# Part 2

# **Evaluations of Individual Projects**



# Chapter 1 Overview of Evaluations of Individual Projects in Fiscal 2003

JICA evaluated the following individual projects in fiscal 2003, using a consistent evaluation system from the ex-ante stage to the ex-post stage (Table 2-1 to 2-4). 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. This chapter presents some cases of evaluation results as examples of exante, mid-term, terminal, and ex-post evaluations.

The objectives of evaluations at each stage are shown below.

Ex-ante evaluation: Examines the relevance of the contents of a project plan. The findings are utilized to obtain the final approval for project implementation.

- Mid-term evaluation: Examines if a project is properly producing effects at the mid-term of the project period. The findings are mainly utilized to improve the project strategy.
- Terminal evaluation: Examines if a project is properly producing effects right before the termination of the project. The findings are mainly utilized to determine whether the cooperation can be terminated or follow-up should be implemented.
- Project-level ex-post evaluation: Examines if the expected effects and impact are produced from a project in a certain time after the project termination. The findings are mainly utilized to effectively implement similar projects in the future.

Table 2-1	Ex-ante Evaluation (Total 78 Projects)	
Droject	Title	

Table 0 1 Example Evaluation (Tabel 70 Dusing tab)

Project Title	Country/Region	Cooperation Scheme
Asia		
Solid Waste Management Study in Dhaka City	Bangladesh	Development Study
The Integrated Master Plan Study for Dzongkhag-wise Electrification	Bhutan	Development Study
Cambodia-Japan Cooperation Center	Cambodia	Technical Cooperation Project
The Legal and Judicial Development Project (Phase 2)	Cambodia	Technical Cooperation Project
Gender Mainstreaming and Policy Development through Upgrading Information and Research Capacity	Cambodia	Technical Cooperation Project
The Project on Capacity Building for Water Supply System	Cambodia	Technical Cooperation Project
The Project for Human Resource Development of Co-medicals	Cambodia	Technical Cooperation Project
Battambang Agricultural Productivity Enhancement Project	Cambodia	Technical Cooperation Project
The Study on the Construction of Second Mekong Bridge	Cambodia	Development Study
The Feasibility Study on Establishment of Open Paddy Market	Cambodia	Development Study
The Study on Financial System Reform Program for the Western Area	China	Development Study
The Study on Regional Development and Urbanization Program in Western Region	China	Development Study
The Project for Prevention of Diarrheal Diseases in India (Phase 2)	India	Technical Cooperation Project
Technical Cooperation for Community Empowerment Program with Civil Society	Indonesia	Technical Cooperation Project
Training of Agricultural Extension Officers on Improvement of Farm Management	Indonesia	Technical Cooperation Project
Gunung Halimun Salak National Park Management Project	Indonesia	Technical Cooperation Project
The Study on Capacity Development for Jeneberang River Basin Management	Indonesia	Development Study
Preparatory Study Mission for the Development of the Feasibility Study on the Centers of Integrated Logistic Complexes in the Republic of Kazakhstan and Marketing Plan of Activities or Container	Kazakhstan	Development Study
Study on Effective Management of Agriculture and Processing Industry	Kyrgyzstan	Development Study
The Study on Integrated Development Plan of Issyk-Kul Zone	Kyrgyzstan	Development Study
Japanese Technical Cooperation on the Legal and Judicial Development Project	Laos	Technical Cooperation Project
The Upgrading IT Education Project (Information Technology Bridging Course)	Laos	Technical Cooperation Project
Forest Management and Community Support Project	Laos	Technical Cooperation Project
The Master Plan Study on Small Hydropower in Northern Laos	Laos	Development Study
Study for Establishment of Tax Education System	Mongolia	Development Study
Myanmar-Japan Center for Human Resources Development	Myanmar	Technical Cooperation Project
The Community-based Alternative Schooling Project (CASP)	Nepal	Technical Cooperation Project
Agricultural Training and Extension Improvement Project	Nepal	Technical Cooperation Project

Project Title	Country/Region	Cooperation Scheme
The Study on the Solid Waste Management for the Kathmandu Valley	Nepal	Development Study
Tuberculosis Control Project	Pakistan	Technical Cooperation Project
The Study on Drainage Improvement in the Core Area of Metro Manila	Philippines	Development Study
Mannar District Rehabilitation and Reconstruction through Community Approach Project (MANRECAP)	Sri Lanka	Technical Cooperation Project
Project on Assistance of Public Health Insurance Information System Development	Thailand	Technical Cooperation Project
Agricultural Statistics and Economic Analysis Development	Thailand	Technical Cooperation Project
The Capacity Building for Implementing Accounting System (TA for Implementing the Accounting Act)	Thailand	Development Study
The Study on Restructuring of Water Supply System of Tashkent City	Uzbekistan	Development Study
Japanese Technical Cooperation in the Legal and Judicial Field (Phase 3)	Viet Nam	Technical Cooperation Project
Enhancing Capacity of Vietnamese Academy Science and Technology in Water Environment Protection	Viet Nam	Technical Cooperation Project
Latin America		
Natural Environment Conservation Project in the Ignazu Area	Argentina	Technical Cooperation Project
Healthy Municipalities Project in Northeast Brazil	Brazil	Technical Cooperation Project
The Project for Forest Conservation and Environmental Education in the Eastern Amazon	Brazil	Technical Cooperation Project
Improvement of School Education (Child Centered Teaching Project)	Bolivia	Technical Cooperation Project
The Study on Sustainable Technical Development for Rice Cultivation in the Central Area	Cuba	Development Study
Regional Primary Health Service Reinforcement Project	Dominican Republic	Technical Cooperation Project
The Study of the Improvement/Construction of the International Airport	Guatemala	Development Study
Project for Vector Control for Chagas Disease	Honduras	Technical Cooperation Project
The Improvement of Teaching Method in Mathematics	Honduras	Technical Cooperation Project
The Project for the Promotion of Self Management Enterprise of Women in Rural Area	Honduras	Technical Cooperation Project
Project on the Assistance Plan for Small Producers in El Soconusco Region	Mexico	Technical Cooperation Project
The Study for Establishment of Base Maps and Hazard Maps for GIS	Nicaragua	Development Study
Water Quality Monitoring Technique	Panama	Technical Cooperation Project
The Sustainable Agricultural Training and Extension Project in Rural Areas	Panama	Technical Cooperation Project
The Study on the Comprehensive Ports Development Plan	Panama	Development Study
Lima Metropolitan Transportation Planification	Peru	Development Study
The Study on Capacity Development for Water Quality Management in Montevideo City and Metropolitan Area	Uruguay	Development Study
Europe		
The Study on Community-based Eco-tourism Development	Bosnia and Herzegovina	Development Study
The Study for Establishment of Base Maps for GIS	The Former Yugoslav Republic of Macedonia	Development Study
Oceania		
Project for Promotion of Smallholder Rice Production	Papua New Guinea	Technical Cooperation Project
Middle East		. ,
Strengthening of Non-Formal Education Project	Afghanistan	Technical Cooperation Project
Improvement of Science and Mathematics Education in Primary Schools	Egypt	Technical Cooperation Project
Study on Flood and Debris Flow in the Caspian Coastal Area Focusing on the Flood-hit Region in Golestan Province	Iran	Development Study
The Study on the Integrated Tourism Development Plan	Lebanon	Development Study
Study in the Roads Network Development	Oman	Development Study
Africa		
Community-based Basic Education Improvement Project	Ethiopia	Technical Cooperation Project
The West African Center for International Parasite Control Project	Ghana	Technical Cooperation Project
Participatory Forest Resource Management Project in the Transitional Zone of the Republic of Ghana	Ghana	Technical Cooperation Project
The Development Study on the Project of Mechanization of Irrigated Agriculture and Water Management in the Plain of Sonfonia	Guinea	Development Study
Strengthening of Mathematics and Science in Secondary Education (Phase 2)	Kenya	Technical Cooperation Project
The Social Forestry Extension Model Development Project for Semi-arid Areas	Kenya	Technical Cooperation Project
The Study on Rural Development and Watershed Management in the South-West Region of Alaotra	Madagascar	Development Study
The Study on the Strategic Plan of Mineral Resources Development	Mauritania	Development Study
The Basic Education Improvement Program for Rural Area	Morocco	Development Study
School for All	Niger	Technical Cooperation Project
The Study on Fisheries Resources Assessment and Management	Senegal	Development Study
Strengthening of National Bureau of Statistics in Data Providing Service	Tanzania	Technical Cooperation Project
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Project Title	Country/Region	<b>Cooperation Scheme</b>
The Study on the Rural Water Supply Project (Phase 2)	Tunisia	Development Study
The Study on Improvement of Post-harvest Processing and Marketing System	Uganda	Development Study
Study on Poverty Eradication through Sustainable Irrigation Project in Eastern Uganda	Uganda	Development Study
able 2-2 Mid-term Evaluation (Total 24 Projects)	1 1	
Asia		
The Project for Technical Service Center for Irrigation System	Cambodia	Technical Cooperation Project
The Sino-Japan Friendship Center for Environmental Protection Project (Phase 3)	China	Technical Cooperation Project
The Model Planning Project for Water-saving Measures on Large-scale Irrigation Scheme	China	Technical Cooperation Project
ntegrated Sediment-related Disaster Management Project for Volcanic Areas	Indonesia	Technical Cooperation Project
The Forest Fire Prevention Management Project (Phase 2)	Indonesia	Technical Cooperation Projec
Coal Mining Enhancement Project at Ombilin Mines Training College	Indonesia	Technical Cooperation Projec
reshwater Aquaculture Development Project	Indonesia	Technical Cooperation Projec
Project for Human Resource Development in Information Technology through Capacity Building of University of Colombo School of Computing	Sri Lanka	Technical Cooperation Projec
The Project of Capacity Building on the Development of Information Technology for Education (ITEd)	Thailand	Technical Cooperation Project
Jzbekistan-Japan Center for Human Development	Uzbekistan	Technical Cooperation Projec
Coal Mine Firedamp Gas Management Center	Viet Nam	Technical Cooperation Project
/iet Nam-Japan Human Resources Cooperation Center	Viet Nam	Technical Cooperation Project
he Reproductive Health Project in Nghe An Province (Phase 2)	Viet Nam	Technical Cooperation Project
atin America		
Project on Establishment of Control Capacity for Industrial Wastewater and Waste	Argentina	Technical Cooperation Project
Caribbean Disaster Management	Barbados	Technical Cooperation Project
Project on Productivity Improvement for Enterprises	Costa Rica	Technical Cooperation Project
Project on Improvement of Vocational Training	Ecuador	Technical Cooperation Project
Strengthening Continuing Education in Nursing and Midwifery in the South of the Republic of Paraguay	Paraguay	Technical Cooperation Project
Middle East	1 1	
Establishment of Extension System for Artisan Fisheries	Morocco	Technical Cooperation Project
Project for the Establishment of the Vocational Training Center for the Electric and Electronics Industry	Tunisia	Technical Cooperation Project
stablishment of Industrial Automation Technologies Departments in Anatolian Technical High Schools	Turkey	Technical Cooperation Project
Africa		
Project for Capacity Building of ERA Training and Testing Center Alemgena	Ethiopia	Technical Cooperation Project
Strengthening District Health Services in Morogoro Region	Tanzania	Technical Cooperation Project
The Strengthening of Laboratory Systems for HIV/AIDS and TB Control Project	Zambia	Technical Cooperation Project
able 2-3 Terminal Evaluation (Total 84 Projects)		
Asia		
Project of Human Resources Development in Reproductive Health	Bangladesh	Technical Cooperation Project
Participatory Rural Development Project	Bangladesh	Dispatch of Expert Team
lational Tuberculosis Control Project	Cambodia	Technical Cooperation Project
Vorkshops on Primary Education and Gender Issues	Cambodia	Technical Cooperation Project
mprovement of the Survey and Forecast System on Meteorology and Agro-meteorology	Cambodia	Dispatch of Expert Team
Inhui Primary Health Care Technical Training Center	China	Technical Cooperation Project
Enhancement of Agricultural Extension System Project	China	Technical Cooperation Project
Sino-Japanese Cooperation Center for Soil and Water Conservation	China	Technical Cooperation Project
Energy Conservation Seminar for Senior Managers	China	Technical Cooperation Project
The Mangrove Information Center Project	Indonesia	Technical Cooperation Project
Project on Supporting Industries Development for Casting Technology	Indonesia	Technical Cooperation Project
Detailed Design of Flood Control and Water Resources Development Project in Semarang	Indonesia	Technical Cooperation Project
Valaria Control in Lombok and Sumbawa Islands	Indonesia	Technical Cooperation Project
The Joint Study Project on the Center for Japanese Studies of the University of Indonesia	Indonesia	Research Cooperation
חים שטוות שנעעץ די טופטר טוו נווב שבוונבו זטו שמאמוובשב שנעעופש טו נווב טווועבושונץ טו וועטוובשול		
Pagianal Davelonment Policies for Local Covernment	Indonesia	Dispatch of Expert Team
Regional Development Policies for Local Government The Aquaculture Improvement and Extension Project Japan-Malaysia Technical Institute: JMTI (Extended)	Laos Malaysia	Technical Cooperation Project Technical Cooperation Project

Project Title	Country/Region	Cooperation Scheme
The Project for the Development of Technology related to the Processing of Feed Based on Agro-industrial By-products of Oil Palms Production (Follow-up)	Malaysia	Technical Cooperation Project
Irrigation Technology Centre Project (Phase 2)	Myanmar	Technical Cooperation Project
Disaster Mitigation Support Programme Project	Nepal	Technical Cooperation Project
Community Development and Forest / Watershed Conservation Project (Phase 2)	Nepal	Technical Cooperation Project
The Cebu Socio-economic Empowerment and Development Project	Philippines	Technical Cooperation Project
Promotion of Sericulture on Negros Island	Philippines	Technical Cooperation Project
Responsible Aquaculture Development	Philippines	Technical Cooperation Project
Forest Management	Philippines	Technical Cooperation Project
Technology Development for Electronic Navigational Charts	Philippines	Dispatch of Expert Team
E-Commerce Training Course	Singapore	Technical Cooperation Project
Products Protection Engineering in Logistics	Singapore	Technical Cooperation Project
Digital Television Broadcasting Engineering	Sri Lanka	Technical Cooperation Project
Plant Genetic Resources Conservation and Management	Sri Lanka	Technical Cooperation Project
Quality Improvement of Apparel Products	Sri Lanka	Technical Cooperation Project
The Modernization of Water Management System Project	Thailand	Technical Cooperation Project
Project for Strengthening of National Institute of Health Capabilities for Research and Development on AIDS and Emerging Infectious Diseases	Thailand	Technical Cooperation Project
Pasture Seed Production Development Project In North-East Thailand	Thailand	Technical Cooperation Project
EPI Management and Surveillance Activities of EPI Target Diseases for Lao Health Personnel	Thailand	Technical Cooperation Project
Freshwater Aquaculture	Thailand	Technical Cooperation Project
Strengthening of Food Sanitation	Thailand	Technical Cooperation Project
Advanced Telecommunication Technology	Thailand	Technical Cooperation Project
Dermatology	Thailand	Third-Country Training
The Training Capability Strengthening Project on the Posts and Telecommunications Training Center No.1	Viet Nam	Technical Cooperation Project
Modernization of Industrial Property Administration Project	Viet Nam	Technical Cooperation Project
Latin America	VICENAIII	
The Horticulture Development Project	Argentina	Technical Cooperation Project
The Plant Virus Research Project	Argentina	Technical Cooperation Project
The Joint Study on Biological Control of Soil-borne Plant Diseases	Argentina	Research Cooperation
The Artificial Insemination of Cattle	Bolivia	In-Country Training
Brazilian Amazon Forest Research Project (Phase 2)	Brazil	Technical Cooperation Project
The Technological Development Project for Sustainable Agriculture in Eastern Amazonia	Brazil	Technical Cooperation Project
Vegetable Crops Production		Technical Cooperation Project
	Brazil	, ,
Improvement of Livestock Parasitosis Diagnosis	Brazil	Technical Cooperation Project
Geriatrics	Brazil	Technical Cooperation Project
Course on Domestic Wastewater Treatment Techniques	Brazil	Technical Cooperation Project
Institutional Development of Macro Economic Planning	Brazil	Technical Cooperation Project
Integral Management of Mining Operations (Safeness, Labor Health, Environment and Quality)	Chile	Technical Cooperation Project
Prevention of the Consumption and Control of the Illicit Traffic of Drugs	Chile	Technical Cooperation Project
Medical Education and Training Project	Dominican Republic	Technical Cooperation Project
The Project for the Strengthening of Agricultural Technology Development and Transfer	El Salvador	Technical Cooperation Project
The Project on the Aquaculture Development in Estuary of El Salvador	El Salvador	Technical Cooperation Project
The Agricultural Machinery Test and Evaluation Project	Mexico	Technical Cooperation Project
Reproductive Health—Prevention of Uterine Cervical Cancer	Mexico	Technical Cooperation Project
Mechatronics	Mexico	Technical Cooperation Project
Japan-Paraguay Skill Development Promotion Center (Extended)	Paraguay	Technical Cooperation Project
Mitigation Measures for Natural Disaster Reduction	Peru	Technical Cooperation Project
Europe		
Management Consulting Training Course	Hungary	Technical Cooperation Project
Japanese Management and Productivity Improvement Method	Poland	Technical Cooperation Project
Middle East		
Project for Foreign Trade Training Center	Egypt	Technical Cooperation Project
	Egypt	Technical Cooperation Project

Project Title	Country/Region	Cooperation Scheme
Rice Milling Processing Technology	Egypt	Technical Cooperation Project
Infectious Disease Control	Egypt	Technical Cooperation Project
The Project of Haraz Agricultural Human Resources Development Center	Iran	Technical Cooperation Project
Medical Equipment Maintenance for Palestine	Jordan	Technical Cooperation Project
The Project for Strengthening of Reproductive Health Education	Tunisia	Technical Cooperation Project
The Tuberculosis Control Project (Phase 3)	Yemen	Technical Cooperation Project
Africa		
The Infectious Diseases Project at the Noguchi Memorial Institute for Medical Research	Ghana	Technical Cooperation Project
Laboratory Support for Polio Eradication: LAST Polio Project	Ethiopia	Technical Cooperation Project
Promotion of Sustainable Community Based Small-holder Irrigation	Kenya	Dispatch of Expert Team
Project for the Global Improvement for the Mahajanga University Hospital Center	Madagascar	Dispatch of Expert Team
Lobi Horticultural Appropriate Technology Extension Project	Malawi	Dispatch of JOCV Team
The Project on Aquaculture and Technical Development of Malawian Indigenous Species	Malawi	Technical Cooperation Project
High-level Technician (BTS)Training Project at the Senegal-Japan Vocational Training Center	Senegal	Technical Cooperation Project
Sokoine University of Agriculture Centre for Sustainable Rural Development : SCSRD	Tanzania	Technical Cooperation Project
Ethics Training for Pubic Servants	Tanzania	Technical Cooperation Project
Nakawa Vocational Training Institute Project (Extended)	Uganda	Technical Cooperation Project
Technical and Vocational Training Improvement Project (Aftercare)	Zambia	Technical Cooperation Project
able 2-4 Project-level Ex-post Evaluation (Total 25 Projects)		
Asia		
The Project on the Research and Training Center on New Technology for Housing	China	Project-type Technical Cooperation
The Pilot Scheme for Technological Development on the River Information System Project	China	Project-type Technical Cooperation
The Clinical Medical Education Project for the China-Japan Medical Education Center	China	Project-type Technical Cooperation
The Project to Enhance Education and Training of Industrial Safety and Health	Indonesia	Project-type Technical Cooperation
The National Tuberculosis Control Project (Phase 2)	Nepal	Project-type Technical Cooperation
Training Services Enhancement Project for Rural Life Improvement	Philippines	Project-type Technical Cooperation
Quality Improvement of Textile and Clothing Products	Sri Lanka	Project-type Technical Cooperation
Project to Enhance the Capacity of the Faculty of Engineering at Thammasat University	Thailand	Project-type Technical Cooperation
Testing and Inspection Technology Upgrading for Textile and Garment Products	Thailand	Project-type Technical Cooperation
The Productivity Development Project	Thailand	Project-type Technical Cooperation
Training Center for Sewage Works	Thailand	Project-type Technical Cooperation
The Industrial Property Information Center	Thailand	Project-type Technical Cooperation
Latin America	, ,	
Population Statistics Project	Argentina	Project-type Technical Cooperation
The Industrial Energy Conservation Project	Argentina	Project-type Technical Cooperation
The Maternal and Child Health Improvement Project in Northeast Brazil	Brazil	Project-type Technical Cooperation
Brazilian Institute of Quality and Productivity Project	Brazil	Project-type Technical Cooperation
The Project for Development of Small Scale Fisheries	Jamaica	Grant Aid (Basic Design Study)
The Project on the Improvement of Techniques for the Production of Vegetables in Morelos State	Mexico	Project-type Technical Cooperation
The Telecommunications Training Center	Paraguay	Project-type Technical Cooperation
The Rural Development Project in the Region South of Pilar	Paraguay	Project-type Technical Cooperation
Middle East		·
The Higher Institute of Maritime Studies Project	Morocco	Project-type Technical Cooperation
The Project on Improvement of the Technical Education of Electronics in the College of Technology in Riyadh	Saudi Arabia	Project-type Technical Cooperation
Africa		
Jomo Kenyatta University of Agriculture and Technology (Undergraduate Program): JKUAT	Kenya	Project-type Technical Cooperation
Community Health Sciences Project	Malawi	Project-type Technical Cooperation
	Zimbabwe	Grant Aid (Basic Design Study)

# **Example of Ex-ante Evaluation**

# Outline of Project

- Country: Ethiopia
- Project title: The Project on Strengthening Technology Development, Verification, Transfer and Adoption through Farmers Research Groups (FRG)
- Sector: Agriculture
- Cooperation scheme: Technical Cooperation Project
- Division in charge: Rural Development Department, Group 2 (Field Crop Based Farming Area)
- Total cost (Japanese side): 470 million yen
- Period of cooperation: April 2004 to April 2009 (five years)
- Partner country's implementing agency: Ethiopian Agricultural Research Organization (EARO), Melkassa Agricultural Research Center, (MARC), Oromia Agricultural Research Institute (OARI), Adami Tulu Agricultural Research Center (ATARC)
- Supporting organization in Japan: Ministry of Agriculture, Forestry and Fisheries, Tokyo University of Agriculture, Tochigi Prefectural Agricultural Experiment Station

#### 1. Outline of Cooperation

This project directly targets farmers in farmers research groups (FRG) (1,000 households participating in 25 FRGs) in East Shoa Zone, Oromia State, Ethiopia. The primary focus of the activity is to strengthen the system in which agricultural techniques developed and improved at the agricultural research centers based on the needs of farmers are verified and disseminated to general farmers by FRG farmers. The activity aims to improve agricultural productivity and farmers' livelihood, which will in turn lead to food security and poverty reduction in the rural area.

#### 2. Necessity and Positioning of Cooperation (1) Current Situation and Problems

Due to excessive cultivation and grazing as well as land devastation and frequent droughts caused by forest destruction, agricultural productivity in Ethiopia is extremely unstable and people often suffer from hunger. The mortality rate is high.

In Ethiopia, 52.3 % of the gross domestic product (GDP) is agriculture, and 85% of the workforce is involved in agriculture. Although the contribution of the agricultural sector to the Ethiopian economy is extremely high, the average annual growth from 1992 to 2002 is as low as 2.8%, whereas that of industry is 6.1% and that of service is 8.3 %. As a result, Ethiopia has been facing a food shortage crisis for many years. To counter this situation, it is very important that small-scale farmers who produce 97% of the total agricultural products adopt improved techniques to increase agricultural productivity.



Harvesting by a farmer

In order to develop, with the participation of farmers, techniques that can be adopted by farmers, the Ethiopian Agricultural Research Organization (EARO) introduced farmers research groups (FRG) in the late 1990s. However, current FRG activities focus on dissemination of techniques mainly by means of demonstration under a top down approach. Needs rooted in the livelihoods of the farmers cannot be raised and the original purpose has not been achieved yet. In addition, networks among researchers, disseminators, and FRG farmers as well as peripheral farmers are insufficient, and effective diffusion activities have not been implemented, so the technical level of farmers remains low. Therefore improvement of the FRG system, establishment of a technique development system with participation of farmers, and strengthening of a proper technique diffusion system are urgent matters.

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

In 1996, the Ethiopian government formulated a food security program to improve and maintain food production. One of the main issues in the program is the development and utilization of new techniques. The Sustainable Development and Poverty Reduction Program issued in 2002 as the Poverty Reduction Strategy Paper (PRSP) specifies poverty reduction as the primary issue of development, and states that food security at the individual household level is the most effective and practical method.

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

The JICA Country Program of fiscal 2002 set four priority fields, one of which is agricultural development (food security). This program specifies a second five-year plan in Ethiopia and support for PRSP as priority plans, and states that it is important to secure food in rural areas for poverty reduction given the fact that about half the population in rural areas cannot secure sufficient food.

#### 3. Framework of Cooperation

#### (1) Objectives of Cooperation (Outcomes)

 Objective to be Achieved at the End of Cooperation (project purpose)

The FRG system with participation of farmers is established as the core of research and diffusion. Part 2

#### [Indicators]

- The number of FRGs acting autonomously becomes 25 in the East Shoa Zone, and the size of participating farmers reaches 1,000 households.
- The productivity and production volume of agricultural and livestock products of farmers participating in the FRGs of the project (the production volumes of meat and unit crop, etc. verified and disseminated by each FRG) improves by 15 %.
- The number of farmers with improved techniques increases around the FRG participant farmers of the project.
- Objectives Expected to be Achieved After the End of Cooperation (overall goal)
  - (a) The improved FRG system is applied in other research centers.
  - (b) In East Shoa Zone, the agricultural and livestock production volume and livelihoods of the recipient farming households of the FRG activities improve.

#### [Indicators]

- (a) The FRG activities supported by research centers throughout the country improve and the number increases compared to that at the time of the base-line study.
- (b-1) In the FRG activity area in East Shoa Zone, the production volume of agricultural and livestock products verified and disseminated by FRGs improve by 15%.
- (b-2) The number of improved livestock, food stock, school enrollment rate increase in the farm households of the FRG activity area.

#### (2) Outputs and Activities

Output 1: The guidelines of the FRG system as the research and diffusion methods are formulated.

# [Activities]

Analysis of the conventional FRG activities; improvement of the FRG system; pilot operation and review of the improved FRG system; formulation of the FRG guidelines; holding of seminars and workshops

#### [Indicators]

Completion of the FRG guidelines

Output 2: Agricultural techniques (various crop cultivation methods, livestock raising methods, etc.) are improved in line with the needs and the capacity of farmers.

#### [Activities]

Analysis of conventional techniques; market research; training for researchers; verification tests (inside and outside the research centers); holding of seminars and workshops

#### [Indicators]

The number of improved techniques; farmers' evaluation of techniques

Output 3: Diffusion activities inside the FRG system are improved.

#### [Activities]

Deployment of the FRG activities (examination meeting, installation of exhibition farm, study meeting for peripheral farmers from FRG participating farmers, etc.); training for disseminators; holding of seminars and workshops

#### [Indicators]

The number of implementations of various training programs such as farming field study meetings; satisfaction of disseminators; FRG and peripheral farmers

## (3) Inputs

#### Japanese side

Long-term experts: 3 experts (chief advisor/system establishment/rural socio-economy, operation adjustment/cultivation/human development, agriculture diffusion/appropriate techniques)

- Short-term experts: 2 or 3 experts per year as necessary (livestock techniques, market research, living improvement/ agricultural products processing, etc.)
- Equipment provision: vehicles, OA devices, material and equipment in support of FRG activities (agricultural machine, equipment for weather forecasting, etc.)

Counterparts training: about 3 trainees per year (provided in Japan or in a third country as necessary)

Local operation expenditure: daily cost, localization cost (verification cost, training cost, system maintenance cost, etc.) Ethiopian side

Facility: provision of a project office and offices for experts

- Assignment of counterparts: assignment of counterparts to Japanese experts and their assistants
- Treatment of required budgets: administration expense and maintenance and control of equipment

#### (4) External Factors

1) Important Assumptions for Achieving the Overall Goal

For the improved FRG system to be utilized in other agricultural research centers, the Oromia Agricultural Development and Agricultural Planning Office and the EARO must take the initiative in aggressively distributing the guidelines and holding seminars and workshops.

Also, to raise the production volume of the agricultural and livestock industry and the livelihood of the beneficiary households of the FRG activities, continuous policy and budgetary supports from the government are essential.

2) Important Assumptions for Achieving the Project Goal

The policies of the research-diffusion-farmers collaboration strategy (REFL) formulated by EARO will not be changed.

As the project area frequently suffers from droughts, countermeasures for mitigating damage from droughts (introduction of small-scale irrigation and drought-resistant variety, etc.) have to be examined. However, in the awake of a serious drought, the degree of the achievement of the goal may be affected. Lastly, political stability of the government is a condition. In this regard, since the establishment of the new constitution in 1994, except for a border dispute with Eritrea in 1998, democratization has been progressing and there are no factors that could lead to political instability at the moment.

# Results of Evaluation

#### 1. Summary of Evaluation Results

#### (1) Relevance

The significance and relevance in the project implemented by Japan is high on the following grounds: (a) it contributes food self-sufficiency and poverty reduction that are the priority issues in Ethiopia, (b) development of techniques useful to farmers meets the needs of both researchers and farmers, (c) it is consistent with agriculture development and food security, which are priority fields in the JICA Country Program, (d) agricultural productivity can be improved through collaboration with the ongoing JICA's Development Study, Capacity Building Programs for Community-based Irrigation Development in Central Oromia Region of Ethiopia.

#### (2) Effectiveness

The Melkassa Agricultural Research Center (MARC) and the Adami Tulu Agricultural Research Center (ATARC) that are the implementing agencies already have basic policies for implementation related to the promotion of the FRG activities. In past FRG activities, problems were clearly identified when a new variety introduced without sufficient analysis of farmers' needs was not adopted by the farmers. Therefore, achievement of the project purpose can be expected by strengthening participatory agricultural techniques, development methods, and the diffusion system of proper techniques.

In the Melkassa Agricultural Research Center, staff members in charge of the FRG activities are secured and they have the basic abilities to carry out tests and research.

#### (3) Efficiency

Large-scale facility construction and equipment provision are not included in the project plan. Since this cooperation mainly provides human development and system building to improve the support system for farmers and strengthen farmers' organization, instruction by long-term experts is essential. The number of long-term experts is set at three according to the minimum necessity.

All the long-term experts are expected to perform effective surveys and field activities in the target rural area as they have already had experience as JOCVs (Japan Overseas Cooperation Volunteers) or JICA experts in Africa.

If the FRG method and the implementation system are established as a result of the activities, it will be a model to be utilized in research centers across the country.

Accordingly, the efficiency of the inputs for achieving the outcomes of this project is assessed to be high.

#### (4) Impact

The impacts of this project are anticipated as follows.

The utilization of the FRG system across the country as the overall goal of the project is expected to be realized by promoting and strengthening the liaison with both the MARC and ATARC and related agencies such as the Ministry of Agriculture by way of the joint adjustment committee.

It is expected to contribute to improvements in agricultural productivity in the area when the farmers in the East Shoa Zone widely adopt useful agricultural techniques that have been verified and disseminated in the project.

Any negative impacts on the natural environment, gender, and disparity between rich and poor are not expected.

#### (5) Sustainability

Since the federal government and the state government accept the FRG activities as important strategies to be introduced into agricultural research, the possibility that the outcome of the project continues and expands is extremely high. MARC and ATARC are supported by the World Bank and the International Fund for Agricultural Development (IFAD) to improve human and physical capacities. In particular MARC, the core of the project, is very active in research activities and has the intention of expanding diffusion and verification activities, so it is anticipated that they have the capabilities for implementing and continuing the project. In contrast, ATRAC has lower organizational capability compared to MARC and its sustainability is of concern. Therefore, the project places emphasis on developing ATRAC's organizational capability during the implementation period, and on strengthening the liaison between those research centers so that ATRAC can attain support from MARC through the liaison even after the project ends.

Both research centers are implementing the FRG activities already, and they have the financial basis to sustain the activities at the moment; however, in order to sustain the expanded scale of activities under this project, JICA will work on the related agencies to secure the budgets.

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

Ethiopia is one of the five poorest countries in the world, and the GNP per capita is about 100 dollars. This is only 25% or less of the average in Sub-Saharan Africa, and about 42% of the total population is under the food poverty line (2,100 kcal per day). Critical food shortages frequently occur; more than 200,000 victims were generated by the huge famine of 1973 and 1974, and eight million people suffered from hunger in 2000. This project contributes to poverty reduction through agricultural development.

#### 3. Lessons Learned from Past Experience

The Project for Strengthening of Agricultural Technology Development and Transfer in the Republic of El Salvador is an example of Japan's research and diffusion liaison-type project. The researchers and disseminators directly acted in farms and carried out research, technique development, and diffusion at the same time. As a result, the technique was not only developed in line with the needs of farmers, but also verified and diffused through the demonstration at farms efficiently.

In past rural development cooperation, techniques were sometimes introduced without understanding the difference in farmers' needs due to differences in land ownership and size of farms, and as a result, the beneficiaries were limited. Therefore, in the base-line study of this project, land ownership of farmers and sizes of farms are investigated as well.

Also, production increases for a single farm product sometimes caused a decrease in the market price, so the trends of the market need to be considered when introducing a farm product.

#### 4. Future Evaluation Plan

Mid-term evaluation is scheduled to be implemented around October 2006, terminal evaluation around October 2008, and ex-post evaluation within five years after the end of cooperation.

# **Example of Mid-term Evaluation**

# Outline of Project

- Country: Dominican Republic
- Project title: The Technology Improvement Project for Irrigated Agriculture
- Sector: Agriculture
- Cooperation scheme: Technical Cooperation Project
- Division in charge: Agricultural Technology Division, Agricultural Development Cooperation Department
- Total cost (at the time of evaluation): 311 million yen
- Period of cooperation: March 1, 2001 to February 28, 2006
- Partner country's implementing organization: The National Water Resources Institute (INDRHI), Secretaria de Estado de Agricultura (SEA)
- Supporting organization in Japan: Ministry of Agriculture, Forestry and Fisheries

#### 1. Background of Cooperation

The government of the Dominican Republic (hereinafter referred to as "Dominica") specifies greater agricultural production as a priority policy issue in order to respond to continuous economic development and increasing domestic demand for food as the result of increasing population. A vital policy related to irrigation farming that is provided in the national social economic development strategy promotes rehabilitation, operation, and maintenance of the existing irrigation system and improvements in the water control system by transferring the system to farmers.

Under such policies, the INDRHI worked to improve the capabilities of technicians involved in the operation and maintenance of the irrigation system and strengthen the function of the water control group of beneficiary farmers as part of activities to raise irrigation efficiency in areas where irrigation systems had already been introduced. Due to insufficient INDRHI budgets and inexperience of technicians, satisfactory results were not achieved. In response, the Dominican government requested the Japanese government to provide a technical cooperation project for the purpose of improving the



Testing to establish optimal water control methods (The Technology Improvement Project for Irrigated Agriculture in the Dominican Republic)

technicians' water control and operation and maintenance skills of the irrigation systems, as well as strengthening the water control group of beneficiary farmers. The implementing agency on the Dominican side is the INDRHI, and the cooperation agency is the SEA and the Lincoln Irrigation Cooperation Association. The main site of the project is the INDRHI headquarters, and the sub site is the El Centro Nacional de Capacitación Arrocera (CENACA) in Bonao City. The period of cooperation is five years, which began on March 1, 2001.

#### 2. Framework of Cooperation

#### (1) Overall Goal

To improve water control, system operation and maintenance, as well as cultivation skills of the irrigation association in the irrigation area, and to transfer the irrigation system smoothly

#### (2) Project Purpose

To improve techniques and knowledge related to water control, system operation and maintenance, and cultivation of the irrigation association, INDRHI and SEA

#### (3) Outputs

- Output 1: To find out problems in the model area, and to demonstrate technical improvement plans related to water control, system operation and maintenance, and cultivation at the verification farm
- Output 2: To develop training program and teaching material related to water control, system operation and maintenance, and cultivation

- Output 3: To cultivate instructors in the components mentioned above
- Output 4: To establish and implement training methods
- Output 5: To improve training participants' knowledge of water control, system operation and maintenance, and cultivation through these training programs

#### (4) Inputs (at the time of evaluation)

Japanese side

- Dispatch of long-term experts: 6 experts
- Dispatch of short-term experts: 3 experts
- Trainees received: 11 people
- · Equipment provision

#### Dominican side

- Assignment of counterparts: 14 people
- · Land and facility provision
- Project office room (headquarters of INDRHI), office and lodging facility of CENACA, community hall and equipment warehouse of the verification farm
- Local cost burden
- Others

# Evaluation Team

#### Members of evaluation team

Team leader/Supervisor: Takahiro Morita,

Deputy Director, Agricultural Technology Division, Agricultural Development Cooperation Department, JICA

#### Irrigation agriculture technique: Eisaku Nomura,

Study Planing Specialist, West-Kanto Land Improvement Study Management Office, Kanto Regional Agricultural Administration Office, Ministry of Agriculture Forestry and Fisheries

#### Cultivation: Yasuhiro Ichihashi,

Agricultural Machine Section Chief, Agricultural Production Section, Production Management and Distribution Department, Chugoku-Shikoku Regional Agricultural Administration Office, Ministry of Agriculture Forestry and Fisheries

#### Evaluation analysis: Atau Kishinami,

Permanent Expert, International Development Associates, Ltd.

#### Interpreter: Atsuko Yoshikawa,

Training Coordinator, Japan International Cooperation Center

Period of evaluation: September 8, 2003, to September 26, 2003 Type of evaluation: Mid-term evaluation

# Results of Evaluation

#### 1. Achievement Level

The counterparts have provided training three times since June 2003 with 79 participants (The first training was intended for INDRHI and technicians from the irrigation association, 32 participants; the second training for SEA technicians, 25 participants; the third training for executives of the irrigation association, 22 participants). Major achievements in each area of cooperation are shown below.

#### (1) Water Control

· The observation facility was arranged and observation

continued in order to study the actual situation of water intake at each trunk water channel, branch water channel, and model farm based on the results of the drain line study for present condition in the model irrigation area.

- Proper water control methods were established and instruction was given at the model farm based on the field study results regarding water control at the farm level.
- Training materials were created, and the training was provided for INDRHI, the irrigation association, SEA technicians, and executives of the irrigation association.

#### (2) System Operation and Maintenance

- Field study of the organization structure of the irrigation association, water control conditions, system operation and maintenance conditions, organizational management conditions in the model irrigation area was carried out as well as a hearing investigation to identify problems.
- A seminar on measures for environmental conservation by the irrigation association and local community was held.
- A field survey on the Hima left bank area was conducted, and an improvement plan for system operation and maintenance was examined and implemented.
- A verification farm of about 34 ha was set up in the Hima left bank area based on the examination with related personnel.
- A manual for system operation and maintenance was formulated.
- · Training materials were created and training was provided.

#### (3) Cultivation

- The current situation of rice cultivation was studied in the model irrigation area and its peripheral area.
- Production cost was calculated.
- Proper water control method inside the farm was examined.
- Low cost cultivation method was examined.
- Improvement of crop yields by adopting a variety of short transplant growing periods and direct seeding in no-tilling drained paddy field was examined.
- Introduction of mechanized seeding in no-tilling field cultivation was examined.
- A manual for pest control was formulated.
- · Training materials were created and training was provided.

#### 2. Summary of Evaluation Results

#### (1) Relevance

The relevance is very high.

The 10-year Strategy and Mid-term Development Plan for Agricultural and Livestock Sector formulated by the SEA in 2000 sets out the following four primary policies.

- a. Induce growth and competitive power
- b. Improve fairness of rural society
- c. Reorganize the system of agricultural and livestock industries

d. Promote sustainability in the agricultural environment

In response to these policies, the INDRHI aims to improve water use efficiency and productivity of irrigation agriculture through the rehabilitation and strengthening of operation and maintenance of the existing irrigation system and water control transfer to users. Additionally, in the national assembly, the Water Law (Ley de Aguas), including the legal security of water rights and a change from the traditional water rights to the permitted water rights, is under examination, and the irrigation system control transfer to project beneficiaries is expected to be promoted. This project provides human development necessary for the primary policies in each component of water control, irrigation organization, system operation and maintenance, and cultivation, and is consistent with the policies of INDRHI and SEA.

#### (2) Effectiveness

The effectiveness is high.

Training has been provided three times by the counterparts since June 2003 with 79 participants (The first training was intended for INDRHI and technicians from the irrigation association, 32 participants; the second training for SEA technicians, 25 participants; the third training for executives of the irrigation association, 22 participants). From the questionnaires given to the 79 participants, about 90% respond with high satisfaction regarding the contents of the training, and say that the training program was effective. By the end of the project, training is scheduled to be provided for INDRHI and the irrigation association technicians nine times (190 people), for SEA technicians seven times (150 people), for executives of the irrigation association six times (85 people), and for Nucleo six times (85 people). A follow-up study of the participants will be implemented to find out the situation surrounding technique diffusion. If training proceeds as smoothly as it has been, the project purpose will be achieved.

#### (3) Efficiency

Inputs from the Japanese and the Dominican side have been implemented mostly as planned in terms of quality, quantity, and timing, and the achievement of outcomes in the Project Design Matrix (PDM) has flowed mostly as planned. At the mid-term evaluation stage, outputs other than the fifth criterion have been achieved to some extent. The establishment of a monitoring method in the fifth criterion is being prepared, and there seem to be no problems. Overall, although some equipment for provision was changed and arrangement of the verification farm was delayed due to bad weather, the activities of the project were not greatly affected and the achievements of outputs were judged to be the results of the inputs. However, while the number of counterparts is secured, some are not paid for their work after 2:30 p.m. so improvements in the working conditions are expected.

#### (4) Impacts

The impacts are positive.

At the verification farm, water control, support from the irrigation association, system repair and operation, and cultivation have been implemented under the instruction of the project, and according to the questionnaires, the crop size has increased and the amount of the chemicals and fertilizer has decreased. Setting up the verification farm includes lining branch water channels, averaging farms, separating irrigation canals, and maintaining farm roads. These methods had an influence on the contents of the Programme for the Management of Irrigation Systems by Water Users (PRO-MASIR), which is implemented by a loan from the Inter-American Development Bank (IDB). The maintenance of farm roads and others, which had not been planned in this area were incorporated into the project, resulting in road maintenance on the periphery of the model area. Additionally, the irrigation association for which training was not originally planned asked the project for technical support, thus showing a positive impact of the project.

#### (5) Sustainability

The overall sustainability is about medium level.

#### 1) Organizational Aspect

The organizational sustainability is about medium level.

Both INDRHI and SEA fully understand the importance of the project. However, there are two working systems in INDRHI, and some counterparts are not paid for overtime after 2:30 p.m., which causes problems in the implementation of training. In addition, it is essential to clarify the management system of the implementing agency after the completion of cooperation.

2) Technical Aspect

Technical sustainability is relatively high.

The training materials are made in line with actual situations based on techniques verified at the farms. As the counterparts have already implemented training three times, they enjoy positive evaluations from the participants and are gaining confidence as instructors. To allow the counterparts to continue with their work and carry out continuous technical development, the working and pay systems must be reviewed, as mentioned above.

#### 3) Financial Aspect

The financial sustainability is about medium level.

Although both INDRHI and SEA fully understand the importance of securing budgets for the project, in order to maintain financial sustainability, measures such as (a) reduction of cost for texts, (b) cost burden on training participants, and (c) securing multi financial resources must be taken.

#### 3. Contributing Factors

#### (1) Factors regarding Planning

Compared to assistance carried out by IDB or the World Bank related to the irrigation system transfer, this project stresses training activities (human development) in the intel-

lectual infrastructure, such as instructors and training materials based at training facilities. The effects are expected to continue through technology transfer by trained personnel at each work place.

# (2) Factors regarding the Implementation Process

Based on hearings conducted with the experts, the confidential relationship built between the project and the farmers through development of teaching materials by the counterparts, as well as arrangement and management of the verification farm, were all effective in securing the effects of the cooperation. In particular, regarding the management of the verification farm, production activities on the expense of farmers after the basic system arrangement by the project was specified in the contract with the farmers. This agreement is considered to be very effective in verifying and demonstrating techniques that can be diffused to local areas.

#### 4. Inhibiting Factors

(1) Factors regarding Planning N/A

#### (2) Factors regarding the Implementation Process

As mentioned above, because of the two working systems, some counterparts cannot receive training or cannot participate in local training. Also the project director is supposed to formulate the annual activity plan, and examine the progress and important issues as chairperson of the joint adjustment committee; however, it is hard to say that he has been functioning effectively so far. In addition, it rained more than usual from January to March 2003, and the completion of the verification farm was delayed for about one month. Accordingly, the experiment of direct seeding in drained paddy fields that was planned in February was not performed.

#### 5. Conclusion

In general, the project is judged to be progressing smoothly in accordance with the PDM and the activity plan. The relevance, effectiveness, and efficiency are high, generating positive impacts, and it is almost certain that the project purpose will be achieved by the completion of the project. However, sustainability can only be judged as medium level at the moment, and to raise sustainability for the future, it is necessary to (a) secure appropriate budgets on the Dominican side, (b) improve the working system of the counterparts, and (c) activate the project implementation system.

#### 6. Recommendations

The following were recommended by the joint evaluation team.

#### (1) Securing Sustainability

a. Appropriate Budgets Since all expenditures for training are borne by INDRHI

and SEA after the completion of cooperation, it is necessary to increase the burden on the Dominican side gradually. At the same time, it is necessary to examine (a) cost reduction for texts, (b) cost burden on training participants, and (c) more diversified financial resources.

b. Improvement of Working System

Some counterparts of INDRHI and SEA are not paid for work after 2:30 p.m., which inhibits the smooth implementation of training.

c. Reactivation of the Project Implementation System

In line with the reorganization of INDRHI, the project director position was changed from engineering assistant secretary to the assistant secretary in charge of project implementation. The involvement of the project director on the Dominican side was previously low, so it was recommended to reactivate the project implementation system in a new organization.

#### (2) Promoting Collaboration with Other Donors

At present, IDB and the World Bank provide cooperation related to the establishment of an irrigation association and the rehabilitation of irrigation systems, and the Japan Bank for International Cooperation (JBIC) provides cooperation related to the rehabilitation of irrigation systems. Since this is the only project to provide cooperation in human development at the base of a training facility, INDRHI is expected to take the initiative in promoting collaboration with other donors as training proceeds full scale in the future.

# (3) Preparation for Future Planning after the **Completion of Cooperation**

As the Dominican side should be able to continue training after the completion of cooperation, it is recommended that the Dominican side formulates a future plan after the completion of cooperation, including concrete budgets and personnel assignment by means of terminal evaluation study.

#### 7. Lessons Learned

Related to similar projects, it is necessary to discuss financial resources more thoroughly, including charging for training from the planning stage of a project, in order to maintain financial sustainability. When PDM was developed, the setting of indicators was not sufficiently clear so more concrete ones were set after consultation during the mid-term evaluation. For the consistent management of a project using a PDM, sufficient consideration is required when setting indicators and outline of the project in the PDM.

#### 8. Follow-up Situation

To follow-up and monitor training effectively, a training effect assessment study is scheduled every year for this project. In this evaluation study, more concrete indicators of the project purpose were attempted, and it is necessary to formulate the study design of the training effect evaluation study.

# **Example of Terminal Evaluation**

# Outline of Project

- Country: The Philippines
- Project title: The Cebu Socio-economic Empowerment and Development Project
- Sector: Rural development
- Cooperation scheme: Project-type technical cooperation
- Division in charge: First Technical Cooperation Division, Social Development Cooperation Department
- Total cost (at the time of evaluation): 967 million yen
- Period of cooperation: March 1, 1999 to February 29, 2004
- Partner country's implementing organization: Provincial government of Cebu

#### 1. Background of Cooperation

In the Philippines, a decentralization law was enacted in 1991 and authorities and functions related to rural development have been widely transferred from the central government to local governments. Targeting the central Visayas region that is reportedly the poorest in the country (according to the poverty line set in the country family budget survey in 1994, this area had the lowest annual income of 6,409 pesos in the entire country, whereas the national average was 8,969 pesos), the Central Visayas Regional Development Plan (from 1993 to 1998) was created. However, due to insufficient capacity for embodying the plan, in cooperation with JICA, the Philippines formulated the Cebu Province Comprehensive Development Plan in 1993 with the development goals of healthy and sustainable economic growth, balanced growth, and social development and poverty reduction. Then the government of the Philippines made a request to Japan for projecttype technical cooperation aimed at revitalizing the local areas of Cebu Province.

Japan dispatched a project formation study team (July 1 to 16, 1996), a project formulation advisor (October 1, to November 1, 1997), an preliminary study team (September 8 to 25, 1997), and a project design team (January 19 to 29, 1999), and held repeated discussions. Following sign-up and exchange of the records of discussion (R/D) on January 25, 1999, this project-type technical cooperation was started with a five year-plan starting on March 1, 1999.

#### 2. Framework of Cooperation

#### (1) Overall Goal

To encourage decentralization and promote social and economic development in the local areas of Cebu Province

#### (2) Project Purpose

To strengthen the rural development administration and to establish a rural development mechanism that utilizes development resources continuously and effectively together with the community and NGOs



Fishermen working in a seaweed cultivation project (The Cebu Socio-economic Empowerment and Development Project in the Philippines)

#### (3) Outputs

- Output 1: To strengthen the planning and coordinating functions of the planning and development department of the provincial government
- Output 2: To develop the administrative methods and procedures for implementing development activities at the town level
- Output 3: To accumulate experiences and know-how of implementation of regional development activities
- Output 4: To establish a knowledge management bank (KMB) in order to share information such as methods, procedures, know-how, and experiences of development activities
- (4) Inputs (including plans partially fixed at the time of evaluation)

Japanese side Dispatch of long-term experts: 7 people Dispatch of short-term experts: 13 people Trainees received: 31 people Equipment provision Administration costs, etc. Philippines side Counterparts: 12 people Local cost burden

# **D** Evaluation Team

Members of evaluation team

- Team leader/Supervisor: Yumiko Tanaka, JICA senior advisor
- Rural development mechanism: Yoshiaki Nishikawa, Professor, Department of Economics, Kurume University

Evaluation planning: Hiroyuki Yakushi, First Technical Cooperation Division, Social Development Cooperation Department, JICA

Project effect analysis: Michiyuki Kemmotsu, Overseas Operation Department, Chuo Kaihatsu Corporation

Period of evaluation: October 5, 2003 to October 16, 2003 (from September 29 to October 16 for consultant members)

Type of evaluation: Terminal evaluation

# Results of Evaluation

Achieving decentralization has two aspects: national

authority is transferred and dispersed to local governments in principle and local residents are given the mechanism for improving their actual livelihoods to realize human security in the area (local administration).

The significance of this project is that the implementation of decentralization is promoted by the provincial government, which is the counterpart situated at the median level, from these two different directions through the micro projects.

In the approach to this project, the provincial government provided a place for these two directions to join. In addition, through the organic involvement of the median-level administration (local administration's substantive participation in rural development), the poverty group who could not achieve development only with resources existing in the individual area secured access to regional resources encompassing the entire province, thus paving the way to achieving human security in the area.

#### 1. Achievement Level

From the following viewpoints, a rural development mechanism has basically been established in the north part of Cebu Province.

- In this project, 67 regional development activities were identified, formulated, and implemented together with the counterpart, the Planning and Development Department of Cebu Province (PPDO). As result, The PPDO gained the capability to provide places and opportunities for the activities of rural development activities with stakeholders, including towns and communities, as an adjustment organization of rural development (platform function).
- At the stage of formation and implementation of rural development activities, the implementing bodies, such as town governments, and the local resources, such as the provincial governments, central government ministries, NGOs, and universities, created a social network and partnership for working together on the activities.
- During the implementations of the activities, sustainability and dissemination were considered and the outcome has started to emerge.
- The effectiveness of the approach in this project was properly recognized and each actor recognized its own role to play.

#### 2. Summary of Evaluation Results

#### (1) Relevance

This project is consistent with the basic policy of the Philippines, namely, transfer of development activities to local administrations specified in the Decentralization Law (1991), thus strengthening local governments' capacities to realize the transfer, and promoting participatory activities. This project is also consistent with "disparity correction" in Japan's Country Assistance Program for the Philippines and "consideration for the capacity building of administrative officers (especially local areas) and support for vocational training for the poverty group" in the fields of human development and institution building. Thus, the project purpose and overall goals of this project are consistent with the policies of both two countries and the relevance of this project is high.

#### (2) Effectiveness

Achievements of the outcomes are shown below. The outputs created so far (or those being undertaken at the moment that are expected to be created by the end of the project) are all expected to contribute to achieving the project purpose effectively. The effectiveness of the project is secured.

- Output 1: Planning and adjusting capabilities (data analysis, consultation, monitoring, evaluation, etc.) of the PPDO have been strengthened.
- Output 2: The Administrative methods and procedures for implementing development activities at the town level have been developed.
- Output 3: The experiences and know-how of implementation of rural development activities have been accumulated in the local governments and the counterparts.
- Output 4: The KMB is being built, and the methods and procedures of development activities are shared at the province, town, and barangay levels through information sharing media such as videos and newspapers.

#### (3) Efficiency

Inputs have been implemented mostly as planned, and effectively utilized to achieve the outputs.

#### (4) Impacts

The NEDA (National Economic and Development Authority) Regional Office No. 7 has positively evaluated the approaches of this project and suggested that the approach and mechanism be applied to the Decentralization Planning Structure Project (DPSP) in Visayas, which is scheduled to take place from 2003 to 2006, thus showing a willingness to apply them in other states as well.

It is too early to determine when the indicators of the overall goal will be achieved; however a mechanism of sustainable rural development has been established and ownership of the rural area is rising through the implementation of as many as 67 regional development activities within the period of cooperation. If this mechanism is sustained and strengthened and the activities continue, the possibility of achieving the overall goal is high.

Also, global issues such as poverty, gender, environment, and community participation are consciously considered in this project. Some positive impacts such as changes in thinking in the provincial government, town government, and community have begun appearing. No negative impacts have appeared.

#### (5) Sustainability

The counterparts and planning and development advisors

of the town's autonomous body properly understand the effectiveness of the rural development mechanism, the concepts of the platform and social network are consolidated, and the established mechanism is expected to be maintained. The governor and mayors have positively evaluated the 67 regional development activities implemented in this project and some of them are already allocated with regular budgets. Their political commitment will further promote sustainability. Though rural development activities will be implemented with the budgets of towns and the provincial government in the future, it can sufficiently be accommodated within budgets at the province and town levels.

#### 3. Contributing Factors

#### (1) Factors regarding Planning

The activity plans of this project include utilizing local resources effectively to establish a rural development mechanism in identifying, formulating, and actually implementing many rural development activities, as well as strengthening the capabilities of the counterparts in the process and consequently building collaborative linkage among numerous different organizations. They were extremely effective in achieving the project purpose such as capacity building of the counterparts, changes in the thinking of the governor, mayors, and residents, and establishment of a mechanism.

#### (2) Factors regarding the Implementation Process

- Inputs from Japan and the Philippines were appropriate in both quality and quantity, and were generally well timed.
- The teamwork and trusting relationship formed between experts and counterparts played a vital role in this project, which aims to promote technical transfer while proceeding with operations such as identification, formulation, and implementation of activities.

#### 4. Inhibiting Factors

#### (1) Factors regarding Planning

Setting of inputs up to achieving the project purpose and outputs of the activities were relatively appropriate from the beginning, and the effectiveness increased after the improvement of the PDM at mid-term evaluation. However, clear indicators to determine whether the overall goal and project purpose were achieved were not clearly set.

#### (2) Factors regarding the Implementation Process

This project features building collaborative linkages among numerous multi-level organizations in the partner country while carrying out technical transfer to the counterparts. This type of project has a few precedents and the methods have not yet been established. It was thus difficult to develop PDM and a plan of operations by the time of the mid-term evaluation. For these reasons, tests and faults were repeated at the early stage of project operation, which led to effective implementation of the second half of the project on the contrary.

#### 5. Conclusion

The project purpose has been mostly achieved, and there are no particular problems with regard to the five evaluation criteria. Consideration is also given to global issues. To apply the approach that was successful in this project to the south part of Cebu Province in the future, capacity building of the counterparts and town governments needs to be further upgraded and the initiative of the PPDO should be demonstrated.

#### 6. Recommendations

#### (1) Tasks Prior to Termination of the Project

The following activities must be carried out for better and more secure outputs from this project.

#### [Activities]

Completion of the KMB, KMB training for main users including the MPDC, completion of population census analysis, smooth reintegration of the Project Management Office (PMO) function to PPDO and preparation necessary for reorganization, follow-up on rural development activities (micro), introduction of approaches for the establishment of a rural development mechanism achieved in this project, creation of videos and holding seminars related to the cases of rural development activities.

#### (2) Tasks after Termination of the Project

After termination of the project, the activities will be operated using the approaches implemented in this project with the development budgets of the province and town. The provincial government has indicated its intention to apply the outputs of the project to the south area, and is examining the establishment of a more effective implementation system including reorganization of the PPDO. The NEDA Regional Office No. 7 also indicated its intention to apply the mechanism established in this project to other provinces as a good practice. For that purpose, the Cebu provincial government requested an advisory-type dispatch of follow-up experts from the evaluation study team.

#### 7. Lessons Learned

#### (1) Effectiveness of Local Government-level Approach

The approach implemented in this project to promote decentralization through a local government (province level) as the direct implementing body was effective. The conventional bilateral aid involves the central government as an implementing body and subsequent diffusion is left to the government of the partner country. However, in establishing a rural development mechanism achieved in this project, local governments including the province and towns played important roles.

## (2) Effectiveness of Rural Development Mechanism in Decentralization

To improve the developing capacity of a local government that has no knowledge of development utilizing local resources effectively, establishment of a rural development mechanism led by median level actors such as the provincial and town governments proved to be very effective in putting into practice the Decentralization Law enacted at the macro level (central government).

# (3) Change in Recognition at the Town and Community Levels in Establishing the Process of a Rural Development Mechanism

It is significant that the administration organizations at the town and community levels had the chance to recognize the importance of local information, budgets, organized human networks, and accessible development resources through the establishment process of a rural development mechanism with a positive attitude, unlike the conventional passive approach.

#### (4) Importance of Implementation

In this project as many as 67 projects were actually implemented, and in the process, the counterparts and the town officials in charge of development started by actually visiting the field and considering "what we want to do and what we can do." In the beginning, the project did not proceed as planned; however, these processes greatly contributed to improving the developing capacity of the counterparts and establishing a rural development mechanism.

#### (5) From Expert Initiative to Counterpart Initiative

As the developing and adjusting capacity of the counterparts was not high at the beginning of the project, the experts led the formulation of activities. However by dividing 16 towns into three phases, the initiative was gradually transferred to the counterparts, and in the third phase the counterparts came to adjust activities, including town consultations, on their own. As a result, the ownership of the counterparts increased, contributing to greater sustainability of the rural development mechanism. This was an effective approach.

## (6) Development and Implementation of Various Development Methods

In the rural development activities implemented with the provincial and town administrations and the communities in this project, various effective methods were developed and implemented in terms of effective use of resources, securing sustainability, and dissemination promotion. They can be utilized in similar projects. The information related to these methods will be recorded and updated in the KMB to make it possible to share them in the future.

Example: introduction of revolving funds (livestock, vegetable utilization), town linkage projects (rural roads development, training center), dissemination from farmer to farmer (sloping ground agriculture)

# (7) Integration of Rural Development Policy and Plan (institutionalization)

The rural development activities implemented in this project have been integrated in rural development policies and plans in various forms.

Reflection on the Annual Investment Plan of the provincial and town administration, installation of a new department to maintain and operate the KMB (inside the PPDO), allocating regular budgets to the provincial journal "Sugbo," concluding of the Memorandum of Agreement (MoA) between provincial and town administrations, and among town administrations in accordance to the Decentralization Law, newly allocating regular budgets for 20 artificial insemination specialists, normalization of quarter term monitoring report meetings, making regulations for marine resource control (municipalities of Bogo and Medellin), etc.

#### (8) Flexibility of PDM

The rural development mechanism implemented in this project was successfully established owing to flexible application of the PDM created at the beginning of the project. Although it is used as the basis in a practical project like this one, flexibility is essential to change if needed while checking the effectiveness of the activities to achieve the goal.

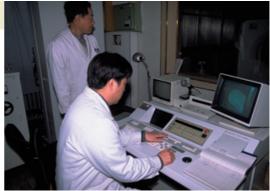
#### (9) Preparation for Termination of the Project

In the case of a project whose purpose is consolidating an approach, a phase-out strategy to terminate the project on the Japanese side must be examined for smooth consolidation at least by the mid-term point of the cooperation period.

# **Example of Project-level Ex-post Evaluation**

# Outline of Project

- Country: China
- Project title: The Clinical Medical Education Project for the China-Japan Medical Education Center
- Sector: Medical education
- Cooperation scheme: Technical Cooperation Project
- Division in charge: First Medical Cooperation Division, Medical Cooperation Department
- Total cost: 612 million yen
- Period of cooperation: April 26, 1995 to April 25, 2000



Learning how to operate a medical device (The Clinical Medical Education Project for the China-Japan Medical Education Center)

- Partner country's implementing organization: China Medical University (CMU)
- Supporting organization in Japan: Ministry of Health, Labor and Welfare
- Related cooperation project: China-Japan Medical Education Center (November 1989 to November 1994)

#### 1. Background of Cooperation

From November 1989 to November 1994, a technical cooperation project aimed at basic medical education, the China-Japan Medical Education Center (SJMEC), was implemented in CMU. Although the project achieved a considerable amount, clinical medicine education was not included, and CMU requested the Japanese government for another technical cooperation project focused on clinical medicine education. Adequacy and necessity of the request was confirmed after the examination. The Clinical Medicine Education Project for the China-Japan Medical Education Center was conducted from April 1995.

#### 2. Framework of Cooperation

The project's objective was to contribute to the development of medical education in China by consolidating relevant systems of the clinical medicine education in Japanese at SJMEC.

#### (1) Overall Goal

To improve medical technology and quality of research in China through the development of medical education

#### (2) Project Purpose

To cultivate competent clinical medicine doctors at SJMEC as a central base of clinical medicine education in Japanese, in China

#### (3) Outputs

- Output 1: To improve the quality of clinical training in the sixth-grade Japanese language class at SJMEC.
- Output 2: To establish an appropriate evaluation method for clinical training in the sixth-grade Japanese language class at SJMEC
- Output 3: To establish a medical-internship education system in SJMEC
- Output 4: To introduce new medical technologies to education programs for the sixth-grade students of the Japanese language class and interns in SJMEC
- Output 5: To cultivate personnel resources capable of educating sixth-grade students of the Japanese language class and interns in SJMEC

#### (4) Inputs

#### Japanese side

Dispatch of long-term experts: 4 people Dispatch of short-term experts: 51 people Trainees received: 22 people Equipment provision Local operating cost Chinese side Counterparts: 43 people Land and facility Local cost burden

# **U** Evaluation Team

#### Members of evaluation team

Chief evaluator: Meng Weiliang (JP Ruihua EnvironTech Co.) Assistant: Tian Song (JP Ruihua EnvironTech Co.) Period of evaluation: November 20, 2003 to January 20, 2004 Type of evaluation: ex-post evaluation by overseas office

# Results of Evaluation

# 1. Summary of Evaluation Results

#### (1) Impacts

The number of papers presented at domestic medical conventions and published in medical journals was set as the key performance indicator of the overall goal of the project. According to the results of a questionnaire survey, five counterparts (doctors) participated in 11 medical conventions and no papers were published during the project. After the completion of the project, they performed better, participating in 20 medical conventions and publishing nine papers (The questionnaire was supposed to be sent to 22 doctors who attended a special training program in Japan during the project, but since 12 doctors among them are currently studying in Japan, it was sent to 10 doctors, and five responded).

Since the completion of the project, the counterparts have pursued their studies on the basis of past achievements in the project and utilized them in the education field. The 12 doctors are continuing the same study as that of the project under the same academic supervisors in Japan. All the supervisory doctors remaining in China have become pivotal figures in their respective departments, and two have obtained research grants (190,000 RMB and 220,000 RMB respectively) from the National Nature Scientific Fund.

As for unanticipated impacts, an advanced laboratory management system was introduced from Japan, and at the same time the supervisory doctors have familiarized themselves with the latest medical technologies

#### (2) Sustainability

1) Organizational Aspects

SJMEC, formerly an independent institution set up in parallel with CMU, was dissolved after the completion of the project, and CMU incorporated their functions. The clinical medicine education in Japanese (CMEJ) is under the management of the International Exchange Center, Education Administration Department and Students Affairs Department in CMU. As a result, the organization management work of CMU has been sustained on the basis of clinical medicine education in Japanese.

#### Financial Aspects

As noted above, CMU is responsible for the management of CMEJ and the development of the personnel resources of supervisory doctors for the Japanese class. Consequently, financial security is dependent upon the extent of support from CMU. In November 2003, the Liaoning Education Agency dispatched an examination team to investigate the quality of CMEJ, and gave its highest mark to overall education including the Japanese class. It proved that CMU has provided continuous financial support to CMEJ. It is not possible to provide actual statistics of the allocated budget put in CMEJ by CMU, because the Japanese class students have the same educational curriculum and clinical training programs as other students. **3)** Technical Aspects

From the aspects of the language skills and expert knowledge of teachers of CMEJ, the quality of educational materials in Japanese, and the environment of medical education in Japanese, the Liaoning Education Agency has changed the Japanese class in CMU from a six-year course to a sevenyear course, which includes a Master's degree program. It is an endorsement of the quality of CMEJ from the government as well as the sustainable impact of the project on CMEJ. Medical technologies continue their remarkable development today, and CMEJ materials have been updated in accordance with the National Education Outline.

#### 4) Effects

The counterparts obtained sufficient knowledge and skills regarding clinical medicine from the project, and they have been able to continue their research activities on their own. When the project was completed, most of them were lecturers, and since then, while continuing their research in their respective areas, they have been teaching in the CMEJ class. Based upon the results of the achievement, some obtained Master's degrees, as well as PH.D and post PH.D titles. Seven have been promoted to professional or assistant professor status from the assistant teacher and lecturer levels. Two are in directors' positions. These results, in addition to award-winning status from the National Scientific Fund, reflect the sustainability of the project's effects.

It has had an impact, with its status, on the core of CMEJ. In order to evaluate one of the project effects as the center of CMEJ, a questionnaire survey targeting the former Japanese class students was conducted. Most are now lecturers, the same position as the entry-level counterparts of the project. All the students were able to pass the National Physician Certification Examination during the project, and the graduates from 1996, 1997, and 1998 have since become lecturers. The recruited number of CMEJ students has increased continuously since the completion of the project, reaching 60 in 2003 from 50 at the completion of the project's effect as the center of CMEJ.

#### 2. Contributing Factors

#### (1) Factors regarding Planning

As a commitment of the Chinese government, detailed provision with respect to required skills for clinicians and assistant clinicians was included in the National Physician Qualification Examination, thus contributing to the evolution of CMEJ.

#### (2) Factors regarding the Implementation Process

CMEJ was the top priority project of CMU before the JICA project started. It helped conduct the project smoothly and facilitated its sustainable development after the completion of the project. The SJMEC's integration into CMU resulted in its receiving continuous technical and financial support from CMU.

#### 3. Inhibiting Factors

N/A

#### 4. Conclusion

After the completion of the project, SMJEC also terminated its role as an independent educational institute, and all the functions, including personnel and education systems, were integrated into CMU. Judging from the subsequent progress of CMEJ, it is obvious that the project significantly enhanced the quality of CMEJ as well as the abilities and skills of supervisory doctors. The textbook compiled for the project has been revised continuously, and the facilities of clinical medicine education helped to improve the overall quality of the clinical training and the affiliated hospital. All of these facts prove that CMEJ offers considerable sustainability in terms of organization, personnel, technology, and finance.

In the three years since the completion of the project, the counterparts have worked on further research based on their achievement during the project, and have used their knowledge in actual clinical training.

#### 5. Recommendations

The CMU should put more effort into public relations with respect to the achievements of the project in order to disseminate their findings throughout the health industry so that other medical institutions can also benefit from it. The counterparts should understand advanced management technology in addition to learning overseas medical technologies (from Japan), and carry out management system reforms accordingly. As technical matters are not the only issue that China faces, management reforms should be strengthened.

#### 6. Lessons Learned

When drawing up a plan for a project, it is important to adopt an appropriate cooperation method in order to reconcile the project purpose and the long-term goal of the partner country. The project has perfectly satisfied the demand of the partner country in the medical education area through the enhancement of CMEJ. In addition, careful consideration is necessary with respect to the pros and cons of creating an independent entity for a project. What is most important is not to create an independent entity but rather to provide and develop knowledge and technology, thereby promoting development in a particular area. Creating a new entity is not necessarily the best plan to adopt; the ideal way is to develop and enhance the necessary ability of an existing organization in accordance with its capacity. JICA is able to develop and enhance the ability of an existing entity, while it is outside of their control to keep a new entity developed for the project after its completion. The implementing section in China does not necessarily have the capability, either.

# **Chapter 2** Synthesis Study of Evaluations (Project-level ex-post evaluations)

This chapter presents the results of the synthesis study on ex-post evaluations of individual projects which were conducted in fiscal 2002 and 2003. Ex-post evaluation mainly examines whether the effect of assistance is sustained and continues to occur after the termination of cooperation. This study was conducted to derive common features from individual evaluation results and compile generalized lessons for easy feedback. The Office of Evaluation, Planning and Coordination Department, an evaluation section of JICA, conducted this study with the participation of external consultants.

# 2-1 Objective, Target and Evaluation Methods

#### (1) Objective

Chapter 1 of Part 2, "Synthesis Study of Evaluation Results," in the Annual Evaluation Report 2003 comprehensively analyzed primary evaluation results based on terminal evaluation reports of JICA's Technical Cooperation Projects (hereinafter referred to as "project"). This synthesis study analyzed the project effects at the termination of cooperation between the partner countries and Japan, identified factors that promoted and impeded realization of the effects, and derived lessons for effective and efficient cooperation in the future.

This year, primary evaluation results of the ex-post evaluation reports are comprehensively analyzed using the same synthesis analysis method as last year. This analysis sheds light on general trends of the effects that were realized in a certain period after the project termination, as well as promoting and impeding factors. Furthermore, lessons are derived based on the results of this analysis for future implementation of projects with sustainable effects.

#### (2) Members of the Study

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#### (3) Projects Subject to the Study

This study targeted 43 ex-post evaluations on individual projects that were conducted by JICA in fiscal 2002 and 2003 (24 evaluations for fiscal 2002 and 19 for fiscal 2003 whose reports were publicized as of April 2004: see Table 2-5 Projects Subject to the Study). Project-level ex-post evaluation was introduced in fiscal 2002 on a trial basis. In principle, JICA overseas offices conduct ex-post evaluation on Technical Cooperation Projects three years after the termination of cooperation using local consultants. Focusing on impact and sustainability of the DAC Five Evaluation Criteria, this evaluation examines whether the effects of the projects are sustained and expanded even after termination of cooperation.

Breakdowns of projects by region and by sector are shown in Figures 2-1 and 2-2, respectively. Since project-level expost evaluation has been introduced on a step-by-step basis, these breakdowns are not necessarily consistent with the general trends of JICA projects. Thirty-three projects subject to the study are in Asia, which accounts for 77% of those implemented in the whole area, whereas the number of projects in the Middle East and Africa is limited in this study.

#### (4) Methods of the Synthesis Study

The analysis in this study set the following three questions.