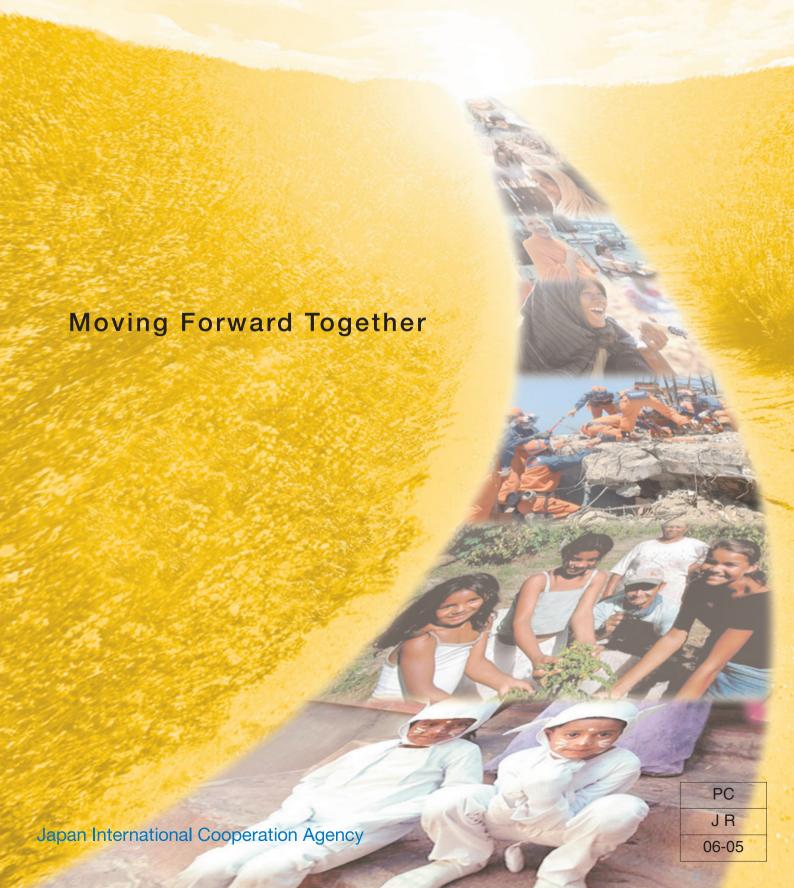
Annual Evaluation Report 2005



Annual Evaluation Report

2005



Japan International Cooperation Agency

Preface

It has been more than two years since Japan International Cooperation Agency (JICA) embarked on a new path as an independent administrative institution in October 2003. As the leading implementing organization of Japan's Official Development Assistance (ODA), JICA has been undertaking organizational and operational reforms based on three initiatives: (1) a field based management, (2) human security, and (3) effectiveness, efficiency and speed. JICA is determined to respond to the expectations of the people of Japan and provide cooperation that truly contributes to socioeconomic development and peace-building in the developing world.

Evaluation is an important tool for carrying out more effective and efficient projects with the understanding and support of the people of Japan. Under this recognition, JICA, in line with the reforms mentioned above, has been working on expanding and enhancing evaluation, promoting the use of evaluation results (feedback) for project improvement, and improving the disclosure system of its evaluation results.

The 2005 Annual Evaluation Report presents JICA's project evaluation activities and its efforts for expanding and enhancing evaluation and contains specific cases to show how evaluation results are fed back.

Regarding the disclosure of evaluation results, in fiscal 2003, JICA launched a system to promptly disclose all the evaluation results of individual projects through its website. In addition, the Annual Evaluation Report, a medium that provides comprehensive information, presents the overview of individual evaluation results and comprehensive results of thematic evaluations, reporting whether JICA projects as a whole are carried out effectively and efficiently.

As an overview of individual evaluation results the report of this fiscal year provides the results of the secondary evaluation conducted by the Advisory Committee on Evaluation, just as it did last year. The secondary evaluation targets the terminal evaluations of individual projects which are conducted as internal evaluations by JICA. Under the secondary evaluation, the quality of evaluations is examined and evaluation results are validated from a third-party perspective.

As comprehensive evaluation results, the report provides summaries of thematic evaluation results. The thematic evaluations deal with such themes as cooperation that surely reaches the people, cooperation with greater impact, and effective implementation of post-conflict assistance, all of which JICA has been working on under the concept of human security. One example included is the evaluation results of the Japan Overseas Cooperation Volunteer Program, which is JICA's representative participatory program.

I would be very pleased if this report serves to promote deeper understanding of JICA's projects and generate further support from its readers.

Finally, I would like to express my sincere gratitude to the many persons and organizations who contributed to this undertaking, including the external advisors who offered their help in compiling this report.

> March 2006 Seiji Kojima Vice-President Japan International Cooperation Agency

Country Targeted for Evaluation Study Published in Annual Evaluation Report 2005





Annual Evaluation Report 2005 Contents

Preface	•••••	3
Part 1	Evaluation	in JICA9
	Chapter 1	JICA's Evaluation Activities and Efforts for Expanding and Enhancing Evaluation10
	Chapter 2	Improving JICA's Cooperation Using Evaluation Results22
Part 2	Project-lev	vel Evaluation ······29
	Overview of	Evaluations of Individual Projects in Fiscal 2004 ······30
Part 3	Program-le	evel Evaluation ······51
	Thematic Ev	valuation
		Assistance that Reaches People in Need
	Chapter 2	Achieving Greater Impact
	Review	
	Chapter 3 Pead	Effective Implementation of Peace-building Assistance
Part 4	Secondary	Evaluation by the Advisory Committee on Evaluation ······113
	Secondary E	evaluation by the Advisory Committee on Evaluation114
	Chapter 1	Results of Secondary Evaluation Fiscal 2005 ······115
	Chapter 2	Improving JICA's Evaluations and Projects (Recommendations)143
Appendix		147

Figures, Tables, and Box Articles

	Figure
1-1	ODA System and JICA's Evaluation10
	Position of Evaluation within JICA's Project Cycle11
1-3	JICA's Evaluation System13
	Patterns of Utilization of Evaluation Results22
1-5	
	25
3-1	Framework of Gender Evaluation in the Thematic Evaluation55
3-2	
	in the Xeatzan Bajo Region58
3-3	
	59
3-4	Interrelationship between Organizations Related to Communicable
	Disease Control in a Developed Country (Japan)78
3-5	Conceptual Chart of Evaluation Method79
3-6	Relationship of Organizations Related to Infectious Disease Control
	in Kenya80
3-7	
3-8	1 07
	Sector
	Structure of JICA Basic Education Enhancement Program95
3-10	Comparison of Rate of Correct Answers in Teachers' Academic Tests
0.11	95
	Teachers' Academic Test Result in Guinope District95
	Conceptual Flow Chart of the Process to Contribution
	Secondary Evaluation System 116
	Average Scores by Evaluation Criterion
	Distribution of Scores by Evaluation Criterion 119
4-3	
4-5	
	Worst Four Terminal Evaluation Reports Rated as Poor Quality •••124
	Year-to-Year Changes in the Quality of Evaluations125
4-8	
	Project Evaluation by Secondary Evaluators128
	Distribution of Evaluation Scores for Projects by Secondary Evaluators
	129
4-11	Project Evaluation by Secondary Evaluators: Viewpoints129
4-12	Year-to-Year Changes for Project Evaluation by Secondary
	Evaluators ······130
	Evaluation by Sector
	Evaluation by Region
	Overall Project Evaluation by the Secondary Evaluators131
	Top Four Projects
	Worst Four Projects 132
4-18	Relationships between Project Evaluation by the Secondary
1.10	Evaluation and Evaluation of the Quality of Terminal Evaluation •••134
4-19	Evaluation of the Quality of Terminal Evaluation (By Group)134
	Table
1-1	Perspectives of Five Evaluation Criteria
	Members of the NGO-JICA Evaluation Subcommittee18
	Members of the Advisory Committee on Evaluation20
1-4	-
1-5	
	(Sustainable Use of Fishery Resources)27
2-1	
2-2	Mid-term Evaluation
2-3	
2-4	Project-level Ex-post Evaluation35
3-1	0 ,
3-2	
3-3	
3-4	Overview of JOCV Dispatches ·····64

	I able
3-5	To what extent do you consider it important to share your JOCV experiences with Japanese and international societies after returning
3-6	to Japan? —
	experiences for Japanese and international societies and the host country?
3-7	Changes in Values and Awareness71
3-8	Changes in Attitude 1—Personal Attitudes and Social Contribution
	Activities where Ex-volunteers Act as Human Resources— ·······72
3-9	Changes in Attitude 2—Communicating One's JOCV Experiences to
	the Public—72
3-10	Target Projects for the Noguchi Memorial Institute for Medical
	Research (NMIMR) in Ghana
	Target Projects for the Kenya Medical Research Institute (KEMRI) ······77
	Target Projects for the Zambia University Teaching Hospital (UTH)······77
	Functions of KEMRI in Communicable Disease Control
	Examples of Joint Research by KEMRI 81 Major Component Projects of the Evaluation Target Program88
	Outline of Development Strategies in the Honduras Education
0 .0	Sector
3-17	Outline of the EFA-FTI Plan 92
3-18	Governmental and Donors' Efforts for the EFA-FTI Plan94
3-19	Chair Ministry and Focal Point by Sector in CG System106
	Priority Issues and Project Examples by Sector108
4-1	Comparison of Evaluation Viewpoints between Fiscal 2004
4.0	and 2005 117 Secondary Evaluation Criteria 118
	Average Scores of the Top Four and Worst Four Projects in the
4-0	Total Scores124
4-4	Good Quality Terminal Evaluations
4-5	Poor Quality Terminal Evaluations
4-6	Year-to-Year Changes in the Quality of Evaluations126
4-7	Year-to-Year Changes for Project Evaluation by Secondary
	Evaluators ······130
	Average Scores of Top and Worst Four Projects
	Projects Rated "Excellent" by the Secondary Evaluators133 Projects Rated "Poor" by the Secondary Evaluators133
	Correlation between Project Evaluation by the Secondary Evaluators
	and Evaluation of the Quality of Terminal Evaluation134
4-12	Scores for Evaluation Criteria of the Reports
	BOX
BOX 1	Development of Various Guidelines—Handbook for Selecting
	Outcome Indicators
BOX 2	Improving Evaluation Capacity in Developing Countries16
BOX 3	Synthesis Study of Evaluations—Systematization of Lessons in the
	Past17
BOX 4	Cooperation with NGOs—Aiming for Effective Implementation of
DOV F	Community-centered Development 18
BOX 2	Joint Evaluation with Other Donor Countries and Agencies —Assistance for the Great Sumatra Earthquake and Indian Ocean
	Tsunami Disaster (Emergency Assistance)19
BOX 6	Secondary Evaluation by External Experts—Ex-post Evaluation of
	Individual Projects
BOX 7	Toward Implementation of More Effective South-South Cooperation
	Support—Thematic Evaluation on South-South Cooperation28
BOX 8	Examples of Gender Empowerment Obtained from the Case Study $$ $\cdots 60$
	Evaluation of the Target Countries by External Experts86
BOX10	Summary of Other Thematic Evaluations102
	Appendix
Appendi	x1 List of Projects Subject to Secondary Evaluation in Fiscal 2005 ···137
	x2 Secondary Evaluation Check Sheet

Part 1

Evaluation in JICA



Chapter 1 JICA's Evaluation Activities and Efforts for Expanding and Enhancing Evaluation

1-1 JICA's Evaluation Activities

(1) Objectives of Evaluation

In order to implement effective and efficient cooperation, it is important to evaluate projects appropriately, and then reflect the recommendations and lessons learned on improvements in the implementation of new projects. JICA's project evaluation assesses the efficiency and effectiveness of a project as objectively as possible at each stage of the project cycle.

The objectives of evaluation are to utilize evaluation results in a decision-making process for project management and to feed lessons learned from evaluation back into the learning process of the aid organizations concerned for more effective project implementation. In addition, by disclosing evaluation results, JICA intends to ensure transparency and accountability to gain public support and understanding in Japan and developing countries in implementing effective and efficient cooperation.

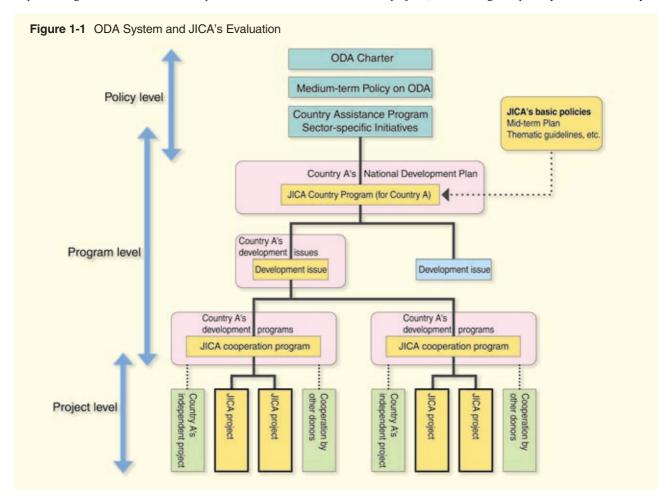
(2) Types of Evaluation

Project evaluation can be categorized from the perspectives of what to evaluate, when to evaluate, and who evaluates. Classification of JICA's project evaluation is based on the following three perspectives.

1) Evaluation Focus

From the perspective of what to evaluate, ODA evaluation is classified into three levels—policy, program and project levels—among which JICA conducts project- and program-level evaluations (Figure 1-1).

Project-level evaluation covers individual projects and is conducted by JICA's departments and overseas offices responsible for project implementation. The evaluation results are utilized in planning and revising projects, making decisions on whether to continue cooperation or make adjustments, reflecting lessons on similar projects, and securing transparency and accountability.



Program-level evaluation evaluates a set of projects in a comprehensive and cross-sectional manner. It examines what effects JICA's cooperation brought about at a country-program level, or to what extent JICA's cooperative approach was effective in a specific development sector and issue. It is also directed at specific cooperation schemes such as Volunteer Program and Disaster Relief Program. These evaluations are conducted by the Office of Evaluation of the Planning and Coordination Department of JICA as thematic evaluation. These evaluation results are used for improving JICA Country Programs and thematic guidelines, modifying cooperative approaches for effective program implementation, as well as formulating and managing new projects.

2) Evaluation within the Project Cycle

Project-level evaluations are classified into four types from the perspective of when to evaluate: ex-ante, mid-term, terminal, and ex-post evaluations, which correspond to four stages in the project cycle (Figure 1-2).

a. Ex-ante evaluation

The ex-ante evaluation is carried out prior to the implementation of a project to check conformity with Japan's aid policy, JICA Country Program, and needs of the partner country, as well as to clarify the project content and expected cooperation effects for the purpose of evaluating the relevance of the project comprehensively. Evaluation indicators of a project set at the ex-ante

stage will be used to measure the progress and effect of cooperation in subsequent monitoring and evaluations at stages from mid-term to ex-post evaluations.

b. Mid-term evaluation

The mid-term evaluation is conducted at the middle point of a project to evaluate for smooth operation leading to outcome. It aims to clarify the achievements and implementing process and examine whether plans of the project are appropriate, focusing on relevance, efficiency, and so on. Results of the mid-term evaluation are utilized to revise the original plan or improve the operation structure.

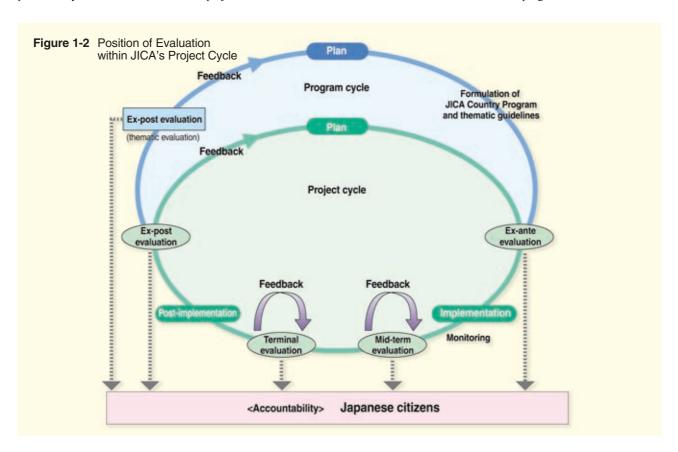
c. Terminal evaluation

The terminal evaluation is conducted to examine whether the project will achieve the outcome as planned prior to the termination of a project. It comprehensively analyzes the achievement level of the project purposes, efficiency and prospective sustainability of a project. Based on the result, it is decided whether to complete the project and whether follow-up such as extension of cooperation is necessary or not.

d. Ex-post evaluation

The ex-post evaluation is conducted a few years after completion of a project to verify impact of the project on the recipient side and sustainability of the cooperation effect. Results of ex-post evaluation serve as lessons learned for effective and efficient project implementation in formulating and implementing new projects and/or programs in the future.

Thematic evaluation and other program-level evaluations are



conducted as ex-post evaluations. They are used to improve JICA Country Programs or thematic guidelines as well as to formulate and implement new projects.

3) Evaluation by Types of Evaluators

From the perspective of who evaluates, JICA's evaluation is classified by evaluator in the following manner.

a. Evaluation by JICA (internal evaluation)

It is conducted by JICA, which is responsible for project management in cooperation with external specialists, such as consultants and academics, for the purpose of collecting information necessary for project management and revision.

JICA also promotes the review of such internal evaluation results by third parties (academics, journalists, NGOs, etc.) with expertise in development assistance and familiarity with JICA's undertakings to assure transparency and objectivity. (Fiscal 2005 secondary evaluation results by the Advisory Committee on Evaluation are provided in Part 4 of the report.)

b. Evaluation by third parties (external evaluation)

In order to ensure the quality, transparency, and objectivity of the evaluation, JICA entrusts a certain portion of evaluation studies to external experts and organizations (universities, research institutes, academics and consultants, etc.). Specifically, they are third parties who are not involved in the planning and implementation of the evaluated project and who have high expertise in the evaluated fields. External evaluation may be conducted by external experts and organizations in the partner country in addition to those in Japan.

In addition, JICA carries out the third party reviews as described in a. using external evaluators.

c. Joint evaluation

This evaluation is conducted in collaboration with organizations in partner countries or with other donors. Joint evaluation with partner countries are effective for sharing the results of effects and issues about projects. It also contributes to learning evaluation methods and improving capacity of those countries in carrying out evaluation. Since all JICA cooperation activities are joint efforts with the partner country, project-level evaluations are consistently conducted as joint evaluations from the planning to the termination stages. Program-level evaluations are also conducted with the participation of the partner country, and evaluation results are fed back to those involved in the partner country.

A joint evaluation with other donors is becoming important in terms of aid coordination and is also effective for learning about one another's projects and evaluation methods.

(3) Methods of Evaluation

Evaluation has no meaning unless evaluations are utilized. To produce reliable and useful evaluation results, the project needs to be examined in a systematic and objective manner and then convincing value judgement has to be made with supporting grounds. It is also important to draw recommendations and lessons learned through analyses of the factors that affect success and failure of the project.

JICA's evaluation framework is composed of three stages: (1) studying and understanding the situation surrounding the project; (2) assessing the value of the project by the five evaluation criteria; and (3) drawing recommendations and lessons and feeding them back for improvement*.

1) Grasping and Examining the Conditions of the Project

The first step is to examine the project achievements as to what has been achieved in the project and to what extent it has been achieved. The next step is to identify and analyze the implementation process as to what is happening in the process of achievement and what kind of effects it has on the achievements. Furthermore, the causal relationships between the project and the effect, namely whether the achievement has resulted from the project, is examined.

2) Value Judgement about the Project in Terms of the Five Evaluation Criteria

The next step is to make value judgements about the project based on the information on the actual conditions of the project obtained through the above-mentioned procedure. For judging the value of projects, JICA has adopted the five evaluation criteria (relevance, effectiveness, efficiency, impact, and sustainability) proposed in 1991 by the Development Aid Committee (DAC) of the Organization for Economic Cooperation and Development (OECD). See Table 1-1 for the definition of each criterion.

3) Drawing Recommendations and Lessons for Feedback

The recommendations should be formulated based on the results of an evaluation study, and they should propose specific actions for the project stakeholders. Evaluation results are reported to those involved in the project and disclosed in public. Feedback of evaluation results to projects is important in improving the project and enhancing its effectiveness. In order to make recommendations and lessons that are easily fed back, it is necessary to clarify the contributing and inhibiting factors that have affected the success or failure of a project. It is also necessary to specify the target of the feedback.

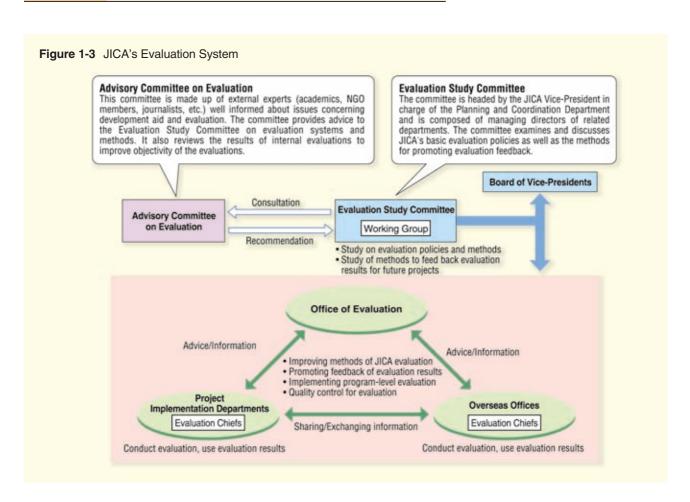
^{*}JICA's project evaluation methods are explained in detail in the "JICA Guideline for Project Evaluation: Practical Method for Project Evaluation" (JICA, September 2004). These guidelines are available on the Evaluation page on JICA's website (http://www.jica.go.jp/english/evaluation/index.html).

(4) Evaluation System

JICA's current evaluation system is composed of the Evaluation Study Committee, the Advisory Committee on Evaluation, Office of Evaluation, and the project implementation departments (headquarters and overseas offices). Major roles and activities of each group are shown in Figure 1-3.

Table 1-1 Perspectives of Five Evaluation Criteria

Relevance	"Relevance" questions whether the plan of a project is greatly needed and meets the needs of the intended beneficiaries; whether the project is consistent with the partner country's development policies and Japan's aid policies and has high priority; and whether the project provides proper solutions to the problems and issues in the area or sectors concerned.
Effectiveness	"Effectiveness" questions whether the effects planned in the project (project purposes) have been achieved and whether the achievement resulted from the activities of the project.
Efficiency	"Efficiency" questions with regard to outputs or project purposes whether there was no alternative means that could have led to the same achievements at lower costs, or whether it was impossible to produce greater achievements at the same costs. It also questions whether the inputs were made in a timely manner.
Impact	"Impact" questions whether long-term, indirect effects planned in the project (overall goals) have been achieved, and whether there are any unintended socioeconomic positive and negative impacts.
Sustainability	"Sustainability" examines whether the effects targeted in the project (project purposes and overall goals) are sustained even after the completion of cooperation in terms of technology, organization, and finances.



1-2 Efforts for Expanding and Enhancing Evaluation

(1) JICA's Efforts for Expanding and Enhancing Evaluation

Recently, the situation surrounding JICA operations has been changing greatly as a result of ODA reform and JICA's new status as an independent administrative institution. Under such circumstances, JICA has made the following efforts for expanding and enhancing evaluation in order to operate effective and efficient projects, as well as execute accountability.

◆ Consistent evaluation from the ex-ante to ex-post stages

In order to implement projects effectively and efficiently, JICA reviews project plans and improves management through continuous evaluations at various stages of the project cycle, such as before, during, at the end of, and after the implementation of the project. Additionally, in order to achieve better planning and operation of similar projects in the future, the lessons obtained from the evaluations are fed back. To run the evaluation system along with the cycle of a project appropriately, JICA has developed various guidelines and provided training to people involved in projects to improve their evaluation capacity. Also, to promote feedback of lessons, various efforts have been made, such as sharing good practices that are successful cases in project improvement utilizing evaluation results.

Evaluation covering various programs

In addition to Technical Cooperation Projects, JICA has various other cooperation schemes, including the Disaster Relief Program and the Volunteer Program. Due to differences in characteristics, the evaluation method used for Technical Cooperation Projects cannot be applied and thus the development of evaluation methods appropriate to the characteristics of individual schemes is required. Starting with the development of evaluation methods that suit the character and implementation procedure of each scheme JICA has made efforts to introduce systematic evaluations. Other efforts have been made for development and improvement of evaluation methods to make evaluation more useful. Included are new development of evaluation methods of program approach in response to the strengthening of program approach that has been promoted recently in JICA, and research into methods of participatory evaluation in the midst of a focus on assistance directly reaching people.

Securing transparency and objectivity in evaluation

In order to ensure objectivity of evaluation, JICA promotes evaluation by third parties by involving more external experts in evaluation study. On the other hand, project evaluation mainly aimed at management of a project is generally conducted by JICA as internal evaluation. Internal evaluation has merits; for example, evaluation based on accurate understanding of actual sit-

uations is possible and the evaluation results can be fed back easily to the decision-making process for the future. However, transparency and objectivity may not necessarily be secured when compared to external evaluation. In response, we have an Advisory Committee on Evaluation conduct secondary evaluation, paying attention to ensuring transparency and objectivity in results of internal evaluation. Additionally, as another effort to secure transparency and objectivity, JICA discloses its evaluation results in a timely manner by uploading the results to its website and issuing Annual Evaluation Reports and other publications as well as holding open seminars.

(2) Consistent Evaluation from the Ex-ante to Expost Stages

1) Upgrading Evaluation System

In order to promote results-based management, it is crucial to set a clear project purpose and indicators to measure the project achievement before the project is launched. Then the project needs to be monitored and evaluated with regard to what effects the project has generated in various stages of the project cycle such as before, during, at the end of, and after the implementation of the project. Furthermore, for effective implementation of cooperation projects, it is essential to perform continuous evaluations in various stages of the project cycle, analyze contributing and inhibiting factors to the achievement of the expected outcomes, review project plans and improve project management. It is also necessary to utilize lessons learned from the evaluations in planning and implementation of similar projects in the future.

With these points in mind, JICA has been working to establish a consistent evaluation system from the ex-ante to ex-post stage. JICA introduced the ex-ante evaluation in fiscal 2001 to examine the needs, priority, and adequacy of the project vis-à-vis the expected outcomes before the launch of the project. JICA also introduced the ex-post evaluation in fiscal 2002 primarily to evaluate whether the effects have been generated and sustained a certain period of time after the completion of the project. By adding these two evaluations to the existing mid-term and terminal evaluations*, a consistent evaluation system was completed that covers the entire project cycle of JICA's technical cooperation projects**.

To perform evaluation from the ex-ante to ex-post stages appropriately, JICA revised its guidelines for project evaluation in fiscal 2003. Furthermore, in order to set proper outcome indicators to measure the project achievement, JICA has reviewed its principles and worked out guidelines (BOX 1).

2) Improving Evaluation Capacity

Along with the introduction of a consistent evaluation system form the ex-ante to ex-post stage and the expansion of evaluation

^{*} See p. 11 of this chapter for the definition of evaluation at each stage.

^{**}See Figure 1-2 "Position of Evaluation within JICA's Project Cycle."

coverage, both the type and number of evaluations have increased significantly in recent years. To respond to such situations and carry out high-quality evaluation, JICA has worked to improve its evaluation capacity. In order to implement projects that meet the needs of developing countries more properly and promptly, JICA is promoting the function expansion of overseas offices from the perspective of field based management. Accordingly, the strengthening of evaluation capacity of overseas offices is becoming more important.

Evaluations of JICA's projects are conducted mainly by the departments and overseas offices involved in project implementation (hereinafter the project implementation departments), with support and supervision provided by the Office of Evaluation in the Planning and Coordination Department. In order to reinforce such an evaluation system, JICA introduced an evaluation chief system in fiscal 2003. Under the new evaluation chief system, evaluation chiefs are assigned to each project implementation department. Evaluation chiefs are responsible for managing the quality of evaluations and promoting effective feedback of evaluation results to improve project planning and implementation. JICA provides these evaluation chiefs with training to promote appropriate evaluations at the field level.

JICA has also been working to improve the evaluation capacity of many stakeholders, including experts, who are involved in the implementation of JICA projects. Designed especially for experts, the Monitoring and Evaluation Training Program is carried out as part of pre-dispatch group training.

Since JICA projects are carried out jointly with developing countries, the evaluation of a project is carried out as a joint eval-

uation with a developing country. To implement projects effectively and efficiently, it is important to improve the evaluation capacity on the developing countries' side as the partner. Accordingly, JICA also provides evaluation training for the people concerned in developing countries. In fiscal 2004, as a part of JICA's training program, three training courses started focusing on evaluation of Technical Cooperation Projects, evaluation of loan assistance (yen loan) projects, and establishment of evaluation system, respectively (BOX 2).

While offering these evaluation training programs on the one hand, teaching materials and documents have been developed to strengthen evaluation capacity of aid-related personnel on the other. The guidelines have been translated into many languages, and materials for distance training have been developed. These materials are posted on the website so that they can be widely utilized by the people concerned both inside and outside JICA.

3) Strengthening Feedback of Evaluation Results

In order to improve projects utilizing evaluation results, it is important to reflect recommendations obtained from evaluations in the stages from ex-ante to ex-post immediately on the planning and management of a project. At the same time, it is important to utilize lessons obtained from projects in the past in planning and managing new projects. JICA has made various efforts to strengthen such feedback of evaluation results to projects.

First, a questionnaire survey was conducted targeting the project implementation departments to investigate the current situation about use of evaluation results as well as identify tasks for promoting feedback. As a result, the following tasks for promot-

B₀X

Development of Various Guidelines —Handbook for Selecting Outcome Indicators

In JICA's Technical Cooperation Project, the outcome that the project aims for is set as the goal (overall goal and project purpose), and the indicators to measure the achievement are specified for periodical measurement, which is designed to verify the cooperation effects and improve project implementation. However, in some projects, goals and indicators were not set appropriately, resulting in problems in the verification of effects.

In response, JICA has studied cases of project evaluations carried out in the past in a cross-sectional manner with regard to goals and indicators in order to examine measures for improvement. As

a result, it was found that positioning the outcome of a project as a change of targets, such as individuals, organizations, and society, and arranging the concepts of outcome indicators focusing on the change of such targets, are useful to set appropriate outcome indicators. This matches the concepts of capacity development (CD)* that JICA is currently promoting.

These cross-sectional viewpoints and concepts that are useful for setting outcomes and indicators were compiled and published as "Handbook for Selecting Outcome Indicators" in fiscal 2005. This handbook will be shared among the parties concerned in training

and will be improved continuously in the future so that people involved with JICA projects can utilize it as a reference tool in planning and formulating a project.

Handbook for Selecting Outcome Indicators

A Bridge to Practical Statement Committee Agency Committee Agency Spice

^{*} CD is defined as the process in which individuals, organizations, institutions and societies develop their "abilities" (the capacity of problem-solving) at each level to perform functions, solve problems, and set and achieve objectives. (Source: "Capacity Development Handbook for JICA Staff: For Improving the Effectiveness and Sustainability of JICA's Assistance," JICA, March 2004)

B₀X

Improving Evaluation Capacity in Developing Countries

In implementing more effective projects, it is important to respect the ownership of developing countries. For that purpose, improvement of the management capacity of development is required for developing countries, and enhancing their monitoring and evaluation capacity has gained more attention internationally. In response, JICA provides training in cooperation with various organizations inside and outside Japan to improve the evaluation capacity of parties involved in developing countries, and lends support to strengthen the evaluation capacity as well as the evaluation system.

 Training related to evaluation of Technical Cooperation Projects (Distance Learning Course for Management-focused Monitoring and Evalution)

JICA set out to offer a distance training program with the focus on evaluation of technical cooperation projects using a TV conference system in fiscal 2003. Curricula and teaching materials were developed jointly with the World Bank Institute (WBI). The training program has been broadcast, linking Japan, the US, and the countries participating in the training program. Starting in fiscal 2005 the training program was newly expand-

ed and provided mainly to people in charge of evaluation in the governments of developing countries. So far, it has been broadcast to nine countries in Asia, two countries in Africa and one country in the Middle East. In the broadcasts of fiscal 2005, a total of 277 people participated.

(2) Training related to evaluation of yen loan projects (Seminar on Evaluation of Japan's ODA Loan Project)

A group training course targeting persons in charge of yen loan projects in developing countries started in fiscal 2001 for the purpose of improving the evaluation capacity of ODA projects. This course focuses in particular on evaluation methods of yen loan projects with cooperation of the Japan Bank for

International Cooperation (JBIC). In fiscal 2005, a total of 18 people from around the world took part.

(3) Training related to establishment of evaluation system (Forum on Institutionalization of Evaluation System)

The purpose of this group training program is to raise the evaluation capacity related to development policy in developing countries, as well as develop a capacity that contributes to the establishment of evaluation systems in developing countries themselves. This was launched in cooperation with the Japan Evaluation Society in fiscal 2004, which targets ministries and agencies administering policy evaluation of developing countries. In the first year, a total of 14 people, including government administrative officials, took part in this program from around the world.



- ↑ Distance Learning Course
- → ODA Loan Project Evaluation Seminar

ing feedback were revealed*.

- a: Developing a feedback mechanism
- b: Improving accessibility to evaluation results
- c: Improving the quality of evaluation results and providing user-friendly information
- d: Improving recognition and awareness of evaluation

Based on the above study results, JICA has taken the following actions to promote use of evaluation results since fiscal 2003. In response to task a (developing a feedback mechanism), spaces where information has to be filled in with regard to the utilization of lessons learned from similar projects in the past were added in the ex-ante evaluation document for the purpose of introducing a mechanism referring to evaluation results in the operation process. For task b (improving accessibility to evaluation results), more evaluation results have been posted on the website and the availability of the Evaluation page and the accessing method have been disseminated throughout the entire organization on occa-

sions such as training. Corresponding to task c (improving the quality of evaluation results and providing user-friendly information), JICA worked to improve quality by revising guidelines and conducting evaluation training, while compiling a database of lessons in the past and carrying out a thematic Synthesis Study that aims to draw out user-friendly systematic lessons (BOX 3). In addition, in fiscal 2004, through secondary evaluation on terminal evaluation results, tasks for improving quality were drawn out, and cases of good evaluation that can serve as role models to others are widely shared within the organization. Finally, for task d (improving recognition and awareness of evaluation), various evaluation training programs are carried out to improve the recognition and consciousness of evaluation, while promoting the sharing of good practices utilizing evaluation results for project improvement**.

As a result of the above efforts, the utilization rate of evaluation results inside JICA increased from 46% in fiscal 2003 to 62% in fiscal 2004. JICA will continue to promote feedback of evaluation results for project improvement.

^{*} The detailed study results are provided in Annual Evaluation Report 2003 (Chapter 2, Part 2) and Annual Evaluation Report 2004 (Chapter 3, Part 1). Annual Evaluation Reports are available on the Evaluation page on JICA's website (http://www.jica.go.jp/english/evaluation/index.html).

^{**}The cases are provided in Chapter 2, Part 1 of this report.

(3) Evaluation Covering Various Programs

1) Introduction of Evaluation to Various Programs

In addition to Technical Cooperation Projects and Development Studies in developing countries, JICA has various cooperation schemes such as the Disaster Relief Program, which provides personnel assistance and emergency relief supplies in the wake of major natural disasters overseas; and the Volunteer Program whose aim is to promote mutual understanding through public participation in international cooperation. Due to the nature of these programs, it is difficult to apply the evaluation method for Technical Cooperation Projects as it is, and thus the development of evaluation methods suitable for the characteristics of each program was required. JICA has worked to introduce the systematic evaluation, including development of evaluation methods that suit the natures and characteristics, when implementing these programs.

For example, in line with the characteristics of the program, the evaluation criteria for the Disaster Relief Program include Speed, Target groups, Operation, and Presence, which the evaluations on activities regarding rescue, medical, and expert teams are based on.

As for the Volunteer Program, not only are contributions to social and economic development in developing countries specified as program goals, but also promotion of friendly relations and mutual understanding between Japan and developing countries, as well as sharing volunteer experiences with society back in Japan. Accordingly, projects are evaluated from the following three viewpoints in a multiple manner.

a. Contribution to social and economic development in developing countries

(Did the dispatch of volunteers meet the needs of the developing country? Did the dispatch bring about any outcomes to

the partner organization or the beneficiaries?)

b. Promotion of friendly relations and mutual understanding between Japan and developing countries

(How much did the partner country deepen its understanding of Japan? On the other hand, how much did Japan deepen its understanding of the partner country?)

c. Sharing volunteer experiences with society back in Japan (After returning to Japan, how did the volunteer share the experiences with Japanese society and international society?)

Based on the above framework, evaluation was introduced to the Volunteer Program in fiscal 2004. Using the same framework, cooperation effects in Malawi, Vanuatu, and Honduras were evaluated as thematic evaluation*.

2) Examination of Methodology of Participatory

Recently, based on the perspective of human security, JICA has strengthened activities to embody assistance reaching people and contributing to empowerment** of people. For that end, JICA is examining how to incorporate the evaluation method of community-centered participatory projects and the method for evaluating empowerment into JICA projects, as well as how to apply them to effective project implementation. As one example of such efforts, development of evaluation method and joint evaluation in cooperation with NGOs are carried out.

In fiscal 2001, in order to promote cooperation and mutual learning with NGOs in the evaluation field JICA set up the NGO-JICA Evaluation Subcommittee, consisting of members of NGOs and JICA, which has been examining evaluation methods suitable for grassroots cooperation that directly reaches local communities (Table 1-2). In fiscal 2005, highlighting community participation approach, the subcommittee carried out Thematic Evaluation

BoX

Synthesis Study of Evaluations—Systematization of Lessons in the Past

Synthesis study of evaluations was introduced in fiscal 2001 as a measure to promote feedback of evaluation results. The synthesis study examines evaluation results of several projects with a specific theme or in a certain sector and reanalyzes tendencies and problems common to projects in that theme or sector to draw out systematized lessons that can be easily fed back. Five synthesis studies have been carried out so far in fields such as primary and secondary education/science and mathematics, and information technology.

The results of these synthesis stud-

ies help promote feedback as easy-touse summarized information, and are widely utilized for planning and operating new projects. For example, the Synthesis Study on Evaluations: Science and Mathematics Education Projects clarified that it is important to promote understanding and establish systems involving school managers and administrators as one of the lessons. In fact, in response to this lesson, Project for Strengthening Cluster-based Teacher Training and School Management in Viet Nam, and Strengthening Child-centered Approach in Myanmar Education have incorporated implementation of training for school managers in parallel with training for school teachers in the activities.



A series of Synthesis Study of Evaluations

^{*} The summary of this evaluation is presented in Part 3 of this report.

^{**}Empowerment means that individuals or organizations obtain independent decision-making capabilities and economic, social, legal, and political power with awareness and exercise their capabilities.

Table 1-2 Members of the NGO-JICA Evaluation Subcommittee

NGO	
Miyuki Aoki	Services for the Health in Asian & African Regions (SHARE)
Tomoo Arakawa	Asia Volunteer Center
Atsuko Isoda	Japan International Volunteer Center/Kagawa Nutrition University
Tsukasa Konishi	The Association of Medical Doctors of Asia (AMDA)
Hiroshi Tanaka	The Institute for Himalayan Conservation
Makoto Nagahata	i-i-network, Research and Action for Community Governance
Yasushi Nozaki	Nagoya NGO Center/Nihon Fukushi University
JICA	
Satoko Miwa	Office of Evaluation, Planning and Coordination Department
Kazuaki Sato	Office of Evaluation, Planning and Coordination Department
Akihisa Tanaka	Office of Evaluation, Planning and Coordination Department
Chieko Yokota	Office of Evaluation, Planning and Coordination Department
Ryuko Hirano	Office of Evaluation, Planning and Coordination Department
Yosuke Tamabayashi	Administration Team, Regional Department I (Southeast Asia)
Yukiharu Kobayashi	Office of Citizen Participation, Training Affairs and Citizen Participation Department
Yuko Katsuno	Office of Citizen Participation, Training Affairs and Citizen Participation Department

in Community Participation for the purpose of presenting appropriate viewpoints when evaluating projects adopting a community participation approach and identifying an effective implementation method for a community participation approach through evaluation (BOX 4).

3) Examination of Methodology of Program Evaluation

JICA is working to strengthen its program approach, which strategically combines cooperation projects across project schemes or sectors to further raise the effects of projects and solve problems in developing countries. In concrete terms, planning and budget control in the program unit are being tried out, thus upgrading project management systems with programs in mind.

As a part of such efforts, JICA has continued examination to develop methods when evaluating a program based on the experience of country program evaluation and research into methods of major donor agencies. As a result, JICA has decided to examine the program evaluation method that conducts evaluation based on the following three points at this time.

 a. In order to evaluate the relevance of cooperation as a means to raise effects for solving problems, not only will consistency of the partner country's strategy with JICA's program be exam-



Cooperation with NGOs—Aiming for Effective Implementation of Community-centered Development

The thematic evaluation in community participation targets cases of JICA's projects that adopt a community participation approach. By identifying specific activities in each project and viewpoints required when evaluating these projects, lessons from the past for more effective projects are drawn out to feedback for improvement of projects that adopt community participation for the future.

JICA has adopted approaches for promoting community participation in various fields and the background, purposes, and the positioning of the adoption vary from project to project. In this study, in order to verify community participation approaches that JICA is working on in a broad way, the following three projects in different fields and with different positioning of community participation in project were selected for evaluation.

- Gunung Halimun Salak National Park Management Project in Indonesia (Environmental conservation)
- School for All (Project on Support to the Improvement of School Management through Community Participation) in Niger (Education)

 Project for Participatory Village Development in Isolated Areas in Zambia (Rural development)

The project in Indonesia attempts to demonstrate a rural model where the residents can coexist with nature in a pilot-site village inside the national park for the purpose of formulating a park management plan for biodiversity in the national park. In the project in Niger, which aims to improve the school environment by school management through community participation, assistance is provided to raise the ownership of the people concerned, including residents, teachers, and students so that educational development with those people in the center will progress. In the project in Zambia, for the purpose of creating a self-sustainable village in an isolated area that is left out of development and cannot correspond to economic deregulation, creation of a model where the residents can conduct rural development continuously by themselves is the aim.

In this evaluation, the NGO and JICA have jointly examined viewpoints of evaluation, studied documents, interviewed

people involved, conducted oral surveys with a broad range of local residents, etc. Especially in the process of evaluation, evaluation of community participation approaches based on viewpoints closer to the community became possible by obtaining knowledge from NGO members possessing experience in grassroots projects with regard to community-centered development, viewpoints of empowerment of individual residents, and methods of approaching residents.

JICA is planning to promote such study analysis and evaluation further to compile a report in the future.



Oral survey among local residents

ined, but also the priority and positioning in the strategy of the partner country.

- b. In evaluating a program, consistency and relations among constituent elements of the program will be examined with a focus on its strategic characteristics as well as accumulation of individual project implementation.
- c. Evaluation will be made using the concept of "contribution" based on cooperation and collaboration among the partner country, Japan, and other donor countries and agencies.

In fiscal 2005, based on the above draft, a program evaluation on a basic education program in Honduras was carried out in trial, working on further improvement of the method. The results are summarized as thematic evaluation on Program Evaluation (Basic Education Sector in Honduras) *.

4) Participation in Joint Evaluation with Other Donor Countries and Agencies

Some of JICA's evaluations are carried out jointly with other donors such as bilateral cooperation organizations and international agencies. As shown in the movements surrounding Millennium Development Goals and Poverty Reduction Strategy Paper, in recent years, collaboration between donor countries and agencies while respecting the ownership of developing countries has gained more importance in achieving development goals in the international community. Under the circumstances, more evaluations are jointly carried out, and JICA has also participated

in a joint evaluation called Joint Evaluation of External Support to Basic Education in Developing Countries, which was comprised of the members of the evaluation network of OECD-DAC (Organization for Economic Cooperation and Development, Development Assistance Committee). Through participation in joint evaluation, evaluation from larger standpoints such as positioning and effects of Japan's cooperation in a global framework has become possible, and at the same time, lessons obtained through evaluation can be mutually shared and utilized. Furthermore, joint evaluation is considered important from the viewpoint of efficient evaluation that avoids duplication.

JICA actively promotes collaboration and cooperation with other donor countries and agencies for implementation of assistance with bigger impacts and participation in joint evaluation (BOX 5).

(4) Securing Transparency and Objectivity in Evaluation

1) Establishment of the Advisory Committee on Evaluation

In fiscal 2002, JICA established the Advisory Committee on Evaluation, which included external experts from universities, NGOs, and international organizations (Table 1-3). The committee has provided JICA with a broad range of recommendations and proposals to enhance evaluation systems, evaluate new themes, and improve methods for feeding back and disclosing



Joint Evaluation with Other Donor Countries and Agencies—Assistance for the Great Sumatra Earthquake and Indian Ocean Tsunami Disaster (Emergency Assistance)

The Great Sumatra Earthquake and Indian Ocean Tsunami, which occurred on December 26, 2004, brought devastating damage to Indian Ocean coastal countries such as Indonesia, Sri Lanka, India. Thailand, and Maldives. It is estimated that the number of missing and dead reached 210,000 and the number of direct and indirect victims reached 1.2 million. For this greatest disaster on record, which brought devastation damage to a wide area, substantial funds were collected from governments and the private sector throughout the world, and many aid organizations, including governments of donor countries, international organizations, and NGOs, provided assistance in the affected countries. Japan also provided emergency assistance of 53.5 billion yen through bilateral cooperation, including the dispatch of Japan Disaster Relief Team by ODA, as well as international organizations. In

addition, a wide range of aid activities was provided by many NGOs.

One year after the tsunami, the Tsunami Evaluation Coalition (TEC) was established under the initiatives of the United Nations Office for the Coordination of Humanitarian Affairs World Health (UNOCHA) and Organization (WHO) to summarize activities of aid agencies and obtain common lessons with regard to emergency assistance. The execution of a joint evaluation has been determined with the participation of over 30 donor countries' governments, including Japan's, related organizations of the affected countries, international organizations, and NGOs. Joint evaluation is being carried out from September 2005 to May 2006 to look into how the international community responded to emergency assistance under five themes: 1) international community's funding, 2) aid coordination, 3)

needs assessment, 4) impact on local and regional capacities, and 5) linking relief, rehabilitation and development. From Japan, the Ministry of Foreign Affairs, the Japan Bank for International Cooperation (JBIC), and JICA are jointly participating, providing cooperation in the evaluation of Japan's role in case studies of each donor. JICA coordinates with the people involved and liaises with TEC as a secretariat on the Japan side.



Japan Disaster Relief Team engaged in medical activities for victims (Indonesia)

^{*} The summary of this evaluation is presented in Part 3 of this report.

Advisory Committee on Evaluation



Table 1-3 Members of the Advisory Committee on Evaluation

Chairperson:

Hiromitsu MUTA:

Professor of Human Resource Development & Dean, Graduate School of Decision Science and Technology, Tokyo Institute of Technology

Committee Members:

Atsuko AOYAMA:

Professor, Department of International Health, School of Medicine, Nagoya University

Kiyoko IKEGAMI:

Director, UNFPA Tokyo Office

Akira KAWAGUCHI:

Manager, Asia and Oceania Group, International Economic Affairs Bureau, Nippon Keidanren (Japan Business Federation) (until June 2005)

Michiya KUMAOKA:

President, Japan International Volunteer Center

Tsuneo SUGISHITA:

Professor, Faculty of Humanities, Ibaraki University

Masafumi NAGAO:

Professor, Center for the Study of International Cooperation in Education, Hiroshima University

Hiroshi Nakayama:

Manager, Asia Group, International Cooperation Group, International Cooperation Bureau, Nippon Keidanren (Japan Business Federation) (since June 2005)

Shunichi FURUKAWA:

Professor, Graduate School of Systems and Information Engineering. University of Tsukuba

Koichi MIYOSHI:

Professor, Graduate School of Asia Pacific Studies, Ritsumeikan Asia Pacific University (since June 2004)

evaluation results.

Every year since fiscal 2003, the results of terminal evaluations conducted by JICA have been examined in the Advisory Committee on Evaluation. This is a process in which external experts add verification to secure the objectivity of internal evaluation conducted by JICA. It is called secondary evaluation. The evaluation identifies issues and proposals on future tasks concerning planning and management of projects, implementation methods and reporting of evaluation, and evaluation systems.

Taking these recommendations from external experts as mentioned above into account, JICA has made various efforts to improve and expand project evaluations such as improvement of project evaluation guidelines, enhancement of feedback of evaluation results, introduction of a timely disclosure system of evaluation results through the website, and review of editorial policy of the annual report.



Experts in a developing country participating in field study

2) Promoting Evaluation by Third Parties

JICA promotes external experts' participation in its evaluation not only to increase objectivity and transparency, but also to improve the quality of evaluation through use of their expertise. Evaluation by external experts (primary evaluation) is effective in drawing lessons based on their expertise and ensuring objectivity. Therefore, some ex-post evaluations at the program level such as thematic evaluation are entrusted to external organizations such as universities and private consultancy firms. Also, JICA promotes participation in primary evaluation by experts in developing countries as a third party.

In addition to primary evaluation by third parties, JICA actively promotes secondary evaluations of internal evaluation conducted by JICA. JICA carries out secondary evaluation by the Advisory Committee on Evaluation every year as described in the above 1), and in addition, JICA has introduced secondary evaluation in ex-post evaluation at the project level to ensure objectivity based on external viewpoints. As for ex-post evaluation at the project level, external experts in developing countries conduct secondary evaluation on ex-post evaluation reports prepared by local consultant (BOX 6). And for ex-post evaluation at the program level such as thematic evaluation, secondary evaluation by external experts as the third party has been adopted.

In addition, JICA makes efforts to gain expert knowledge and increase transparency by having external experts in the target sectors or issues participate in thematic evaluation. Several external advisors have been appointed to take part in almost all the thematic evaluations since fiscal 2003.

In the course of promoting evaluation by third parties, JICA works to enhance partnership with universities, research institutes, academic societies, the private sector, and NGOs at home and overseas. One example is thematic evaluation on Communicable Disease Control in Africa*, which gained cooperation from the African Evaluation Association, involving external African experts with expertise in the field with evaluation (Part 3, BOX 9, p.86). The thematic evaluation on Economic Partnership**, which started in fiscal 2004 was entrusted to a

^{*} The summary of this evaluation is presented in Part 3 of this report.

^{**}The outline of this evaluation is introduced in a BOX in Part 3 of this report.

joint team consisting of Hiroshima University and Mitsubishi Research Institute.

3) Enhancing Disclosure System of Evaluation Results

Timely and sound disclosure of evaluation results is an essential part of JICA's efforts to ensure accountability. JICA discloses all the evaluation reports and uploads evaluation results in a timely manner on its website.

For the website in particular, the contents have been greatly enriched in recent years. Summaries of evaluation results of individual projects, program level evaluation reports including thematic evaluation, Annual Evaluation Reports, and project evaluation guidelines are posted. At the same time, the English website is enriched with textbooks of evaluation training posted in addition to the above items. The access number visiting the evaluation page of the website exceeds 4,000 a month on average.

In addition to enhancement of the website, JICA holds evaluation seminars open to the general public as a method for broadly disclosing evaluation results. In the evaluation seminars, JICA transmits information widely at the stage when major evaluation results are obtained during country-program or thematic evaluation, and receives opinions from participants as well.

In fiscal 2004 JICA held six seminars of thematic evaluation under the themes Synthesis Study of Evaluation in Science and Mathematics Education Projects, NGO-JICA Collaboration Program, Poverty Reduction/Community Development, the



Evaluation seminar open to the public

Synthesis Study of Evaluation in Information Technology (IT)related Human Resources Development and the Utilization of IT in Various Fields, Synthesis Study of Evaluation in Agriculture and Rural Development, and Gender Evaluation of Participatory Community Development. About 580 participants, including those from development assistance organizations, researchers at universities and research institutions, consultants, and NGO members, attended the seminars and exchanged ideas on various topics. In and after fiscal 2005, evaluation seminars under the themes Volunteer Program, Economic Partnership, and Higher Education are scheduled.



Secondary Evaluation by External Experts—Ex-post Evaluation of **Individual Projects**

In order to increase the objectivity of evaluation, JICA introduced secondary evaluation by external experts in fiscal 2003, and it was carried out in fiscal 2004 as well. For ex-post evaluation of the Research Project for Higher Utilization of Forest and Agricultural Plant Materials in Thailand, primary evaluation was entrusted to the local consultant in Thailand, and secondary evaluation on the evaluation report was requested for a local academic expert. As a result, the following comments were obtained.

[External expert]

Suchint Simaraks, Associate Professor, Faculty of Agriculture, Khon Kaen University

[Summary of secondary evaluation results]

This evaluation was conducted in accordance to the guidelines, and obtained useful results overall. Taking the following points into consideration could have made the quality of the evaluation even higher.

- ◆ In addition to the lessons specified in the report, more lessons could have been drawn out in aspects such as coordination and cooperation among related organizations, field survey and results of technical transfer to farmers. The purposes of the project were to develop a model of sustainable agroforestry, and disseminate it to rural
- areas. As for training carried out as part of the dissemination activity, interviews with trainees should have been effective. This would have led to useful lessons in dissemination activity for the future.
- ♦ When evaluating the overall effects and sustainability of the project, more detailed information at the farmers' level could have been collected. It was better to clarify what kinds of knowledge and information were selected and used, after termination of cooperation, as well as to follow the flow of knowledge and information from project activities including research to farmers.

Chapter 2 Improving JICA's Cooperation Using Evaluation Results

The primary objectives of project evaluation conducted by JICA are to ensure accountability to the people, utilize evaluation results as a tool for project management by feeding them back into projects, and enhance learning among parties concerned. Under such objectives, JICA has been striving to share and accumulate good practices within the organization using evaluation results in the course of improving projects through feedback.

As part of its effort, JICA, in fiscal 2004, conducted a questionnaire study on good practices using evaluation results to select excellent cases of utilization of evaluation results for project improvement and share them within the organization. The results were provided in the Annual Evaluation Report 2004 (Part 1, Chapter 3).

With the purpose of sharing and accumulating information within JICA about good practices of using evaluation results and organizational efforts toward utilization, JICA conducted a case study in fiscal 2005 as it did in fiscal 2004. In particular in fiscal 2005, the study targeted thematic task forces responsible for knowledge management by sector and issue within JICA.

As a result of the studies, the following patterns in the utilization of evaluation results were identified.

a. Utilization for planning and operation of individual projects

For example, planning of new projects is improved using the evaluation results of similar projects in the past as references; project modifications are made based on the results of monitoring and evaluation of projects under implementation. There are also cases where the results of thematic evaluation, i.e. program-level evaluation, are used for improving planning and operation of projects.

Utilization for the formulation of cooperation policies by sector and issue

After analyzing aid trends and cooperation approaches by sector and issue, JICA works to clarify the basic concepts and directions of its projects. Evaluation results in the past are reflected in formulating cooperation policies at the program level as well.

c. Utilization for improving systems for project implementation

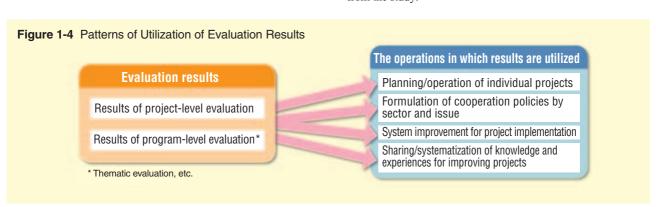
In order to implement effective and efficient projects, it is essential to improve the system of operational processing on an as-needed basis. The study showed the cases where evaluation results were used for system improvement.

d. Sharing and systematization of knowledge and experiences for project improvement

As described above, in order to proceed with project improvement through utilization of evaluation results, the efforts led primarily by thematic task forces were made in various areas, including promotion of information sharing among the concerned parties by holding study sessions and systematization of sector-specific lessons.

In connection with the effort of the entire organization in improving its cooperation activities, the Office of Evaluation of the Planning and Coordination Department of JICA has been committed to the compilation of a database of past lessons and the extraction of systematic lessons through a thematic synthesis study (see BOX 3, p.17), as well as to the promotion of sharing the good practices described above within the organization.

The following sections introduce the cases of utilization of evaluation results in various forms such as planning/operation of individual projects, formulation of cooperation policies by sector and issue, system improvement, etc., which were obtained from the study.



2-1 Cases of Utilization for Planning/ Operation of Individual Projects

As examples of cases in which evaluation results were used for planning/operation of individual projects, this section presents the efforts in three areas: agricultural and rural development, fishery, and energy/mining. In launching a new project, JICA currently ensures that lessons from similar projects in the past are utilized from the planning stage to implement effective projects. The ex-ante evaluation document has space to be filled in with regard to utilization of lessons learned from similar projects in the past (See Part 2, p36, Examples of Ex-ante Evaluation).

(1) Agricultural and Rural Development

In planning and formulating Agricultural and Rural Development for Rehabilitation and Reconstruction through Community Approach in Trincomalee, launched in Sri Lanka in fiscal 2005, the results of Thematic Evaluation in Poverty Reduction and Community Development were utilized. The project involves reconstruction of rural infrastructure with participation of the community in the Northeast Province, Trincomalee, which has been devastated as a result of the civil war that lasted over two decades. It aims to establish a development model for participatory agricultural and rural reconstruction through activities such as enhancement of community-based organizations and technical guidance in agriculture.

In specific terms, the following actions have been taken during the formulation of project plans by making use of lessons learned from the thematic evaluation.

- The lesson learned from the Rural Livelihood Generation Project in the Philippines, which was subject to the thematic evaluation study as a case, is that mutual cooperation was not sufficiently obtained since the roles of the concerned parties were not clearly defined. Thus, in the project in Sri Lanka, information will be thoroughly shared among the concerned parties prior to the launch of the project regarding the concept and method of operations as well as the division of roles. Even during the project, the information will be updated appropriately in the periodical joint committee sessions. Through such activities, the project aims to build a mutual cooperation system with the involvement of various concerned parties such as an agriculture support center, administrators of provincial and village levels, community-based organizations, etc.
- In the Project on Strengthening Sulawesi Rural Community
 Development to Support Poverty Alleviation Programs in
 Indonesia and the Participatory Rural Development Project in
 Bangladesh, both of which were also subject to the thematic
 evaluation study, a proactive approach was adopted to increase
 the incentives and initiatives of the concerned parties in the
 partner countries, which led to support gained from the con-

cerned parties for the activities and the highest sustainable morale. Making use of the lessons, proactive and continuous participation of the community-based organizations, which are the key player of development, will be promoted in the project in Sri Lanka, by performing operations based on the community action plans developed by community initiatives.

(2) Fishery

The Fisheries Training Project in the Federated States of Micronesia utilized the results of its mid-term evaluation for its project management. Specifically, based on the activities performed during the first half of the cooperation period, the organizational system of the marine fisheries training school, which is the implementing body of the project, was reviewed at the time of mid-term evaluation, and as a result, a career counselor was placed at the school. Through the activities of the career counselor, the operations of the marine fisheries training school became widely known to private shipping companies engaged in marine fisheries, which used to be unfamiliar with the school activities. This contributed to gaining cooperation from private shipping companies in activities of the training school, allowing the use of private fishing vessels and regular ferries in addition to school-owned training ships for on-board training. As a consequence, training opportunities have increased and the quality of training has improved (more practical training opportunities), creating more job opportunities for students. Furthermore, effective management of practical training was made available without increasing the budget of the training school.

In other cases, lessons learned from projects in the past were used for the start of new similar projects. For example, the lesson learned from the Aquaculture Improvement and Extension Project in Laos is that conducting third-country training in Thailand was effective for the promotion of understanding and technical improvement of the Lao trainees because of similarities in culture and language. In addition, in the Freshwater Aquaculture Development Project in Indonesia, verification tests at the farmers' level and visits to the more advanced farms proved to be effective for the dissemination of aquaculturing technology to small-scale farms. Based on these lessons, in newly planned projects called Freshwater Aquaculture Improvement and Extension Project in Cambodia and Aquaculture Improvement and Extension Project in Laos (Phase 2), the following considerations have been given at the planning stages.

- Promoting South-South cooperation (third-country training and dispatch of third-country experts)
- Technology exchange between the counterpart and experts by taking advantage of the overlapping periods of both projects in Cambodia and Laos
- Diffusion of aquaculture at the farmers' level, highlighting training and exchange among farmers.

Table 1-4 Example of CD Assessment Check Sheet

First Classification	Second Classification	Third Classification	80's	90's	2000- present	Prospect
		Systems of EU states				
		National Development Plan				
		Energy Conservation Law				
	Legal system	Energy conservation regulations				
		Energy conservation policy and measures of authorities				
		IS014001				
		Convention on Climate Change				-
		Subsidy				
	Public funds	Low-interest loan				
Society		Preferential tax				
,		Energy cost				-
	Incentives	Energy self-sufficiency				-
	incentives	Emission control of greenhouse gases				
		Energy-conservation potential				1
	ESCO market	ESCO market				
	Energy- conservation	Energy-conservation awareness				
		Environment consciousness				
	awareness	Cost consciousness				
	Partnership	Partnership among administration, enterprises and citizens				
		Training for energy managers				
	Central government	Factory consulting				1
		Public Relations, Policy Formulation				
Organization/	Public sector	Agency for Small and Medium-sized Enterprises				· · · · · · · · · · · · · · · · · · ·
Individual	Fublic Sector	Universities (cooperative organizations of government)				
		Factories				
	Private and commercial sector	ESCOs				
	COMMITCICIAL SCOTO	Sellers of energy devices				
	Davishaval	Population, ethnicity, religion				
Prerequisites	Peripheral environment for	Land				
(present only)	the promotion of	Natural conditions				
	energy- conservation	Economy, core industries				
	55001 144.011	Other donors				

(3) Energy/Mining

In the energy/mining area, experiences with evaluation of similar projects in the past have been utilized for the planning and evaluation of other projects.

For the terminal evaluation of the Project on Energy Conservation in the Republic of Turkey, a Capacity Development (CD) Assessment Check Sheet was developed to evaluate capacity of promoting energy conservation at the levels of individual, organization and society as a method of monitoring and evaluation. This enabled them to evaluate the consolidation and diffusion of technology in specific terms from a comprehensive perspective of capacity development.

This type of CD Assessment Check Sheet is deemed effective if it is used not only at the time of evaluation, but also starting from the stage of project formulation. For example, making use of the sheet at the initial stage of project planning enables the selection of appropriate counterpart organization through the analysis of organizational capacity. Furthermore, by comprehensively encompassing the three layers, namely individual, organization, and society, it is greatly expected to perform detailed examination

of the cooperation content, incorporating the view of achieving the overall goals. Thus for the Project on Energy Conservation in Saudi Arabia and Dissemination of Promotion Energy Conservation in Indonesia, based on the knowledge and experience obtained from the project in Turkey, a similar CD Assessment Check Sheet will be prepared for ex-ante evaluation of capacity of promoting energy conservation at the levels of individual, organization and society.

Furthermore, outside of projects in the energy conservation area, the thematic task force for energy/mining area is looking to implement CD assessment depending on the conditions of each subsector and holds study sessions on CD for that purpose. In the study sessions, efforts are made to promote understanding of basic concept of CD and share examples of the CD carried out by projects for energy

conservation and rural electrification.

2-2 Cases of Utilization for Formulation of Cooperation Policies by Sector and Issue

In the areas of health and transportation, lessons learned from evaluation results in the past were utilized for cooperation policies by sector and issue (Thematic Guidelines and Approaches for Systematic Planning of Development Projects, respectively), which were compiled in fiscal 2005.

(1) Health

After sorting out the general conditions, aid trends, and approaches and methods of major development issues, JICA systematically compiled its accumulated experience and knowledge as Thematic Guidelines, which includes points to consider in implementation of JICA projects/programs and directions of cooperation. The objective of the Thematic Guidelines is to promote sharing of basic information and knowledge about issues among the concerned parties of JICA, serving as a reference for

planning and implementation of JICA cooperation activities. The Thematic Guidelines in the area of nursing education were formulated in fiscal 2005. The following lessons obtained from the evaluation results of the past projects were used in the formulation process of the Guidelines.

- In some Islamic countries, where the status of women is low, nursing is considered to be women's work, and therefore, the status of nurses is perceived to be low. There are no institutional and social settings where specialized knowledge obtained in postgraduate education can be fully utilized, which in some cases hinders the generation of project effects (Nursing Education Project in Pakistan). When planning cooperation activities for the countries where gender discrimination and inequality could impede projects, it is essential to conduct analysis on gender issues in advance.
- When there is a plan to disseminate the nursing education models designed by projects throughout the nation, it is insufficient just to cover the cooperation period of JICA project (generally five years); instead, a longer-term perspective is required. The counterpart government should in principle be responsible for the nationwide dissemination. Still, it is important to develop strategic approaches jointly with the partner country even while the project is in progress and continue support on an as-needed basis, in order to consolidate the outcomes of the model districts at a national level and contribute to the nationwide dissemination.

Based on these lessons, the Thematic Guidelines list the following two points to be considered for cooperation activities: a) A gender perspective for cooperation in the countries where the status of women is low; and b) Development of strategic approaches toward nationwide dissemination of pilot projects in model schools or model districts.

Similarly, Synthesis Study of Evaluation in Higher Education, which has been conducted since fiscal 2004, is an example of the utilization of evaluation results for the formulation of Thematic Guidelines. The evaluation is to comprehensively analyze JICA projects in the area of higher education in the past, explore the direction of cooperation in the area and draw out lessons for formulation of future projects. Evaluations are conducted with the prospect that these lessons are to be reflected in the Thematic Guidelines in the same sector (See Part 3, BOX 10, p.102 Thematic Evaluation [Synthesis Study of Evaluation in Higher Education]).

(2) Transportation

JICA has systematically sorted out major development issues by sector and examined effective approaches based on experi-

Figure 1-5 "The Approaches for Systematic Planning of Development Projects"

Five Development Strategy Goals in Transportation

- 1. Improving the environment that provides transport services
- 2. Response to globalization and regionalization
- Balanced national land development
- Sustainable urban development and improvement of living standards
- 5. Elevation of rural living standards and regional promotion



ences with JICA projects in the past to compile Approaches for Systematic Planning of Development Projects since fiscal 2001*. In the area of Transportation, the Approaches for Systematic Planning of Development Projects (hereinafter referred to as the "Approaches") was formulated in fiscal 2005 and lessons learned from past projects were used in its formulation process.

For example, the following lessons are obtained from the Study on Urban Transport Master Plan and Feasibility in Viet Nam (HOUTRANS) (2002.8-2004.6).

- In the area of urban transportation, development studies have conventionally been conducted focusing on public transportation development such as railways and light rail transit (LRT), and road infrastructure development such as highways and trunk roads. However, since the development of urban transport systems is a part of a comprehensive program closely related to urban and economic development, it is important to formulate plans with a future vision of sustainable urban systems.
- The execution of a master plan requires, in essence, selection as a political process, which, in some cases, stands in a trade-off relationship with the other options. In order to secure necessary funds and resources, a competition frequently arises with other sectors. Under such circumstances, it is essential for the government and prefectural and city governments to share common visions and take consistent actions toward the implementation of plans addressed by the master plan.

Based on these lessons, the Approaches recommend a cooperation approach aimed at sustainable urban systems while placing urban transport as part of a comprehensive program, encompassing urban and economic development. In an effort to improve the implementation rate of recommended projects, it is important to form a consensus among several concerned parties, including central and local governments.

In addition, the Approaches include various lessons obtained from past projects and are expected to be utilized for future oper-

^{*} The Approaches for Systematic Planning of Development Projects have been compiled in the following sectors thus far: urban/regional development, water contamination/resources, reproductive health, agriculture/rural development, poverty reduction, higher education, trade/investment promotion, information and communication technology, basic education, HIV/AIDS control, and promotion of small and medium-sized enterprises. These reports are available on the JICA website, Research, www.jica.go.jp/english/resources/publications/study/topical/index.html.

ations. Furthermore, skill-up training for the JICA staff is scheduled to disseminate the details of the Approaches.

2-3 Cases of Utilization for Improving Project Implementation Systems

Cases in peace-building and South-South cooperation that are cross-area and cross-sector issues are introduced as good practices of using evaluation results to improve project implementation systems.

(1) Peace-building

Peace-building assistance is one of JICA's primary cooperation areas. In order to extract lessons for effective cooperation in this area, JICA conducted Peace-building Assistance: Review of Assistance to Afghanistan* in fiscal 2004. Valuable lessons were obtained to rapidly and flexibly implement peace-building assistance: namely, promoting the streamlining of operation processes such as decision-making in project formulation (expediting approval process, simplification of required documents, etc.), and reviewing operational procedures of a project that requires urgent attention while confirming priority.

Based on the results of the review, JICA launched the Fast Track System in fiscal 2005 with the aim of quickly planning and implementing urgent projects by simplifying and reducing the ordinary implementation processes. When approved for the application of the Fast Track System, the project is eligible to go through simplified implementation formalities related to project formulation, decision-making, implementation preparation, and procurement.

Thus far, cooperation projects to be implemented in the Jericho region of Palestine and South Sudan have been approved for system application.

Another recommendation obtained for future assistance to Afghanistan is to enhance the safety management system. Based on the recommendation, JICA underwent a series of improvements in fiscal 2004 and 2005, including the upgrading of safety equipment, such as vehicles and radio devices, introduction of contingency plans, and allocation of security clerks who are familiar with the locality. JICA conducts human resources development incorporating safety management capability, for example, by improving safety management training program, which is carried out jointly with the United Nations High Commissioner for Refugees (UNHCR), and sharing these experiences within the organization.

(2) South-South Cooperation

South-South cooperation is defined as "mutual cooperation aimed at fostering self-sustaining development, involving deep-

ening relations among developing countries while conducting technical and economic cooperation**." To support and promote such South-South cooperation, a JICA South-South cooperation task force compiles knowledge and experiences with related projects and looks into more effective and efficient support systems.

Evaluation results in the past have been actively used in these activities; for example, the evaluation results of Strengthening the JCPP (Japan Chile Partnership Program) (Technical Cooperation Project) and Support for South-South Cooperation in Mexico (formerly, individual expert dispatch program) were used for the formulation of an operation improvement plan. The plan was developed based on the lessons in relation to the process of enhancing capacity of the implementing country of South-South cooperation and the systematic framework of cooperation.

JICA's South-South cooperation task force extends further discussions on the systems, by setting up subcommittees that focus on particular themes, such as system improvement, needs-resource matching, and evaluation, with the purpose of expanding and actively promoting support for South-South cooperation. JICA is currently implementing Thematic Evaluation on South-South Cooperation (BOX 7) in fiscal 2005 to be used for feedback into these efforts.

2-4 Cases of Sharing/Systematization of Knowledge and Experiences for Project Improvement

In using lessons learned from past projects to improve projects in various ways as described above, each thematic task force promotes the sharing of knowledge and experience by systematizing the lessons learned on thematic issues based on evaluation results and through study sessions, etc. Efforts in the areas of education, fishery, and gender mainstreaming are presented in this section.

(1) Education

In the area of education, Sharing Luncheon meetings have been held since fiscal 2004 in order to promote the use of the sector-related information including lessons. At the study sessions during lunch time hours, members including JICA staff in charge of projects and senior advisors exchange opinions and information on a practical level, sharing lessons learned from various evaluation results.

In addition, Overseas Technical Support Seminars and Study Sessions with External Experts were launched in fiscal 2005. The Overseas Technical Support Seminars aim mainly at supporting project formulation at overseas offices to enhance the field based management. Information on lessons learned from past projects and points to be considered for project formulation

^{*} See Chapter 3, Part 3 of this report for the results of the review and the details of the feedback of the results.

^{**}Definition by JICA's South-South cooperation task force

in the area of education is shared between JICA headquarters and overseas offices. In fiscal 2005, a total of nine meetings were held under four themes: current situation and issues of educational cooperation, non-formal educational cooperation, early child development, and teacher training and primary schools construction with community participation in Japan. The Study Sessions with External Experts aim to share experiences and lessons with a wide variety of external experts engaged in project formulation and implementation, look into ways to implement higher quality cooperation, and establish human networks by connecting concerned parties in a forum for exchanging candid opinions. In the study sessions, specific project cases are presented and opinions are exchanged on a regular basis.

(2) Fishery

In the fishery area, in order to promote feedback of lessons in

an organized manner, the thematic task force is working to systematically sort out related lessons in accordance with cooperation approaches stipulated in JICA's thematic guidelines. In specific terms, the task force selects projects with high relevance to each mid-term objective of the development goals and draw out lessons through case studies of those projects (Table 1-5). In the future, these lessons will be fed back into the formulation and management of projects.

(3) Gender Mainstreaming

In the area of gender, in order to integrate gender perspectives at each stage of JICA projects, namely, project formulation, implementation, and evaluation, the thematic task force has been working on information sharing among the concerned parties by accumulating and utilizing knowledge and experience with gender issues. When conducting these activities, the task force uti-

Table 1-5 Development Objectives and Relevant Recommendations/Lessons Learned (Sustainable Use of Fishery Resources)

The recommendations and lessons are derived from reports and opinions of the concerned parties on several projects in the past corresponding to each mid-term objective. They are used for formulation and management of similar new projects.

Development Objectives			Recommendations /Lessons
		1-1-1 Development of appropriate fishery technology	
	1-1 Increase in the volume	1-1-2 Dissemination of appropriate fishery technology	
1. Effective use of	of fishery products	1-1-3 Reduction of waste in fishery harvests	
fishery resources	1-2 Promotion of	1-2-1 Promotion of extensive aquaculture	
	aquaculture	1-2-2 Promotion of intensive aquaculture	
		4-1-1 Capacity development of fishery administrators	
	4-1 Fishery administration	4-1-2 Upgrading of functions of fishery administration agencies	
4. Capacity		4-1-3 Development of law and regulations concerning fishery management	
development	4-2 Fishery education/	4-2-1 Establishment of implementation systems for fishery education and training	
	training	4-2-2 Enhancement of dissemination and education activities	1

Development Objectives	Mid-term Objectives	Sub-targets of Mid-term Objectives	Recommendations and Lessons for Mid-term Objectives
4. Capacity development	4-2 Fishery education/ training	4-2-1 Establishment of implementation systems for fishery education and training 4-2-2 Enhancement of dissemination and education activities	Partnership with the private sector By implementing skills training in cooperation with private corporations that require skilled personnel the ability needed in the field is developed, enabling the development of human resources with practical skills (note). More accessible curriculum design Envisaging that the students and trainees are residents of remote areas or islands, consideration should be given so that participants can learn about as many disciplines as possible on one occasion to save travel time and expenses. Utilization of alumni members

(Note) When on-board training was conducted in cooperation with private shipping companies in Micronesia, better quality training was made available, and more job opportunities were created. Since no additional training cost was necessary for the partnership, effective management was made possible.

By hiring alumni members as temporary teachers, educational institutions short of teaching staff can resolve the problem and the alumni members are

able to review what they have learned.

lizes evaluation results of the past such as the thematic evaluation entitled Gender Evaluation of Participatory Community Development (See Chapter 1, Part 3).

As part of these activities, JICA selected tools for gender consideration, details of activities and the impacts in terms of gender perspective and compiled a booklet of Good Practices of Gender Consideration.

JICA staff in charge of projects utilizes it as a reference to understand the specific methods of integrating gender perspective and its effects, and in particular, to try out development of the gender consideration framework at the formation stage of a new project. Thematic task forces disseminate these good practices to other staff in charge of the same case and promote the utilization of lessons by distributing copies of the booklet and introducing some good practices on various occasions such as staff training.



Toward Implementation of More Effective South-South Cooperation Support—Thematic Evaluation on South-South Cooperation

Japan has promoted South-South cooperation, regarding it as an effective instrument for sharing development experiences, knowledge and technology among developing countries, and bringing about a wide range of effects. In specific terms, based on the outcomes of technical cooperation, Japan has selected a core country of South-South cooperation as an implementing country, and conducted third-country training programs by accepting trainees from other developing countries and dispatch of third-country experts.

In recent years, in efforts to strengthen country-specific and issue-specific approaches, JICA has set forth a policy to utilize South-South cooperation that could lead to expansion of aid resources and promotion of regional cooperation, seeing the cooperation as an effective way to facilitate capacity development of developing countries. In light of such background, in order to clarify the method of implementing more effective South-South cooperation support, the thematic evaluation on South-South cooperation has been conducted with the following three objectives.

- a. To review and analyze how JICA's support for South-South cooperation has been positioned and implemented in the policies of the three concerned countries: implementing country, recipient country, and Japan
- b. To analyze the contribution and effects of JICA's support for South-South cooperation on development in the

implementing and recipient countries

c. To make recommendations in terms of policy/strategy, system and operation toward effective and efficient implementation of South-South cooperation support

In conducting the study, major implementing countries of South-South cooperation (Thailand, Indonesia, Mexico, Chile, and Kenya) and recipient countries (Laos, Cambodia, El Salvador, and Uganda) were selected as targets for field study in regions such as Asia, South and Central America and Africa. Other than these nine countries, questionnaire studies were conducted targeting the agencies in charge of technical cooperation in other countries as well as JICA Overseas Offices. As a result of these studies, changes have been found in project formulation, planning, and implementation of South-South cooperation.

One change is that there are more cases where South-South cooperation support is more clearly positioned as a solution to the issues in recipient countries under country-specific and issuespecific approaches, instead of as an extension of support for implementing countries of South-South cooperation. For example, there are cases where Japan has utilized the resources of developing (implementing) countries for technical cooperation projects that Japan conducts in neighboring developing (recipient) countries. There are also cases where efforts have been made to promote mutual cooperation between developing countries, with greater emphasis on the needs of recipient countries when implementing South-South cooperation support. In latter cases, a mechanism has been established to link the needs of recipient countries with the resources of implementing countries within the regional strategies, as in the case of the JICA-ASEAN Regional Cooperation Meeting in Asia (JARCOM). Effects of the South-South cooperation, which responds to the needs of recipient countries, are expected to be significant. As a future direction, further promotion of this type of support seems worthwhile.

As a change observed in some implementing countries, there has been an emergence of new donor countries. These implementing countries have started to initiate South-South cooperation within the region, and it is not always appropriate to treat them as a supplementary/dissemination center for Japan's technical cooperation, as they were before. In these cases, when Japan implements South-South cooperation support, it is increasingly necessary to build new relations under more equal partnerships.

This thematic evaluation will further sort out and analyze information, with an intention to understand the situations surrounding South-South cooperation support by region and identify specific measures for improving the implementation of more effective cooperation.

Part 2

Project-level Evaluation



Overview of Evaluations of Individual Projects in Fiscal 2004

JICA evaluated the following individual projects in fiscal 2004, using a consistent evaluation system from the ex-ante to expost stages (Table 2-1 to 2-4). This chapter presents some cases of evaluation results as examples of ex-ante, mid-term, terminal, and ex-post evaluations. As JICA introduced a system to disclose evaluation results promptly on the website in fiscal 2003, the summaries of results of these evaluations were already available on the website.

The objectives of evaluations at each stage are shown below.

- Ex-ante evaluation: The ex-ante evaluation is carried out prior to the implementation of a project to check conformity with Japan's aid policy, JICA Country Program, and needs of the partner country, as well as to clarify the project content and expected cooperation effects for the purpose of evaluating the relevance of the project comprehensively. Evaluation indicators of a project set at the ex-ante stage will be used to measure the progress and effect of cooperation in subsequent monitoring and evaluations at stages from mid-term to ex-post evaluations.
- Mid-term evaluation: The mid-term evaluation is conducted

at the middle point of a project to evaluate it for smooth operation leading to outcome. It aims to clarify the achievements and implementing process and examine whether plans of the project are appropriate, focusing on relevance, efficiency, and so on. Results of the mid-term evaluation are utilized to revise the original plan or improve the operation structure.

- Terminal evaluation: The terminal evaluation is conducted to examine whether the project will achieve the outcome as planned prior to the termination of a project. It comprehensively analyzes the achievement level of the project purpose, efficiency, and prospective sustainability of a project. Based on the result, it is decided whether to complete the project and whether follow-up such as extension of cooperation is necessary or not.
- Project-level ex-post evaluation: The ex-post evaluation is conducted a few years after completion of a project to verify impact of the project on the recipient side and sustainability of the cooperation effect. Results of ex-post evaluation serve as lessons learned for effective and efficient project implementation in formulating and implementing new projects and/or programs in the future.

Table 2-1 Ex-ante Evaluation (Total 117 Projects)

Project Title	Country/Area	Cooperation Scheme
Asia		
Participatory Rural Development Project	Bangladesh	Technical Cooperation Project
Project for Sustainable Arsenic Mitigation under the Integrated Local Government System	Bangladesh	Technical Cooperation Project
Strengthening Primary Teacher Training in Science and Mathematics	Bangladesh	Technical Cooperation Project
The Agriculture Research and Extension Support Project in Lhuntse and Mongar	Bhutan	Technical Cooperation Project
National Tuberculosis Control Project (Phase 2)	Cambodia	Technical Cooperation Project
The Capacity Building for the Forestry Sector (Phase 2)	Cambodia	Technical Cooperation Project
Freshwater Aquaculture Improvement and Extension Project (PROTECO)	Cambodia	Technical Cooperation Project
Cambodia-Japan Cooperation Center	Cambodia	Technical Cooperation Project
The Master Plan Study on Rural Electrification by Renewable Energy	Cambodia	Development Study
Master Plan Study for the Sustainable Development of Siem Reap/Angkor Town	Cambodia	Development Study
Study on Comprehensive Agricultural Development of Prek Thnot River Basin	Cambodia	Development Study
Economic Legal Infrastructure Development Project (Corporate Related Laws)	China	Technical Cooperation Project
Sino-Japan Forestry Ecology Training Center Project	China	Technical Cooperation Project
he Study on the Improvement of the Water Rights Systems	China	Development Study
(ining-Centered Qinghai Province Comprehensive Tourism Development Study	China	Development Study
Augmentation of Water Supply and Sanitation for Goa State	India	Development Study
The Project for Institutional Support for Food Security	Indonesia	Technical Cooperation Project
he Empowerment of Water Users Association Project	Indonesia	Technical Cooperation Project
Regional Educational Development and Improvement Program	Indonesia	Technical Cooperation Project
he Study on Countermeasures for Sedimentation in Wonogiri Multipurpose Dam Reservoir	Indonesia	Development Study
Detailed Design Study of the Urgent Rehabilitation Project of the Tanjung Priok Port	Indonesia	Development Study

Project Title	Country/Area	Cooperation Scheme
T Human Resource Development (National IT Center)	Kyrgyzstan	Technical Cooperation Project
he Project for Capacity Building in PIP Management	Laos	Technical Cooperation Project
he Project on Electric Power Technical Standard Establishment	Laos	Technical Cooperation Project
he Aquaculture Improvement and Extension Project (Phase 2)	Laos	Technical Cooperation Project
Comprehensive Traffic Safety Plan in Vientiane Municipality	Laos	Development Study
evelopment of Human Capacity for Weather Forecasting and Data Analysis	Mongolia	Technical Cooperation Project
he Study on Solid Waste Management Plan for Ulaanbaatar Municipality	Mongolia	Development Study
echnical Cooperation Project for the Eradication on Opium Poppy Cultivation and Poverty Reduction in Kokang Special Region No.1	Myanmar	Technical Cooperation Project
Strengthening Child-centered Approach in Myanmar Education	Myanmar	Technical Cooperation Project
Community-oriented Reproductive Health Project	Myanmar	Technical Cooperation Project
nprovement of Public Administration for Local Governments in Punjab	Pakistan	Technical Cooperation Project
evelopment Study on Improvement of Management Information Systems in Health Sector	Pakistan	Development Study
formation Technology Human Resource Development Project	Philippines	Technical Cooperation Project
ustainability Improvement of Renewable Energy Development in Village Electrification	Philippines	Technical Cooperation Project
ducational Support for the New CNS/ATM Systems Implementation	Philippines	Technical Cooperation Project
roject for Enhancement of Community-based Forest Management Program	Philippines	Technical Cooperation Project Technical Cooperation Project
he Project on the Development and Promotion of Location-specific Integrated High-yielding Rice and Rice-based Technologies	Philippines	Technical Cooperation Project
easibility Study and Implementation Support on the CALA East-West National Road Project	Philippines	Development Study
laster Plan Study on the Development of National Airport	Philippines	Development Study
,		, ,
tudy on the Domestic Shipping Development Plan	Philippines	Development Study
roject for Technical Strengthening of National Institute of Metrology (Phase 2)	Thailand	Technical Cooperation Project
he Project for Improvement of Sewage Treatment Plant Management	Thailand	Technical Cooperation Project
he Study on Implementation of the BMA Subcenters Program	Thailand	Development Study
Development Study on Planning and Capacity Building for Natural Resource Management and Sustainable Rural and Agricultural Development in the North Thailand	Thailand	Development Study
rigation and Rice Cultivation Project in Manatuto	Timor-Leste	Technical Cooperation Project
ursing Education Improvement Project	Uzbekistan	Technical Cooperation Project
roject for Strengthening Cluster-based Teacher Training and School Management	Viet Nam	Technical Cooperation Project
mprovement of Port Management System	Viet Nam	Technical Cooperation Project
orest Fire Rehabilitation Project	Viet Nam	Technical Cooperation Project
Itilization of Intellectual Property Information	Viet Nam	Technical Cooperation Project
Project for Improvement of Medical Service in Central Region	Viet Nam	Technical Cooperation Project
Capacity Development of Participatory Irrigation Management System through Viet Nam Institution or Water Resources Research (VIWRR) for Improvement of Agricultural Productivity	Viet Nam	Technical Cooperation Project
trengthening Health Service Provision in Hoa Binh Province	Viet Nam	Technical Cooperation Project
nprovement of Plant Quarantine Treatment Technique against Fruit Flies or Fresh Fruits	Viet Nam	Technical Cooperation Project
etailed Design Study of Cai Mep-Thi Vai International Terminals	Viet Nam	Development Study
he Study on the Development of Industrial Statistics	Viet Nam	Development Study
Capacity Building for Preparing Feasibility Studies and Implementation Plans for Afforestation Projects	Viet Nam	Development Study
he Comprehensive Urban Development Programme in Hanoi City	Viet Nam	Development Study
atin America		
tudy on Revitalization of Small and Medium Enterprises	Argentina	Development Study
nprovement of Technical Extension for Small-scale Livestock Farmers Project	Bolivia	Technical Cooperation Project
echnological Center on Agriculture and Livestock (Phase 2)	Bolivia	Technical Cooperation Project
ommunity Policing Project for the Federative Republic of Brazil	Brazil	Technical Cooperation Project
tudy on Integrated Plan of Environmental Improvement in the Catchment Area of Lake Billings in ao Bernardo do Campo	Brazil	Development Study
he Study on Pecem Industrial and Port Complex Development Plan	Brazil	Development Study
The Study on Capacity Development Program in Bridge Rehabilitation Planning, Maintenance and Management Based on 29 Bridges of National Highway Network	Costa Rica	Development Study
Strengthening of the Primary Health Care in the Province of Samana	Dominican Republic	Technical Cooperation Project

Project Title	Country/Area	Cooperation Scheme
roject of Sustainable Agricultural Development of the Small Agriculturists of North Central Region f the Dominican Republic	Dominican Republic	Technical Cooperation Project
he Study for Integrated Management of Urban Solid Waste in Santo Domingo	Dominican Republic	Development Study
ne Project for Shellfish Aquaculture Development	El Salvador	Technical Cooperation Project
ne Project on Waste Management for Small Municipalities	El Salvador	Technical Cooperation Project
eproductive Health — Prevention of Uterine Cervical Cancer	Mexico	Technical Cooperation Project
nprovement of Cattle Productivity for Small and Medium Scale Farmers Project	Nicaragua	Technical Cooperation Project
echnological Center on Agriculture (Phase 2)	Paraguay	Technical Cooperation Project
he Project on Strengthening Integrated Health Care for the Population Affected by Violence and luman Rights Violation	Peru	Technical Cooperation Project
IERCOSUR Tourism Promotion Project	MERCOSUR	Technical Cooperation Project
he International Training Course on the Criminal Justice System Reforms in Latin America	Latin American Countries	Technical Cooperation Project
urope		
azanlak Area Revitalization Project	Bulgaria	Technical Cooperation Project
he Study on Establishing Digital Topographic Maps for Georgia	Georgia	Development Study
he Study on Protection and Rehabilitation of the Southern Romanian Black Sea Shore	Romania	Development Study
ceania		
he Improvement of Pohnpei International Airport	Micronesia	Development Study
Strengthening Expanded Immunization Program in the Pacific Region	Oceania 13 countries	Technical Cooperation Project
Aiddle East		
ledical Education Project	Afghanistan	Technical Cooperation Project
trengthening Teacher Training Project	Afghanistan	Technical Cooperation Project
uberculosis Control Project	Afghanistan	Technical Cooperation Project
conomic Empowerment for Women	Afghanistan	Technical Cooperation Project
he Central Agricultural Experiment Station Rehabilitation Project	Afghanistan	Technical Cooperation Project
leproductive Health Project	Afghanistan	Technical Cooperation Project
Irgent Rehabilitation Support Program in Mazar-e-Sharif	Afghanistan	Development Study
Study of Seismic Microzoning of the Wilaya Algiers	Algeria	Development Study
PP Program for Cairo Urban Toll Expressway Network Development	Egypt	Development Study
he Study on Water Supply System Resistant to Earthquakes in Teheran Municipality	Iran	Development Study
purism Development through Museum Activities	Jordan	Technical Cooperation Project
he Technical Cooperation Project Improvement of Medical Care for Expectant and Nursing Mothers	Morocco	Technical Cooperation Project
ational Ports Development Strategy Study	Oman	Development Study
evelopment and Training Center Project	Saudi Arabia	Technical Cooperation Project
roject on Development of Efficient Irrigation Techniques and Extension	Syria	Technical Cooperation Project
apacity Development of Environmental Monitoring at Directorates for Environmental Affairs in Governorates	Syria	Technical Cooperation Project
roject for Sustainable Management of Coastal Fisheries Resources	Tunisia	Technical Cooperation Project
roadening Regional Initiatives for Developing Girl's Education (BRIDGE) Program in Taiz	Yemen	Technical Cooperation Project
Africa		
ne Study on Urgent Rehabilitation Program of Ports	Angola	Development Study
he Groundwater Development and Water Supply Training Project (Phase 2)	Ethiopia	Technical Cooperation Project
roject on Strengthening Technology Development, Verification, Transfer and Adoption through armers Research Groups	Ethiopia	Technical Cooperation Project
ncreasing Access to Quality Basic Education through Developing School Mapping and strengthening Microplanning in Oromia Region	Ethiopia	Development Study
roject on Basic Training for Reintegration of Demobilized Soldiers	Eritrea	Technical Cooperation Project
Project for the Improvement of Health Service with a Focus on Safe Motherhood in the Kisii and Verich Districts	Kenya	Technical Cooperation Project
nprovement of Environmental Management Capacity in Nakuru	Kenya	Technical Cooperation Project
he Master Plan and Feasibility Study to Alleviate Traffic Congestion and Improve Traffic Safety in ne Nairobi Metropolitan Area	Kenya	Development Study
he Study on the Sustainable, Autonomic Drinking Water Supply Program in the South Region of Madagascar	Madagascar	Development Study
To classy on the deciding of the control of the con		
trengthening of Mathematics and Science in Secondary Education	Malawi	Technical Cooperation Project

Project Title	Country/Area	Cooperation Scheme
The Oasis Zone Development Focused on Feminine Promotion	Mauritania	Development Study
Master Plan Study for Utilization of Solar Energy	Nigeria	Development Study
The Study on the Reorganization of the Production of Rice	Senegal	Development Study
The Study on Water Supply Improvement in Coast Region and Dar es Salaam Peri-urban	Tanzania	Development Study
The Study on Rural Water Supply in Mwanza and Mara Regions	Tanzania	Development Study
Secondary Science and Mathematics Teachers' Project	Uganda	Technical Cooperation Project

Table 2-2 Mid-term Evaluation (Total 27 Projects)

Table 2-2 Iviid-teriii Evaluatioii (Total 27 FTojects)		
Asia		
Research and Development Center Project on Sustainable Agricultural Technology	China	Technical Cooperation Project
The Japan-China Cooperation Science and Technology Center for Forest Tree Improvement Project	China	Technical Cooperation Project
Human Resource Development of Rehabilitation Professionals	China	Technical Cooperation Project
The Project for Strengthening Extension System for Bivoltine Sericulture	India	Technical Cooperation Project
The Project for Strengthening Decentralized Environmental Management System	Indonesia	Technical Cooperation Project
Mongolia-Japan Center for Human Development	Mongolia	Technical Cooperation Project
Community Forestry Training and Extension Project in Dry Zone	Myanmar	Technical Cooperation Project
Balancing and Modernization of Workshop Facilities at PITAC, Lahore (Phase 2)	Pakistan	Technical Cooperation Project
Asia-Pacific Development Center on Disability	Thailand	Technical Cooperation Project
The Project of the Japan-Thailand Technical Cooperation on Animal Disease Control and in Thailand Neighboring Countries	Thailand	Technical Cooperation Project
Program on the Instructor Training for Electric Power Sector	Viet Nam	Technical Cooperation Project
Latin America		
The Mining Environment Research Center Project	Bolivia	Technical Cooperation Project
The Project for Strengthening Regional Health Network for Santa Cruz Department	Bolivia	Technical Cooperation Project
Strengthening the Agricultural Technical Support System to Small Scale Farmers in Tocantins State	Brazil	Technical Cooperation Project
The Project for Strengthening Institutional Capacity Mining Environmental Management	Chile	Technical Cooperation Project
Vector Control of Chagas Diseases	Guatemala	Technical Cooperation Project
The Improvement of Teaching Method in Mathematics	Honduras	Technical Cooperation Project
Strengthening Continuing Education in Nursing and Midwifery in the South of the Republic of Paraguay	Paraguay	Technical Cooperation Project
Europe		
The Project on the Reduction of Seismic Risk for Buildings and Structures	Romania	Technical Cooperation Project
Oceania		
Palau International Coral Reef Center Strengthening Project	Palau	Technical Cooperation Project
Middle East		
Saudi-Japanese Automobile High Institute Project	Saudi Arabia	Technical Cooperation Project
The Geologic Remote Sensing Project	Turkey	Technical Cooperation Project
Africa		
African Institute for Capacity Development (Phase 2)	Kenya	Technical Cooperation Project
Project for the Development of Human Resources in Health	Senegal	Technical Cooperation Project
Kilimanjaro Agricultural Training Center Project (Phase 2)	Tanzania	Technical Cooperation Project
Project for Participatory Village Development in Isolated Areas	Zambia	Technical Cooperation Project
Lusaka District Primary Health Care Project (Phase 2)	Zambia	Technical Cooperation Project

Table 2-3 Terminal Evaluation (Total 92 Projects)

Table 2-3 Terminal Evaluation (Total 92 Projects)		
Asia		
Integrated Approach for Mitigation of the Arsenic Contamination of Drinking Water	Bangladesh	Technical Cooperation Project
The Capacity Building for the Forestry Sector	Cambodia	Technical Cooperation Project
The Maternal and Child Health Project (Phase 2)	Cambodia	Technical Cooperation Project
The Model Afforestation Project in Sichuan	China	Technical Cooperation Project
Research on Performance Assessment and Product Certification for Residential Building	China	Technical Cooperation Project
Research Project on Timber from Man-made Forests	China	Technical Cooperation Project
Human Resource Development Project for Water Resources	China	Technical Cooperation Project
China-Japan Friendship Project on the National Center for Safety Evaluation of Drugs	China	Technical Cooperation Project

Project Title	Country/Area	Cooperation Scheme
Expanded Program on Immunization Strengthening Project	China	Technical Cooperation Project
Monitoring and Control Techniques of Acid Rain and SO _X	China	In-country Training
Health-care in Poor Remote Area	China	In-country Training
Assistance to General Election	Indonesia	Technical Cooperation Project
Human Resources Development for Local Governance	Indonesia	Technical Cooperation Project
Strengthening of Polytechnic Education in Electric-related Technology	Indonesia	Technical Cooperation Project
Project for Establishment and Management of Appropriate Technology Center for Waste Water Treatment	Indonesia	JICA Partnership Program with NGC Local Governments and Institutes
Collaborative Study Project on the Epidemiology Pathogenesis and Molecular Characterization of NIPAH Virus in Animals	Malaysia	Technical Cooperation Project
Leprosy Control and Basic Health Service Project	Myanmar	Technical Cooperation Project
The Project for the Improvement of Sethathirath Hospital	Laos	Technical Cooperation Project
Development of the Faculty of Economics and Management of National University of Laos	Laos	Technical Cooperation Project
ao-Japan Human Resource Cooperation Center	Laos	Technical Cooperation Project
International Training Course on Operation and Maintenance of Construction Machinery	Pakistan	Third-country Group Training
Project for Strengthening of Continuing School Based Training Program for Elementary and Secondary Science and Mathematics Teachers	Philippines	Technical Cooperation Project
The Project for Enhancement of Capabilities in Flood Control and Sabo Engineering of the Department of Public Works and Highways (Follow-up)	Philippines	Technical Cooperation Project
The Project for Establishment and Implementation Conservation Plans in Local Government Units in the Province of Cavite	Philippines	Technical Cooperation Project
Extension of Technology Development for Electronic Navigational Charts	Philippines	Technical Cooperation Project
The Project for Improvement of Farmers Income and Area Development	Philippines	Technical Cooperation Project
Environmental and Productivity Management of Marginal Soils	Philippines	Technical Cooperation Project
The Project for the Preparation and Publication of the Philippine Pharmacopeia (Phase 2)	Philippines	Technical Cooperation Project
Information and Communication Technology for Entrepreneurship	Philippines	Third-country Group Training
Regional Training Orientation Course on the Principles and Practice of Appropriate Technology Development	Philippines	Third-country Group Training
Contemporary Development in Banking and Finance	Singapore	Third-country Group Training
Mechatronic Systems Technology	Singapore	Third-country Group Training
Project for Human Resource Development in Information Technology through Capacity Building of University of Colombo School of Computing	Sri Lanka	Technical Cooperation Project
The Project on the Practical Energy Management Training Center	Thailand	Technical Cooperation Project
Project for Development of Trauma Center Complex	Thailand	Technical Cooperation Project
SIC—Tool and Mold Technology Development Project	Thailand	Technical Cooperation Project
Capacity Building for Planning Management of Local Authorities	Thailand	Technical Cooperation Project
The Project of Capacity Building on the Development of Information Technology for Education	Thailand	Technical Cooperation Project
The Project on the Industrial Water Technology Institute (Phase 2)	Thailand	Technical Cooperation Project
The Project for the Asian Center for International Parasite Control	Thailand	Technical Cooperation Project
Project on Local Management Cooperation	Thailand	Technical Cooperation Project
The Reforestation and Extension Project in the Northeast of Thailand (Phase 2)	Thailand	Technical Cooperation Project
Development of the Method of Urban Development (Follow-up)	Thailand	Technical Cooperation Project
Regional Cooperation Project on Capacity Building of Drug Analysis for Improvement of Drug Law Enforcement in Thailand, Cambodia, Lao P.D.R., Myanmar and Viet Nam	Thailand	Technical Cooperation Project
Communicable Diseases Control and Surveillance	Thailand	Third-country Group Training
The Project for Improvement of Cattle Artificial Insemination Technology	Viet Nam	Technical Cooperation Project
Project on the Improvement of Higher Maritime Education	Viet Nam	Technical Cooperation Project
Strengthening of National Institute of Veterinary Research	Viet Nam	Technical Cooperation Project
The Bach Mai Hospital Project for Functional Enhancement	Viet Nam	Technical Cooperation Project
The Project for Strengthening Training Capacity for Technical Workers in the Hanoi Industrial College	Viet Nam	Technical Cooperation Project
Latin America	<u> </u>	
Project on Establishment of Control Capacity for Industrial Wastewater and Waste	Argentina	Technical Cooperation Project
Regional Geologic Mapping with Advanced Satellite Sensors	Argentina	Technical Cooperation Project
Diagnosis and Research on Domestic Animal Diseases	Argentina	Third-country Group Training
Caribbean Disaster Management	Barbados	Technical Cooperation Project
Project for the Dissemination of High-quality Rice Seeds for Small-scale Farmers	Bolivia	Technical Cooperation Project

Project Title	Country/Area	Cooperation Scheme
Support to Promotion of Participation by Community Residents in the Field of Education	Bolivia	Community Empowerment Program
Technology Development for Revegetation and Utilization of Degraded Areas in the Semi-arid Region (Caatinga) of the Northeastern Brazil	Brazil	Technical Cooperation Project
Project of Community Development through Training of Community Educators	Brazil	Community Empowerment Program
Public Health Course for PALOPS	Brazil	Third-country Group Training
International Course about Tropical Illness	Brazil	Third-country Group Training
Training in Integrate Development of Cassava for PALOPS	Brazil	Third-country Group Training
Worker's Health	Brazil	Third-country Group Training
The Project on Conservation of the Environment and Rural Development with Farmers' Participation for the Mediterranean Dryland Zone of Chile	Chile	Technical Cooperation Project
Improvement of Productivity for the Small-scale Dairy Farmers Project	Chile	Technical Cooperation Project
The Reproductive Health Project in the Health Region 7	Honduras	Technical Cooperation Project
Development of Method of Research and Education in Electronic Field	Mexico	Technical Cooperation Project
Development of Agriculture and Local Community in South Baja California State	Mexico	JICA Partnership Program with NGO Local Governments and Institutes
The Project for Strengthening of the Local System of Integrated Health Care (SILAIS) of Granada	Nicaragua	Technical Cooperation Project
Leader Training for the Small and Medium-sized Companies	Paraguay	Technical Cooperation Project
Improvement of Small and Medium Scale Dairy Farm Management Project	Paraguay	Technical Cooperation Project
Improvement of Local Health System	Peru	Technical Cooperation Project
Europe		
Human Resources Development for Environmental Engineers at the College of Dunaujvaros	Hungary	Technical Cooperation Project
Oceania		
Information and Communication Technologies (ICTs) Capacity Building at the University of the South Pacific	Fiji	Technical Cooperation Project
Middle East		
The Project on Upgrading of Metal Processing Technology	Egypt	Technical Cooperation Project
The Water Management Improvement Project in the Nile Delta	Egypt	Technical Cooperation Project
Project on the Improvement of Audio-visual Aids and Instruction Methods in Vocational Training at the Instructor Training Center (ICT)	Iran	Technical Cooperation Project
The Training Center Project for Agricultural Mechanization	Morocco	Technical Cooperation Project
Third Country Training Program in the Merchant Marine Field	Morocco	Third-country Group Training
Portable Water and Sanitation	Morocco	Third-country Group Training
The Establishment of the Water Resources Information Center	Syria	Technical Cooperation Project
Management of Water Resources and Improvement of Water Use Efficiency in Dry Areas	Syria	Third-country Group Training
The Project for Strengthening of Reproductive Health Education	Tunisia	Technical Cooperation Project
Project on Improvement of Maritime Education	Turkey	Technical Cooperation Project
Africa		
The Small-scale Irrigated Agriculture Promotion Project (Follow-up)	Ghana	Technical Cooperation Project
Improvement of Educational Achievement in Science, Technology and Mathematics (STM) in Basic Education	Ghana	Technical Cooperation Project
Strengthening of Rural Women's Capacity for Community Development	Kenya	In-country Training
Regional Course for the Promotion of Social Forestry in Africa	Kenya	Third-country Group Training
Capacity Building for WATSAN Stakeholders in the Sustainability of Water Facilities in Oyo State	Nigeria	In-country Training
The Integrated Community Forestry Development Project	Senegal	Technical Cooperation Project
Sustainable Rice Cultivation by Mulch System	Tanzania	Technical Cooperation Project
Community Empowerment for Water Supply and Sanitation	Zambia	Community Empowerment Program
In-Country Aquaculture Training	Zambia	In-country Training

Table 2-4 Project-level Ex-post Evaluation (Total 42 Projects)

Table 2 1 Project level Expect Evaluation (Potal 12 Projecto)		
Asia		
The Project for Improvement of Water Supply Facilities in Phnon Penh 2	Cambodia	Grant Aid (Basic Design Study)
The Watershed Management Training Project on the Loess Plateau	China	Technical Cooperation Project
The Integrated Development Project in the Waterlogged Area in the Four-Lake Area of Jianghan Plain, Hubei Province	China	Technical Cooperation Project
Environmental Protection and Safety Training Center of the Coal Industry	China	Technical Cooperation Project
Technology for the Control of Waste Gases in the Petrochemical Industry	China	Technical Cooperation Project

Project Title	Country/Area	Cooperation Scheme
Dairy Development Project in Tianjin	China	Technical Cooperation Project
Forest Protection Research Project in Ningxia-Hui	China	Technical Cooperation Project
The Project for Improvement of Kalawati Saran Children's Hospital	India	Grant Aid (Basic Design Study)
The Irrigation Engineering Service Center Project	Indonesia	Technical Cooperation Project
The Integrated Agricultural and Rural Development Project in Southeast Sulawesi Province	Indonesia	Technical Cooperation Project
The Agricultural Statistics Technology Improvement and Training Project	Indonesia	Technical Cooperation Project
Technical Cooperation Project for Improvement District Health Service in South Sulawesi	Indonesia	Technical Cooperation Project
Dairy Technology Improvement Project	Indonesia	Technical Cooperation Project
Pediatric Infectious Disease Prevention Project	Laos	Technical Cooperation Project
The Project on Risk Management of Hazardous Chemical Substances	Malaysia	Technical Cooperation Project
The Project for Construction of Sixth Male Primary School	Maldives	Grant Aid (Basic Design Study)
The Central Forestry Development Training Center Project	Myanmar	Technical Cooperation Project
The Maternal and Child Health Project	Pakistan	Technical Cooperation Project
Project for Prevention and Control of AIDS	Philippines	Technical Cooperation Project
The Family Planning and Maternal and Child Health Project (Phase 2)	Philippines	Technical Cooperation Project
Pesticide Monitoring System Development Project	Philippines	Technical Cooperation Project
The Research Project for Higher Utilization of Forestry and Agricultural Plant Materials	Thailand	Technical Cooperation Project
Latin America	'	
The Beef Cattle Improvement Project	Bolivia	Technical Cooperation Project
The Clinical Research Project of State University of Campinas	Brazil	Technical Cooperation Project
Quality Improvement of Foundry Technology in Small and Medium Scale Industry	Brazil	Technical Cooperation Project
The Research Project on Small-scale Horticulture in Southern Brazil	Brazil	Technical Cooperation Project
The Project for Agricultural Development on Sloped Terrains	Dominican Republic	Technical Cooperation Project
Research and Clinical Project for the Gastroenterological Diseases	Dominican Republic	Technical Cooperation Project
The Project for Improvement of Water Supply Facilities in the Southern Region of Quito City	Ecuador	Grant Aid (Basic Design Study)
Engineering and Industrial Development Center for Small and Medium Scale Industries at Queretaro State	Mexico	Technical Cooperation Project
Refinery Safety Training Center Project	Mexico	Technical Cooperation Project
The Project for the Improvement of Vegetable Production Techniques for Small Scale Farmers	Paraguay	Technical Cooperation Project
The Forest Extension Project in the Eastern Region of Paraguay	Paraguay	Technical Cooperation Project
Agricultural Statistics Project (Aftercare)	Paraguay	Technical Cooperation Project
The Forest Tree Improvement Cooperation Project	Uruguay	Technical Cooperation Project
The Veterinary Laboratory Improvement Project	Uruguay	Technical Cooperation Project
Middle East		
The Pediatric Emergency Care Project	Egypt	Technical Cooperation Project
The Fisheries Technical Training Project	Morocco	Technical Cooperation Project
mprovement of Mine Safety Technologies	Turkey	Technical Cooperation Project
Africa		
Kenya Institute of Surveying and Mapping	Kenya	Technical Cooperation Project
The Project for Rehabilitation of Building and Equipment of Coast Provincial General Hospital	Kenya	Grant Aid (Basic Design Study)
The Project for Construction of Primary Schools	Senegal	Grant Aid (Basic Design Study)

Example of Ex-ante Evaluation

① Outline of Project

- Country: Syria
- Project title: Capacity Development of Environmental Monitoring at Directorates for Environmental Affairs in Governorates
- Sector: Environmental management
- Cooperation scheme: Technical Cooperation Project
- Division in charge: Global Environment Department, Group 2



In an ex-ante evaluation, a workshop is held with the participation of stakeholders in order to formulate a project in line with local needs.

- Total cost (Japanese side): Approximately 340 million yen
- Period of cooperation: January 2005 to January 2008 (three years)
- Partner country's implementing agency: Ministry of Local Administration and Environment (MOLAE)
- Supporting organization in Japan: Ministry of the Environment

1. Outline of Cooperation

This project aims at strengthening the environmental monitoring capabilities (including both general environmental monitoring capability and pollution sources surveillance capability) of the Directorates for Environmental Affairs in Syria (hereinafter referred to as "the directorates"). Targeting 14 directorates nationwide, it focuses on improving the analytical skills of staff members in charge, laboratory operation and management skills, information management skills, environmental monitoring planning skills and environmental education implementation skills.

2. Necessity and Positioning of Cooperation

(1) Current Situation and Problems

The aggravating environment, especially of late, following industrialization in Syria has affected ordinary citizens in such ways as contamination of drinking water and food caused by water pollution and development of respiratory illness caused by air pollution. In order to respond to such problems, Syria has promoted system building in preparation for full-scale environmental administration by developing laws and regulations including the Basic Environmental Law and Environmental Protection Law, and by establishing Directorates for Environmental Affairs nationwide to monitor the environment. However, environmental monitoring by the directorates that are in charge of protecting local environments has just started and the conditions of equipment maintenance and staff members' skills are still immature. In other words, while the framework for an administrative system has been developed, the environmental monitoring capabilities of staff members at the directorates (including sampling, analysis, interpretation, evaluation, data filing and reporting, data management skills, laboratory operation and management skills and monitoring planning skills) have not fully developed and need immediate attention.

The directorates have just started implementing enlightenment and dissemination activities for local residents; however, the activities vary among provinces and are not implemented on a full scale. It is necessary to strengthen those activities in order to improve the residents' awareness about the environment.

(2) Positioning within the National Policies of the Government in the Partner Country

The 9th Economic and Social Development 5-year Plan (2001-2005) stresses the importance of environmental consideration while announcing further industrial promotion and econom-

ic liberalization. Utilization of the resources in a sustainable way in order to strike a balance between the environment and industries is planned. The National Environmental Action Plan officially approved in 2003 sets specific goals to be achieved in the next 10 to 12 years in areas such as improvement of environment-related laws and regulations, development of human recourses, and control of damages on human health. It outlines the short- and mid-term action plans in order to realize the aforementioned goals. Futhermore, the minister announced in January 2004 that he would establish directorates in charge of monitoring the environment in 13 of the total 14 governorates nationwide (excluding Ar-Raqqah).

(3) Positioning within Japan's Foreign Aid Policy and JICA Country Program

The ODA Charter endorsed by the Cabinet in August 2003 states "balancing environment and development" as one of principles for providing aid. The project also conforms to Millennium Development Goals, the Environmental Conservation Initiative for Sustainable Development (Eco ISD) by the Japanese government, and the policies of the Third World Water Forum. In order to meet the requirements of the Japanese government and the international community for environmental consideration as stated above, administrative skills of the Syrian environmental administration must be improved. The project conforms to environmental conservation (strengthening of environmental policy planning capability), one of the priority target areas for providing aid, in JICA's Country Program for Syria.

3. Framework of Cooperation

(1) Objectives of Cooperation (Outcomes)

1) Objective to be achieved at the end of cooperation (project purpose)

The target Directorates for Environmental Affairs in Governorates are capable of introducing and conducting regular monitoring of required parameters for water and air quality according to the monitoring plan formulated by the directorates themselves as well as implementing activities for public awareness, including publication of the monitoring results.

[Indicators]

• The analysis technology level to be targeted at each directorate is as follows:

Damascus: (water) chemical and biological analysis level, (air) basic sampling level (manual)

Aleppo and Homs: (water) basic analysis level, (air) basic sampling level (manual)

Other 11 directorates: (water) manual sampling level, (air) not included in the project

- The target directorates conduct monitoring of water and air on a regular basis according to the monitoring plan they formulate themselves.
- · Activities for public awareness are implemented in at least four

directorates of the 14 directorates.

 Monitoring results are issued and constantly open to the public as an annual report at the governorate level

Objectives expected to be achieved after the end of cooperation (overall goal)

Environmental monitoring system and publication of the monitoring results are introduced and disseminated to all the directorates.

[Indicators]

- All the directorates conduct monitoring of air on a regular basis according to the monitoring plan they formulate themselves no later than five years after the completion of the project.
- Roles for the national monitoring system are properly allocated among the directorates (reference system).
- Results of the monitoring are constantly issued and open to the public as an annual report at all governorates.
- Results of the monitoring are issued and open to the public as an annual report at the national level.

(2) Outputs and Activities

Output 1: The technical level of laboratory staff concerning environmental sampling and analysis is improved in the target directorates.

[Indicators] The following conditions at the target directorates as of 2008.

- a. The whole laboratory staff conducts environmental monitoring according to the Standard Operation Procedures (SOP) compiled.
- b. The whole laboratory staff reaches the grade B* level on monitoring items in charge.
- c. 50% of laboratory staff reaches the grade A^* level on monitoring items in charge.
- * Grade A: able to analyze samples, evaluate the data, and determine them on his/her own
- * Grade B: able to analyze samples and work out the data, but need decision from their superiors to evaluate and determine the data

[Activities]

- a. Compilation of SOP for samplings, analysis, interpretation, evaluation, data filing and reporting
- Training in theory for making monitoring plans, samplings, analysis, interpretation, evaluation, data filing and reporting
- c. Hands-on training in sampling, pre-treatments, analysis, interpretation, evaluation, data filing and reporting
- d. On-site on-the-job training (OJT) in sampling, analysis, interpretation, evaluation, data filing and reporting
- e. Training in analysis results checking, concept and procedures of evaluation

Output 2: Laboratories are properly managed by the laboratory staff itself at the target directorates.

[Indicators] The following conditions at the target directorates as of 2008

- a. Equipment in laboratories are properly operated and maintained according to the operation and maintenance manual compiled by the laboratory staff.
- A spare parts and consumable materials management system has been established.
- c. Chemical reagents are properly stored and cared for according to the operation and maintenance manual.
- d. Liquid and solid wastes from the laboratory are properly treated according to the operation and maintenance manual.
- e. Each directorate prepares its budget plan for regular monitoring.

[Activities]

- a Compilation of a "laboratory operation and maintenance manual" for equipment operation and maintenance, spare parts preparation, reagents storage and treatment, liquid and solid laboratory wastes treatment and others
- Hands-on training for equipment operation and maintenance, reagents storage and treatment, liquid and solid laboratory wastes treatment, and others
- c. Assistance and guidance to prepare directorates' budget plan for regular monitoring
- **Output 3:** Environmental analysis data is accumulated and properly managed at the target directorates.

[Indicators] Condition on the accumulation of the monitoring records at the target directorates as of 2008

[Activities]

- a. Creation of format for the monitoring records for laboratories and the General Commission for Environmental Affairs in MOLAE
- b. Compilation of monitoring records at each directorate
- c. Each directorate sends monitoring records to the General Commission for Emvironmental Affairs in MOLAE
- Output 4: Laboratory staff at the target directorates is able to formulate an environmental monitoring plan specifying required parameters.

[Indicators] The following conditions at the target directorates

- a. Environmental Monitoring Plan specifying parameters and monitoring sites is established in respective laboratories as of 2006.
- b. The existing "Environmental Monitoring Guideline" is established as a standard for all laboratories as of 2008.

[Activities]

- a. Preliminary pollution source inventory surveys
- b. Specification of monitoring sites and their parameters
- c. Formulation of "Environmental Monitoring Plan" specifying parameters and monitoring sites in respective laboratory
- d. Assistance and guidance to integrate the exisiting "Environmental Monitoring Guideline" into a standard for all laboratories

Output 5: The results and data acquired by the project are open to and shared with the citizens of the target directorates.

The staff of target directorates is able to formulate its action plan for public awareness and environmental education.

[Indicators] The following conditions at the target directorates as of 2008

- a. Preliminary condition on public awareness is comprehended by each governorate and shared among the organizations concerned.
- b. Materials for activities for public awareness, such as textbooks, manuals, and pamphlets, are prepared.
- Seminars and workshops targeted for educational institutions and so forth are conducted.
- d. A periodical network meeting among organizations and/or institutions regarding environmental education in each governorate is organized.

[Activities]

- a. Preliminary survey on activities regarding environmental education and public awareness in each governorate
- b. Development of textbooks, manuals, pamphlets for environmental education
- c. Seminars and workshops for educational institutions, NGOs, etc.
- d. Strengthening of network among organizations and/or institutions regarding environmental education in each governorate and implementation of regular meetings

(3)Inputs

Japanese side

Dispatch of experts: environmental management, water quality analysis, air quality analysis and monitoring, data management, environmental education

Equipment provision: simplified water quality analysis equipment, general chemical and biochemical analysis equipment, heavy metal analysis equipment, air monitoring equipment, and accompanying equipment. Personal computers for data management, etc.

Counterparts training: training in Syria envisioned Project operation expenditures

Syrian side

Counterparts' labor cost

Arrangement of facility and land: laboratory equipment, disposal equipment for laboratory waste, expendables, project operation expenditures including the transportation expenses of seminar participants

(4) External Factors (External Conditions to be Met)

- Appropriate number of staff members with appropriate academic background or experience is assigned to the 14 directorates and the ministry.
- Laboratory staff trained by the project stays in laboratories and keeps working on the environmental monitoring.

- Agents/manufactures provide spare parts for the equipment in a timely manner.
- The Syrian government issues the administrative instruction on environmental monitoring.
- The Syrian government allocates budget for staff placement and equipment procurement to all directorates.
- The Syrian government issues the administrative instructions for environmental monitoring staff.

Results of Evaluation

1. Summary of Evaluation Results

(1) Relevance

The relevance of this project is high for the following reasons. Partner country's needs: Deterioration of environment has been progressing every year in Syria and prompt response is necessary. This project aims at regularly providing information on the current conditions of environmental contamination, the basis for enforcing the environmental administration, which is high in demand in Syria. It is said that the environmental problems become apparent when the GDP per person exceeds US\$1,000. Presently in Syria, where per capita GDP is around US\$1,200, the implementation of this project is timely.

Consistency with partner country's policies: Recognizing the necessity of environmental policies, the Syrian government has enacted various environment-related laws and regulations including a Basic Environmental Law, regulations on sewage and gas emissions, an Environmental Protection Law and a National Environmental Action Plan. At the same time, the government established a Directorate for Environmental Affairs in each governorate to perform environmental monitoring. In relation to the 9th Economic and Social Development 5-year Plan in which development of human resources in the environment field, establishment of environmental monitoring capabilities, strengthening of authorities of directorates, and establishment of laboratories were announced, the purpose of this project is highly consistent with the policies of the Syrian government.

Consistency with the aid policies of the Japanese government: Environmental consideration is one of the core policies for Japanese aid activities as apparent in the ODA Charter, in which "balancing environment and development" is stated as one of the fundamental conditions for providing aid, and also in the JICA Guidelines for Environmental and Social Considerations, which requires appropriate consideration of the environmental situation in the partner countries. Therefore, this project is consistent with Japanese aid policies. It is also consistent with environmental conservation (strengthening of environmental policy planning capability), one of the priority areas for providing aid, in JICA's Country Program for Syria.

Relevance of methods: Japanese technical advantage in this field is quite high, as Japan has overcome its pollution problems

in the past. JICA has implemented similar environment center projects in Thailand, Indonesia, Mexico, Chile and Egypt, and the experience, knowledge and lessons learned from those projects can be effectively utilized in the implementation of the project in Syria. The target area, technical transfer items and technical transfer targets of this project were determined based on the population of the target group, degree of environmental contamination, conditions of establishment of directorates' laboratories, existing skills of laboratory staff members, policies of the Ministry of Local Administrations and Environment, etc., and the choice is relevant. As of May 2004, there was no aid from other donors or Syrian government projects focusing on strengthening environmental monitoring capabilities, so this project does not overlap with any other aid programs. In the Latakia directorate, where UNEP-MED-POL (phase 2) is in the examination stage, the project focuses primarily on the accumulation of seawater quality monitoring data. The technical level of analysis is different from that of this project, thus the Latakia project does not directly overlap with this project.

(2) Effectiveness

This project is expected to be effective for the following reasons.

This project is structured theoretically as follows. The directorates improve their technical capabilities on environmental-monitoring (output 1). Operation and management of laboratories become appropriate (output 2). Data management capabilities are improved (output 3). Environmental monitoring plans are formulated (output 4). Environmental education capabilities are improved (output 5). When the Syrian government issues the administrative instructions on environmental monitoring (external factor), each directorate performs periodical monitoring according to the self-developed plans, and discloses its results (project purpose). The structure covers necessary and sufficient items for achieving the project purpose, and there appears no leap, duplication, or deficit in its theory.

Administrative instructions, the external factor, exist although they are incomplete. The environmental monitoring plan, standard operation procedures, operation and maintenance manuals, etc., which are created under this project, provide information to supplement the incomplete area of these administrative instructions. Therefore, although issuance of administrative instructions is the external factor for this project, this project is able to call on the completion and issuance of such instructions; therefore, this external factor will most likely be achieved.

(3) Efficiency

This project is expected to be efficient for the following reasons.

Equipment is provided locally through suppliers who have reliable local agencies. That makes procurement of spare parts easy, shortening the idle time of equipment. Purchasing cost can also be lowered. It is also easy to replenish reagents and expendables accompanying the equipment.

As for counterpart training, basic training in Damascus City by the Syrian local parties including universities and laboratories is planned as well as those by Japanese experts. The fact that the site for the project and for training is the same location contributes to providing more appropriate training at lower cost; thus high cost-efficctiveness is anticipated.

(4)Impact

The impact of this project is anticipated as follows.

The overall goal of this project is expected to be realized within approximately five years after the project is completed by establishing a mechanism to multiply the effects during the project period. The external factor to achieve the overall goal is that the Syrian government allocates a budget for staff placement and equipment procurement to all directorates. It is very possible this external factor will be achieved given that the Ministry of Local Administrations and Environment has already started to establish laboratories at the directorates.

The primary focus of capacity building in this project is on Damascus, Aleppo and Homs; however, the project considers the establishment of a mechanism to multiply the effects from the target directorates to all the directorates. Specifically, the mechanism addresses the following two points after due consideration is given to whether or not the establishment of laboratories with superior analysis capabilities in other provinces are appropriate. 1) Before the establishment of such laboratories or even in governorates where such laboratories are deemed unnecessary, a system should be established where directorates send collected and analyzed samples to the Damascus directorate for more advanced analysis so that such directorates have a way to obtain advanced analysis results. 2) Standard operating procedures and laboratory operation and maintenance manuals should be created so that they can be used at directorates which have newly installed laboratories.

This project will improve the directorates' capabilities to provide timely and reliable information on environmental contamination, which is expected to lead to the improvement of overall environmental management capabilities necessary to implement countermeasures against contaminated materials such as inspection of business entities that produce contaminated materials and issuance of administrative directions and orders.

By raising the community's awareness of the environment, this project is also expected to result in more complaints and requests regarding the environment, development of consensus for pollution prevention (depending on national circumstances), and residents reviewing their own lifestyles, thus finally strengthening the social environmental management capabilities.

No negative impacts are anticipated from this project.

(5) Sustainability

The sustainability of this project is anticipated for the following reasons. Recognizing fully the degree of environmental contamination, the Syrian government has established various environmental laws and regulations, and has planned to improve environmental monitoring capabilities, strengthen the authority of directorates, and establish laboratories under the 9th Economic and Social Development 5-year Plan. It also has appropriated a budget for the implementation of those plans. In short, they are ready to provide political and financial support with laws and regulations developed to ensure sustainability of this project.

This project strengthens the existing services of the laboratories of existing organizations, with no additional organizations, capabilities, or duties. Therefore, this project is expected to achieve sustainability smoothly from the organizational capability standpoint.

Also from the standpoint of the settlement of human resources, given that the transfer from public sectors to private sectors is not common in local cities in Syria, this project is expected to be sustainable. The Syrian government is also committed to improving treatment for civil servants so they are likely to stay in their jobs. For example, wages of government employees have continued to increase since 2003 (a 20% increase was introduced twice), and another wage increase will be introduced in 2005.

This project is expected to be sustainable from the standpoint of equipment maintenance, as activities to promote sustainability are incorporated into the project. Those activities include the provision of equipment that is easy to maintain by prioritizing local procurement in the selection of provided equipment, and setting the improvement of laboratory operation and management including equipment maintenance as one of the outputs for this project.

2. Consideration for Poverty, Gender, Environment, etc.

Only one directorate operates a laboratory in a practical manner; however, the laboratory has no facility to dispose of waste despite the fact that it is an environmental laboratory. Therefore, this project sets as a precondition the establishment of appropriate waste disposal facilities at laboratories of the target directorates. The project calls on the Syrian government to enforce measures necessary to meet this precondition.

3. Lessons Learned from Past Experience

Thematic Evaluation: Environmental Center Approach: Development of Social Capacity for Environmental Management in Developing Countries and Japan's Environmental Cooperation was reported in 2002 as an evaluation by third parties of projects in the environmental management field. The report points out tasks for the future such as 1) administrative positioning of a project, 2) contribution to companies and society, and 3) response to decentralization.

Lessons learned in the past are utilized in this project as follows: 1) monitoring environment (monitoring of sources for water contamination, general environmental monitoring of air quality) is the goal, not only in terms of improving analysis capabilities but also in terms of management of data obtained from the analysis; 2) community enlightenment and information disclosure activities are included to contribute to the improvement of social environmental management capabilities; and 3) not only the central ministry but also directorates are targeted in cooperation.

4. Future Evaluation Plan

Mid-term evaluation is scheduled to be implemented around July 2006, terminal evaluation around July 2007, and ex-post evaluation about five years after the end of cooperation.

Example of Mid-term Evaluation

Outline of Project

- Country: Senegal
- Project title: Project for the Development of Human Resources in Health
- Sector: Health
- Cooperation scheme: Technical Cooperation Project
- Division in charge: Human Development Department, Group 3
- Period of cooperation: November 2001 to October 2006
- Partner country's implementing organization: Department of Research and Education of the Ministry of Health and Prevention, Ecole de Nationale de Développement Sanitaire et Social (ENDSS), etc.



Practical training to check blood pressure at ENDSS

 Supporting organization in Japan: International Medical Center of Japan

1. Background of Cooperation

The government of Senegal issued the National Plan for Development of Human Resources in Health (PNF) in 1997, which states as one of its priority issues the securing of human resources in health. In Senegal, there are only seven doctors and 35 nurses per 100,000 citizens, and the numbers are significantly lower than the average numbers in all developing countries (78 doctors and 98 nurses). In addition, 73% of doctors, 60% of midwives, and 43% of nurses practice in the capital city of Dakar, where only 22% of the population resides, and therefore in rural areas unqualified medical staff has to examine and treat patients. Under such circumstances, the government of Senegal requested Japanese cooperation to assist in implementing the PNF.

2. Framework of Cooperation

(1)Overall Goal

To contribute to increasing the number of competent human resources in health who work in the primary health care system

(2) Project Purpose

To strengthen the education and training system for human resources in health who work in the primary health care system

(3)Outputs

Output 1: Schools, especially capabilities to educate and train human resources who work in the primary health care system, are strengthened.

Output 2: An appropriate in-service training system for nurses in the primary health care system is established.

Output 3: An appropriate education system for regional health care workers (ASC) in Gossas district (test district) is established.

(4)Inputs (at the time of evaluation)

Japanese side

Dispatch of long-term experts: 8 experts
Dispatch of short-term experts: 11 experts

Trainees received: 13 people Equipment provision

Senegalese side

Assignment of counterparts: 14 people

Land and facility provision

Local cost burden

Others

Evaluation Team

Team leader: Harumi Kitabayashi Director, Group 3, Human Development Department, JICA

Health administration: Noriaki Ikeda

Specialist, Bureau of International Cooperation, International Medical Center of Japan

Evaluation analysis: Eimitsu Usuda IC Net Limited

Cooperation planning: Keiji Ehara

Group 3, Human Development Department, JICA

Interpreter: Mariko Sekita

Period of evaluation: June 21, 2004 to July 9, 2004

Type of evaluation: Mid-term evaluation

Results of Evaluation

1. Achievement Level

(1)Initial Education

In order to strengthen the institutions and systems of initial education, the Department of Research and Education of the Ministry of Health and Prevention (DERF) drafted criteria for the establishment of private training schools for nurses and midwives, as well as a ministerial ordinance on the establishment of National Initial Education Coordination Committee that is in charge of promotion and coordination of national initial education. Though these drafts have not yet been signed, under DERF's guidance, three private schools have already met the criteria required for the establishment of schools.

In order to improve the capabilities of the Ecole de Nationale de Développement Sanitaire et Social (ENDSS), the only national educational institution for human resources in health, systemization of financial management and training equipment control, and the contents of practical training programs for nurses and midwives were thoroughly examined. The plan to utilize the multi-purpose building built with Japan's grant aid was also included. For the purpose of strengthening the capabilities of instructors at regional training centers in Kaolack, Tambacounda and Saint-Louis, who provide initial education and in-service training for assistant nurses, necessary equipment was provided to the centers and training was conducted for instructors.

(2) In-service Training

DERF drafted a ministerial ordinance on the establishment of the National In-service Training Coordination Committee in order to strengthen policies and system regarding in-service training for nurses and midwives. However, as with the National Initial Education Coordination Committee, the National In-service Training Coordination Committee has not yet been approved by the Ministry of Health and Prevention. Meanwhile, the project conducted an assessment on the needs for in-service training in eight regions for the purpose of promoting programming of inservice training. Based on the analysis results, a revised guide book for chiefs at health posts was drafted and teaching manuals for instructors were developed. Reports on in-service training for 2001-2002 and 2002-2003 were compiled and distributed to offices related to the regional medical affairs offices and donors concerned.

(3) Training for Regional Health Care Workers

The project conducted evaluation and analysis on the current national situation of regional health care workers' (ASC) activities. Based on the results, the Gossas health district in Fatick region was selected as a test model for training for ACS and support for ASC with community participation.

In the planning for this test model, methods of maintaining the motivations of ASC through community participation and of monitoring the test model were discussed and a draft for the standard manual for ACS training was developed.

2. Summary of Evaluation Results

(1)Relevance

The relevance is secured even at the time of mid-term evaluation.

Strengthening of the education system for nurses and midwives, which the project targets, is an urgent task and is also specified as the priority issue in the last 5-year plan (2004-2008) of the National Health Initiative, which is currently under development. Initial educational institutions for nurses and midwives (ENDSS) always receive many applications, which accounts for 30 to 40 times more than its capacity. The assessment on needs for in-service training also revealed that 73% of nurses and midwives currently in service want some kind of training.

Only 20% of health care stations at the frontier of primary health care service are functioning and a mechanism for maintaining health care stations continuously is called for. Since health posts and health care stations are the key operations in the primary health care service, education and reeducation of nurses and midwives who operate and manage those posts and stations as well as training of ASC and community support are appropriate strategies.

(2) Effectiveness

The project purpose shown in PDM, "To strengthen the education and training system for human resources in health who work in the primary health care system," is somewhat abstract. However, when taking a look at the results of the project from the standpoint of "strengthening capabilities to educate and train chiefs of health posts that are the key function of the primary health care service," it is deemed that this project is expected to achieve its goal by the end of termination of cooperation if several obstacles are removed.

As for initial education for nurses and midwives who will become chiefs of health posts in the future, the total number of students in the Nursery and Midwifery Department of ENDSS in academic year 2003-2004 was 230, a 15% increase over three years compared to the number in academic year 2000-2001, which was 198. As for in-service training, based on the need analysis regarding national in-service training, a draft of a guide book for chiefs at health posts and a teaching manual that are to be used for in-service training will be completed soon. As for ASC training and community support, which are required for chiefs of health posts, model activities of training and maintaining motivation of ASC are at the stage of trial implementation in Goosas health district of the Fatick region.

(3) Efficiency

The project is generally being implemented efficiently. One

exception is that there was a problem with input timing, which was a delayed dispatch of experts in initial education from the Japanese side. Though the equipment provided to ENDSS Khombole is used effectively, its positioning in the project has been altered and scaled down.

(4) Impacts

The outputs of this project are expected to be utilized nationwide if the Ministry of Health and Prevention and the Ministry of Vocational Training accredit the National Initial Education Coordination Committee, the National In-service Training Coordination Committee, and approve the criteria for the establishment of private schools, the guide book for health post chiefs, and the manual for ASC training.

(5) Sustainability

Capabilities of instructors at ENDSS are advanced and, therefore, new curricula and new methods of operation and management of practical training will be internalized in the organization through the counterparts. However, more examination is necessary in areas such as methods of maintenance and management of equipment at the newly built multi-purpose building and procurement of expendables.

As for in-service training, reorganization of the agency concerned with this project is underway, including the establishment of a Bureau of Human Resources within the Ministry of Health and Prevention. It is necessary to designate the chief of this bureau as early as possible.

As for ASC training, the ASC motivation maintenance model should be tested and established in order to achieve sustainability.

3. Contributing Factors

There have been few personnel changes of counterparts since the commencement of the project, thus contributing to the maintenance of consistency.

4. Inhibiting Factors

The PDM of the project is a basic plan that should be shared by JICA's expert team, counterparts, and other project-related parties. However, as the contents of PDM including indicators were not examined thoroughly, much time was consumed for coordinating among related parties and departments regarding its interpretation, identifying and analyzing problems and issues in details. Afterwards, joint coordination committee meetings were held four times to discuss the PDM, including the operation of the project. However, tripartite joint meetings that require cooperation and coordination among concerned sectors were held only twice, resulting in insufficient coordination for the decision making of the project contents.

5. Conclusion

Various activities to strengthen education, training and activities for personnel who are engaged in the primary health care ser-

vice have been implemented in each field for the past two years and eight months. As a result, criteria for the establishment of schools, teaching materials in nursing education, draft of revised guide book for chiefs at health posts, annual reports on in-service training, and ASC training manuals were developed. These outputs are consistent with the strategies laid out in the National Plan for Health Development (PNDS) and the National Plan for Development of Human Resources in Health (PNF). For the rest of the project period, focus should be placed on activities to effectively utilize these outputs in developing human resources in primary health care service, especially chiefs at health posts.

6. Recommendations

- Senegalese project manager and JICA chief advisor should hold working-level tripartite meetings on a regular basis.
- Incorporating the guide book for chiefs at health posts and ASC

- training manuals in the initial education curriculum for nurses and midwives should be added to one of the activities of the PDM, "improving educational contents at EDESS." At the same time, a specific activity plan should be developed and a person in charge of the activity should be designated.
- Ministry of Health and Prevention should accredit at an early date the guide book for chiefs at health posts developed in the project, and approve the ministerial ordinance on the establishment of two national coordination committees (initial education and in-service training).
- Ministry of Health and Prevention should accredit at an early date the manual for ASC training developed in the project.
- After discussion between JICA's expert team and counterparts on appropriate indicators for the project purpose, the existing PDM should be revised and approved by the joint coordination committee.

Example of Terminal Evaluation

Outline of Project

- Country: Cambodia
- Project title: The Maternal and Child Health Project (Phase 2)
- Sector: Health
- Cooperation scheme: Technical Cooperation Project
- Division in charge: Human Development Department, Group 4
- Total cost (at the time of evaluation): About 630 million yen
- Period of cooperation: April 2000 to March 2005
- Partner country's implementing organization: The National Maternal and Child Health Center (NMCHC)
- Supporting organization in Japan: International Medical Center of Japan

1. Background of Cooperation

Cambodia ended its 30-year civil war at the Paris Peace Conference in October 1991, and made its first significant step towards democracy with the general election in 1993. Japan dispatched medical advisors to the Ministry of Health of Cambodia for three years starting in March 1992 to study the situation. As a result, it was revealed that not only the medical facilities but also human resources had been devastated and the training of medical practitioners was urgently required. Responding to the study results, Japan pledged to provide technical cooperation in the field of maternal and child health, which had little support from other agencies, as well as build a national maternal and child health center with grant aid. In response, JICA provided project-type technical cooperation for the purpose of improving the management and operation ability of the center, training activities, and examination/treatment standards between 1995 and 2000. The



A mother and child in the National Maternal and Child Health Center

new center, which was built with grant aid, was opened in April 1997. Though the outcome of the first-phase technical cooperation was highly praised, it was still necessary to enhance the clinical, training, and hospital management divisions. In particular, it was essential to improve the local maternal and child health service. Thus, the second-phase project, whose aim was strengthening human development for the improvement of maternal and child health, was implemented for five years starting in April 2000.

2. Framework of Cooperation

(1)Overall Goal

The quality of maternal and child health service in Cambodia is improved.

(2) Project Purpose

Human resource development is strengthened to improve maternal and child health, including community health service.

(3) Outputs

Output 1:NMCHC's function as the top referral hospital is fur-

ther strengthened.

Output 2: NMCHC's function as the national training center is further strengthened.

Output 3: NMCHC's functions as the national program implementation and collaboration organization are strengthened to support national policy making.

Output 4: Hospital facility management at NMCHC, national hospitals and referral hospitals is improved.

(4)Inputs (at the time of evaluation)

Japanese side

Dispatch of long-term experts: 15 people Dispatch of short-term experts: 46 people

Trainees received: 22 people

Equipment provision

Third-country training

Cambodian side

Counterparts: 368 people Land/facility provision Equipment purchase Local cost burden

Evaluation Team

Team leader: Akiko Tomita

Director, Group 4, Human Development Department, JICA

Maternal and child health: Tamotsu Nakasa

Director, Second Expert Service Division, Bureau of International

Cooperation, International Medical Center of Japan

Nursing/training evaluation: Yoko Konishi

Director, Nursing Department, National Hospital Organization

Kanagawa Hospital

Evaluation planning: Shoko Sato

Group 4, Human Development Department, JICA

Project effect analysis: Keiko Noji

IC Net Limited

Period of evaluation: August 18, 2004 to September 3, 2004

Type of evaluation: Terminal evaluation

(II) Results of Evaluation

1. Achievement Level

The human resource development system was successfully established in the area of maternal and child health through the project based on the following results: the NMCHC has been strengthened as a training center; training provided by the project for doctors and midwives who work at referral hospitals and health centers has been accredited as a national training course by the Ministry of Health.

The results of pre- and after-course tests conducted during the training shows that the training has been implemented appropriately and the trainees have improved their knowledge. In order to assure that the knowledge gained through the training is main-

tained and practiced in the field, annual itinerary guidance has been carried out. According to the itinerary guidance reports that the NMCHC training department staff put together, the performance of the training participants at their work site is generally satisfactory.

2. Summary of Evaluation Results

(1) Relevance

Cambodia still has higher maternal death and infant mortality rates than its neighboring countries. In particular, health/medical care workers at local medical institutions are in short supply. To develop high quality health/medical care workers is the primary issue of the strategic plan in the health/medical care sector and corresponds to the needs of Cambodia. The enhancement of health care service is one of the priority cooperation sectors of Japan's cooperation with Cambodia, and is included in the priority cooperation sector of the JICA Country Program as well. As the target group of the project is women and children, and the medical fee exemption system for needy people has also been introduced to NMCHC, it benefits the vulnerable groups of the society.

(2) Effectiveness

Human resource development in health care largely depends on instructors, teaching materials, facilities, and training management, which were thus addressed comprehensively to increase the achievement level of the project purpose. The training that NMCHC conducted for doctors and midwives from referral hospitals and health centers has been accredited as a national training course (Minimum Package of Activities: MPA/Complimentary Package of Activities: CPA Training). The accumulated total of the medical care service workers developed by the project from the first phase are 25 doctors and 110 midwives working at referral hospitals, and 303 midwives working at health centers. Though the ratio appears small compared to the total number of medical care workers in Cambodia, this is because the focus of the project is placed on developing human resources who can be the core or leaders to provide good quality medical service at medical institutions. Trainees are very satisfied with the course and they gained adequate knowledge and skills by participating in the course. Though they face problems such as a shortage of manpower, equipment, and medicine at their work sites, they utilize their knowledge and skills as much as they can.

(3) Efficiency

As equipment was provided substantially during Phase 1, the provision during Phase 2 was minimized and no delay in the timing of equipment provision was observed. Furthermore, thanks to the proper selection of equipment, the equipment is utilized effectively and as a result of the activities to establish a system for maintenance and management of the equipment, a high operation rate is maintained. In terms of training cost, in addition to the burden borne by the national budget, advanced donor coordination

brought support from other donors such as UNICEF. As a result, the initial cost borne by JICA, which was about 80% at the initial stage of the project, has decreased every year, and in fact decreased to about 20% in the fourth year. Since the range of the activities is wide, a relatively large number of counterparts received training, to which short-term experts were dispatched. However, by incorporating third-country training and third country experts, the cost was reduced. The timing for all inputs was appropriate and there was no major delay.

(4)Impacts

This project succeeded in developing medical care workers equipped with adequate knowledge and skills and contributed to achieving the overall goal (to improve the quality of maternal and child health service in Cambodia). If the working conditions and shortage of medical equipment, medicine, and manpower at referral hospitals and health centers improve and the environment where trained medical care workers can demonstrate their learned skills is created, then it is possible to further increase the chance of achieving the overall goal. The Ministry of Health instructed hospitals/health centers to introduce the medical care cost collection system that this project started and the system has spread widely throughout the country, showing the emergence of an institutional impact. Also, some of the former trainees have become trainers for activities by NGOs and other donor agencies, showing the emergence of technical impact as well.

(5) Sustainability

At NMCHC, where systems to plan, manage, evaluate hospital management, training, and equipment management were established, the development of the next generations' human resources to lead in clinical care and training, as well as strengthening the management capacity for the program called Preventing Mother-to-Child Transmission (PMTCT) of HIV, are tasks for organizational sustainability. Most of the equipment at NMCHC will become obsolete in the next five years and new equipment must be purchased. Financial sustainability, however, can be maintained because of the stable financial source of the medical care cost collection system as well as increased expenditures of the national financial resource to NMCHC. As technology transfer to the counterparts was smoothly conducted, technical sustainability is high. However, since guidance by Japanese experts will not be available after the completion of cooperation, they need to secure alternatives to acquire new technology and information.

3. Contributing Factors

(1) Factors Regarding Planning

A workshop on Project Cycle Management (PCM) was held during the planning stage of the project, and a plan was made through the participatory process resulting in the reflection of opinions of related people. It should be noted that another PCM workshop was held during mid-term evaluation, which incorporated the issues and changes that the project faced in the process of implementation, and revised the Project Design Matrix (PDM) to one reflecting the activities that the project responded to in various situations.

(2) Factors Regarding the Implementation Process

A mechanism to internalize the changes in important external assumptions was created. Even though the important assumptions of PDM, "no delay in medicine provision by the Ministry of Health," and "main counterparts will not leave their job," were not fulfilled, revenues from the medical fee collection system that was introduced to the NMCHC allowed for the purchase of medicine on their own, as well as the placement of new personnel, avoiding considerable impact on the project. When GTZ (German Technical Cooperation) discontinued cooperation called the Physical Asset Management for creating inventory of hospital equipment and facilities in Cambodia, the project decided to include a new activity for the creation of a simplified inventory to prevent this change in the external condition from having an adverse effect.

4. Inhibiting Factors

(1) Factors Regarding Planning

The PDM indicator was not clearly defined in the stages of planning and implementation. At the beginning stage of the project, baseline data should have been taken to set appropriate numerical targets, which show how much the project should have accomplished within the limited timeframe of five years. Also, an indicator to measure quality improvement in the counterparts and trainees should be added in the implementation process of the project. If there had been precise indicators, it could have been possible to prioritize or add activities in response to the changes of indicators (e.g. trainees' performance at their work sites) during the implementation of the project. For the same reason, it was difficult to objectively evaluate the degree of achievement of the project at the terminal evaluation.

(2) Factors Regarding the Implementation Process

This project initially assumed the task of training medical care workers at regional training centers (RTC) and referral hospitals in addition to the NMCHC. However, the training and supervising function of RTC and referral hospitals was so weak that the training was conducted only at NMCHC, which is the central-level. This choice seems reasonable. However, there is a lack of examination for a specific path to utilize trained personnel through this project to improve local-level health and medical care service.

5. Conclusion

This project matches the needs and policies of Cambodia as well as the aid policy of Japan. The project purpose and outputs



Midwives' training

have been effectively achieved. Positive impact has been confirmed in the introduction of the medical fee collection system at other hospitals and health care centers, as well as training programs that other institutions conduct. The sustainability of the project's effects is good overall, although there remain some concerns (developing next-generation human resources at NMCHC, strengthening management capacity of PMTCT, updating equipment, securing the means to get new technology and information).

6. Recommendations

(1) Tasks Prior to Termination of the Project

The Ministry of Health should complete the MPA/CPA training course curriculum for doctors and midwives who work at referral hospitals and health centers.

In preparation for the retirement of 14% of the personnel at NMCHC over the next four years, specific personnel strategy and plans need to be formulated. This includes personnel placement not based on age but on performance, and management training for new mid-level management positions. It is critical to develop the next-generation leaders at the NMCHC who will take charge of hospital management, training, national program implementation, and equipment management.

Existing data obtained to measure the quality of trainees (pretest, post-test, follow-up survey/guidance of trainees, etc.) need to be organized and analyzed. In order for the training to become an effective means of improving services at the work sites of medical care, the past training course needs to be analyzed to reflect its findings in the future training course.

The procurement system of medicine and equipment at NMCHC should be further improved and the revenue from the medical treatment fee collection system should be used more effectively.

(2) Tasks after Termination of the Project

<Department of Human Resource Development of the Ministry of Health>

The overall plan to deploy MPA/CPA training (including follow-up survey and guidance of the former trainees) nation-

wide should be included in the annual activity plan of the Department of Human Resource Development and should be implemented.

The training function of RTC and the management function of Provincial Health Departments should be strengthened to implement training in local areas and improve the quality of health and medical care service (including follow-up survey and guidance of the former trainees). It is also necessary to consider coordination with hospitals that offer clinical practical training as well as improvement of the facilities and equipment of local medical institutions.

<Department of Drugs and Food of the Ministry of Health>

In cooperation with the Ministry of Economy and Finance, national procedural time to procure medicine needs to be shortened. Provide medicine with sufficient expiration date to hospitals and health centers.

<Department of Hospital Services of the Ministry of Health>

Budget to continue instructor training for laboratory technicians needs to be secured. Utilizing performance of the project regarding medical equipment management, equipment management and maintenance service should be provided at referral hospitals nationwide.

<National Maternal and Child Health Center>

Management capacity of the PMTCT, Provincial Health Departments, and health administrative districts should be strengthened. Coordination between PMTCT and other national programs should be strengthened.

7. Lessons Learned

Factors that contributed to the sustainability of the project substantially are: initiative and ownership of the partner government and implementing organization were respected; support for their original operations and issues that they are concerned with continued from the planning stage of the project; and the partner government and implementing organization now have a sense of ownership in carrying out activities in the project. It is agreed that the Department of Human Resource Development of the Ministry of Health will take responsibility for MPA/CPA training, and Department of Hospital Services of the Ministry of Health will take responsibility for implementing and deploying the hospital equipment management system nationwide.

Constant information-sharing and coordination with the Ministry of Health and donor agencies are important. Sector-wide management is being advanced in the medical and health sector in Cambodia, and in addition to the NMCHC being a member of the working group, the center's director also served as the chairman and coordinator. As a result, an increased number of institutions understand and cooperate with this project, which had a positive impact on the effectiveness and efficiency of the project.

Example of Project-level Ex-post Evaluation

① Outline of Project

- Country: China
- Project title: The Integrated Development Project in the Waterlogged Area in the Four-Lake Area of Jianghan Plain, Hubei Province
- Sector: Agriculture, Forestry and Fisheries
- Cooperation scheme: Technical Cooperation Project
- Division in charge: Agricultural Technical Cooperation Division, Agricultural Development Cooperation Department (currently Rural Development Department)
- Total cost: About 840 million yen
- Period of cooperation: January 1997 to January 2002 (five years)
- Partner country's implementing organization: Hubei Provincial Department of Science and Technology, Hubei Provincial Development Engineer Research Center for Lake Wet Lands Development Project
- Supporting organization in Japan: The Ministry of Agriculture,
 Forestry and Fisheries

1. Background of Cooperation

In China, the economic disparity between coastal areas and inland areas has been a major problem. In the national plan, the development of inland areas is positioned as an important issue.

The Jianghan Plain, located in an inland area of China, consists of sedimentary layers of the earth from the Yangtze and its tributaries. The waterlogged area is concentrated in the Four Lakes, which are in the center of the Jianghan Plain. Consequently, due to limitations in the utilization of land, inefficient cultivation system, and bad soil, the potential for agricultural production was not fully exploited, urgently requiring the development of a drainage system with the agricultural field and the corresponding establishment of farming techniques.

Under these circumstances, China requested Japan to provide technical cooperation with the aims of introducing Japanese techniques related to the development of waterlogged areas and demonstrating a model of development for the freshwater swamp area.

2. Framework of Cooperation

The project was implemented between January 10, 1997 and January 9, 2002 to foster personnel engaged in the development of freshwater swamps through the experimental proof of utilization methods of submerged land development at the two pilot areas (Jingsha City and Shenjiang City) within the Four-Lake Area together with Hubei Provincial Development Engineer Research Center for Lake Wetlands Development Project (hereinafter referred to as "the Center").



A counterpart explaining the overview of the test agricultural field

(1)Overall Goal

Techniques developed in the project are disseminated in Jingsha City and Shenjiang City.

(2) Project Purpose

The personnel engaged in the development of freshwater swamps are fostered through the experimental proof of utilization methods of submerged land development at the two pilot areas within the Four-Lake Area.

(3) Outputs

Output 1: The techniques necessary for development of the freshwater swamp are established through the tests and experimental validations at the pilot agricultural land and the pilot areas.

Output 2: Human resources development system necessary for the development of a freshwater swamp is established.

(4)Inputs

Japanese side

Dispatch of long-term experts: 13 people Dispatch of short-term experts: 16 people

Trainees received: 23 people Equipment provision

Chinese side

Counterparts: 23 people Local cost burden

Evaluation Team

Evaluator: Yang Weiming

Chinese International Process Consulting Co.

Period of evaluation: November 1, 2004 to March 3, 2005 Type of evaluation: Ex-post evaluation by overseas office

Results of Evaluation

1. Summary of Evaluation Results

(1)Impact

The overall goal of the project (to disseminate techniques developed in the project in Jingsha City and Shenjiang City) was largely achieved. In the three years since the project was terminated, research and training have been strengthened at the Center, and various research and training have been conducted by technicians who received counterpart training in the Kaochang pilot area, the Cenhe pilot area, and the Four-Lake water discharge testing ground. The total cost that the Center put in was 1.8 million yuan for research expenses, 60 thousand yuan for training expens-

es, and 5.5 million yuan for training in prefectures and cities. As described below, these inputs and activities led to the achievement of the overall goal.

Three hundred and fifty middle-class technicians received training at the Center in the three years following the termination of the project, and more than 1,400 middle-class agricultural technicians and more than 20,000 farmers were indirectly trained through training organizations in those two pilot cities and related prefectures and cities. More than 100 new techniques and new breeds were directly taught.

According to the data provided by the Center, the submerged areas of Jingsha City and Qianjian City occupy two-thirds and four-fifths of arable land, respectively. Two pilot cities converted a total of 280 thousand mu (1 mu is about 6.667a) of farming land using the techniques of this project, disseminated the underdrain to 21 thousand mu, and multiple cropping to 1.2 million mu, and the total of those areas became one-fourth of the submerged areas in those two cities. The areas converted for multiple cropping in one project site, Cenhe, was 70%. It is particularly notable that though the Kaoyang pilot area, one of the project sites, suffered from record rainfall, the most in the last 137 years (460 mm waterfall in three days), in 2004, the draining facility helped reduce the loss by more than 3 million yuan. This case encouraged city governments and farmers to utilize the techniques developed in the project to convert the land.

In the three years following the termination of the project, the Center has achieved an advanced academic background of personnel, high duty positions, younger generation leadership, increased academic subjects, and a network of research organizations (a science and technology innovation system has been formed under the initiative of the Center by over 20 universities and research institutions and over 10 research centers). Furthermore, by establishing provincial priority subjects and priority laboratories at the Center, the research capacity was strengthened, and a foundation to develop high-level personnel was laid. Meanwhile, the counterparts of the project conducted more than 20 scientific research projects on their own, among which 16 research and development projects, two international cooperation projects, and four natural science fund projects have received some kind of award (more than 60 people have received the awards). The Center was certified to have provincial priority subjects and a priority laboratory and as an institution to offer master degrees, and has formed a research network with more than 20 universities/research institutions in China, thus elevating its academic position substantially.

Other than the above-mentioned results, techniques developed in this project also played a positive role in the fields of prevention and eradication of schistosome fluke, improvement of the local sanitary environment, and environmental beautification.

(2) Sustainability

The Center is an independently organized and financially

independent research institute under Yangtze University, and its necessary expenditure is secured by the operation expenses of the University and the research expenses of the government. The organizational system of the Center has advanced further and the level of the technical team has been constantly improving with a younger average age. With technical development and its application and dissemination system already built, the Center will play an even more important role as a base for China's submerged area development in the future. Thus, the Center is equipped with good sustainability in all aspects such as organization, finance, and techniques.

Following the termination of the project, the pragmatic usefulness of the techniques developed in this project has been proven, and the dissemination in the project site has reached a certain scale, which has proven effective in bringing technological advancement and income increases to the local farmers. The needs of these techniques will be continuously great, and since, as mentioned above, the Center has good sustainability as a disseminating institution of techniques, the effect of this project will have good sustainability.

2. Contributing Factors

(1) Factors that Contributed to Impact

Regarding the implementation system, there is strong support from the government. Government sectors such as Provincial Department of Science and Technology, Department of Water Resources, and Department of Education are in close contact with the Center, forming a support system in policy and finance. Since the Center won the Science and Technology Award, its sense of presence has increased and promoted the dissemination of the techniques developed in the project.

Public relations is another factor. In this regard, during the three years following the termination of the project, the Center was reported on 117 times by the media, including the Science and Technology Times of China Central Television, which played a role in promoting an expanded impact. During this period, seven members of the Chinese Academy of Sciences and Chinese Academy of Engineering, both of which are the top national authoritative organizations, visited the Center more than 10 times and positively appraised the achievement of the project and its future prospect, helping to powerfully promote the presence of the project and the dissemination of the outputs. As the achievement of the project became widely known, it brought opportunity for the outputs to further expand, advancing domestic as well as international cooperation.

The pilot activities of the project were recognized and the dissemination of the techniques developed in the project was pushed forward by local governments, thus promoting the use of those techniques by farmers.

(2) Factors that Contributed to Sustainability

From the termination of the project to this ex-post evaluation,

Chan Jiang University added departments, priority subjects, and a priority laboratory with powerful support from the government and voluntary efforts of the implementing organization. This further established the Center's central position, which helped to organize a research and development network with over 20 universities and research institutions nationwide as well as establish the training dissemination system in prefectures and cities where the project sites were located. This indicates that sustainability of the Center from an organizational aspect has been strengthened.

The central government of China regards Jianghan Plain as one of the six priority development areas in China's inland area. At the same time, the government has made the development of rivers and lakes and the incorporation of three agricultural issues of agriculture/farming villages/farmers, into the development plan as top priorities. Also, in the Four-Lake and Changhan Plain areas, more than 20 prefectures and cities are specified as national priority development districts for grain, cotton, oil, fishery, and special local products. Under these circumstances, research and development of the submerged areas has started to expand, and developing techniques for the submerged areas has become the top priority in southern China. Furthermore, the techniques developed in the project have proven to be in line with the local needs and effective. This has contributed to the promotion of sustainability of the Center in the technical aspect.

On top of it all, the Center receives an annual average budget of one million yuan from the Yangtze University, and the Department of Education and Department of Science and Technology of the Hubei Province. This promotes sustainable deployment of the activities of the Center.

3. Inhibiting Factors

(1) Factors that Inhibited Impact

A few techniques that the project worked on, such as leveling skills and mechanization promotion, were not successful. The main cause was that current Chinese agriculture is implementing a subcontract system by family unit, which is family-based management. This restricted the dissemination of techniques in the project. Since the initial investment necessary for leveling the land and building an underdrain system is relatively large (following the termination of the project, technical development for cost reduction was conducted on their own, but the investment of over 1,000 yuan per mu is still needed), individual payment of the cost by farmers is difficult unless it is subsidized by the government.

Finance is a factor that influences the effectiveness of the Center. With the current research budget of the Center, pilot exhibition and dissemination of techniques are feasible only on a small scale, which is not able to cope with higher needs.

(2) Factors that Inhibited Sustainability

Consumables and parts of some equipment are in short sup-

ply and cannot be locally procured, thus making it hard to fix such equipment and having an adverse effect on the use of that equipment.

4. Conclusion

During the three years following the termination of the project, the Center effectively conducted the dissemination of the outputs and the expansion of the effects generated by the techniques developed in the project. As a result, the improvement and dissemination of the project's outputs have been promoted in Jingsha City, Qianjian City, and their neighboring area, and the overall goal of the project has been basically achieved. At the same time, it was proved that improving the submerged areas with the techniques could increase agricultural productivity, resulting in gaining the approval and support of the government for the transferred technology of the project, which has been accepted by farmers, too. The Center has a good reputation both domestically and overseas, and with a strengthened organizational system and technical capacity, its sustainability is considerably high.

5. Recommendations

- It is necessary for the Center to further invest in a training program in order to expand the impact of the project further. The Center should attempt to disseminate techniques directly to farmers by building and developing an agricultural technology market.
- Effective implementation of technical dissemination requires a close cooperative relationship between the Center and each class of the government-related sector.

6. Lessons Learned

- Durability and maintenance of equipment purchased in the project need to be considered for high sustainability. Some equipment, where possible, should be procured locally to avoid any difficulty in purchasing the necessary spare parts at a later time.
- During the three years following the termination of the project, reports on the project were broadcast 117 times by the Science and Technology Times of the China Central Television, which played a significant role in expanding the impact. Also, in those three years, seven members from the Chinese Academy of Sciences and Chinese Academy of Engineering, which are the highest authoritative organizations in China, visited the Center more than 10 times, and positively appraised the achievement of the project and its future prospect, which played an important role in promoting the presence of the project and the dissemination of the outputs. Thus, in promoting impact of a project, strengthening public relations activities, and involving the domestic authoritative organizations in the project are considered effective.