2011 Annual Evaluation Report JICA

Inclusive and Dynamic Development

Japan International Cooperation Agency

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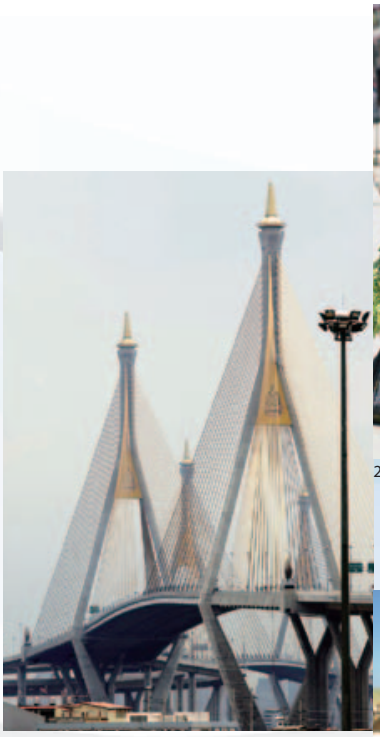
2011 JICA

Toward Inclusive and Dynamic Development


1


2


3


4


5


6

INDEX

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PREFACE

I would like to express my deepest sympathy with the victims and families of the Great East Japan Earthquake.

Following the March 2011 earthquake and tsunami, Japan received widespread support and help from countries, regions and international organizations all across the world. This reminds us that we are all truly connected and mutually dependent. I believe the great support and help Japan received reflects some appreciation for what Japan has been contributing to the world and the expectation that Japan will continue to play an important role in the international community.

Throughout 2011, there were many new and important changes in politics, economics and, unfortunately, in the number of natural disasters. It made us at JICA realize we must continue to closely monitor the changing world and to provide assistance so that all people can enjoy peace and prosperity.

To accomplish this, JICA, after the merger with the Official Development Assistance (ODA) wing of former Japan Bank for International Cooperation (JBIC) in October 2008, has undertaken projects in all three major areas of development (technical cooperation, loan aid, and grant aid).

JICA also aims to continuously improve future operations by planning and implementing projects appropriately, evaluating and understanding the outcomes objectively, and utilizing the lessons learned for new projects. In addition, to achieve full accountability and transparency as Japan's integrated ODA agency, JICA will make the results of its evaluation open to the general public.

This Annual Evaluation Report 2011 presents summaries of ex-post evaluation results conducted by external experts and thematic evaluation, and introduces JICA's own evaluation system and the efforts to further improve it.

I would be pleased if this report helps to promote deeper understandings of JICA's operations. Thank you for your continued and future support and encouragement.

March 2012
Sadako Ogata, President
Japan International Cooperation Agency

Part 1

Operations Evaluation in JICA

A variety of organizations and groups including governments, international organizations, NGOs, and private companies carry out economic cooperation to support socio-economic development in developing countries. Financial and technical cooperation extended by governments for development purposes is called Official Development Assistance (ODA). ODA is classified into two types: bilateral aid and multilateral aid (investment and contributions provided to international organizations).

Among Japan's ODA, JICA provides bilateral aid in the form of Technical Cooperation, ODA Loans, and Grant Aid* in an integrated manner. Part 1 describes the evaluation system for these projects of JICA and efforts to improve the evaluation system.

An overview of JICA's operations is available on JICA's website:
http://www.jica.go.jp/english/index.html

An overview of JICA's operations evaluation is available on JICA's website:
http://www.jica.go.jp/english/operations/evaluation/index.html

* Excluding those directly implemented by Ministry of Foreign Affairs of Japan

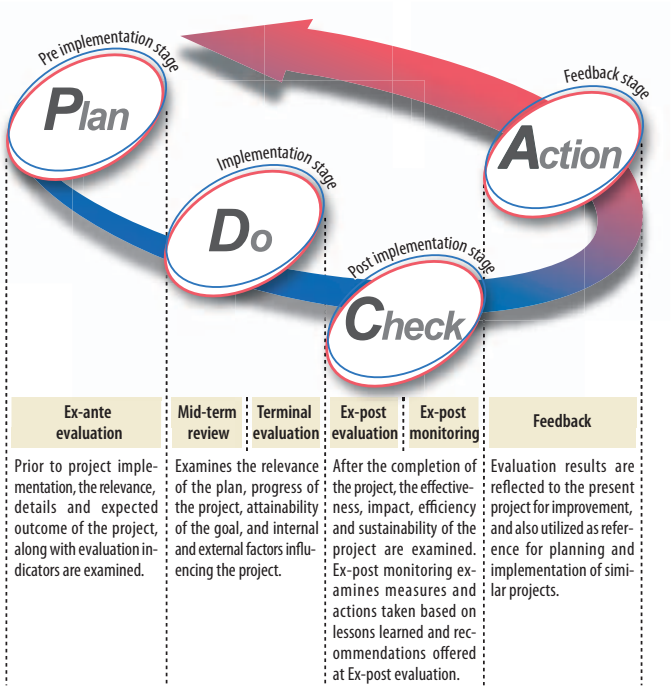
The Operations Evaluation System of JICA

In an effort to improve its projects and ensure accountability to the Japanese taxpayers, JICA implements operations evaluations in accordance with the PDCA (Plan, Do, Check, and Action) cycle for all Technical Cooperation, ODA Loans, and Grant Aid projects.

1 Consistent evaluation throughout the project's PDCA cycle

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

For all projects, JICA's evaluation is conducted based on the PDCA cycle, regardless of the scheme of assistance*. Considering the characteristics of the scheme of assistance, such as the assistance period and timeframe for expected results, JICA conducts the evaluation within a consistent framework at each stage of the project (planning, implementation, post-implementation and feedback). By conducting the evaluation at each stage of the PDCA cycle, it aims to improve the development results of the project. The details of the evaluation conducted at each stage are introduced on p.6-7 and p.48-49.



2 Coherent methodologies and criteria for three schemes of assistance

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

Specifically, an evaluation framework that reflects: 1) Project-level evaluation based on the PDCA cycle; 2) Evaluation applying the Five DAC Criteria for evaluating development assistance that is laid out by the OECD-DAC (Organisation for Economic Co-operation and Development/Development Assistance Committee) and is internationally accepted as an ODA evaluation method (Table 1); and 3) Publication of evaluation results based on a uniform style using a rating system developed by JICA. JICA is studying and examining the way to standardize the interpretation of each of the Five DAC Criteria so that more appropriate evaluation judgments can be made. Further details are introduced on p.42–43. The ratings system and results are introduced on p.18–19 and p.50.

Table 1 Evaluation Perspectives Using the Five DAC Criteria for Evaluating Development Assistance

Relevance	Examines the extent to which the aid activity is suited to the priorities and policies of the target group, recipient and donor: Does the goal of the aid activity meet the needs of beneficiaries? Are the activities and outputs of the program consistent with the overall goal and the attainment of its objectives?
Effectiveness	Measures the extent to which a program or a project attains its objectives.
Efficiency	Measures the outputs in relation to the inputs to determine whether the aid uses the least costly resources possible to achieve the desired results.
Impact	Examines positive and negative changes as a result of the project. This includes direct and indirect effects and expected and unexpected effects.
Sustainability	Relates to whether the benefits of the project are likely to continue after the closure of the project.

*Schemes of assistance, such as Technical Cooperation, ODA Loans, and Grant Aid.

The evaluation system of JICA has the five features shown below.

1. **Consistent evaluation throughout the project's PDCA cycle**
2. **Coherent methodologies and criteria for three schemes of assistance**
3. **Cross-sectoral and comprehensive evaluation through a thematic evaluation**
4. **Ensuring objectivity and transparency**
5. **Emphasizing use of evaluation results**

3 Cross-sectoral and comprehensive evaluation through a thematic evaluation

JICA conducts thematic evaluations to analyze a group of projects comprehensively and cross-sectorally. The aim of this evaluation is to derive recommendations and lessons learned which can be utilized across projects. Thematic evaluation is conducted by selecting projects based on a specified theme and analyzing them from a different angle than in an individual project evaluation.

JICA has so far conducted thematic evaluations that focus on a specific development issue or assistance scheme. Moving forward, evaluations will also be conducted for JICA's cooperation programs (a strategic framework designed to support the achievement of developing countries' mid- to long-term development goals) in line with the progress being made in this endeavor. The details of thematic evaluation are introduced on p.7.

4 Ensuring objectivity and transparency

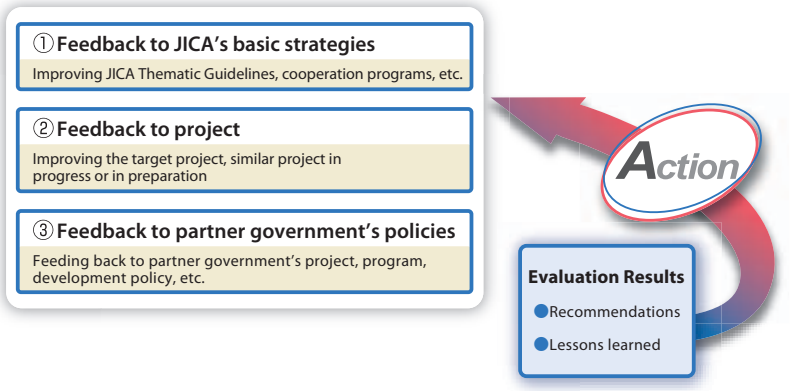
JICA has incorporated external evaluations according to project size in the ex-post evaluations which require an objective verification of project implementation results for all three schemes of assistance, and the findings are made available on the JICA website. JICA will continue its efforts for increasing objectivity and transparency in its operations evaluations.

In order to improve the quality of evaluations, JICA has set up mechanisms by which the viewpoints of external parties are reflected in the operations evaluation system. In this context, JICA receives advice on evaluation policy, as well as on the evaluation system and methodology from the Advisory Committee on Evaluation consisting of third-party experts (→see p.8).

5 Emphasizing use of evaluation results

JICA's operations evaluations are not merely evaluations. Evaluation results also serve as a feedback function for improving the quality of the "Action" phase of the PDCA cycle. This feedback is utilized as recommendations for improving the project and lessons learned for ongoing and future similar projects. JICA intends to further strengthen the feedback function for reflecting the evaluation results into JICA's fundamental strategies for cooperation and the JICA Thematic Guidelines.

At the same time, JICA makes efforts to reflect the evaluation results into development policies, sector programs, and respective projects of the recipient governments by feeding back the evaluation findings. Conducting joint evaluations with the recipient government is also a way of feeding back the evaluation findings.



Evaluation results are available on JICA's website. http://www.jica.go.jp/english/operations/evaluation/

Pre Implementation Stage Evaluation (Ex-ante Evaluation)

In order to determine the necessity of the project as well as to set targets for outcomes, JICA conducts ex-ante evaluation and publishes the results in the "Ex-ante Evaluation Report."

JICA conducts the ex-ante evaluation prior to project implementation to confirm the needs and priorities of the project as well as verify the outline of the project and anticipated outcomes. At the ex-ante evaluation stage, JICA also confirms implementations of appropriate safeguard procedures based on the review of environmental and social considerations, as well as reflections of lessons learned from past projects.

The results from the ex-ante evaluation conducted from this perspective are reflected in the subsequent decision-making regarding project design and project approach. Once the project commences, evaluations are conducted based on the evaluation plan and indicators set at the time of the ex-ante evaluation.

Number of Ex-ante Evaluations Performed in FY2010

Technical Cooperation	126 projects	ODA Loans	35 projects	Grant Aid	79 projects

Implementation Stage Evaluation (Mid-term Review and Terminal Evaluation)

Mid-term reviews and terminal evaluations are conducted at the project implementation stage in order to assess the relevance of the project plan, the status of progress and the attainability of the goals, and internal and external factors affecting the project.

JICA conducts the mid-term review and terminal evaluation for ongoing projects. These are intended to study the attainability of the project purpose, contributing or impending factors of the project's implementation, as well as their respective trends in terms of effectiveness and efficiency. The evaluation results will be utilized in revising the project plan and project management system, and decision-making on the termination or continuation of the project. Lessons learned from the evaluation will be used for improving similar projects in the future.

The mid-term review of Technical Cooperation projects is conducted at the mid-term stage for projects that are implemented for more than four years. The purpose is to verify the relevance and analyze the attainability of the project goal in terms of effectiveness and efficiency as well as the project's promoting factors and obstacles and their respective trends. The results of the mid-term review are utilized to make project plan revisions and management system improvements.

Terminal evaluation is conducted for Technical Cooperation projects about six months prior to project termination. The purpose is to verify mainly the attainability of the project goal, efficiency, and sustainability, so that JICA can draw up the project plan for the remaining period of the project with the recipient government and decide on the appropriateness of terminating the project and/or necessary follow-ups for the future, among other matters. The terminal evaluation is an evaluation and monitoring scheme that is unique to Technical Cooperation projects. This verifies the effectiveness during the project's implementation phase.

Number of Mid-term Reviews and Terminal Evaluations Performed in FY2010

Technical Cooperation (Mid-term Review)	71 projects	Technical Cooperation (Terminal Evaluation)	76 projects

Post Implementation Stage Evaluation (Ex-post Evaluation and Ex-post Monitoring)

JICA conducts ex-post evaluation and ex-post monitoring in order to evaluate completed projects comprehensively and monitor if the project's effectiveness, impact, and sustainability will continue to materialize after project completion.

JICA performs the ex-post evaluation and ex-post monitoring after project completion. Compared with other evaluation schemes, evaluations conducted at the post implementation stage place more importance on the aspect of accountability. Therefore, external evaluations, whereby an external third-party makes evaluation judgments, are conducted for projects over a certain size.

All three assistance schemes are subject to ex-post evaluation, of which there are two types: detailed ex-post evaluation (in principle, projects over 1 billion yen; external evaluation) and internal ex-post evaluation*1 (projects over 200 million yen and under 1 billion yen; implemented by JICA's overseas offices). At the stage after the completion of each project, JICA conducts a comprehensive evaluation using the Five DAC Criteria. One distinctive feature of the detailed ex-post evaluation is the application of a rating system*2 in order to present the evaluation results in a way that is easy to understand.

The recommendations and lessons learned gathered from these ex-post evaluations will be applied toward improving the project, as well as to the planning and implementation of similar projects in the future.

Ex-post monitoring is usually conducted seven years after the completion of ODA Loan projects if there were concerns in project effectiveness and sustainability based on the results of the ex-post evaluation. It re-verifies the project's effectiveness, impact, and sustainability, as well as monitors the extent to which recommendations drawn from the ex-post evaluation are being applied. It aims to extract recommendations and lessons learned necessary for the project impact to be sustained and improved as a whole. In FY2010, ex-post monitoring was conducted for 15 projects.

Number of Ex-post Evaluations Performed in FY2010

Technical Cooperation	(detailed) 9 projects (internal) 12 projects	ODA Loans	(detailed) 52 projects	Grant Aid	(detailed) 32 projects (internal) 31 projects

Thematic Evaluation

JICA conducts a comprehensive evaluation and analysis of JICA's cooperation in relation to a specific theme or development goal, and the evaluation results are utilized for future cooperation planning and implementation to be more effective.

JICA conducts the thematic evaluation based on a specific theme, such as region, sector, and assistance methodology, for projects that are relevant to the theme, using an evaluation criteria established for each theme. This includes comprehensive analysis, which extracts trends and problems common to a particular issue or compares projects and categorizes them to extract common features and good practices. Comprehensive analysis and examination of the evaluation results provide recommendations and lessons learned relating to the specific theme. Furthermore, JICA endeavors to develop a new evaluation methodology by using different evaluation methodologies.

Moving forward, JICA will also conduct evaluations of cooperation programs, which are strategic frameworks through which JICA assists developing countries achieve their specific mid- to long-term development goals. Taking into account that cooperation programs will be subject to future evaluations, JICA will need to verify from the ex-ante evaluation stage: Whether the goal and indicators for the cooperation program are clearly set; and whether there is a consistent cause and effect relationship between the overall goal of the projects that comprise the cooperation program and the goal of the cooperation program.

Thematic Evaluations Performed

- Articulation of Evaluation Perspectives and Evaluation Judgments Based on the Five DAC Criteria
- Economic Impact Assessment of ODA Loans and Grant Aid: Evaluating their Contributions from a Macro-Economic Viewpoint
- Survey on the Economic Benefits of the Smooth Implementation of ODA Loan Projects

Note: See Reference 1 (p.48-49) regarding the evaluations conducted at each stage of Technical Cooperation, ODA Loans, and Grant Aid projects.
*1 See p.21 for an overview of the internal evaluation.
*2 See Reference 2 (p.50) for an overview of the rating system.

Advisory Committee on Evaluation

JICA established the Advisory Committee on Evaluation in July 2010 in order to enhance the quality of evaluations, strengthen feedback of the evaluation results, and better ensure evaluation accountability on the basis of advice regarding operations evaluations.

The Committee, chaired by Shinji Asanuma, Visiting Professor at the School of International and Public Policy, Hitotsubashi University, includes experts in international aid and evaluation from international organizations, academia, NGOs, media, and private sector groups.

Below is an outline of the expert advice provided from the Committee members during the 3rd and 4th meetings convened in FY2011 for the second year running. The wide range of advice will help JICA further improve its operations evaluations.

List of Committee Members (as of January 2012)

●Chairperson	
Shinji Asanuma	Visiting Professor, School of International and Public Policy, Hitotsubashi University
●Acting Chairperson	
Akifumi Kuchiki	Professor, College of Bioresource Sciences, Nihon University
●Members (in alphabetical order)	
Kunihiko Hirabayashi	Director, UNICEF (United Nations Children's Fund) Tokyo Office
Yoshiko Homma	Lawyer (Yoshiko Homma Law Office) / Professor, The Graduate School of Law, Soka University
Toyokazu Nakata	Chairperson, ShaplaNeer=Citizens' Committee in Japan for Overseas Support / Director, Institute of Participatory Development
Masaichi Nosaka	Vice Chairman of Editorial Board, The Yomiuri Shimbun
Yasuyuki Sawada	Associate Professor, Faculty of Economics, Graduate School of Economics, The University of Tokyo
Hisashi Takanashi	Managing Director, Engineering and Consulting Firms Association, Japan (ECFA)
Kiyoshi Yamaya	Professor, Doshisha University Graduate School of Policy and Management
Kenichiro Yokoo	Director, International Cooperation Bureau, Keidanren (Japan Business Federation)

From the 3rd Meeting

(1) Realigning ex-post evaluations (internal evaluations) and the ex-post monitoring system

- If ex-post evaluations are conducted partially under the lead of JICA's overseas offices, the system design should take into account the burden borne by the offices.
- Budgetary measures that allow for local consultants to be hired should be taken in order to fully utilize expert opinion.
- In light of issues of cost, targets for ex-post evaluations should not be all projects over 200 million yen, but be chosen with greater selectivity.
- The Project Evaluation Search Database on JICA's website should be made more user-friendly.
- If the projects subject to evaluation are to be categorized based on their expenditure, it is necessary to examine whether projects, such as small but long-term Technical Cooperation projects, would be appropriately covered.

(2) Presentation of evaluation results, etc.

- As there are trends in lessons learned for each country or sector, their use for projects will be significantly facilitated if the database allows for easier access to the lessons learned.
- As the evaluation criteria themselves are subject to change over time, evaluations of past projects should take into account the situation and circumstances at the time of the project's implementation when drawing out lessons.

From the 4th Meeting

(1) Overview of FY2010 ex-post evaluation

- Detailed ex-post evaluations are required to further improve their quality. Evaluations on relevance and efficiency, in particular, tend not to go beyond formal confirmations and superficial analysis.
- Evaluation on efficiency should include a comparative analysis, including of outcomes. Evaluation on efficiency of Technical Cooperation projects has room for improvement, such as evaluation of the spillover effects of technical transfers.
- Going forward, the system of internal evaluations is expected to become more definite, internal evaluations to be conducted for more projects, and their quality to be further improved.
- Internal workshops can be considered to draw on the lessons learned and good practices offered by ex-post evaluations for the design of projects.
- More specific analyses should be conducted to utilize the lessons learned.

(2) Overview of thematic evaluation

- The thematic evaluation, "Articulation of Evaluation Perspectives and Evaluation Judgments Based on the Five DAC Criteria," is of interest as the theme directly concerns the discussions of the Committee. It may serve as a guideline on the interpretation of the five criteria.
- The task moving ahead is to clarify the differences between "output," "outcome," and "impact" by presenting specific examples of each in all evaluations and making them easier to understand.
- The thematic evaluation, "Economic Impact Assessment of ODA Loans and Grant Aid," is commended for attempting to demonstrate macroeconomic impacts on a pilot basis. The data prepared for the application of the GTAP model is valuable (The GTAP model is introduced on p.43–45).
- Further analysis of the two impact evaluations are required to understand how the results should be interpreted and linked to the designing of future projects.

Toward Improving Project Evaluation

JICA attempts to better its operations evaluation system and method in order to improve project management and increase development impact.
Its initiatives also include efforts for improving accountability through operations evaluations, and support to increase the evaluation capacity of developing countries.

Approach 1 Improving the quality of evaluation and strengthening feedback

Promotion of results based management

The OECD-DAC (Organisation for Economic Co-operation and Development/Development Assistance Committee) identifies that more effective project implementation requires: 1) Identifying clear objectives and selecting indicators for measuring progress toward each project objective (strategic planning); 2) Appropriate monitoring of the project's performance by using indicators (performance measurement); and 3) Using lessons learned from monitoring and evaluating the project for planning and implementing similar projects (results based management).

1. Formulating a strategic plan

In order to formulate the strategic plan indicated in 1), not only the desired outputs (changes in inputs through project activities) but also the desired outcomes (changes for improving the development issue) should be clarified, and verifiable indicators should be selected for measuring progress.

At JICA, both the project implementation and evaluation departments hold discussions from the planning stage of a project to select not only "output indicators" but also "outcome indicators." While output indicators include the number of trainings implemented or facilities constructed by the project, outcome indicators include improvements in the service provided by technical training participants or improvements in the situation of the project's final beneficiaries (e.g., improved detection rate of tuberculosis patients or reduced mortality rate of tuberculosis patients in the project area). JICA also implements baseline surveys as necessary to understand the situation prior to the project's intervention to identify the changes generated.

2. Performance measurement

With regard to 2) performance measurement, in the implementation and post-implementation stage, both the project implementation and evaluation departments jointly monitor the achievement of targets by using the indicators set at the planning stage, and reflect the results in the ongoing project as necessary. While monitoring results may not always explain the reasons for achieving the project performance, JICA ascertains them through a terminal evaluation or ex-post evaluation.

3. Analyzing and drawing on the lessons learned

With regard to 3) results based management, JICA analyzes factors that promote or hinder achieving outputs and outcomes through terminal and ex-post evaluations, and cites in the evaluation reports the lessons that may be drawn for similar projects. These evaluation reports, available on the JICA website, may be searched by sector or region and are used for improving projects and accelerating achievement of results. During project planning, relevant departments, including the Evaluation Department, share project information with each other and endeavor to reflect the lessons learned in the project plan.

These initiatives are among the ways that JICA is promoting results based management.

Initiatives for improving the quality of ex-post evaluation

As part of the promotion of results based management, efforts are made to obtain and further draw on more appropriate recommendations and lessons learned from the results of ex-post evaluations. In detailed ex-post evaluations, for example, a feedback seminar for executing agencies in counterpart countries is conducted in principle for all projects. By sharing the results, JICA strives to leverage them for the improvement of future projects in developing countries.

Furthermore, a new initiative was started in FY2010, under which specific evaluation themes are identified for projects that are expected to derive particularly useful lessons learned. Those results are fed back to be utilized more effectively. The specific themes that were studied include "impact of projects in the transport sector in northern Viet Nam on the regional development," "the synergistic effects of the coordination between an ODA Loan project and a Japan Overseas Cooperation Volunteer (JOCV) program for a water supply project in Sri Lanka" (→see p.17), and "assessing the project's outcomes by comparing areas targeted and not targeted by a water supply project in Mali" (→see p.36–37). For each theme, evaluation results useful for future projects were obtained.

A feedback seminar on evaluation findings in Viet Nam

Examples of Uses of Evaluation Findings Listed in Ex-ante Evaluation

1 Tanzania, Strengthening Development of Human Resource for Health (Technical Cooperation)

The terminal evaluation of the Project for Institutional Capacity Strengthening for HIV Prevention Focusing on Sexual Transmitted Infections (STIs) and Voluntary Counseling and Testing (VCT) Services in Tanzania offered the following lesson learned: "If cross-sectoral components are included in the activities, such as health information management system or monitoring evaluation, a study which examines the entire health system should be necessary at the planning and design stage in order to avoid duplication of activities and the establishment of unnecessary systems." Based on this lesson, in the preliminary survey of the project JICA consulted and coordinated activities with the Ministry of Health and Social Welfare's Monitoring Evaluation Unit and relevant development partners to avoid duplication.

In addition, the Development Study for Improvement of Current Health Management Information System in Pakistan (Technical Cooperation for Development Planning) offered the lesson that, "The challenge with enhancing health information systems is not only promoting utilization of the system but also ensuring the system's maintenance and management." In Tanzania's project, it was agreed in the preliminary survey that the Tanzanian government will be responsible for the continuous maintenance and management of the system, using funds from the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund)*.

2 Thailand, Mass Transit System Project in Bangkok (Purple Line)(II) (ODA Loans)

Past ex-post evaluations of similar projects in the transport sector recommended that for cities that have severe road traffic and a high potential need for elevated railway systems that reduce travel time and are punctual, means to stimulate this potential need and increase project effectiveness should be examined. This project will consider the possibility of the introduction of a Technical Cooperation project, based on discussions with Thailand's Mass Rapid Transit Authority. The project fields include: 1) Development of areas surrounding new train stations; 2) Development of railroad areas; 3) Coordination with competitor bus service (including review of routes and fares); 4) Development of new bus routes to and from new train stations; and 5) Introduction of tickets that can be used between different modes of transport, such as subway, elevated railway, and bus systems.

3 Senegal, Dakar and Thies School Construction Project in Senegal (Grant Aid)

In a similar school construction project implemented in FY2006 in Senegal, 286 classrooms were constructed in 60 sites in 5 provinces. However, the sites covered too broad an area, and supervision of the construction work was extremely difficult. Furthermore, construction progress depended heavily on the technical and financial capacities of local contractors. The lessons were that when designing projects it is necessary to: 1) Have a more targeted project site; and 2) Design the project approach considering the criteria for selecting local contractors.

Based on the lessons learned, this project prioritized target sites by region. In addition, a model site was established, at which construction started two months in advance. The project plan also made sufficient considerations to allow for the supervision of the construction work. For example, technical guidance was provided to contractors at the model site, and efforts were made to ensure that they have a common understanding on the desired quality of their deliverables.

*A foundation that was established to procure funds from the international community to support the fight against the three major infectious diseases facing developing countries. It provides grants to cover the costs of prevention, treatment, and care offered by developing countries themselves. The Global Fund was proposed by Japan at the G8 Kyushu-Okinawa Summit (2000) and established in Switzerland in 2002.

Approach 2 Ensuring accountability

Initiatives for ensuring accountability in ex-post evaluation

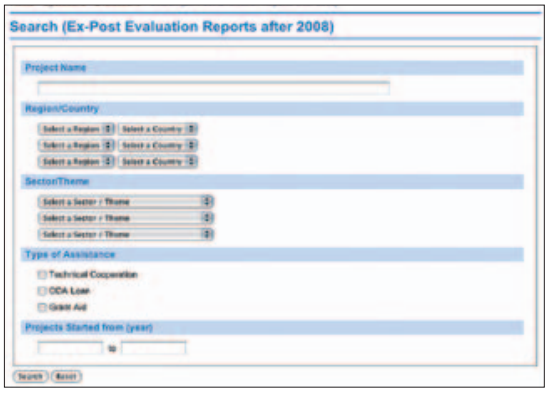
In order to maintain the accountability of evaluations, JICA has been commissioning external evaluators to conduct ex-post evaluations of projects over a certain size. However, external evaluations cannot be conducted for too many projects both in terms of efficiency and quality assurance.

In this light, in addition to external ex-post evaluations of projects over 1 billion yen, JICA's overseas offices conduct internal ex-post evaluations of all other projects exceeding 200 million yen since FY2010. Under this revised system, the Evaluation Department manages the quality of the evaluations (→see p.21 for an overview of internal evaluation). To ensure the quality of evaluations and appropriate accountability through the internal evaluation system, JICA will work to verify and improve the system while obtaining advice from external experts.

Publication of evaluation information

To improve information accessibility and strengthen its accountability to the people, JICA has set up the "Project Evaluation Search Database" on its website. The creation of the database has made evaluation information more accessible to people interested in JICA's projects and evaluation results. In addition, this search function has enabled the smooth feedback of evaluation information to those who are engaged in project design and planning, project implementation and management, and project evaluation and monitoring.

In FY2011, a search function for ex-post evaluation reports in English was also introduced on JICA's website. This search function has made evaluation information more accessible for executing agencies not only in countries in which the projects were implemented but also in other countries.



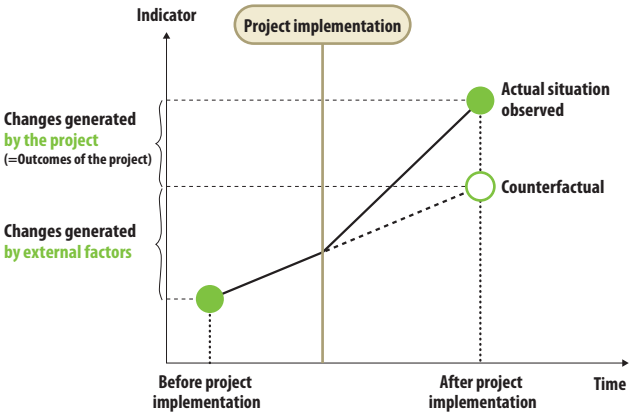
URL http://www2.jica.go.jp/en/evaluation/index.php

Approach 3 Impact evaluation efforts

Impact evaluation rigorously measures the changes that a policy or project generated in the beneficiary community. It ideally does this by comparing the situations in which a project has and has not been implemented (counterfactual). However, unlike in a laboratory, such comparisons are not easy to do for development projects that target actual communities in which people live. As an alternative and a simpler method, the outcomes before and after project implementation or outcomes in the beneficiary and non-beneficiary areas are often compared. However, in many cases, these are not accurate comparisons.

Through devising methods for determining project beneficiaries, data collection, and analysis techniques, an impact evaluation makes possible more rigorous comparisons and more accurate assessments of the changes generated by a project. With greater priority being placed on results, donor agencies such as the World Bank, or other bilateral aid agencies, have also promoted impact evaluations. At JICA, too, the Evaluation Department and the Research Institute were the main departments to lead the implementation of impact evaluations on themes such as irrigation facility construction, primary education support, improvement of independent school administration, and improvement of community health. JICA is also examining ways to make effective use of the impact evaluation method for project management (→see p.46–47).

Basic Concept of Impact Evaluation: Comparison with Counterfactual



Approach 4 Support to increase evaluation capacity

Joint evaluation with developing countries

Improving the evaluation capacity of project executing agencies and supervising agencies in developing countries further increases their ownership, and contributes to more efficient and effective implementation of JICA projects. To achieve this aim, JICA conducts joint ex-post evaluations with developing countries.

In Viet Nam, based on an MOU for evaluation capacity-building concluded with the Ministry of Planning and Investment (MPI) of Viet Nam in 2007, JICA has: 1) Conducted joint ex-post evaluations; and 2) Provided support to establish an evaluation system and for capacity-building. Through these initiatives, Viet Nam has made progress in developing an evaluation system, and evaluation officials have increased their capacities, leading to Viet Nam's graduation from assistance provided through ex-post evaluation. Moving forward, Viet Nam is expected to implement evaluations more proactively and JICA will consider assistance as necessary.

In the Philippines, since concluding an evaluation-related MOU with the National Economic Development Authority (NEDA) of the Philippines in 2006, JICA provides comprehensive support to increase its evaluation capacity. Assistance is being provided to enable NEDA to independently conduct ex-post evaluations in the future. In FY2011, NEDA fulfilled a larger role in ex-post evaluation-related activities.

Seminar on Evaluation of Japanese ODA Projects

Starting in FY2011, the Seminar on Evaluation of Japanese ODA Loan Projects, previously held by former JBIC and former JICA since FY2001, has been held under its new name, the Seminar on Evaluation of Japanese ODA Projects. This seminar is targeted at executing agency staff in developing countries in charge of development projects. The program aimed to give them an overview of JICA's evaluation system through lectures, workshops, project tours, and other means, as well as an opportunity to learn about Japan's experience with infrastructure development projects.

In FY2011, the seminar was held over 12 days from November 28 to December 9 and was participated by 16 personnel from 13 countries. After returning to their countries, the participants are expected to put into practice the knowledge they acquired in the seminar and spread their knowledge within their organizations. JICA plans to hold seminars not only related to ODA Loans but also those that focus on the evaluation of Technical Cooperation projects and other schemes.

Cooperation with emerging donors

As developing countries' economies grow, aid recipients are emerging as new donors. They include the Republic of Korea (ROK), which has graduated from foreign aid, as well as Thailand and China, which are now making this transition. In order for these emerging donors as well as Japan to be able to implement more effective aid, JICA shares its experiences by implementing various evaluation partnerships and assistance.

In December 2010, Korea International Cooperation Agency (KOICA) and JICA held their first regular meeting, and discussions were also conducted on inter-agency partnerships in the field of operations evaluation. As a result, in March 2011, a KOICA officer participated in the field survey for the ex-post evaluation of JICA's health project in Morocco as an observer. In June, an officer from JICA presented a lecture on its evaluation system at a seminar held by KOICA. The two organizations held discussions on further partnership at the second regular meeting in November 2011 and are currently working on this initiative.

Site Visit of ODA Projects by an Expert and a Celebrity

Ghana — Ms. Kaori Kuroda, CSO Network Japan

Laos and Cambodia — Ms. Kumiko Endo, actress

Since FY2004, JICA has published on-site reviews by intellectual and public figures, in order to advertise JICA's evaluation projects, the effect of ODA projects, and the importance of international cooperation to the public.
In FY2010, Ms. Kaori Kuroda, CSO Network Japan, visited the project sites in Ghana, and Ms. Kumiko Endo, actress, visited the project sites in Laos and Cambodia (p.14) for an on-site review.

* See JICA's website for the full-length version (in Japanese).
http://www.jica.go.jp/activities/evaluation/monitoring_02.html (Ms. Kuroda) http://www.jica.go.jp/activities/evaluation/monitoring.html (Ms. Endo)

Selecting Aid Approach of Japan's Comparative Advantage

Ms. Kaori Kuroda

Ms. Kaori Kuroda is Executive Director for CSO Network Japan. After working in the private sector, she worked for the Center on Japanese Economy and Business at Columbia Business School, and The Asia Foundation. Subsequently, she joined CSO Network Japan in 2004. She also serves as a Japanese NGO expert for the formulation of ISO26000 (social responsibility), and a member of the Council on the Promotion of "New Public Commons."

Ghana maintains political and social stability and develops steadily, aiming to become a middle-income country by 2020, and it fulfills a leading role in West Africa. In the meantime, Ghana confronts development issues, including vulnerable economic structure and poverty. The Ghanaian government identifies "private sector promotion," "human resource development," and "governance" as the priority areas for development, and promotes poverty reduction and economic growth. Ghana developed the offshore oilfield, which went into commercial production in 2010. Its private sector grew remarkably, with a rapid increase in private investment.

Japan has long supported the development of human resources in health and medical services/agriculture/education, and economic infrastructure development in Ghana. Presently, Japan's development agenda for Ghana focuses on "vitalization of rural areas" and "industrial development" in order to "reduce poverty through economic growth" in line with the development priorities of Ghana's government. To address these issues, Japan also provides support for "administrative capacity-building and institutional development." On the occasion of President John Evans Atta Mills' visit to Japan in 2010, the Japanese government announced plans to resume ODA Loans, to enhance support measures, such as additional acceptance of technical trainees, and to promote Japanese corporate investment in Ghana.

Meanwhile, there has been impressive progress in aid coordination in Ghana. The sector-wide approach*1 has taken hold in Ghana, and general financial support*2 for Ghana accounts for 30% of the entire assistance to Ghana. With the rise of emerging donor countries which provide large-scale infrastructure assistance, such as China, the Republic of Korea, and India, Japan may need to select aid approaches in which it has comparative advantage. This site visit provided me with a key to answering this issue.

The road rehabilitated by the Highway Sector Investment Project. Heaviest traffic between Kumasi and Cape Coast.

Projects for the Site Visit (from February 28 to March 4, 2011)

Technical Cooperation	Project for Sustainable Development of Rain-fed Lowland Rice Production Noguchi Memorial Institute for Medical Research Technical and Vocational Education and Training Support Project
ODA Loans	Highway Sector Investment Project
Grant Aid	The Project for Rehabilitation of National Trunk Road N8 The Project for Rehabilitation of Trunk Roads
JICA Volunteer Program	Japan Overseas Cooperation Volunteers, Senior Volunteers (Education, Automobile maintenance)

Technical Cooperation Based on Local Community

Rice is the second most important cereal after maize in Ghana. Ghana depends on imports for 60-70% of the domestic rice consumption, and it is important for Ghana to increase the domestic rice production in terms of food security, saving foreign currency, and improving the small rice farmers' livelihood. JICA conducts the Project for Sustainable Development of Rain-fed Lowland Rice Production, which aims to develop advanced skills in rain-fed rice production and to disseminate the methodology to improve the farming support system for rice production as a model.

Mr. Katsuyuki Ohara, an expert who has more than 20 years of experience in the field, served as the chief adviser of the project. His activities include not only technical transfer in rice cultivation, but also the Japanese type of detailed assistances, including support for the voluntary activities of farmer groups, expansion of the sales channels, and establishment of the dissemination method. Because

*1 In this approach, a developing country formulates a sector development plan jointly with a donor country and international donors, and the development and assistance are promoted in line with the plan.
*2 An aid approach in which funds are provided directly to the government's overall budget.

Mr. Katsuyuki Ohara (center) explaining to Ms. Kuroda (right) about the Project for Sustainable Development of Rain-fed Lowland Rice Production.

The well-organized workshop of the automotive repair department of the Cape Coast Technical Institute. The school succeeded to qualify as the Toyota Ghana Authorized Service Shop.

Ghana consists of orderly communities under the leadership of traditional chiefs, the approach, which expects farmers and local people to participate in the project, seems to fit the Ghanaian society.

The rice cultivation promoter I met at the model site stated, "While there were some problems with the group activities last year, we overcame those, and we plan to expand rice paddies next year and have many farmers involved." I was impressed also by Mr. Ohara's comment that the idea is not to simply apply the existing model, but to "build up case studies through trial and error with the farmers."

Economic Infrastructure Development in Collaboration with the Local Community

Of the traffic routes linking three areas (the capital city of Accra, the export port of Takoradi, and Kumasi), the Grant Aid project rehabilitated the section of approximately 60km between Assin Praso and Bekwai of National Trunk Road N8 south of Kumasi. Two Japanese companies were contracted for the project: INGÉROSEC Corporation for consulting service, and Tokura Corporation for construction work. In partnership with a Portuguese construction company with extensive experience in projects in West Africa, JICA employed local workers and utilized local resources to bring benefits to the local community.

Tokura Corporation held the company credo to make a contribution to the community during the project. Tokura Corporation was engaged in educational activities on AIDS, malaria and cholera for the local workers, in cooperation with a Japan Overseas Cooperation Volunteer (JOCV) dispatched to a local NGO. Tokura Corporation's attempt is a good example of collaboration between a Japanese company, the local community, and JICA.

JOCV Contributing to Comprehensive Program and Private Sector Partnership

Approximately 90 JOCVs and Senior Volunteers are dispatched to Ghana and engaged in a wide range of fields, such as Japanese cuisine lesson, science and mathematics instruction, and activities in local support organizations for people with disabilities. I found two remarkable points regarding the activities of JICA volunteers during the site visit.

One is that the volunteers play significant roles in promoting the comprehensive program of JICA. In the project, Scaling up of Community Based Health Planning and Services (CHPS) Implementation in the Upper West Region, besides Technical Cooperation and Grant Aid, JICA adopted a more comprehensive approach to facilitate access by the poor people to basic health services, collaborating with the grassroots activities by JOCVs. In the region, JICA plans to conduct a maternal and child health strengthening program for the next phase.

The other is that the volunteers can serve as a bridge between the local community and the private sector. Mr. Hiroshi Inoue, a JOCV who used to work for a major company that dealt with maintenance and sales of trucks and buses in Japan, taught the technical know-how for automobile maintenance at the Cape Coast Technical Institute. He devoted much effort to improve the school with all of the experience and knowledge which he acquired from working nearly 15 years for the company in Japan. By organizing the workshop and smartening the reception area for clients, he improved the work environment and motivated the students. Also, he extended the term of his service to sign the service shop contract with a Japanese company (Afterward, the school obtained certification from Toyota Ghana in July 2011). Recently, more Japanese companies are interested in BOP business which targets the poor people in developing countries, including Africa, and they need human resources familiar with the local situations. There will be more opportunities for people with JOCV experience to be active in various fields of society.

JICA's Comparative Advantage is to Create "Positive Chain Reaction"

The biggest challenge facing Japanese ODA is probably that Japan is expected to implement more effective assistances despite the annual decrease in the Japanese ODA budget.

The strength of Japanese ODA is said to be the progression from Grant Aid to Technical Cooperation and Research Cooperation, and development of human resources through the entire process. Although the approach of Japanese ODA may seem slightly low-profile compared with other donor countries, Japan received assistances from over 160 countries, including Ghana, after the Great East Japan Earthquake, and it can be a sign of trust in Japan and Japanese people, which have contributed to the development of their socio-economies over many years. What I was particularly impressed with during the site visit is that every one of the projects placed much value on forging a good relationship with the local community and the people. JICA establishes relationships with people over a long period of time, achieves results, and then further deepens mutual trust with them. Through that process, JICA creates a "positive chain reaction," and this is truly the comparative advantage of JICA's projects, which cannot possibly be achieved overnight. It is important to be aware of this feature as JICA's strength and respond to new environments and needs based on the strength.

In recent years, it is considered very important to form partnerships with diverse stakeholders for solving development issues. I expect JICA to put more effort into a variety of activities for enhancing not only the partnerships with local governments, community, and people, but also new relationships between JICA and private companies, and equal partnerships with NGOs and private companies. There will be an increase in opportunities for establishing partnerships with "non-traditional actors" in various sectors, with which JICA previously had little interactions. I strongly hope that JICA makes active efforts to establish good partnerships with a wider range of stakeholders.

Enabling Local People in the Country to Move Forward on Their Own

Site Visit in Laos and Cambodia Ms. Kumiko Endo

Ms. Kumiko Endo was born in 1978 in Tokyo. She made her debut in show business in 1995, and appeared in many TV dramas. In September 2005, she interviewed a Japan Overseas Cooperation Volunteer (nurse) in Niger for a TV program.

Ms. Kumiko Endo visited the ODA project sites in Laos and Cambodia from February 20 to 26, 2011. After the site visit, JICA's Evaluation Department interviewed Ms. Endo on the visit.

Ms. Kumiko Endo visiting a primary school in Phao Village in Laos, a beneficiary of Grant Aid and Technical Cooperation projects

In your site visit, what particularly stands out in your memory?

I observed firsthand how extensively Japan is connected to Laos and Cambodia through international exchanges. I was struck to see the Japanese people who struggle, ponder, feel conflicted every day, and try to achieve something in these countries.

Do you think that JICA's project and approach to the problems in developing countries are appropriate?

It is extremely difficult to determine why a developing country needs a particular type of assistance. However, I felt that a series of JICA's projects have given local people more options and allowed them to think and live on their own, although they previously had no other options for living. In that respect, I think that JICA's projects are appropriate.

Do you believe that the outcomes of JICA's projects will be sustained for a long time after project termination?

In these projects, JICA didn't just simply construct buildings, but also took account of the future and imparted knowledge and skills to the counterpart of the project. For example, in Cambodia, JICA didn't stop the assistance for the Water Supply Authority until they made sure that the counterpart was able to manage the facilities by itself. If you continue these types of efforts, the people will become able to move forward on their own in the future.

I think that it's necessary to combine material support and technical assistance. It was very impressive to see JICA's experts and Japan Overseas Cooperation Volunteers (JOCV) enthusiastically teaching the local people how to solve issues, such as water supply, waste problem, and hospital hygiene. I believe that it's one of the responsibilities of developed countries to support, teach, and build partnerships with developing countries.

Based on your site visit, what is your message to the Japanese people?

I would like to communicate to the Japanese people that Japanese ODA takes shape in a variety of ways by the accumulation of each little effort. While there aren't so many opportunities to see specifically what kind of projects taxpayers' money is spent on, I found that the Japanese assistance is considered very important and much needed, and we can start our support by doing small things at the grassroots level.

Also, I realized that education is extremely important. In the future, more foreign companies will start businesses in developing countries and this will develop their economies more, but I believe that it's still the people themselves that determine the vision of development in their countries. So, they will need good knowledge to think deeply and make the right decision for themselves. I observed a variety of education projects during the site visit. Thinking of the next 10 to 20 years, or even 100 years, I came to feel even more keenly the importance of education assistance.

Projects for the Site Visit (from February 20 to 26, 2011)

Laos	**Technical Cooperation**	Supporting Community Initiatives for Primary Education Development in the Southern Provinces The One District One Product Pilot Project in Savannakhet and Saravanh Provinces Lao-Japan Human Resource Cooperation Center
	ODA Loans	Nam Ngum Hydropower Project
	Grant Aid	The Project for Improvement of School Environment in Three Southern Provinces The Project for Construction of Pakse Bridge
	JICA Volunteer Program	Japan Overseas Cooperation Volunteers (Education, Nursing)
	JICA Partnership Program	Improvement of the Quality of Wheelchair Services and Handover of Operation to NRC (National Rehabilitation Center)
Cambodia	**Technical Cooperation**	The Project on Capacity Building for Water Supply System
	Grant Aid	The Project for the Improvement of Water Supply Facilities in Phnom Penh The Project for Expansion of Phum Prek Water Treatment Plant The Project for improvement of Kampong Cham Hospital in Kampong Cham Province The Project for Rural Drinking Water Supply in Memot District of Kampong Cham Province Construction of a Bridge Over the Mekong River (Kizuna Bridge).
	JICA Volunteer Program	Japan Overseas Cooperation Volunteers (Education, Clinical laboratory technologist)

Part 2

Overview of Evaluation Results

Part 2 summarizes the findings of the evaluations conducted in FY2010 based on the evaluation systems described in Part 1.

***Ex-post evaluation reports of all projects evaluated in FY2010 are available on JICA's website:**
http://www.jica.go.jp/english/operations/evaluation/index.html

Overview of Ex-post Evaluation Results

JICA conducts ex-post evaluations according to the scale of the project through external evaluations by external experts and internal evaluations primarily by JICA's overseas offices, in order to ensure the transparency and objectivity of project evaluations. The following presents an overview of the evaluation findings and analysis results from the ex-post evaluations conducted in FY2010.

Introduction

JICA has strived to develop a common evaluation method for all three schemes of Technical Cooperation, ODA Loan, and Grant Aid. In FY2010, ex-post evaluations were conducted based on a uniform evaluation system following on from FY2009. Detailed ex-post evaluations were conducted for 93 projects (9 Technical Cooperation, 52 ODA Loan, 32 Grant Aid). Internal evaluations were conducted for 43 projects (12 Technical Cooperation, 31 Grant Aid).

Overview of findings analysis

This chapter analyzes ex-post evaluation findings cross-sectorally and compiles the lessons learned on "improving the development outcome through the promotion of the program approach." The ratings given by detailed ex-post evaluations and their distribution are then analyzed by evaluation criterion. In addition, projects cited as having issues in detailed ex-post evaluations and the findings of internal evaluations are summarized. P.22 onwards present an overview of selected detailed ex-post evaluation findings.

Rating system

Of the ex-post evaluations, detailed ex-post evaluations give projects a rating to present the findings in an easy to understand way. Each project is evaluated on: (1) relevance; (2) effectiveness/impact; (3) efficiency; and (4) sustainability. Based on the findings, an overall rating is given according to a flowchart on a four-point scale: "A (highly satisfactory)"; "B (satisfactory)"; "C (partially satisfactory)"; and "D (unsatisfactory)." Efforts are made to minimize discrepancies among the evaluators' perspectives by establishing general guidelines on the perspectives applied to each criterion. However, because the ratings do not reflect all aspects of a project, too much emphasis should not be given to the ratings and they should be considered only as a point of reference (→see p.50 for the main items examined in the ratings and the flowchart).

Cross-sectoral analysis: Improving the development outcome through the promotion of the program approach

JICA promotes the program approach, under which development goals to solve development issues are established based on policy dialogues with counterpart countries. Specific projects are then formulated to enhance overall aid effectiveness by generating synergistic effects among them. In promoting the program approach, JICA has carried out a cross-sectoral analysis of the following FY2010 ex-post evaluations in order to take stock of the projects: 1) Examples in which the success and failure of the coordination of multiple projects had a significant influence on the achievement of project outcomes; 2) Examples that provide lessons learned for generating impacts; and 3) Examples that suggest points of consideration for the promotion of the program approach (establishment of indicators and timely program modification). The findings of the analysis are discussed below.

Lessons learned for outcomes achievement

The Project for Rehabilitation and Improvement of Sakoula Regulator on Bahr Yusef Canal in Egypt is a Grant Aid project that rehabilitated and improved diversion weirs to provide a stable supply of irrigation water to the beneficiary area. The project generally achieved the target amount of irrigation water intake. However, the rehabilitation and improvement of terminal irrigation facilities were not included in the project scope, and consequently, water had not reached some sections of the feeder channels in the downstream region. The evaluator therefore suggested that while an urgently needed project is implemented through Grant Aid, other longer-term assistance to benefit terminal users should be extended in combination with other schemes including ODA Loan, so that the schemes are made mutually complementary.

A rehabilitated and improved Sakoula Regulator (Egypt)

On the other hand, the **Project for Improvement of Maternal Healthcare in the Rural Area in Morocco** (→see p.32-33 for details) is a Technical Cooperation project that helped improve health and medical services for pregnant and parturient women in rural areas in coordination with a Grant Aid project that enhanced medical facilities. The project offered training programs that were integrated with the project (e.g., introduction of initiatives, including classes for mothers) in coordination with the trainings held in Japan prior to project commencement. One JICA expert played a key role over a long-term, from the planning stage through the implementation stage of the programs. The project is thus a good practice of coordination with other schemes that complement each other toward the achievement of outcomes (improvement in prenatal and postnatal checkup ratio and hospital delivery ratio).

Lessons learned for generating impacts

Solving development issues requires not only the project's short- and medium-term "outcomes." It also requires the generation of long-term "impacts" and the achievement of the overall goal through the project's sustainable effects. As the following ex-post evaluations from FY2010 also demonstrate, the promotion of the program approach is expected to contribute to the generation of more impact-level effects, improvements in sustainability, and in turn, to tackling development issues.

The Project Aimed at the Enhancement of Sustainability in the Mangrove Forest Management of Saloum Delta in Senegal implemented highly sustainable activities in the project area, including: Skills acquisition for strengthening resident organizations and increasing incomes; and the Management of the Environment Fund for the conservation of the mangrove forest. Nevertheless, the model of activities did not necessarily produce a sufficient level of the project's intended spillover effects on the surrounding area. The lesson learned was that if the overall goal is to expand the project targets to other areas, the project should then strive to achieve the goal by increasing the necessary components and coordinating with other projects in order to minimize the effect of external conditions on the achievement of the overall goal.

Meanwhile, the **Kalu Ganga Water Supply Project for Greater Colombo in Sri Lanka** included a pilot scheme that constructed household connections and water discharge facilities for low-income households through community participation. The evaluation found that the implementation of the pilot scheme in coordination with the Japan Overseas Cooperation Volunteer (JOCV) program fostered a sense of participation and behavioral changes among the residents. Based on these outputs, the Sri Lankan government is incorporating a policy to introduce participatory models using external parties in infrastructure development projects as well as to promote a low-price tariff system in poor areas nationwide.

Furthermore, ex-post evaluations of the **Bai Chay Bridge Construction Project** and other projects in Viet Nam have attempted to comprehensively evaluate the role that transport infrastructure development projects fulfilled in improving the distribution system and poverty reduction in the region. The projects were designed based on the master plan (M/P) survey that JICA implemented in northern Viet Nam. According to the evaluations, the annual average growth rate of the industrial output in the region in the 2000s was 19.9%, exceeding the national average, partially owing to the foreign direct investment brought in by the transport infrastructure development. The region's poverty rate also fell steadily. Assistance for the transport sector contributed to increasing both industry and agriculture production in the 2000s. This in turn increased the incomes of the people engaged in these sectors and decreased the poverty of the region as a whole.

Points of consideration for the promotion of the program approach

(establishment of indicators and timely modification of the program)

The following projects provide pointers on program design and establishment of indicators for the promotion of the program approach.

The Bach Mai Hospital Project for Functional Enhancement in Viet Nam established as its project purpose, "to improve the quality of the medical services at the target hospitals." While the project design is believed to have been largely logical, the project did not sufficiently narrow down the project purpose and activities. Because the areas of assistance were wide-ranging whereas inputs were limited, sufficient outputs were not generated in some areas. Therefore, the lesson learned was that when formulating project plans under a program, it is important that the project's specific activities are narrowed down after clearly specifying the targets which should be achieved by individual projects in light of the program and overall goal.

In the **Hunan Higher Education Project in China**, despite the project targeting only nine of the 100 higher education schools in Hunan Province, the project's purpose was identified as improving the amount and quality of higher education in the entire Hunan Province. As a result, many of the project's effectiveness-related indicators exceeded the scope of the project's outcomes. Hence, the ex-post evaluation clarified the logic by which multiple projects will ultimately lead to impacts and reestablished the mid-term indicators for both outcome and impact.

In addition, the FY2009 thematic evaluation, the "Empirical Evaluation of Master Plan Study to Formulate Program Evaluation Method," pointed out the importance of collecting baseline data on the program before and during its implementation, in order to monitor and make revisions to the program according to the changes in external factors during the implementation stage.

Way forward

To resolve development issues in developing countries, it is essential that projects and programs are promoted with a variety of stakeholders working together, including developing countries themselves, donors including JICA, aid groups such as NGOs, and private companies. The promotion of the program approach also serves to advance partnerships with non-JICA stakeholders. To promote the program approach and resolve development issues, JICA will continue to analyze project evaluations and conduct thematic analyses and feed back the lessons learned and recommendations, while bearing in mind the country analyses and the program approach being conducted and promoted by JICA's project departments.

Rating of Detailed Ex-post Evaluations

Country	No	Scheme*	Project name	page	Relevance	Effectiveness	Efficiency	Sustainability	Overall rating
India	1	L	Delhi Mass Rapid Transport System Project (I)–(VI)	22	③	②	③	③	A
	2	G	The Project for Construction of Diarrheal Research and Control Centre		③	③	③	③	A
Indonesia	3	L	Upper Citarum Basin Urgent Flood Control Project (1) (2)		③	③	②	③	A
	4	L	Denpasar Sewerage Development Project	24	③	②	①	③	C
	5	L	Railway Double Tracking on Java South Line Project		③	③	②	③	A
	6	L	Bali Beach Conservation Project		③	③	②	②	B
	7	L	Dumai Port Development Project (2)		③	③	②	③	A
	8	L	Gadjah Mada University Development Project		③	③	②	②	B
	9	L	Medan Flood Control Project		③	③	②	②	B
	10	G	The Project for Improvement of Research Facilities for Biodiversity Conservation and Utilization		③	③	②	③	A
	11	T	Freshwater Aquaculture Development Project		③	③	①	③	B
Kazakhstan	12	L	Western Kazakhstan Road Network Rehabilitation Project		③	③	②	②	B
Sri Lanka	13	L	Kalu Ganga Water Supply Project for Greater Colombo		③	③	②	③	A
	14	L	Improvement of National Blood Transfusion Services Project		③	③	②	③	A
	15	L	Greater Kandy Water Supply Project		③	③	②	③	A
China	16	L	Shaanxi Higher Education Project		③	③	②	③	A
	17	L	Hunan Higher Education Project		③	③	①	③	B
	18	L	Gansu Province Road Construction Project		③	③	③	③	A
	19	L	Lanzhou Environmental Improvement Project		③	③	①	③	B
	20	L	Shandong Yantai Water Supply and Water Induced Disaster Management Project		③	③	②	③	A
	21	L	Suzhou Water Environmental Improvement Project		③	③	②	③	A
	22	L	Zhejiang Sewage Treatment Project		③	③	②	③	A
	23	L	Kunming Water Supply Project		③	③	②	③	A
	24	L	Chengdu Water Supply Project		③	③	②	③	A
	25	L	Yellow River Delta Agricultural Development Project		③	③	③	③	A
	26	L	Beijing Urban Railway Construction Project		③	③	②	③	A
	27	L	Xi'an Xianyang International Airport Terminal Expansion Project		③	③	②	③	A
	28	L	Tianjin Wastewater Treatment Project		③	③	②	③	A
	29	L	Dalian Water Supply and Wastewater Treatment Project		③	③	②	③	A
	30	L	Hubei Small-Sized Hydropower Project		③	③	②	②	B
	31	L	Gansu Small-Sized Hydropower Project		③	③	②	③	A
	32	L	Liaoning Television and Radio Infrastructure Improvement Project		③	③	②	③	A
	33	G	The Project for Afforestation for Conservation of Middle Stream of Huang He (Phase II)		③	③	③	③	A
	34	T	The Dairy Farming and Industry Development Project in Heilongjiang Province		③	③	③	②	A
Nepal	35	G	The Project for Construction of Primary Schools in Support of Education for All		③	②	③	②	B
Pakistan	36	G	The Project for the Establishment of Environmental Monitoring System		③	②	②	①	D
	37	L	Secondary Transmission Lines and Grid Stations Project		③	③	②	③	A
Bangladesh	38	L	Rupsha Bridge Construction Project		③	②	②	②	C
	39	L	Greater Faidpur Rural Infrastructure Development Project		③	③	②	②	B
	40	G	The Project for the Improvement of the Meteorological Radar System at Cox's Bazar and Khepupara		③	②	③	③	A
Philippines	41	L	Metro Manila Flood Control Project-West of Mangahan		③	③	①	②	C
	42	L	Agrarian Reform Infrastructure Support Project (II)	26	③	③	②	②	B
	43	L	Cordillera Road Improvement Project		③	③	②	②	B
	44	L	New Iloilo Airport Development Project		③	③	②	③	A
Viet Nam	45	L	Cai Lan Port Expansion Project		③	③	②	②	B
	46	L	Da Nhim Power System Rehabilitation Project		③	③	②	②	B
	47	L	Hanoi Urban Infrastructure Development Project		③	②	②	③	B
	48	L	Bai Chay Bridge Construction Project		③	③	②	③	A
	49	L	Tan Son Nhat International Airport Terminal Construction		③	③	③	③	A
	50	L	National Highway No.18 Improvement Project (I)(II)		③	③	②	②	B
Viet Nam	51	L	Dai Ninh Hydropower Project (I)(II)(III)		③	③	②	③	A
	52	L	Rural Infrastructure Development and Living Standard Improvement Project (III)		③	③	②	②	B
	53	G	The Project for Improvement of Facilities for the Hue Central Hospital		③	③	③	②	A
	54	G	The Project for the Groundwater Development in Rural Part of Northern Provinces		③	②	③	②	B
	55	G	The Project for the Construction of the Facilities for Measles Vaccine Production		③	②	③	③	A
		T	Project for Modernization and Internationalization of Customs Administration	28	③	②	②	②	C
	57	T	The Bach Mai Hospital Project for Functional Enhancement		③	③	②	③	A
Malaysia	58	T	Bornean Biodiversity and Ecosystems Cooperation Program (I)		③	③	③	②	A
Mongolia	59	L	Rehabilitation Project of 4th Thermal Power Plant in Ulaanbaatar (1)(2)		③	③	②	③	A
	60	G	The Project for Improvement of Water Supply Facilities in Ulaanbaatar		③	③	③	②	A
	61	G	The Project for Improvement of Primary Education Facilities (Phase II)		③	②	②	③	B
Iran	62	L	Godar-e-Landar Hydroelectric Power Project and Masjid-e-Soleiman Hydroelectric Power Project (II)		③	③	②	③	A
Egypt	63	L	Social Fund for Development Project	30	②	③	②	③	B
	64	G	The Project for Water Supply Development in Northwestern Part of Sharqiya Governorate		③	③	③	②	A
	65	G	The Project for Rehabilitation and Improvement of Sakoula Regulator on Bahr Yusef Canal		③	②	③	②	B
Tunisia	66	L	Inundation Protection Project		③	②	②	③	B
Morocco	67	L	Meknes-Fes Track Doubling Project		③	②	②	③	B
	68	L	Agadir Water Supply Project		③	③	②	③	A
	69	G	The Project for Improvement of Maternal Health Care in the Rural Area (Phase II)		③	③	②	②	B
	70	T	The Project for Improvement of Maternal Health Care in the Rural Area	32	③	③	②	③	A
Uganda	71	G	The Project for the Improvement of Health Facilities and Supply of Medical Equipement in the Eastern Region		③	②	③	②	B
Ghana	72	G	The Project for Rehabilitation of Trunk Road		③	②	②	③	B
Cameroon	73	G	The Third Project for Construction of Primary Schools	34	③	③	③	③	A
Kenya	74	G	The Project for Reconstruction of Athi Bridge and Ikutha Bridge		③	③	③	②	A
Zambia	75	G	The Project for Construction of Basic Schools in Lusaka, Phase II		③	③	②	②	B
Senegal	76	T	The Project Aimed at the Enhancement of Sustainability in the Mangrove Forest Management of Saloum Delta		③	②	③	②	B
	77	T	Project on the Integrated Community Forestry Development Project Extended Phase		③	②	②	②	C
Tanzania	78	G	The Project for Rural Water Supply in Lindi and Mtwara Regions		③	③	②	②	B
	79	T	Integrated Malaria Control Project		③	②	②	②	C
Nigeria	80	G	The Project for Construction of Additional Classrooms for Primary Schools		③	②	③	②	B
Burkina Faso	81	G	Third Elementary School Construction Plan		③	③	③	②	A
Mali	82	G	The Water Supply Project in Region of Kayes, Segou and Mopti	36	③	②	③	②	B
Mozambique	83	G	The Project for Reinforcement of Dredging Capabilities for Beira Port		②	②	③	②	C
Mauritius	84	G	Environmental Sewerage and Sanitation Project		③	②	②	②	C
Guatemala	85	G	The Project for Improvement of Water Supply System in Quetzaltenengo Municipality		③	③	③	③	A
Nicaragua	86	G	Project for Improvement of Fishery Facilities at San Juan del Sur Port	38	②	①	③	①	D
	87	G	The Project for the Rehabilitation of Basic Education Facilities in Managua Department		③	③	②	②	B
	88	G	The Project for the Rehabilitation of Basic Education Facilities in Rivas, Boaco, and Chontales Departments		③	③	②	②	B
Peru	89	L	Electric Frontier Expansion Project (I)(II)		③	③	②	②	B
Samoa	90	G	The Project for Upgrading and Extension of Samoa Polytechnic		③	②	③	②	B
Tonga	91	G	The Project for Upgrading and Refurbishment of Vaiola Hospital		③	③	③	②	A
Bosnia and Herzegovina	92	G	The Project for Improvement of Medical Equipment in Primary Health Care Institutions (Phase III)	40	③	③	③	③	A
	93	G	The Project for Construction of Doboj Bridge and Modrica Bridge		③	③	②	③	A

Note) ③: High, ②: Moderate, ①: Low
A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory (→see p.50 for details)
Effectiveness includes evaluation of impact.
Regarding projects which have page numbers listed, please refer to p.22 and onwards of this report.

* T: Technical Cooperation, L: ODA Loan, G: Grant Aid

Explanation of Ratings Distribution (Detailed Ex-post Evaluation)

Overall rating

The results of the detailed ex-post evaluations conducted in FY2010 are as listed on p.18. Evaluations were conducted for 93 projects: 52 ODA Loan projects; 32 Grant Aid projects; and 9 Technical Cooperation projects. Most of the projects were carried out in Asia and Africa by region and in sectors such as water supply and sewerage, education, health, and road.

The overall ratings of the 93 projects are as illustrated in the graph: 48 projects were rated A (51.6%); 35 projects were B (37.6%); 8 projects were C (8.6%); and 2 projects were D (2.2%). A and B combined account for 89.2% of the total; therefore, the projects largely generated the impacts which were expected. Compared to previous trends, while the share of the projects with A increased and the share of the projects with C and D slightly decreased this fiscal year, the distribution overall is comparable to previous years.

Criterion-based rating

The findings by criterion are as follows. First, with regard to relevance, 90 projects were rated "③" (96.8%) and 3 projects were "②" (3.2%); therefore, most of the projects were deemed relevant. The reasons some projects were evaluated as having challenges included the fact that while the project was relevant to the policies of the partner country and the needs of the entire country, "The project's design included partner country activities that were infeasible" or "The project was not adequately relevant to the needs at the field level." Thus, there were problems with the appropriateness of the projects' plans.

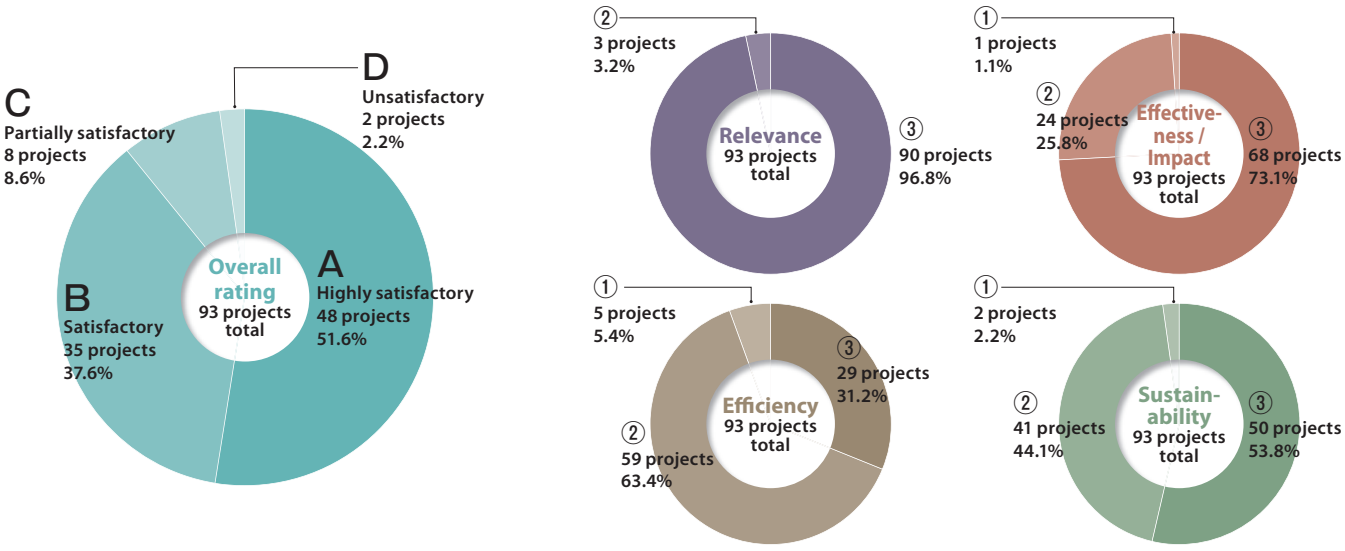
Next, regarding effectiveness/impact, 68 projects were rated "③" (73.1%), 24 projects were "②" (25.8%), and 1 project was "①" (1.1%). Therefore, many projects were deemed to be effective and have generated impacts. Projects which were evaluated as having challenges included those that constructed and managed outputs, such as facilities and infrastructure, as planned, but did not generate as much effects as initially targeted. The reasons vary by project. For example, in several projects, the initial demand forecasts were set too high. Or there were delays in the implementation of the project or related projects, and consequently, the project beneficiaries who were initially anticipated opted for other alternative methods.

As for efficiency, 29 projects were rated "③" (31.2%), 59 projects were "②" (63.4%), and 5 projects were "①" (5.4%). Therefore, the projects were not necessarily efficient. The primary cause of some projects being evaluated as having challenges was the fact that the project was not completed within the planned period. The reasons included the need to modify the plan after the project's start, which required additional time to review the design and other aspects and re-obtain authorization, as well as delays in procurement procedures.

Finally, with regard to sustainability, 50 projects were rated "③" (53.8%), 41 projects were "②" (44.1%), and 2 projects were "①" (2.2%). Therefore, there is room for improvement. In many projects, the cause of some projects being evaluated as having challenges was attributed to insufficient budgets for operation and maintenance. The reasons for this included insufficient budget allocations from the central and local governments in sectors that expect to receive minimal incomes, such as road, health, and education. Even in sectors that collect fees, such as water supply and sewerage, the fees could not recover the necessary costs for O&M.

Regarding these issues, individual project evaluations identify recommendations and lessons learned for JICA and the developing country. They include "fully understand the development needs, including at the field level, during the project planning stage," "reach full agreement with the partner country on the tendering method," and "allocate a sufficient O&M budget." The recommendations and lessons learned will be fed back to the developing country in order to improve the project and leveraged for future projects. At the same time, mechanisms will be developed for recommendations and lessons learned to be fed back within JICA to steadily reflect them in future ODA projects.

Overall rating and four criteria ratings



Projects Cited as Having Issues in Ex-post Evaluation

Based on detailed ex-post evaluations, the following two projects of those evaluated in FY2010 were evaluated as D (unsatisfactory).

JICA will conduct appropriate post-project monitoring in response to the challenges, recommendations, and lessons learned identified in the ex-post evaluation, and take stock of them for future similar projects.

Pakistan: Project for the Establishment of Environmental Monitoring System (Grant Aid)

■ Evaluation result

The project was implemented to establish the necessary foundation for the monitoring of air and water quality by: Constructing the Central Laboratory for Environmental Monitoring and Networking (CLEAN) for the Pakistan Environmental Protection Agency (EPA); and Upgrading the environmental monitoring and analysis equipment for four provincial EPAs.

Due to the shortened construction period caused by delays in ground leveling, the construction of only the first floor of CLEAN was completed. Although the second floor was supposed to be constructed by the Pakistan side, securing the necessary budget required time and the construction was still in progress at the time of the ex-post evaluation (efficiency). Furthermore, adequate technical guidance could not be provided by JICA experts because of the delayed start of the Technical Cooperation project that was to be implemented in parallel with the project, due to the worsening security situation which prevented experts from travelling to the project site. As a result, the project could not achieve the annual monitoring targets for air and water quality output indicators, and the project's delivery of effects was delayed (effectiveness).

It is unclear whether the system, budget, and technology will be sustainable after the termination of the Technical Cooperation project in the end of FY2011. In particular, major concerns remain regarding sustainability, including: Unclear division of roles between CLEAN and provincial EPAs with the decentralization of environmental administration; Uncertain budgetary outlooks of the provinces; and Lack of technical capacity to respond to frequent equipment malfunctions caused by power failures.

■ Recommendations and lessons learned

The ex-post evaluation recommended that the project outputs are scaled up by leveraging the resources and knowhow to date. It was suggested that even after the termination of the Technical Cooperation project, personnel continue to be assigned to and the budget for activities and O&M continue to be secured in a stable manner for the Federal EPA and CLEAN, which serve vital roles as the national environmental standards formulating body and research institution. The lessons learned included those related to the design of projects led by central government bodies amidst decentralization and to the need to account for the local electric voltage and electricity supply situations when precision machinery is provided.

■ Action plan by responsible department in JICA

As a result of JICA's continuous urging through the activities of the Technical Cooperation project, the project's target provinces are expected to allocate the budget for the activities, O&M, and personnel necessary for environmental monitoring in FY2012. The budget has already been approved in some of the provinces. JICA will continue to monitor Pakistan's initiatives to ensure that the equipment provided by the project is fully utilized, harnessing the skills transferred through the Technical Cooperation project, and that the Pakistani government implements self-sustained environmental monitoring.

Nicaragua: Project for Improvement of Fishery Facilities at San Juan del Sur Port (Grant Aid)

See also p.38-39

■ Evaluation result

The project aimed to reduce post-harvest losses and increase the volume of fish handled at San Juan del Sur port, a major fish discharging center in Nicaragua, by renovating the facilities and equipment at the port.

Because auction trading was not introduced at the fish handling area at Nicaragua's expense as was assumed when the project was designed, the facilities and equipment provided on that assumption were underutilized. Auctions were planned in order to achieve the project's objective as well as to generate further spillover effects on the project's overall goal of "improving the livelihood and income of fishermen." In light of the fact that the challenges of introducing auctions were assumed from the stage of the preliminary survey, the evaluation identified that the approach taken for resolving the challenges was insufficient. Coupled with the effects of external factors, such as the policy change of the new administration after the project's completion on the use of the facilities and the decrease in fishery resources in the nearby waters, the project generated limited outcomes (effectiveness).

Furthermore, due to the change in administration, the financial status and the implementation structure of the project continued to be unstable in the absence of a clear policy regarding the use of the facilities. While the project's vision can be confirmed at the time of the evaluation, concrete outcomes have not been produced. The project is therefore deemed to have structural and financial problems (sustainability).

■ Recommendations and lessons learned

The evaluation noted that, when designing projects that assume the introduction of new systems or change in commercial practices (in this project, auction trading), the activities borne by the partner country should be made clear and their feasibility should be thoroughly examined. A lesson learned was that, when the implementing agency is to establish an entity to operate and manage fishery port facilities and equipment and conduct capacity building, it is important that the implementing agency's capacity to carry this out is sufficiently considered.

■ Action plan by responsible department in JICA

Following discussions between Nicaragua and JICA on the effective utilization of the facilities, the Nicaraguan government established a plan in April 2011, to support the reinforcement of San Juan del Sur port's economic activities. The plan sets out that the operation and maintenance entity of the port will purchase fish from fishermen at fixed prices and that a system will be created to process and sell fish by making use of the facilities. JICA will continue to monitor to ensure the facilities' appropriate utilization.

Overview of Internal Ex-Post Evaluation Results

Pilot implementation of Internal Ex-Post Evaluation

In FY2009, simplified ex-post evaluations were conducted by external evaluators for projects over 200 million yen and below 1 billion yen on a pilot basis. The simplified ex-post evaluation did not carry out field surveys with consideration for cost-effectiveness. Instead, questionnaires were distributed to project-related organizations, such as the implementing agency, and those answers were used as primary sources to draw the evaluation judgment by external evaluators. However, several issues were found in the implementation of the simplified ex-post evaluation; for instance, the answers to the questionnaires were sometimes insufficient to make an evaluation analysis. Furthermore, verifying the accuracy of these answers and examining the current operational situation without field surveys, have been recognized as major issues. In light of the above difficulties, JICA decided to introduce internal ex-post evaluation to be implemented by JICA's overseas offices as the evaluator. The internal ex-post evaluation was introduced to improve evaluation quality and to strengthen the management role of overseas offices for completed projects.

In FY2010, internal ex-post evaluations were conducted on a pilot basis in order to standardize the implementation system, evaluation method, and procedures. And in the same year, the evaluation process of 43 projects was completed, although the evaluation process of some others was carried over to the next fiscal year. The reasons for this carryover include: 1) The necessity of longer preparation time for the actual evaluation work in countries where JICA does not have an office; 2) The deterioration in the security situation; 3) Natural disasters, such as flood; and 4) Difficulty obtaining answered questionnaires by the deadline, in the project-targeted country/area.

Overall evaluation

Internal ex-post evaluations were conducted for 43 projects: 31 Grant Aid projects and 12 Technical Cooperation projects. Many of the project areas were in Southeast Asia, Central and South America, and Africa. Infrastructure, such as road and bridge construction, and health were the main sectors.

The overall evaluation of the 43 projects found that approximately 90% of the projects were identified as "highly satisfactory" or "satisfactory," while about 10% of the projects were identified as "partially satisfactory."

Evaluation by criterion

In terms of the evaluation result by criterion, relevance is evaluated to be high in all the projects, being consistent with the development policy and needs in the project-targeted country.

Regarding effectiveness/impact, approximately 80% of all projects achieved expected outcomes and the remaining 20% were regarded to have some challenges. For Grant Aid projects, some parts of the project activities, which the implementing agency was responsible for, were not completed due to lack of financial resources and/or coordination within project stakeholders. For Technical Cooperation projects, it is considered that the capacity development of and technical transfer for the implementing agency needed a longer time than expected, and some inputs were not appropriate to produce expected outcomes.

As for efficiency, the projects were generally implemented efficiently, with approximately 60% of the projects being completed within the planned period and cost. Nevertheless, the remaining 40% were evaluated as fair or low. In case of Grant Aid projects, this is attributed to: Postponement of construction due to natural disasters; Delays in customs clearance for procured equipment; and Project period delays due to implementing agencies' lack of budgetary measures prior to project implementation. In case of Technical Cooperation projects, the project period was extended or project amount was increased, since the achievement of the project purpose was not confirmed within the project period.

Concerning sustainability, approximately 30% of the projects were expected to have highly sustainable outcomes, while approximately 70% of them were identified as having challenges, showing that many projects confront challenges of some kind. In roughly half of those projects, the O&M agency had insufficient budgetary and other financial measures. Some projects were also found to have agencies with inadequate human resources, skills, and organizational structure.

In light of these issues, recommendations to the recipient country side and to JICA, as well as lessons learned will be formulated for each project. They will be fed back to the recipient countries' agencies and JICA's relevant departments. Furthermore, JICA will promote the development of a system that will allow the recommendations and lessons learned to contribute to JICA overseas offices' post-project management and future project formulation and operation.

Future efforts

Internal ex-post evaluations, through interviews with implementing agencies and surveys of project sites, allowed JICA to directly confirm a project's operation status and management, and therefore, to obtain a more detailed understanding of ongoing projects' outcomes and challenges. Given that improvements were made to the issues encountered in simplified ex-post evaluations, JICA intends to continue to implement the internal ex-post evaluation. Moving forward, considerations will be made to further improve the evaluation quality, while increasing the capacity of JICA's overseas offices to conduct evaluations.

JICA office staff interviewing an implementing agency (Viet Nam)

Delhi Mass Rapid Transport System (I)-(VI)

Asia
India

Contributing to improve the urban environment and efficiency of urban transportation

External Evaluators: Keiichi Takaki and Yoshimi Hayashi, Foundation for Advanced Studies on International Development (FASID)

Outline of the Project

- Loan amount / Disbursed amount: 162,751 million yen / 159,513 million yen
- Loan agreement: (I) February 1997; (II) March 2001; (III) February 2002; (IV) March 2003; (V) March 2004; (VI) March 2005
- Terms and conditions: 1.8% interest rate; 30 years repayment period (grace period: 10 years); general untied
- Final disbursement date: June 2010
- Executing agency: Delhi Metro Railway Corporation Ltd. (DMRC)

Project Objectives

Overall Goal: To improve the urban environment in Delhi by alleviating traffic congestion and traffic pollution

↑

Project Purpose: To meet the increasing transportation demand

↑

Output: To construct a mass rapid transport system (the Delhi Metro) totaling 58.6 km in length in Delhi, India's capital city

Effects of Project Implementation (Effectiveness, Impact)

In Delhi, public transportation improvements were urgently needed to mitigate worsening traffic congestion and air pollution caused by emission gases—the result of economic growth accompanied by a higher population density in the city.

Ever since the project's first metro line was opened in 2004, metro ridership increased steadily and the increase in ridership became especially more evident after 2006 when all three metro lines were opened. While the number of transported passengers and average fare revenue did not meet the targets two years after the completion of the project in 2008, 90% or more of the other operational and effect indicators have been met. The number of passengers in FY2010-2011 on average reached 1.4 million on weekdays and 970,000 on weekends. As to why the ridership fell short of the goal, it is pointed out that contrary to the assumptions at the time of the project's planning, bus services provided by Delhi Transport Corporation (DTC) were not reviewed, and furthermore, DTC did not provide feeder bus services*1. Nevertheless, ridership increased sharply in the subsequent phase of the project due to the extension of existing lines and the opening of three new lines, and ridership is expected to increase further with the future construction of the circular line.

According to a passenger survey, 92% of the passengers utilize Delhi Metro for commuting and other work-related reasons, while 74% utilize it to save time, suggesting that Delhi Metro has become part of the daily lives of Delhi citizens as a fast and convenient means of transportation. Although air pollution levels in Delhi worsen every year as a result of the rapid increase in city traffic, air pollution levels may have further worsened without the opening of Delhi Metro. The project is therefore believed to have contributed to the mitigation of the deterioration of air pollution to a certain extent. Furthermore, the electric power regenerative braking system*2 that was installed by the project has been registered as a Clean Development Mechanism (CDM)*3 project and has led to the careful monitoring of carbon dioxide emission reductions since 2008.

From the above, it is observed that although the project has realized many achievements, the ridership did not reach the goal. Thus, the effectiveness is fair.

Platform of Barakhambha Road station

Interior of Delhi Metro's coach

Relevance

The project is consistent with the development policies of India which attach importance to transportation sector improvements necessary for economic growth and with Delhi's high need for an efficient mass rapid transit system. Furthermore, the project is consistent with Japan's ODA policy for India. Thus, the relevance is evaluated to be high.

*1 Buses that connect rail stations and surrounding areas. Based on an outsourcing agreement, DMRC operates 17 feeder bus lines connecting to 22 metro stations. However, DTC bus lines continue to operate in parallel with the metro lines, competing with each other.
*2 A system that allows the energy propelling a train to be converted to electric power during braking and fed back into the power supply system for use by other traction units.
*3 A framework that allows a country, including developed countries, to implement a greenhouse gas-reduction project in developing countries under the Kyoto Protocol. Such projects can earn salable certified emission reduction credits, which can be counted toward meeting the country's Kyoto targets.

Rating		
Effectiveness, Impact	②	Overall Rating A
Relevance	③	
Efficiency	③	
Sustainability	③	

Operational Target and Performance

Indicators	Target		Performance		
	2006	2008	2006	2008	2010
Operating rate (%/year)	92	92	82	86 (93% achieved)	—
Car kilometer (1,000km/day)	94.1	96.3	83.0	95.8 (99% achieved)	109.56
Number of operating trains (trains/day, one direction) (peak hour×minute head)	636	648	542	624 (96% achieved)	774
Transported passengers (million passengers-km/day)	16.3	22.6	5.4	7.1 (32% achieved)	11.46
Average fare revenue (million Rps/day)	16.3	22.6	5.43	6.79 (30% achieved)	13.17

[Source] DMRC (July 2011)

Ticket gate of Barakhambha Road station

Efficiency

Facilities, such as tracks and metro stations, were constructed as planned, and train cars were also procured as planned. The project expenditure was within the budget, and the project period was within the plan. From the above, the efficiency is rated high. This outcome owes to the work culture fostered in DMRC, including an established partnership between its employees and contractors based on a shared recognition that "deadline is sacrosanct," or that they should make keen efforts to observe the construction schedule.

Sustainability

DMRC, the executing agency of the project, manages the smooth operation of the organization and the running of the railway system. A system is also in place to reinforce the human resources of the organization. The latest operational and current balance registered a surplus, and there are no financial concerns in the medium- to long-terms. From the above, the sustainability of the achievements made by the project is rated high.

Train shed in Shastri Park

Key Point of Evaluation

Findings from Citizens' Behavioral Change Survey in Delhi

A beneficiary survey was implemented in the ex-post evaluation to further study the project's effects which were not anticipated prior to the project's implementation, including changes in the way people conceive urban living and time. Responses were obtained from 88 Delhi Metro users.

In response to the question, "Has your use of time changed with the development of Delhi Metro?," 82 people (93.2%) responded "Yes." Many noted that their work efficiency improved due to the trains' on-time schedule and peoples' reduced travel times. Many also stated that their social lives had changed, in particular, that they were able to see relatives they previously were unable to see because of lack of time. In response to the question, "Do you believe the development of Delhi Metro has changed Delhi citizens' behavior or way of thinking?," 71 people (80.7%) responded "Yes," while 17 people (19.7%) responded "No." The following are a sample of the responses:

- People have begun to follow the rules and be on time.
- I learned to follow the rules, such as lining up at the station.
- People are more conscious about keeping public spaces clean.

Conclusion, Lessons Learned and Recommendations

From the above, the project is evaluated to be highly satisfactory.

DMRC, which was organized to execute and manage the project, has continued to develop human resources since its founding and boasts an outstanding human resources development system that features training, including on-the-job training. Daily reports from the work site and the results of regularly-conducted technical evaluations of drivers and station staff are fed back to the training facility and used to improve the training program. The establishment of such human resources development systems within the executing agency will be effective for similar projects in ensuring the project's effective and efficient implementation and sustainability.

Projects such as this one that demand profitability need to make sure that the conditions necessary for profitability are in place, and if not, such conditions need to be promoted. In this project, the difference in target and actual number of passengers was partly attributed to the competition between bus and metro services. To promote the efficient operation of the public transport system as a whole, JICA should confirm with relevant agencies, including the Transport Department of the government of Delhi that governs both DMRC and DTC, and promote their coordination.

Denpasar Sewerage Development Project

Asia
Indonesia

Contributing to the improvement of the sanitation environment by developing sewerage treatment facilities in southern Bali

External Evaluator: Kenichi Inazawa, Octavia Japan Co., Ltd.

Outline of the Project

- Loan amount / Disbursed amount: 5,400 million yen / 5,231 million yen
- Loan agreement: November 1994
- Terms and conditions: 2.6% interest rate; 30 years repayment period (grace period: 10 years); general untied (consulting service: partial untied)
- Final disbursement date: October 2008
- Executing agency: Directorate General of Human Settlements, Ministry of Public Works (O&M unit: Public Service Organization of Wastewater Management, BLUPAL)

Project Objectives

Overall Goal To contribute to the improvement of economic activities in Bali

↑

Project Purpose To increase the amount of wastewater treated and improve water quality

↑

Output Develop sewerage treatment facilities in southern Bali (around Denpasar City and Badung Regency) where urbanization and tourism development have advanced rapidly

Effects of Project Implementation (Effectiveness, Impact)

In southern Bali, continuous growth in tourism and urbanization have made it a necessity to enhance sanitation facilities and sewerage treatment systems in order to improve the sanitation environment and preserve the water quality of the ocean–Bali's key tourism resource.

As a result of the project's construction of a wastewater treatment plant, the sewage treatment capacity of the project area increased to 36,000 m^3 per day. However, the actual amount of sewage treated stands at merely 23,000 m^3 per day (64% of treatment capacity), with many hotels (assumed to be the major users of sewage treatment) deciding not to join the sewer service. On the other hand, according to the results of the beneficiary survey, clients of the sewer service are generally satisfied with the sewer system, with many responding that the system contributed to improving the sanitation situation and beautifying the roads (see table on p.25). Therefore, the project has somewhat achieved its objectives in improving the living environment of the sewer service area. Thus, the effectiveness of the project is fair.

Stabilization pond at the wastewater treatment plant

Relevance

One of the objectives of the Sixth Five Year Plan, Indonesia's national plan at the time of appraisal, was to expand public health services. Meanwhile, the National Mid-Term Development Plan at the time of the ex-post evaluation also deemed it necessary to improve basic sanitary services. The project is consistent with Bali's increasing need to develop environmental infrastructure in parallel with the area's expanding urbanization, as well as with Japan's policy of achieving "compatibility between environment and development." Therefore, the relevance of the project is high.

Efficiency

The project period significantly exceeded the plan (by 204%). Although only about half of the outputs in the plan were achieved, the project cost was still similar to the plan. Therefore, the efficiency of the project is low. The significant extension of the project period and the decrease in outputs are attributed to the effects of the currency crisis in the late 1990s, which in turn led to social and economic turmoil in Indonesia.

Sustainability

The agency responsible for operation and maintenance, BLUPAL, is deemed not to have any organizational, technical, and financial issues. While some areas experienced garbage clog-ups in sewer pipes and pump stations, Indonesia is taking preventive measures through budget allocations and investments in equipment and human resources. Thus, problems are expected to be solved steadily. Therefore, the sustainability of the project effect is high.

Rating

Effectiveness, Impact	②	Overall Rating C
Relevance	③	
Efficiency	①	
Sustainability	③	

Living Environment Improvements in the Sewer Service Area

Question	Response	
1) Are you satisfied with the new sewage system? (n=120)	Very satisfied:	0%
	Satisfied:	77.5%
	Neutral:	18.3%
	Dissatisfied:	4.2%
2) Do you believe the new sewage system contributed to improving the living environment? (Question for residents) (n=80)	Yes:	77.5%
	No:	10.0%
	Not sure/No response:	12.5%
3) Why did you answer "Yes" in 2)? What were the specific contributions? (Multiple answers allowed; n=131)	Improved sanitation environment:	39.7%
	Beautified the roads:	30.5%
	Improved health condition:	12.2%
	Facilitated household chores:	10.7%
	Helped improve relations with neighbors:	1.5%
	Increased environmental awareness:	3.8%
	Other:	1.6%
4) Do you believe the new sewage system contributed to improving the living environment? (Question for companies and store managers) (n=40)	Yes:	75.0%
	No:	5.0%
	Not sure/No response:	20.0%
5) Why did you answer "Yes" in 4)? What were the specific contributions? (Multiple answers allowed; n=40)	Improved sanitation environment:	57.5%
	Beautified the roads:	35.0%
	Improved health condition:	2.5%
	Increased environmental awareness:	2.5%
	Other:	2.5%

[Source] Beneficiary survey (Sewer service members: 80 residents and 40 companies and store managers)

Sewer service area (commercial area)

Key Point of Evaluation

Project Delay Generates Loss of Benefits

Any delays in a project will necessitate more time for the project to produce effects and cause a loss of benefits during that period, even if the project achieves the planned development effects upon its completion.

In the case of this project, the completion of the sewerage treatment plant was delayed by nearly seven years—too long of a wait for many of the hotels that were expected to be major clienteles of the service, leading to the procurement of their own septic tanks. Particularly when private companies are the project's beneficiaries, any project delay will result in beneficiaries switching to alternative options, with companies unable to wait for the project's completion from a business standpoint. Hence, the number of potential beneficiaries decrease, additional costs and burdens arise, and the loss of benefits enlarges even further. Increased attention is therefore needed to ensure the project's smooth implementation.

Conclusion, Lessons Learned and Recommendations

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

A lesson learned is that the risks associated with project delays should be eliminated as much as possible. In this project, the longer than anticipated time expended on land acquisition negotiations and procedures for the construction of the sewerage treatment plant resulted in a lower number of sewage service users and amount of sewage treated. While administrative procedural delays caused by the change in government personnel were also major factors behind the project delay, both the Indonesian government and JICA are expected to secure the project's continuity and to eliminate all risks of delay.

To increase the amount of treated sewage, the executing agency is advised to continue to encourage general households and hotels to join the sewer service. Furthermore, assuming that maintenance operations increase with the increase in treated sewage amounts, BLUPAL must appropriately secure more human resources and technology in accordance with the increased number of sewer service users in the future.

Agrarian Reform Infrastructure Support Project (II)

Asia
Philippines

Supporting the vitalization of the Agrarian Reform Communities (ARCs) by developing basic and essential infrastructure

External Evaluator: Kinuko Mitani, IC Net Limited

Outline of the Project

- Loan amount / Disbursed amount: 16,900 million yen / 12,333 million yen
- Loan agreement: December 1999
- Terms and conditions: 1.8% interest rate (partially 1.3%); 30 years repayment period (grace period: 10 years); general untied
  [consulting service: 0.75% interest rate; 40 years repayment period (grace period: 10 years); bilateral tied]
- Final disbursement date: March 2007
- Executing agency: Department of Agrarian Reform (DAR)

Project Objectives

Overall Goal: Livelihoods of farmers in 150 ARCs* are improved
↑
Project Purpose: To improve the agricultural productivity of the project area
↑
Output: Development of basic and essential infrastructure and organization of local farmers' groups in the project area

Effects of Project Implementation (Effectiveness, Impact)

The Philippine government promotes land distribution to farmers through agrarian reform and provides supports to rural areas using Agrarian Reform Communities (ARCs) as the basic unit of development. The project was designed to provide a range of support services to 150 ARCs, including small-scale irrigation facilities, post-harvest processing facilities, farm-to-market roads, water supply systems, capacity-building of farmers' organizations with the support of local NGOs, and the strengthening of rural governments.

The irrigation facilities developed through the project have contributed to improving the agricultural productivity of the project area. At the end of the project, paddy production reached 102% of the initial target. The project's training courses on irrigation water management and farming technology contributed to the improvement of farm management technology, and in turn, to the increase in paddy cropping cycle, the improvement of paddy production technology, and introduction of improved varieties. In light of the proper distribution and utilization of irrigation water in the project area, it is deemed that the project also contributed to the increase in paddy production.

Farmers in a paddy field using the improved irrigation facilities

DAR, the executing agency, conducts the Assessment of the Level of Development of Agrarian Reform Communities (ALDA) annually based on DAR's own indicators (see table on p.27). In 2004, 73% (110) of the ARCs in the project area were rated "high" (level 5 or 4), while in 2010 this percentage increased to 87% (127). As of the project's completion, no ARC was rated level 1–the lowest level of development. As discussed above, agricultural productivity as well as the living conditions of farmers have improved in the project area. It is therefore assessed that the effectiveness of the project is high.

Relevance

Both at the time of the project appraisal and ex-post evaluation, the Medium-Term Philippine Development Plan attached high importance to supporting the agriculture and rural development sectors. The project is also consistent with Japan's ODA policy, which identifies securing sustainable economic growth, alleviating poverty, and developing human resources as priorities. Hence, the relevance of the project is high.

Rating		
Effectiveness, Impact	③	Overall Rating B
Relevance	③	
Efficiency	②	
Sustainability	②	

* ARC refers not to an administrative unit but to a unit of farmer groups that received land through agrarian reform (a member owns an average 2ha of land).

Development level according to the Assessment of the Level of Development of Agrarian Reform Communities (ALDA)

Level of development	ARC (unit)	
	Year 2004	Year 2010
5: very high	60	92
4: high	50	35
3: moderately high	28	15
2: low	9	4
1: very low	3	0
Total	150	146*

*146 out of 150 ARCs were verified. [Source] DAR (July 2011)

Improved potable water supply system

Efficiency

Although the project cost was within the plan, the project period was exceeded; therefore, the efficiency of the project is fair. The main reasons for the delay of the project were the replacement of some target ARCs, the prolongation of the baseline survey, and the delayed start of the civil engineering work and institutional development. The inability of the Philippine government to smoothly disburse the project funds also contributed to the delay.

Sustainability

Local government units (LGUs) and three farmers' organizations (irrigation associations, cooperatives, and water users associations) in the project area are conducting O&M as originally planned. From a technical perspective, improvements are needed in the management method of the irrigation facilities (especially that of irrigation water) by some of the irrigation associations. From a financial perspective, some of the irrigation associations are not able to secure adequate funds for O&M, and thus, there is room for improvement. For the above reasons, the sustainability of the project effect is fair.

Key Point of Evaluation

Beneficiary Survey Implemented in 150 ARCs Across the Country

The project targeted 150 ARCs in the Philippines. Due to budget and time constraints, two ARCs from each of the three areas (northern, central, and southern Philippines) were selected for the site visit and beneficiary survey for the ex-post evaluation. Sampling surveys are common for projects such as this one that have a broad project area for reasons of practicality. However, a simplified beneficiary survey was also conducted for this evaluation in the remaining 144 ARCs. A questionnaire was distributed using the network of the executing agency, and responses were obtained from 139 ARCs.

Although effectiveness indicators were limited in these surveys, significant qualitative data were collected through the beneficiary survey and interviews with the executing agency and relevant organizations. Added weight was placed on qualitative information, and the project's effectiveness and impact were evaluated.

The executing agency is now implementing Phase III of the project. Hence, uncovering the needs and issues facing the project area through this evaluation was also beneficial for striving to ensure the project's sustainability.

Conclusion, Lessons Learned and Recommendations

For the above reasons, the project is evaluated to be satisfactory.

While in some cases the irrigation facilities developed by the project are not operating properly, neither DAR nor the National Irrigation Administration (NIA) has monitored the irrigation associations in the project area from a technical standpoint after the project was completed. When conducting similar projects in the future, DAR and the LGUs, with the technical cooperation of NIA, should provide continuous technical assistance and monitor the irrigation associations whose organizational maturity is low.

A recommendation to DAR is to monitor the O&M status of all irrigation facilities developed by the project once a year or once every six months, with the cooperation of NIA, which was responsible for the construction of irrigation facilities and technical advisory to irrigation associations on O&M of these facilities. Another recommendation is to urge NIA to take countermeasures that would enhance the O&M of the irrigation associations.

Project for Modernization and Internationalization of Customs Administration

Asia
Viet Nam

Contributing to the modernization of customs administration through enhancing the capacity of master trainers

External Evaluator: Kumiko Shuto, IC Net Limited

Outline of the Project

- Total cost (Japanese side): 280 million yen
- Period of cooperation: August 2004 to July 2007
- Partner country's implementing organization: General Department of Viet Nam Customs (GDC)
- The number of experts dispatched: 2 experts (long term), 56 experts (short term)
- The number of technical training participants: 38 participants
- Main equipment provided: Chemical analysis machines

Project Objectives

Overall Goal Appropriate staff training on customs valuation, post clearance audit, and HS classification (including chemical analysis)* is periodically provided to the frontline officers who work at selected regional customs offices

Project Purpose Master trainers are raised to provide practical training on customs valuation, post clearance audit, and HS classification (including chemical analysis) based on international standards and act as instructors of staff training courses

Output

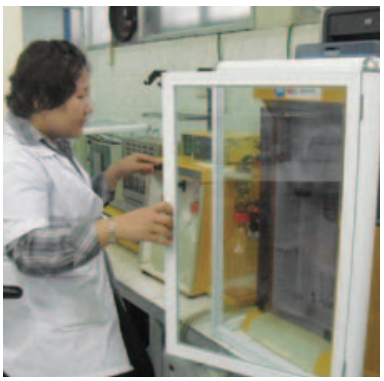
1. Activity plan for developing the master trainers, who can teach customs officers at local staff training courses, is prepared
2. Training materials and teaching guidelines are prepared in order to introduce international standards to regional customs offices
3. At selected regional customs offices, periodic on-the-spot trainings are conducted by the master trainers
4. A sustainable training plan (a plan to foster master trainers by Viet Nam with the same ability of those trained by the project), which would be implemented after completing the project, is prepared

Effects of Project Implementation (Effectiveness, Impact)

The establishment of a customs system in line with international standards was a pressing issue for Viet Nam to become a member of the World Trade Organization (WTO).

The project trained 32 master trainers to provide practical training in accordance with international standards in three fields, namely, customs valuation, post clearance audit, and HS classification (including chemical analysis). The master trainers conducted teaching activities at on-the-spot training, which was offered six times during the project period. All activities necessary for achieving the project purpose were undertaken, and the four outputs, i.e., the preparation of the activity plan, the development of training materials in Vietnamese, the implementation of staff training, and the formulation of the plan for the training of successor master trainers, were achieved as planned. The total number of participants in the staff training was 1,100, exceeding the target number of 1,000. Therefore, the project purpose was sufficiently achieved.

After the project's completion, staff training has been conducted regularly, and more than 80% of the frontline staff engaged in customs administration have received the training at least once. However, due to a lack of an established human resources development system within the organization, presently half of the master trainers trained by the project do not teach more than 60 hours a year. Thus, while the training of master trainers has made gradual progress, no new master trainers have been certified after the project's completion. In addition, information about the revisions of the teaching materials was not sufficiently shared among the trainers. Hence, the achievement of the overall goal is partial, and the impact of the project cannot be regarded as high. Therefore, the effectiveness/impact of the project is fair.



A customs officer operating equipment (chemical analysis machines) provided by the project

Relevance

Viet Nam's Five-Year Socio-Economic Development Plan identifies improvements in customs procedures as one of the tasks for the modernization of industry. Viet Nam's Master Plan for Customs Reform and Modernization (-2010) also presents human resources development as one of its priorities. Furthermore, Japan's Country Assistance Program for Viet Nam sets forth human resources and institutional development for the promotion of a market economy as the Program's priorities. Therefore, the relevance of the project is high.

Rating		
Effectiveness, Impact	②	Overall Rating C
Relevance	③	
Efficiency	②	
Sustainability	②	

* HS is short for Harmonized Commodity Description and Coding System. It is an international convention for ensuring uniformity in the names and classifications of products subject to tariffs. HS classification refers to the classification of imported products according to the product classifications that are created based on HS. Classification may require the chemical analysis of products called HS analysis.

The opinions of the participants of the training conducted by the master trainers

The teaching materials were "very good" or "good."	79.3%
The training curriculum was "very good" or "good."	97.6%
The knowledge of the master trainers was sufficient.	95.7%
The teaching skills of the master trainers were adequate.	83.0%
I gained knowledge I wanted to gain in the training.	97.2%
I got confidence in executing customs administration work after the training.	92.0%

[Source] Beneficiary survey (Information was collected through questionnaires sent out and returned via e-mail from 25 customs personnel who received training from master trainers.)

Efficiency

While the cooperation period was as planned, the project cost was 112% of the plan. The increase in cost was the result of the additional procurement of the chemical analysis machines for the HS analysis. However, the GDC was not fully prepared to accept the machines in terms of its technical, managerial, and facility aspects, and thus expected output was not sufficiently produced. Therefore, the efficiency of the project is fair.

Sustainability

After the project's completion, the GDC departments responsible for carrying out the project activities, such as the training of master trainers and updating of training materials, became ambiguous. Organizational activities were not continued, and no successor trainers have been trained so far. Furthermore, only about one-seventh of the funds necessary for the O&M of chemical analysis machines have been allocated, and machine troubles and failures cannot be addressed in a timely manner. Therefore, the sustainability of the project is fair.

The General Department of Viet Nam Customs in Hanoi City

Key Point of Evaluation

Systematic Human Resources Development, and Appropriate Use and Management of Machines Remain a Challenge

The project is highly assessed for achieving the project purpose. However, problems were recognized with achieving the overall goal and sustainability. The achievement of the overall goal was hindered by the lack of an established mechanism for systematic human resources development. By the project's completion, the project's human resources development system and the training of successor trainers should have been fully handed over to relevant departments, including the HR department and customs training school, and their responsibilities and authorities should have been made clearer. The ex-post evaluation has shown that the project's activities were not sufficiently handed over, and the GDC had not continued to carry out its organizational activities.

A major issue from the standpoint of efficiency and sustainability is the usage and management of the machines. Although the cost of purchasing chemical analysis machines accounted for roughly half of the total cost of the project, the capacity of the GDC was lacking to take full advantage of the machines and the expected effects were not sufficiently produced. In addition, because the budget for machine maintenance is insufficient, repairs are not being made in a timely manner. Moving forward, the GDC must develop a management system for the machines and secure the necessary budget for their maintenance, and in turn, improve the efficiency and sustainability of the machines.

In tandem with the relocation of the customs training school, the GDC presently has plans to strengthen staffing and financing for staff training. If these plans materialize smoothly and the recommendations of the evaluation are put into practice, the sustainability of the project will be enhanced.

Conclusion, Lessons Learned and Recommendations

While the project produced certain effects, it is evaluated to be partially satisfactory.

The lessons learned are that it is important to: establish an organizational system that allows for the revision of teaching materials if frequent legal amendments are anticipated; develop a system for ensuring the continuation of activities tailored to changes in the organization; and conduct a thorough preliminary study on the procurement of machines.

The recommendations to the implementing organization for immediate implementation are: 1) Taking institutional and systematic action for the training of master trainers; 2) Securing sufficient funds for the dispatch of trainers and increasing teaching hours of part-time trainers; and 3) Establishing an updating and distribution system of teaching materials. In the mid- to long-term, it is important to: 1) Increase the number of training participants by increasing the number of full-time master trainers and training coordinators and enhancing the training content; 2) Develop and enhance training materials for intermediate- and advanced-level staff; and 3) Secure funds and strengthen technical and management capacity for O&M of machines.

Social Fund for Development Project

Middle East
Egypt

Contributing to meet the financial needs of micro and small enterprises and to the promotion of job creation

External Evaluator: Hajime Onishi, Mitsubishi UFJ Research and Consulting Co., Ltd.

Outline of the Project

- Loan amount / Disbursed amount: 5,194 million yen / 5,194 million yen
- Loan agreement: February 2002
- Terms and conditions: 0.75% interest rate; 40 years repayment period (grace period: 10 years); general untied
- Final disbursement date: November 2008
- Executing agency: Social Fund for Development (SFD)

Project Objectives

Overall Goal To encourage the reduction of poverty and socioeconomic inequalities in Upper Egypt and the Suez Canal and the Sinai Peninsula

↑

Project Purpose To meet the financial needs of micro and small enterprises (MSEs) and to promote job creation in the target area

↑

Output To provide soft loans on concessionary terms by the way of two financial intermediaries under the Small Enterprise Development Organization (SEDO) of SFD

Effects of Project Implementation (Effectiveness, Impact)

The macro economy in Egypt recovered by accepting the structural adjustment loans of the World Bank and International Monetary Fund (IMF) in 1991. Due to rapid economic structural reform, however, poverty and unemployment worsened even further. In this context, the government established the Social Fund for Development (SFD), which provided loans for fostering small enterprises, developing human resources, and promoting community development, to reduce poverty and alleviate the adverse impacts of the economic structural reform program.

The project has achieved all three targets set at the time of appraisal (1. the cumulative amount of sub-loans disbursed, 2. the number of sub-projects approved, and 3. the number of jobs created). In terms of the sub-project loans by sector, however, loan disbursement to the wholesale and trading sectors accounted for a significant portion (about 40%), with the manufacturing sector—the initial target of the project—accounting for less than 10%. On the other hand, it is estimated that more than 30,000 new jobs have been created, more than 1.5 times the number of new jobs assumed at the time of appraisal. In addition to the new jobs contributing to the lowering of the unemployment rate in the project area, the project's implementation has significantly improved the business environment of the end-users. Thus, the project has generated many positive impacts. Furthermore, the percentage of the number of sub-loans in arrear was low, registering at 5.3% of the total number. Hence, the project has largely achieved its objectives; therefore, its effectiveness is high.

An automobile repair shop which received a soft loan

Regarding the target values for 1 and 2 above, due to geographic variations among the sub-projects, the level of benefits achieved differed greatly by region. It is deemed that the selection of target areas at the time of appraisal and the design of loan conditions were slightly mismatched.

Relevance

The project is sufficiently consistent with Egypt's development policy and Japan's ODA policy. However, the project design is not fully consistent with development needs, with the loan conditions in some cases not in line with the needs of end-users at the initial stage of the project. Therefore, the relevance of the project is fair.

Rating		
Effectiveness, Impact	③	Overall Rating B
Relevance	②	
Efficiency	②	
Sustainability	③	

Achievement of Main Indicators

Operation and Effect Indicators	Target Value (project completion year, 2009) (a)	Actual Value (as of ex-post evaluation, 2011)(b)	Achievement Ratio (b)/(a)
Operation indicators			
Cumulative amount of sub-loans disbursed	187 mil. L.E.	264 mil. L.E.	141%
Number of sub-loans (sub-projects) approved	5,342	5,395	101%
Number of sub-loans (sub-projects) in arrear	Not known	285	n.a.
Effect indicators			
Number of new jobs created	18,700	31,320	167%

[Source] JICA internal documents and answers to the questionnaire to SFD and National Bank of Egypt (NBE)
Note: The percentage of the number of sub-loans in arrear to the total number of sub-loans (sub-projects) approved is 5.3% (=285/5,395)

Efficiency

Although the project cost was within the plan, the project period exceeded the plan (by 139%). Therefore, the efficiency of the project is fair. The main reasons for the delay are: 1) Delayed procedures in Egypt at the beginning of the project (approx. 1 year delay); 2) Slow growth in the number of loans at the beginning of the project; and 3) (Two-year) suspension of JICA disbursements due to contract issues involving external auditors of Japan's Special Account.

Sustainability

The management systems of SFD and intermediary banks are free of problems, and the incidence of non-performing loans has remained low. Although some difficulties in debt collection may arise if the economic turmoil stemming from the February 2011 people's revolution is prolonged, the repayment situation is favorable at the time of this ex-post evaluation. Therefore, the sustainability of the project is high.

Egypt
: Areas covered by the project

Key Point of Evaluation

Evaluation Method for Two-Step Loans

In two-step loans, the project's impact is difficult to assess as end-users are not determined prior to the project's start and the number of sub-projects is numerous. For this reason, the evaluation method is not necessarily well-established.

This project identifies that the "number of new jobs created" is the most essential indicator for measuring the achievement of the project's purpose. A target value was thus established as an effect indicator during the appraisal. According to a questionnaire forwarded to SFD at the time of the ex-post evaluation (see table above), the number of jobs created is 31,320. However, SFD's estimate was calculated by dividing the loan amount by a certain coefficient; it is not the actual number of jobs created. Therefore, in addition to the above calculation, the actual number of new jobs created was obtained by conducting in-depth interviews with end-users (23 randomly selected companies). It was found that on average 7.88 new jobs were created for one sub-project (sub-loan).

According to this calculation, the number of new jobs created by the project is 42,538 (=7.88 × 5,395 sub-projects approved). While the sample size of the end-users in the interviews is small (23 companies), assuming they represent the average population (5,395), it can be inferred that the "31,320" is not an accurate reflection of the new jobs created, and moreover, the actual number of new jobs exceeds SFD's estimated amount. Given that job creation is one of the objectives of SFD's founding, a more precise data collection system should be developed and an evaluation should be carried out according to the system to demonstrate the effectiveness of the project and organization.

Conclusion, Lessons Learned and Recommendations

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

However, some difficulties in debt collection may naturally arise if the economic turmoil stemming from the people's revolution is prolonged. The executing agency, SFD, is recommended to conduct a more careful monitoring ahead of the final debt collection before the payment deadline in 2013.

A lesson learned for planning similar projects is that loan conditions should be studied carefully based on the needs of the expected end-users. In this project, the conditions for the sub-loans were established to encourage the capital investment of end-users in the less developed governorates, where the injection of working capital was necessary. This is believed to have had a negative impact on loan performance. It is deemed that the initial understanding of the needs was slightly mismatched with the actual situation.

The Project for Improvement of Maternal Health Care in the Rural Area

Middle East
Morocco

Contributing to the establishment and extension of a model system for improving maternal healthcare through continuous support based on a programmatic approach

External Evaluators: Hisami Nakamura and Junko Fujiwara, OPMAC Corporation

Outline of the Project

- Total cost (Japanese side): 340 million yen
- Period of cooperation: November 2004 to November 2007
- Partner country's implementing organization: Population Department of Ministry of Health, Regional Health Service Delegations of Fès Boulmane, Mèknés-Tafilalet and Guelmim-Es-Smara, Provincial Health Service Delegation of Séfrou and Ifrane
- The number of experts dispatched: 5 experts (long term), 9 experts (short term)
- The number of technical training participants: 62 participants
- Main equipment provided: Tocomonitor, ecography, apparatus for birth, vehicle for Mobile Clinic and equipment for IEC activities

Project Objectives

Overall Goal

1. The health condition of women in reproductive age is improved in rural areas of the three target regions
2. Results of the project are diffused in the three target regions

⬆

Project Purpose Appropriate health and medical services are provided to women in reproductive age in rural areas of the pilot provinces

⬆

Output

1. Continuous education/training systems for health workers in order to improve knowledge and skills in maternal health are established in the pilot provinces
2. The operational planning capacity of the provincial health service delegations for maternal health in rural areas is reinforced
3. Programs of Information Education and Communication (IEC) activities related to maternal health in rural areas are reinforced
4. The strategy for mobile clinics for maternal health in rural areas is reinforced in the pilot provinces

Effects of Project Implementation (Effectiveness, Impact)

Morocco has significant socioeconomic disparities between urban and rural areas, including in the maternal health sector, notably in the maternal mortality rate across Morocco.

The aim of the project was to develop models for improving maternal health in the rural areas of Morocco. The project strengthened the capacities of midwives and nurses in the maternal health sector through the establishment of a continuous education system in the pilot provinces. The project also enhanced IEC activities, including classes for mothers, and mobile clinics through the capacity development of the health authorities in the pilot provinces.

The outputs of the project contributed to increasing prenatal and postnatal checkups and institutional deliveries in the pilot provinces, while the increase fell below the target values. Therefore, the project purpose was generally achieved. Furthermore, the Ministry of Health recognized the effectiveness of the project's models for the continuous education system and classes for mothers and reflected them in Morocco's policy. Therefore, the models have been scaled up beyond the three target regions stated in the overall goal to the entire country. In particular, classes for mothers are now held nationwide and have been introduced in Benin, Burkina Faso, and Senegal through a third country training program. The expansion of the model owes to the contributions of the counterpart, which has enhanced its capacities through the project. Similarly, the project brought about remarkable spillover effects, such as the use of the "Women Health Handbook." This was developed with the suggestion of a former JICA trainee in Japan who was inspired by the maternal handbooks in Japan, for managing the health of pregnant women, including at the classes for mothers and prenatal checkups. Based on the above, the project generated the planned outcomes and impacts; therefore, the effectiveness and impact of the project are high.

Class for mothers at the Sidi Sddah Health Center (Séfrou)

Relevance

The national health policy of Morocco presents reduction in maternal mortality as one of the priorities and identifies the need to enhance "the Program for Deliveries without Risk." The capacity building of midwives providing maternal healthcare services, as well as institutional reinforcement, are consistent with Morocco's health policy and needs as well as with Japan's ODA policy. Therefore, the relevance of the project is high.

Rating		
Effectiveness, Impact	③	Overall Rating A
Relevance	③	
Efficiency	②	
Sustainability	③	

Performance of Prenatal and Postnatal Medical Checkups in Rural Areas of the Pilot Province (2007)

	Séfrou	Ifrane
Proportion of new recruitment of prenatal checkups	51%	54%
Proportion of pregnant women in the first trimester among the new recruitment of prenatal checkups	58%	47%
Proportion of postnatal checkups	79%	77%
No. of pregnant women having prenatal checkups at mobile clinics	1,812 people	274 people

[Source] Ministry of Health

Note: Some of the baseline data are not sufficient. However, coupled with the studies of the qualitative effects, the situation is deemed to have improved from the planning period of the project (2004).

Mother and baby receiving postnatal and neonatal care at a health center

Efficiency

The change in the initial plan to assign long-term experts affected the project's implementation to a certain extent. Although the inputs were appropriate for the outputs produced by the project, the project cost exceeded the plan and some inputs were in shortage. Therefore, the efficiency of the project is fair.

Sustainability

The models established by the project were reflected in the health policy of Morocco and have been expanded nationwide. The administrative system has been maintained, while there is room for improving the medical system. The system for scaling up the project's outputs and outcomes has been secured, and the project's activities have been continued. Therefore, the sustainability of the project is high.

A health center constructed by a Grant Aid project. This Technical Cooperation project is contributing to the effective utilization of the facilities constructed and equipment provided by the Grant Aid project.

Key Point of Evaluation

Coordination Between Technical Cooperation Schemes Prove to be Effective

The classes for mothers were introduced in Morocco on the suggestion of a former trainee who had participated in a training program in Japan ahead of the project and had witnessed similar classes in Japan. The project's counterpart, too, recognized the importance of the classes for strengthening maternal health, and the classes were introduced as part of the IEC activities. Later, the Ministry of Health recognized the effectiveness of the classes, and following the project's completion, implemented them on a national scale. Furthermore, the classes were also introduced in Franco African countries through a third country training program conducted in Morocco.

The project was able to achieve impacts that exceeded the overall goal and ensure sustainability because an expert with extensive knowledge of Morocco played a key role in mobilizing long-term assistance through a variety of schemes before and after the project's implementation, including training in Japan and Morocco, dispatches of short- and long-term experts, and dispatches of Senior Volunteers and Japan Overseas Cooperation Volunteers.

This project is a good practice of enhancing the effectiveness of Technical Cooperation through strategic assistance which is based on a programmatic approach with the continuous engagement of key experts.

Conclusion, Lessons Learned and Recommendations

In conclusion, the project is evaluated to be highly satisfactory.

A lesson learned is that it is important to implement projects that make strategic use of training programs and are designed around ex-participants of training programs conducted in Japan. In this project, training programs in Japan were offered before the project's start. Furthermore, training programs in Japan and short-term expert guidance in Morocco were provided in parallel with the project's progress. The training received by the personnel of the Provincial Health Service Delegations, who are rarely transferred to other provinces, led to the implementation of systems in their provinces. It also contributed to the national expansion of the classes for mothers and other impacts and to ensuring the project's sustainability. Another lesson learned is that in order to increase the effectiveness of the models established through Technical Cooperation projects, it is important to extend long-term assistance with a programmatic approach, bearing in mind coordination with other schemes.

The implementing organization is recommended to draw on the outputs of the project. The Ministry of Health should continuously conduct trainings and human resources development to scale up the project's activities and improve and diffuse skills related to maternal health.

The Third Project for Construction of Primary Schools

Africa
Cameroon

Contributing to the improvement of the educational environment by reforming overcrowded classrooms

External Evaluator: Jun Totsukawa, Sano Planning Co., Ltd

Outline of the Project

- Grant limit / Actual grant amount: 2,617 million yen / 2,596 million yen
- Exchange of notes date: (I) August 2004; (II) June 2005; (III) June 2006
- Project completion date: November 2007
- Implementing agency: Ministry of Basic Education

Project Objectives

Overall Goal To increase access to basic education

↑

Project Purpose Educational environment of students at the targeted 33 primary schools in Central, South, Southwest, Far North, and North regions is improved

↑

Output School facilities, furniture, and basic educational materials are constructed/installed at the targeted schools

Effects of Project Implementation (Effectiveness, Impact)

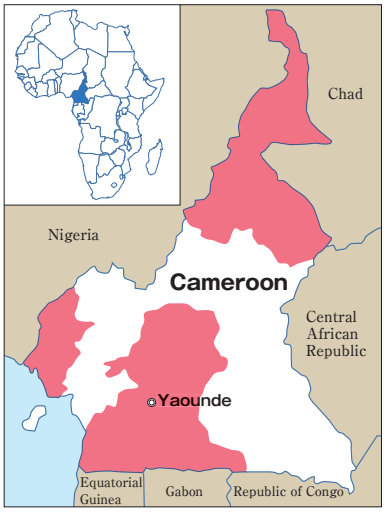
Cameroon's economic stagnation in the 1980s and 1990s stalled education finance, resulting in few education facilities being constructed or maintained during this period. From the late 1990s, the shortage of classrooms and the overcrowding of classrooms became an ever more serious issue.

The project not only succeeded in reducing the classroom size to below the project's target value of 62 students (44.8 students in 2009) but in also reducing the classroom size to below the government's target of 50 students. Furthermore, nearly all of the school facilities constructed by the project are still in good condition. In addition to the construction of classrooms, the beneficiary survey reveals that improvements in the learning environment through the provision of flip charts and other visual aids which were rarely used before in Cameroon have increased the students' motivation to study. The effects of the improved environment are also reflected in the students' learning performance. At the project's target schools, the percentage of students that pass the primary school graduation exam has been improving gradually and has been higher than the national average (81.3% in the target schools compared with the national average of 80.9% in 2009) (see graph on p.35).

The construction of toilet facilities along with the classrooms is also highly regarded by students and parents for improving sanitation. As a secondary effect, toilet cleaning also has had the positive effect of promoting sanitation education. In addition, the project has increased the motivation of teachers based on their awareness that they are working at the famous "Japan school." Also, the installation of a storehouse has improved the management of documents.

Thus, the project generated sufficient effects; therefore, the effectiveness of the project is high.

A school constructed by the project (Southwest Region)



Cameroon

: Areas covered by the project

Relevance

The Education Sector Strategy of Cameroon aims to "redress educational disparities" and "improve the efficiency and quality of education services," and strove to construct roughly 2,500 classrooms every year. However, the actual number of classrooms constructed had remained at 1,000 classrooms per year due to financial difficulties. In this light, the relevance of this project, which constructs new classrooms in areas confronted with a severe shortage of classrooms, is high.

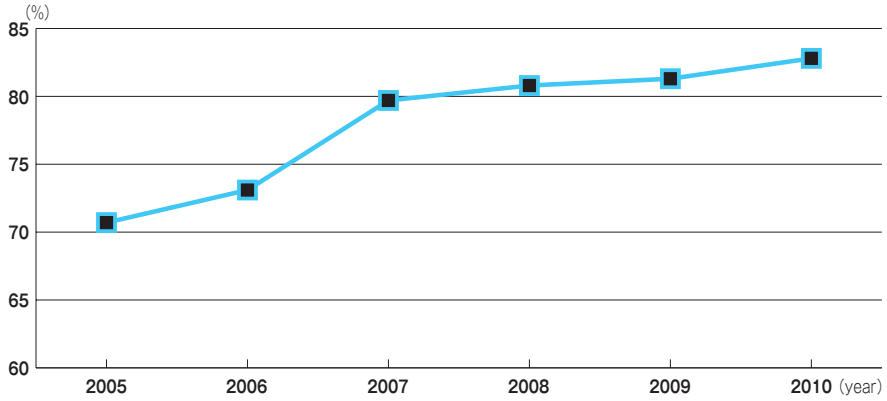
Efficiency

Similar to the initial plan, the project constructed 426 classrooms; 84 principal's offices; toilet facilities; and multipurpose rooms at the targeted 33 primary school sites. The project cost and period are slightly lower and shorter respectively than the plan. Based on the experiences from the 1st and 2nd projects, the project cost was reduced while maintaining the necessary specifications. Therefore, the efficiency of the project is high.

Rating

Effectiveness, Impact	③	Overall Rating A
Relevance	③	
Efficiency	③	
Sustainability	③	

Change in the pass rate of graduation examination in primary education (an average of the 13 target schools of the beneficiary survey)



[Source] Beneficiary survey

A classroom constructed by the project (Southwest Region)

Sustainability

A "Japan unit" was set up within the Ministry of Primary Education, which carries out the maintenance of the facilities and awareness-raising activities on sustainable management. In addition, most of the parents' associations which are in charge of daily maintenance activities maintain a certain level of technical and organizational capability. Many schools are able to collect the necessary funds from the association members for daily maintenance. And thus, there are few financial concerns. Therefore, the sustainability of the project is high.

Key Point of Evaluation

"Japan Unit" Supports the Outputs of Continuous Assistance

The project has been implemented continuously from the 1st project in 1997 to the 5th project (E/N signed in July 2011) and its target areas have expanded to all ten regions of Cameroon. The primary schools that have been constructed are popularly known as "Japan schools" and are regarded favorably as clean and refined schools. The schools also feature earthquake-resistant structures and specifications requiring little maintenance. Specifications using hollow blocks that do not rely on electric lighting continue to be used by the Cameroon government and other donors for the construction of primary schools.

Cameroon, too, has made corresponding efforts. In 2007, it launched the "Japan Unit" that carries out maintenance, including facility repairs and repainting, as well as awareness-raising activities including painting competitions for beautifying the schools and the KIREI NA GAKKO Competition. These activities supported the project's outputs and are one of the major factors behind the project's enhanced sustainability.

Poster for the KIREI NA GAKKO Competition

Moving forward, it is expected that the project will enter a new stage with the "Japan schools" serving as "model schools" and Cameroon promoting this model across the country.

Conclusion, Lessons Learned and Recommendations

Overall, the project is evaluated to be highly satisfactory.

It is suggested to the implementing agency that the KIREI NA GAKKO Competition that was implemented as an awareness-raising activity on improved facility maintenance is made a nationwide competition rather than limiting it to the central provinces around Yaounde as in 2010. Furthermore, rather than making it a transient event, it is recommended that the Competition's activities are diversified, including tours of the winning school (a model school) by schools that received low evaluations in the Competition.

A lesson learned was that if continuous assistance is provided from Japan and efficiency can be expected in light of the counterpart government's administration cost, the clear identification of responsibilities and departments, including the establishment of a special unit by the implementing agency, can lead to an accumulation of knowhow and improvements in efficiency and sustainability.

The Water Supply Project in Region of Kayes, Segou and Mopti

Africa
Mali

Making a certain contribution to reducing the burden of water-drawing labor and the outbreak of waterborne infectious diseases by providing safe water supply facilities

External Evaluator: Machi Kaneko, Earth & Human Corporation, Ltd.

Outline of the Project

- Grant limit / Actual grant amount: 1,493 million yen / 1,473 million yen
- Exchange of notes date: (I) December 2003; (II) May 2004
- Project completion date: (I) March 2005; (II) March 2007
- Implementing agency: National Water Department (DNH) at the Ministry of Mines, Energy and Water

Project Objectives

Overall Goal Waterborne infectious diseases such as diarrhea are reduced in Kayes, Segou, and Mopti regions. The water-drawing labor of women and children is reduced, and thereby, their opportunities for schooling and social activities are increased

↑

Project Purpose To ensure a reliable supply of safe water in the target regions

↑

Output The provision of boreholes with hand pumps in a total of 233 villages and small water facilities in 3 villages in the target regions

Effects of Project Implementation (Effectiveness, Impact)

In Mali, with the water supply rate in rural areas standing only at 57% (87% in urban areas), access to safe drinking water was limited. Villagers, unable to secure safe drinking water, were forced to rely on draw wells, river water, lake water, and other sources for their drinking water, which in turn became one of the causative factors for waterborne infectious diseases among infants and young children. The situation also left children and women, responsible for the hard labor of drawing water, few opportunities to attend school or engage in production.

The project provided roughly 100,800 people with water supplies in 2009, falling short of the roughly 135,000 people (75% of the planned number) targeted for 2007 at the time of the project's planning. This is primarily because the facilities equipped with boreholes with hand pumps are not operating at full capacity. A facility survey conducted during the ex-post evaluation found that the number of facilities in operation by region was 27 out of 38 in Kayes (71.1%), 22 out of 34 in Segou (64.7%), and 33 out of 56 in Mopti (58.9%). The results show that a substantial number of residents remain unable to use the water supply facilities due to failures or other reasons.

Regarding the safety of the water supplied by the boreholes with hand pumps and small water facilities constructed by the project, tests did not detect either general bacteria nor coliform at the facilities and confirmed that the water was very clean compared with water supplied by draw wells and large-diameter wells.

In short, although some positive effects were observed, the project did not achieve the target number of people with new access to water supplies. Therefore, the effectiveness is evaluated to be fair.

A borehole with a hand pump provided by the project

Mali

: Areas covered by the project

Relevance

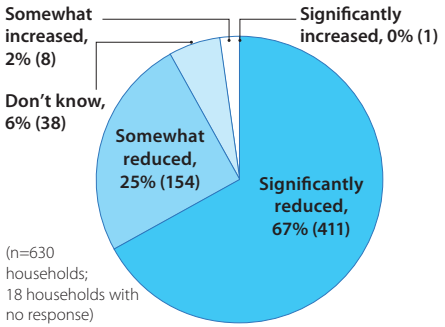
The project targets rural areas in Mali with limited access to safe water and is consistent with the country's water sector policy and the National Development Strategy. The project is also sufficiently consistent with Japan's ODA policy. Therefore, the relevance of the project is high.

Efficiency

The project constructed water supply facilities as planned, and no changes were made to the scale of the project. The project period was 38 months as planned, and the project cost was within the plan. Therefore, the efficiency of the project is high.

Rating		
Effectiveness, Impact	②	Overall Rating B
Relevance	③	
Efficiency	③	
Sustainability	②	

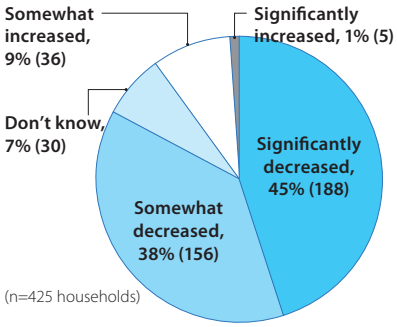
Change in frequency of children's diarrheal diseases compared to 5 years ago (2005)



(n=630 households; 18 households with no response)

[Source] Beneficiary survey

Change in burden of drawing water compared to 5 years ago (2005)



(n=425 households)

A woman with her baby pumping water with one hand

Sustainability

The sustainability of the project is evaluated to be fair due to some minor problems observed in maintenance structure, technical abilities, and financial resources. In particular, there remain problems in the functioning of Water Management Committees (CGEs)* responsible for the O&M of the boreholes with hand pumps, and furthermore, the capacities of the O&M personnel for the small water facilities are not sufficient.

*Before Mali's decentralization in 2006, the National Water Department (DNH) repaired hand pumps, trained repair workers at the village level, and supplied parts, among other activities. After decentralization, communes, which are the latest owners of the water supply facilities, became responsible for O&M. In practice, however, there are difficulties associated with communes assuming all tasks formerly conducted by the government. Hence, CGEs, an O&M organization led by residents, have assumed responsibility for the O&M of the facilities.

Key Point of Evaluation

Project Effect Analysis Using Statistical Social Survey

The ex-post evaluation attempted a project effect analysis using the statistical social survey methodology in order to assess the project's effects and impacts in more detail. Employing Structural Equation Modeling (SEM), the statistical analysis created a theoretical model representing the causal relations from "Input" through "Distal Outcome." A factor analysis was conducted of the data obtained from the social survey (of 630 households in the target villages and 100 households in non-target villages), and five factors were extracted, including "water use and the satisfaction," "improvement of women's domestic work conditions," "improvement of health," "improvement of economic situation of households," and "increase in schooling opportunity." A path diagram was drawn based on the theoretical model, within which arrows represent a causal relation between the five factors. Goodness of fit for the overall model was then examined.

The results of the analysis show that the users of the project's boreholes have a strong impression that diarrheal diseases have decreased to a significant degree. Moreover, a strong correlation has been observed between "improvement of women's domestic work conditions" and "improvement of economic situation of households" due to the construction of boreholes, which is particularly affected by increasing women's engagement in income-generating activities. It confirms that women's traditional work of drawing water from draw wells and other sources had contributed to preventing women from engaging in income-generating activities. On the other hand, a strong correlation was not found between use of boreholes and "increase in schooling opportunity."

While the five factors used in the statistical analysis are often used as impact indicators for rural water supply projects, it is suggested that in establishing indicators for similar projects, the above results are referred to for a more careful assessment of the causal relations.

Conclusion, Lessons Learned and Recommendations

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

A lesson that was learned on the establishment of target values. While targets were set for water supply access and water supply rate during the project's planning, the achievement of the targets as planned requires facilities to maintain a 100% operating rate during the five years after the project is completed. In view of Mali's challenging living environment and climate conditions, this would seem unrealistic. The National Development Strategy of Mali on potable water aims to realize operating rates of 70-80% for boreholes with hand pumps. Therefore, the targets for the number of people with new access to water supplies and water supply rate should be considered after the establishment of the project's targets for operating rates.

Moreover, during the planning stage, the project did not establish target operating rates or potential downtime, both of which are important indicators to assess project effects. It is suggested that the design of similar projects in the future consider the establishment of these indicators.

Project for Improvement of Fishery Facilities at San Juan del Sur Port

Latin America
Nicaragua

Making partial contributions toward improving the freshness of fish and other impacts

External Evaluator: Keiko Asato, Foundation for Advanced Studies on International Development

Outline of the Project

- Grant limit / Actual grant amount: 119.6 million yen / 119.6 million yen
- Exchange of notes date: June 2005
- Project completion date: January 2007
- Implementing agency: National Administration of Fisheries and Aquaculture (Administración Nacional de Pesca y Acuicultural [ADPESCA]) *

Project Objectives

Overall Goal: The income of fishermen at San Juan del Sur port will increase

↑

Project Purpose: Post-harvest losses are reduced and the volume of fish handled at San Juan del Sur port is increased

↑

Output: The fishery facilities and equipment at Sun Juan del Sur port are renovated

Effects of Project Implementation (Effectiveness, Impact)

The San Juan del Sur fishery port was Nicaragua's major fishery port, handling around 16% of the country's catches. Since maintaining fish discharging efficiency and freshness of catches were difficult at the port due to lack of space as well as facilities and equipment necessary for fresh fish distribution, post-harvest losses were a problem. Furthermore, based on business transactions that favored exporters/brokers over fishermen, fish were sold at broker-set prices and fishermen incomes were therefore kept low.

The ex-post evaluation confirmed that ice-making facilities provided by the project helped maintain the freshness of the fish catch. The project, however, did not improve the efficiency of fish discharging. Consequently, the effects were limited in reducing post-harvest losses and increasing catches. Fish discharging efficiency did not improve for the reason that auction trading was not conducted at the fish handling area as was assumed at the time of the project's design. As a result, the equipment and facilities provided for that purpose are underutilized. While the introduction of auctions was anticipated with the hope that fish will be sold at fair prices, auctions were an unfamiliar practice in Nicaragua and required changes in commercial practices among fishermen and brokers. The establishment of micro-finance systems accessible to fishermen were also necessary. Many obstacles thus stood in the way to the implementation of auctions. Additionally, despite Nicaragua's willingness to introduce new commercial practices at the time of the ex-ante evaluation, the policy change of the new administration after the completion of the project (to make the facilities a processing and export center for fish) played a factor in why auctions were not introduced.

In addition, the decrease in fishery resources in the nearby waters and the decrease in fishing frequency due to the escalation of fuel cost attributed to the rising price of crude oil, and therefore, the decrease in the number of fishermen, impeded the increase in the volume of fish handled at the fishery port. As a result, no notable improvements in the incomes and livelihood of fishermen were observed. From the above, the effect brought about by the project is limited compared with the plan. Therefore, the effectiveness of the project is low.

San Juan del Sur fishery port

Relevance

The Nicaraguan government, at the time of the ex-ante evaluation, identified fishery as an important industry to acquire foreign currency, aiming to improve the livelihood of fishermen. Thus, the project purpose was consistent with the needs. However, the project is partially inconsistent with the policy of the new administration that took over immediately after the project's completion. The project design in itself also had some challenges. Therefore, the relevance of the project is fair.

Rating

Effectiveness, Impact	①	Overall Rating D
Relevance	②	
Efficiency	③	
Sustainability	①	

* Renamed to the Institution of Fisheries and Aquaculture (Instituto Nicaragüense de la Pesca y Acuicultura [INPESCA]) in January 2007

Main Effect Indicators*1

Indicator	2005 Actual	2009 (Target)	2011 (As of ex-post evaluation)
Improvement in fish discharging efficiency: Number of workers involved in the discharge operation on panga (small fishing boat with outboard motor)*2	3 people/ discharging	2 people/ discharging	4 people/ discharging
Improvement in freshness of fish: Port fishermen's purchase price of ice*3	US$0.056/kg	US$0.037/kg	US$0.058/kg

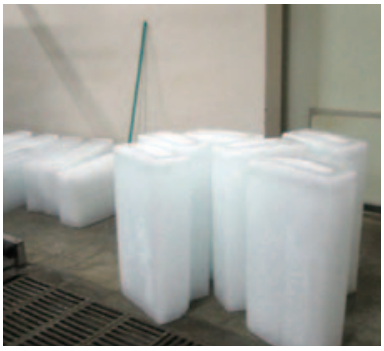
[Source] INPESCA

*1 Direct indicators for assessing the project purpose—the amount of post-harvest losses and the status of the increase in the volume of fish handled—were not established at the time of the ex-ante evaluation. Indicators also could not be obtained at the time of the ex-post evaluation. Therefore, "improvement in fish discharging efficiency" and "improvement in freshness of fish" are provided as alternative indicators.
*2 At the time of the ex-ante evaluation, fish were expected to be discharged from the deck directly to the fish handling area using the appropriate equipment, such as trucks equipped with cranes. However, the fish discharging method still remains unchanged, thus, the personnel number and time spent have not improved.
*3 According to interviews of fishermen, 96% of fishermen purchase ice at the port and keep fish refrigerated while fishing. 77% of fishermen responded that the freshness of fish improved after they started to purchase ice through the project. While the purchase price of ice is below the target price, fishermen are able to purchase ice at a price 40% lower than the general market price (at the time of the ex-post evaluation: US$0.08/kg).

Crew members discharging the fish caught

Efficiency

The project was as planned and the project period was within the plan; therefore, the efficiency of the project is high.



Ice to keep the fish catch fresh

Sustainability

Due to the change in administration, the financial status and the implementation structure of the project continued to be unstable in the absence of a clear policy regarding the use of the facilities. At the time of the ex-post evaluation, various measures are being taken to transform the current facilities into a processing and export center for fish. However, the measures have not produced concrete outcomes. Therefore, the sustainability of the project is low. Despite this, the fishery port's management structure changed after entering into 2011, and loans have begun to be made for a new business plan. If the improved implementation structure is sustained and the facilities are utilized in line with the new business plan, it is believed that the sustainability will increase.

Key Point of Evaluation

Appropriateness of the Project Design

To conduct an analysis, the ex-post evaluation reexamined the logic tree, which lays out the project's approach from its inputs to the project purpose and the overall goal. This helped to obtain a clearer understanding of the whole project, as well as showed that auction trading had been a critical prerequisite for the project to deliver sufficient outcomes. Given that the consolidation of auction trading necessitates a variety of requirements, including changes in local commercial practices and the introduction of a new financial system, it is questionable whether the project design was appropriate.

This evaluation reaffirmed that examining the appropriateness of the project approach using a logic tree or log frame further clarifies the issues which should be resolved at the project design stage and their countermeasures, as well as the inputs and the stakeholders who should be working together, and therefore, contributes to appropriate project design. In addition, it was confirmed that a logic tree or log frame allows accurate assessments to be conducted in ex-post evaluations.

Conclusion, Lessons Learned and Recommendations

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

At the time of the project design, the feasibility of the activities borne by the partner country should be thoroughly examined (in this project, the introduction of auction trading). If it is deemed that the counterpart country alone will not likely achieve the activities, JICA should provide additional assistance or the project design itself should be reviewed.

It is also important that the implementing agency's capacity to manage the facilities and equipment is sufficiently considered. In this project, the plan was to establish a "fishery port operation and maintenance entity" as an operator of the fishery port facilities and to manage the fishery market. Technical training was conducted for this purpose. However, the training period was not sufficient, and the establishment of the entity was delayed. Therefore, technical training could not be conducted for the appropriate persons. For cases in which the introduction of a new mechanism is being considered by a project, a lesson learned is that it is important to fully assess the implementing agency's capacity to put the mechanism into practice.

Note: See p.20 for information about the measures that the JICA department in charge of this project will be taking.

The Project for Improvement of Medical Equipment in Primary Health Care Institutions (Phase III)

Europe
Bosnia and Herzegovina

Contributing to the improvement of medical services through procuring medical equipment

External Evaluator: Kenichi Inazawa, Octavia Japan Co., Ltd.

Outline of the Project

- Grant limit / Actual grant amount: 1,273 million yen / 764 million yen
- Exchange of notes date: (I) November 2004; (II) December 2005
- Project completion date: (I) November 2005; (II) December 2006
- Implementing agency: Federal Ministry of Health (Federation of Bosnia and Herzegovina); Ministry of Health and Social Affairs (Republic of Srpska); Division of Primary Health Care, Department of Health (Brčko District)

Project Objectives

Overall Goal: Contributing to the improvement of the medical services and residents' health condition in Bosnia and Herzegovina

↑

Project Purpose: Strengthening the preventive and diagnostic functions of primary healthcare institutions (e.g., increase the number of diagnoses and examinations)

↑

Output: Procurement of medical equipment and renovation of X-ray facilities at 33 primary healthcare institutions which were damaged during interethnic conflicts

Effects of Project Implementation (Effectiveness, Impact)

In Bosnia and Herzegovina (hereinafter "BiH"), approximately 30% of the primary healthcare institutions known as Dom Zdravlja (hereinafter "DZ") were devastated by the interethnic conflicts in the 1990s. This has contributed to a grave shortage of medical equipment at DZ.

Through procuring medical equipment and renovating X-ray examination rooms, the project was expected to enable accurate tests and correct diagnoses, such as radiodiagnoses, ultrasonography tests, biochemical tests, and physiological examinations, as well as to improve medical services. The actual numbers of all kind of diagnoses and tests significantly exceed the predicted values. It is believed that the increase in radiodiagnoses and ultrasonography tests owes largely to the equipment procured by the project and the renovation of X-ray-sealed doors. Also, the increase in biochemical tests and physiological examinations owes to the procurement of new medical equipment by the project as well as to the increasing needs for diagnoses and tests in BiH in recent years.

In addition, through the field survey, it was confirmed that X-ray equipment are used frequently and X-ray protective environments have improved. Moreover, positive responses were obtained in general from a beneficiary survey which targeted DZ's medical staff (doctors, nurses, medical technicians, etc.) as well as patients visiting DZ (see table on p.41). The result of the survey also shows that DZ's functions have improved and that the residents' health is improving. It is also deemed that the residents' trust in DZ's medical service is generally strong. Thus, the project has largely achieved its objectives. Therefore, its effectiveness is high.

X-ray apparatus procured by the project

Biochemical analyzer in operation

Relevance

The project is relevant to BiH's policy on the improvement and enhancement of the health and medical sectors as well as to its development needs, namely, lack of medical equipment caused by interethnic conflicts. In addition, the project is consistent with Japan's reconstruction support policy. Therefore, the relevance of the project is high.

Efficiency

The project period was 26 months as planned. The project cost was lower than the initial plan (62% of the plan) because of competitive biddings for the procurement of medical equipment and the subsequent efficient placement of orders. Therefore, the efficiency of the project is high.

Rating		
Effectiveness, Impact	③	Overall Rating A
Relevance	③	
Efficiency	③	
Sustainability	③	

Number of Diagnoses and Examinations at PHC Institutions (Total: 33 DZ)

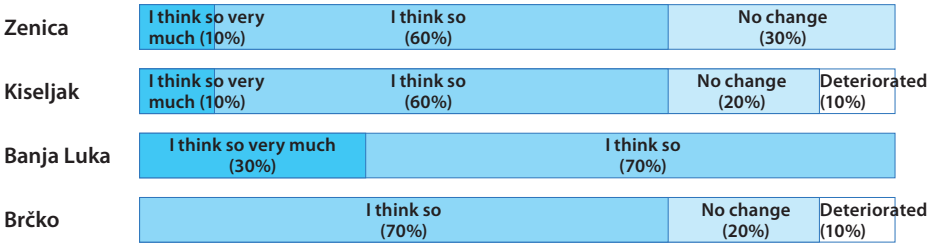
Effect Indicators	Predicted Values*1	2009	2010
Number of Radiodiagnoses	More than 14,000 per month	17,798 per month	20,672 per month
Number of Ultrasonography Tests	More than 9,500 per month	11,551 per month	12,224 per month
Number of Biochemical Tests	More than 82,000 per month	335,816 per month	334,381 per month
Number of Physiological Examinations	More than 16,000 per month	225,369 per month	230,524 per month

[Source] JICA documents (predicted values); Answers to the questionnaire (2009 and 2010)

*1 Predicted values at the time of the ex-ante evaluation use the actual values prior to the project's implementation (2004) (taken from JICA material, "Basic Design Survey Report"). Regarding post-project predictions, the project's output targets (achievement of quantitative impacts) were identified as "achievement of values exceeding the 2004 actual values." This was because it was quite difficult to predict the number of diagnoses and tests at the time of the ex-ante evaluation due to uncertainties, such as the number of refugees from the internal conflict who return in the future and likely outflow of population.

Results of Beneficiary Survey Targeting Medical Staff and Visiting Patients*2

Do you think that DZ's medical services have improved compared to before the project's commencement?



*2 Among the 33 target DZ, Zenica and Kiseljak (Federation of Bosnia and Herzegovina), Banja Luka (Republic of Srpska), and Brčko (Brčko District) were selected for the beneficiary survey.

Bosnia and Herzegovina
: Federation of Bosnia and Herzegovina
: Republic of Srpska
: Brčko District
○ : DZs covered by the project

Sustainability

The medical equipment procured by the project has been in use without any problems. Sufficient maintenance has also been carried out, and the financial aspects of O&M face no major problems. Moreover, no major problems have been observed in the organizational structure of the implementing agencies and the technical level of DZ. Therefore, the sustainability of the project is high.

Key Point of Evaluation

Detailed Coordination in Line with the Complex Needs of the Beneficiaries Proves to be Successful

The project was implemented in three areas: the Federation of Bosnia and Herzegovina; the Republic of Srpska; and the Brčko District. There were three implementing agencies, and the administrative and budgetary systems were different in each region. In addition, BiH is a multi-ethnic country comprised of Bosnians, Serbians, and Croatians, and the ethnic makeup varied by DZ. In the context of this complex domestic situation, it is assumed that many and various requests were made from the implementing agencies, local municipalities, and the target DZ. Nevertheless, the project was implemented according to the planned schedule due to sufficient communication between the Japanese side and the recipient side and, as shown in the result of the beneficiary survey, the project contributed to the great satisfaction of the facility users and medical staff. The detailed coordination and communication among stakeholders was one of the important factors of the efficient and effective implementation of the project.

The field survey was conducted in March 2011, immediately after the Great East Japan Earthquake. When the evaluation team visited DZ and the implementing agencies, Japan's aid was greatly appreciated and many words of encouragement were expressed for the earthquake-stricken region. One of the DZ commented, "Our level of medical service has improved with Japan's provision of medical equipment. We wonder if there is anything we can do for Japan." Through the survey, it became clear that Japan's assistance has contributed to promoting affinity toward Japan and mutual friendship.

Conclusion, Lessons Learned and Recommendations

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

As for the lessons learned, as slight difficulties existed in obtaining BiH's actual project cost in this survey, it would be desirable for the implementing agencies and the respective DZ to keep records appropriately from the project's implementation stage. Moreover, it is also important to agree on the data recording method between the recipient side and the Japanese side at the time of the project's commencement.

As for recommendations to the implementing agencies, it is desirable that the process for formulating the guideline for the disposal of medical wastes, which RS is currently working on, moves as quickly as possible. Ensuring the management and disposal of medical wastes by preparing and complying with the guideline will directly contribute to the improvement of DZ's medical services and the region's sanitation environment.

Articulation of Evaluation Perspectives and Evaluation Judgments Based on the Five DAC Criteria

Summary of the Study

Summary of the Study

The study aimed to draw out lessons and recommendations for the improvement and articulation of current evaluation perspectives and evaluation judgments based on the criteria for evaluating development assistance laid out by the OECD-DAC (Organisation for Economic Co-operation and Development/Development Assistance Committee).

Background of the Study

Taking advantage of the merger between JICA and the Overseas Economic Cooperation Operations of the former Japan Bank for International Cooperation (JBIC) in 2008, JICA has strengthened evaluation systems in the form of the "New JICA Guidelines for Project Evaluation: First Edition" (hereinafter "Guidelines") since FY2009, which should be applied to all the assistance schemes: ODA Loans, Grant Aid, and Technical Cooperation. One of the major changes was the introduction of ex-post evaluations conducted by external evaluators for all those schemes.

In terms of evaluation perspectives based on the criteria, however, there is great variability among evaluators depending on their characteristics. In terms of evaluation judgments, there is less consistency among the schemes based on the evaluation timing. As a result, it has been pointed out that these factors may lead to discrepancies in evaluation results.

In order to ensure high quality and consistent project evaluations, whether JICA's interpretations of the five criteria fit with the international evaluation standards needs to be examined by reviewing other donors' guidelines and evaluation reports. Furthermore, current evaluation perspectives and evaluation judgments need to be articulated and improved by examining JICA's previous project evaluations, taking into consideration the characteristics of the assistance schemes and timing of the evaluations.

Study Framework and Policy

The study analyzed a total of 70 evaluation reports of JICA's projects, ten each from the following respective reports: Ex-ante and ex-post evaluations (ODA Loans and Grant Aid); and Ex-ante, terminal, and ex-post evaluations (Technical Cooperation). In accordance with the Five DAC Criteria, information was arranged by: 1) The evaluation perspectives used; 2) The evaluation judgments; and 3) The evaluation methodology. Information on the project evaluations of other aid agencies adopting the Five DAC Criteria in their evaluation criteria was also arranged and analyzed by evaluation perspectives and evaluation judgments for each of the DAC criteria. Based on the analysis results, a study committee, comprised of an external expert and personnel from relevant JICA departments, discussed the ways to improve future project evaluations.

Study Results

An analysis of other aid agencies' project evaluations found that JICA has been systematically carrying out a series of project evaluations from ex-ante to ex-post, based on the Five DAC Criteria, and it was shown that there were no discrepancies with international standards.

On the other hand, the analysis of JICA's project evaluations as well as the discussions of the committee revealed that the evaluation perspectives applied to each criterion are wide-ranging. As a result, it was found that some perspectives were not adopted by many evaluators and some of the perspectives were presented in evaluation tables in a stylized phrase. In order to improve this situation, the study proposed to reorganize and integrate the evaluation perspectives set forth in the current Guidelines. The main proposals are as follows:

(1) Relevance

In addition to the following main evaluation perspectives: 1) Development needs; 2) Alignment with the policy of the recipient country; and 3) Alignment with Japan's ODA policy, the project's alignment with international targets and other projects of JICA as well as other donors should be added as evaluation perspectives. This will promote more strategic project implementations by creating synergy between schemes as the fruit of the aforementioned merger, and by harmonizing aid coordination.

(2) Effectiveness

Effectiveness mainly confirms the level of achievement of the project purpose and anticipated outcomes in accordance with indicators. However, the method of targeting appropriate outcomes and impacts should be elaborated to establish more appropriate targets and indicators to enhance the quality of the project (→see Box on p.43).

(3) Efficiency

While most evaluations compare inputs and outputs, focusing on the difference between planned and actual project period or cost, inputs and outcomes should also be compared. Accordingly, the internal rate of return, an evaluation perspective for effectiveness, should be considered as an evaluation perspective for efficiency as well.

(4) Impact

The level of the overall goal achievement and the level of other

indirect effects that may vary by project tend to be confused with each other. For clarifying these two, perspectives should be broadly categorized into "intended impacts for the overall goal" and "indirect impacts resulting in other effects." Additionally, indirect impacts resulting in other effects should be further categorized into: 1) Effects on policy and institutions; 2) Economic and social effects in the project area; and 3) Other effects.

(5) Sustainability

The evaluation of this criterion predicts the future continuity of the project's outcomes; therefore, sustainability evaluations may highly be influenced by the subjective judgment of evaluators. Thus, sustainability should be evaluated based on the evidences analyzed from "the actual situation" and "future prospects."

The committee also actively discussed the "appropriateness of management," including process evaluations, as a perspective which is not covered by the Five DAC Criteria. The Five DAC Criteria judge values based on the achievement of objectives at the time of evaluation (=management results). Therefore, the quality of management is not evaluated by the criteria. Appropriateness of management, however, largely influences the project's outcomes. From this perspective, the committee noted that major management decisions made during the project period should be appropriately recorded to use as lessons learned in other projects.

Moving forward, these recommendations will be shared with the relevant JICA departments. The Guidelines will be elaborated in the future after a trial period of these in practice.

BOX Output/Outcome/Impact and Project/Program Objectives

For the creation of development effects by the implementation of a project, it is considered that there should be the following steps: Inputs; Activities; Outputs; Outcomes; and Impacts. Outputs indicate how inputs have evolved through activities. Outcomes indicate changes that are brought about directly to beneficiaries through the project intervention, while impacts refer to changes that are brought about indirectly to beneficiaries after a certain length of time through the project intervention.

When designing a project, the main agenda should be the identification of the project purpose, i.e., what kind of changes (outcomes) a project aims to deliver. Furthermore, as the programmatic approach advances, the establishment of linkages between the program purpose (the larger changes [outcomes] brought about to beneficiaries) and the impacts of the projects that make up the program should be a more important agenda in designing a program.

The committee noted that while the level of the target outcomes of the projects and the program would inevitably vary according to their purpose and scale, the ways to understand the outcomes and impacts according to the project and program objectives should be set out.

Economic Impact Assessment of ODA Loans and Grant Aid: Evaluating their Contributions from a Macro-Economic Viewpoint

Research Consultant: Mitsubishi Research Institute, Inc.

Summary of the Study

Summary of the Study

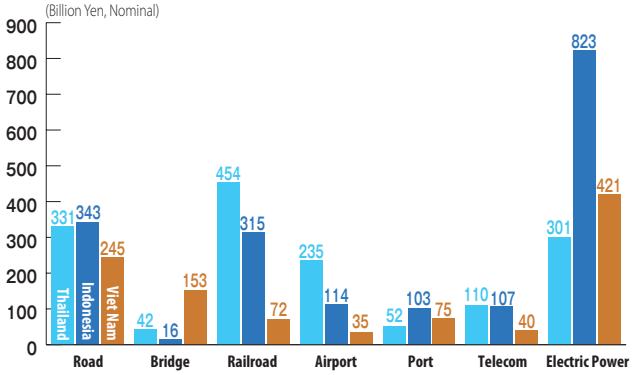
The aim of the study is to numerically assess the impacts that JICA's past ODA Loan and Grant Aid projects for economic infrastructure development have had on the macro-economies of recipient countries (e.g., boost in GDP).

Study Framework and Policy

1. The study examines all previous ODA Loan and Grant Aid projects for the following countries and sectors. Total disbursement amounts by country and sector are shown in Figure 1 on p.44.
   Countries: Thailand, Indonesia, Viet Nam
   Sectors: Transport (road, bridge, railroad, airport, port)
   Telecom
   Electric power (thermal, hydraulic, alternative, transmission line)
2. JICA provides the data that forms the basis of the study. The data will numerically show the outputs of all ODA Loan and Grant Aid projects which were extended to the above countries and sectors as well as the extent of their contribution to the sectors in each country (e.g., road length, amount of cargo handled, passenger number, number of telephone lines, amount of electric power generated, length of transmission lines).

3. An existing economic theoretical model (GTAP)*1 is identified for the calculation of economic impacts that the above outputs are expected to generate. The model requires preparation of simulation parameters, which enable the calculation of economic impacts by comparing between macroeconomic values calculated for both "with" and "without" Japanese financial assistance.

Figure 1 Cumulative Disbursements of Financial Assistance of Seven Sectors (As of 2009)

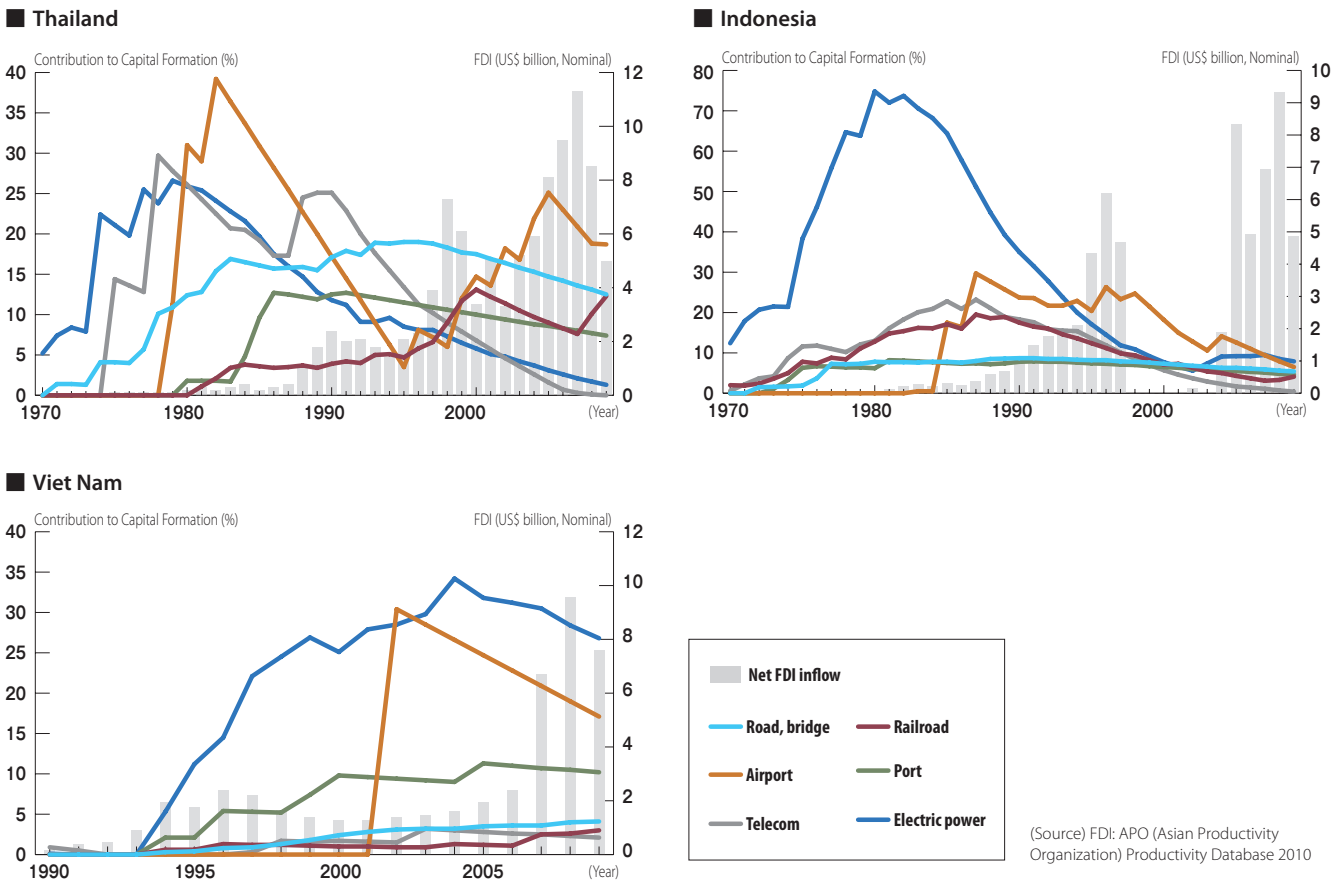


Study Results

1. Changes in JICA's Contribution Ratio to Countries' Capital Formations Across Time (Figure 2)

Figure 2 shows JICA's contribution ratio of capital formations by country, year, and sector in monetary terms (depreciation is also taken into account). According to the figure, infrastructures were developed in a majority of the sectors in the 1980s in Thailand and Indonesia. In Viet Nam, on the other hand, infrastructure development has been underway since the mid-1990s when Japan's ODA to the country formally started, and what happened in Thailand and Indonesia in the 1980s is taking place precisely now. In Viet Nam, the contribution to the electric power sector and airport sector has also been pronounced compared with other sectors. The figure indicates that the infrastructure development of JICA was implemented ahead of the boost in foreign direct investment (FDI) in all three countries.

Figure 2 Changes in JICA's Contribution Ratio to Capital Formations Across Time and FDI Inflows



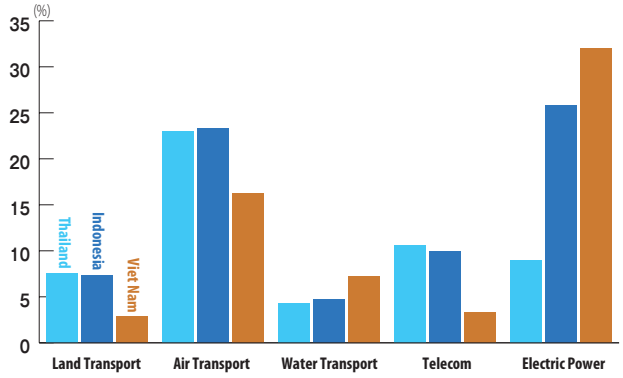
(Source) FDI: APO (Asian Productivity Organization) Productivity Database 2010

*1 Global Trade Analysis Project model. A Computable General Equilibrium (CGE) model that was developed for the analysis of trade liberalization across the world. It has many features, including enhanced production functions, multiple output variables, international reliability, and comprehensive data on all regions of the world.

2. Productivity Increases by Infrastructure Development (Figure 3)

Figure 3 shows to what extent JICA's contribution ratio to capital formations in Figure 2 boosted productivity in each sector. According to the figure, infrastructure development boosted productivity in each sector in all countries by 3 to 30%. The productivity gains in the airport and electric power sectors were high in all three countries.

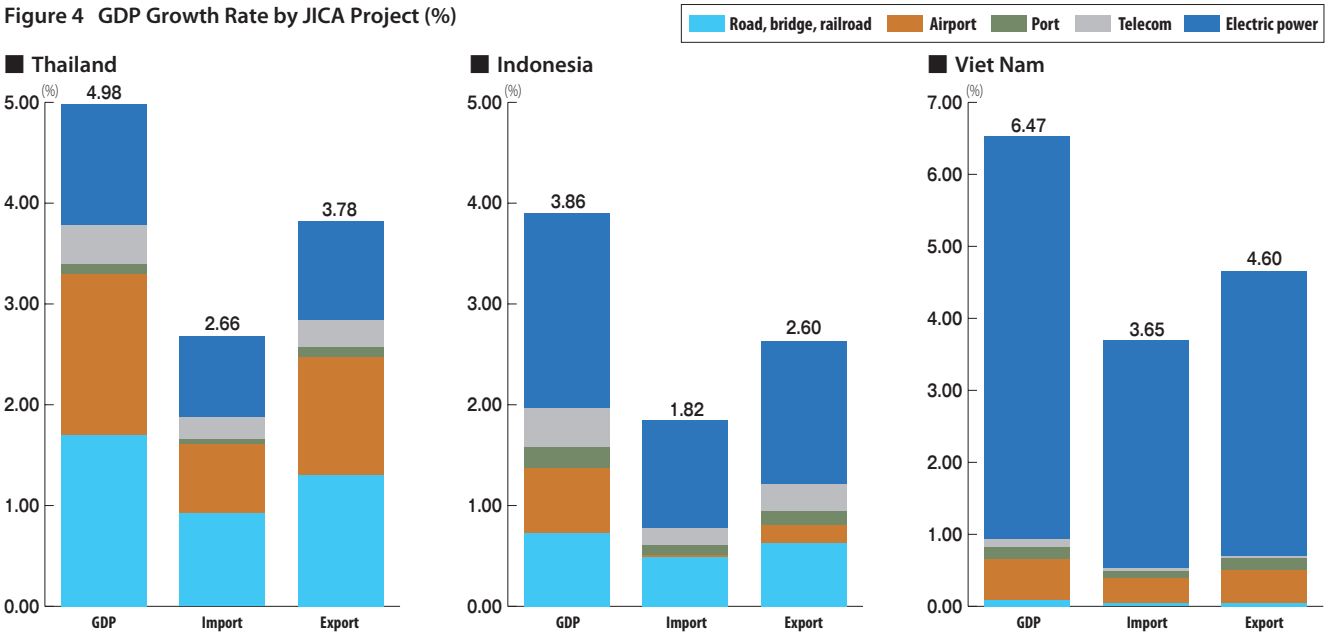
Figure 3 Productivity Increase by Infrastructure Development (%) (by 2009)



3. GDP Growth Rate by JICA Project (Figure 4)

Figure 4 illustrates, by country, the GDP growth rate by sector, boosted as a result of JICA's project implementation. In Thailand and Indonesia, each sector made comparatively well-balanced contributions. On the other hand, in Viet Nam, the electric power sector made most of the contributions. This is because as is shown in Figure 2, Viet Nam receives a significant proportion of its financial cooperation in the electric power sector.

Figure 4 GDP Growth Rate by JICA Project (%)



Note: Study Process

1) Asset values (capital stock amounts) for the outputs that are deemed to have been generated through economic infrastructure development from past ODA Loans and Grant Aids (e.g., road length, number of telephone lines, amount of electric power generated, length of transmission lines) are calculated using data obtained from Japanese and Thai capital stock statistics.
2) The values of JICA's projects and capital stocks are compared by country, year, and sector, and JICA's contribution ratio is estimated in monetary terms (Figure 2).
3) Productivity gains of each sector are then calculated by multiplying the production gain elasticity*2 from economic infrastructure development (which is found in existing research*3) to 2) (Figure 3).
4) A GTAP model is computed by giving the values in 3) as simulation parameters for final good productivities by industry in each country (current situation: "With Scenario"). Simultaneously, calculations are made assuming hypothetically that no JICA projects were implemented (give minus values as the simulation parameters: "Without Scenario"). From their difference, the economic impact of JICA's projects on the countries is estimated as of 2009 (Figure 4).

*2 +0.2-0.5 depending on the country and sector.
*3 Zhai (2010) "The Benefits of Regional Infrastructure Investment in Asia: A Quantitative Exploration" ADBI DP223.

Impact Evaluation of the Pasak Irrigation Project

Asia
Thailand

Evaluators: Seiro Ito and Kazunari Tsukada, Institute of Developing Economies, Japan External Trade Organization (IDE-JETRO); Satoshi Ohira, Keio University

Summary of the Evaluation

Background and Summary of the Evaluation

JICA's ex-post evaluations of irrigation projects have tended to focus on indicators such as the increase in the irrigated land area, beneficiary population, or crop yields. On the other hand, rigorous investigations have not necessarily been conducted on how the development or improvement of irrigation facilities ultimately contributed to the improvement of the lives of the beneficiaries. In this light, the impact evaluation was conducted to measure the changes that the construction of tertiary canals, which supply water to each plot, brought about to farmers' incomes and production patterns.

Evaluation Framework and Policy

Rigorous impact evaluations require comparisons between treatment and control groups which share similar characteristics. However, since project areas are selected according to certain criteria in infrastructure projects, the socio-economic conditions of the project area (treatment group) usually differ significantly from those of the non-project area (control group), making rigorous comparisons difficult. Although this is one of the technical difficulties of conducting impact evaluations of infrastructure projects, this evaluation succeeded in making comparisons between groups with similar characteristics by taking advantage of the time lag that was created in the construction of the canals in the project area. Furthermore, by employing a statistical method called the difference in difference method*, this impact evaluation was able to eliminate the effects of other factors and possible biases, and thus, precisely measure the impact of the project.

Analysis Results

The results show that the construction of tertiary canals increased farmers' incomes by approximately 60,000 to 70,000 Bahts (approximately 150,000 to 180,000 yen) during the dry season. On the other hand, the project's impacts on incomes were not confirmed during the wet season. Tertiary canals also increased the probability of cultivation by 20 to 30% in the dry season. These results suggest that the construction of tertiary canals contributed to the increase in farmers' incomes by promoting cultivation in the dry season.

On the other hand, the analysis did not confirm the increase in productivity per land area as is conventionally recognized among the stakeholders. The results show that in the case of this project, the impact of the construction of tertiary canals on farmers' incomes was not due to improved productivities but increased cultivation in the dry season. It is important to accurately understand the mechanism through which the project generates the final impact (increase in income) for the formulation and implementation of similar projects in the future.

* Difference in Difference (DID): Method of estimating impact by taking two differences, i.e., difference between pre- and post-project and difference between with and without project.

BOX External Validity of the Evaluation Results

Since project impacts can be affected by various factors, the evaluation results measured under a certain condition do not necessarily apply under other conditions (issue of external validity). For example, it cannot be concluded simply from the evaluation results that the construction of tertiary canals will in general have no impact on productivity. While the impact of tertiary canals on productivity was not observed in the Pasak region where water is abundant during the wet season and its proximity to the capital city offers opportunities of non-agricultural activities, a different evaluation result might be obtained under different conditions, such as farming areas with little rainfall.

It is important to understand not only whether or not the project generated impacts but also various factors surrounding the project and the impact-generation mechanism in order to accurately understand the evaluation results and promote project improvements. Furthermore, it is essential to accumulate evaluation results for similar projects and develop evidence that will allow for further generalization (high external validity).

Impact Evaluation of the Third Elementary Education Project

Asia
Philippines

Evaluator: Futoshi Yamauchi, International Food Policy Research Institute (IFPRI)

Summary of the Evaluation

Background and Summary of the Evaluation

The Third Elementary Education Project (TEEP) was implemented in all elementary schools in 23 provinces in the poverty areas of the Philippines, and the objective of the project is to improve the quality of and access to elementary education by providing comprehensive supports, including the construction of school buildings, distribution of textbooks, procurement of equipment and development of instructional materials, instructor training, and improvement of school-based management. The impact evaluation rigorously assessed both the project's short-term impacts (improvement in students' learning achievements) and long-term impacts (students' advancement to higher education after graduating from elementary schools, labor market earnings, etc.).

Evaluation Framework and Policy

Pre- and post-project comparisons and simple with and without project comparisons cannot eliminate the influences of external factors, such as the differences in initial conditions and changes in socio-economic situations, which result in a biased estimate of the project impact. Thus, this evaluation carefully designed a data collection strategy (data was obtained from target provinces and non-target provinces, which share similar socio-economic conditions as target provinces) and an analysis method (difference in difference and propensity score matching* methods). This approach ensured appropriate comparisons by avoiding potential bias, and therefore, allowed for a rigorous estimation of the project impact.

Analysis Results

TEEP contributed to improving the students' learning achievements in the short-term, raising test scores by 8% in math and 6% in all subjects. Furthermore, an impact analysis on TEEP's components found that in particular the construction of classrooms contributed significantly to the increase in test scores. The analysis also confirmed that the distribution of textbooks, instructor training, and the renovation of classrooms generated positive impacts.

The analysis confirmed that TEEP brought about positive impacts to especially women in the long-term. Specifically, the project on average increased the years of schooling completed by 0.34 years, reduced the number of repetitions in high school by 0.14 times, and increased the percentage of college entries by 9%. TEEP also contributed to increasing women's earnings. The internal rate of return (IRR) which was calculated based on the above results exceeds 15%, confirming that the project generated significant benefits.

A renovated elementary school building

The results showed that support for elementary education improved learning achievements in the short-term as well as improved women's advancement to higher education and labor market performance in the long-term, which confirmed the importance of investing in the early stage of the education system.

* Propensity Score Matching (PSM): Method of estimating impact by selecting units from a control group with similar characteristics as each unit in the treatment group, and comparing the two groups.

BOX **Making Use of the Evaluation Results**

Rigorous impact evaluation is able to not only contribute to an accurate understanding of the project's impacts, but also to provide evidence for designing similar projects. Project plans based on detailed evaluation results enable development impacts to be maximized within a limited budget and personnel.

The results of this evaluation were shared with many education stakeholders at seminars held at the Philippine Department of Education. A senior official from the Department has also indicated that the evaluation results will be drawn upon for future education reform. Indeed, one of the roles of impact evaluation is to feed back the evaluation results into project implementation and, more broadly, into policies.

JICA's operations evaluations for Technical Cooperation, ODA Loans, and Grant Aid projects at respective stages are discussed below.

Pre Implementation Stage Evaluation (Ex-ante Evaluation)

Ex-ante evaluation confirms the needs and priorities of the project and verifies its contents and expected outcomes prior to project implementation.

Evaluation at Pre Implementation Stage by Scheme

	Technical Cooperation	ODA Loans	Grant Aid
Evaluation scheme	Ex-ante evaluation		
Timing	Prior to project implementation		
Targets	In principle, all projects	All projects	In principle, all projects
(Note)	(Simplified evaluations may be conducted for projects under 200 million yen)		(Projects estimated over 200 million yen for which JICA conducts preliminary survey)
Principals of evaluation	Internal evaluation		
Items evaluated and evaluation method	Confirming the needs and expected outcomes and verifying the plan of the project, in light of the Five DAC Criteria		

Implementation Stage Evaluation (Mid-term Review and Terminal Evaluation)

Mid-term review verifies the relevance of a Technical Cooperation project, in which the implementation period will be more than four years, in the middle of the cooperation period. It also aims to study the attainability of the project purpose, contributing or impeding factors to the project's implementation, as well as their respective trends in terms of effectiveness and efficiency.

Terminal evaluation is conducted about six months prior to the completion of a Technical Cooperation project. The purpose is to verify primarily the attainability of project purpose, efficiency, and sustainability.

Evaluation at Implementation Stage by Scheme

	Technical Cooperation	
Evaluation scheme	Mid-term review	Terminal evaluation
Timing	At mid-point of project	6 months prior to project completion
Targets	Projects with cooperation period of four years or more	All projects
Principals of evaluation	Internal evaluation (joint evaluation with recipient government)	
Items evaluated and evaluation method	Evaluating project outcomes based on the Five DAC Criteria. The findings are utilized in fine-tuning plans and improving operational structures as necessary.	Evaluating attainability of project outcomes comprehensively based on the Five DAC Criteria. Judging propriety of project completion and necessity of follow-ups, based on the results.

Post Implementation Stage Evaluation (Ex-post Evaluation and Ex-post Monitoring)

All three assistance schemes are subject to Ex-post evaluation. Aiming for comprehensive evaluation after the completion of each project, Ex-post evaluation is conducted using the Five DAC Criteria.

Evaluation at Post Implementation Stage by Scheme

	Technical Cooperation	ODA Loans	Grant Aid
Evaluation scheme	Ex-post evaluation		
Timing	In principle, by 3 years after project completion		
Targets	All projects with contributions of 200 million yen or more	All projects with contributions of 200 million yen or more	General and Fisheries Grant Aid projects with contributions of 200 million yen or more implemented by JICA and some other sub-schemes
Principals of evaluation	External evaluation Internal evaluation*	External evaluation	External evaluation Internal evaluation*
Items evaluated and evaluation method	Based on the Five DAC Criteria		

* In principle, detailed ex-post evaluations (external evaluations) are conducted for projects over 1 billion yen. Internal evaluations are conducted by JICA's overseas offices for projects over 200 million yen and under 1 billion yen.

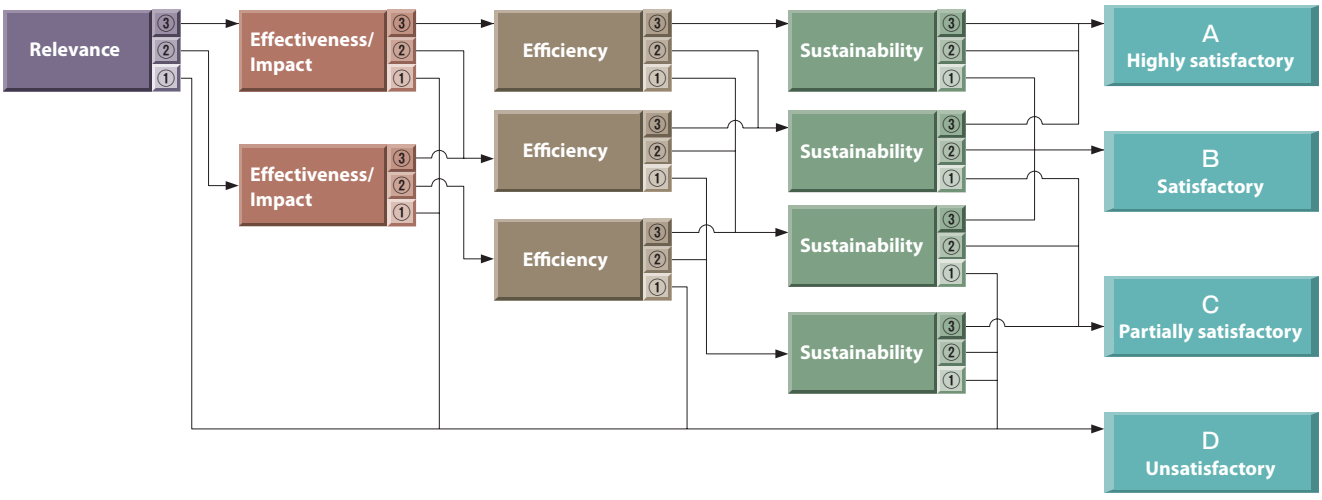
Ex-post monitoring is conducted seven years after the completion of ODA Loan projects if their ex-post evaluations revealed concerns about the project effectiveness and sustainability.

Rating criteria and overview of main items examined

		Reasoning		
		③	②	①
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 in consistency
	Relevance with development needs (needs of beneficiary, project area, and community)			
Effectiveness/ Impact	Achievement of expected project outcomes in target year (including use of facilities and equipment)	Objectives largely achieved, and project generated outcomes (80% or more of plan)	Some objectives achieved, but some outcomes were not generated (between 50% and 80% of plan)	Achievement of objectives was limited, and project did not generate outcomes (50% or less than plan)
	Status of indirect positive and negative outcomes	Project generated indirect outcomes as assumed / no negative impacts	Some problems with indirect outcomes generated / some negative impacts	Problems with indirect outcomes generated / 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	Institutional sustainability (e.g., structure / skills / HR of organization)	Sustainability is ensured	Some problems, but prospects of improvement exist	Insufficient
	Financial sustainability (availability of operation and maintenance budget)			

Note: The criteria and items examined differ by assistance scheme and project.

Rating flowchart



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