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 FY2011.

Introduction

JICA has strived to develop a common evaluation method for all three schemes of Technical Cooperation, ODA Loan, and Grant Aid. In FY2011, ex-post evaluations were conducted based on a uniform evaluation system following on from FY2010. Detailed ex-post evaluations were conducted for 107 projects (51 ODA Loan, 36 Grant Aid, 20 Technical Cooperation). Internal evaluations were conducted for 73 projects (43 Grant Aid, 30 Technical Cooperation).

○ Overview of findings analysis

This chapter analyzes ex-post evaluation findings cross-sectorally and compiles the lessons learned from individual evaluations. 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.23 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.52 for the main items examined in the ratings and the flowchart).

Cross-sectoral analysis: Enhancement of Plans for Improved Development Effectiveness

Upon providing development assistance to developing countries, result-based management has become the international standard. While the program approach *1 is one of the means used to facilitate result-based management, ensuring the effectiveness of the individual projects in the program is essential to overall success of the program in addressing issues. To that end, analyses of various aspects in a project on prospects of realizing the effectiveness are required. Based on the factors identified by ex-post evaluation as being influential to project effectiveness during the various phases of a project, the below presents challenges and lessons regarding project effectiveness.

Ex-post evaluations were conducted on 107 projects this year with their results revealing many valuable lessons. Approximately 70% of these lessons refer to the planning stage, indicating that the enhancement at the planning stage is particularly important in attempting to achieve improved effectiveness. Below are summaries of notable lessons that were identified as useful during the planning stage in achieving targeted effectiveness or improving effectiveness.

○ Analysis and Assessment of Project Design and a Framework that Leads to Effectiveness

A project design that ensures intended project effectiveness and an adequate project framework including surrounding environment and prerequisites are essential for achieving targeted effectiveness or improving effectiveness. The evaluation has revealed that some projects did not adequately establish the means by which the projects were to logically lead to targeted outcomes nor the desired impact, while some projects did not involve sufficient relevant entities in order to achieve goals. There have been issues in achieving the intended level of effectiveness in the Project for Conservation of the Galapagos Marine Reserve (→see p.38) in Ecuador, because planned activities exceed the capacity of the implementing organization and the logical relationship among output, a primary outcome, and project goals was not clearly established.

Furthermore, when developing infrastructure, prior consideration of a system that encourages the use of the infrastructure by those who will have benefit is necessary to achieve the intended level of effectiveness. In a fishing port construction project (The Project for the Construction of Owia Fishery Center in Saint Vincent and the Grenadines) it was necessary for members of the fishing community to change their traditional way of fishing, such as location and methods of landing fish and sales, if they were to use the new fishing port. However, a sufficient measures were not developed, with the facility consequently not being fully utilized, illustrating the need for consideration of these factors. The use of a diesel-powered pump irrigation system was planned for Pampanga Delta Development Project (Irrigation Component) in the Philippines, but the rising cost of diesel in the area resulted in under-utilization of the facility, illustrating the need for better risk assessment.

These projects have shown afresh the importance of a logical design that leads to success and the importance of prior risk assessment of factors that may influence project effectiveness.

*1 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 synergy between them. For instance, if the goal is the efficient supply of electricity, projects that are required to achieve this goal, such as the construction of power stations and the development of legal systems, are formulated.

○ Plans that Incorporate Mechanisms for Increased Effectiveness

In relation to the previous point, external evaluators have found the following projects to be positive examples.

Walawe Left Bank Irrigation Upgrading and Extension Project (E/S) (I) (II) in Sri Lanka (→see p.24) assisted the region in the development of a new crop (banana), but more importantly, assistance was also supplied for the development of a value chain including sales in addition to the introduction of production of new crop. This project successfully generated sustainable activities of local farmers and was more successful that initially planned with the region growing to become one of the largest banana producing regions in Sri Lanka. Chongqing Environment Model City Project (1) (2) in China installed desulfurization systems at natural gas distribution generation plants, and introduced a prioritized pollution source monitoring system with the aim of improving air pollution. Since project completion, the system has become a major tool for environmental administration of Chongqing and now connects 400 sites of 300 companies, monitoring pollution over vast areas of the city, which is a better result than originally anticipated.

As these projects show, developing multifaceted plans, which is clearly establishing means of contributing to broader goals rather than being limited to the specific targets of individual infrastructural items, is significant.

As stated above, it is essential to analyze and assess a plan if it is to succeed. Furthermore, this year's ex-post evaluation results have revealed that the below perspectives are important when analyzing and assessing the plans.

○ Understanding the Picture of the Overall Project and its Steady Implementation

In development projects, assistance typically does not extend to all components of the overall project. Therefore, confirmation of the responsibilities of partner countries and other relevant entities is important in ensuring the project's effectiveness.

The Project for the Improvement of Water Supply Facilities in Urban and Semi-urban Centres in Nepal is designed to facilitate the development of the water supply network. The local implementing organization was expected to complete the construction of the pipe networks for the unconnected households. However, due to a lack of thorough examination on the feasibility of work to be carried out by the local organization, the effectiveness of the project suffered. The use of the counterpart fund *2 was considered for the construction of the terminal canals for The Project for the Rehabilitation of the Kandal Stung Irrigation System in Cambodia. However, the Cambodian Government was slow to make a decision regarding the use of the fund, which resulted in delayed construction, consequently hindering the effectiveness of the project. On the other hand, it has been decided that grant aid is to cover the procurement expenses of electricity distribution equipment and part of the installation costs for The Project for Rural Electrification in Ghana, while final household connection costs are to be borne by the Ghana Government. This is an appropriate demarcation of tasks in light of the results of past experience. This project is a positive example of timely success.

The importance of keeping perspective of the entire project is not a lesson applicable for only partner countries. Today when the role of private sector entities, non-governmental agencies, non-traditional donors and other parties involved in development efforts have become so significant, understanding the overall picture of the project and their steady implementation are gaining even greater importance.

○ Examination Accounting for Post-project Completion

It is often the case that projects produce results and continue their effect only after cooperation with Japan is completed. Therefore, it is at this stage that the actions of the local implementing organizations become crucial to success.

In Laos due to financial challenges, both public and private sector post-project initiatives for The Forest Management and Community Support Project were very limited. This has shown that it is crucial to develop a clear understanding during the planning stage with the implementing organizations regarding project objectives and actions required for post-completion to achieve those objectives. Furthermore the project has shown that measures should be developed during the course of the project to ensure sustainability. The Project for the Establishment of the Meteorological Radar System at Moulvibazar in Bangladesh did improve the issuance of storm warnings, but the capacity for forecasting and the issuance of flash flood warnings, for which the other entity than local implementing organization was responsible, is not sufficient and thus has not been effective. The project illustrates the need for analyzing the capabilities of relevant organizations and taking that into account as necessary when conducting project planning. Attapady Wasteland Comprehensive Environmental Conservation Project in India was anticipated to create environmentally-friendly independent economic activity within the community, however the improvement of community life is mostly attributed to the cash from employment on the project and it was revealed that the project did not necessarily create independent economic activity.

These projects show that, as result-based project management, it is crucial that we engage in dialog with the implementing organizations of partner countries at the planning stage and conduct follow-ups after project completion. This should also include examining actions to be taken after project completion, promote to realizing these actions from early stage so as to ensure effectiveness.

○ Way Forward

As illustrated above, there are a number of factors that influence the effectiveness of individual projects. Each issue is a challenge that arises at a different project phase, but to resolve these issues, it is crucial that we comprehensively analyze and examine the complete picture of individual projects at the planning stage. We must then incorporate necessary measures into projects in order to realize the effectiveness.

Needless to say, projects are always dynamic and therefore not everything can be clear during the planning phase and change is natural throughout the course of a project. Therefore, it is imperative that the planning phase thoroughly assesses risk, identifies countermeasures, and implements project management to ensure effectiveness.

Furthermore, it appears that the period before the effectiveness is realized is an important element. It is clear that it is important to identify feasible means for developing countries to realize the intended effectiveness after project completion, continue and improve it. This must be done during the planning phase as much as possible and should include monitoring plan after completion.

It is apparent that such efforts with the shared understanding of the developing countries and JICA will lead to project success and improvement of its effectiveness.

*2 Counterpart funds allow developing countries to utilize revenue gained by selling goods initially provided through grant aid for development purposes.

Rating of Detailed Ex-post Evaluations *1 *2

Country	No	Scheme *3	Project name	page *4	Relevance	Effectiveness *5	Efficiency	Sustainability	Overall rating
Afghanistan	1	G	The Project for Constructing of the Terminal of Kabul International Airport		③	③	②	②	B
India	2	L	Simhadri and Vizag Transmission System Project (I) (II)		③	③	②	③	A
	3	L	West Bengal Transmission System Project (I) (II)		③	③	②	③	A
	4	L	Dhauliganga Hydroelectric Power Plant Construction Project (I)–(III)		③	③	②	③	A
	5	L	Attappady Wasteland Comprehensive Environmental Conservation Project		③	③	②	②	B
	6	L	Punjab Afforestation Project Phase (I) (II)		③	③	②	③	A
	7	L	Manipur Sericulture Project		③	②	②	①	D
Indonesia	8	L	Batang Hari Irrigation Project (E/S) (I) (II)		②	③	②	②	C
	9	G	The Project for Improvement of Animal Health Laboratories for Diagnoses of Avian Influenza and Other Major Diseases of Animal		③	③	②	②	B
	10	G	The Project for Promotion of Sustainable Coastal Fisheries		②	①	③	②	D
	11	G	The Project for Water Supply in Gunungkidul Regency of Yogyakarta Special Territory		③	②	③	②	B
	12	T	Regional Educational Development and Improvement Program (REDIP)		③	②	②	②	C
	13	T	The Project on Self-Sustainable Community Empowerment Network Formulation in Nanggroe Aceh Darussalam Province		③	②	③	①	C
Cambodia	14	L	Sihanoukville Port Urgent Rehabilitation Project, Sihanoukville Port Urgent Expansion Project		③	③	②	③	A
	15	G	The Project for the Rural Electrification on Micro-Hydropower in Remote Province of Mondul Kiri		③	③	②	③	A
	16	G	The Project for the Rehabilitation of the Kandal Stung Irrigation System		③	③	①	②	C
Kyrgyz	17	T	IT Human Resource Development in the Kyrgyz Republic (National IT Center)		③	③	②	②	B
Georgia	18	L	Power Rehabilitation Project		③	③	①	③	B
Sri Lanka	19	L	Pro-Poor Rural Development Project		③	③	③	②	A
	20	L	Walawe Left Bank Irrigation Upgrading and Extension Project (E/S) (I) (II)	24	③	③	②	③	A
	21	G	Construction of a New Highway Bridge at Manampitiya in the Democratic Socialist Republic of Sri Lanka		③	③	③	②	A
Thailand	22	L	Second Bangkok International Airport Development Project (I)–(VII)		③	③	①	③	B
	23	L	Transmission System and Substation Development Project (Seventh Stage Phase II)		③	③	②	③	A
	24	L	Construction of 230 kV Underground Transmission Line between Bangkapi and Chidlom Substation Project		③	③	②	③	A
	25	T	Agricultural Statistics and Economic Analysis Development Project		③	②	③	②	B
Thailand/ Laos	26	L	Second Mekong International Bridge Construction Project	26	③	②	②	③	B
China *6	27	L	Xi'an Environmental Improvement Project		③	③	①	③	B
	28	L	Taiyuan Environmental Improvement Project		③	③	②	③	A
	29	L	Chongqing Environment Improvement Project		③	③	②	③	A
	30	L	Chongqing Environment Model City Project (1) (2)		③	③	②	③	A
	31	L	Dalian Environment Model City Project (1) (2)		③	③	①	③	B
	32	L	Xinjiang Water-saving Irrigation Project	28	③	③	②	③	A
	33	L	Ningxia Afforestation and Vegetation Cover Project		③	③	③	③	A
	34	L	Shanxi Wangqu Thermal Power Plant Construction Project (I) (II)		③	③	②	②	B
	35	L	Shanxi Hancheng No.2 Thermal Power Plant Construction Project (I) (II)		③	③	②	②	B
	36	L	Wuhan Urban Railway Construction Project		③	②	②	③	B
	37	L	Broadcasting Infrastructure Improvement Project (Jinan City, Shandong Province)		③	③	②	③	A
	38	T	The Japan–China Cooperation Science and Technology Center for Forest Tree Improvement Project		③	③	②	③	A
Nepal	39	G	The Project for Improvement of Water Supply Facilities in Urban and Semi-Urban Centres		③	③	②	②	B
	40	T	Agricultural Training and Extension Improvement Project		③	②	③	①	C
Pakistan	41	G	The Project for the Rehabilitation of Gates of Taunsa Barrage		③	③	③	②	A
Bangladesh	42	L	Jamuna Bridge Access Road Project		③	③	①	③	B
	43	G	The Project for the Establishment of the Meteorological Radar System at Moulvibazar		③	②	③	②	B
	44	G	The Project for the Provision of Portable Steel Bridges on Upazila and Union Roads	30	③	③	②	②	B
Timor-Leste	45	G	Project for the Development of a Water Supply Service in Same and Ainaro		③	①	③	①	D
	46	G	Project for the Development of a Water Supply Service in Dili ★		③	①	③	①	D
The Philippines	47	L	Sustainable Environmental Management Project in Northern Palawan		③	②	③	②	B
	48	L	Social Reform Related Feeder Ports Development Project		③	②	②	③	B
	49	L	Arterial Road Links Development Project (VI)		③	③	①	②	C
	50	L	Batangas Port Development Project (II)	32	③	①	②	②	D
	51	L	Calaca Coal-Fired Thermal Power Plant No. 1 Unit Environmental Improvement Project		③	③	②	③	A
	52	L	Central Luzon Irrigation Project		③	③	①	②	C
	53	L	Pampanga Delta Development Project (Irrigation Component)		③	①	②	②	D
	54	L	Secondary Education Development and Improvement Project		③	②	②	③	B
Bhutan	55	G	The Project for Reconstruction of Bridges (Phase II)		③	③	③	②	A
Viet Nam	56	L	Small-Scale Pro Poor Infrastructure Development Project		③	③	②	②	B
	57	L	Power Sector Loan		③	②	②	③	B
	58	G	Project for Improvement of Facilities of Primary Schools in the Northern Mountain Region (Phase 2)		③	③	③	②	A
Viet Nam	59	T	Enhancing Capacity of Vietnamese Academy of Science and Technology in Water Environment Protection		③	②	②	③	B
	60	T	Project for Rehabilitation of Natural Forest in Degraded Watershed Area in the North of Vietnam		③	②	③	②	B
	61	T	The Project on the Improvement of Port Management System		③	③	①	②	C
	62	T	Utilization of Intellectual Property Information		③	②	③	②	B
Malaysia	63	L	Port Dickson Power Station Rehabilitation Project (2)		③	③	②	③	A
	64	L	Beris Dam Project		③	③	③	③	A
	65	L	Universiti Malaysia Sarawak (UNIMAS) Development Project		③	③	②	③	A
	66	L	Look East Policy		③	②	②	③	B
Mongolia	67	G	The Project for Improvement of Waste Management in Ulaanbaatar City		③	③	③	③	A
	68	G	The Project for Improvement of Primary Education Facilities (Phase III) in Mongolia		③	③	②	②	B
	69	T	The Enhancement of Tax Administration Project in Mongolia	34	③	③	③	③	A
Laos	70	G	Project for Vientiane Water Supply Development		③	③	②	②	B
	71	G	The Project for the Improvement of the Vientiane No.1 Road		③	③	②	③	A
	72	G	The Project for Improvement of District Hospitals		③	③	③	②	A
	73	T	The Forest Management and Community Support Project (FORCOM)		③	②	③	①	C
Kiribati	74	G	The Project for Improvement of Fisheries-related Roads in South Tarawa		③	③	③	①	B
Solomon Islands	75	G	The Project for Improvement of Honiara Power Supply	36	③	②	②	②	C
Vanuatu	76	G	The Project for Improvement of Power Generation in Sarakata River Hydroelectric Power Station		③	③	③	③	A
Palau	77	G	The Project for the Rehabilitation of Arterial Roads in the Metropolitan Area		③	②	②	②	C
Ecuador	78	G	The Project for Improving Water Supply Systems in the Cities of Huaquillas and Arenillas		③	②	③	①	C
	79	G	Water System Improvement Project for Ibarra		③	③	③	②	A
	80	T	Project for Conservation of the Galapagos Marine Reserve	38	②	③	②	②	C
Guatemala	81	L	Rural and Main Roads Improvement Project		③	②	①	③	C
Saint Vincent and the Grenadines	82	G	The Project for the Construction of Owia Fishery Center		②	②	②	①	D
Nicaragua	83	G	Project of General Hospital Construction in the Department of Boaco		③	③	②	③	A
	84	G	Project for Reconstruction of Primary Bridges on the National Road No.7		③	③	③	③	A
Paraguay	85	L	Agricultural Sector Strengthening Project (II)		③	②	②	②	C
Brasil	86	L	Parana State Environmental Improvement Project		③	③	②	③	A
Peru	87	L	Sierra - Natural Resources Management and Poverty Alleviation Project (III)		③	②	②	②	C
	88	G	Project for Expansion and Modernization of Artisanal Fishery Port in Talara		③	②	③	②	B
Bolivia	89	T	The Improvement of Technical Extensions for Small-Scale Livestock Farmers Project		③	③	③	①	B
Egypt	90	G	The Project for Upgrading of El Mahala El Kobra Water Treatment Plant		③	③	③	②	A
Saudi Arabia	91	T	The Development and Training Center Project		③	①	①	①	D
Tunisia	92	L	Rades–La Goulette Bridge Construction Project		③	③	②	②	B
	93	L	El Jem–Sfax Motorway Construction Project		③	②	②	③	B
Morocco	94	L	Rural Water Supply Project (1)		③	③	②	③	A
	95	L	Rural Water Supply Project (2)		③	③	②	②	B
Jordan	96	G	The Project for the Improvement and Expansion of the Water Supply Networks in North/Middle Jordan Valley	40	③	③	②	②	B
Ethiopia	97	G	The Project for Rehabilitation of Trunk Road (Phase III)		③	②	②	③	B
	98	T	Project for Irrigation Farming Improvement		③	③	③	②	A
Ghana	99	G	The Project for Rural Electrification		③	③	②	③	A
	100	T	Project for West African Centre for International Parasite Control		②	②	②	①	D
Kenya	101	L	Sondu-Miriu Hydropower Project (I) (II)		③	③	①	③	B
	102	T	Strengthening of Mathematics and Science in Secondary Education Project Phase 2	42	③	③	②	②	B
Tanzania	103	T	Project for Capacity Development in Road Maintenance Management		③	③	③	③	A
Mauritania	104	G	Project for the Construction of Classrooms for the Primary and Secondary Schools in Nouakchott and Nouadhibou		③	③	②	②	B
Slovakia	105	L	Motorway Construction Project		③	③	①	③	B
Serbia	106	G	The Project for the Improvement of Water Supply System in Belgrade City		③	③	②	②	B
Poland	107	T	The Project on the Poland-Japan Energy Conservation Technology Centre		③	②	②	②	C

*1 ③: High, ②: Moderate, ①: Low / A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory (→see p.52 for details)
*2 Detailed ex-post evaluations are for projects costing over 1 billion yen or other projects deemed to provide valuable insight.
*3 L: ODA Loan, G: Grant Aid, T: Technical Cooperation
*4 Regarding projects which have page numbers listed, please refer to p.24 and onwards of this report.
*5 Effectiveness includes evaluation of impact.
*6 New provision of ODA loan to China was halted with the six Loan Agreements in December 2007.
For projects with a star (★) denotes that the department in charge of the project has made some interpretations which vary from the evaluation findings. Please refer to the ex-post evaluation report of the individual project for details.

● Explanation of Ratings Distribution (Detailed Ex-post Evaluation)

○ Overall rating

The results of the detailed ex-post evaluations conducted in FY2011 are as listed on p.16. Evaluations were conducted for 107 projects: 51 ODA Loan projects; 36 Grant Aid projects; and 20 Technical Cooperation projects. Most of the projects were carried out in Asia and Central and South America by region and in sectors such as road and bridge, electric power, water supply and sewerage, education. The overall ratings of the 107 projects are: 39 projects were rated A (37%); 42 projects were B (39%); 17 projects were C (16%); and 9 projects were D (8%). A and B combined account for 75% of the total; such projects largely generated the results which were expected. Some of the reasons for giving project ratings of C or D include "insufficient mechanisms encouraging facility utilization," "insufficient involvement of relevant parties" and "less active post-project operation by the implementing organization."

○ Criterion-based rating

With regard to relevance, 102 projects were rated "③" (95%) and 5 projects were "②" (5%); therefore, most of the projects were deemed relevant. Projects deemed to have problems in appropriate project planning, including "inconsistency between project design and local needs", "unclear organizational status of partners", and "inappropriate project design for its objective achievement".

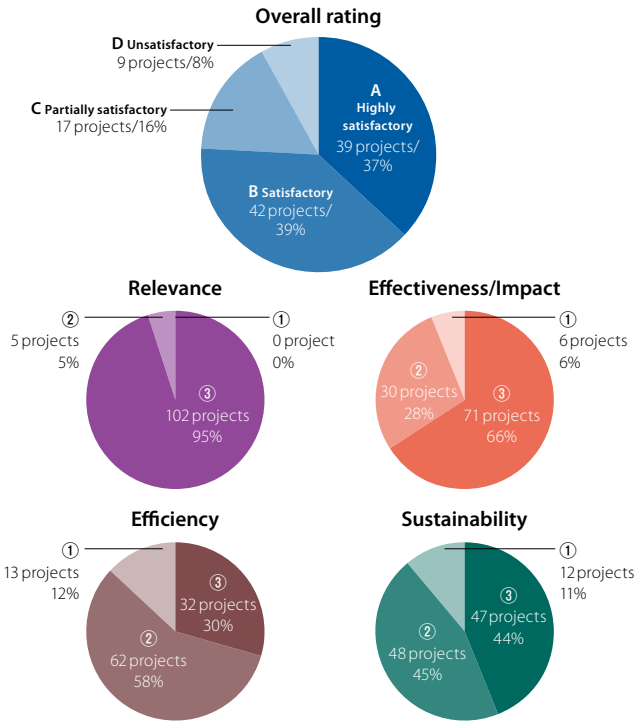
Regarding effectiveness/impact, 71 projects were rated "③" (66%), 30 projects were "②" (28%), and 6 project was "①" (6%). Therefore, many projects were deemed to have effectiveness/impacts. Some of the projects deemed to be experiencing some kind of issues that did not exhibit the degree of effectiveness that was initially targeted or experienced a lack of continued activities by the partner government after project completion. The reasons can be attributed to "lack of a mechanism for facility utilization", "overestimation of target of demand and objectives of the project", "delays in the tasks for which the partner was responsible", and "a lack of measures that ensure project effectiveness continuation".

As for efficiency, 32 projects were rated "③" (30%), 62 projects were "②" (58%), and 13 projects were "①" (12%). Therefore, the projects were not necessarily efficient. Some projects deemed to have issues that could not be completed within allotted times or planned budget. The reasons for these assessments are attributed to "delays in procurement", "changes in plans that resulted the need for revised design and permit reacquisition", and "the need for additional investment".

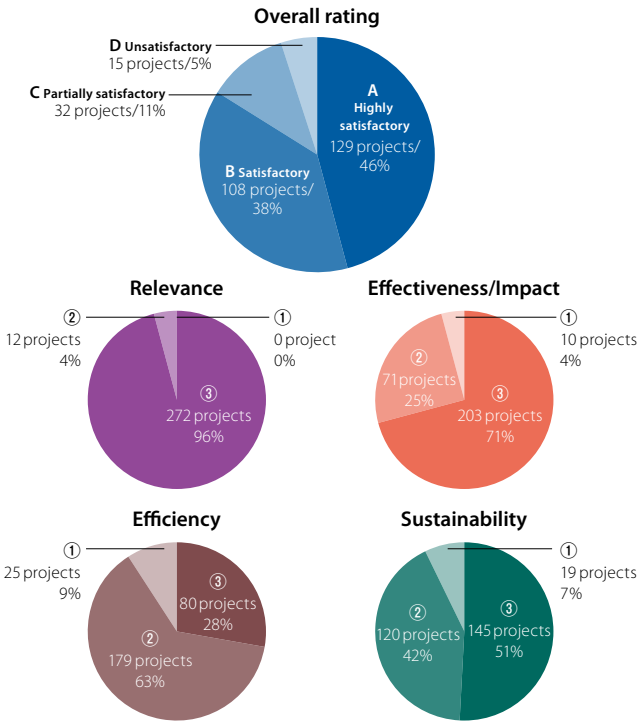
With regard to sustainability, 47 projects were rated "③" (44%), 48 projects were "②" (45%), and 12 projects were "①" (11%). Therefore, there is room for improvement. Many projects found to have issues that had insufficient funds for operation and maintenance, and continued activities. The reasons for insufficient funds include "insufficient budget allocations from the central and local governments for project operation and maintenance" and "inability to cover costs required for operation and maintenance from fee collection". It was also found that "necessity for strengthening organizational and institutional capacity of those responsible for project operation and maintenance".

Regarding these issues, individual project evaluations identify recommendations and lessons learned for JICA and the developing country. Page 14 "Cross-sectoral analysis" elaborates on these recommendations and lessons, and identifies lessons regarding "Analysis and Assessment of Project Design and a Framework that Leads to Effectiveness", "Understanding the Complete of the Overall Project and its Steady Implementation" and "Examination Accounting for Post-project Completion". The recommendations and lessons learned will be fed back to not only the developing country but also JICA in order to steadily improve the evaluated project and future new projects.

<Overall Rating for FY2011 Projects and Distribution of 4 Criteria>



<Totals for FY2009 to FY2011 Projects>



Projects Cited as Having Issues in Ex-post Evaluation

Based on detailed ex-post evaluations, the following nine projects of those evaluated in FY2011 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.

India: Manipur Sericulture Project (ODA Loan)

○ Evaluation result

This project aimed to increase cocoon and raw silk production, by introducing sericulture in an organized manner, thereby improving the living standard of the poor in the state of Manipur.

The achievement in cocoon and raw silk production remained at 50 to 60% of the targets. The main reason of this low production is that the number of raised silkworms has been lower than the target because of improper rearing practices due to a lack of knowledge and necessary equipment. Insufficient institutional arrangement and organizing farmers' groups also limited the achievement and effectiveness of the project. On the other hand, it is considered that the project has contributed to improving the living standard and the women's social status, while the contribution to income of the beneficiaries has not been so significant. The interruption of the consulting service due to the deteriorated security situation in state of Manipur during the project negatively affected the progress of the project and the improvement of technical capacity.

Regarding operation & maintenance (O&M), many challenges have been observed including shortages of staff in the Department of Sericulture, sluggish activities by the farmers' groups, a delay in the formation of the cooperatives in charge of the O&M of facilities, and the preparation of O&M manuals. It is noted that this ex-post evaluation was conducted with constraints on site survey and information collection due to the security situation.

○ Recommendations and lessons learned

In order to increase cocoon production in the state of Manipur, it is essential to revitalize farmers' organization activities, and it is recommended that the implementing agency should strengthen the institution of extension and technical guidance including the enhancement of facility utilization. A lesson learned is that small scale financial assistance is necessary for the poor who have little experience in making a living through sericulture, since it takes some time until they generate income. Also, it is necessary to carefully consider the selection criteria and coordination mechanism among members when organizing farmers who have little experience of such activities.

○ Action plan by responsible department in JICA

Although access to information in the project area is still restricted due to the unstable security situation, JICA continues to monitor measures taken by the executing agency for improving sustainability, such as planning and implementing transfer plans of facilities, which are not well utilized, to cooperatives.

Indonesia: The Project for Promotion of Sustainable Coastal Fisheries (Grant Aid)

○ Evaluation result

This project was implemented to stimulate the regional fishing industry in Larantuka Sub-district, East Flores District, by constructing fishery facilities (PPI) toward improving the efficiency of fisheries and minimizing post-catch losses.

In the target area, trade of fishery products has been conducted at facilities belonging to private companies or at sea, and it was observed that fishermen usually rend ice and light diesel oil from the companies in advance. According to the results of beneficiary survey, about 55% of target fishermen land catch of fish at facilities of private companies or other places without using PPI. It is considered to be due to insufficient detailed plan concerning the operation of PPI and a lack of measures being taken to promote the effective use of PPI. On the other hand, some benefits are also observed from fishermen who use PPI, such as shortened time for landing of catch of fish and wholesale to brokers.

As for the operation and maintenance (O&M), policy of PPI operation remains unclear, whether it aims at the activation of small-scale fishermen or at financially sound independent operation. Technical issues were also observed.

○ Recommendations and lessons learned

It is recommended to transfer PPI control from the Ministry of Maritime Affairs and Fisheries to the East Flores District government, to establish administration regulations based on measures for promoting fisheries in the target area, and to take necessary measures to utilize PPI in discussion with private companies and fishermen. The lessons learned were that it was necessary to commence the project upon sharing and coordinating the project purpose with the relevant entities, and confirming the operation policy, reflecting the results of analyses of the relevant entities and commercial customs.

○ Action plan by responsible department in JICA

Following discussions with the Indonesian side on the transfer of control of PPI to the East Flores District government, transfer is currently underway. JICA will continue to approach the Ministry to ensure a smooth transfer, to demand the prompt establishment of administration regulations and ask that it should carry out its duty upon showing the contents of the regulations not only within organizations but also to local fishery entities. JICA will also continue to monitor its progress.

Timor-Leste: Project for the Development of a Water Supply Service in Dili (Grant Aid)

○ Evaluation result

Timor-Leste has been in the rehabilitation/reconstruction process since its independence in 2001. The objective of this project is to ensure the stable supply of safe water to the residents of Dili by restoring the function of the water supply facilities damaged by conflict and deterioration. The stable supply of safe water to residents has not been achieved since the planned ratio of water supply hours per day is as low as 10% to 40% depending on the purification plants, because of improper assignment of nighttime staff due to a shortage of employees, a shortage of electricity due to the lack of budget and an underdeveloped infrastructure. On the other hand, with regard to the impact, as a result of a

beneficiary survey, some positive impacts were observed, such as improvements in the utilization rate of the water supply system and a reduction in the labor time required to obtain water. As for the operation and maintenance (O&M), both the organizational system and the level of staff skill are insufficient. Also, collection of water fees has still not started at the time of this evaluation. Therefore many issues are observed in institutional and financial aspects.

○ Recommendations and lessons learned

In order to tackle the budget shortage, it is recommended that an appropriate O&M plan be established and that technical support be provided in institutional aspects in coordination with the advisor, currently dispatched by JICA. The lessons learned were that flexible application of technical assistance is effective in countries which have not been independent for long. It was also pointed out that project design should be carefully considered including countermeasures for risks realizing the possibility of difficulties in setting appropriate project objectives and indicators.

○ Action plan by responsible department in JICA

Each ministry in Timor-Leste is currently developing a 5-Year Plan in alignment with the Strategic Development Plan (2011-2030), and an implementation system for water supply is also under establishment. Although early realization in a country which has not long been independent was difficult, people's wish for a 24-hour water supply is still unchanged. JICA will implement technical assistance to develop maintenance capacity including the establishment of a plan for water supply pipe networks and maintenance, in cooperation with the adviser currently dispatched. JICA will also monitor efforts to obtaining the necessary budget through continuous dialogues with the government.

Timor-Leste: Project for the Development of a Water Supply Service in Same and Ainaro (Grant Aid)

○ Evaluation result

Under the same circumstances as the above mentioned "Project for the Development of a Water Supply Service in Dili," this project was implemented to ensure a stable supply of safe water to the residents of Same and Ainaro districts of Timor-Leste by restoring the functionality of the water supply facilities damaged by conflict and deterioration.

Quantitative information including the amount of water taken in and supplied by the purified plant was unavailable. The lack of this data made it difficult to understand the effectiveness in quantitative manner. As a result of the qualitative analyses, the stable supply of safe water has not been achieved as planned because operating hours of water purification plants are limited due to shortages of staff, and electricity and river water is distributed to users without purification during the stoppage of their operation. The number of households connected to the new pipes remains limited. This is because of the issue of connection charge in Ainaro and the shortage of connection materials in Same, despite high demand.

As for the operation and maintenance (O&M), many of the same issues above mentioned in the case of Dili issues were also observed.

○ Recommendations and lessons learned

It is recommended that the budget shortage be improved and that skills and awareness of staff be raised based on an appropriate O&M plan. Also, the necessity to provide technical support in institutional aspects in coordination with the adviser, currently dispatched by JICA, has been pointed out.

In addition to the lessons learned in the above mentioned project in Dili, it follows also that the procurement plan needs to be carefully examined because of issues connected to local residents in the local procurement of materials.

○ Action plan by responsible department in JICA

The budget shortage under this project is more serious than that of above mentioned project in Dili. JICA will keep on making efforts to ask the government to understand the necessity of securing a maintenance budget, in order to improve the project's effectiveness. Similarly to the project in Dili, in cooperation with the adviser currently dispatched, JICA will not only implement technical assistance to improve the operation and maintenance plan and institutional arrangement but also monitor the improvement of maintenance and assist on the preparation of a daily check sheet and design documents in order to realize the smooth procurement of materials and quick repair of malfunctions.

The Philippines: Batangas Port Development Project (II) (ODA Loan) (→ see pp.32–33)

○ Evaluation result

This project aimed to raise the logistical efficiency by developing Batangas Port in Luzon Island, thereby contributing to the alleviation of traffic congestion in Metro Manila and the balanced development of the Calabarzon region.

However, the shift of container cargos from the Port of Manila to Batangas Port was not realized as planned and, as a result, the actual volume of cargo handled is much lower than the projected volume. The possible factors are that the total amount of container cargo handled on Luzon Island has plateaued due to changes in its industrial structure, the start of full-scale operation at Batangas Port was delayed due to delays in land acquisition and in the selection of a port operator, and that the advantages of Batangas Port is not fully utilized when compared to the Port of Manila.

○ Recommendations and lessons learned

Currently, due to the sales efforts by the port operator, it is observed that companies located in the industrial parks nearby the Port have sings to use the container terminal in Batangas Port. Under such a circumstance, it is recommended, in addition to the temporally measures to reduce the port charge, to reconsider the expansion policy of the Port of Manila for further use of Batangas Port, among others. As lessons learned from the evaluation, it was pointed out that it was necessary to consider the role of Batangas Port in relation to other ports and to take incentive measures preferential to the new port in order to promote the use of the new port and thus realize policy objectives. Furthermore, lessons learned included the importance of considering, as much as possible, the trends of the concerned private sectors, such as shipping companies.

○ Action plan by responsible department in JICA

Considering the performance of container terminal operations, several measures to increase the volumes of cargos have been already made, and they will be continuously implemented. (The measures include, for example, the promotion for Japanese firms through the joint seminar with the Japanese Chamber of Commerce and Industry of the Philippines and the request to

the Government of the Philippines and the executing agency for further policy interventions.)

The Philippines: Pampanga Delta Development Project (Irrigation Component) (ODA Loan)

○ Evaluation result

This project was implemented to increase agricultural production in the Pampanga Delta Area, by constructing irrigation facilities, thereby contributing to the improvement of living standards of local residents. Households of the beneficiary farmers reported the effects and impact of the project, such as an improved agricultural income due to the increase in rice production, and improved living standards. However, the extent of these effects and impact are very limited as the actual irrigated and planted area was about 30% of the target area. The major reasons for this were 1) underreporting of planted areas by farmers, 2) a decrease in utilization rate of pumping facilities due to the increased price of fuel, and an increase in inundation and flooding after the unexpected eruption of Mount Pinatubo, 3) delays in introduction of cash crops due to the preference of farmers and lack of funds, etc.

Some issues were observed in structural and financial sustainability such as staff shortages in the local offices of the National Irrigation Administration (NIA) responsible for maintenance and low rates of collection of Irrigation Service Fee (ISF).

○ Recommendations and lessons learned

The NIA is recommended to expand the planted areas by proceeding with rework and construction of necessary facilities based on their action plans, and to improve the utilization rate of the facilities and operation and maintenance (O&M) structure, grasping the situation of the project area by conducting parcellary mapping.

The lessons learned from the project were that it is necessary, for the introduction of pump irrigation, to examine the possibility of providing the option of a subsidy upon careful review of the beneficiaries' ability to pay ISF and the risk of the rising fuel cost, and that it is necessary, for the introduction of cash crops, to carefully examine market trends, willingness of farmers and their financial capacity.

○ Action plan by responsible department in JICA

Regarding land use, the NIA is currently considering the conduction of a survey in order to accurately grasp the size, owners and farmers of the target irrigated area. Also excavation works in neighboring rivers are being planned by Department of Public Works and Highways. JICA will continue to monitor these measures.

Saint Vincent and the Grenadines: The Project for the Construction of Owia Fishery Center (Grant Aid)

○ Evaluation result

This project was implemented by constructing a fishery center and breakwater in order to improve safety, increase the catch and ultimately promote the fishing opportunities of the small local fishing industry in Owia area which is located in the northeast of Saint Vincent Island.

The project was planned on the premise of changing social customs such as to make beach seine fishing boats land their catch at the center and sell it there, whereas fishermen had not done before. Those activities had been, though, limited and the catch landed at the center was lower than estimated. It seems that the plan was not scrutinized sufficiently. However, it is observed that the project has been contributing to safe operation and efficiency of fishery works and keeping the freshness of catches to some extent, but there are some facilities which are not fully utilized due to the limited catch at the center.

Fisheries Division of Ministry of Agriculture, Forestry and Fisheries temporally conducts operation and maintenance (O&M) of the center. It is expected that a public corporation will take over the management in the future, but the timing is not clear yet. Additionally, many other challenges still remain such as the lack of manpower and high maintenance cost, while the income of the center is only 20% of the estimates.

○ Recommendations and lessons learned

It is recommended that a quick progress be made on the consideration to entrust the operation of the center to a public corporation, which is on the way, that an operation improvement plan be established, and that income sources be diversified. The lessons learned were that it is necessary to utilize the existing system rather than largely changing it when similar projects are planned. The project plan was insufficient to examine whole factors that could change social customs. In addition, it was pointed out that the project be more likely to be utilized if the operation and maintenance plan including income and expenditure was scrutinized.

○ Action plan by responsible department in JICA

The Fisheries Division, Ministry of Agriculture, Forestry and Fisheries recognizes these O&M issues, and is managing the center directly to improve the situation. The hand-over operation plan to a public corporation is expected to be approved by the Cabinet in the year 2013. Also, the operation is expected to improve through the improvement of financial management including strengthening management income and expenditure, and selling fuel in collaboration with a private company. JICA will continue to monitor the situation and support efforts toward the appropriate utilization.

Saudi Arabia: The Development and Training Center Project (Technical Cooperation)

○ Evaluation result

This project aims to strengthen the capability of the Development and Training Center (DTC) of Technical and the Vocational Training Corporation (TVTC) to implement training courses for teachers at technical colleges by developing training courses for them, thereby contributing to the improvement of their knowledge and skills in mechanical, electrical and construction fields.

Although the development of the training courses was implemented almost as planned, technology transfer to DTC instructors was insufficient, which led to the limitations in the improvements in the capability of DTC to implement training

courses for teachers. Consequently, knowledge and skills acquired by teachers at technical colleges were constrained. Furthermore, although the equipment procured and the teaching materials developed by the project are still in use, DTC's key function in providing training for college teachers through trained DTC instructors has not been carried out as expected, because DTC was reorganized after the completion of the project, and training for teachers at technical colleges was entrusted to other entities.

○ Recommendations and lessons learned

It is recommended that equipment procured and teaching materials developed by the project be used properly in the future environment.

DTC was reorganized due to insufficient performance of TVTC's activities in fields outside the project. The lesson learnt is that when it comes to implementing a project that covers only one part of overall activities, it is important not only to examine planned activities under the project but also confirm with the implementing agency how to proceed with project activities together with activities in fields outside the project.

○ Action plan by responsible department in JICA

While the training by DTC was not realized as expected due to the reorganization of the implementing agency, it is confirmed that ex-DTC instructors trained by the project still implement parts of the training courses at other organizations and the equipment provided is utilized. In addition, it is also confirmed that the Saudi Arabian side intends to continue to make use of the project equipment and the results of cooperation. When it comes to the reorganization of the counterpart agency, such as in the case of this project, JICA have an intention to request the counterpart government to utilize the contents of cooperation so as to bring about substantial effects.

Ghana: Project for West African Centre for International Parasite Control (Technical Cooperation)

○ Evaluation result

This project aimed to improve the capacity of the West African Centre for International Parasite Control to play a role of a human resource development institution in parasitic disease control in the West African sub-region.

Within the project period the centre helped to strengthen the network of the 10 member countries in the region and conducted international workshops and follow-up visits frequently for these countries. As a result of this, the project objectives, such as the promotion of policy framework and programs about school health for parasite control in the countries, were achieved.

However, although some collaboration between the centre and international NGOs were partly observed, the activities of the center, after project completion, have been limited. This is due to the unclear status of the centre. Although the centre's integration into West African Health Organization (WAHO) has been discussed and considered, the prospect for its realization is not yet clear. There are great challenges in areas such as government policy and financial resources to support the centre, despite the centre's sufficient technical level acquired throughout the project.

○ Recommendations and lessons learned

To ensure the sustainability of the centre, stable supporting policies and financial resources are indispensable. In this respect, its integration into WAHO is an effective option and thus should be continuously pursued. As lessons learned, it was pointed out that it is important to identify the related policies of a hosting country and the status of a regional centre before starting the project, to share action plans of even the post-project-period among the persons involved, and to manage the project based on those policies and plans.

○ Action plan by responsible department in JICA

As a result of the continuous efforts to strengthen the status of the centre from the beginning and even after the completion of the project, the counter-part staff who have been trained by the project are still employed, and research activities in the model sites still continue. Furthermore, since 2009, the centre conducts international trainings with the financial support from an international NGO. While the status of the centre, including the cooperation with WAHO, is still under consideration, JICA will continue to monitor the efforts of the centre towards its self-sustainability.

● Review of Suspended Japanese ODA Loan Projects

Some of Japanese ODA Loan projects have been suspended before completion of the project. It is crucial that causes of incomplete projects are identified and lessons are learned for improved future project management. However, conducting ex-post evaluations using the five DAC evaluation criteria or the rating system for incomplete projects is difficult. Therefore, following the recommendations of the FY2007 Japanese ODA Loan Evaluation Expert Committee, JICA has been extracting lessons by reviewing the appropriateness of the decisions made at the time of project appraisal and project supervision phase.

In FY2011, the following five projects were reviewed in this manner: (1) Subic Bay Freeport Environment Management Project (Phase II) in the Philippines, (2) Ninh Binh II Thermal Power Plant Construction Project (I) (II) in Vietnam, (3) North Karanpura Super Thermal Power Project in India, (4) Visakhapatnam Port Expansion Project (E/S) in India and (5) Tashkent Thermal Power Plant Modernization Project in Uzbekistan.

The review shows that although the projects were all relevant, the review indicated that reasons such as "change of site due to the development of planned site," "use of private funds" and "repeated failure on procurement" contributed to incomplete projects. It was concluded that the suspension of Japanese ODA Loan for all five projects could not have been avoided and the following lessons have been noted: "have a broader understanding of the project's surrounding environment and then assess project feasibility," "remain aware of external factors that may influence the project even after implementation and exchange opinions with implementing organizations whenever appropriate" and "develop measures to encourage the understanding of procurement procedures and to support procurement."

Overview of Internal Ex-Post Evaluation Results

Background 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. In light of observations of the pilot evaluation, since FY2010 JICA has been conducting internal evaluations whereby overseas offices act as evaluators under the assistance of the Evaluation Department. It is anticipated that this way of evaluation will improve the quality of ex-post evaluation and strengthen system for post-project monitoring by overseas offices. The internal evaluation conducted in FY2010, through the interviews of implementing organizations and project site inspections by overseas offices, allowed JICA to better understanding of project effectiveness and issues. Therefore, this fiscal year a larger number of projects were evaluated. The evaluation process of 73 projects was completed, although some others had to be carried over to the following year after commencement due to deterioration of the civil security and difficulties in obtaining information in due time.

Overall evaluation

Internal ex-post evaluations were conducted for 73 projects: 43 Grant Aid projects and 30 Technical Cooperation projects. Many of the project areas were in Southeast Asia, Central and South America, and Africa. Health, water resource management and road were the main sectors. The overall evaluation of the 73 projects found that approximately 75% of projects have delivered the expected result at the time of ex-post evaluation, while approximately 25% of projects were found to have issues.

Evaluation by criterion

Evaluation results by criterion show that no major issues were present in terms of relevance and projects were consistent with the policies of the project-targeted countries and met their needs.

Regarding effectiveness/impact, approximately 70% of all projects achieved expected outcomes and the remaining 30% were regarded to have some challenges. For grant aid projects, JICA observed that insufficient examination of measures to utilize facilities after project completion and insufficient funds and skills of the implementing organizations resulted in the underutilization of equipment and facilities after project completion. For technical cooperation projects, JICA observed that implementing organizations could not carry out activities as planned after project completion because of financial and organizational issues.

As for efficiency, approximately 30% of the projects are completed within the planned period and cost. Nevertheless approximately 70% of the projects were found to have moderate in efficiency. In case of grant aid projects, delays in customs clearance for procured equipment, a lack of prior budgetary measures of the implementing organizations and delays of inputs of implementing organizations resulted in prolonging of project schedule. As for technical cooperation projects, project period was extended or project amount was increased due to factors such as delays in technical transfers and the necessity of additional funds for the achievement of outputs.

Concerning sustainability, approximately 20% of the projects were expected to be highly sustainable, while approximately 80% of them were identified as having challenges, showing that many projects confront challenges of some kind. It was found that the organizations responsible for operation and maintenance of the project outputs have insufficient budgetary measures in more than 70% of the projects. Additionally, some project experienced difficulties in acquiring spare parts. Some projects were also found to have agencies with inadequate human resources, skills, and organizational structure.

Future efforts

Challenges identified in each project are relayed to related organizations in recipient countries and relevant JICA departments in the form of practical recommendations. Those recommendations are then used to facilitate improvements. Furthermore, through internal evaluation activities, overseas offices have gained a number of lessons for project development and monitoring. These are also relayed in the same way and utilized for the planning and monitoring of similar projects within JICA.

Moving forward, JICA will continuously conduct internal evaluations, utilizing the experiences gained in the past two years. In the implementation, we will strive to ensure that evaluations are easy for the public to understand and increase objectivity by using quantitative indicators. Additionally, we will enhance the evaluation capacity of overseas offices while exploring means of further improvement, including utilization of the local staff of those offices.

On-site Inspection in Egypt

List of the projects

P.24 onwards present an overview of selected ex-post evaluation findings of the following projects.

Ex-post Evaluations

	Country	Scheme	Project Name	Page No.
1	Sri Lanka	ODA Loan	Walawe Left Bank Irrigation Upgrading and Extension Project (E/S)* (I) (II)	P. 24
2	Thailand/Laos	ODA Loan	Second Mekong International Bridge Construction Project	P. 26
3	China	ODA Loan	Xinjiang Water-saving Irrigation Project	P. 28
4	Bangladesh	Grant Aid	The Project for the Provision of Portable Steel Bridges on Upazila and Union Roads	P. 30
5	The Philippines	ODA Loan	Batangas Port Development Project (II)	P. 32
6	Mongolia	Technical Cooperation	The Enhancement of Tax Administration Project in Mongolia	P. 34
7	Solomon Islands	Grant Aid	The Project for Improvement of Honiara Power Supply	P. 36
8	Ecuador	Technical Cooperation	Project for Conservation of the Galapagos Marine Reserve	P. 38
9	Jordan	Grant Aid	The Project for the Improvement and Expansion of the Water Supply Networks in North/Middle Jordan Valley	P. 40
10	Kenya	Technical Cooperation	Strengthening of Mathematics and Science in Secondary Education Project Phase 2	P. 42

* Engineering Service loans: They are the loans for engineering services which are necessary at the survey and planning stages of projects.

Walawe Left Bank Irrigation Upgrading and Extension Project (E/S) (I) (II)

Asia

Sri Lanka

Contributing to the increase in agricultural production through careful support designed to meet local needs and circumstances

External Evaluator: Hisae Takahashi, Ernst & Young Sustainability Co., Ltd.

Outline of the Project

- Loan amount/Disbursed amount: (E/S) 379 million yen/379 million yen, (I) 2,572 million yen/2,495 million yen, (II) 9,393 million yen/8,711 million yen
- Loan agreement: (E/S) July 1994, (I) August 1995, (II) October 1996
- Terms and conditions: (E/S)(I) Interest rate: 2.6%, Repayment period: 30 years (grace period: 10 years), (II) Interest Rate: 2.3%, Repayment period: 30 years (grace period: 10 years)
- Final disbursement date: (E/S) March 1997 (I) June 2003 (II) December 2008
- Executing agency: Mahaweli Authority of Sri Lanka (MASL)

Project Objectives

Overall Goal: To contribute to the improvement of living standards and employment opportunities, the increase of farmers' income and the development of the regional economy

Project Purpose: 1) To secure water for agriculture, 2) to promote effective land use, 3) to promote settlement, and 4) to increase agricultural production including rice and other crops, in the target area

Output: To upgrade and extend the irrigation and drainage system, agricultural land, reservoir facilities and social infrastructure in the target area.

Effects of Project Implementation (Effectiveness, Impact)

This project aimed to increase agricultural production in the Walawe left bank area in order to improve living standards and farmers' income, thereby enhancing the regional economy. The project consisted of the construction and upgrading of irrigation facilities, the drainage system, night storage tanks and social infrastructure (education and medical facilities, etc.), consulting services for project implementation and training on operation and maintenance (O&M) of facilities. The project contributed to the increase in rice production and crop diversification. In particular, the production of bananas substantially expanded, and the actual production volume was twice and five times more than the planned volume in the phase I and II areas respectively. The main factor of this large expansion was that the rehabilitated irrigation facilities enabled farmers, who formerly depended on rain-fed or traditional Chena (burn) cultivation, to undertake dual cultivation. In addition, due to the installation of facilities for efficient water usage, such as the dual canal system and storage tanks, farmers can now cultivate not only rice but also other food crops, including bananas and papayas, which they were unable to water before the project.

Furthermore, in the project area, the average household income increased from 180,000 rupees in 1996 to 790,000 rupees in 2010. The beneficiary survey also revealed that around 98% of respondents answered that their revenue had increased due to this project. Therefore, it is conceivable that the implementation of this project contributed to increase residents' income and the growth of the agricultural sector in the target area. As mentioned above, this project has largely achieved its objectives; hence its effectiveness and impact are high.

Dual Canal System: The left is for rice and the right is for other crops

Bananas at a traditional market (Pola)

Relevance

Both the development policy of Sri Lanka at the time of appraisal (Public Investment Plan) and the present 10-year development policy (Mahinda Chintana) prioritize infrastructure development in the area of social services for the increase of domestic food production and the increase of farmers' income. This project, which aimed to improve living standards of residents and farmers' income by developing irrigation facilities, drainage systems, storage tanks and social infrastructure, has been highly relevant to Sri Lanka's development plan and development needs as well as Japan's ODA policy. Therefore, its relevance is high.

Efficiency

Although the project cost was within the plan (97% of the planned cost), the project period was exceeded (147% of the planned period) due to a delay in the selection of consultants. Therefore, project efficiency is fair.

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

<Production of each crop in the target area>

Phase I (Unit: ton)

Crops	Baseline	2005	2006	2007	2008	2009	2010
Rice	Original plan: 24,420						
	21,884	24,812	26,575	28,404	28,724	36,580	43,151
Bananas	Original plan: 6,800						
	750	35,748	35,196	35,100	26,184	19,188	15,900
Papayas	No original plan						
	—	1,440	1,188	2,700	2,124	1,260	1,404
Vegetables	Original plan: 13,000						
	12,400	1,200	1,272	1,440	2,268	3,024	3,192
Pulses	No original plan						
	—	543	495	511	854	805	836

Phase II (Unit: ton)

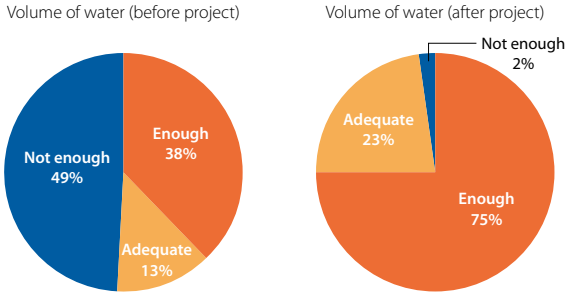
Crops	Baseline	2009	2010
Rice	Original plan: 23,430		
	—	26,530	28,441
Bananas	Original plan: 10,800		
	—	38,184	35,700
Papayas	No original plan		
	—	13,644	23,220
Vegetables	Original plan: 26,000		
	—	4,788	2,904
Pulses	Original plan: 1,110		
	—	1,153	759

Source: MASL

Sustainability

MASL and Farmers Organizations (FO), which are responsible for O&M of irrigation facilities do not face any structural issues and coordinate with each other efficiently. Due to the training conducted under the project, no major technical issues were confirmed, and the current O&M status of facilities is also in good condition. No major issues were observed in terms of the O&M cost because it is covered by MASL and the FO maintenance fund, meaning the project sustainability is high.

<Volume of irrigation water before and after the project (Beneficiary survey)>



▶ Key Point of Evaluation: Impact on poverty reduction (Exploring the banana market)

Under this project, the installation of facilities for efficient water usage enabled farmers to diversify their production. While the major crop in the target area was rice at the beginning of the project, the project also supported banana production, since bananas are relatively easy to cultivate and expected to enhance farmers' income. Further, the scope of the project also covered assistance in exploring the market route of bananas, such as holding the Walawe Food Exhibition in Colombo, developing a traditional local market (Pola) to link producers and buyers, and approaching a nationally known supermarket (Keells). These efforts enabled buyers to explore business opportunities in the project area and bananas produced in the project area are now transported to major cities in Sri Lanka via various market routes, which has led to a significant increase in farmers' income.

Each market route has its own characteristics. Pola is the most familiar market route with farmers due to low transportation cost, but the selling price is cheaper. Conversely, the collecting center of Keells demands high-quality products and farmers need to bear transportation cost, but Keells buys bananas at much higher prices. Under current circumstances, Pola remains to be the most popular route, but Keells is now planning to expand its activities in the Walawe area. From the perspective of agricultural development in the Walawe area, the awareness that "producing crops of high quality is profitable" or "devoting more time and effort can lead to the increase in income" could encourage new settlers or the poor in this area and is expected to help entrepreneurship and capacity development of farmers.

Conclusion, Lessons Learned and Recommendations

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

It is recommended that the executing agency continue to provide the new FO with periodical technical guidance and to monitor and support O&M of facilities, which the FO cannot afford to do. Other recommendations include continuing to conduct training with constant and careful support to the FO and applying the appropriate project management system, including information management, when a new project is implemented.

Since construction work was implemented in parallel with dialogue and coordination with farmers, some modifications in construction were required to reflect farmers' lifestyles during the implementation stage, resulting in a delay in project completion. Therefore, a process which reflects the needs of beneficiaries should be adopted at the planning stage to avoid such problems. Another lesson learned from this project is that it would be effective to install facilities designed to meet local needs and circumstances, such as a dual canal system and night storage tanks, to realize high effectiveness and secure sustainability.

Second Mekong International Bridge Construction Project

Asia

Thailand/Laos

Contributing to the promotion of bilateral trade and economic development through the construction of an international bridge across the border

External Evaluator: Masumi Shimamura, Mitsubishi UFJ Research and Consulting Co., Ltd.

Outline of the Project

- Loan amount/Disbursed amount: Thailand: 4,079 million yen/2,736 million yen, Laos: 4,011 million yen/3,977 million yen
- Loan agreement: For both countries: December 2001
- Terms and conditions: For both countries: Interest rate: 1.0%, Repayment period: 30 years (grace period: 10 years) [Consulting service: Interest rate: 0.75%, Repayment period: 40 years (grace period: 10 years)]
- Final disbursement date: April 2009
- Executing agency: (Thailand) Ministry of Transport, Department of Highways (DOH), (Laos) Ministry of Public Works and Transport (MPWT)

Project Objectives

Overall Goal: To contribute to the promotion of bilateral trade between Thailand and Laos as well as to encourage economic development along the area of the East-West Economic Corridor (EWEC)

Project Purpose: To connect the EWEC that runs through Vietnam, Laos, Thailand, and Myanmar

Output: To construct a bridge (Second Mekong International Bridge) with an overall length of 2,050 meters over the Mekong River at the border of Thailand and Laos

Project location and the East-West Economic Corridor (EWEC)
Source: UN website

Effects of Project Implementation (Effectiveness, Impact)

This project aimed to promote the expansion of distribution networks between Thailand and Laos as well as along the area of the EWEC by constructing a bridge at the border of Thailand and Laos.

With regards to the traffic volume of the Second Mekong International Bridge (SMIB), although a substantial increase of traffic volume was observed for cars, sluggish growth was seen for trucks in comparison with the expected traffic. Concretely, the actual daily average traffic volume of trucks (both sides) in the third year after the opening of the bridge (in 2009) remained at 100. On the other hand, the number of passengers crossing the border using the SMIB has sharply increased, and passenger volume in the fifth year after the opening of the bridge has increased almost threefold compared to that of the opening year. Impact on trade facilitation between Thailand and Laos can be observed. Border trade between Mukdahan (Thailand) and Savannakhet (Laos) before the opening of the SMIB (prior to 2005) was between 4 and 5 billion baht each year, of which 80 to 90% accounted for exports from Thailand to Laos. After the operation of the bridge in FY2008, the trade amount has risen sharply to 24 billion baht, and the proportion of exports from Laos to Thailand has also been increasing. Beneficiaries at the project site have pointed out in the interview survey that effects on facilitation of border trade, activation of tourism demand, enhancement of access to educational opportunities and healthcare services for residents in Savannakhet, and creation of new business and employment opportunities have been observed. Although traffic volume of trucks has been growing at a sluggish pace, the project is deemed to have yielded positive impacts on regional economies and societies. Thus, the effectiveness and impact of the project are fair.

Second Mekong International Bridge: SMIB (taken from Lao side)

Toll Gate

Relevance

The project was consistent both at the time of the project appraisal and the ex-post evaluation with the regional development policy of the Greater Mekong Subregion (GMS), the national development policies and development needs of Thailand and Laos. Furthermore, the project is consistent with Japan's ODA policy for Thailand and Laos. Therefore, the relevance of the project is high.

Efficiency

While the project cost was within the plan, the project period was exceeded; therefore, the efficiency of the project is fair. However, the delay was relevant considering that the project included the modification of the characteristics of the inspection roof (in Thailand) and additional outputs (provincial road improvement and bank protection on the Lao side).

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

<Actual traffic volume and traffic estimation for both sides in the third year after the opening of the bridge (in 2009)>

		Truck	Bus	Car	Other	Total
Actual traffic volume for both sides in 2009	Upper figures: Vehicles/year Lower figures: Vehicles/day	36,641 100	54,387 149	121,681 333	21,066 58	233,393 639
Traffic estimation for both sides in 2009 (at the time of the estimation study in 2007)	Vehicles/day	517	117	225		859

Note 1 Although a difference in the calendar year (Laos) and FY (Thailand) exists, a simple addition of actual traffic volume was made.
Note 2 "Other" indicates vehicles not subject to paying the toll fee. Breakdown of vehicle type is not available.
Note 3 The sum of actual traffic volume of trucks, buses and cars does not coincide with the total number.

● Sustainability

The responsibility for the operation and maintenance (O&M) of the bridge is physically divided in half: the mandate of Thailand is from the center of the bridge to the Mukdahan side, and the mandate of Laos is from the center of the bridge to the Savannakhet side. No particular issue has been observed for the O&M system, technology and finance, and the status of O&M is in good condition for both countries. Therefore, the sustainability of the project effects is high.

▶ Key Point of Evaluation: Institutional and Policy Issues to be Resolved to Further Increase Broad-Based Impact and Effectiveness of the Project

Analysis of the "broad-based impact" on large-scale infrastructure of the EWEC, where the project is located, was conducted. New business seems to have emerged through exploring new distribution routes from Thailand to Vietnam utilizing the EWEC after the opening of the SMIB. However, it is too early to mention the contribution to the change in the economic role-sharing among Mekong countries or economic-sharing among regions within a specific country since it is still about five years since the completion of the EWEC, except for a section in Myanmar, and the changes observed are not as salient as expected.

In order to further increase the broad-based impact and effectiveness of the project, it is vital to (1) shorten the lead time, (2) reduce transportation cost, and (3) improve the institutional environment for transportation in order to secure quality logistics. In this regard, in addition to improving physical infrastructure, it is urgently necessary to develop relevant laws and institutional arrangements relating to simplification of prior import-export procedures, to realize Single-Stop, Single-Inspection[*1] on cross-border procedures, to facilitate reciprocal exchange of traffic rights for commercial cross-border carriers and vehicles (resolving issues on reloading containers).

<Institutional and Policy Issues to be Resolved[*2]>

(1) Shortening the lead time	• Reducing time required for prior import-export procedures before shipping cargo • Reducing time required for crossing the border (reducing time required for customs, immigration and quarantine) • Reducing transit time through increasing average travel speed
(2) Reducing transportation cost	• Reducing cost through shortening tranportation time • Reducing time and cost through improving transshipment of containers
(3) Securing quality logistics	• Realizing safe transportation, day and night • Securing punctuality of transportation • Avoiding damage to cargo

*1 Import-export procedures on border crossing are conducted not in both countries but in one country, consolidating the custums inspections of both sides.
*2 Compiled based on the information from the Study conducted by the Ministry of Economy Trade and Industry (METI), and the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) in 2008 — Experimental Test Run by Overland Route in Mekong Region

● Conclusion, Lessons Learned and Recommendations

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

When developing transport infrastructure as an integral part of a broad-based regional road network with a view to eliminating physical bottlenecks, paying due attention not only to the road network directly connected by the bridge but also to other roads/transport networks is highly critical for integrated and consistent development for further realization of project effectiveness. Furthermore, giving careful consideration to institutional arrangements relating to planning and development of cross-border transport for relevant countries is important at the time of project formulation. Several bottlenecks in the streamlining of distribution networks have been pointed out relating to issues on mutual entry of traffic. Therefore, it is essential to overcome such institutional issues in order to realize expected project effectiveness. Since there are limitations on institutional and policy issues that cannot be resolved by one single country, it is important to make careful considerations and analysis when setting a baseline for forecasting traffic volume.

With regard to O&M of the project, it is recommended that outside resources including specialized consultants be utilized to sort out envisioned technical problems as well as to strengthen technical capacity of O&M staff, in preparation for expected large-scale repair works in future for planning and bidding.

Xinjiang Water-saving Irrigation Project

Asia

China

Contributing to efficient water resource management through the construction of water-saving irrigation facilities and technology dissemination

External Evaluator: Makiko Soma, Global Link Management, Inc.

Outline of the Project

- Loan amount/Disbursed amount: 14,400 million yen/13,347 million yen
- Loan agreement: March 30, 2001
- Terms and conditions: Interest rate: 1.3 %, Repayment period: 30 years (grace period: 10 years)
- Final disbursement date: March 8, 2010
- Executing agency: Xinjiang Uygur Autonomous Region

Project Objectives

Overall Goal: To contribute to the mitigation of desertification and improvement of living standards of farmers within the 9 areas of Xinjiang Uygur Autonomous Region.

Project Purpose: To increase the unit yields of agricultural production as well as to reduce water intake from the riverine system in the project target areas.

Output: Establishment of canal lining, construction of water-saving irrigation facilities and construction/ rehabilitation of wells at the project site.

Effects of Project Implementation (Effectiveness, Impact)

Xinjiang Uygur Autonomous Region (hereinafter referred to as Xinjiang) is one of the areas with the severest precipitation scarcity throughout China. Annual precipitation is around 150 mm and the area has a large rural population. For Xinjiang, effective utilization of water and improvement in agricultural productivity and profitability were important issues for the improvement of living standards.

Through the establishment of water-saving irrigation facilities, the project almost achieved the targeted figure of water-saving rate. The volume of irrigation water demand decreased from 18,040 million m^3 to 17,180 million m^3 (-4.8%).

Compared to the baseline, unit yields of major crops in the project sites increased as much as 1.4 –1.8 times at the time of ex-ante evaluation. Owing to the upgrading of irrigation facilities as well as various technical training programs on water management, the stability and timeliness of water supply have been improved. This project has greatly contributed to the increase of unit yields.

Unit revenues of major crops (wheat, corn and fruit) in the project sites have increased, except for cotton. Reasons behind the revenue increase are complex; they include the reduction of production cost, increase in the unit yields and market prices of the major crops. This project has contributed to a reduction in production cost in several ways. Firstly, farmers were able to decrease the total consumption of irrigation water with the introduced water-saving irrigation facilities/technology. Secondly, they were able to reduce workload by the automation of watering. Thirdly, they reduced the amount of pesticides and fertilizer used through efficient application using drip pipes.

Effective water resource management is an important preventive-/counter-measure against desertification. In this sense, the establishment of water-saving irrigation facilities through this project contributed to the prevention of desertification to some extent. For the above reasons, the effectiveness and impact of the project are high.

Main Canal (Turpan)

Pumping machine and fertilizer mixing machine (Tacheng)

Cotton farm with drip irrigation (Changji)

Relevance

Pursuant to the "National Construction Plan of Ecological Environment" (January, 1999) the Chinese government put emphasis on environmental conservation in districts with ethnic minorities. Through "Western Development" (a 50 year plan from 2001 onwards), the government is implementing development in the Western area, including the project sites, to reduce poverty. Japan's ODA policy for China laid out water projects, environmentally sustainable agriculture and poverty alleviation through improvement in agricultural productivity as priority areas. Therefore, the relevance of the project is high.

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

<Irrigation water demand and amount of water-saving>

(Unit: 100 million m³)

Indicators	Before the project	After the project	Amount of water-saving	
Irrigation water demand	180.4	171.8	8.6 (Water-saving rate 4.8%)	
			Breakdown of water-saving	
			Canal lining	4.3
			Sprinkler	1.5
			Drip	2.3
			Pipe	0.5

Source: JICA, Executing agency

<Unit yield by major crops>

(Unit: kg/ha)

	Before the project (2000)	After the project (2011)	Rate of increase
Wheat	4,978	8,774	176%
Corn	7,781	10,828	139%
Cotton	3,403	4,751	140%
Fruit	39,625	56,643	143%

Source: Executing agency

● Efficiency

Project cost was within the planned budget. Along with some changes in the project output at the target sites, project budget was reduced. Changes in the project output included scale reduction of branch canal construction and sprinkler irrigation as well as the cancellation of new well development. Such changes were made after thorough reviews of the local needs during project implementation. The project period was longer than planned due to the influence of SARS (Severe Acute Respiratory Syndrome) and due to failure in the bidding. For the above reasons, the efficiency of the project is fair.

● Sustainability

Operation and maintenance (O&M) of the irrigation facilities including main canals, branch canals, and irrigation equipment installed in the farms are carried out by the water resource department of each city/prefecture, water users' associations/village committees and individual farmers, respectively. In each of the counties/cities, there are sufficient numbers of engineers to ensure proper maintenance and there are various manuals available. O&M expenses are sufficiently covered by the water fees (with an average collection rate of around 99%) from farmers and with financial resources of the local and Xinjiang governments. Therefore, the sustainability of the project is high.

▶ Key Point of Evaluation: Effective training for technology transfer contributed to water-saving and measures against desertification

This project aimed to reduce irrigation water demand through the construction of water-saving irrigation facilities and through technical training for farmers on the O&M of such facilities. Some irrigation facilities require advanced O&M techniques, and it was difficult to gain the full understanding of the farmers when introducing such facilities. The project took the strategy of selecting well-motivated farmers at the initial stage to intensively strengthen their capacity to create good models. The success of such farmers caught the attention of the neighboring farmers. With these sucessful results, the willingness to participate spread to other farmers and resulted in the active participation of many farmers in the project, hence technological dissemination succeeded.

By switching to water-saving irrigation, it created a virtuous circle for farmers, with less water demand and reduced water fees. At the time of ex-ante evaluation, there had been a concern that collecting water fees from the poor farmers would be difficult in some areas of southern Xinjiang. It turned out, however, that the water fee collection rates in the areas were close to 100% at the time of the ex-post evaluation. The farmers became able to save water fee expenditure by reducing their total consumption of irrigation water with the introduction of water-saving irrigation facilities, while a large quantity of irrigation water had been used for inefficient surface irrigation, which kept the water consumption and associated water fees very high before this project.

Efficient water resource management by improving water-saving irrigation facilities is one of the important prevention-/counter-measures against desertification. Thus, this project has also indirectly contributed to the prevention of desertification.

● Conclusion, Lessons Learned and Recommendations

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

There were two major lessons learned through this project. One lesson is found in the strategy of disseminating the technology of water-saving irrigation facilities. It was of concern that the technology would not be accepted and established among the farmers because many of them thought such irrigation facilities would be too difficult for them to operate and maintain. To convince the farmers, the project selected well-motivated farmers at the initial stage and intensively strengthened their capacity. When such farmers' success caught the attention of neighboring farmers, the willingness to adopting the irrigation facilities spread to other farmers and resulted in their active participation in the project. In this kind of project where the beneficiaries are required to acquire relatively high levels of technology or techniques, awareness building is obviously important. Moreover, the presence of farmers acting as "role models" is very important and effective to stimulate others to follow, as observed in this project.

Another lesson is relating to the cooperation of different agencies. To disseminate and to promote water-saving irrigation technology, the cooperation of the Water Resources Bureau (WRB) and the Agriculture Bureau, Xinjiang, is important. In this project, the expected effects, such as the yield increase in major crops, were achieved; thus, the absence of the cooperation of the WRB and Agricultural Bureau was not particularly brought into question. However, in order to avoid overlaps in training plans on water management and cultivation technology, it would have been desirable for both agencies to cooperate in planning and implementing their training for a more synergistic effect.

The Project for the Provision of Portable Steel Bridges on Upazila and Union Roads

Asia
Bangladesh

Portable steel bridges constructed in rural areas have contributed to the creation of job opportunities and the vitalization of the local economy

External Evaluator: Atsuko Kawauchi, T & Associates, Inc.

Outline of the Project

- Grant limit/Actual grant amount:
  (I) 679 million yen/419.35 million yen,
  (II) 700 million yen/561.70 million yen,
  (III) 611 million yen/498.03 million yen
- Exchange of notes date:
  (I) November 2005
  (II) July 2006
  (III) August 2007
- Project Completion date: March 2009
- Implementing agency:
  Local Government Engineering Department (LGED) in the Ministry of Local Government, Rural Department and Cooperatives

Project Objectives

Overall Goal: The improvement of the living standard of local residents, the vitalization of the social economy, poverty reduction, the creation of employment opportunities, and the promotion of infrastructure development in 17 districts from the central, southeast, northwest and southwest regions in Bangladesh.

Project Purpose: Securing year-round traffic and improvement of the mobility of people and goods in the target area.

Output: The procurement of a superstructure of bridges and the establishment of portable steel bridges for higher priority bridges in the target area.

Effects of Project Implementation (Effectiveness, Impact)

In Bangladesh, which is situated on an alluvial delta, road transportation has been frequently disturbed by river flood water and gaps in road transportation have become one of the factors that hamper social and economic activities. To date, 92 bridges that had been constructed by this project have enabled people to cross rivers throughout the year. This has resulted in a great reduction in traveling times, an increase in the means of local transportation and economic development in those areas as roads nearby were also improved. The results of the beneficiary survey for local people show that the average time needed to go to market was reduced from 20.9 minutes to 5.2 minutes. As a result, the frequency of visiting the market increased from 2.8 times per week before the bridge construction to now 8.2 times per week on average. The average frequency of hospital visits has increased from 8.1 to 19.1 times per year. Also, more than 80% of respondents answered that job opportunities have been increased. Bridge construction contributes to the stimulation of economic activities in target areas and the beneficiary survey reported that 18 kinds of new shops and businesses, such as grocery stores, tea-houses, real estate offices, pharmacies, dairy products sellers and poultry farms were initiated in total.

Regarding the impact on women, some effects of the project was confirmed. Generally speaking, women in the target area tend to hesitate to use water taxis or bicycles which are costly, and the area of their activities had been limited compared to men. However, after the bridge construction, women could more easily move around on foot, by car and rickshaws, which resulted in expanding the area of their activities. For instance, it is reported that, in Pabna District, the ratio of pregnant women who go to hospitals has increased from 10% to 70%.

The observations above indicate that this project has largely achieved its objectives; therefore, its effectiveness and impact are high.

A bridge constructed in Sirajganj District

Women using the bridge by rickshaw (Manikganj District)

Relevance

In Bangladesh, where a large percentage of the population lives in rural areas, the expansion of the road network and bridge development are vital for economic development and poverty reduction. Bangladesh has continuously engaged in road development projects in rural areas in its development strategy. Hence, the project is consistent with Bangladesh's development strategies and development needs, as well as Japanese ODA policies. Therefore, the relevance of this project is high.

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

<Purpose of bridge use and frequency of visit>

Purposes of use	Before bridge construction		After bridge construction	
	Average visiting frequency (times)	Average transit time (minutes)	Average visiting frequency (times)	Average transit time (minutes)
Market (per week)	2.8	20.9	8.2	5.2
Hospital (per year)	8.1	28.8	19.1	11.6
Houses of relatives and friends (per year)	12.4	26.7	24.0	9.8
School (days)	0.92	19.3	0.95	5.5

Source: beneficiary survey

● Efficiency

Compared to the Basic Design, the number of planned bridges (outputs) was increased from 92 to 96 and some construction sites were also changed. As a result, while both the project cost and period on the Japanese side were within the plan, bridge construction work conducted by the Bangladeshi side was delayed at certain sites and four bridges remain incomplete at the time of ex-post evaluation. Therefore, the efficiency of this project is fair.

● Sustainability

Notable concerns about the structure and budget of the implementing agency were not identified and bridge sites requiring large-scale repairs have not been found at this point. However, it is observed that the implementing agency has not identified definite suppliers of spare parts for future maintenance, and guidelines for maintenance were also not prepared. Therefore, the sustainability of the project effects is fair.

▶ Key Point of Evaluation: Contribution to the creation of employment opportunities and the vitalization of the local economy

The overall goal of this project is quite wide-ranging, including the vitalization of the social economy in the target area, poverty reduction, and the creation of employment opportunities. Also, the construction sites of those 92 bridges (plan) spread across rural areas. Therefore, sampling of the beneficiary survey was carefully conducted to avoid bias as much as possible. First, five districts were chosen from districts both close to and far from Dhaka. Then all the bridges in those districts were categorized according to bridge length and construction period, and samples were selected randomly from each category. In the actual survey, residents from the neighboring communities were randomly selected, and were directly visited and interviewed by evaluators. To supplement this questionnaire survey, qualitative data was also collected through group discussion sessions. This enabled the evaluation study to assess the effectiveness and impact, including unforeseen impact, in a more detailed manner.

As a result, it was revealed that the project contributed not only to the mobility of people but also created various effects such as the generation of employment opportunities and the vitalization of the local economy. In particular, farmers received the most benefit from the construction as they are now able to deliver harvested crops by car or truck to markets. At the same time, wholesalers can also come to their villages to buy directly from them, farmers' incomes have increased, and now they can more easily obtain agricultural chemicals, fertilizers and seeds. Also the project led to the expansion of the mobility of women. Some unforeseen effects were also found, such as an increase in the frequency of hospital visits by pregnant women, as previously described, and the prevention of drop-out of female students.

● Conclusion, Lessons Learned and Recommendations

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

For LGED, it is recommended that the construction work on the remaining bridges should be rapidly completed. Under the situation that the LGED can obtain neither spray paint from Japan, nor steel parts bearing the adequate strength, it is observed that the LGED has procured necessary parts and repaired bridges on an ad-hoc basis. Maintenance methods and guidelines for portable steel bridges have not been developed either. These observations reveal that systematic monitoring and maintenance activities should be conducted with effective procurement and appropriate maintenance guidelines. It is important for JICA to enhance the LGED to appropriately and systematically conduct maintenance activities for the bridges including those constructed by the previous Japanese Grant Aid Projects.

In this project, from the planning period of basic design to the commencement of construction, the soils of certain project sites have degraded, or the demands of residents have changed. These situations forced the implementing agency to change construction sites. Considering Bangladesh's situation: that rivers flood every year, which causes soil erosion and topographical changes, as well as social needs tending to change drastically, implementing agencies might need to cancel construction work or modify initial plans after launching the work, particularly in case of small-scale bridge construction works in rural areas. In addition, a further lesson learned was that the Japan side should strengthen its monitoring and follow-ups even after the completion of activities, if planned projects require large contributions from the recipient countries, and if their contribution would influence the success of the projects.

Batangas Port Development Project (II)

Asia

The Philippines

Addressing the alleviation of traffic congestion in Metro Manila by improving logistical efficiency

External Evaluator: Ryujiro Sasao, IC Net Limited

Outline of the Project

- Loan amount/Disbursed amount
  14,555 million yen/14,300 million yen
- Loan agreement: September 1998
- Terms and conditions: Interest rate: 2.2 %, Repayment period: 30 years (grace period: 10 years)
  [Consulting service Interest rate: 0.75 %, Repayment period: 40 years (grace period: 10 years)]
- Final disbursement date: January 2008
- Executing agency: Philippine Ports Authority (PPA)

Project Objectives

Overall Goal: To contribute to the alleviation of traffic congestion, that stems from overconcentration in Metro Manila, and to the balanced development of the Calabarzon region.

Project Purpose: To enhance logistical efficiency in the target area.

Output: The Batangas Port in the Calabarzon region is improved as an international trade port capable of handling container cargo.

● Effects of Project Implementation (Effectiveness, Impact)

This project aimed to improve logistical efficiency by constructing a container terminal at Batangas Port. However, the operating ratio of the container terminal constructed by this project remains low, falling far short of the target volume of container cargo to be handled. For this reason, the project has shown only an extremely limited effect on local employment and the economic growth of local businesses; therefore its effectiveness and impact are low.

The following two points are the most direct causes of the low degree of realization of the project purpose:

- The total amount of container cargo handled on Luzon has plateaued.
- An expected shift in the handling of container cargo from the Port of Manila to Batangas Port has not occurred.

The first point seems to be caused by the increased number of IT companies in the Calabarzon region, which has increased the need for transporting products such as semiconductor products and electronic components. Such products are better suited for air transport than container transport.

The second point appears to be primarily the result of three factors. The first was the delayed start of full-scale operations at Batangas Port resulting from delays in civil works and port operator selection and other matters. The second was the insufficient overall strength of Batangas Port in terms of port facilities and quality of service as compared to the Port of Manila. The third was that companies operating in industrial parks, transport companies, and shipping companies showed lukewarm interest toward using Batangas Port. Furthermore, the increased cargo handling capacity of the Port of Manila prevented the shift in the handling of container cargo from the Port of Manila to Batangas Port.

Container berth

Gantry crane

● Relevance

The Philippine government planned that maritime sector development would improve the efficiency and safety of transport services. There was also strong demand for the establishment of a port that could substitute or complement the Port of Manila to correct the overconcentration in Metro Manila.

In light of the above, this project has been relevant to the Philippines' development plan and development needs as well as Japan's ODA policy. Therefore, its relevance is high.

● Efficiency

The scope of civil works has not changed much from the original one. While there was no change in the content, the amount of consulting services required increased due to the extension of the project period.

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

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

<Port cargo of Batangas Port (2010)>

(Unit: 1,000 tons. The target values in parenthesis)

Type of cargo	Domestic			Foreign		
	Inbound	Outbound	Total	Imports	Exports	Total
Container	21.2 (1,530)	37.8 (2,004)	59.0 (3,534)	8.2 (3,230)	0.5 (2,990)	8.7 (6,220)
Other	191.6 (1,390)	148.9 (710)	340.5 (2,100)	456.7 (890)	0.8 (10)	457.5 (900)
Total	212.8 (2,920)	186.7 (2,714)	399.5 (5,634)	464.9 (4,120)	1.3 (3,000)	466.2 (7,120)

Sources: JICA documents, executing agency

● Sustainability

All the expected equipment was installed and has been functional without a problem. There are no specific problems with facility management and maintenance, or with the organization and technical aspects. However, there is uncertainty regarding financial aspects in the long run. Therefore, the sustainability of the effects of the project is fair.

▶ Key Point of Evaluation: Review of the Results of the Joint Evaluation

JICA has supported the Philippines National Economic and Development Authority (NEDA) for the improvement of institutional evaluation capacity since 2006, and 2012 is the final year of their cooperation. Under this cooperation, JICA has conducted 13 joint evaluations (including this project) with NEDA and has provided NEDA staff with various kinds of training programs to improve the evaluation capacity of NEDA. The results of this cooperation are as follows.

Surveys on the evaluation capacity of NEDA staff reveal an improvement in the overall capacity of NEDA staff in areas such as understanding of evaluation methods and ability to analyze data and extract lessons learned and recommendations. Since almost all NEDA staff in charge of evaluations took the training program, it may be possible to conclude this cooperation contributed to the capacity development of staff. Questionnaires to NEDA staff who participated in the joint evaluation also show high satisfaction among NEDA staff. In addition, NEDA staff revised training materials prepared in assistance with Japanese consultants to reflect the local context and conducted training by themselves without any concerns using the revised materials.

From now on, it is recommended that NEDA examine how to place evaluation activities in its mandate, since it might not be suitable for NEDA to implement ex-post evaluations of all individual projects. For example, if NEDA were expected to conduct sector-level analysis based on the individual evaluations conducted by others, NEDA would be required to develop the skills needed to conduct such broader analyses rather than sophisticated skills for the evaluation of individual projects.

Considering this point, it is expected that NEDA will continue to develop its evaluation capacity and utilize it for the more effective and efficient implementation of its activities.

A meeting for Joint Evaluation

● Conclusion, Lessons Learned and Recommendations

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

However, companies in the industrial park at Calabarzon have started using the container terminal in Batangas Port, and now is an important turning point to judge whether Batangas Port can grow in the future. Under such circumstances, the reduction of the port charges against vessels, which has been implemented by PPA since October 2012, is an effective measure. PPA is recommended to continue implementing this kind of promotional measure in the future and to reconsider carefully its policy on the expansion of Manila Port.

For similar projects in the future, if new ports do not possess sufficient strength, it is necessary that the related government organizations make an effort to provide measures to enhance the utilization, including preferential treatment given to the new ports through policies, such as setting upper cargo volumes that competitor ports handle or applying a lower tariff on usage by the new ports. Another lesson learned was the importance of examining as much as possible the trends in the private sector (i.e. shipping companies) and the mid- and long-term outlook of the industrial structure for the appropriate planning of future cargo volume.

The Enhancement of Tax Administration Project in Mongolia

Asia
Mongolia

Greatly contributing to the stabilization of tax revenues through continuous cooperation by Japan in the field of tax administration

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

Outline of the Project

- Total cost (Japanese side): 210 million yen
- Period of cooperation: January 2006 to July 2008
- Partner country's implementing organization: Mongolian Tax Authority (MTA)
- The number of experts dispatched: 8 for short-term
- The number of technical training participants: 35 trainees received in Japan
- Main equipment provided: Equipment for tax training and research center, two provincial training centers, a taxpayer service center and a call center

Project Objectives

Overall Goal

1) To realize proper and fair tax administration.
2) To improve taxpayer compliance (spontaneous and correct declaration) and increase the number of tax filers.

Project Purpose

1) To enhance the human resource development system and training system of MTA by implementing the Short Term Action Plan, and to improve the job performance of the MTA staff.
2) To improve MTA's operations in tax collection (including taxation and tax audit).
3) To improve MTA's taxpayer services.

Output

1) Human resource development and training: Support for the training of MTA staff including the capacity development of MTA instructors and the improvement of training facilities and equipment.
2) Tax collection (including taxation and tax audit): Improvement of taxpayer management, capacity improvement of tax auditors in their auditing skills for fair, efficient and effective tax collection, improvement of job performance through the integration of information systems with other related organizations.
3) Taxpayer services: Improvement of the service of MTA staff, establishment of additional taxpayer service centers, improvement of contents of public relations activities for taxpayers.

Effects of Project Implementation (Effectiveness, Impact)

This project was implemented as a summary of Japan's series of cooperations on tax administration in Mongolia since 1998 in order to further strengthen three components, namely, human resource development and training, tax collection and taxpayer services.

With regard to human resource development and training, MTA introduced distance learning and increased the number of training centers from two to four through the provision of equipment, contributing to an increase in learning opportunities for MTA staff, particularly in remote areas. With regard to tax collection, comparing the incidence of use of TPI * by tax auditors at project completion and project commencement, data on customs increased by 340% due to the improvement of TPI and the development of related manuals by the project. As a result of efforts in the efficient operation of auditing including the efficient use of TPI, the amount of tax penalties per tax audit increased. Regarding taxpayer services, the project made various efforts for a model service center to improve services to visitors, such as installing call notification devices and setting up a reading space to improve the long waiting time. Through the MTA website, taxpayers became able to file tax returns, and information on the website was also enriched.

After project completion, MTA has continuously made efforts to further improve each component. Consequently, the number of registered taxpayers has steadily increased and the rate of tax payment by the due date reached 99% in 2011. The number of taxpayer service centers increased from 25 at the time of project completion to 31 in 2009. A beneficiary survey conducted at the four taxpayer service centers during the ex-post evaluation shows that respondents were highly satisfied with the services. This project has largely achieved its objectives; therefore, its effectiveness and impact are high.

Call center in the Mongolian Tax Authority (MTA)

Tax education for taxpayers by Darkhan-Uul tax office

Relevance

The national development plan of Mongolia has continuously aimed to increase the national budget by enhancing the tax system and tax administration at the time of both the ex-ante evaluation and project completion. Japan's ODA policy, the Country Assistance Program for Mongolia (2004), identifies the support for institution building and human resource development for promoting a market economy as one of its priority areas. In light of the above, the relevance of the project is high.

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

* TPI is a database system of matching taxpayer information held by the MTA and other agencies' information. Tax auditors should refer to the TPI system based on the manual developed by the project.

<Registered taxpayers>

Category	2005	2006	2007	2008	2009	2010	2011
Corporations/organizations (Corporate taxpayers)	30,401	34,500	40,909	48,592	52,846	62,232	73,287
Individuals	562,780	631,232	928,910	996,528	1,078,732	1,189,308	1,553,697

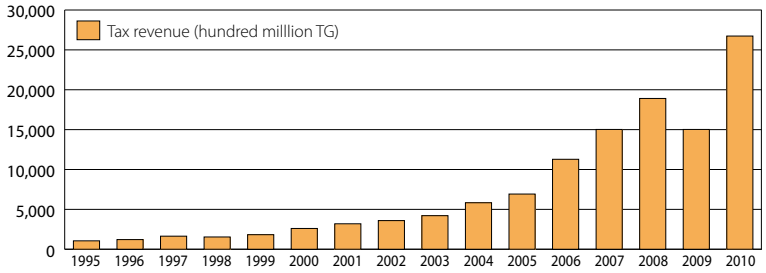
Source: MTA

<Improvement of the service level of service centers> (Have you noticed that services have improved in the last 2–3 years?)

Answers	Count	Ratio (%)
Improved greatly	99	82.5
Improved to some extent	21	17.5
Yes and no	0	0
Not improved much/at all	0	0
Total	120	100

Source: Beneficiary survey

<Trend in tax revenue>



Source: The National Statistical Office of Mongolia

● Efficiency

The input was appropriate for producing output and achieving the project objectives, and both the project cost and period of cooperation were within the plan, therefore the efficiency of the project is high. In particular, products such as training materials, manuals and casebooks for effective tax audit and collection are highly appreciated by other donors and private companies. This appreciation shows that the input of experienced experts was effective in producing output at a higher level.

● Sustainability

MTA has been utilizing the knowledge and techniques transferred by the project in each component. No major problems have been observed in the policy background or the structural, technical and financial aspects of the implementing agency, therefore, sustainability of the effects of this project is high.

▶ Key Point of Evaluation: Cooperation to complement the development of Mongolia

In 1998, Japan began providing assistance on tax administration which continued for 10 years in five phases. The series of the cooperation have greatly enhanced the functions of tax administration in Mongolia. Along with recent remarkable economic growth, tax revenue has also significantly increased. Moreover, fiscal revenue and expenditure passed into the black in 2005. Through Japan's series of cooperation, various lessons can be gained: the importance of a programmed approach to aiming at institutionalization, the importance of selection and concentration, and setting conditions for institutional establishment in a firm manner.

Although it takes time to enhance capabilities in tax administration, in order to establish a strong institution, it is important to take a strategic and flexible approach in the medium to long term from the stage of project formulation.

In the 10 years of cooperation activities, the first two phases focused on institutional arrangements to create a base to strengthen the functions of tax collection. Then in the next two phases, the strengthening of priority issues such as the establishment of an information management system and a tax education system were focused on. This project, as phase five, has achieved outcomes at high levels as a result of effective selection and concentration.

In a medium to long term cooperation which includes legal reforms and institutional establishment, strong ownership by the counterpart is highly important. Mongolia was supported by major donors in the promotion of a market economy since 1990. Under such circumstances, higher importance was attached to the enhancement of tax administration. By showing an overall picture of tax-related issues and coping with relatively urgent priority issues step by step and solving them, Japan's assistance raised ownership on the Mongolian side. Such an approach and, as a result, the realization of a solution, enabled the parties concerned in Mongolia, even in staff level, to gain a higher level of consciousness and confidence.

● Conclusion, Lessons Learned and Recommendations

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

The following lessons learned are gained through this evaluation. In this project, the Japanese experts respected the opinions and initiatives of their Mongolian counterparts within their short dispatch period in an efficient manner through local coordinators. This approach seemed to promote sustainable technical transfer to MTA. For instance, Japanese experts left assignments for their counterparts before leaving Mongolia, and they checked the results of them during their next dispatch. When the period of stay of the experts is relatively short, it is important to secure an effective coordinator and to devise ways to facilitate joint work between the experts and their counterparts to ensure a high-level of project effectiveness and sustainability. One recommendation to the implementing agency is that, under the current situation in which the number of tax inspectors will not increase dramatically, it is necessary to strengthen work efficiency further by devising staff allocation and continuing to improve the tax audit process.

The Project for Improvement of Honiara Power Supply

Oceania

Solomon Islands

Contributing to the stabilization of the power supply in Honiara city

External Evaluator: Hisae Takahashi, Ernst & Young Sustainability Co., Ltd.

Outline of the Project

- Grant limit/Actual grant amount: 1,476 million yen/1,429 million yen
- Exchange of notes date: (I) June 2005, (II) June 2006
- Project completion date: (I) February 2007, (II) February 2008
- Implementing agency: Solomon Islands Electricity Authority (SIEA)

Project Objectives

Overall Goal: To maintain stable socioeconomic activities and public service operations in Honiara city.

Project Purpose: To establish a stable power supply system in Honiara city.

Output: To install additional power generating facilities and transmission and distribution systems.

Effects of Project Implementation (Effectiveness, Impact)

The project was implemented through the installation of additional diesel generation facilities, the construction of substations, the expansion of the transmission and distribution system, and the procurement of the related equipment, in order to ensure a stable power supply in Honiara city. As a result, the available power capacity in Honiara city, which was 10.8 megawatts (MW) prior to the project, increased to 14.6 MW. The ex-post evaluation found that voltage drops for end users were also kept below 10% compared to the original figure of more than 20%. However, there were problems in realizing some of the effects of the project, such as the failure to reach the planned reduction in the number of blackouts, due to the deterioration of pre-existing generators and the delay to install new facilities due to budget shortfalls.

Furthermore, the current urgent reserve capacity remains tight, at almost the same level as that of the planning stage. However, it would have been impossible to maintain the balance of supply and demand of power, and power cuts over a large area of Honiara on a daily basis would have been inevitable without the generating unit installed by the project. In addition, the beneficiaries recognized the impact of the project in the form of revitalized economic activities and stabilized public service operation, meaning the project was considered to contribute to a stable power supply in Honiara to a certain extent. This project has somewhat achieved its objectives, therefore the effectiveness and impact are fair.

Relevance

The project was consistent with the Solomon Islands' development needs of improving the tight power supply caused by the deterioration of generators, and the Solomon Islands' policy on the development of infrastructure which improves living standards. The project is also consistent with Japan's policy for the Solomon Islands, which states that targeting the improvement of infrastructure is essential for economic reconstruction. Therefore, the relevance of the project is high.

Efficiency

The project cost was within budget (97% of the original planned budget). However, the project period was one month longer than planned (103% of the original planned period), but it did not exceed the contract period. Accordingly, the efficiency of the project is fair.

Sustainability

No major problems have been observed in terms of institutional aspects and the technical capacity of SIEA for the daily operation and maintenance of facilities. However, there are some concerns in terms of financial status and the supply of spare parts. Therefore, the sustainability of the project is fair.

Installed Diesel Engine Generator (Lungga Power Station)

Exhaust Tower (Lungga Power Station)

Transformer in Ranadi S/S (Ranadi Substation)

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

<Balance of supply and demand of power in Honiara city>

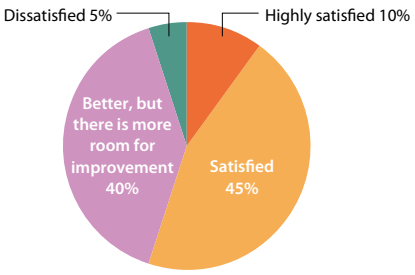
(Unit : MW)

Item	Pre-project	Post-project				
	2004	2008	2009	2010	2011	2012*1
Peak demand	9.9	12.6	12.8	13.8	13.9	14.0
Available capacity (AC)	10.8	16.6	15.0	15.3	14.6	17.5
Honiara power station	0	1.9	0.6	0.6	0.6	0.6
Lungga power station	10.8	14.7	14.4	14.7	14.0	16.9
Power balance	0.9	4.0	2.2	1.5	0.7	3.5
AC of largest unit	3.9	4.1	3.8	3.8	3.8	3.8
Stable capacity*2	6.9	12.5	11.2	11.5	10.8	13.7
Urgent reserve capacity*3	-3.0	-0.1	-1.6	-2.3	-3.1	-0.3

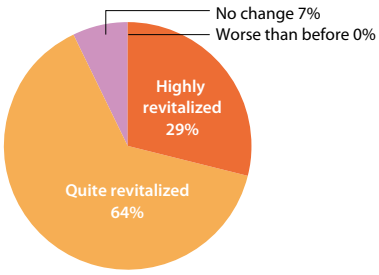
*1 Data for 2012 is predicted data.
*2 Stable capacity=AC – AC of largest unit
*3 Urgent reserve capacity= AC – Peak demand – AC of largest unit
Source: Documents provided by JICA and SIEA

<Results of beneficiary survey > (Comparing pre- and post-project)

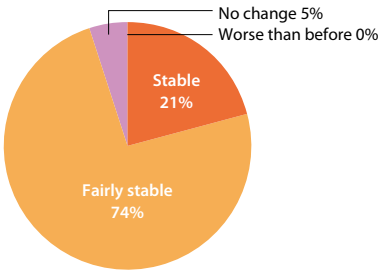
Satisfaction with power supply



Revitalization of economic activity



Stability of public and welfare services



▶ Key Point of Evaluation:
Assessment of quantitative and qualitative effectiveness and impact through a survey of end-users

This project was expected to help revitalize economic activities and facilitate the stable operation of public and welfare services in Honiara city via a stable power supply, by installing power generation, distribution and transmission facilities. Consequently, increased power supply and a stable power voltage were confirmed. On the other hand, all planned targets, such as decreasing the frequency of power outages and improving the urgent reserve capacity, could not be achieved through this project alone, due to external factors including the deterioration of other generators. However, without the project, it would not have been possible to even maintain the balance of supply and demand of power, and power cuts over a large area of Honiara on a daily basis would have been inevitable. The scope of this evaluation involved conducting interviews with a wide range of users (e.g. hotels, hospitals, government authorities, universities, factories and individuals, etc.) to determine the impact other than that which was planned, to reinforce the evaluation in assessing the effectiveness and impact of the project. The results showed that 40% of respondents felt more could be done, despite the situation having improved while 55% were satisfied with the current power supply situation. Furthermore, it was observed that, while electricity usage had increased, the usage hours of self-powered generators and fuel consumption had decreased compared to prior to the project. As mentioned above, the power balance in Honiara city was somewhat improved compared to the pre-project situation.

● Conclusion, Lessons Learned and Recommendations

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

As a major recommendation, further efforts should be made to improve SIEA's financial status to enable it to install a new generator unit to cope with increased electricity demand. Secondly, the steady implementation of the plan to increase the available capacity (installation of a new generator unit, project for hydropower development) should be secured. Finally, it is suggested that awareness-raising activities be conducted to encourage power users to make efficient use of electricity.

Under the current circumstances, the high cost of spare parts and service engineering to date has burdened the executing agency and become a serious issue hindering the installation of new generating facilities. Accordingly, from the perspective of sustainability, a thorough review of appropriate cost for maintenance, as well as the efficient sharing of information with the executing agency, would be important in similar projects in the future.

Project for Conservation of the Galapagos Marine Reserve

Latin America
Ecuador

Contributing to marine environmental conservation through a wide range of activities

External Evaluator: Wataru Yamamoto, Global Group 21

Outline of the Project

- Total cost (Japanese side): 682 million yen
- Period of cooperation: January 2004 to January 2009
- Partner Country's Implementing organization: Dirección del Parque Nacional Galápagos (DPNG), Ministry of the Environment
- The number of experts dispatched: 7 for long-term, 15 for short-term
- The number of technical training participants: 10 personnel
- Main equipment provided: Marine surveying, water quality analysis, communication equipment, a vehicle, etc.

Project Objectives

Overall Goal: To promote the conservation and sustainable management of the Galapagos Marine Reserve (GMR) through the participation of key actors *1.

Project Purpose: To strengthen the Participatory Management System *2 of the GMR.

Output:
1) To strengthen information flow on marine reserve management among fishing communities.
2) To promote environmental understanding among local residents.
3) To increase knowledge of marine life and the ocean environment.
4) To establish a water quality monitoring system in Santa Cruz.
5) To support sustainable resource management for artisanal fisheries.

Effects of Project Implementation (Effectiveness, Impact) *3

In order to secure sustainable management of marine resources, it was necessary to improve communication between DPNG and fishermen, to develop alternative sources of income for fishermen and to raise awareness of environmental conservation from the long-term perspective through environmental education for local residents.

With the implementation of the project, information on the natural resources of the GMR was disseminated to local fishermen and, as a result, the level of knowledge of the GMR among local fishermen increased. Knowledge and awareness of the GMR among local residents also improved through events held at the communication center constructed as part of the project and environmental education courses held for secondary school students. Marine monitoring of spiny lobster larvae and other species increased knowledge of marine life and thus the project has improved the research capability of DPNG. Water quality monitoring at Santa Cruz island initiated by the project has been expanded to two other islands and is paid for through the DPNG budget, and the data produced by the monitoring has been utilized. While the lifting of the ban on sea cucumber fishing was realized as a result of participatory monitoring, the support to develop alternative income sources by introducing fishing experience tours and domestic cottage industries run by women's groups under the project has made a limited contribution to the development of alternative means of livelihood for fishermen because the scale of the activities were small. Various activities have continued, except for radio and television broadcasting, environmental education and support for alternative income generating activities. As for the overall goal of the project, the emergence of new environmental conservation activities by key actors has been observed. Therefore, the effectiveness and impact of the project are high.

Marine monitoring by volunteers

Inside the exhibition hall of the Communication Center for Environmental Education

Relevance

Although the project was highly relevant to the development plan and developmental needs of Ecuador as well as Japan's ODA policy, the project design was questionable due to the fact that the links between each individual output were weak and most of the outputs were to provide technical transfer to DPNG while the project purpose, the strengthening of the Participatory Management System, could be achieved by other members, suggesting inconsistencies in the project design. Consequently, the relevance of the project is fair.

Spiny lobster larvae specimen room

*1 Key actors: organizations or individuals which have a close relationship with the project, including schools, fishing cooperatives, municipal offices and tourism-related bodies, etc.

*2 The Participatory Management System indicates the Participative Management Council (Junta de Manejo Participativo: JMP) which consists of DPNG, the Galapagos Artisanal Fishing Community, Galapagos Chamber of Tourism, Charles Darwin Research Station of the Charles Darwin Foundation (CDF), and the Naturalist Guides Association.

*3 The project purpose "To strengthen the Participatory Management System of the GMR" was not achieved as a result of the project because there was a logical gap between the planned output and the project purpose as written in the Relevance section. Therefore, effectiveness and impact of the project were evaluated based on the achievement of each output rather than the achievement of the project purpose.

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

<State of continuity of project activities and major impact>

Output	Beneficiary	State of continuity of activities/Major impact
Improvement of information flow on GMR	Fishermen, fishing communities	• Radio and television broadcasting on the GMR is now included in programs featuring the entire national park. • Communication with fishermen via mobile phone has started among fishing communities.
Promotion of environmental understanding among local residents	Secondary school students, teachers, residents	• The facilities of the CCEE are used for environmental education activities and events. As of 2012, some 10,000 people a year visit the CCEE. • The environmental education for secondary school students is discontinued.
Information on marine life and ocean environment	DPNG	• As the DPNG has established the Oceanic Research Division, its research functions have been enhanced. The monitoring items have been expanded to include sea turtles, sharks and marine ecology. • Research work on coastal sea water quality is continuing.
Water quality monitoring at Santa Cruz Island	DPNG	• The DPNG has purchased equipment at its own expense for installation by the Water Quality Monitoring Program. • The scope of monitoring has been expanded to San Cristobal Island and Isabella Island. • The municipal office has changed the water source and tightened the control of contamination sources in response to a reported deterioration of the water quality.
Sustainable resource management for artisanal fisheries	Fishermen, women's groups	• The DPNG no longer supports the commercial activities of women's groups nor the local fishing experience tours organized by fishermen. Fishing experience tours face a problem of coordination with the tourism sector. The commercial operations of women's groups have encountered marketing problems. • Participatory monitoring of sea cucumbers is continuing as part of the annual operation plan of the DPNG. The total allowable catch each year is determined based on the data.

● Efficiency

While the cooperation period was within the plan, the total project cost exceeded the planned cost due to the additional input of Japanese experts and local staff. The opening of the CCEE was delayed by over one year due to lengthy negotiations for the use of land for its construction. Therefore, the efficiency of the project is fair.

● Sustainability

The organizational structure of DPNG has become more stable compared to the time of the project's commencement. DPNG, however, is currently undertaking major organizational reforms to improve its efficiency and laid off 51 employees in January, 2012. Activities on the part of the Junta de Manejo Participativo (JMP) have been stagnant, and future perspectives are not illustrated. Due to the increasing number of tourists, the financial base of DPNG appears to be stable, however, continued budget allocation to support the activities launched under the project is not secure. Therefore, the sustainability of the effects of the project is fair.

▶ Key Point of Evaluation: Appropriate project design for a nature conservation project

At the planning stage of a technical cooperation project, it is necessary to create a logical framework including project objectives, output and activities, as well as the institutional and human capabilities of the implementing agency, and to determine a feasible project scope. For marine environmental conservation, various actions including environmental education, marine ecological studies, fishing harvest control, water quality monitoring, and alternative income generation are needed, and the participation of local residents as the main stakeholder is essential. The activities implemented by this project were determined through issue analyses in two short-term studies; however, the project scope became large and the relations between each individual output were weak and even the project objective did not cover the entire project scope. In addition, a part of the activities was beyond the scope of the implementation agency and coordination with other sectors was not sufficient.

However, for environmental conservation, a narrow scope increases the risk of failing to achieve the expected effectiveness and impact due to larger external conditions. This project, as described above, contained a logical fallacy; however, on the other hand, as a result of diverse activities, many visible outcomes were produced: new activities of the implementing agency (water quality and marine monitoring), participatory monitoring to restart the sea cucumber harvest, and so on. The achievements of the project were somewhat realized through a trial and error approach without narrowing the project scope.

● Conclusion, Lessons Learned and Recommendations

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

Recommendations for the implementing agency were to restart radio publicity of its activities to protect the GMR, to restart environmental education for secondary school students, to promote fishing experience tours organized by local fishermen, to revitalize the JMP and to continue allocating the necessary budget for activities. Lessons learned from the project were as follows. Before the project starts, it is essential to elaborate on target topics, make clear logical connections between the project objective and output and to narrow down the people concerned. For a nature conservation project with diverse components, on the other hand, it is necessary to also consider setting up a comprehensive project objective to cover the project output and activities to avoid narrowing the project scope, resulting in a smaller impact. Also, to initiate new activities in an implementing agency, it is essential to gain mutual understanding on the necessity of the activities between project staff and the implementing agency and to secure sufficient budget and personnel to continue the activities after the completion of the project.

The Project for the Improvement and Expansion of the Water Supply Networks in North/Middle Jordan Valley

Middle East
Jordan

Contribution to the improvement of the water supply situation by upgrading the decrepit and complicated water supply networks

External Evaluator: Noriyo Aoki, IC Net Limited

Outline of the Project

- Grant limit/Actual grant amount: 53 million yen/53 million yen (detailed design), 2,011 million yen/1,978 million yen (main construction work)
- Exchange of notes date: December 2004 (detailed design) June 2005 (main construction work)
- Project completion date: February 2008
- Implementing agency: Water Authority of Jordan (WAJ)

Project Objectives

Overall Goal: To improve the living conditions of the community of people in the North Shuna region in the Northern District and some areas of the Middle District of the Jordan Valley.

Project Purpose: To supply safe water to the target area in an efficient manner.

Output: To develop effective management of safe water resources through the improvement of water supply facilities such as main and branch distribution pipes and reservoirs.

Effects of Project Implementation (Effectiveness, Impact)

This project was implemented to supply safe water to the target area in an effective manner through the improvement of water supply facilities such as the replacement of main and branch distribution pipes, the improvement of reservoirs and the introduction of supervisory control and data acquisition (SCADA).

In the Northern and Middle Districts of the Jordan Valley, the deterioration was conspicuous in the distribution pipes, including in asbestos pipes which were laid in the 1970s, pumping equipment and reservoirs, and they were unable to supply a sufficient amount of water for the increasing number of people living on the hillsides. The problem of low feed-water pressure in highland residential areas and excessively high pressure in the lowlands became obvious. As a solution to these issues, the water service areas were divided into smaller areas, and the valves installed in each area were set in operation. However, ad hoc repairs to the water distribution system have complicated the system. Thus, fundamental upgrading of the water distribution system was needed.

The equipment and facilities which had been in a state of deterioration were repaired and their capacity was expanded, and water supply networks were reconstructed by the project. As a result, the water leakege rate was reduced. By introducing the SCADA system, the water supply control has become more efficient and water pressure can be adjusted more easily, so that the frequency of valve adjustment has been reduced to one-third of the pre-project level. As information on several water sources and the amount of water held in the reservoirs can be monitored by the North Shuna office's control room, water supply and distribution are now more easily manageable. Hence, highland residential areas can be supplied with water at an appropriate pressure, and the problem of excessively high water pressure in the lowlands has been solved; thus a fair distribution of water between areas has been achieved. In addition, it was confirmed by the beneficiary survey that there were improvements in water pressure and the amount and taste of water, etc. The project generated sufficient effects; therefore, the effectiveness and impact of the project is high.

Adasiya pumping station

Monitor of the SCADA System

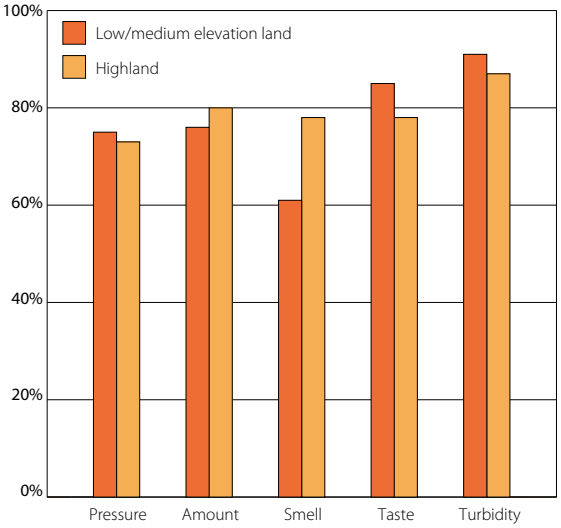
Beneficiary survey

Relevance

The Jordan Water Sector Policy listed the control of the excessive pumping of groundwater, the reduction in unaccounted-for water and leakages and the introduction of the SCADA system to water supply networks as items to be implemented. The latest Jordan Water Strategy also declared the importance of supplying appropriate and safe drinking water, introducing measures to reduce non-revenue water, effectively using existing water resources, and adopting new technologies for upgrading water supply techniques. This project is also relevant to Japanese ODA policy. Therefore, the relevance of this project is high.

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

<Percentage of the respondents who answered "Improved" based on a comparison before and after the project>



Source: Results of the beneficiary survey

<Effect indicators>

Indicator (unit)	Benchmark (2003)	Plan (2010)	Actual (2010)	Comparison Actual/Plan
Leakage rate (%)	30	20	22	90%
Population supplied with water (persons)	117,674	137,426	137,992	100%
Average water supply volume/ person/day (L)	114	129	125	97%
Water pressure	—	2.5 *– 6 bar	6 bar	100%

Source: Yarmouk Water Company (YWC) (The North Shuna Office)
* The minimum water pressure required to supply water directly to the fourth floor of a building is 2.5 bar. Pressurized at 6 bar, water can reach the highlands.

Efficiency

While the project cost was within the plan, the project period slightly exceeded the plan: whereas the construction by the Japanese side was completed within the planned period, some parts of training were implemented after the completion of the project. Therefore, the efficiency of this project is fair.

Sustainability

The Northern Governorates Water Administration of WAJ was transfered to the Yarmouk Water Company (YWC) in September 2011 under the privatization policy of the government. Whereas there was no major problem found in maintenance techniques, there are some problems in structural and financial aspects. Therefore, the sustainability of the effects of this project is fair.

▶ Key Point of Evaluation: Detailed coordination with a wide-range of multitiered stakeholders

To oversee the progress of the project, the implementing agency established a project supervisory team with representatives from Authority of Archeology and the municipalities as well as the contractors and consultants. They had regular meetings in the headquarters and on site to ensure and make adjustments to the progress and the issues of the work, negotiate and solve problems in order to ensure efficient implementation of the project. When projects including construction works are carried out in Jordan, there are often failures to complete the preparation works on schedule, due to issues such as for land acquisition and approvals or permits, which affect the progress of the main construction work. The completion of this project without delays was due to the effective functioning of these supervisory arrangements.

There were several wells as water resources, and the existing water pipes and networks intricately extended throughout the target area. Detailed coordination with a wide-range of multitiered stakeholders is one of the factors which enhanced the effectiveness of this project. Proper project management resulted in project effectiveness such as an average water supply volume per person, lower leakage rate, improved water pressure, and a larger water supplied population. The results of the beneficiary survey show 42% of households in highland residential areas which bought water tanks before the project, now get tap water, therefore convenience has been improved. The survey results also show a reduction of the water fetching time and improvement of the hygiene environment through the improvement of the water supply situation.

Conclusion, Lessons Learned and Recommendations

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

Before the project started, the North Shuna Office had no staff familiar with IT, and the Japanese side suggested to WAJ that the office should be newly staffed with a worker qualified to control the SCADA system. A lesson learned is that it was appropriate for the implementing agency to assign employees familiar with IT. As seen in this case, when a new system is introduced, it is necessary to secure human resources who have the knowledge to use it, since they make a large difference to the ease of operation and maintenance once the system comes into service.

The local office has no stock of some important spare parts in its warehouse, and needs to contact the branch office to acquire them. It was recommended to the implementing agency that a scheme should be set up to allow local offices to manage spare parts themselves. The local office produces no document to record the monthly amount of water distribution or water reserves and has no way to monitor long-term trends in seasonal changes in the groundwater level. Hence, it was also recommended that a management system and organizational structure should be established to analyze information obtained from the SCADA system and utilize it for the control, forecasting, or estimation of water supplies.

Strengthening of Mathematics and Science in Secondary Education Project Phase 2

Africa

Kenya

Attempting to improve science and mathematics teaching in the African region —Transfer to a student-centered teaching method—

External Evaluators: Haruo Ito, ICONS Inc. Kazuyoshi Inokuchi, Mitsubishi UFJ Research and Consulting Co., Ltd.

Outline of the Project

- Total cost: 1,689 million yen
- Period of cooperation: July 2003 to December 2008
- Partner country's implementing organization: Ministry of Education (MoE) (former Ministry of Education, Science, and Technology)
- The number of experts dispatched: 6 long-term, 5 short-term
- The number of technical training participants: Training in Japan: 105 participants, Training in third countries: 206 participants
- Main equipment provided: Computers, vehicles, copy machines, science kits, reference books

SMASE-WECSA member countries

Project Objectives

Overall Goal: Kenyan component: To improve the capability of young Kenyans in mathematics and science.
Regional component: To strengthen the quality of mathematics and science education at the secondary level in member countries.

Project Purpose: Kenyan component: To strengthen the quality of mathematics and science education at the secondary level through teacher training.
Regional component: To practice ASEI-PDSI lessons in teacher training institutions and secondary schools in member countries.

Output:
Output 1: Kenyan component: To strengthen the training system for district trainers in mathematics and sciences at the national center.
Regional component: To teach the trainers for ASEI-PDSI in member countries.
Output 2: Kenyan component: To establish a system of teacher training in mathematics and science in the districts.
Regional component: To consolidate a national center as a resource center for mathematics and science in Africa.
Output 3: Kenyan component: To strengthen the role of the national center and district centers as resource centers for teacher training.
Regional component: To make the national center functional as the secretariat of the regional network in Africa.

● Effects of Project Implementation (Effectiveness, Impact)

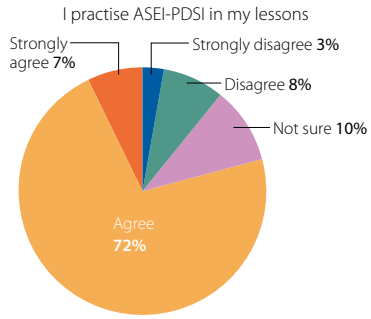
The project was carried out in Kenya for the purpose of strengthening mathematics and science education through student-centered classes (ASEI/PDSI*1) by the implementation of in-service education and training of teachers (the Kenyan component) as well as for the purpose of supporting the dissemination of this training approach to other African countries (SMASE-WECSA*2) (the regional component).

In the Kenyan component, improvements in teaching practices and pupil participation in the learning process through the implementation of the training system were identified. According to a beneficiary survey, 79% of teachers practiced ASEI-PDSI, the methodology to improve lessons, in their classrooms. Thus, it could be considered that the implementation of the training system contributed to the improvement of teaching practices. It was also observed that the pupils' participation in classroom activities had been promoted and pupils' satisfaction was high in the lessons of teachers who attended the training. Moreover, a positive impact was observed in that the more teachers attended the training, the higher Kenya Certificate of Secondary Education (KCSE) scores in mathematics and science were.

In the regional component, the number of SMASE-WECSA member countries has increased to 33 countries and regions; 17 projects have been implemented as of 2012, and the contribution of South-South cooperation through SMASE-WECSA has been observed. Although the number of requests from member countries for experts has decreased, the dispatch of third country experts and the provision of third country training through the regional component have improved ASEI-PDSI practices in the field of education among member counties, and led to the achievement of the project purpose, the strengthening of mathematics and science education in the member countries. Thus, the effectiveness and impact of the project are high.

Chemistry class

<Practice level of ASEI-PDSI>



Target: 437 teachers who participated in district training
Source: Beneficiary survey

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

*1 ASEI-PDSI stands for "Activity, Student-centred, Experiment, Improvisation/Plan, Do, See, Improve." The ASEI-PDSI approach was chosen by discussion between SMASSE counterparts and Japanese experts; the approach provides the direction and methodology necessary to improve lessons so that they promote scientific and logical thinking and develop real knowledge through the active participation of pupils in the lessons.
*2 33 African countries and 1 African region are registered as Strengthening of Mathematics and Science Education in Western, Eastern, Central, and Southern Africa (SMASE-WECSA) members (as of November 2011). SMASE-WECSA was started as a regional conference in 2001.

Relevance

The Kenyan component is relevant to Kenya's long-term development program, the investment programs in the Kenya Education Sector Support Program (KESSP), and the developmental need to improve the quality of education. The regional component for supporting the 33 African countries involved is also consistent with educational issues of Sub-Saharan African countries; therefore the relevance of the project is high.

Efficiency

While the extension of the cooperation period was judged as relevant, the project cost exceeded the plan because of the expansion of the activity area of the Kenyan component and the increase in the number of WECSA member countries launching new projects, which brought about an increase in the number of people training in Japan and in third countries. Therefore, the efficiency of the project is rated as fair.

Sustainability

Although some challenges still remain in terms of the institutionalization of the training system and organizational and technical aspects of the counterparts, the Kenyan component has no particular issues in financial aspects. On the other hand, as for the regional component, even though technical and operational sustainability are somewhat secured, the number of requests for experts is decreasing. It is necessary to customize training according to the actual situation in member countries. Thus, the clear future strategy for SMASSE-WECSA should be carefully considered among stakeholders. Also, the budget for SMASSE-WECSA activities is highly dependent on assistance from Japan. Therefore, the comprehensive sustainability of the project is rated as fair.

▶ Key Point of Evaluation: The effectiveness of the approach for introducing the training system *3

The approach for applying this project in the case of Malawi and Botswana was studied in this ex-post evaluation in order to assess its effectiveness and to assess the necessity to revise measures in the training system in response to the situation of each member country. A project which included the dispatch of Japanese experts has been conducted in Malawi. In Botswana, on the other hand, nationwide training has been carried out mainly by the trainers who participated in the third country training in Kenya. The study shows that developing the financial, personal and institutional foundations which are essential for the approach is important for each case. To develop those foundations, it has also been identified that commitment from key policy decision-makers, capacity development, the utilization of in-country human resources, needs-based training programs, and the promotion of institutionalization are important. Furthermore, it is necessary to assist in the establishment and improvement of monitoring/evaluation systems so that the people of the country may themselves address continuous activities. Technical support through the dispatch of Kenyan experts, the provision of third country training in Kenya and the SMASE-WECSA regional conference contributed to the introduction of this approach in other countries. On the other hand, SMASE-WECSA is required not only to teach other countries about Kenyan experiences but also to provide assistance addressing the different situation of each WECSA member country. It is necessary to consider a future strategy which includes the capacity development of Kenyan counterparts in order to establish continuous support for other countries.

Conclusion, Lessons Learned and Recommendations

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

Though the training system for ASEI-PDSI has been disseminated nationwide in the Kenyan component, institutionalization of the system in secondary education is difficult because the target subjects are limited to only mathematics and science. Although the project target is to support only specific subjects, it considerations should be made to include a component for promoting institutionalization of the system without any limitation by subject, allowing for the possibility of extending the system to cover other subjects in the future. The implementation of the training system without any financial incentive (such as daily allowances) for participants creates strong resistance to the program among teachers participating in the training at the time of the ex-post evaluation. Their dissatisfaction may constitute a hindrance to securing continuous implementation of the training. With a view to the sustainability of activities after project completion, to solve this issue, the training should be of high quality and be perceived by teachers as valuable and worthy of participation even without a daily allowance. In addition, it is worth considering the establishment of other incentive systems such as a system which rewards teachers who participate with a raise in their salary and/or promotion.

With regard to the regional component, the beneficiaries of technical cooperation are people in other countries. In this project, continuous support from JICA is necessary to maintain the effects of the project because Kenya, the host country, has little incentive to maintain regional support. To support this kind of South-South cooperation, a clear exit strategy should be considered when a project starts. In particular, future institutional and financial sustainability should be considered in the early stages.

*3 The approach which addresses the establishment of a foundation which enables the development of the content, structure and sustainable implementation of teacher training.