

# 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	Xian 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	

Country	No	Scheme*	Project name	page	Relevance	Effectiveness	Efficiency	Sustainability	Overall rating
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 (I)(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
	63	L	Social Fund for Development Project	30	2	3	2	3	B
Egypt	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 Quetzaltenango Municipality		3	3	3	3	A
	86	G	Project for Improvement of Fishery Facilities at San Juan del Sur Port	38	2	1	3	1	D
Nicaragua	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 Vaiala 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

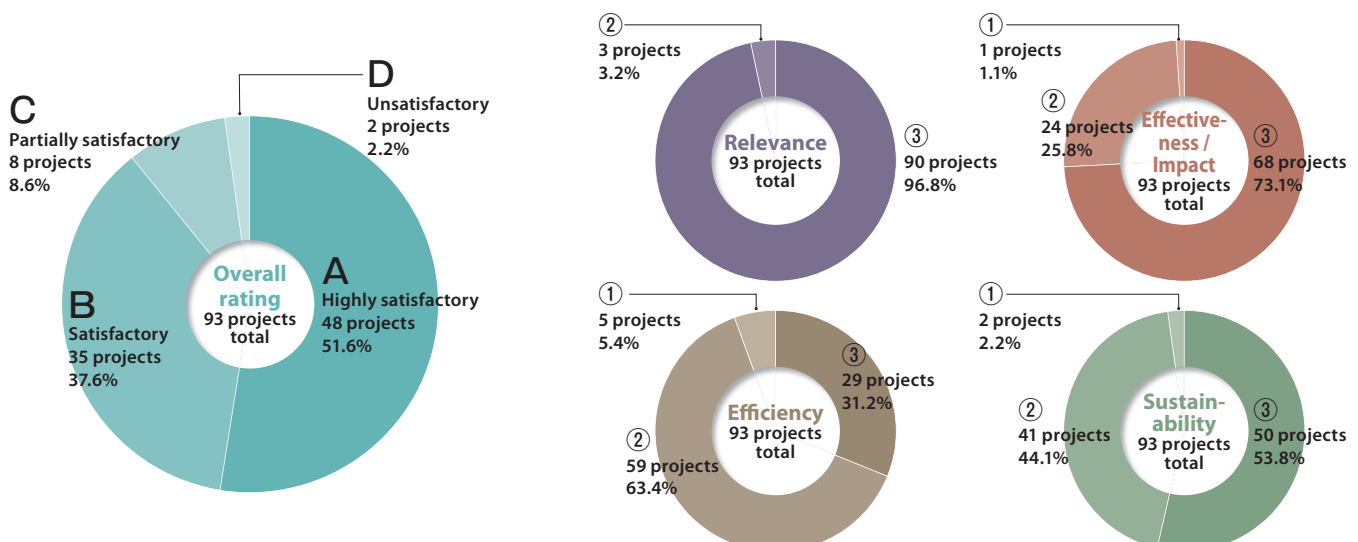
as much effects as initially targeted. The reasons vary by project. For example, in several projects, the initial demand forecasts were set too high. Or there were delays in the implementation of the project or related projects, and consequently, the project beneficiaries who were initially anticipated 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	Project Objectives
<ul style="list-style-type: none"> <li>• Loan amount / Disbursed amount: 162,751 million yen / 159,513 million yen</li> <li>• Loan agreement: (I) February 1997; (II) March 2001; (III) February 2002; (IV) March 2003; (V) March 2004; (VI) March 2005</li> <li>• Terms and conditions: 1.8% interest rate; 30 years repayment period (grace period: 10 years); general untied</li> <li>• Final disbursement date: June 2010</li> <li>• Executing agency: Delhi Metro Railway Corporation Ltd. (DMRC)</li> </ul>	<p><b>Overall Goal</b> To improve the urban environment in Delhi by alleviating traffic congestion and traffic pollution</p> <p>↑</p> <p><b>Project Purpose</b> To meet the increasing transportation demand</p> <p>↑</p> <p><b>Output</b> To construct a mass rapid transport system (the Delhi Metro) totaling 58.6 km in length in Delhi, India's capital city</p>

### 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.

### 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.



Platform of Barakhambha Road station



Interior of Delhi Metro's coach

Rating		Overall Rating <b>A</b>
Effectiveness, Impact	②	
Relevance	③	
Efficiency	③	
Sustainability	③	

\*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.

## 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 Barakhamba 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

## 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<sup>3</sup> per day. However, the actual amount of sewage treated stands at merely 23,000 m<sup>3</sup> 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		Overall Rating <b>C</b>
Effectiveness, Impact	②	
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:
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%



Sewer service area (commercial area)

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

## 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	Project Objectives
<ul style="list-style-type: none"> <li>• Loan amount / Disbursed amount: 16,900 million yen / 12,333 million yen</li> <li>• Loan agreement: December 1999</li> <li>• 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]</li> <li>• Final disbursement date: March 2007</li> <li>• Executing agency: Department of Agrarian Reform (DAR)</li> </ul>	<p><b>Overall Goal</b> Livihoods of farmers in 150 ARCs* are improved</p> <p>↑</p> <p><b>Project Purpose</b> To improve the agricultural productivity of the project area</p> <p>↑</p> <p><b>Output</b> Development of basic and essential infrastructure and organization of local farmers' groups in the project area</p>

## 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.

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.



Farmers in a paddy field using the improved irrigation facilities

## 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		Overall Rating <b>B</b>
Effectiveness, Impact	③	
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
<b>Total</b>	<b>150</b>	<b>146*</b>

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

### 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.



Improved potable water supply system

### 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

## 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.

## 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.

\* 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.



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

### Rating

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

### 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

## 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	Project Objectives
<ul style="list-style-type: none"> <li>• Loan amount / Disbursed amount: 5,194 million yen / 5,194 million yen</li> <li>• Loan agreement: February 2002</li> <li>• Terms and conditions: 0.75% interest rate; 40 years repayment period (grace period: 10 years); general untied</li> <li>• Final disbursement date: November 2008</li> <li>• Executing agency: Social Fund for Development (SFD)</li> </ul>	<p><b>Overall Goal</b> To encourage the reduction of poverty and socioeconomic inequalities in Upper Egypt and the Suez Canal and the Sinai Peninsula</p> <p>↑</p> <p><b>Project Purpose</b> To meet the financial needs of micro and small enterprises (MSEs) and to promote job creation in the target area</p> <p>↑</p> <p><b>Output</b> To provide soft loans on concessionary terms by the way of two financial intermediaries under the Small Enterprise Development Organization (SEDO) of SFD</p>

### 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.

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.



An automobile repair shop which received a soft loan

### 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		Overall Rating <b>B</b>
Effectiveness, Impact	③	
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)
<b>Operation indicators</b>			
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.
<b>Effect indicators</b>			
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.



## 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

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, Meknès-Tafilet 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 <b>A</b>
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	Project Objectives
<ul style="list-style-type: none"> <li>Grant limit / Actual grant amount: 2,617 million yen / 2,596 million yen</li> <li>Exchange of notes date: (I) August 2004; (II) June 2005; (III) June 2006</li> <li>Project completion date: November 2007</li> <li>Implementing agency: Ministry of Basic Education</li> </ul>	<p><b>Overall Goal</b> ↑ To increase access to basic education</p> <p><b>Project Purpose</b> ↑ Educational environment of students at the targeted 33 primary schools in Central, South, Southwest, Far North, and North regions is improved</p> <p><b>Output</b> ↑ School facilities, furniture, and basic educational materials are constructed/installed at the targeted schools</p>

### 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  
Red : Areas covered by the project

### Relevance

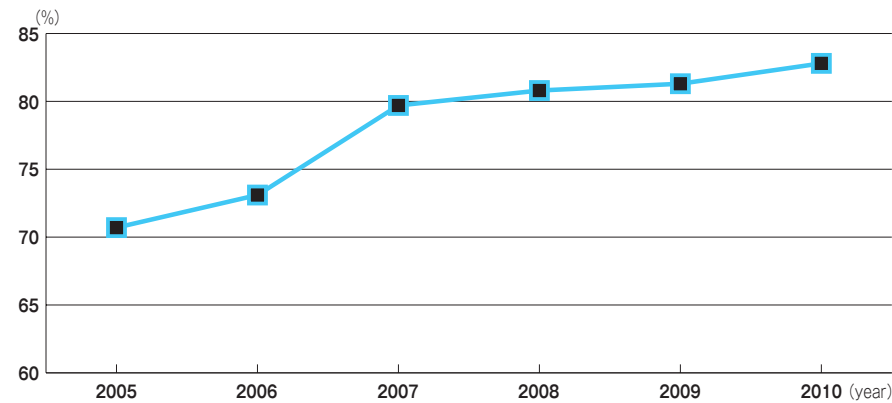
The Education Sector Strategy of Cameroon aims to "redress educational disparities" and "improve the efficiency and quality of education services," and strove to construct roughly 2,500 classrooms every year. However, the actual number of classrooms constructed had remained at 1,000 classrooms per year 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	<b>Overall Rating A</b>
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-

Poster for the KIREI NA  
GAKKO Competition



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.

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.

## 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.



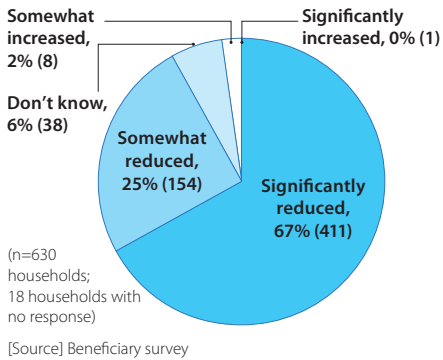
A borehole with a hand pump provided by the project



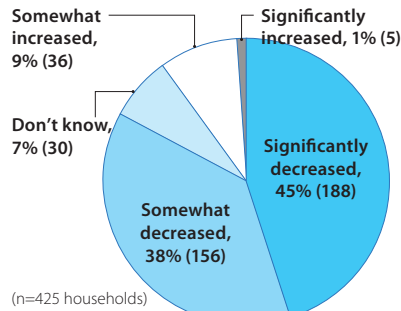
Mali  
 ■ : Areas covered by the project

Rating		Overall Rating <b>B</b>
Effectiveness, Impact	②	
Relevance	③	
Efficiency	③	
Sustainability	②	

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



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



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

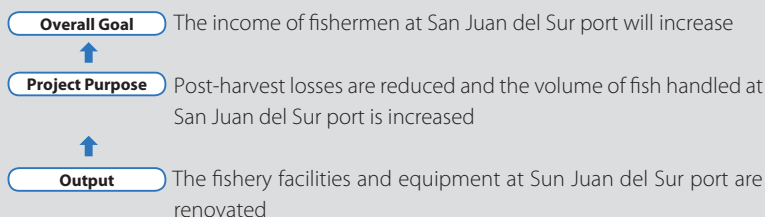
## Making partial contributions toward improving the freshness of fish and other impacts

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 Acuicultura [ADPESCA]) \*

### Project Objectives



### 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.

### 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.



San Juan del Sur fishery port

### Rating

Effectiveness, Impact	①	Overall Rating <b>D</b>
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).



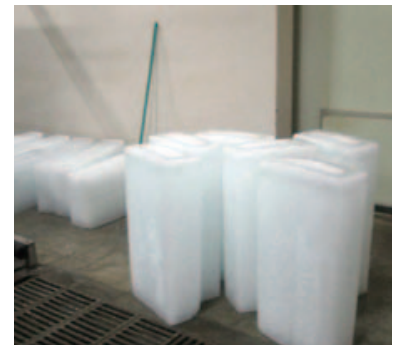
Crew members discharging the fish caught

## Efficiency

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

## 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.



Ice to keep the fish catch fresh

## 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		Overall Rating <b>A</b>
Effectiveness, Impact	③	
Relevance	③	
Efficiency	③	
Sustainability	③	

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

Effect Indicators	Predicted Values <sup>*1</sup>	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)

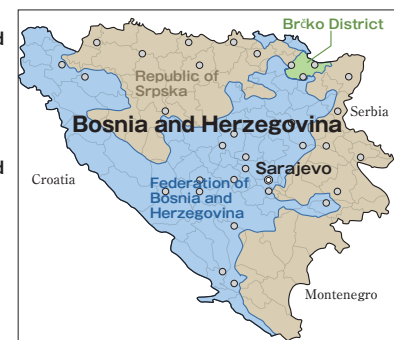
\*1 Predicted values at the time of the ex-ante evaluation use the actual values prior to the project's implementation (2004) (taken from JICA material, "Basic Design Survey Report"). Regarding post-project predictions, the project's output targets (achievement of quantitative impacts) were identified 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<sup>\*2</sup>

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

Zenica	I think so very much (10%)	I think so (60%)	No change (30%)	
Kiseljak	I think so very much (10%)	I think so (60%)	No change (20%)	Deteriorated (10%)
Banja Luka	I think so very much (30%)	I think so (70%)		
Brčko		I think so (70%)	No change (20%)	Deteriorated (10%)

\*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 Croats, 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.