

## 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

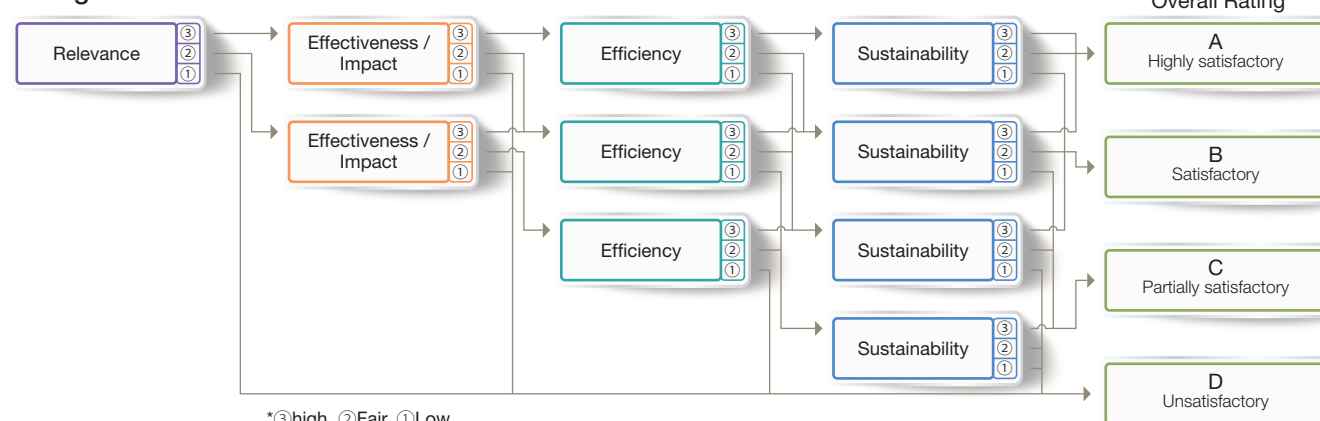
(highly satisfactory); B (satisfactory); C (partially satisfactory); and D (unsatisfactory).

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)   | Sustainability is ensured   | Some problems exist, but there are prospects of improvement                                     | Insufficient   |
|  | Institutional sustainability (mechanisms, division of roles, etc.)  |   |   |  |
|  | Technical sustainability (trainings, manuals, technical levels)   |   |   |  |
|  | Financial sustainability (availability of budgets, etc.)  |   |   |  |
|  | Operation and maintenance sustainability  |   |   |  |

### 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

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



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.

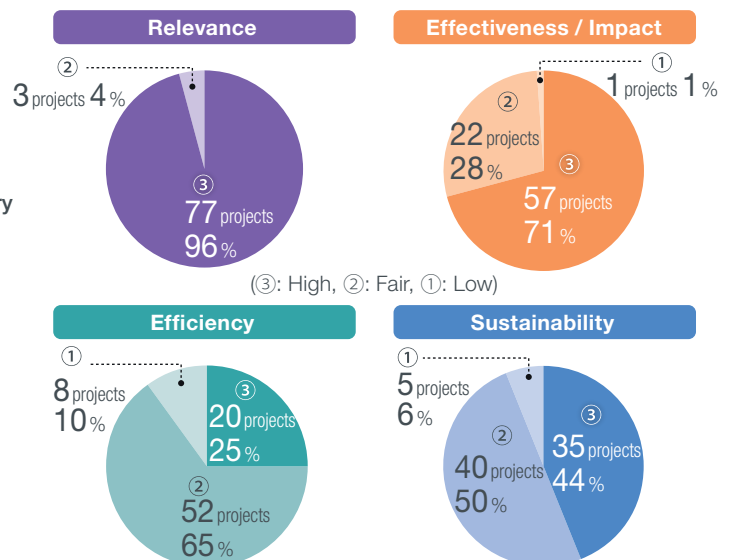
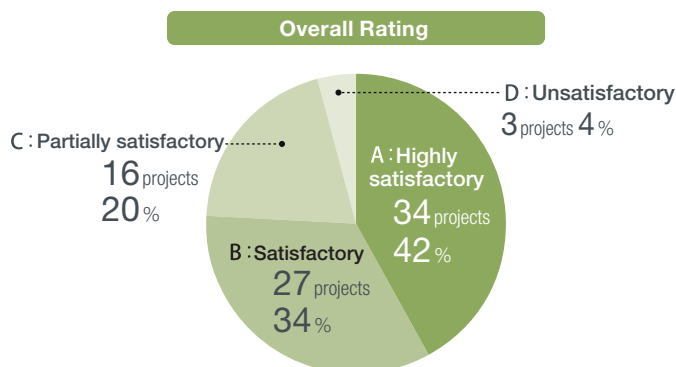
**Sustainability:** 35 projects were rated as “③” (44%), 40 projects were “②” (50%), and 5 projects were “①” (6%). Those rated as ① were two Technical Cooperation and three Grant Aid projects. The main factors behind the low rating were issues such as “Operation and maintenance system was insufficient/not 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<sup>\*1,2</sup>

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)

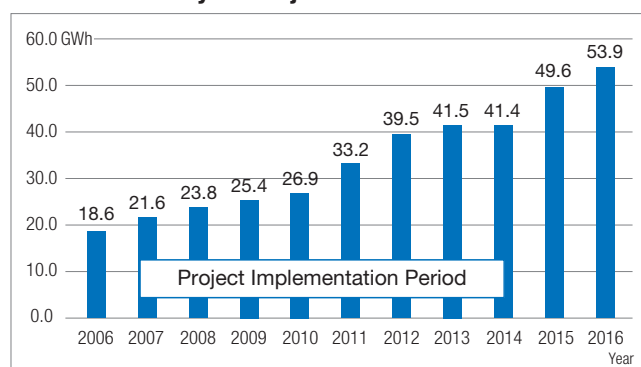
In rural areas of targeted 10 Dzongkhags, 16,241 households were electrified, exceeding the planned target numbers of 15,322 households. In addition, the project contributed to improvement of national electrification rate, with the evidence that number of rural households in project target areas accounts 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

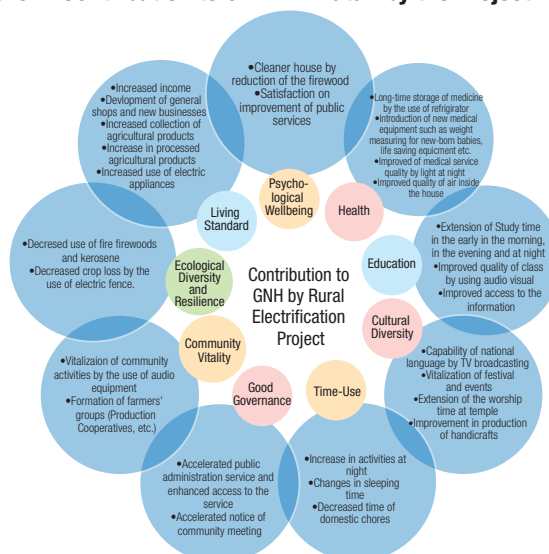
In the light of above, this project is evaluated to be highly satisfactory.

### 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\*<sup>1</sup> 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

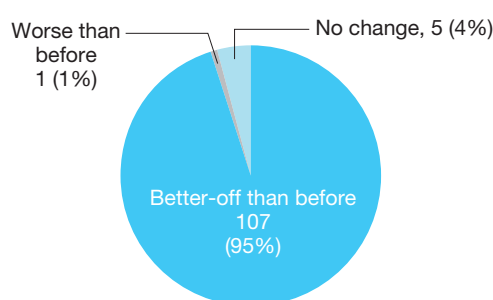
Operation of the revolving fund for the project was completed in 2018. Field officers recruited in the project and PFI staff are recovering



## 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.

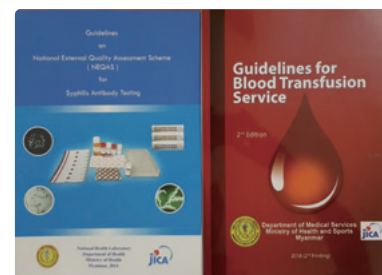
Malaria Control: NMCP is strengthened.

【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<sup>\*3</sup>, 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】

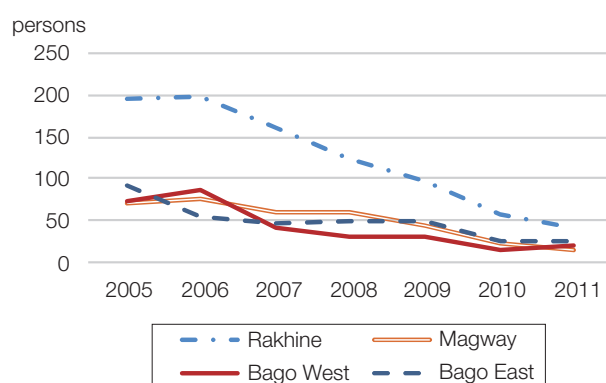
### Effects of Project Implementation (Effectiveness, Impact)

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<sup>\*4</sup> 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<sup>\*5</sup> 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.\*<sup>1</sup> Moreover, a target time for arrival and fire dousing commencement was achieved by the introduction of small vehicles in areas with narrow streets.\*<sup>2</sup> 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<br>(2012)   | Target<br>(3 <sup>rd</sup> year after the completion of the project) | Actual<br>(2015-2018)        |
|------------|--|--|------------------------------|
| Situations | Dispatch from another fire site where force attended <sup>*3</sup> | Dispatch from a fire station   | Dispatch from a fire station |
| Time       | 6 to 10 minutes  | 3 to 6   | Shortening 3 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<br>(2012)  | Target<br>(3 <sup>rd</sup> year after the completion of the project in 2018) | Actual<br>(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  | Reducing 6-9 hoses   |
| Time Required            | 5-7 minutes with two fire fighters (7-12 minutes with one firefighter)          | 2-3 minutes  | Shortening 3-4 minutes   |

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<br>(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<br>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<br>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<br>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.

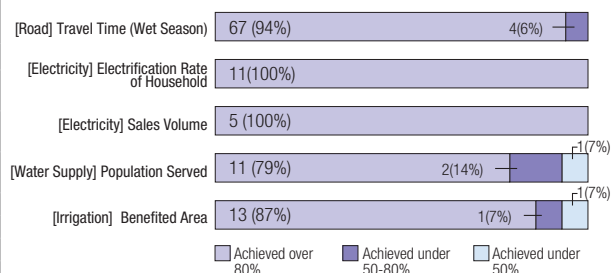
## Status of Achievement of Operation and Effect Indicators (Mean or total values of all subprojects)

| [Sector] Indicator Name (Unit)  |                  | Baseline                                 | Target                                     | Actual                                   |
|---|------------------|--|--|--|
|   |                  | 2009                                     | 2017                                       | 2017                                     |
|   |                  | Year of Detailed Design                  | 2 Years after Completion                   | 2 Years after Completion                 |
| <b>Operation Indicator</b>  |                  |  |  |  |
| [Road] Annual Average Daily Traffic Volume (PCU/Day) (Mean)                       | New Construction | 0  | Provincial Road 1,425<br>District Road 380 | Provincial Road 900<br>District Road 556 |
|   | Improvement      | Provincial Road 221<br>District Road 132 | Provincial Road 394<br>District Road 340   | Provincial Road 357<br>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                                    |
| <b>Effect Indicator</b>   |                  |  |  |  |
| [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 safeness 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”<sup>\*\*1</sup>

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<sup>\*\*2</sup>.) 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<br>(Before Project Completion) | 2016/17<br>(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 <sup>*1</sup> |                          |                                  |
|---|---------------|----------------------------|----------------------|--------------------------|----------------------------------|
|   | 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 <sup>*2</sup>        | 1,891                | 1,896                    | (1,945)<br>2,191 <sup>*3</sup>   |
| Number of outpatients to general clinic | 61,770        | 82,000                     | 29,111               | 44,710                   | (45,199)<br>56,773 <sup>*4</sup> |
| Number of referrals to the hospital     | 351           | 480<br>(203) <sup>*5</sup> | 301                  | 149                      | 227                              |

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

<sup>\*1</sup>: 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.

<sup>\*2</sup>: Calculated result (2,344 operations) of the preparation study was used as the target.

<sup>\*3</sup>: 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.

<sup>\*4</sup>: 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).

<sup>\*5</sup>: 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 <sup>*1</sup>  | Not Available           | Not Available            | 12,455                   |
| Numbers of Clinical Examinations | 59,810 <sup>*2</sup> | 74,479 <sup>*2</sup> | 119,235                 | 129,034                  | 145,338                  |
| Numbers of X-ray pictures taken  | 17,994 <sup>*2</sup> | 25,660 <sup>*2</sup> | 26,400                  | 26,693                   | 28,921                   |

Source: Data provided by VCH

<sup>\*1</sup>: 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.

<sup>\*2</sup>: 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.

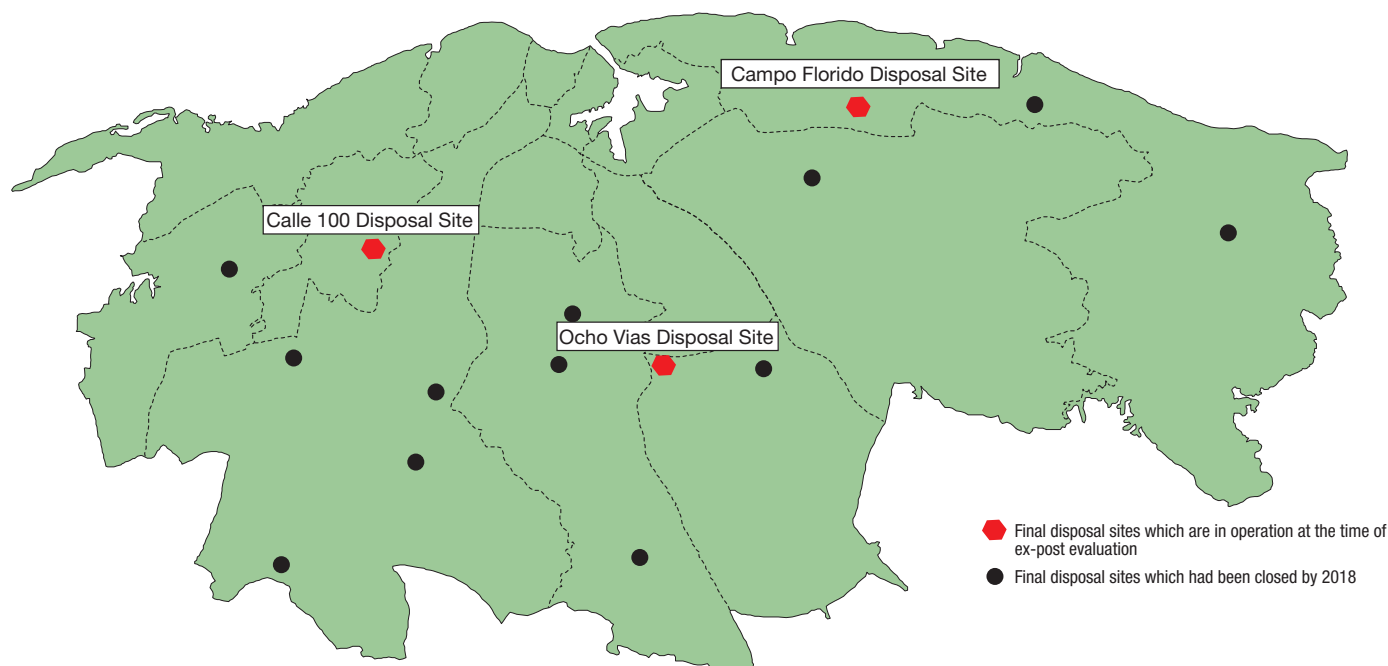
**Relevance**

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) <sup>*1</sup> | 30 tons     | 38 tons                 | 15 tons                                    | 30 tons                 | 60 tons                 |
| Ice/fish ratio (per day) during storage of fresh fish by wholesalers <sup>*2</sup>                           | Approx. 10% | 20-30%                  | No data<br>(MCPB does not sell fresh fish) |                         |                         |
| Post-harvest loss of fresh fish handled in the market <sup>*3</sup>  | 15%         | 7.5%                    | No data<br>(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.

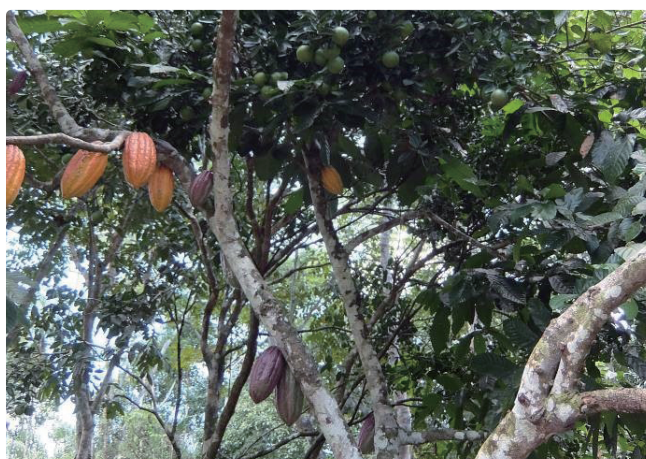
### 2. Recommendations and lessons learned

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

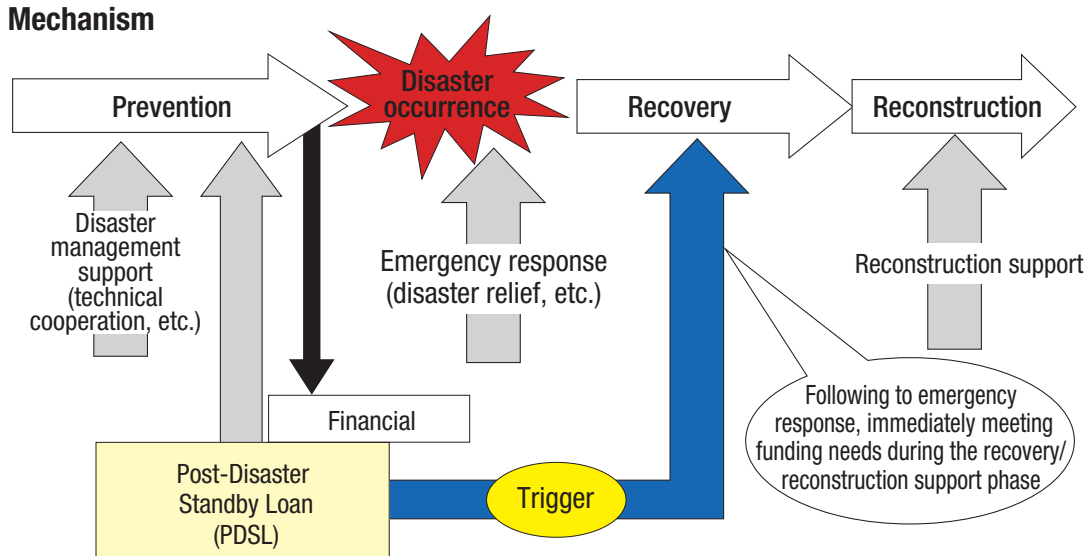
In 2013, the Government of Japan established a new scheme, Stand-by Emergency Credit for Urgent Recovery (hereinafter, “SECURE”), as part of the improvement measures to make strategic use of ODA loans. This scheme was designed to provide support as soon as possible to developing countries affected by 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.

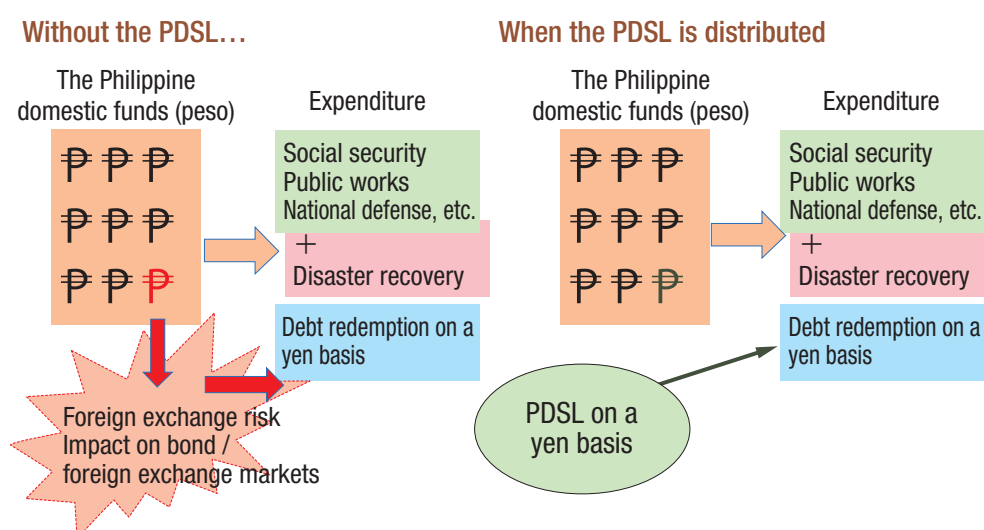
On the other hand, given that the PDSL can be disbursed at any time when a natural disaster occurs, the interest-rate fluctuation risk may accidentally materialize, undermining the financial footing of JICA. With

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.

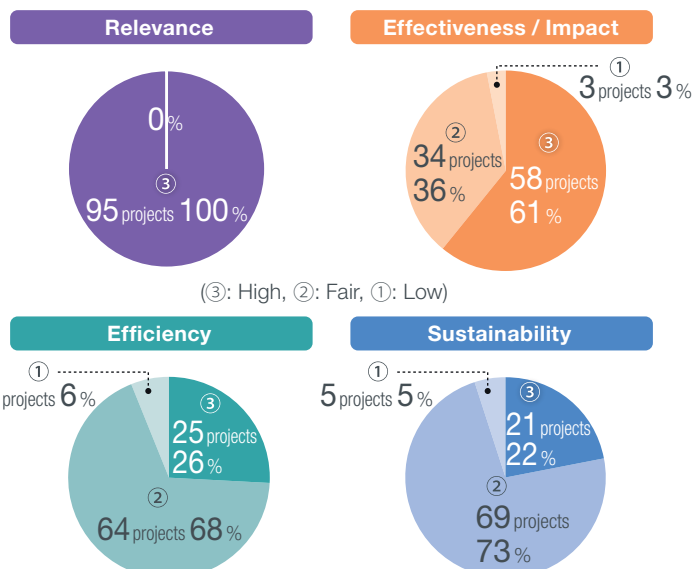
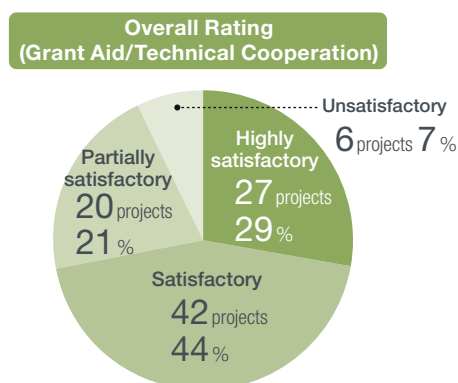
### ◇Sustainability:

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:

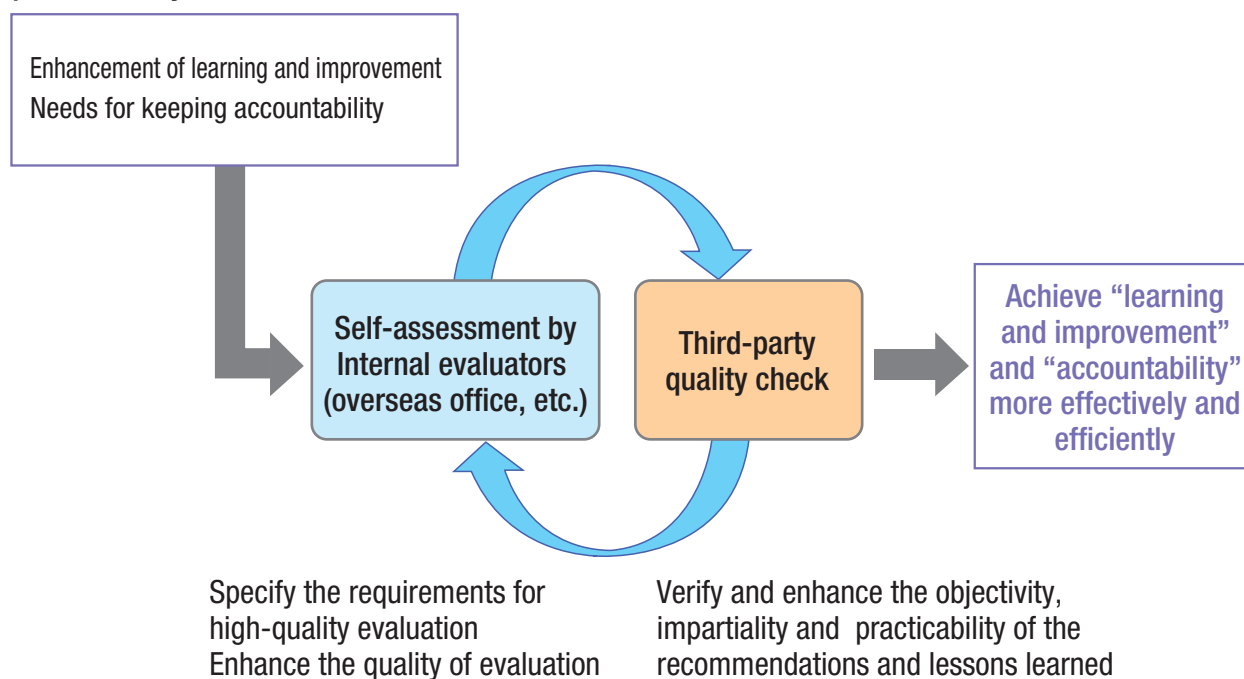
Evaluators (e.g. overseas office) reflect on their own internal evaluation reports at the middle and end of the evaluation process. Because the check sheet specifies the requirements for high-quality evaluation, they can use it as guidelines for conducting project evaluations smoothly, improving their 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<sup>\*1</sup> to health facilities in collaboration with traditional birth attendants, contribution of the Pregnant Women's Clubs<sup>\*2</sup> and other efforts all helped fuel the success of the project.

<sup>\*1</sup>: Referral and transfer from the lower health facilities to the higher health facilities.

<sup>\*2</sup>: 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