the Target Schools

Indicator	Baseline	Target	Actual	Actual
	2011	2017		2018
	At the time of planning	3 years after project completion	Before arsons due to the crisis	At the time of ex-post evaluation
Number of classrooms that can be used continuously at the target schools	17	207	219	216

Sources: Site visits and data provided by the target schools.

Success Rates of the First School Learning Certificate/Certificat d'Études Primaires (FSLC/CEP) at the Target Schools

(Unit: %)

School District	2013/14 (Before Project Completion)	2016/17 (After Project Completion, Before the Crisis)
Bamenda	78.4	86.6
Bali	93.4	97.1
Ndop	54.6	70.1
Santa	94.6	100
Tubah	47.5	81.9
Bafut	97.3	100
Fundong	60.4	87.7
All Target Schools	75.8	87.0
North West Region as a Whole	87.0	89.8

Sources: Data provided by the target schools and by North West Regional Delegation of Basic Education

Sustainability

The "Anglophone Crisis" has negatively affected the number of enrolled students. Consequently, the existing organizational structure, which relies on the Parent-Teacher Association and PTA levy for the day-to-day maintenance and repairs for the school, has not been functioning well. In addition, the funds necessary for large-scale maintenance and repair plans had been financed through the counterpart budget of the on-going project during the periods when the projects for the construction of primary schools had been continuously implemented. At the time of ex-post evaluation, it cannot be said that adequate funds have been secured, and thus, sustainability of the project effects is fair.

Conclusion, Lessons Learned and Recommendations

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

Among the lessons learned is that a more elaborate plan, for example, aiming to construct a larger number of classrooms selectively in a center of a school district, should have been devised based on a dynamic forecast of the demand for school enrollment. When determining the numbers of classrooms to be constructed, the project has given only a minimum consideration to projected population growth, an increase in transfer students from neighboring schools, and so on. As a result, in some schools located in a center of a school district, the number of the students who

want to enter or transfer to the schools had rose after project completion, and the number of students per classroom exceeded 100 in some schools. On the contrary, in some suburban and rural schools away from a center of a school district, there exist a few schools where a couple of classrooms have been left unused since right after project completion. If the number of students is expected to increase rapidly, not only classrooms number of toilets also should be arranged accordingly.

Also, it is recommended that JICA continues to carry out primary school construction projects. In Cameroon, the "Japanese schools" have become schools with an excellent reputation and contributed to improving the quality of education through attracting children of the parents who strongly care about the education of their children, and motivated teachers. To further contribute to enhancing the level of primary education in Cameroon, therefore, it is desirable to continue the assistance and thus avoid the "Japanese schools" from becoming the institutions for a relatively small number of lucky students who can attend there.

*1: In Cameroon, a total of about 120 primary schools (approximately 1,500 classrooms) have been constructed in all the 10 regions through Japanese grant aid projects, including this one. And those schools are well-received among locals as "Japanese Schools" with a well-equipped educational environment.

*2: In the English-speaking regions including the North West Region, which was the target area of this project, the conflict between the Anglophone (English-speaking) separatists and the government/security forces has gradually intensified since around October 2016, and the security situation has become deteriorated.

Key Point of Evaluation

Constraint and countermeasure of evaluation under the conflicts

As the Anglophone Crisis intensified at the time of ex-post evaluation, a curfew became imposed in the North West Region, and thus it has become difficult for students to go to school safely even at the target schools of this project. Consequently, the number of enrolled students dropped, and some schools were forced to be temporarily closed as more and more children stayed at home or transferred temporarily to schools in French-speaking regions. When carrying out an ex-post evaluation of the project, therefore, this evaluation divided the period after project completion into pre-crisis and post-crisis and made efforts to collect and analyze

information/data separately by period, with regard to the extent to which the facilities constructed by this project were being utilized.

As the Anglophone Crisis continues with no end in sight, however, an increasing number of households have semi-permanently moved to French-speaking regions to send their children to school there. The environment surrounding this project is in a state of flux. Thus, it is likely that the outcomes of this project (its sustainability in particular) will be greatly influenced by how the crisis, as an external factor, turns out.

Republic of Vanuatu (Grant Aid)

Overall

B

Effectiveness and Impact	3
Relevance	3
Efficiency	3
Sustainability	1

The Project for the Redevelopment of Vila Central Hospital

Realization of improvements in medical services and strengthening of human resources in health sector through construction of new medical facilities

External Evaluator: Atsuko Orimoto*, Japan Economic Research Institute Inc.

*The consultant is from Japan Development Service Co., Ltd., who assisted Japan Economic Research Institute Inc. with this ex-post evaluation.

Project Description

Grant Limit / Actual Grant amount:
1,464 million yen / 1,433 million yen
* Detailed design and construction inclusive

Exchange of notes:
Detailed Design: January, 2012
Construction: June, 2012

Project Completion: June, 2014

Implementing agency:
Ministry of Health (MoH)

Project Objectives

Overall Goal:
(Considering that Vila Central Hospital (VCH) is the nationwide referral hospital, a post graduate training facility for doctors and an intern training facility for graduates of Vanuatu College of Nursing Education for nurses;) Medical services in quality and quantity in Vanuatu are improved.

Project Purpose:
To strengthen medical services at VCH as the top referral hospital for the whole of Vanuatu.

Output:
Strengthening facilities of VCH through construction of new medical facilities including new outpatient and laboratories and provision of medical equipment and supporting maintenance on the medical facility and the equipment.



New hospital building; undamaged by a supersized cyclone.



Orientation of equipment for new doctors in lab.



Outpatients' open waiting area

Effects of Project Implementation (Effectiveness, Impact)

In this project, new medical facilities were constructed and medical equipment was replaced with the aim of improving medical services provided under the Vila Central Hospital (VCH). The hospital had been suffering badly from age-related degradation and faced many challenges as little refurbishment had been carried out since its foundation in 1974. The evaluation was carried out using additional indicators since some of the operation indicators, used to assess effectiveness of the project, were found to be inappropriate and others had problems with mis-handled data.

The number of X-ray pictures taken was approx. 1.6 times greater after the introduction of new equipment, while the number of emergency outpatients became eight times greater due to the new facility of the Emergency Department. The number of clinical examinations increased by approx. 2.4 times, not only due to the effect of the updated equipment but also because of the new building, as all units handling specimens were brought together in one location. Training regarding operation and maintenance of equipment provided under the project was held and considered to be effective as seen in "the improvement of performance of doctors and nurses" and "to improve efficiency in healthcare services". As to the impact of the project, although electricity costs increased by an amount more than estimated, a positive impact in the enhancement of resilience against natural disasters was observed. It would not have been

possible to resume medical activities as rapidly after a super-sized cyclone hit Port Vila, where the VCH is situated, without the new hospital building which was almost undamaged. Moreover, several additional positive impacts emerged such as a reduction in the environmental burden (less waste from X-ray films and chemical liquids), a positive influence over implementation of the Vanuatu building code, an indirect contribution towards economic effects, and recognition of laboratory improvements by external audit, etc. Therefore, effectiveness and impacts of the project are high.

Relevance

This project is consistent with the development plan and health strategy, which aim for "quality healthcare" and "improving population access to quality health services". Moreover, strengthening the VCH is very important in terms of enhancing resilience to natural disasters. This project has been highly relevant to the development needs of Vanuatu, as well as Japan's ODA policy. Therefore, the relevance of this project is high.

Efficiency

There were some minor changes from the original plan; however, the project was mostly carried out as planned and project costs were within the planned amount (approx. 98%). The project periods were also within the plan (approx. 100%). Therefore, the efficiency of the project is high.

Transition of Quantitative Indicators to Assess the Effectiveness of This Project

Indicators	Baseline	Target	Actual ^{*1}		
	2010	2017	2014	2016	2017
	Baseline Year	3 Years After Completion	Completion Year	2 years After Completion	3 Years After Completion
Number of operations	2,183	2,344 ^{*2}	1,891	1,896	(1,945) 2,191 ^{*3}
Number of outpatients to general clinic	61,770	82,000	29,111	44,710	(45,199) 56,773 ^{*4}
Number of referrals to the hospital	351	480 (203) ^{*5}	301	149	227

Source: Preparatory Survey Report, Data provided by MoH and VCH

^{*1}: Due to missing data and credibility issues after the cyclone hit Vanuatu in 2015, statistical data from 2015, one year after completion, was not used in the ex-post evaluation report.

^{*2}: Calculated result (2,344 operations) of the preparation study was used as the target.

^{*3}: Numbers of general operations, cesarean, amputation and operations by visiting doctors were included in the base-line data (2010), therefore, the same types of operations were added to the official figure for the year 2017 (numbers of cesarean and operations by visiting doctors were not available for the year 2014 and 2016). The top line of year 2017 had the same condition of accounting as 2014 and 2016.

^{*4}: General, emergency and pediatric outpatients were included in the base-line data (2010), however, pediatric outpatients and general outpatients were split and the number of pediatric outpatients has not been included in the official statistical data of 'number of outpatients' since 2014. The figure in 2010 cannot separate the pediatric outpatients from others, number of pediatric outpatients was added to the official figure for the year 2017 (the top line of year 2017 was the official figure for general and emergency outpatients only).

^{*5}: During the planning period, unofficial numbers of referral from VCH were used to set the target. In accordance to MoH 2009 Annual Report, the number of referrals to VCH from 2007 to 2009 were 180, 269 and 160 cases respectively, and the average of the past three year (2007 – 2009), as stated in the narrative target, was 203 cases.

Transition of Other Quantitative Indicators to Assess the Effectiveness of This Project

Indicators	2013	2014	2015	2016	2017
		Completion Year	1 Year After Completion	2 Years After Completion	3 Years After Completion
Number of Emergency Outpatients	Not Available	1,680 ^{*1}	Not Available	Not Available	12,455
Numbers of Clinical Examinations	59,810 ^{*2}	74,479 ^{*2}	119,235	129,034	145,338
Numbers of X-ray pictures taken	17,994 ^{*2}	25,660 ^{*2}	26,400	26,693	28,921

Source: Data provided by VCH

^{*1}: Numbers of emergency outpatients were included within general outpatients until 2014. The data for year 2014 includes the number of emergency outpatients after having moved to the new hospital in September 2014 for 3.5 months.

^{*2}: Laboratories moved to a new building in the late half of year 2014, therefore, the figures for year 2013 were before the laboratories moved, and the numbers in year 2014 were a combined number for both old and new buildings.

Sustainability

The shortage of maintenance budget in this project is serious, since salary and personal expenses constitute the vast majority of expenses and approximately one third of operation expenditure is used to cover electricity usage. Since it has not been confirmed if Australian Aid will continue financial support to the Health Sector after 2019 and problems remain in financial aspects influencing the situation of operation and maintenance, the sustainability of effectiveness arising from the project is low.

Conclusion, Lessons Learned and Recommendations

Overall, the evaluation of this project is satisfactory.

Regarding recommendations to the implementing agency; it was suggested to include the cost of spare parts and a maintenance plan within the recurrent budget, to examine means for reducing electricity costs and capacity development for staff members for the collection of accurate and consistent data. To JICA, it was recommended to consider assisting in resolving the problem regarding emission of steam from autoclaves in the

operation theatre (Central Sterile Supplies Department) and with follow-up measures to be taken by the Vanuatu government towards reducing electricity costs.

There are several lessons learned through the project. Among the operation indicators, used to assess effectiveness of the project and determined during the planning stage, some were inappropriate and others had problems with mis-handled data. Therefore, while determining operation indicators, indicators should be verified with the utmost care, paying attention to ensure that; there is no discrepancy with the partner country's policy, pre-conditions and definitions of data are clear, and/or that targets are not set based on the opinion of only a few people, etc. Regarding procurement of equipment, careful consideration of maintenance after completion of the project should be taken into account. Equipment brought from manufacturers that have agents within the country, or at least in neighboring countries, is preferable in order to obtain parts easily. It is also desirable to fully consider the natural environment during design, should there be plans to construct future hospital buildings in countries vulnerable to natural disasters.

Key Point of Evaluation

Many lives were saved due to the hospital being undamaged by the super-sized cyclone

A super-sized cyclone hit Port Vila, where the VCH is situated in Vanuatu, in 2015, one year after completion of the project. While the old hospital suffered major damage, the new hospital and facilities built under this project were almost undamaged due to their robust structure. Many lives were saved, since serious patients who could not go back home during the cyclone could spend time in the new building. Also, the new hospital made it possible to resume medical activities quickly after the cyclone, and not only staff members of

MoH and VCH, but also representatives from other Ministries, donors, neighboring clinics and the general public, unanimously agreed that resilience to natural disaster had been strengthened by the project and evaluated this project highly. Great positive impacts were observed, as the necessity to have cyclone proof medical infrastructure was re-acknowledged, resulting in the MoH setting a new policy that all medical buildings should be category 5 cyclone proof.

Cuba (Technical Cooperation)

Overall

C

Effectiveness and Impact	2
Relevance	3
Efficiency	2
Sustainability	2

Improvement of the Capacity on Urban Solid Waste Management in Havana City

Approach to the garbage problem in Havana city through strengthening waste management capacity

External Evaluator: Hajime Sonoda, Global Group 21 Japan, Inc.

Project Description

Total cost: 480 million yen

Period of cooperation:
September 2009 – September 2014

Partner country's implementing organizations:
Provincial Direction of Communal Services (DPSC)
and Provincial Unit of Hygiene (UPPH) under
DPSC in Havana City

The number of experts dispatched:
(long term) none
(short term) 8

The number of technical training participants:
Training in Japan: none
Third country training: 10

Main equipment provided:
Equipment for inspection, maintenance, and
processing of parts for collection vehicles repair
workshop

Project Objectives

Overall Goal:
Urban solid waste management is properly
implemented in Havana City and sanitary environment
of the City is improved.

Project Purpose:
Capacity of DPSC on urban solid waste management in
Havana City is strengthened through collaboration among
cooperative organizations.

Output:

1. Comprehensive management capacity on solid waste of DPSC is improved.
2. Solid waste source separation at Pilot Project site is promoted and capacity of UPPH in organic waste reduction at the source is strengthened.
3. Capacity of UPPH in the collection and transportation of solid waste is strengthened.
4. Capacity of UPPH and DPSC on landfill design and operation of final disposal sites is strengthened.



Garbage collection in Havana City



Machining parts with the equipment procured in the Project (Vehicle repair workshop)



Construction wastes disposed on the street (Old Havana)

Effects of Project Implementation (Effectiveness, Impact)

The Project was implemented with the objective of strengthening the capacity of the Provincial Direction of Communal Services (DPSC) of Havana, which implements the collection and disposal of solid waste in Havana City. As a result, cooperation was strengthened between the DPSC and the relevant agencies such as Ministry of Science, Technology and Environment, Havana Office; the solid waste management capacity of DPSC personnel was strengthened; a pilot project for manufacturing compost using organic wastes from hotels and agricultural markets was implemented; equipment was augmented and capacity of employee was strengthened at the waste collection vehicle maintenance workshop; design of the new final disposal site was improved, and partial improvements were made to the operation of existing final disposal sites; hence, the project purpose was more or less achieved at the time of project completion. However, at the time of ex-post evaluation, the number of operational waste collection vehicles is less than half of the required number, and waste collection services are unstable. In addition to this, major shortage of containers and poor discipline among residents regarding the discharge of waste make the situation worse, thus no major improvement can be seen in the environmental sanitation of Havana City. Since priority is given to collection of general waste, the manufacture of compost, which requires separate collection, has been suspended. Moreover, following a decision to introduce foreign investment to the waste management service in Havana

City, construction of the new final disposal site has been suspended. Meanwhile, improvement in operation of the existing final disposal sites has not progressed very much since the end of the Project. Therefore, issues exist regarding continuity of the activities following completion of the Project, and the overall goal has not been achieved either. Summing up, the effectiveness and impact of the Project are deemed to be fair.

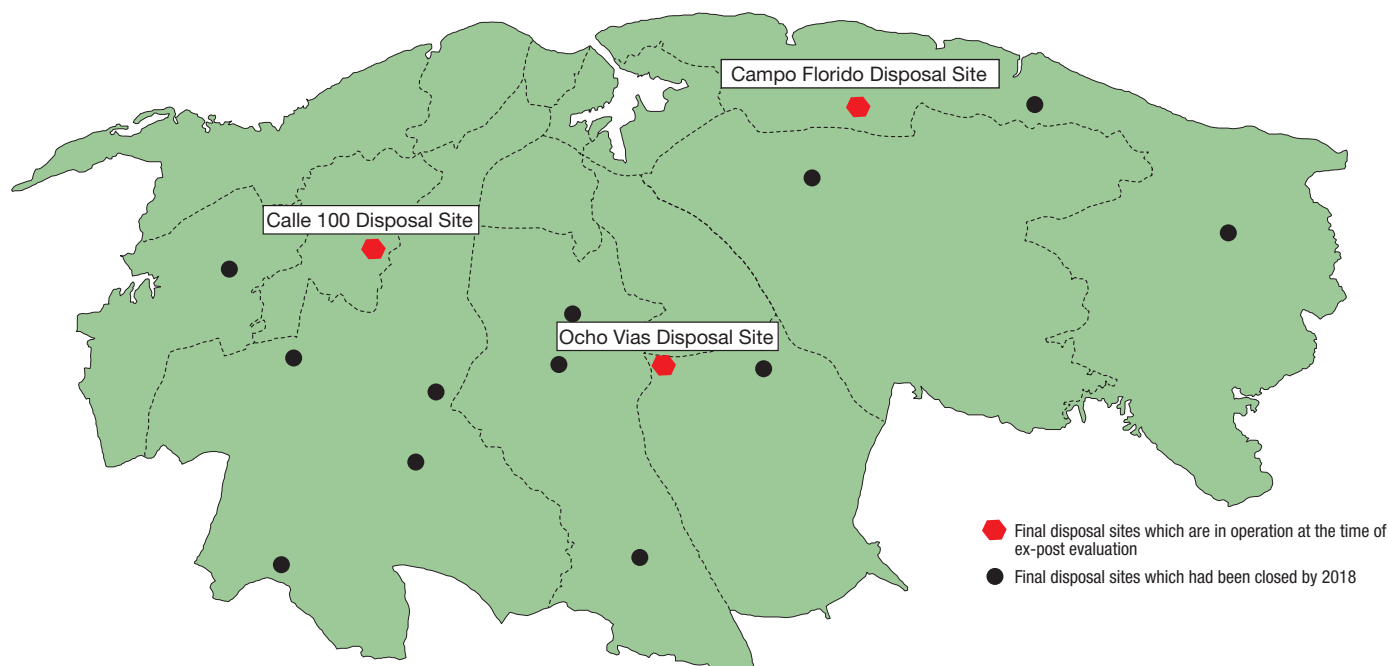
Relevance

The importance of solid waste management within the policies of Cuba was high at both the time of planning and the time of completion of the Project. In Havana City (population in 2009: 2,140,000), waste collection capacity and final disposal sites were insufficient at the time of planning, while, needs to improve waste management in the city were still high at the time of completion of the Project. The Project was relevant to Japan's ODA policy at the time of planning. Based on the above, the relevance of the Project is high.

Efficiency

The inputs of human resources and equipment were appropriate in terms of content and quality. However, because it took a long time for the Cuban side to prepare the compost yard and for JICA to procure the equipment, the project period was longer than planned. In addition, the project cost also exceeded the planned budget due to increase of

Figure 1 Scope of Final Disposal Sites in Havana City



Source: Map in the report of the "Study on Integrated Management Plan of Urban Solid Waste in Havana City" is modified.

equipment procurement costs. Therefore, the efficiency of the Project is fair.

Sustainability

Concerning sustainability, while there are no problems regarding the policy and institutional aspects, there are some technical issues regarding the frequent turnover of human resources, and financial issues in terms of budget constraints. Moreover, in addition to the joint venture based on the aforementioned foreign investment, examination of a proposal to nationalize the solid waste management service is also in progress. Therefore, the Project is faced with major institutional and financial uncertainties in the medium to long term. Based on the above, the sustainability of the Project is deemed to be fair.

Conclusion, Lessons Learned and Recommendations

In the light of the above, the Project is evaluated to be partially satisfactory. Since the waste collection service in Havana City is confronted with numerous issues, it is necessary for DPSC to fully leverage the

experiences gained through the Project with the aim of improving waste collection services and tackle such issues as monitoring on waste collection, continued procurement and appropriate management of waste containers, improvement of social discipline concerning waste, appropriate operation and maintenance of waste collection vehicles, and deployment and training of waste collection vehicles drivers. Meanwhile, since there is urgent need to extend the useful life of existing final disposal sites until construction of the new disposal site is completed, it will be necessary to utilize the remaining landfill capacity with maximum efficiency and conduct programed operation and maintenance with an eye on upcoming site closure. At the same time, it will be important to leverage the information and experience acquired in the Project to assess the remaining landfill capacity and promptly examine a life extension plan and landfill plan. Furthermore, it is desirable that the nationalization and establishment of a joint venture based on foreign investment in Havana City's solid waste management services be realized upon fully examining the technical, financial and institutional feasibility of these plans.

Key Point of Evaluation

Continuous support for solid waste management in Havana City

The Project was implemented as part of Japan's continuous support for the solid waste management of Havana City. As a result of the economic crisis that followed the collapse of the Soviet Union in 1991, it became impossible to transport wastes to disposal sites on the outskirts of Havana City, leading to wastes being accumulated at emergency disposal sites temporarily installed in the city and causing deterioration of living environment for residents. Early securing of a new final disposal site was another big issue. Through JICA's technical cooperation entitled "Study on Integrated Management Plan of Urban Solid Waste in Havana City" (2004-2006), Havana City compiled a master plan for urban solid waste management and worked on closing the emergency disposal sites and improving existing final disposal sites while receiving advice from experts dispatched by JICA. Also, it procured 70 waste

collection vehicles and made the decision to construct a new final disposal site in the east of the city. After the Project from 2009 to 2014, with the objective of further improving the solid waste management in Havana City, an additional technical cooperation entitled "Improvement of the Capacity on Waste Collection Vehicles Management in Havana City" (2015-2018) was implemented to strengthen technical capacity for maintenance of waste collection vehicles. Furthermore, to address the shortage of waste collection vehicles, the plan is underway to procure waste collection vehicles and heavy machinaries, which is more than double of existing vehicles, through Japanese Grant Aid "Economic and Social Development Programme" from 2019 onwards. This is expected to lead to a significant improvement in Havana City's waste collection.

Republic of Mali (Grant Aid)**Overall****D**

Effectiveness and Impact	1
Relevance	2
Efficiency	3
Sustainability	2

Project for construction of Bamako Central Fish Market

The new fresh fish market constructed by this project has not started selling fish because fresh fish wholesalers have not relocated to the market.

External Evaluator: Akemi Serizawa, TAC International, Inc.

Project Description

Grant limit / Actual Grant amount:
1,027 million yen / 734 million yen

Exchange of notes: June 2010

Project Completion: December 2011

executing agency:
Ministry of Livestock and Fisheries (Ministère de l'Elevage et de la Pêche)

Project Objectives

Overall Goal:
To contribute to the stable supply of quality fresh fish in Bamako

Project Purpose:
To improve infrastructure for distribution of fresh fish in Bamako

Output:
To construct Bamako Central Fish Market (Marché Central à Poisson de Bamako: MCPB)



Space for fresh fish wholesalers in Bamako Central Fish Market (Marché Central à Poisson de Bamako: MCPB)



Ice making (MCPB)



Freezer (MCPB)

Effects of Project Implementation (Effectiveness, Impact)

This project constructed a building to be used as a wholesale market of fresh fish (including space for vendors, space for loading and unloading, management office, hygiene examination room, first processing room, icemaking machine and freezer) and installed facilities such as public toilets, elevated water tank, receiving and transforming room, and waste collection area. The project procured equipment to handle fresh fish such as cool boxes, pallets, platform scales, flat carts, ice cracking machine, and fish processing table as well as equipment for maintenance of icemaking machine and hygiene control equipment such as radiation-type thermometer and chest freezer. As a soft component, the project provided training in operation and maintenance of the icemaking machine.

Ice was produced as planned by the icemaking machine in MCPB at the time of ex-post evaluation and contributed to the freshness of fish distributed in Bamako. However, as the fresh fish wholesalers had not relocated to MCPB and the market had not started selling fish, improvement of infrastructure for distribution of fresh fish, the intended effect of the project, was not realized. Data of ice/fish ratio and post-harvest loss of fresh fish, which are the indicators to measure the effects of constructed facilities and procured equipment, did not exist. Expected qualitative effects such as hygienic environment and hygienic handling of fresh fish or impacts such as stable quantity and price of fresh fish and concentration of distribution system of fresh fish were not realized.

Expected effects will be realized once MCPB starts selling fresh fish as

the facilities of the market are in good condition.

As the project has achieved its objectives only to a limited level compared to the plan, effectiveness and impacts of the project are low.

Relevance

This project is in line with Mali's country policy of fisheries and responds to its needs of modern and hygienic fresh fish market in Bamako. However, mainly due to the political unrest in 2012 and the location of MCPB, fresh fish wholesalers have not relocated to MCPB and sales of fresh fish has not started. As it is not clear whether the project fully examined measures to encourage relocation of wholesalers at the time of project design, its relevance is fair.

Efficiency

Efficiency of the project is high as the building was constructed and equipment was procured as planned and both the project cost and project period were within the plan (70% and 95% of the plan, respectively). The actual project cost was lower than the plan because the bid price was much lower than anticipated. As no defects of the facilities and equipment constructed or procured by the Japanese side were reported, the low price did not compromise the quality of the outputs.

Sustainability

There are no serious problems in the institutional, technical, financial aspects or status of operation and maintenance of AGMCPB (the

Target and actual figures of quantitative effects

Indicator	Baseline	Target	Actual		
	2009	2013	2012	2013	2017
		1 Year After Completion	Completion Year	1 Year After Completion	5 Year After Completion
Quantity of ice supplied for transport of fish from neighbouring provinces to Bamako (per day) ^{*1}	30 tons	38 tons	15 tons	30 tons	60 tons
Ice/fish ratio (per day) during storage of fresh fish by wholesalers ^{*2}	Approx. 10%	20-30%	No data (MCPB does not sell fresh fish)		
Post-harvest loss of fresh fish handled in the market ^{*3}	15%	7.5%	No data (MCPB does not sell fresh fish)		

Source: Documents provided by JICA and questionnaire response from AGMCPB

*1: The data of ice quantity were supposed to be collected from the management record of the market.

*2: The data of ice/fish ratio were supposed to be collected from the ice sales records of the market.

*3: Post-harvest loss was to be calculated by post-harvest loss examination.

management agency of MCPB), and it will continue functioning after starting sales of fish. However, since the fresh fish wholesalers have not relocated to MCPB and fish are not sold yet, which means AGMCPB is not functioning as planned, it is not possible to conclude that there is no problem in its sustainability of the effects of the project. Similarly, it is not possible to measure the sustainability of the effects of the project because they are not realized. From the above, sustainability of the project is fair.

Conclusion, Lessons Learned and Recommendations

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

As a lesson learned for projects involving market relocation, workers might be reluctant to move when they have concerns about commuting, work-life balance and access to clients. JICA and executing agencies should identify such problems and formulate countermeasures at the project design. It is not clear whether this project fully examined problems for wholesalers with the market relocation and countermeasures at the time of project design.

It is recommended that implementing agency (AGMCPB) should continue preparation of facilities for fresh and frozen fish wholesalers and retailers and negotiation with vendors to relocate until it finally starts selling fish and the business becomes stable. It is also recommended that AGMCPB should consider regular employment or training of staff with expertise of market management and activation.

The fact that MCPB was constructed by Japanese assistance can attract customers to the market. It is recommended that JICA should continue assistance in market management by Japanese experts to the extent possible based on the efforts of AGMCPB in market management and activation.



Inside of the hangar for fresh fish retailers, constructed by Bamako Central Fish Market Agency (Agence de Gestion du Marché Central à Poisson de Bamako: AGMCPB) in 2017-2018 as a means to activate MCPB

Key Point of Evaluation

Qualitative survey of projects when the constructed infrastructure is not functioning as expected

It was difficult to analyze the effectiveness and impacts of this project because fresh fish wholesalers had not relocated to the new market and sales of fish had not started. At the qualitative survey of the ex-post evaluation, 20 wholesalers who were going to relocate to MCPB were selected for the survey to know their level of satisfaction with the existing fresh fish markets and their expectations for MCPB. The survey revealed pros and cons of MCPB for the fresh fish wholesalers.

The wholesalers were highly satisfied with the existing fresh fish markets about the building, land, equipment as well as location, commuting, work-life balance and access to clients. It was an

unexpected result that the wholesalers were satisfied with the cleanliness of the existing markets even though it was a fact that they were not very hygienic. All 20 respondents gave high marks to the modern, spacious and hygienic MCPB and they wanted to keep the same level or make their business better after relocation in terms of quantity and quality of fish as well as income. However, as MCPB is on the other side of the Niger River and more than 10km away from the city center where the existing fish markets are located, they considered that commuting, work-life balance and access to clients would be more difficult than the current situation and these problems would be challenges for them.

Measures for Projects Evaluated as Having Issues

Palestine: Jericho Wastewater Collection, Treatment System and Reuse Project

1. Overview of evaluation results and issues observed

This project aimed to improve the wastewater treatment service and secure water resources in the region by constructing wastewater treatment systems and reusing treated wastewater in Jericho; thereby helping improve sanitary conditions and develop the regional economy. In assessing the project effect, the achievement level at the time of ex-post evaluation (2017) was estimated based on the 2020 target value set in the project. The achievement result showed that the wastewater treatment and reused volumes would likely be far lower than the target value, even in 2020, due to the delay in improving the sewage branch pipes and other works deemed essential for wastewater collection. However, since the target value remained unclear as of 2017, it was unlikely to be achieved, although this could not be explicitly confirmed. Under such circumstances, the effectiveness of the project was assessed as fair based on external ex-post evaluation references*, on which JICA's evaluation is based. Conversely, the main factor behind the fact that the wastewater treatment



An example of a date farm reusing wastewater

volume remained constant was the project planning issue, in which works such as sewage branch pipe improvement were considered items to be borne by the recipient country without estimating wastewater treatment demands and taking vulnerability in the implementation capacity and the finances of the Palestine side into consideration. This was the reason for rating its relevance as fair. Likewise, since its efficiency and sustainability were rated as fair, the overall project rating was unsatisfactory.

2. Recommendations and lessons learned

As lessons learned, given that planning capacity and the project implementation system are vulnerable elements in a conflict-affected country/region, it is preferable to consider, from the project planning stage onward, collaborating with other donors and leveraging other JICA cooperation schemes which will elicit complementary and synergy effects with the project.

3. Insights of the JICA department in charge of the project

The evaluator and JICA department overseeing the project have different views regarding the appropriateness of the project planning and approach and how to evaluate their effectiveness and impact. The relevant details are also described in the project evaluation report.

4. Measures to be taken by the JICA department in charge of the project

To achieve the goal in 2020, JICA will continue to ask the recipient government and Jericho City to promote the expansion project, including improvement of the wastewater branch pipe and home connection works to boost the wastewater inflow. In addition, JICA will also work with the Government of Japan to encourage the implementation agency and help streamline and facilitate the expansion project supported by the Japanese Government.

*: The External Ex-Post Evaluation References (FY 2017) include a note on page 2 stating that: "... where appropriate evidence is unavailable, such projects lack any evidence and cannot therefore be assessed with a sub-rating of ③ or a rating of ①."

Bolivia: Project of Value-added Agriculture and Forestry for Improvement of the Livelihood of Small Scale Farmers in Northern La Paz

1. Overview of the evaluation results and issues observed

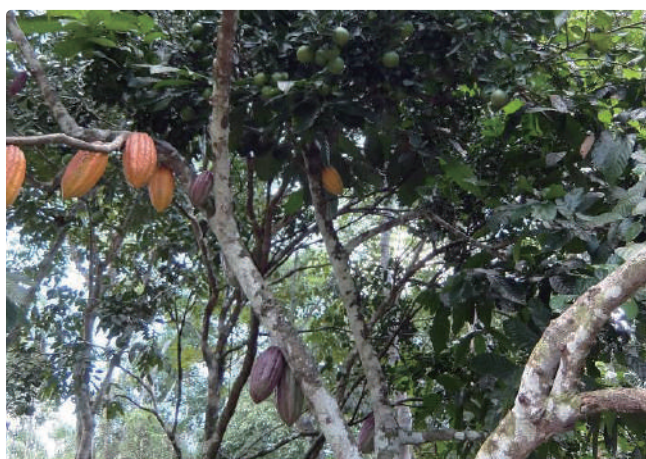
This project aimed to improve the livelihood of farmers in the Northern La Paz region by developing agricultural implementation system to promote value-added agriculture, cooperating with national/departmental/municipal administrative and research institutions as implementing agencies. Although both rice and cacao achieved productivity improvement and added value in the target demonstration farm, the overall goal, namely to reduce poverty of small-scale farmers, was not fully achieved and technological dissemination outside the demonstration farm was limited. This was due to the rice markets have deteriorated. In addition, frequent turnover and absence of responsible personnel in the implementing agencies and lack of collaboration among relevant agencies. Given that there was also significant financial concern in the implementing agencies, the project sustainability was assessed as low.

2. Recommendations and lessons learned

The recommendations include the followings. To the implementation agencies, it is vital for them to support farmers introduce the target technology and to authenticate seeds. JICA is recommended to conduct seminars and monitoring aiming to add value and facilitate collaboration between farmers and businesses. As lessons learned, if the personnel involved in the project were frequently reassigned, it is effective to take the following measures: (i) assigning a site supervisor to represent multiple agencies, (ii) getting farmers' associations to run activities in the project on an ongoing basis.

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

The project strives to secure a sustainable implementation system, such as securing the participation of research institutions and universities besides administrative agencies. JICA will also note the need to promptly review and readjust as the project plan in similar projects in future when any external encumbrance hinders the project implementation.



Cacao fruits produced by a farmer supervised during the project (a village in San Felipe)



A former demonstration farm where rice farming continues (April 2018) (a village in Santa Rosa de Maravilla)

Mali: Project for construction of Bamako Central Fish Market

1. Overview of the evaluation results and issues observed

This project aimed to improve infrastructure for distribution of fresh fish in Bamako by constructing Bamako Central Fish Market (MCPB), thereby contributing to the stable supply of quality fresh fish in Bamako. The evaluation result showed that selling fish had not started yet at the new market, since the fresh fish wholesalers had not yet relocated to the new market by the time of the ex-post evaluation. Since no project effects were realized except ice production by improved icemaking machines, effectiveness and impacts of the project were rated as low. The major reason for this was deemed to be because relocation negotiations between the MCPB and wholesalers of each market remained at a standstill, despite plans to integrate two markets located separately into the central fishery market constructed in the project.

2. Recommendations and lessons learned

The evaluator recommended that the AGMCPB (the management agency of MCPB) should facilitate the voluntary relocation of wholesalers to the new market and continue to work on developing the surrounding facilities and attracting vendors. As lessons learned, identifying issues at the project planning stage (location, commuting means of market participants, outlook of access to clients, etc.) and considering measures in response were understood as important.

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

Political turmoil and deteriorating security in Mali in 2012 delayed the response on the part of the Malian government and led to JICA suspending its support through the technical adviser for fisheries distribution. Once the security situation recovered, JICA promptly re-dispatched the advisor until February 2018 to conduct a fishery distribution survey, issue recommendations for improving management and organize training sessions. Eventually, the scope of products distributed at the MCPB was also expanded from fresh fish to frozen fish and retail products to secure customers. Under this policy, buildings for retailers are under construction. JICA will keep checking on progress and striving to promote the project.



Location of the container to be used by frozen fish wholesalers (MCPB)



A kiosk for retailers distributing products other than fresh fish (constructed by AGMCPB to revitalize the market)

Collaboration with Experts for Project Evaluations

Joint Evaluation of the Post-Disaster Standby Loan in the Philippines

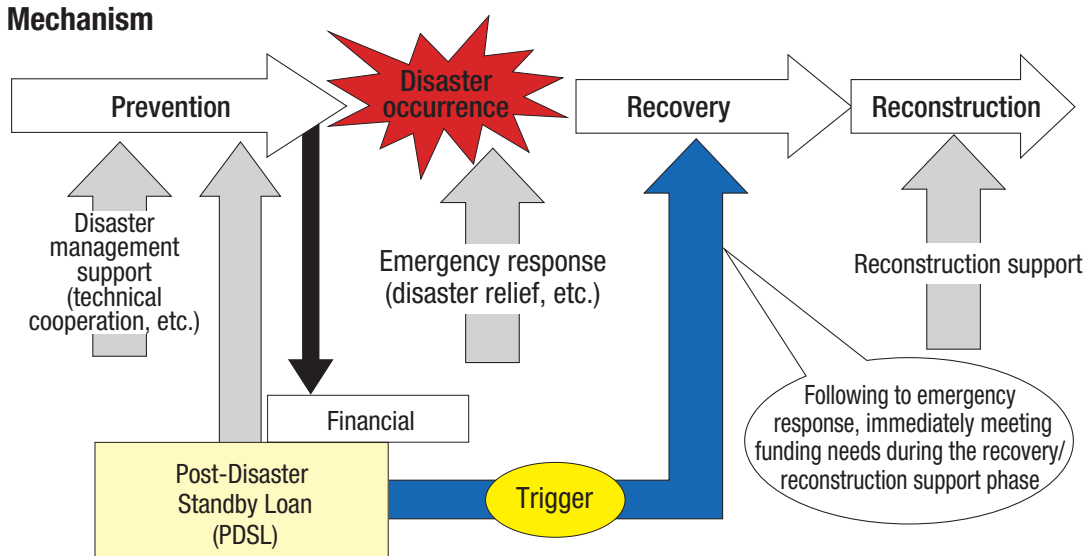
In 2013, the Government of Japan established a new scheme, Stand-by Emergency Credit for Urgent Recovery (hereinafter, “SECURE”), as part of the improvement measures to make strategic use of ODA loans. This scheme was designed to provide support as soon as possible to developing countries affected by natural disasters in order to meet their financing needs for recovery. Under this scheme, a financing agreement is made in advance so that the loan can be awarded immediately upon request from the borrowing country when a natural disaster occurs. The first SECURE loans were provided to Peru, El Salvador, and the Philippines.

The Philippines is one of the most vulnerable countries in the world to natural hazards. Natural disasters hit the country every year, causing huge economic and human losses as well as frequent damage to social infrastructure. In fact, such losses accumulated to cause a long-term impact on economic activities. Coupled with this, devastating storms had struck the country and led it to declare a state of national calamity so many times that these catastrophe risks became an urgent issue. In this context, the Government of the Philippines sought technical and financial support

from JICA to enhance its disaster risk reduction and management capacity, particularly by the following means: (i) formulate a national disaster risk reduction and management plan and strengthen the capacity of local governments; (ii) introduce integrated water resources management; and (iii) improve information management for disaster risk reduction and management. Their discussions led to an agreement on the Post-Disaster Standby Loan (hereinafter, “the PDSL”) in 2014. In addition to the above-mentioned means, this agreement included a financing commitment to meet the funding needs immediately in case of temporary shortage of funds for post-disaster recovery.

The two parties also agreed on a policy action matrix, where policy actions to be implemented with technical support from JICA were specified as conditions for disbursement of the loan. The Government of the Philippines was required to monitor the progress against this matrix on a regular basis to ensure that it could enhance its disaster risk reduction and management capacity. It was also required to keep the macroeconomics sound and healthy as well as manage the public funds properly.

Figure 1: PDSL Mechanism



When the Philippines declared a state of national calamity after Super Typhoon Yolanda hit the country, the PDSL was disbursed in total 50 billion yen, which marked the first completion of the newly established scheme. JICA and the Government of the Philippines decided to jointly evaluate this program in part because it was expected to generate useful lessons for improvement of the scheme and in part because several disaster management agencies were involved in the policy actions. The joint evaluation took longer than usual since it required the Japanese and Philippine sides to agree on all aspects of the evaluation, from evaluation planning to results feedback. In the evaluation planning phase, the Philippines' Department of Finance suggested to JICA that the joint evaluation should include a comparison with similar programs supported by other development partners. This was because the Government of the

Philippines wanted to compare different aid modalities devised for similar purposes in order to develop guidelines for future implementation of similar programs. In light of the intention of the Government of the Philippines, JICA agreed to compare the PDSL with the Catastrophe-Deferred Drawdown Option (Cat-DDO) of the World Bank and the Disaster Risk Management and Prevention Policy Loan of the French Development Agency (AFD).

In the joint evaluation, the Philippines' Department of Finance illustrated the effectiveness of the PDSL with an example that the immediate disbursement of PDSL funds had enabled it to raise yen-denominated funds for repayment without causing unnecessary harm to the bond and exchange markets. In the Philippines, the Department of Budget and Management appraises budget requests and allocates funds to government

Table 1 Comparison of similar schemes

	JICA	World Bank	French Development Agency
	Post-Disaster Standby Loan	Catastrophe-Deferred Drawdown Option (CAT-DDO)	Disaster Risk Management and Prevention Policy Loan
Funding type	Accidentally materialized	Accidentally materialized	Incorporated into the regular budget
Withdrawal of tranche	3	1	1
Funding size	50 billion yen	5 million dollar	0.5 million EURO
Loan interests / fees	0.01%	LIBOR + 0.48%	
Redemption period	40 years	25 years	40 years

departments. Bureau of Treasury manages short-term funds, and its International Finance Operations Division is responsible for raising foreign currency funds. The Government of the Philippines needs Japanese yen to repay its ODA loans and other public debts as well as pay for imports. When a disaster or emergency causes a temporary shortage of local currency resources, the Government will have to first raise local currency funds from the bond market and then convert them to Japanese yen in the exchange market, which will cause the Government to bear the financing and currency exchange costs. Therefore, the Bureau of Treasury highly evaluated the PDSL in the sense that the immediate disbursement of this yen-denominated loan had helped manage the cash flow and debt. The Bureau described this advantage as a significant impact of this program. Also it was turned out that the Bureau appreciated this program since it had eliminated the risk of exchange-rate fluctuations differences between the exchange rate of Japanese yen to Philippine peso at the time of lending and the exchange rate of Philippine peso to Japanese yen at the time of repayment, which otherwise sub-borrowers, namely executing agencies such as disaster management agencies, should have borne. Eventually, this loan covered 16.4 percent of the total costs incurred by the Government of the Philippines for recovery from Super Typhoon Yolanda from 2013 to 2016.

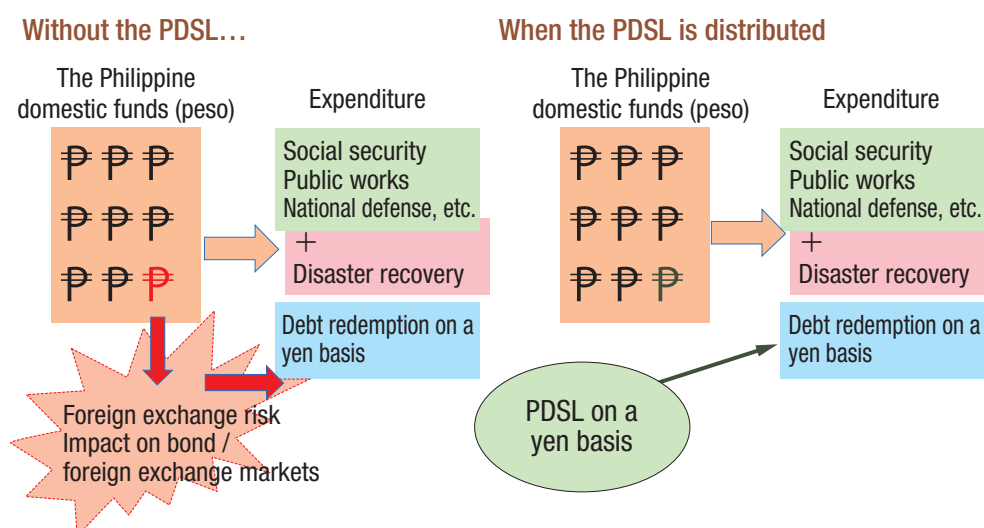
On the other hand, given that the PDSL can be disbursed at any time when a natural disaster occurs, the interest-rate fluctuation risk may accidentally materialize, undermining the financial footing of JICA. With

regard to this, JICA learned valuable lessons for future implementation of similar programs by comparing the PDSL with the Cat-DDO loan from the World Bank, which developed a mechanism to raise funds from the market after the scheme was set up.

This case shows that a joint evaluation is a mutually complementary, flexible process that can enable both donor and recipient countries to discuss their circumstances and intentions behind system development. In particular, in this joint evaluation, the recipient country suggested comparing the PDSL with other donors' similar programs to evaluate its flexibility as a macroeconomic management instrument and as a financial product. This demonstrates that donors can learn lessons from recipient countries.



A feedback workshop for DOF-JICA Joint Evaluation on Post Disaster Stand-by Loan

Figure 2: Effectiveness of the PDSL (based on the discussion with the Philippine Department of Finance)

An Evaluation of the Post-Disaster Standby Loan

Yoshiyuki Arima, Japan Representative, World Bank Treasury

The Post-Disaster Standby Loan (PDSL) provided by JICA to the Government of the Philippines is an extremely useful financial scheme for borrowers. In fact, the PDSL enables JICA to provide support immediately when a typhoon hits the country. Therefore, it is expected that this catastrophe risk financing scheme will be accepted by more market participants in a future. On the other hand, PDSL is not always an easy financial service for financial institutions to manage properly. PDSL still has some points to be sorted out, such as improving the accuracy of damage predictions, ensuring proper pricing, and developing financial instruments to hedge the risks. This section evaluates the PDSL by referring to the financial instruments used by the World Bank to manage disaster risks.

Due to global warming, natural disasters have been increasing recently in frequency and severity around the world, causing damages beyond what the insurance industry has been able to cover in a past. There is an example that a year after floods caused severe damage in Thailand, many casualty insurance companies have significantly raised premiums or failed to pay benefits. Premiums on insurance against natural disasters have also surged in Japan due to frequent typhoons and earthquakes. In this context, the public and private sectors have been working together on various global initiatives against natural hazards. In particular, the Government of Japan has been playing a leading role for many global initiatives in recent years.



School buildings collapsed by strong wind and high tide



A coconut oil tank rolled over by typhoon, testifying its terrific force

At IMF/World Bank Annual Meetings in Tokyo in 2012, Sendai was chosen as the first city to host a sub-meeting to discuss how to manage catastrophe risks around the world. In 2013, a year after this dialogue, the World Bank launched a project under the leadership of Japan to insure five Pacific island countries against natural disasters. While the Government of Japan paid the insurance premiums, the World Bank formed a syndicate of insurance companies and acted as an intermediary between this group of insurance companies and the developing countries. This is the first ever syndicated transaction that private sector insurance companies provided insurance services to developing countries.

We used derivative transactions that are widely used in capital markets for syndicating insurance. This was another unique point.

In 2017, the World Bank issued the world's first pandemic bonds under the Pandemic Emergency Financing Facility (PEF), which have been established to provide financial support as soon as possible to countries affected by infectious diseases when the outbreak is likely to lead to an

epidemic or pandemic. The creation of the PEF was announced at the G7 Finance Ministers and Central Bank Governors' Meeting in Sendai in May 2016. The PEF's insurance benefits provided to pandemic-affected countries are, in principle, financed from two sources: (i) the World Bank's Pandemic Bonds issued as catastrophe bonds (cat bonds) and (ii) insurance derivative transactions. This unique fund-raising structure was designed to mobilize a diverse range of investors. In fact, this scheme attracted a wide segment of investors, including insurance companies. It was critical that the Pandemic Bonds were issued by the World Bank, because the World Bank Bonds has longer than 70 years track record in the global capital market.

These two schemes are important not only because large scale disaster risks are widely covered by multiple types of investors (risk takers) but also because they are the first full-scale public-private partnership programs to bridge the gap between abundant private capital markets and catastrophe insurance markets.



After Super Typhoon Yolanda hit the Philippines in November 2013, temporary housings have stood in a row in the coastal area. The picture shows a woman drawing water from a temporary well.

JICA's PDSL and the World Bank's above-mentioned two schemes have an important function in common; when a natural disaster over a certain magnitude occurs, they immediately provide financial support to the affected country without assessing the damages. In general, insurance premiums are paid only after the amount of damages are determined; however, this mechanism cannot fulfil the urgent needs of affected people. In particular, in the case of infectious disease outbreaks, damage assessment may cause delays in funding and end up with larger epidemics. In order to overcome this disadvantage, it has become increasingly common to use simulation models to estimate damages caused by natural disasters. The World Bank uses Swiss AIR Worldwide's model for the above-mentioned two schemes.

These are able to provide financial support to affected people as soon as a natural disaster occurs will be exceedingly helpful to the beneficiaries. In fact, the Government of the Philippines highly appreciated JICA's PDSL as it had provided funds for recovery without any negative impact on the financial market.

In theory, there is no correlation between cat bond and financial market conditions. In addition, their financial returns (insurance premium) are higher than standard market interest rates. Therefore, cat bonds are very attractive to some investors for diversify investments. In fact, the World Bank's cat bonds were oversubscribed by investors around the world, and the bonds were priced suitably in comparison to the value at the time of implementation.

Moreover, development finance institutions' cat bond capital is used to finance developing countries when no insured disaster occurs during the term of the bonds, and part of or all of the invested principal is used to help affected people when such events are triggered. Because of these characteristics, development finance institutions' cat bonds have recently attracted increasing attention as ESG bonds. These market trends have also provided favorable tailwinds

The emergence of artificial intelligence (AI) and blockchain technology are expected to further reduce financial technology costs in the future. If transaction costs also decline in insurance-related capital markets, such as the cat bond market, it will make it possible to issue bonds in smaller and more flexible increments and thereby new entrants are expected. Although the World Bank's bonds used to be issued in huge increments, generally in the range of hundreds of billions of yen, newly introduced Euro-MTN program and other factors have significantly reduced bond issuance costs and in turn made it possible to offer bonds in smaller and more flexible increments. This has resulted in the spread of tailor-made World Bank bonds that can meet various demand for investors, which has contributed to market development. As of June 2018, the number of bond offerings from the World Bank to Japanese investors, including individual investors, has reached several hundred per year.

In a past, the World Bank had guaranteed the return of principal in the original currency and enjoyed triple-A ratings by refraining from issuing bonds with principal risks. In order to address the increasing risk of catastrophes in developing countries, the World Bank decided in 2014 to start issuing cat bonds which value of principal could fall below par value regardless of the issuer's credit. The World Bank's general bonds contributed to market development by reducing minimum size of bonds and meeting demand in flexible manners. If the cat bond market attracts more investors and becomes more efficient, it is expected that we will be able to address a wider range of natural hazard risks.

Active use of private capital markets with large size of capital and flexibility leading to greater risk taking is essential. Otherwise development finance institutions cannot continue to provide financial services (e.g. PDSL) entailing natural hazard risks. We foresee the positive use of new financial instruments will be able to develop financial services further.



Residents of temporary housings in the coastal area built after Super Typhoon Yolanda hit in November 2013



Damage caused by Super Typhoon Yolanda hit in November 2013. A large ship stranded has been left as it is.

Internal Evaluation Results for FY 2017

Overall rating

The overall evaluation of 95 projects shows that approximately 70% of the projects delivered the expected or higher result at the time of ex-post evaluation. Among 77 Technical Cooperation and 20 Grant Aid projects,

most of which were carried out in Africa and Southeast Asia in sectors such as public works and utilities, agriculture, forestry and fishery, health and medical care, development planning and governance and education sectors.

Evaluation by criteria

◇Relevance:

There is no specific problem observed from all the projects and they were consistent with the policies of the partner countries in meeting their development needs.

◇Effectiveness / Impact:

Approximately 60% of projects achieved the expected outcomes, while the remaining around 40% faced some challenges in achieving results.

Some Grant Aid projects are observed that damaged equipment provided in the project could not be repaired and remain unused because corresponding budgets of the executing agency was not allocated, as well as such an issue that both the project purpose and overall goal were not achieved as planned, although the projects produced certain effects. With regards Technical Cooperation projects, in some cases the ex-post evaluation was unable to verify the impact of the project as the data for the overall goal indicators could not be confirmed due to organizational reform. In other cases, the expected outcome of the trainings provided in the project were not sustained due to unclear training implementation system attributable to the changes of the ministry in charge. Moreover, project effects could not be fully verified at the time of ex-post evaluation due to the vague definition, or the unavailability of data and information on indicators defined at the project planning stage.

◇Efficiency:

Approximately 30% of the projects were completed within the planned period and cost, while the remaining projects exceeded the period and/or cost upon completion. In case of Grant Aid projects, around 70% of the projects were observed that delays in facility construction, results of equipment bidding/procurement and other factors caused the extension of the project period. As for Technical Cooperation projects, the project cost exceeded the planned cost as more inputs were needed than initially planned to achieve the project purposes and outputs while the project period was extended due to deteriorating security situations, change in the plan or to achieve the project purposes.

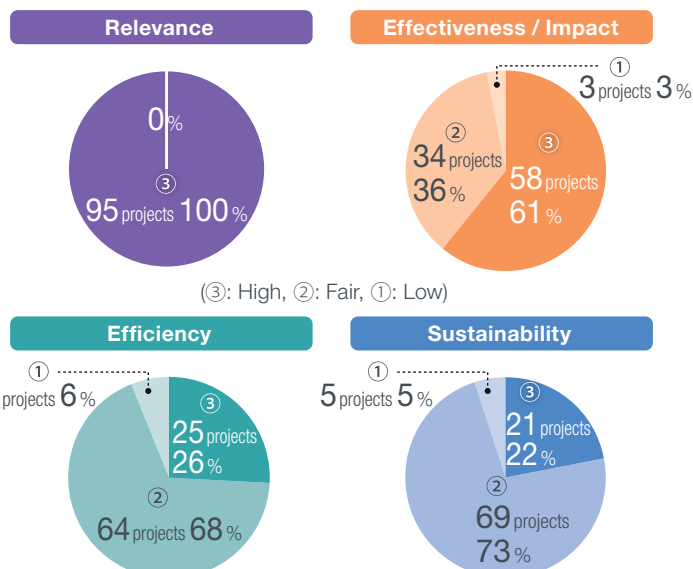
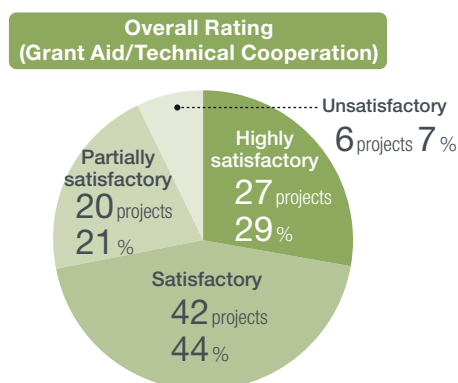
◇Sustainability:

Approximately 80% of the projects were identified as having some challenges. As frequent problem, around 70% were identified as having insufficient financial sustainability, such as difficulty in securing the necessary budget by implementing agencies, while institutional sustainability, most typically in the form of shortage of staff was identified as the second most frequent problem. Other challenges were also observed frequently in technical aspects, such as the retention of the technologies transferred and omission of routine inspections and repairs.

Future Direction: Quality Improvement and Further Streamlining of Evaluation

JICA promotes a verification process of evaluation results involving third-party experts to make them used for realizing high-quality evaluations, improving succeeding projects and formulating future projects (refer to the next page for details). The improvement of organizational evaluation capacity is also facilitated by leveraging internal evaluation trainings for

overseas office staff and other efforts. To conduct internal evaluations, efforts to streamline the process also required simultaneously. Thus, JICA attempts to unify evaluation of project that has several phases and integrate evaluation across the schemes such as Grant Aid and Technical Cooperation.



Accountability and Quality Improvement in Internal Evaluation: Self-assessment and Third-party Quality Check

With the aim of enhancing its internal evaluation function to achieve the evaluation objectives (learning lessons for improvement and fulfilling its accountability) 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.

Based on advice from the Advisory Panel on Enhancement of Ex-post Evaluation*, JICA has developed check sheets to define requirements and procedures for good and high-quality evaluation. These check sheets are used for self-assessment and third-party quality checks. More specifically, they offer perspectives to examine the appropriateness of the evaluation process, the validity of the ratings of the each 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 enable evaluators (e.g. overseas office) and external third party reviewer assess the conformity with the requirements and procedures for high-quality evaluation. The checklists include following perspectives: whether the evaluators conduct tasks with full understanding on the evaluation framework; whether the evaluation report contains all the necessary information; whether the evidence on the ground for judgements and factors are stated; whether the description is coherent; and whether evaluation constraints (if any) and their influence on the evaluation results are described. In order to improve

their evaluation reports, the overseas offices (evaluators) try to tick off as many items as possible on the checklist in their evaluation process.

◇Self-assessment:

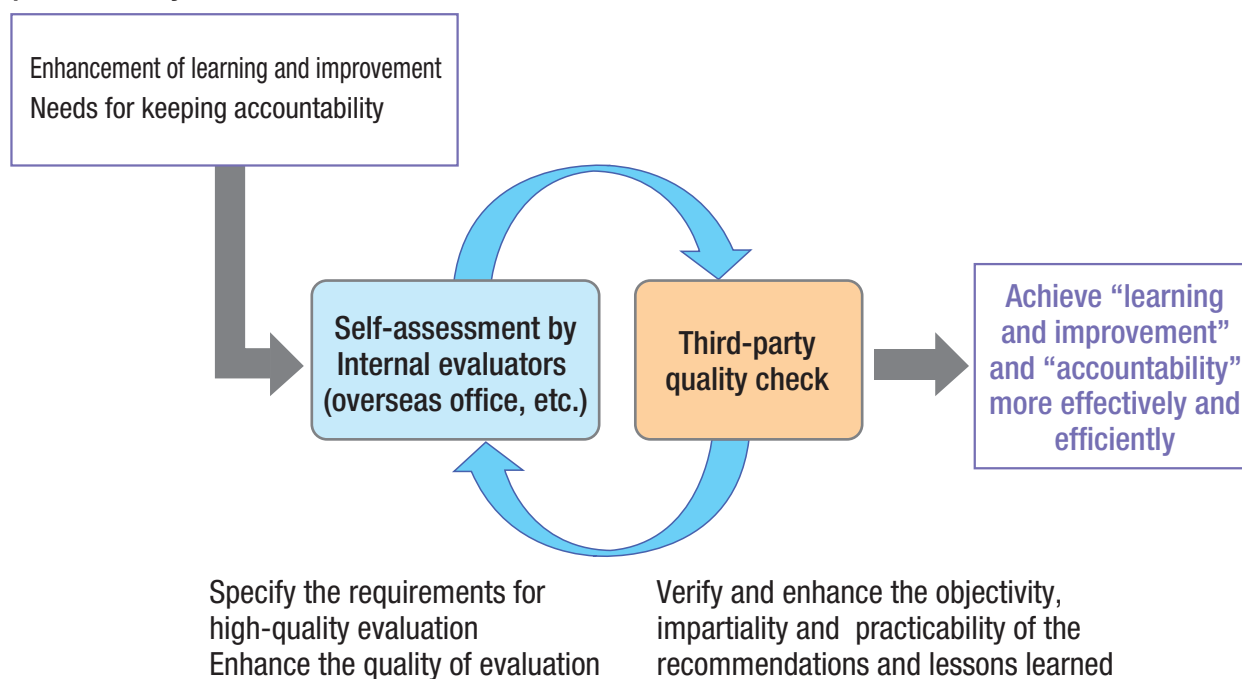
Evaluators (e.g. overseas office) reflect on their own internal evaluation reports at the middle and end of the evaluation process. Because the check sheet specifies the requirements for high-quality evaluation, they can use it as guidelines for conducting project evaluations smoothly, improving their evaluation reports, and enhancing the quality of evaluation.

◇Third-party quality check:

External third party verify the evaluation reports made by internal evaluators (e.g. overseas office) by examining the objectivity and impartiality of the judgements and the specificity and practicability of the recommendations and lessons learned. The verification results are sent to the evaluators (e.g. overseas office), along with advice from the Advisory Panel on Enhancement of Ex-post Evaluation, and used as feedback to improve the quality of internal evaluations in the future. These verification summaries are also disclosed to the public in order to enhance accountability.

* The Advisory Panel on Enhancement of Ex-post Evaluation, consisting of external experts, was established in FY2016 to develop new methods and systems to track and analyze in greater depth the process of generating project effects, in addition to assessing the project effects themselves, and maintain and enhance the quality of internal evaluations.

Purpose of the systems



Internal Evaluation Practice as Part of Overseas Training for New Staff

JICA provides its first-year staff with overseas training at its overseas offices every year. This overseas training offers opportunities for some new staff to practice internal evaluations. In FY2018, four new staff were involved in internal evaluations. With instructions from Japanese and local staff at overseas offices, these new staff conducted field surveys and collected information for the evaluations.

Experiences in internal evaluations

The new staff saw the effects and challenges of JICA projects with their own eyes by interviewing project beneficiaries and implementing agency staff and observing the operation and maintenance of equipment installed by the projects.

On the other hand, they realized difficulties in collecting the necessary information. For example, they took long time to gather data because it had not been designated which data would be used to measure the indicators set in the project planning phase. Moreover, some new staff also felt difficulties overseas office staff engaged in internal evaluations have due to their limited knowledge and experience, as not all of them were necessarily familiar with the internal evaluation procedures.

Insights and suggestions from experience in internal evaluations

The new staff involved in internal evaluations provided the following insights and suggestions for project evaluation.

Here are insights from their comments: "Internal evaluations are good opportunities for Japanese and local staff to work together." "Relevance and efficiency can be evaluated in the project planning and implementation phases, but effectiveness and sustainability cannot be evaluated until the project is completed. The opportunity to evaluate a project after it has been completed was a valuable experience for me as a new staff." "From the perspective of evaluation, it is important to choose which indicators to use to evaluate the project effects before the project starts."

The new staff also made suggestions, including the following: "Because some project implementing agencies may become defensive about evaluation, we should explain to them that our evaluation does not mean a kind of examination but a good opportunity to reflect on both positive and negative aspects they have experienced."

The internal evaluation practice during the overseas training allowed the new staff to deepen their understanding of JICA's evaluation system and provided them with a valuable opportunity to consider how to operate and evaluate projects effectively.



Field survey conducted by new staff (upper left: Viet Nam; lower left: Egypt) / interview with implementing agency (upper/lower right: Cambodia)

Message from the JICA Uganda Office

“Don’t stop following up!” - aiming to facilitate and streamline the ex-post evaluation -

JICA Uganda Office conducted four FY 2017 internal evaluations. Thanks to a small-scale but long time follow-up led by national staff after completion of the project, our office was able to conduct the internal evaluations efficiently and smoothly. For a technical cooperation project in the education sector, for example, our office organized monthly meetings with the implementing agency after completing the project to update the implementation status of matters recommended at the terminal evaluation. For a grant aid project in the water sector, the sector advisor (Japanese expert) and our national staff confirmed current hand-pump conditions at over 80 locations and prepared their inventory data prior to the ex-post evaluation. Trust built with the implementing agency, networking and data were maintained and enhanced through such efforts, which paved the way for us to streamline evaluations.

However, the actual internal evaluations saw some challenges emerge, namely: (i) it was the first time for the three national staff to take responsibility for the evaluation, (ii) responses to the emailed questionnaire took time to arrive due to the Internet and power supply constraints, (iii) a number of counterparts assigned during the project had already resigned and more. Under the circumstances, however, the evaluations could be completed promptly as national staff shared their practice, processed their

duties with consultations and strove honestly to collect the questionnaires by calling on and visiting respondents. Doing so allowed the national staff in charge to reaffirm the importance of enhancing the capacity of the organization rather than the individual and the necessity of assessing things from long-term perspectives (project sustainability and continuous monitoring) as well as the responsibility of JICA as a development agency that could bring them a good learning opportunity. Our national staff will play a lead role in monitoring the project and follow-up and leverage the evaluation results on an ongoing and positive basis.



National staff of JICA Uganda Office

Case study: Project for Child Health in Department of Quetzaltenango

A collaboration with Japan Overseas Cooperation Volunteers helped achieve the project purpose and realize a long-lasting project effect

Guatemala shows worse indicators for mother and child health areas compared to its neighboring countries. The Department of Quetzaltenango in particular faced a higher infant mortality rate, caused largely by respiratory infections and diarrhea. This project aimed to decrease the infant mortality rate in six municipalities in the Department by strengthening health services and management at the health facilities and upgrading parents' knowledge on health. Specific activities included health training for health personnel and health volunteers, development of the infants' medical examination and health education for parents.

The ex-post evaluation confirmed that more infants had received the medical examinations than when the project was launched and mothers' knowledge on the treatment of the infant respiratory infections and diarrhea in greater depth improved. The follow up of low-weight infants, strengthened through this project, remained ongoing. All these efforts have helped further reduce the infant mortality rate.

Moreover, a Department-wide decline in the infant mortality rate was also confirmed. According to the Health Area office of Quetzaltenango, the efforts of Japan Overseas Cooperation Volunteers (nurse, nutritionists and midwife) who were strategically assigned to target municipalities contributed to this achievement as well as healthcare services improved by this project. As a lesson, it is important to collaborate with such relevant projects to achieve effects of JICA cooperation integrally and to design and share a clear project plan to facilitate collaboration promptly.

The succeeding project expanded its target area into three Departments and supported maternal and child health services. The ex-post evaluation, which was implemented the evaluation of those two projects simultaneously, confirmed that the facility-based delivery rate had increased in all three Departments, while the infant and maternal mortality rates also declined on

the Department level. The survey for the implementing agency also revealed that activities of health facilities, identification of high-risk pregnant women and improvements in referrals^{*1} to health facilities in collaboration with traditional birth attendants, contribution of the Pregnant Women's Clubs^{*2} and other efforts all helped fuel the success of the project.

^{*1}: Referral and transfer from the lower health facilities to the higher health facilities.

^{*2}: This project promoted the Health Centers and Posts (a facility providing basic healthcare services including maternal and childcare) to establish Pregnant Women's Clubs in the communities. The Pregnant Women's Clubs encourage mothers to share information related to nutritional intake and deepen their knowledge of prenatal care. The club activities have also seen attitudes on the part of some fathers taking part change, since they allowed their wives to visit health facilities or accompanied them after their participation. They have also shown a better understanding of contraception.



National staff of JICA Guatemala Office interviewing a mother at the health center

Identification and Analysis of Lessons Learned

Lessons Learned for Project Management in Conflict-affected Countries and Areas

Miyoko Taniguchi, Senior Advisor (Peace-building)

JICA has been playing an active role in the reconstruction and development of conflict-affected countries and areas since the late 1990s^{*1}. These experiences have revealed that the causes of conflicts differ from country to country and from region to region, and the features of conflict-affected countries and areas also vary depending on the context and dynamics of the conflict, the framework of peace-building, the post-conflict government structure, and the support from the international society. Against this backdrop, a Senior Advisor on Peace-building performed a transversal analysis of lessons learned from the evaluations of past projects in conflict-affected countries and areas in terms of the characteristics of post-conflict projects, the features of conflict-affected countries and areas, and the lessons learned from ex-post evaluations, to explore perspectives for project management throughout the process from planning to implementation.

1. Characteristics of projects in post-conflict settings

Why do development projects fail? Albert O. Hirschman answered this question in the late 1960s: "The distortion due to the asymmetry of information between the donors and the recipients prevents the efficient allocation of resources (when aid is defined as resources)^{*2}." His argument has now been brought back into the spotlight in the international development arena.

This argument suggests that there is an enormous risk when many development projects with uncertainties^{*3} are implemented based on the assumption that they will go as planned.

When applied to conflict-affected countries and areas, this discussion indicates that development projects in such a situation are more unpredictable and uncertain than usual. In other words, their PDM^{*4}, which is a hypothetical project plan, is not necessarily accurate. This is because these projects are planned by donors under the following conditions:

- (1) Economic, social, political, administrative, and other sectoral data and information are limited;
- (2) The scope and content of the preliminary study are limited due to the volatile political and security situation;
- (3) Development partners, including JICA, have limited experience in the target country/area and therefore have little experience-based knowledge to assess the institutional capacity of the implementing agencies; and
- (4) There is an urgent need to deliver aid as a post-conflict peace dividend even under the above-mentioned constraints.

In addition to these impediments in the planning stage, the volatile political and security situation may pose other risks during the implementation phase. In some cases, Japanese project team

members may be forced to work remotely due to security reasons. This will turn the input-to-output process into a black box. There may also be other risks, such as failing to meet the prerequisites and leading external factors to prevent project outcomes from being achieved. Therefore, it is extremely difficult for donors to develop a PDM that will not need any changes (a highly accurate hypothesis).

2. Features of conflict-affected countries and areas

Conflict-affected countries and areas are characterized by the lack of sovereignty over the entire territory. More specifically, their features include (1) a fragile and malfunctioning government, (2) the lack of state legitimacy, (3) limited rule of law, (4) volatile political and security situations, (5) division and hostility between people, (6) limited community functions, (7) floating populations (e.g. refugees and internally displaced persons), (8) land ownership problems, and (9) socially vulnerable populations emerging from conflicts, though they may vary depending on the local context.

Most people rely on customary resource allocation mechanisms, not public ones, for their own survival. The resources (aid) input through government agencies (public institutions) may increase competition over resource allocation between conflicting clans, tribal, and ethnic groups. In particular, when the conflict is about to end, political turbulence is likely to occur, with the tensions increasing between powers over access to national resources, which will enhance the fluidity of the resource allocation mechanism due to struggling for a new political order.

This situation will make it difficult for external donors to understand the local political dynamics. In order to prevent conflicts from recurring and promote peace, it is important to note the restrictions, conduct the Peace-building Needs and Impact Assessment (PNA)^{*5} throughout the process from planning to completion, perform a stakeholder analysis, take both stabilizing and destabilizing factors into account in the planning of inputs and activities, and revise the plan when necessary. In other words, the political nature of aid should be taken into account to prevent projects from being unintentionally used as political interventions.

3. Lessons learned from the ex-post evaluations of post-conflict projects

Some of the projects implemented in conflict-affected countries and areas were rated lower in the ex-post evaluations because the above-mentioned features of conflict-affected countries and areas had not been taken into consideration in project management. The ex-post evaluations of these projects provide the following lessons learned^{*6}.

Some of the lessons are applicable not only to conflict-affected countries and areas but also to other countries and areas.

- (1) Some project purposes and overall goals were set too high in comparison to what was realistic to achieve with the institutional capacity and resources of the implementing agencies.
- (2) In relation to (1), the peace-building targets and indicators and their measurement methods were not clear or confirmed by all stakeholders, which made it difficult to measure the outcomes.
- (3) In relation to (1), there was no scenario or strategy to extend the outcomes of the project after its completion. No sufficient consideration was given to institutional development for this purpose in the implementation phase.
- (4) Frequent plan changes were not reflected into the PDM or documented.
- (5) Despite many constraints, such as remote management, some projects covered too large an area and too wide a field and involved too many organizations. In addition to the problem mentioned in (1), the project scope expanded beyond what a single project could cover.

These lessons indicate the importance of accepting inevitable uncertainties in the planning phase and revising the project plan and reflecting the revisions into the PDM in the implementation phase.

4. Perspectives for project management in conflict-affected countries and areas

In view of above, it is necessary to change the paradigm of project management in conflict-affected countries and areas with high uncertainties in order to correct the asymmetry of information between the donor and the recipient and ensure the effective and efficient allocation of (aid) resources. In other words, because it is not realistic to assume that you can make an accurate hypothesis (PDM) in the planning phase, it is more important than usual to improve its accuracy in the implementation process by modifying it according to the actual situation. Based on these analysis results, the following perspectives are suggested for project management in conflict-affected countries and areas^{*7}.

Table. Perspectives for project management in conflict-affected countries and areas

Phase	Points to consider
Planning phase	<ul style="list-style-type: none"> ■ Conduct a capacity assessment^{*8} of the implementing agencies and then define the implementation structure and the scope of cooperation (target areas, beneficiaries, sectors, personnel assignment, etc.). When the project is remotely managed, design the implementation structure so that it can be gradually scaled up. ■ Build a consensus among all stakeholders that the PDM is provisional and subject to change. ■ With regard to the external factors in the PDM, because post-conflict projects are more vulnerable to external factors, it is essential to carefully analyze risks while distinguishing them into internal and external factors. ■ Set measurable indicators and develop realistic plans for baseline and endline surveys (including sampling methods, questionnaires, and implementation structures). Pay attention to the risk that the implementing agencies may not have existing data especially in conflict-affected countries and areas. ■ Conduct PNA and define the scope of assistance according to the analysis of stabilizing and destabilizing factors. ■ Develop scenarios and strategies for spreading the outcomes of the project after its completion.
Implementation phase	<ul style="list-style-type: none"> ■ After the project starts, do what was left undone in the planning phase. ■ Monitor the progress against the outcome targets specified in the PDM, examine the influence of internal and external factors, identify obstacles to delivering outcomes, and add activities to the project as required. Examine the logical sequence of activities-outputs-project purpose-overall goal and check the validity of indicators. ■ Conduct PNA on a regular basis and add activities and notes as required according to the analysis of stabilizing and destabilizing factors. ■ When the gap between planned and actual performance is larger than expected, consult with stakeholders on the influence on the project and the possible countermeasures based on the results of the risk analysis and PNA, revise the project plan (and modify the contract accordingly), and add these changes to the PDM. ■ When revisions are made to the PDM, build a consensus among all stakeholders on their necessity, appropriateness, and reasonableness, and officially document the changes. ■ Document in as much detail as possible the implementation process of the project and changes to the project plan and PDM. These records may be useful not only in project evaluation but also in lesson-learning for developing effective approaches to future projects.

*1: The word "conflict" here means an domestic armed conflict that occurred between different clan, tribal, and ethnic groups after the end of the cold war. The project in post-conflict settings include not only projects directly aimed at peace-building but also any other projects implemented in conflict-affected countries and areas.

*2: Hirschman, Albert. 1967. *Development Projects Observed*. Washington, D.C.: Brookings Institution. EBSCOhost, an online research platform, has published 84 academic articles that cite the works of Hirschman since 2010.

*3: Hirschman used the word "uncertainty" to mean the unpredictable problem that occurs despite all the careful preparations based on best possible knowledge.

*4: PDM stands for Project Design Matrix. It is a matrix that outlines the project.

*5: See the following for details: *Handbook for Conflict Prevention and Peace Promotion: Application of Peace-building Needs and Impact Assessment (PNA)* (JICA, 2017).

*6: These lessons are extracted from ex-post evaluation reports on projects implemented in conflict-affected countries and areas.

*7: For details of lessons learned for the formulation and implementation of peace-building projects, see the following report: *Thematic Evaluation: A Cross-sectional Analysis of Evaluation Results: Extraction of "Knowledge Lessons" from Peace-building Projects (Japanese)* (JICA, 2016).

*8: For details of capacity assessment, see the following reports: *Capacity Assessment Handbook: Project Management for Realizing Capacity Development* (JICA, 2008) and *Handbook for Administrative Structure Assessment (Japanese)* (JICA, 2009).

Column

PDIA Approach in Conflict-affected Areas

Southeastern Mindanao Island was faced with various problems, such as high poverty rates, limited basic social services, and poor infrastructure, due to the armed conflict that lasted more than 40 years. Despite the creation of the Autonomous Region in Muslim Mindanao (ARMM) in 1990 and the peace agreement between the Moro National Liberation Front (MNLF) and the Government of the Philippines in 1996, violent clashes often erupted between the Moro Islamic Liberation Front (MILF), spun off from the MNLF in 1984, and the Government of the Philippines. They signed a Framework Agreement in October 2012 and a Comprehensive Agreement in March 2014. Then, the Organic Law for the Bangsamoro Autonomous Region in Muslim Mindanao was ratified in July 2018 to establish a new autonomous government. JICA has assisted the new autonomous government in providing better administrative services since the transition period through the Project for Comprehensive Capacity Development for the Bangsamoro (hereinafter, "CCDP"), which is a Technical Cooperation project launched in 2013. In order to ensure a peaceful life for all the people of Mindanao after the armed conflict, this project has been working to promote the transition process to reach a final peace agreement and establish a new autonomous government based on the understanding and support of the local residents and stakeholders. More specifically, this project has been establishing the organizational and institutional structures of the new autonomous government, developing a regional development plan according to the local needs, assisting the new autonomous government in providing effective administrative services as expected by the local residents, and building the capacity of administrative officers to support the establishment of the new autonomous government. This project has also provided Revenue Enhancement Assistance for ARMM Local Government Units (REAL), using a project management approach called problem-driven iterative adaptation (PDIA) on a trial basis. The PDIA approach was first outlined by Dr. Lant Pritchett (economics), Dr. Matt Andrews (public administration), and Dr. Michael Woolcock (sociology) at the Harvard Institute for International Development of Harvard University. In the context of development assistance, this approach is used to allow local stakeholders to relate to their own problems and develop solutions by themselves as well as

create a loop of trials and corrections to achieve successful and sustainable institutional reform. This approach has been found to be more effective in complicated projects (e.g. organizational and institutional reform projects in fragile countries and unprecedented projects) than in simple projects. Therefore, JICA incorporated the PDIA approach into REAL for the CCDP in Mindanao so that ARMM local government officials would relate to the problem of revenue generation and develop solutions by themselves. This approach is expected to work well because it is proven to be effective in institutional reform in conflict-affected, fragile countries and areas like Mindanao, where the situation is changing rapidly.

PDIA workshops helped ARMM local government officials shift from passive to active participants. They became aware of actions they could take to increase revenues, such as making written requests to the Land Bank of the Philippines for registration and visiting homes to collect taxes instead of waiting for taxes to be paid, and actually put these ideas into action. Thus, the approach of working side-by-side to address challenges in delivering project outcomes while having an evaluative perspective can help local stakeholders identify and solve problems on their own. JICA will continue to use the PDIA approach to promote iteration so that stakeholders will become aware of actions they can take to achieve the project purpose.



A workshop in Mindanao

Efforts to Improve Evaluation Methodology

Basic concept on Evaluation of Technical Cooperation for Development Planning (TCDP)

1. Background

All Technical Cooperation for Development Planning (projects that assist developing countries in formulating policies and public works plans and transfer surveying, analyzing, and planning techniques; hereinafter, "TCDP") costing over 200 million yen and assessed through ex-ante evaluations after FY2011 are subject to ex-post evaluation. The basic concept and key points of the ex-post evaluation of TCDP are described below.

2. Basic concept

TCDP is aimed at producing outputs, such as master plans (M/P) and feasibility studies (F/S), by the end of the project period. Therefore, TCDP projects are different from other Technical Cooperation projects in the way that objectives (project purposes and overall goals) are set and the way that evaluation is conducted.

In the ex-ante evaluation process, objectives and indicators are generally set in terms of (i) expected utilization of the proposed plan and (ii) expected goals to be achieved with the proposed plan. With regard to the expected utilization of the proposed plan, ex-post evaluations assess the effectiveness of TCDP projects by examining how the proposed plan (project output) has been used/implemented by the recipient country. On the other hand, the expected goals to be achieved with the proposed plan are generally medium- to long-term goals, such as contributing to achieving the economic and social goals of the recipient country, and usually impossible to achieve in such a short time like three years after project completion; therefore, the ex-post evaluations of TCDP projects usually focus on assessing how the proposed plan has been utilized over the three years since the completion of the project (see Examples (1) and (2)). However, TCDP projects that are not aimed at developing M/P or conducting F/S but focused on strengthening organizational capacity or transferring techniques and TCDP emergency support studies for infrastructure reconstruction and recovery are assessed not only from the above-mentioned perspectives but also from the same perspectives as for other Technical Cooperation projects, such as whether the outcomes expected to be achieved within three years after the completion of the project are delivered and how they are used.

3. Key points of ex-post evaluation

(1) Effectiveness/impact

The ex-post evaluations of TCDP projects assess effectiveness and impact mainly by examining how the proposed plan has been used. The expected utilization of the plan may vary depending on the project and the recipient country. Therefore, it is assessed not only by confirming whether the proposed plan has been adopted but also by examining how it has been incorporated into the policies and plans of the recipient government, how it has been recognized and used by stakeholders, and how it has been used for preparations for projects. In addition, JICA considers that it is important to assess the expected utilization of the proposed plan from as many angles as possible. For example, it is desirable to assess the satisfaction of stakeholders with the proposed plan (through interviews or questionnaires).

(2) Sustainability

The sustainability of TCDP projects is assessed mainly by examining the sustainability of the agencies responsible for implementing the projects

listed in the proposed plan, competent authorities, and other relevant organizations. More specifically, it is assessed by collecting information on the policies and systems related to the implementation of the proposed plan, the organizational, technical, and financial aspects of the implementing agencies, competent authorities, and other relevant organizations and analyzing the implementation and future prospects of the proposed plan. (It is noted that the relevance and efficiency of TCDP projects are assessed in the same way as for other Technical Cooperation projects)

These evaluation results are used to analyze and identify factors for success and failure and provide recommendations and lessons learned.

<Example>: Urban Transport Master Plan

(1) Main perspectives for assessing the expected utilization of the proposed plan and the expected goals to be achieved with the proposed plan

<Expected utilization of the proposed plan>: whether the proposed M/P has been institutionalized as the urban transport development plan of the city and whether the priority projects listed in the plan have been put into action

- Whether the proposed plan (e.g. M/P) has been approved
- Whether the coordination structure among related organizations has been established to put the proposed plan into action
- Whether detailed plans have been developed to put the proposed plan into action
- Whether the projects listed in the proposed plan have been budgeted for implementation and put into action

<Expected Goals to be achieved with the proposed plan>: whether the projects listed in the proposed plan have been implemented/completed and contributed to traffic improvements in the city

- Whether the projects listed in the proposed plan have been budgeted for implementation and put into action
- Whether the projects listed in the proposed plan have been completed (whether the transport infrastructure has been developed)
- Whether the projects listed in the proposed plan have contributed to traffic improvements

(2) Process from the expected utilization of the proposed plan to the attainment of the expected goals to be achieved with the proposed plan

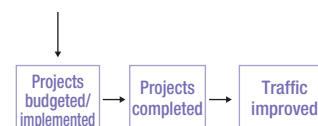
<Expected utilization of the proposed plan>

(Expected to be completed between the project completion and the ex-post evaluation)



<Expected Goals to be achieved with the proposed plan>

Expected to be completed in the medium- to long-term (after the ex-post evaluation)



Efforts to Visualize Project Beneficiaries

► Case: Rajasthan Minor Irrigation Improvement Project in India

JICA has striven to visualize beneficiaries, who are prone to be lumped together in conventional evaluation methods, to enhance elicitation of lessons and to improve evaluation methods with the aim of fairness in project outcome emersion. Provided that any gaps are caused in distribution of project outcomes among beneficiaries, those are attributable to the differences in gender or socioeconomic status. JICA intends to propose projects arranged to benefit a wider range of actors by visualizing whether the project outcomes have been equally shared among gender groups or have reached group(s) most in need.

This section introduces an analytical case of the Rajasthan Minor Irrigation Improvement Project (ODA Loan) in which the “beneficiaries were visualized.” This project was implemented to increase agricultural productions through rehabilitation of existing minor irrigation facilities and dissemination of water resource management and agricultural technologies. As well as conducting a regular ex-post evaluation, a detailed analysis was performed by OPMAC Corporation receiving cooperation from gender experts and following the procedures below.

<Purpose of Analysis>

- To elucidate benefits of the project outcomes that were unevenly distributed among different socioeconomic groups and gender groups and the explanatory factors.
- To elicit recommendations and lessons that would help formulate future projects, focusing on women and socioeconomically vulnerable groups.

<Analytical Methods>

The following data collection and analytical methods were applied:

Title of the targeted sub-project for the investigation	Para-I sub-project in the Ajmer District
Data collection period	From May 2018 to July 2018
Population	1,238 residents (1,187 farmers registered in the Water Users' Association (WUA) and 51 landless farmers)
Sampling method	Stratified at random (based on data registered in the WUA and a list of landless farmers)
Sample size	148 households (148 males and 148 females)
Methods for statistical analysis	Cross-tabulation analysis (Chi-square test and Fisher's exact test) and Sign test of groups (two-sided test)

Note: As for selection of project site (Sub-project), the following three criteria were employed considering appropriate identification of beneficiaries' gaps:

- Where the volume of water source is stable,
- Where women engage in a certain role that would be significantly influenced by the project (e.g., there are self-help groups or activities of cultivating/selling vegetables),
- Where areas of irrigation and the number of target villages suffice for facility maintenance and management.

<Analytical Result>

(1) Uneven benefits distributed among different socioeconomic groups and the explanatory factors

The project's input to the agriculture sector spawned introductions of new products and breeds, regardless of the scale of farmers involved. However, larger-scale farmers were more likely to cite that the volume of water inflow from irrigation channels was increased (see Table 1). This could reflect the fact that many large-scale farmers are located in upstream areas. With regard to the effect of the agriculture sector, it generally demonstrates positive results as yields of main production and agricultural income following the rehabilitation were increased. This tendency appears to be more outstanding for larger-scale farmers. It is assumed that the use of pumps and agricultural machines was attributed to their agricultural productivity. In terms of benefits to agricultural households, alongside a general increase in various agricultural expenditures, household expenditures also increased across the board. Meanwhile, larger-scale farmers tend to engage in general household work longer, indicating that their agricultural workload is also intensified. Generally, in irrigation projects, farmers in upstream areas of irrigation channels are more likely to benefit compared to farmers in downstream areas, and this project affirmed the tendency.

Table 1 Water volume during dry season after rehabilitation of the irrigation channel

(Unit: households)

Farmer's scale	Change in water volume						Total
		Increased	Slightly Increased	No change	Slightly Decreased	Decreased	
Small		13	30	1	0	0	44
Medium		19	34	0	0	0	53
Large		36	9	0	0	0	45
Total		68	73	1	0	0	142

Note: The results of Chi-square test and Fisher's exact test showed statistically significant relevance in both variables (Chi-square test: p-value 0.000 / Fisher's exact test: p-value 0.000).

(2) Uneven benefits among gender groups and the explanatory factors

As a project outcome within the agriculture sector, despite being secondary products, a shift to vegetable production was observed due to the increased water volume. Since this change expanded disposable income of agricultural households on the whole, discretionary spending was also improved among both males and females. In particular, women became more aware of the improvement in decision-making concerning expenditures (see Column).

Conversely, farming hours tended to become longer in general (see Table 2). Although no change was observed in the allocation of traditional farming roles, some women spent longer time in plowing work, for which males have used to be responsible. It is also assumed that women engage in farming work more than men within vegetable farmers because vegetable production is mainly organized by women. Moreover, albeit farming is becoming an increasing burden within households, it was suggested that labor of water drawing had declined in men, implying the possibility that women undertake the labor and the workload of water drawing in women is increased.

Table 2 Annual work hours (overall farming)

Gender	Annual work hours (overall farming)						Total
		Increased	Slightly Increased	No change	Slightly Decreased	Decreased	
Male		39	83	3	17	0	142
Female		63	59	3	17	0	142
Total		102	142	6	34	0	284

Note: The results of Chi-square test and Fisher's exact test showed statistically significant relevance in both variables (Chi-square test: p-value 0.021 / Fisher's exact test: p-value 0.017).

(3) Recommendations and lessons learned for project formulation

Regarding the project benefits that were unevenly shared among socioeconomic groups and gender groups, key factors were identified. The set of given conditions among socioeconomic groups in the target area (financial and geographical conditions), and the allocation of farming roles within households reflected by the historical and societal background significantly affected to the cases of (1) and (2) respectively. When formulating future projects, project components should be considered following adequate analysis of the aforementioned given conditions/factors, otherwise projects could exacerbate disparities among socioeconomic groups and genders groups within target areas. It was indicated that taking adequate measures is necessary to modify such disparities in projects.



Interview with members of a self-help group



Water intake facility of a dam



Agricultural land benefited from irrigation

Column

Effort to project outcome emersion and women's empowerment

As introduced, the outcomes achieved in the Rajasthan Minor Irrigation Improvement Project in India include expansion of disposable income for entire households and improvement of discretionary spending among both males and females. Women, in particular, have become increasingly aware of the improvement in decision-making on expenditures. At the same time, such outcomes on women's empowerment within households were not only driven by the project.

In the target area, self-help groups* that are centered on women have been functionally enhanced, and women's participation in local autonomy has been promoted. Such social environmental changes in the area were also highly likely to have helped facilitate the project outcomes, according to the analysis.

In a succeeding project, women's opinions have been already incorporated in the project plan and implementation. Activities such as establishing a women's section in the WUA were added in the project component. Based on the analyses described above, it was proposed that, for future designs of similar projects, additional consideration of activities contributing to women's empowerment would be significant in the context of fairness in project outcome emersion among gender groups.

* Self-help group (SFG): a group for low-income individuals who have difficulties in accessing financial institutions was formulated. The main aims of SFG are to mutually support household budgets through savings, revolving loans and other means. In India, there are a variety of loans via SHGs, such as small amount loans from a financial institution using deposits made by SHG members as its capital. In the case of Rajasthan State, SHGs were formulated under the State Government policy; particularly targeting women in around 2014, that was when the operation of facilities improved by the project was initiated

Leveraging Satellite Data in Ex-post Evaluations

Masamitsu Kurata, Metrics Work Consultants/Sofia University

Recently, increasing opportunities have emerged to leverage data collected by satellite to determine various aspects of the natural environment and the state of socioeconomic activities worldwide. Major factors behind this have included technological developments that are high precision and diversification of observation devices (sensors) equipped in satellite, as well as environmental improvements that made observation data more accessible to public as opened data via IT platforms. JICA also has encouraged the use of satellite data for international cooperation projects, such as developing and operating the JICA-JAXA Forest Early Warning System in the Tropics (JJ-FAST) system which uses JAXA's radar satellite, ALOS-2, under a cooperative agreement with the Japan Aerospace Exploration Agency (JAXA). From the ex-post evaluation perspective, satellite data have been recognized as significant information sources that allow us to obtain objective evidence. In 2018, JICA has used available information and experimentally conducted analysis within two ex-post evaluations.

► Case 1: Project for Improvement of National Road No. 9 as East-West Economic Corridor of the Mekong region in Laos (Grant Aid)

The first case involved the ex-post evaluation of the Project for Improvement of National Road No. 9 as East-West Economic Corridor of the Mekong region implemented in Laos. JICA requested Mr. Souknilanh Keola, a researcher at the Institute of Developing Economies, Japan External Trade Organization, specializing in remote sensing using satellite data and its analysis, to analyze how the regional economy had been revitalized following the improvement of National Road No. 9, which also plays a key role as an international highway using nocturnal lights observed by satellite (see Figure 1 for a sample image). As nocturnal light is closely correlated to gross domestic production and other economic indicators, it is widely used

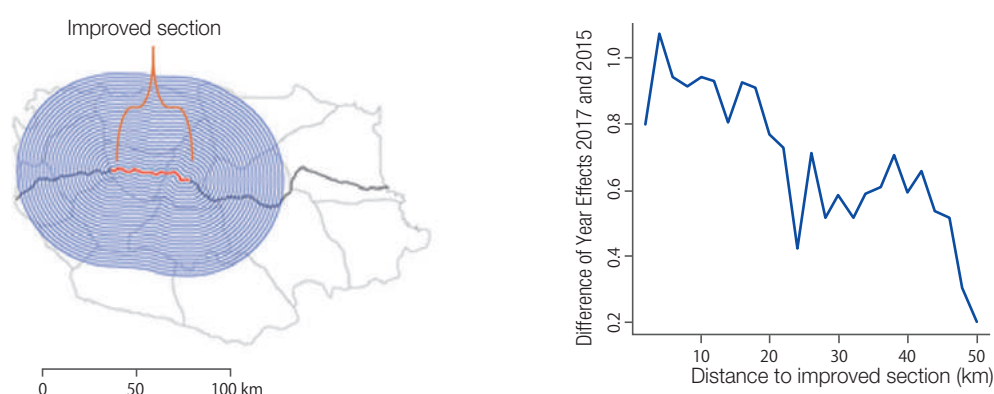
as an indicator in economics and other fields to identify the geographical distribution of economic activities. This analysis adopted freely available data from the meteorological satellite, Suomi NPP, operated by the National Oceanic and Atmospheric Administration of the U.S. The analytical result showed how more nocturnal light was intensified in the areas surrounding the section improved by the project, indicating the project outcome was linked to regional economic revitalization (Figure 2). This result also tallies with other positive results, such as an increased traffic volume for the improved sections and an improved trade/investment environment, as revealed in the interview with local residents during the ex-post evaluation.

<Figure 1> A world map showing nocturnal lights observed by the Suomi NPP satellite



Source: NASA Earth Observation Center / National Geophysical Data Center of the National Oceanic and Atmospheric Administration

<Figure 2> Correlation between the distance to the Improved Road (National Road No. 9) and change in nocturnal light

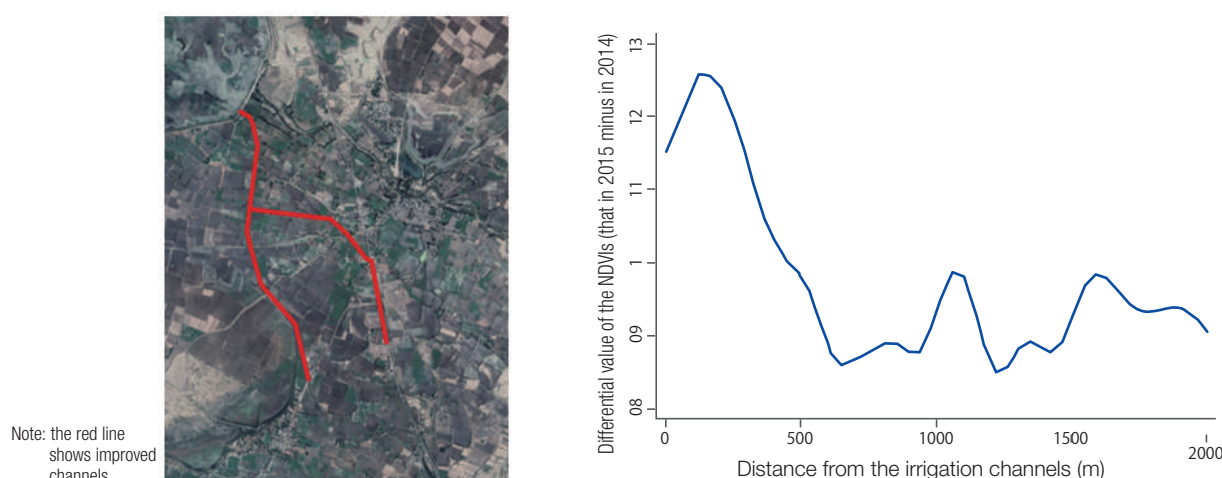


► Case 2: Rajasthan Minor Irrigation Improvement Project in India (ODA Loan)

The second case is the ex-post evaluation of Rajasthan Minor Irrigation Improvement Project in India. Focusing on Para-I area in Ajmer District, satellite data were used to evaluate how agricultural productivity in the surrounding area had increased after improving irrigation systems. Specifically, as well as leveraging the technical expertise of the Space Technology Directorate I of JAXA, satellite data (Terra, Landsat-8) operated by the U.S. National Aeronautics and Space Administration and other sources were adopted to estimate at a mesh level of 30 meters square of

the normalized difference vegetation index (NDVI), which shows the distribution of crops and other vegetation and compares its fluctuation before and after the project respectively (Figure 3). The analytical result showed that the vegetation index within 500 meters of irrigation channels that were improved by the project increased more than elsewhere, indicating an increased crop yield. This result also reflects interviews with local farmers, who cited increased irrigation water and crop yields.

<Figure 3> Relation between the distance from improved channels and changes in the NDVI



As the above cases suggest, satellite data can be used as key information to obtain objective and quantitative evidence in a form of complementary information to conventional beneficiary surveys, conducted based on interviews with local residents and other methods. Other than nocturnal light and the state of vegetation, this observational data can be used to capture various aspects, including the sea area and seawater temperature, damage caused by natural disasters, such as inundation by

floods and landslides and even air pollution and greenhouse gas. With this in mind, it is expected in the Sustainable Development Goals (SDGs) that space agencies worldwide should cooperate to develop a system that is able to monitor indicators related to the SDGs. JICA plans to develop project evaluations utilizing satellite data in a wider range of categories hereafter.

► Attempt to Link Quantitative and Qualitative Surveys – Introducing Qualitative Comparative Analysis (QCA)

The outcomes of the development project are attributable to multiple factors that are complexly intertwined. Although a quantitative survey including statistical analysis can identify major factors, a sufficient number of cases is required and limitations apply when handling the complexity of each case. Although a qualitative survey including a case study is suitable to prove the complex factors of cases, it is no better than presenting a small number of cases. A method that draws attention to realize a systematic comparison while properly maintaining and compiling the complexity of cases based on Set theory is Qualitative Comparative Analysis (QCA).

JICA's project in the forest sector in India, which aims not only to regenerate forest but also to reduce poverty among residents depending on forest resources, includes a number of interventions that are not limited to

afforestation activities (e.g. establishing a joint forest association, providing small-scale infrastructures and promoting small amount loans). Other factors, such as changes in the natural environment and socioeconomic situations, come into play, although it remains unclear which combination among such multiple interventions/factors can be attributed to the achievement of the project outcomes. Accordingly, JICA started attempting to clarify such complex interactions of factors by introducing QCA. If a combination of interventions/factors to achieve the project outcomes can be generalized by the analytical results to a certain extent, there is expected to be able to present more helpful recommendations and lessons for similar projects in the future. JICA will keep encouraging to enhance learning by introducing such new evaluation methods.

Adaptation of Various Evaluation Perspectives for Learning and Improvement

JICA has been evaluating its projects in a consistent manner across the three schemes (Technical Cooperation, ODA Loans, and Grant Aid) since 2008. At the same time, JICA has been exploring evaluation perspectives considering the characteristics of each scheme.

As of FY2017, more than 1,600 projects have received overall ratings based on their ex-post evaluations, either internal or external. The evaluation perspectives are also adapted every year based on comments from the Advisory Committee individual evaluators, and internal relevant departments, as well as a statistical analysis of these ratings.

In particular, the adaptation of evaluation perspectives was focused on elaborating and extending the evaluation perspectives so that evaluations can provide useful insights into the planning and management of projects.

This section describes the recent modifications to the evaluation perspectives.

Common Matters

■ Conduct integrated evaluations

JICA decided, in principle, to evaluate Technical Assistance Projects Related to Japanese ODA Loan and their relevant ODA Loan projects in an integrated manner and introduced a new perspective for analyzing the synergistic effects of different schemes. JICA also decided to evaluate Technical Cooperation and Grant Aid projects in an integrated manner, as much as possible, when they are jointly implemented.

■ Define the project scope including the scope of responsibility of the recipient government

In the past, it was only in ODA Loan projects that the input from the recipient government were considered as part of the project and evaluated as an important factor influencing the delivery of project outcomes. It was decided that, also in Technical Cooperation and Grant Aid projects, the input from the recipient government should be evaluated as well. This has led projects to be more closely and constantly managed in terms of the input from both JICA and the recipient government. This has also raised awareness about performing a thorough risk analysis in the planning phase and promoting the necessary adjustments to the appropriate project plan to consider constraints due to the limited implementation capacity of the executing agency.

■ Enhance analysis and survey methods

JICA has been working to promote the use of statistical approaches in quantitative analysis and the use of triangulation in qualitative analysis. These approaches are intended to enable data collection for new project formulation as well as follow-up after ex-post evaluations by securing access to information and data and improving measurement repeatability.

■ Clarifying the definition of external factors

JICA clarified what factors should be considered as external. According to this new definition, the following three factors should be regarded not as external factors but as critical factors for which countermeasures should be developed in the project planning stage: (i) prerequisites and factors that are essential to achieving the project purpose/objective; (ii) events that constantly or frequently occur in the project area; and (iii) risks identified in the planning and appraisal phases.

Relevance

■ Reinforce the analysis of the appropriateness of the project plan and approaches

JICA decided to strengthen examining whether the project plan and approaches were appropriate for achieving the project objective, whether the project scope included all the necessary activities, and whether the project plan was adjusted according to the changing situation, in addition to analyzing the relevance of the project to the development policies and needs. This enables the analysis of the quality of project planning and management.

Efficiency

■ Compare the planned and actual project scope when it is changed

JICA decided to examine, if possible, whether the outputs increased or decreased according to the increase or decrease in the input when the project scope changes. JICA decided to examine the background causes of the change, analyze the external factors, and assess the appropriateness of the change before comparing the planned and actual project schedules and costs.

■ Strengthen the cost-benefit analysis approach (the assessment of the internal rate of return: IRR)

JICA decided to strengthen the cost-benefit analysis approach (the assessment of the IRR, etc.). It was decided that the EIRR and FIRR should be recalculated in the same way and under the same conditions (calculation

assumptions) as at the time of appraisal for comparison between before and after the project, as much as possible. It aims to determine whether the benefits were properly assumed and whether the cost-effectiveness was properly calculated.

Effectiveness

■ Strengthen the comparison of facts and hypotheses (counter-facts)

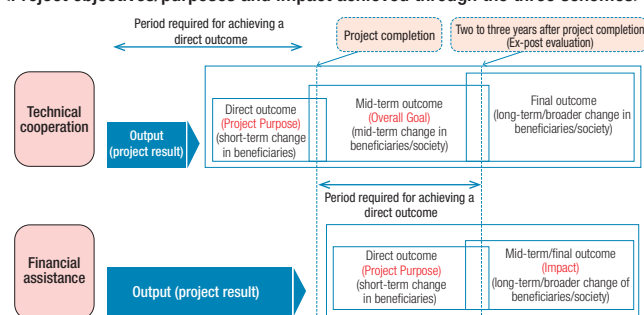
JICA decided to not only compare before and after the project but also compare facts and hypotheses (counter-facts). Although the influence of various social and economic factors cannot be completely eliminated, this approach can enable evaluators to more precisely identify the contribution of the project and more accurately analyze the effectiveness of the project.

Impact

■ Clarify the perspectives for Impact considering the differences of timing to appear the Impact among the schemes

Financial aid (ODA Loan and Grant Aid) and Technical Cooperation projects deliver impact at different timing. In the financial aid projects, the impact starts appearing after the project (facility construction and equipment provision) completion. In the technical cooperation projects, the Impact is generated through technical transfer while the project is being implemented. Therefore, the ex-post evaluations of financial aid projects put more emphasis on analyzing Effectiveness.

<Project objectives/purposes and impact achieved through the three schemes>



Sustainability

■ Refer to financial statements and other evidence to support the analysis of financial sustainability

In the evaluation reference, it is advised to analyze financial sustainability by collecting and analyzing financial information (e.g. financial statements) on the implementing agencies and the financial prospects of the competent authorities.

Moreover, JICA also emphasizes the evidence-based analysis approach by collecting background information on financial schemes (e.g. whether there is any financial support, such as subsidies, to cover part or all of the operation and maintenance costs) even when the project is not designed to be self-financing.

■ Standardize the assessment of organizational/institutional sustainability

It is changed to include analyzing organizational/institutional sustainability not only in the evaluations of Technical Cooperation projects but also in the evaluations of ODA Loan and Grant Aid projects and put more emphasis on confirming whether there is any mechanism for ensuring the sustainability of project effects in the evaluations of all the three schemes.

JICA will continue to review and adapt the evaluation perspectives to make evaluations more effective in improving project management.

Capacity Building Training

Evaluation seminar for implementation agencies of the recipient country (Viet Nam)

In October 2018, JICA Viet Nam Office and Evaluation Department held an evaluation seminar in Hanoi for Vietnamese implementation agencies aiming to promote understanding of the ex-post evaluation and improve projects by leveraging the evaluation results. Total 30 personnel participated, including 25 in charge of ex-post evaluation from Ministries of Planning and Investment, Finance, Transport, Agriculture and Rural Development, Health, Industry and Trade and other agencies and five from JICA Viet Nam Office.

The seminar proceeded with the following contents: (i) Introduction of JICA's evaluation system (evaluation purpose, external/internal evaluation system, evaluation criteria and implementation process, etc.), (ii) Sharing evaluation results on the projects implemented worldwide and in Viet Nam, successful cases and those with issues as well as key points for sustaining the project effect, and (iii) Evaluation simulation using Vietnamese cases*, identification of recommendations/lessons learned through a group discussion to share evaluation practice.

As the simulation was conducted after introducing a process for

implementing internal and external evaluations and information needed for the same, some participants commented that they "could learn which data of the ongoing project will be needed for evaluation in forthcoming years, that helped clarify ex-post evaluation", reflecting their greater motivation to take part in future evaluation activity.

Through the group discussion, the participants deepened their understanding on evaluation and actively exchanged views on the way forward to improving projects by utilizing the evaluation results. The following is some of the opinions expressed during the session: "In case technical cooperation projects have different project scopes according to their target region, support should be provided to local government to establish goals commensurate for each project.", "To maximize the project effect, a mechanism to sustain the effect is needed after the project completed.", "The technology transferred in a project should be leveraged elsewhere." and "It is also important to implement the succeeding project based on monitoring and preceding projects to maximize the project effect."



Group Discussion



Presentation from each group



All participants

*: Using data actually applied in ex-post evaluations in the past, the participants scored sub-rating (relevance, effectiveness, impact, efficiency and sustainability) and derived the overall rating.

Process Analysis

JICA has been trying to find ways to reflect learning from ex-post evaluation on better project management. In these attempts, we have not only assessed project results (outcomes) but also analyzed project processes (how the project process affected the delivery of the outcomes) on a trial basis. In addition, we have been working to establish a standard process analysis methodology.

As part of the process analysis, this year, JICA has reviewed the trial analysis results to develop procedures for rapid project ethnography (RPE): a simplified, shortened, and less-cumbersome version of the ethnographic approach, which is mainly used in cultural anthropology and sociology. These efforts culminating to develop a handbook that describes these procedures. In addition, this RPE method has already been partially used to analyze the design and construction process of a bridge construction project in Sri Lanka.

Moreover, JICA presented its process analysis activities during the 29th Annual Conference of the Japan Society for International Development in November and at the 19th Annual Conference of the Japan Evaluation Society in December.

Specific details are shown below.

Ethnographic Analysis: A Handbook Developed and Released

The main feature of RPE is that it allows ethnographers to analyze the specific efforts made to overcome, avoid, and mitigate problems during the project implementation from the perspectives of different stakeholders based on the results of interviews with the stakeholders and reconstruct the situation of the project site from the ethnographers' own viewpoint so that the audience can vicariously experience the progress of the project. In addition, ethnographers can extract lessons learned according to the circumstances and conditions of the project areas due to how RPE enables ethnographers to gain deeper understanding of the historical, cultural, and social contexts of the project through participant observation (direct interactions with research subjects). RPE makes it easier for readers to relate to the stories of the projects as well as find differences between the projects analyzed by the RPE and projects they have been directly engaged in; therefore, a clearer picture of what was learned can be drawn.

The RPE-based process analysis was highly evaluated by the Advisory Committee on Evaluation (see p. 6 for an overview of the Advisory Committee) as well as internal and external development practitioners and evaluation experts. With technical advice from internal and external experts, JICA developed a handbook that describes the basic concept of RPE and provides fundamental and useful information for RPE studies and analyses, leading to increased effectiveness and efficiency of subsequent studies.

This handbook consists of two sections: 1) the Basics, aiming at promoting basic understanding of RPE; and 2) the Application, describing

practical techniques and methods for RPE researchers. As a result, readers can move through the book according to their interests. The Basics section includes the standard study process, the key points of each step, the role and competencies of ethnographers, and the purposes of RPE. The Application section illustrates the importance of this approach using the Delhi Metro Project as an example by highlighting bringing diverse perspectives into the analysis to describe who the research subjects can be. In particular, this section covers detailed techniques suitable for RPE including interviews due to their essential role in RPE. For example, it is suggested that interviewers should refrain from directing the conversation in order to allow the interviewees to express what they want to. This section also advises carefully observing the body language and facial expressions of interviewees.

In the evaluation of developmental projects, this method thus far has been underutilized, as those unfamiliar with ethnography may find it difficult. Therefore, JICA has developed and released an RPE handbook with even those unfamiliar with anthropology or sociology in mind. Overall, this handbook is expected to be widely used by those interested in the process analysis, which endeavors to provide deep insights that are different from those represented in the conventional ex-post evaluations based on the Five DAC Criteria.

The handbook is available on the following website:
<https://www.jica.go.jp/activities/evaluation/process.html>

Presentations at Academic Conferences

<Japan Society for International Development>

Inside and outside of the organization, JICA has been reporting and presenting its process analysis activities. This year, JICA presented "Quality Improvement in Ex-post Evaluations of ODA Projects: Application of Process Analysis" to report the backgrounds, concepts, and specific examples of the process analysis as well as report the challenges and possibilities for the future at the 29th Annual Conference of the Japan Society for International Development. This presentation was made for the session "How to Narrate ODA: Qualitative Evaluation and Public Relations for Kids regarding Japanese ODA." During this session, Ms. Yasuko Matsumi, a consultant and a member of the Advisory Panel on Enhancement of Ex-post Evaluation (see p. 39 for an overview of the Advisory Panel), described the

power of stories told in the project ethnography and the possibilities of its application in her presentation titled "Power of Storytelling: Possibilities of Project Ethnography." In this presentation, she stressed that process analysis can be more persuasive since readers can relate to and vicariously experience the stories, the subjective feelings, emotions, and worries of the frontline workers. She concluded that its strength lies in readers extracting lessons learned through comparing these vicarious experiences with their own experiences.

Moreover, the chair of the session, Mr. Hiroshi Sato (a senior researcher of the Institute of Developing Economies and a member of the Advisory Panel on Enhancement of Ex-post Evaluation) said that donors (governments, bilateral donor agencies, and NGOs) are accountable to the

taxpayers and supporters of their countries as well as the general public of donor countries (including mass media and online communities). Although the need for evidence-based practice has recently increased in this field, Mr. Sato had argued stories are often more powerful and persuasive than evidence such as facts and figures, emphasizing that is very meaningful to tell stories about the non-quantifiable outcomes and impact of Japanese ODA.

During the conference, some participants had expressed the importance of understanding the process of delivering outcomes in order to know how to apply the outcomes of ODA projects to other settings. Others insisted that process analysis should be performed to assess not only successful projects but also unsuccessful ones to learn lessons.

In closing, although this process analysis enables incorporating perspectives different from those represented in the Five DAC Criteria for learning toward future projects, the methodology is still under development.

Going forward, JICA will work to share findings about this process analysis and other evaluation efforts to internal and external stakeholders at various opportunities, such as relevant conferences, and hopes to incorporate feedback to provide increasingly sophisticated analysis.



A session at the Japan Society for International Development

<The Japan Evaluation Society>

JICA presented a comprehensive overview of its new evaluation approaches at the 19th Annual Conference of the Japan Evaluation Society. An overview of its process analysis activities, including a comparison with

similar evaluation approaches utilized by other development partners, was introduced. While some participants expressed support for JICA to continue process analysis, others pointed out that JICA should incorporate this analysis into their entire knowledge acquisition and management system.

Case The Project for Construction of Manmunai Bridge in Sri Lanka (Grant Aid)

Evaluator: Ayumi Hori, IC Net Limited

This project was launched soon after the civil war at Sri Lanka. The project constructed a bridge at Manmunai in Eastern Province where the economy was lagged behind compare to other regions, and it aimed to enhance transport and logistics services, thereby contributing to revitalize the region and improve the quality of lives of the local people. According to the ex-post evaluation based on the Five DAC Criteria, this project was rated A (the highest rating). It was found to have made a huge impact, increased the interexchange of people and goods on both sides of the river, and facilitated economic development especially on the economically ailing west bank. JICA decided to analyze the project process in parallel with the ex-post evaluation as we observed that the project would provide further lesson learned on the area where the inventive approaches and the active involvement of stakeholders were made during the course of planning and construction stage.



Manmunai Bridge

In this process analysis, the results of interviews with stakeholders will be used to analyze the background of the project, the interviews on the discussions and efforts made to resolve the problem they faced during the process of project formulation, planning, construction and the outcome after the completion of the project, and the dynamics and interactions of internal organization and stakeholders, as well as on the communication among the local contractors and people at the project area. This story will be interpreted to reconstruct the facts and describe the events and feelings that arose from their interactions so that the readers can vicariously experience what have happen during the project. Thus, this process analysis is intended to facilitate vicarious experience through the story, provide insights that cannot be fully gained from the ex-post evaluation based on the Five DAC Criteria, and offer practical lesson learned for similar projects.



Japanese staff and local workers at site meeting

JICA's Efforts in Promoting Impact Evaluation

The key measures to deal with various development issues involve implementing and deploying projects with proven and verified effectiveness. This approach is known as Evidence-Based Practice (EBP). Under such concepts, JICA has been improving and enhancing projects.

For EBP, impact evaluation is a major tool in which the effect of intervention (measures, projects and development models applied to improve/solve development issues) is rigorously verified. JICA has been promoting EBP as well as the implementation of an impact evaluation, particularly when evidence of the effects of a project is lacking or when a project is to be upscaled. Efforts made to promote impact evaluation also include development of internal and external human resources through training courses and attempts to produce high-quality evidence at a reasonable cost by using existing data.

Case 1. Picture Books through Reading-Aloud Activities in India

Verifying whether read-aloud activities of picture books contribute to children's understanding of environmental and hygiene issues and change in their awareness

Development issues surrounding developing countries have become increasingly diversified and complex. To successfully handle such issues, JICA has been promoting the effective use of private-sector technologies and services through public-private partnerships. One example of such efforts involves supporting KODANSHA, one of the leading publishing companies in Japan, in their business promotion of environmental/hygiene education activity in India (preparatory survey on BOP business of the Private-Sector Partnership and Finance Department).

In India, soaring economic development means more and more waste ends up not properly collected, separated and disposed of, resulting in serious national environmental issues. Ongoing open defecation has also triggered public health issues. Although the Government of India has taken both institutional and infrastructural measures in response, raising awareness of citizens is crucial to promote their behavioral change. For this purpose, KODANSHA has been promoting environmental awareness in children by encouraging activities involving reading their picture book products aloud ("MOTTAINAI BAA SAN" (Mottainai Gramma) series). Picture books are leveraged as media with which to disseminate awareness-raising messages, which may otherwise constitute uninteresting information for children and are likely to appeal to the children concerned, while also conveying messages effectively to them.

These activities have been very well received by participant children,

educators and parents. However, determining whether such activities truly contribute to children's understanding of environment/hygiene issues and change in awareness requires careful consideration. To determine this, JICA cooperated with KODANSHA to verify the impact by applying a Randomized Controlled Trial (RCT). Specifically, the primary schools proposed for the read-aloud activities are first divided into two groups at random, both with and without the activities respectively. Subsequently, the way in which students in the former group have changed their awareness, understanding and behavior with respect to environmental/hygiene issues is verified compared with students in the latter group.

Provisional analytical results revealed that most students have raised their environmental awareness and preferable behavior thanks to the read-aloud activities. Moreover, other results also showed the remarkable impact of such activities observed among students who seem to understand them and schools where other forms of environmental education are provided. These results will provide key pointers for developing and refining such activities in future on an ongoing basis.

Given the innovative and distinctive nature of private-sector technologies and services, whether or not they could truly help achieve the goal of addressing development issues remains unknown in many parts. As exemplified by this case, a proper impact evaluation at the pilot stage will minimize uncertain factors and allow the project to be promoted effectively.



A read-aloud session at a primary school
(picture provided by Mr. Yoshiaki Koga, KODANSHA)

Case 2. Rural Road Improvement Project in Morocco

An Analysis of the Changes (Impact) to People's Lives by the Road Improvement Project

Road and other transport infrastructure projects represent a large share of JICA's portfolio. The development of high-quality transport networks is expected to contribute to economic growth, poverty reduction, and inequality correction by improving access to economic opportunities and social services.

These transport infrastructure projects are usually evaluated by assessing the use of the infrastructure (e.g. traffic volumes) and conducting a cost-benefit analysis based on simulations. However, in order to make infrastructure projects more effective in improving the living standards of people, they should be more closely analyzed in terms of the changes (impact) the infrastructure development made to people's lives.

With the objective of revealing them, the Rural Road Improvement Project (ODA Loan) in Morocco was assessed through impact evaluation. This project rehabilitated the 30 road sections with a total length of 530 km in rural areas in Morocco. In the impact evaluation, corresponding road sections were carefully selected for comparison with the rehabilitated roads. Then, a difference-in-differences analysis method was adopted to compare how the lives of the people living along these roads had changed before and after the project.

Road development can produce various impacts on the people living along the roads. Therefore, a wide range of information has been collected and analyzed, including the utilization of roads, the means of transport, the frequency of travels, access to social services (e.g. education and health services), economic activities (e.g. local employment and agricultural production),

and livelihoods (e.g. household incomes and expenditures).

According to the tentative analysis results, the road development was confirmed to have made a positive impact on the use of public transport, the enrollment of girls in secondary schools, and the expenditures of households. A comparison of employment before and after the project shows that although job opportunities fell in the agricultural and non-agricultural sectors in the project area as a whole, the decline was smaller in the non-agricultural sectors in the areas along the rehabilitated roads. Moreover, emigration decreased in the areas along the rehabilitated roads, which indicates that the road development prevented the outflow of people. On the other hand, no significant impact was confirmed on agricultural production (though agriculture was a major industry in rural areas in Morocco), household incomes, or access to health services.

Although this evaluation is tentative and necessary to be verified with a rigorous analysis of data, the results of this analysis are expected to provide important lessons for future similar projects. It is essential to collect insights from detailed evaluations and make evidence-based decisions, especially in the case of road and other infrastructure projects which require abundant resources.



Road before improvement



Road after improvement

Column

Capacity Building of Development Practitioners through Impact Evaluation Training

Human resources who can plan, implement, and manage impact evaluations and use their results are essential to promote impact evaluation. For developing human resources with capacity of impact evaluations, JICA conducts project evaluation training, lectures, and seminars for JICA staffs as well as participants from other organizations (e.g. universities, academic societies, and other institutions). Focusing on improvement of the capacity of development practitioners, JICA provides capacity building training "Impact Evaluation: Toward Evidence-based Practice (EBP)."

In FY2018, the training was divided for the first time into two courses, Basic (September 6 to 14, except weekends) and Practical (September 25 to 28) courses, in response to request from past participants. It was attended by a total of 37 participants (22 in the Basic course and 15 in the Practical course) from development consulting companies, universities, local governments, and international organizations.

The training curriculums were developed based on relevant international standard textbooks as well as lectures and training sessions provided by universities and international organizations. The Basic course offered introductory knowledge, such as the concept and methodology of impact evaluation and the key points of implementation. The Practical course covered more practical themes, such as advanced topics on impact evaluation, data analysis methods, and practical exercises. Both courses consisted not only of lectures but also of

exercises based on practical examples and review tests so that the participants could fully understand the lectures and apply what they learned to practical situations.

The participants appreciated and were satisfied with the training. Some participants said that they would share the knowledge gained through this training with their colleagues and local counterparts, and others said that they would apply the knowledge to their projects. Past participants also reported that they had actually engaged in impact evaluations and applied the knowledge gained through the training. Going forward, the participants are expected to further contribute to promoting impact evaluations.



Exercise scene of the capacity building training "Impact Evaluation"

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*¹ and Grant Aid. As of FY2018, the number of ex-post evaluations had reached 1,636 (refer to p. 8 for the rating criteria, main examination items and rating flowchart for external evaluation).

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

Subject of this statistical analysis

This statistical analysis was conducted on 1,636 evaluations, comprising 1,113 external evaluations*² from FY 2003 to 2017 (i.e. 697 ODA Loans, 470 Grant Aid Awards and 469 Technical Cooperation Projects) as well as 523 internal evaluations after FY 2010. The ratings were analyzed for a total of 1,617 projects (i.e. 685 ODA Loans, 466 Grant Aid Awards and 466 Technical Cooperation Projects) excluding 19 projects without a sub-rating.

* For internal ex-post evaluations, the analysis was only conducted for the results determined by the end of January 2019. Accordingly, the above figure is not consistent with those as shown on p. 38.

Method

The analysis of trends and distribution of external evaluation results (overall- and sub-ratings based on the Five DAC Criteria) was conducted across three schemes based on descriptive statistics. The number of

ex-post evaluations per fiscal year by scheme was also indicated.

* 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 limits the assessment to the scope of the DAC evaluation criteria (for example, it does not evaluate aspects such as donors' roles and contributions); (2) it is not fully adjusted to take account of the various issues the project 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 would happen in development projects.

Moreover, this section only refers to those projects for which the ex-post evaluation is completed. In other word, since those projects were underway or completed but their ex-post evaluations had not be conducted were not included, this section does not cover all the JICA projects implemented during said period. Nonetheless, it shows a database integrating all those projects with ex-post evaluations completed and as such, provides an overall picture of JICA's ex-post evaluation.

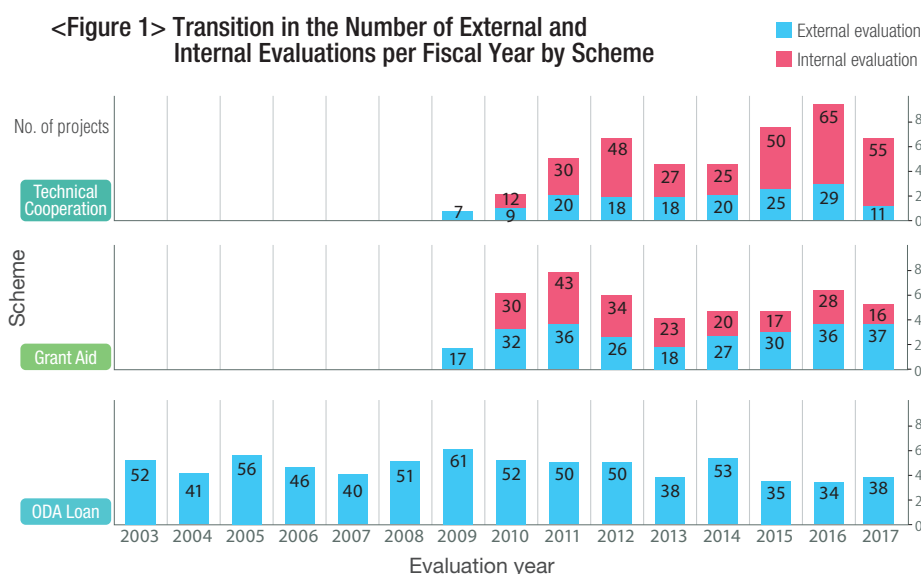
*1: ODA Loans include Yen Loan and Private Sector Investment Finance, although projects under the latter finance have not yet reached the timing for evaluation. Therefore, ODA Loans referred to in this analysis mean Yen Loans.

*2: External evaluation target projects with assistance of one billion yen or more and those likely to provide useful lessons learned.

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

Number of evaluations

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



As shown in Figure 1, the rating system was first adopted for the external evaluation of ODA Loans in FY2003, with a total of 697 projects evaluated in the 14 years up to FY 2017. The same evaluation system and internal evaluation were introduced to Grant Aid and Technical Cooperation projects from FY2009 and 2010, respectively. To date, a total of 470 Grant Aid projects (259 external and 211 internal evaluations) and a total of 469 Technical Cooperation projects (157 external and 312 internal evaluations) were evaluated. The proportions of each scheme relative to all ex-post evaluations were: ODA Loans (43%), Grant Aid (29%) and Technical Cooperation (29%). Meanwhile, the proportion of internal evaluation in Grant Aid and Technical Cooperation projects were 211 out of 470 projects (45%) and 312 out of 469 projects (67%), respectively, which were relatively high percentages.

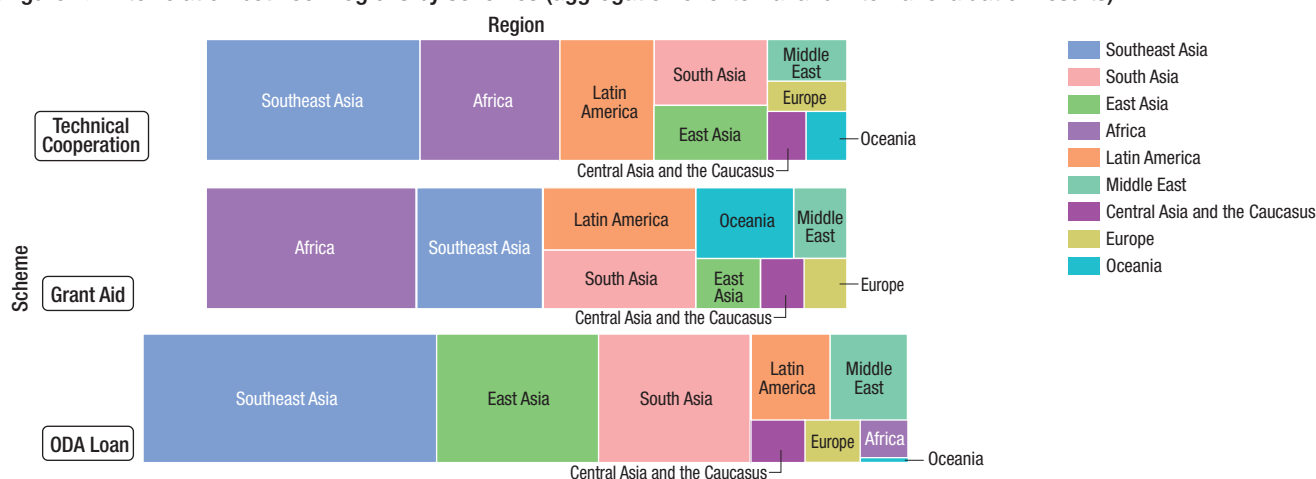
Interrelation between the scheme and the region/sector

Figures 2 and 3 show the number of projects implemented in each sector by region*3 and sector*4 in a form of tree map while the area of each rectangle corresponds to the proportion of the number of project evaluations.

First of all, the interrelation between schemes and regions, as indicated in Figure 2, suggests that most (approximately 80%) of all ODA Loan projects are in Asia. Although the number in East Asia stands out compared

to other schemes, the majority comprise assistance to China*5. In Grant Aid, meanwhile, many projects are also implemented, particularly in Africa, which reflects how such projects target countries with lower incomes among those developing in Latin America, the Pacific and other regions, showing a different trend in terms of project implementation to ODA Loan projects. As for Technical Cooperation, most projects are implemented in Southeast Asia as well as being broadly explored elsewhere.

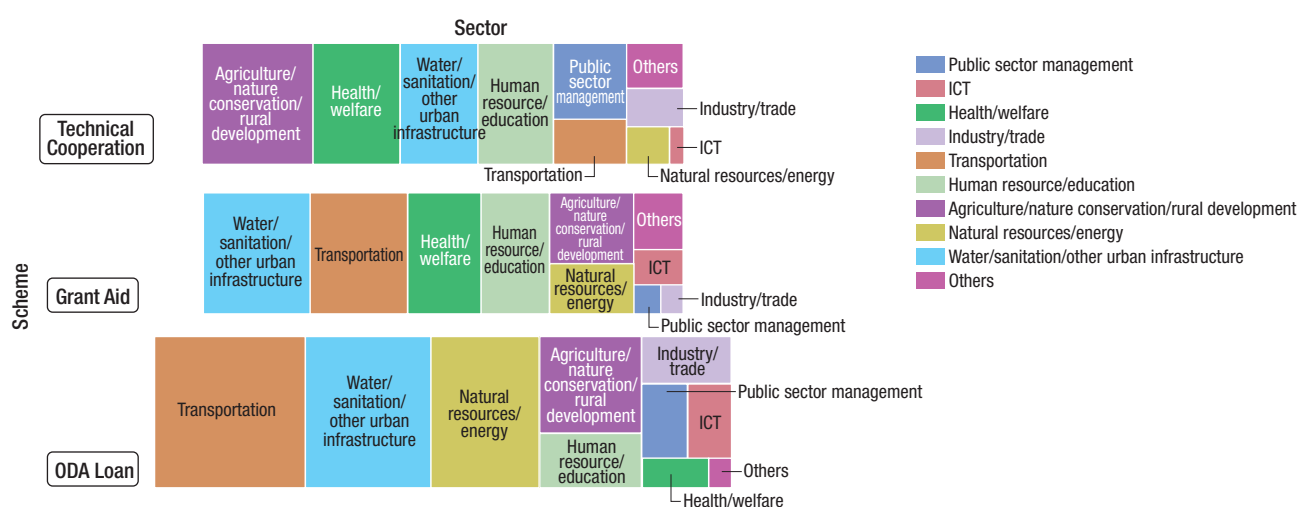
<Figure 2> Interrelation between regions by schemes (aggregation of external and internal evaluation results)



Secondly, as Figure 3 indicates the interrelation between the scheme and sector, more ODA Loans and Grant Aid projects are implemented in water, hygiene, environment and other urban infrastructure sectors while a certain number of Technical Cooperation projects are also implemented in the same sectors. As well as infrastructural development, including facility construction and equipment procurement, intangible cooperation such as human resource development and strengthening of organizations is also promoted in areas such as improving water supply systems (including rurally) and environmental management. Meanwhile, most cooperation in transport/traffic and natural resource/energy sectors is provided as part of a financial cooperation scheme,

since infrastructure improvement constitutes one of the major project components. Moreover, most projects in the health and welfare sectors are implemented under the Grant Aid and Technical Cooperation schemes. The figure suggests a trend whereby basic infrastructure improvement, such as constructing hospital buildings and procuring medical equipment, is provided under Grant Aid while a large proportion of intangible support is provided in the form of Technical Cooperation projects. In public sector management, most schemes under which JICA provides support constitute Technical Cooperation, and it describes Technical Cooperation is suitable for developing human resources and institutions and strengthening organizations.

<Figure 3> Interrelation between sectors by schemes (aggregation of external and internal evaluation results)



*3: 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**: Argentina, Antigua and Barbuda, Ecuador, El Salvador, Guyana, Cuba, Guatemala, Grenada, Costa Rica, Colombia, Jamaica, Suriname, Saint Lucia, Chile, Dominica, Dominican Republic, Nicaragua, Haiti, Panama, Paraguay, Barbados, Brazil, Belize, Peru, Bolivia, Honduras and Mexico; **Africa**: Angola, Uganda, Ethiopia, Eritrea, Ghana, Cabo Verde, Gabon, Cameroon, Gambia, Guinea, Guinea-Bissau, Kenya, Republic of Congo, Democratic Republic of Congo, Zambia, Sierra Leone, Djibouti, Zimbabwe, Sudan, Swaziland, 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, the Republic of North Macedonia, Moldova, Montenegro and Romania.

*4: Categorization of sectors is based on those defined in our statistical analysis.

*5: ODA loans to China ended in 2007.

Overall Ratings (comparison between external and internal evaluations)

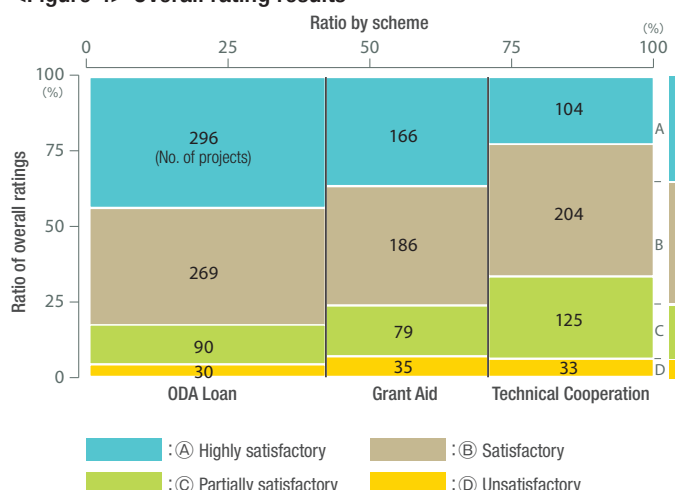
Figures 4 and 5 visualize the aggregation of overall ratings by scheme in the form of a mosaic plot. Figure 4 shows the difference in ratings between schemes by combining external and internal evaluation results while Figure 5 visualizes a comparison between external and internal evaluation results*6.

The ratio on each vertical axis represents overall ratings while each horizontal axis shows the ratio of each scheme (based on the number of projects) and each figure shown on the figures indicates a corresponding

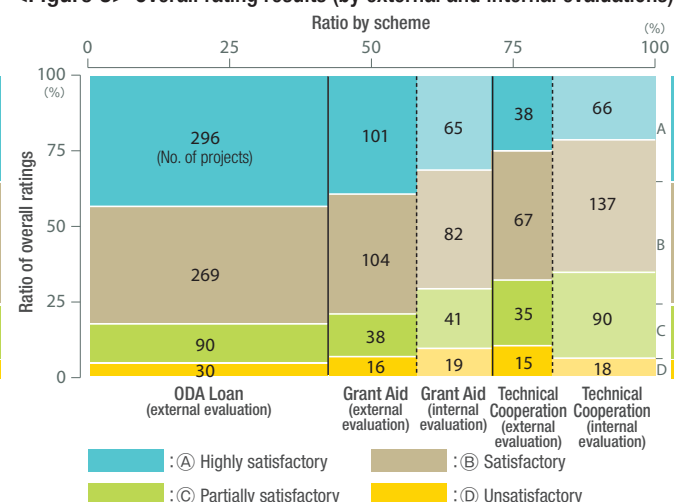
number of projects. For example, the yellow area becomes narrower in every scheme, which indicates a small number of ratings in D (Low). The ratio of each rating when aggregating all projects is shown on the right end. Figures 6 to 9 also show evaluation results by sub-rating item similarly.

The following analyses cover 1,617 projects and do not include 19 projects*7 for which overall ratings or some sub-rated items are unavailable, despite an ex-post evaluation having been conducted.

<Figure 4> Overall rating results



<Figure 5> Overall rating results (by external and internal evaluations)

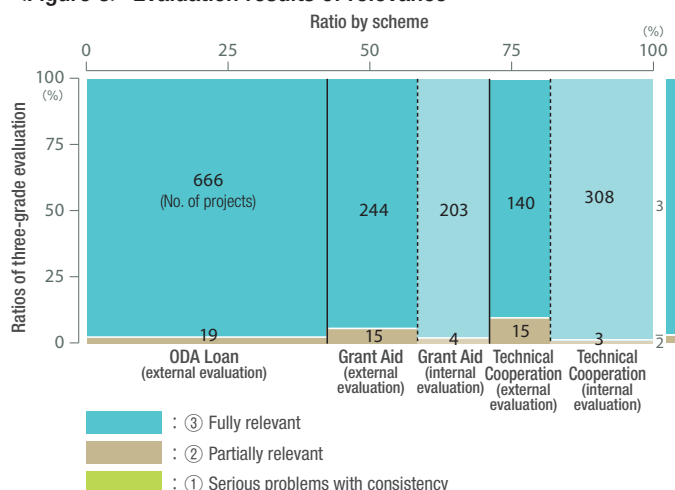


The overall ratings shown in Figure 4 suggest that the ratings of A (Highly Satisfactory) and B (Satisfactory) share larger areas in all schemes. The same trend can be found in Figure 5, which shows overall ratings by external and internal evaluations, seemingly indicating no significant differences in the results evaluated by third-party and JICA overseas offices. However, such differences need to be analyzed by taking the unique backgrounds observed by sector, region and project into consideration. Here, the ratio of the A and B ratings are lower in the internal evaluations, in both Grant Aid and Technical Cooperation projects. This trend is deemed to be influenced by the different sub-rating results as described below.

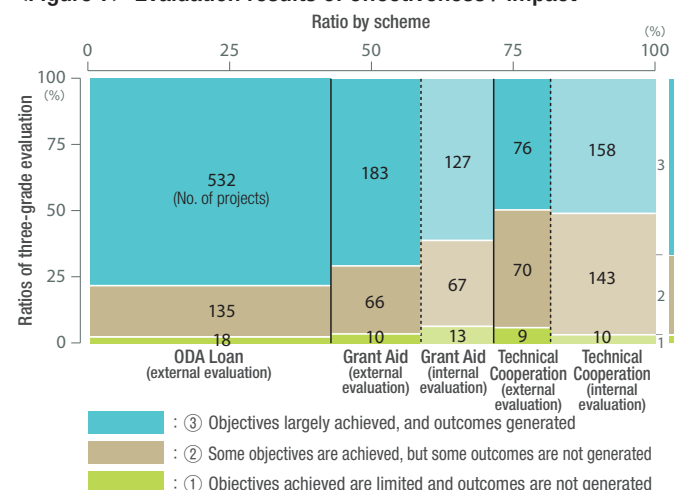
In terms of relevance, the rating ③ (Fully Relevant) continues to represent the majority, regardless of schemes and evaluation methods (Figure 6).

As for effectiveness/impact, the rating ③ (Objectives largely achieved and outcomes generated) accounts for the majority in every scheme; a trend that is particularly outstanding in ODA Loans (Figure 7). The rating ③ seems to be rare in Technical Cooperation. This may be derived from the fact that capacity strengthening of human resources and organizations are often set as the project purpose, making it more difficult to keep continuously generating and disseminating outcomes after project completion than other schemes.

<Figure 6> Evaluation results of relevance



<Figure 7> Evaluation results of effectiveness / impact

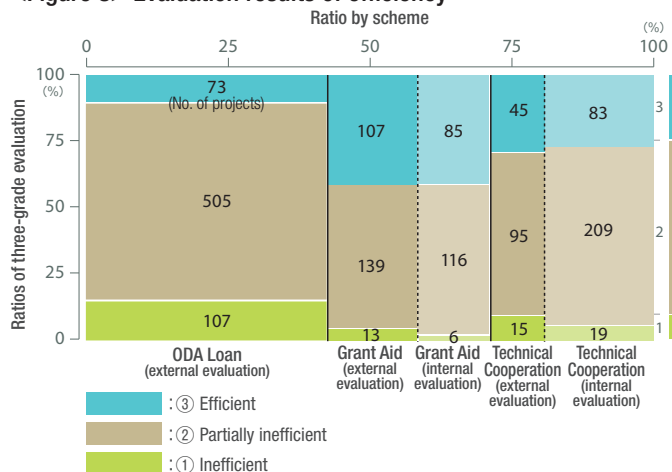


*6: Since internal evaluation focuses more on identifying learnings and lessons than ratings compared with external evaluation, it only shows qualitative descriptions not providing ratings. The subsequent considerations standardize its description on the rating system of external ex-post evaluation.

*7: Financial assistances and program loan under ODA Loan and those projects under all the schemes assessed as "evaluation results not available (N/A)" due to limited conditions in evaluation were excluded from the rating.

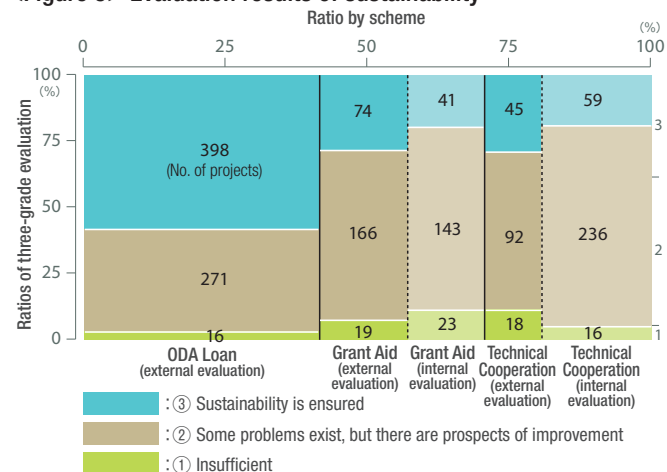
There is no significant difference between external and internal evaluation results regarding project efficiency, while the rating of ③ (Efficient) for ODA Loan projects is awarded on fewer occasions than other schemes (Figure 8). Efficiency is assessed by comparing the planned project period and cost and the result. Compared with the other two schemes, the ratio of costs borne by the recipient country for ODA loan projects (including costs for land acquisition or part of construction) are likely to be larger, which means their project period, in particular, is likely to extend beyond the planned period.

<Figure 8> Evaluation results of efficiency



As shown in Figure 9, the sustainability of most projects implemented under all the schemes are rated as either ③ (Sustainability ensured) or ② (Some problems exist, but there are prospects of improvement). The ratio of ③ is particularly high for ODA Loan projects, surmising that the technical and financial capacities for steadily sustaining outcomes achieved by the project are at a higher level, reflecting the nature of the scheme whereby development funds can be borrowed from the recipient government.

<Figure 9> Evaluation results of sustainability



Distribution and Trend of Overall Ratings

Figure 10 provides an overview of interrelations of key items for all ex-post evaluation results (external/internal evaluations) to date. The ratio of each of the items on the vertical axis indicates the number of projects and their ratio by item within each variable. Setting overall ratings as the central axis allows the ratio of projects by item to be determined by identifying the region and sector in which projects are implemented. Accordingly, ex-post evaluation results (A, B, C (Partially Satisfactory) and D) can be identified by determining their interrelation between region, overall ratings and sectors simultaneously.

Given the same considerations as above, ratings A and B comprise most overall ratings, accounting for 76% of the entire set of 1,617 projects rated (566 projects as A, 659 projects as B, 294 projects as C and 98 projects as D).

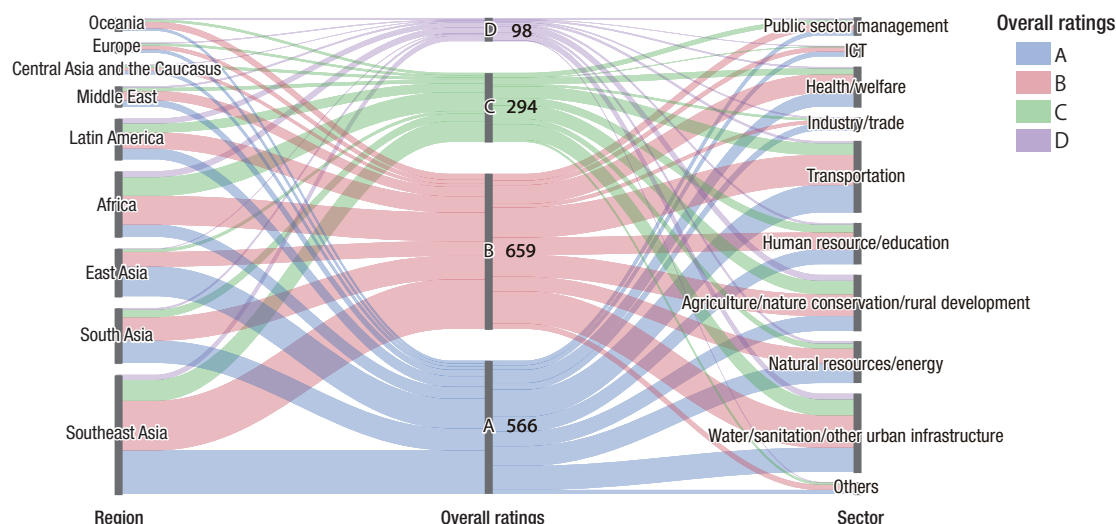
In terms of regions, ratings A and B comprise the majority in each region, with rating A showing up particularly strongly in East Asia, while a certain number of C and D are deemed outstanding in Southeast Asia, due

to a number of projects implemented in the region. Similarly, ratios of A and B ratings are high in each sector while ratings C and D tend to be fewer, particularly in natural resources/energy, health/welfare and human resource/education sectors. As described in p. 57, additional support is provided under Technical Cooperation and Grant Aid schemes in health/welfare and human resource/education sectors. Incorporating internal evaluation results this time makes the overall trend and bigger picture more visible.

For FY 2018, JICA prioritized compiling all evaluation results of JICA projects into a single set of data, including internal evaluations^{*8}. Based on these, JICA will reveal questions and hypotheses in the field by applying regression analysis and other statistical methods.

^{*8}: Minami et.al.(2018), Quantitative analyses of ex-post evaluation: creation and definition of exploratory variables with practical consideration. The 19th Annual Conference of the Japan Evaluation Society, Yokohama.

<Figure 10> Interrelation between overall region and sector ratings (aggregating external/internal evaluation results)



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JICA Annual Evaluation Report 2018

Edited and Published by

**Evaluation Department,
Japan International Cooperation Agency**

5-25, Nibancho, Chiyoda-ku, Tokyo 102-8012, Japan

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