# Chapter 5 Environment—Environmental Center Approach: Development of Social Capacity for Environmental Management in Developing Countries and Japan's Environmental Cooperation

# 5-1 Outline of Evaluation Study

#### (1) Background and Objectives

At the World Summit on Sustainable Development (WSSD) in Johannesburg, which took place in late August and early September, 2002, the Japanese government announced the Environmental Conservation Initiative for Sustainable Development (EcoISD), an advanced plan of Initiatives for Sustainable Development toward the 21st century (ISD) proposed in 1997. In this plan, Japan, presenting a new policy emphasizing the importance of partnerships with developing countries, as well as principles of ownership that Japan had pursued for a long time, defined capacity development in the environment in the first of several basic policies. Specifically, under the Koizumi Initiative (the concrete actions to be taken by the Japanese government for sustainable development throughout the world, which was announced by Prime Minister Koizumi), Japan gave first priority to human resource development for sustainable development, raised the amount of aid in education to more than 250 billion yen over five years, and supported human resource development for 5,000 experts in the environmental sector.

However, Japan has been trimming the amount of ODA for the past few years because of its severe fiscal situation and lost its position as the No. 1 ODA donor in 2001. In the meantime, Japan's foreign direct investment has been growing steadily and has become approximately five times larger, overtaking ODA in 1992. Furthermore, the role of Civil Society Organizations (CSOs), such as NGOs and NPOs, has expanded dramatically in the fields of development assistance and environmental protection in developing countries. When thinking of sustainable development in developing countries as stated above, it is more important than ever for both the private (firms and citizens) and the public sectors to take their own share of responsibility and cooperate with each other.

Although the portion of total ODA dedicated to the environment is increasing, it is time to consider the approach for effective and efficient international cooperation, including development support from other official funds (OOF), sources other than ODA and other cooperation based on private funds in these circumstances of environmental cooperation.

The Environmental Center approach, which has been

implemented since 1990, mainly consists of grants and technical cooperation for the establishment of a center. The center has (1) a research function for monitoring skills in air and water pollution, along with environmental research, and (2) a training function for environmental experts with technical cooperation from Japan. Hence it may be said that the Environmental Center approach is a characteristic feature of Japan's environmental cooperation.

This report presents a proposal for how JICA's effective and efficient environmental cooperation should be conducted based on the concept of development of social capacity for environmental management (SCEM) as the framework for program evaluation. This study also analyzed how Environmental Center projects have contributed to the partner countries' social capacity development, while conducting evaluations of related cooperation projects and policy systems as required.

# (2) Evaluation Study Period and Team

# 1) Evaluation Study Period

May 2002 to March 2003

## 2) Evaluation Study Team

Under an official contract between JICA and the Japan Society for International Development (JASID), this evaluation was conducted by the Evaluation Team on Environmental Cooperation in JASID. A task force established for this evaluation study in JICA took part and exchanged opinions.

# (3) Projects subject to the Study

The evaluation of the Environmental Center approach in this report is a program evaluation of Environmental Center projects. The evaluation analyzed the outcomes of the Environmental Centers (one of Japan's representative environmental cooperation) from various perspectives using evaluation framework for development of SCEM in developing countries. In this report, the evaluation was conducted on projects in four (China, Thailand, Indonesia and Mexico) of the six countries where Environmental Center projects had been implemented, taking into consideration the duration of each project and the characteristics of each Environmental Center (Table 3-24).

#### Table 3-24 Outline of the Environmental Center Projects

	Sino-Japan Friendship Center for Environmental Protection, China	Environmental Research and Training Center (ERTC), Thailand	Environmental Management Center (EMC), Indonesia	National Center for Environmental Research and Training (CENTCA), Mexico
Agreement of grant aid	1992.6	1989.7	1991.12	—
Project duration	Phase 1: 1992.9-1996.8 Phase 2: 1996.2-2001.1 Phase 3: 2002.4-2006.3	Phase 1: 1990. 1-1995. 3 Extension: 1995. 4-1997. 3	Phase 1: 1993. 1-1997.12 Follow up: 1998. 1-2000. 3	Phase 1: 1995.7-1997.6 Phase 2:1997.7-2000.6 Follow up: 2000.7-2002.6
Project purposes	Collection and analysis of monitoring data, research of the pollution control technology, development of human resources for environmental protection	Environmental research, training, improvement of monitoring activ- ities (contribution to improvement of environmental quality)	To develop a capacity for envi- ronmental management and improve environmental quality through environmental research, monitoring, information system, and training	To develop a method of pollu- tion control and environmental management (improvement of the capacity for environmental administration)
Environmental issues targeted in the project	Cooperation in general environmental issues addressed by SEPA • Environmental monitoring • Development of the pollution control technology • Improvement at the environmental information network • Research on environmental strategic policy • Environmental education and enlight- enment activity	<ul> <li>Water pollution</li> <li>Air pollution</li> <li>Noise and vibration</li> <li>Solid waste</li> <li>Hazardous substances</li> </ul>	<ul> <li>Water pollution</li> <li>Air pollution</li> <li>Hazardous substances</li> </ul>	• Air pollution • Hazardous substances
Project type	Grant aid, technical cooperation	Grant aid, technical cooperation	Grant aid, technical cooperation	Technical cooperation

# 5-2 Development Stages of SCEM in Developing Countries

#### (1) SCEM and SEMS

Social capacity for environmental management (SCEM) indicates the overall capacity that addresses environmental management by governments, firms, and citizens. This capacity is defined as the social environmental management system (SEMS) on the basis of a systematic and institutional argument (Figure 3-8). SEMS has three main actors for environ-

mental management, namely, governments, firms, and citizens, and the system works according to the actions of these three actors in environmental management as well as interactions among them. As for SEMS, the relationship between the two levels in the country, central (national) and local, should be considered, too.

#### (2) Development Stages and Benchmarks of the SEMS

There are three stages in the development process of SEMS: system-making, system-working, and self-manage-



ment. Fundamental functions of SEMS are developed in the system-making stage . Since this stage particularly requires capacity development in the government sector, benchmarks should be the development of (1) environmental laws (basic laws and specific regulations), (2) environmental administration, and (3) environmental information system (establishment of monitoring networks, and collection, use and disclosure of data). The system-making stage enters its final phase when an environmental administrative organization is established following the enactment of environment laws. Going through the final adjustment, such as the development of environmental information system, toward the execution of the environmental policy, the system shifts to the system-working stage.

In the system-working stage, the system makes a fullfledged start of the execution of pollution reduction followed by development of the environmental administration, which should be fundamental in the system. In this stage, the tendency of pollution changes from increasing to decreasing and a turning point in the environmental Kuznets curve (EKC) should be observed. When such a turning point is observed, the stage is assumed to be fully open.

The self-management stage is the stage where the system develops on its own through stronger interrelationships among the government, firms, and citizens, and comprehensive environmental management is enforced. In particular, firms and citizens take the initiative in environmental management through voluntary efforts. For example, firms make efforts to obtain ISO14001 certificates as a part of internal environmental management and begin to implement more efficient environmental and business management, thus making the most of environmental accounting. Firms appeal to society with these achievements and gain a competitive edge in the market as consumers appreciate their efforts. From the aspect of international cooperation, a developing country should become more independent from the donor country's assistance and utilize its own financial resources at the beginning of this self-management stage.

The roles and the relationships among the three actors also change along with the development process of the stages. While the government shoulders the biggest role in the system-making and system-working stages, it is responsible for creating a framework for comprehensive environmental management and supporting the other actors in the self-management stage. The Chinese case of the development process of SCEM is shown in Figure 3-9. Regarding the evaluation indicators of SCEM, on the basis of the Human Development Index of the United Nations Development Programme (UNDP), evaluation indicators for air quality management capability of the World Health Organization (WHO) and the United Nations Environment Programme (UNEP), and the evaluation theory in capacity development in the environment (CDE) promoted by OECD, the evaluation analysis in this report focuses on the benchmark indicators in the development stages, assuming a bundle of evaluation indicators as shown in Figure 3-10.

# 5-3 Environmental Center Approach and Development of SCEM

# (1) Entry Point and Exit Point of Environmental Center Projects

In terms of development of SCEM in developing countries, it is important to identify what environmental cooperation should mean, and when it should be implemented most effectively. In this respect, this report examines suitable entry and exit points for Environmental Center projects.

Suitable entry and exit points in the development stages of the SEMS and Environmental Center projects are shown in Figure 3-11. When Environmental Center projects, whose key activities are monitoring, researching, and training, are started in the final phase of the system-making stage where environmental law and administration are already established, the most effective results for the formation of SCEM for the partner country will occur. In short, the final phase of the system-making stage is the most suitable entry point for Environmental Center projects.

On the other hand, the switch to a decrease in pollution in the system-working stage means that the partner country's social system has established the capacity to reduce conventional industrial pollution, such as sulfur oxide (SOx). Thus, the Environmental Center faces a new task after having attained one of its original purposes, and the time to address self-sustaining development begins. Also, the cooperative relationship shifts to one that is well balanced, with and without ODA, from one where ODA plays a large role; in other words, from vertical to horizontal cooperation. Therefore, it is desirable for Environmental Centers to reach the exit point of projects when the stage spreads out fully, after it passes through the turning point of pollution reduction in the system-working stage.

From the point of view stated above, the contribution of Environmental Center projects to development of SCEM in the four countries is evaluated below. The development process of the SEMS and the input timing of Environmental Center projects in the four countries are shown in Figure 3-12.

# (2) China

Both environmental laws and administrations were satisfactorily established in the 1990s, and the China Environment Yearbook, which is equivalent to China's State of the Environment, has been issued annually since 1990, with an upgrade in quality since 1994. This proves that the systemmaking stage in China was completed in the mid-1990s, meaning that the first half of the 1990s dovetails with the final phase of the stage. With Air Pollution Control Act Amendments enacted in 1995 and the Ninth Five Year Plan started in 1996, China implemented effective countermeasures, and entered the system-working stage in the latter half of the 1990s. Since  $SO_2$  emissions from industry in China reached their peak in 1996, there is a possibility that China reached the turning point toward pollution decrease in the latter half of the 1990s. The development process of social capacity, which appears to be extensive in China as stated above,

implies that the government, firms, and citizens, acting as a single body, appear to be actively promoting environmental management prior to the Beijing Olympic Games, which are to be held in 2008, and the Shanghai International Exposition, which is to be held in 2010, and the country seems to have started changing over to the self-management stage from the system-working stage.

Figure 3-12 indicates that the Sino-Japan Friendship Center for Environmental Protection Project in China started in 1992 (an agreement for a grant aid was reached and project-



type technical cooperation started), which was the final phase of the system-making stage, and the project was initiated at a suitable entry point. Furthermore, full-scale technical cooperation and activities in the center were started in 1996 as the second phase of the project. With project input having been given at the right time for a significant contribution to the system, the Sino-Japan Center has been developing along with the development of the SEMS in China.

In the meantime, China experienced the system-working stage during the latter half of the 1990s and is gradually shifting to the self-management stage, which started in the early 2000s, and the Sino-Japan Center project entered the third phase in 2002 (scheduled to be completed in 2006). Although the Sino-Japan Center might not need further assistance form Japan, considering the exit point of the project on the basis of the original concept of Environmental Center projects, it is relevant for Japan to continue supporting the Environmental Centers if they find a new target or need for their activities, as in the case of the Sino-Japan Center, in terms of strengthening the relationship between both countries' governments, firms, and citizens.

# (3) Thailand

In Thailand, environmental law, administration, and infor-







mation are mostly in place, and the country shifted to the system-working stage from the system-making stage in the mid 1990s. However, it has taken considerable time to set up the system-working stage in the SEMS because of social and economic problems caused by the currency crisis of 1997. Furthermore, in Thailand, a period of reorganization of the governmental system and the early phase of the system-working stage have coincided due to the reformation of the former Ministry of Science, Technology and Environment (MOSTE) into the present Ministry of Natural Resources and Environment (MONRE) after the establishment of the new Constitution in 1997, the enforcement of the Decentralization Plan and Process Act in 1999, and the restructuring of the ministries in October 2002.

Figure 3-12 shows that the Environmental Research and Training Center (ERTC) projects started at the end of the 1980s (grant aid in 1989 and project-type technical cooperation in 1990), which was the final phase of the system-making stage, and ERTC projects appear to have been implemented prior to the transitional period to the system-working stage. The Thai administration and economy began a restructuring period after the completion of cooperation in 1997 and it was impossible to predict these conditions in the latter half of the 1980s. So, the entry point of the Environmental Center project in Thailand was appropriate considering the situation at that time. Furthermore, although the ERTC projects ended in 1997, the input of the project should have been continued a little longer to be more rational, considering that the system was at the beginning of the system-working stage and far from fully operational.

#### (4) Indonesia

Environmental law and administration in Indonesia were established in the late 1980s and early 1990s. Nevertheless, Indonesia is behind in terms of development of its environmental information; in other words, a nationwide monitoring network is not established, and periodical dissemination of the state of the environment is not being performed, either. Under these conditions, the country appears to have been at a standstill in the final phase of the system-making stage since the beginning of the 1990s. Furthermore, Indonesia went through social and economic instability due to the change of the Suharto administration along with the currency crisis in 1997, the independence movement of Timor-Leste, the restructuring of the central ministries that accompanied the establishment of the new Ministry of the Environment (January 2002) out of the former State Ministry of Environment and BAPEDAL (Environmental Impact Management Agency), and the enactment of the Decentralization Act (2001). Under unstable administrative conditions like these, Indonesia may remain in the final phase of the system-making stage.

The analysis of the development process of the SEMS in Indonesia leads to the conclusion that the timing of the start of project input of the Indonesia Environmental Management Center (EMC) in the beginning of the 1990s and also in the final phase of the system-making stage (an agreement for the grant aid in 1991, and the timing of the start of project-type technical cooperation in 1993) was appropriate. On the other hand, regarding the accomplishment of the project, remarks are often made that the EMC still has a long way to go before it becomes self-sustaining and the project can be continued. Focusing on development of the SEMS, it is analyzed as follows. Indonesia's own particular conditions led to the necessity of a much longer timeframe in years for the final phase of the system-making stage due to external factors and other problems, and in consideration of concrete needs, such as preparation of an environmental information system and the development of environmental experts, it is relevant to continue the input of aid funds into the EMC project indefinitely. The second phase of the EMC project, whose purpose is to support the decentralized environment management system, started in July 2002. Although the project design, including the method for connecting it to environmental policy and the definition of the scope, is controversial, it is expected to contribute to future development of SCEM in Indonesia.

#### (5) Mexico

In Mexico environmental law and administration was developed between the latter 1980s and the mid-1990s, and Ministry of the Environment, Natural Resources and Fishery (SEMARNAP) was established in 1994. Environmental information system was also established and introduced to the public around the same time. The development of the SEMS in Mexico was completed in the mid-1990s. It is now shifting from the system-working stage to the self-management stage. However, for Mexico City there was a turning point in terms of SO<sub>2</sub> emissions in 1992 and 1993, and according to this data, the system-working stage already started in the first half of the 1990s. Moreover, the Action Plan for Air Pollution Control (1988) and the Integral Program for Air Pollution Control (PICCA, 1990) were implemented. Based on these facts and countermeasures, it can be said that the system had already entered the system-working stage and was also in the final phase of the system-making stage simultaneously in the late 1980s. The analysis stated above suggests that the start of the National Center for Environmental Research and Training of Mexico (CENICA) in 1995 came a little too late to contribute significantly to Mexico's development of SCEM.

The project ended in June 2002, after a follow-up period of two years. When it is seen from the viewpoint of the development of the SCEM, the CENICA project started from the early phase of the system-working stage, and the project input could have been terminated before 2002, because Mexico had the technology for environmental management and policy study at an adequate level. Unlike China, whose Environmental Center has renewed and furthered the scope of its functions in the midst of its course of operation, CENICA does not seem to have a clear and new target to achieve. CENICA should have been given an opportunity to search for a new approach to development of the Environmental Center at an earlier stage of consideration of the development of its SEMS. Therefore, it was possible for Japan to offer different assistance than the prior Environmental Center project.

# 5-4 Development of Environmental Center Approach and Environmental Cooperation in the Future: Lessons and Recommendations

Recommendations in this report are categorized into two levels. The first level is for organizations more or less directly concerned with the Environmental Center projects or other environmental cooperation, including JICA. Recommendations suggest how to make a supportive Environmental Center that contributes to the development of SCEM in developing countries, and what an ideal partnership of environmental cooperation between developing countries and Japan as well as among developing counties through the Environmental Center approach should be [see (1)(2) and (3)]. The second level is for stakeholders at a higher level or in a broader area from the perspective of development of SCEM in developing countries and improving Japan's international environmental cooperation. This level comprises three suggestions: development of comprehensive assistance in the environmental and other sectors; environmental cooperation in the global economy; and a developed system for providing assistance and environmental cooperation with significant impact [see (4)].

# (1) Environmental Center Projects in Development of SCEM

# 1) Administrative Status of the Environmental Centers

In order to contribute more to the development of environmental monitoring, research, and training, it is important to provide a relevant administrative status to the Environmental Center so that it is able to impact more significantly on environmental policy-making. To achieve this, it is important to identify which specific authority in the environmental administration the Environmental Center belongs to during the development and implementation of the project. Moreover, it is also important to build a mechanism in which the Environmental Center can implement activities extensively without being influenced by the authority of other organizations in order for it to perform effectively in the environmental administration system. When considering the Environmental Center's contribution to the development of SCEM in the long term, it is more important to set up a wide scope of functions or a wide support system in the project. The support system should be flexible so that the cooperation approach can be altered to improve its effectiveness according to the development of the Environmental Center, expand the range of cooperation, or shift focus to policy study even in the middle of the project.

## 2) Entry Point and Exit Point of the Environmental Center Projects

As mentioned earlier, the final phase of the system-making stage, in which the fundamental features of the SEMS, such as environmental law and administration are well prepared, is an optimum entry point (a project starting time) for the Environmental Center projects. Furthermore, the time when the turning point toward a decrease in pollution appears in the system-working stage, showing that the stage is fully functioning, is the preferable exit point to impel the Environmental Center into becoming self-sustaining. At that time, the project should shift emphasis to a horizontal cooperation type of partnership. Based on this viewpoint, examining whether the counterpart country is at the appropriate stage of the planning process for the Environmental Center project implementation and setting up necessary cooperation items in advance are key procedures. Finally, taking advantage of the entry and exit points, Japan should not disrupt its relationship with the Environmental Center after the exit point nor stick to the Environmental Center as the sole cooperation approach but should instead continue flexible cooperation according to the development of the SEMS.

# (2) Future Perspectives of the Environmental Centers

### 1) The Environmental Centers and the Capacity Development for Environmental Management in Firms, Citizens and the Local Actors

In order to make a further contribution to the development of SCEM of the partner countries, the Environmental Center should strengthen ties with firms and citizens and make a greater impact on these primary actors of the system. At the same time, assistance to local actors to increase their capacity for environmental management is indispensable in the process of local decentralization in developing countries, which is anticipated to accelerate.

## 2) Further Qualitative Improvement of the Environmental Centers

As mentioned above, it is imperative for the Environmental Centers to improve the capacity of their staff members for the development of SCEM. Although important research has been done in the Environmental Centers, the number of doctoral degree holders is not sufficient; 16 in China (about 20% of the total number of researchers in the

Center), five in Thailand (about 10%), and none in Indonesia. They do not need to match the situation in developed countries (about 90% of researchers at Japan's National Institute of Environmental Studies are doctoral degree holders), but in order to become a leading research center for environmental studies in and outside of the country, at least one third to one half of the researchers should hold doctoral degrees, and efforts to increase the number of research workers who have degrees are necessary.

### (3) Further Impact of the Environmental Centers: Building Partnerships

#### 1) Partnership between Japan and Developing Countries

It is important for Japan to make the most of, both tangible and intangible assets in Environmental Centers, to build a relationship of mutual trust with developing countries, and to develop partnerships in different levels of the government, firms, citizens, and local actors. This will lead to the creation of social capital. Through exchange activities like this, the relationships between Japan and partner countries can blossom into horizontal forms of cooperation, where both sides follow a give-and-take system with interest and concern for each other, separate from the vertical cooperation influenced by ODA.

#### 2) Partnership among the Environmental Centers

In terms of future capacity improvement of the Environmental Centers or development of the new Centers, it is very useful to exchange experiences and undertake collaborative research among Environmental Centers. For instance, the China and Indonesia Environmental Centers have participated in the Acid Deposition Monitoring Network in East Asia (EANET). Thai Center is expected to join them. Furthermore, there is a hope that each Center will start South-South cooperation with neighboring countries as regional centers.

# (4) Further Environmental Cooperation in the Future by Japan: Recommendations from a Broader Point of View

# 1) Development of Assistance Programs and Assistance Coordination

When Japan pursues ideal environmental cooperation in the future, programmed assistance for the purpose of developing the capacity of the entire sector of the environment namely, development of SCEM, is fundamental. In the assistance programs for the environment in partner countries such as China, Thailand, Indonesia, and others, there is insufficient coordination between the program for brown issues (air and water pollution) and green issues (forest preservation and diversity preservation). Commitment to structuring a link between the problem-solving project and the system-developing program is not strong enough either. Environmental cooperation policies should be clarified, with a linkage of brown and green environmental issues, such as countermeasures for pollution and forest preservation, as well as global environmental issues, such as global warming, desertification, and the decrease in bio-diversity, within the larger movement for development of SCEM in countries of interest. Moreover, a cooperative relationship at the program level will be also fundamental, such as cooperation to counter the vicious cycle of poverty and environment degradation, which have not always been linked.

#### 2) Globalization of Economy and Environmental Cooperation

More free trade agreements (FTA) are being concluded bilaterally and multilaterally, and there is active free trade among WTO (World Trade Organization) member economies in line with globalization of economies and environmental cooperation. In future free trade agreement negotiations, Japan should call for a many-sided cooperative agreement, including not only mutual cooperation between economies, but also environmental preservation, following NAFTA's (North American Free Trade Agreement) leadership. In terms of implementing future environmental cooperation, Japan should give full attention to this trend toward economic agreements.

#### 3) Establishment of an Aid Supply System and the Impact of Environmental Cooperation

In order to implement the new policy of environmental cooperation stated above, drastic reform of Japan's aid supply system is required.

Japan has usually depended on central ministries, including the Ministry of the Environment, and local public bodies for technical expertise and experts required for cooperation programs. However, as a consequence of recent progressive administrative and fiscal reform, the Ministry of the Environment is finding it difficult to send new staff members to these programs. Moreover, the ministry does not seem to have sufficient expertise or knowledge regarding international cooperation. The local public bodies are operating under the same conditions.

When it comes to thinking of future development of SCEM, it is imperative to make the most of expertise from firms and citizens, and to search widely for and foster human resources, because there is a shortage in staff and knowledge in the central and local governments. In preparation, the administration, firms, and NGOs should jointly contemplate how to foster advanced experts and re-educate people who have a certain level of experience in graduate schools focusing on international cooperation and the environment, and academic societies such as JASID should also be involved in these efforts.

# Chapter 6 NGO-JICA Collaboration Programs

# 6-1 Outline of Evaluation

#### (1) Background and Objectives

Recently JICA has been actively involved in partnership with NGOs for implementing cooperation that directly reaches communities in developing countries and promoting citizens' participation in ODA. The NGO-JICA Evaluation Subcommittee, which consists of staff members of NGOs and JICA, started in 2001 as a subcommittee of the NGO-JICA Council established in 1998 to promote collaboration between NGOs and JICA. The purpose is to share information and knowledge to promote mutual learning through project evaluation, and to draw lessons and recommendations for more effective planning, implementation, and evaluation of projects conducted for NGOs and JICA.

In fiscal 2003, the subcommittee proposed an evaluation method of grassroots cooperation (hereinafter referred to as grassroots type projects) directly delivered to the community. Among the NGO-JICA Collaboration Programs (hereafter NGO Collaboration Programs), JICA Partnership Programs implemented in the past were analyzed and evaluated in a cross-sectoral manner. Especially for the purpose of formulating an evaluation method of grassroots type projects, a thematic evaluation in NGO Collaboration Programs was conducted.

#### (2) Evaluation Period and Team

The members of the NGO-JICA Evaluation

Table 3-25 Member List of the NGO Evaluation Subcommittee\*1

Subcommittee (Table 3-25) determined the evaluation policy, implemented the study, and wrote a report from June 2003 to May 2004. The consultant from the Global Link Management joined in wiring the report and conducting field surveys.

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

This evaluation study targeted nine projects among 13 JICA Partnership Programs that terminated in fiscal 2003 (Table 3-26). The nine projects were selected based on certain criteria: (1) projects implemented by NGOs (excluding universities and local governments)\*, (2) projects that target community (excluding research projects).

# 6-2 Framework of the Study

#### (1) Viewpoints in Evaluation

- To analyze and classify the targeted NGO Collaboration Programs in order to recognize the diversity of grassroots type projects
- b. To focus on the analysis on JICA Partnership Programs, which is one cooperation scheme of the NGO Collaboration Programs\*\* and draw important points for the evaluation in order to propose an evaluation method for grassroots type projects.

#### (2) Procedures of Evaluation

In the evaluation study, the NGO-JICA Evaluation Subcommittee examined the projects based on the findings

	NGO side		JICA side
Makoto Nagahata	Japan NGO Center for International Cooperation	Satoko Miwa	Office of Evaluation, Planning and Coordination Department
Maroto Naganata		Kazuaki Sato	Office of Evaluation, Planning and Coordination Department (from December 2003)
Nobuaki Wada	SOMNEED Sangham	Kaoru Suzuki	Office of Evaluation and Post Project Monitoring, Planning and Evaluation
Tovokazu Nakata	Institute of Participatory	Kaulu Suzuki	Department*2 (until December 2003)
i oʻj onaza Hanana	Development	Ayumu Ohshima	Office of Evaluation, Planning and Coordination Department
Miyuki Aoki	Services for the Health in Asian & African Regions (SHARE)	Mariko Homma	Office of Evaluation, Planning and Coordination Department (from December 2003)
Hiroshi Tanaka The Institute for Himalayan Conservation		Yosuke Tamabayashi	Administration Team, Regional Department I (Southeast Asia)
		Yukiharu Kobayashi	Office of Citizen Participation, Training Affairs and Citizen Participation Department
Koichiro Watanabe	Save the Children (until August 2003)	Sayako Tokuda	Domestic Partnership Promotion Division, Domestic Partnership and Training Department $^{\ast_3}$ (until October 2004)
		Mahomi Masuoka	Office of Citizen Participation, Training Affairs and Citizen Participation Department

\*1 Members who were involved in this evaluation.

\*2 Reorganized into Office of Evaluation, Planning and Coordination Department in April 2004.

\*3 Reorganized into Office of Citizen Participation, Training Affairs and Citizen Participation Department in April 2004.

\* Among the evaluated projects, only the Improvement of Living Conditions for the Poor in Kenya was implemented by a consulting company in cooperation with a local implementing organization, which is a local NGO called Save the Children Center (SCC).

\*\*As projects that directly benefit grassroots concerns, there are some cooperation schemes including Technical Cooperation Projects other than NGO Collaboration Programs. This evaluation study pinpointed the projects that directly benefit grassroots concerns through collaboration with NGOs. It should be noted that not all the NGO Collaboration Programs directly implement the projects at the grassroots level .



of literature review and field surveys in two countries as shown in Figure 3-13. The characteristics and diversity of NGO Collaboration Programs were considered in the evaluation study.

# 6-3 Characteristics of NGO-JICA Collaboration Program (Grassroots Type Projects)

# (1) Characteristics of NGO Collaboration Program

Based on the results of study and research that had been

#### Table 3-26 Projects Subject to the Study

implemented since 2001 when the evaluation subcommittee was established, this study summarized the NGO Collaboration Programs into the following three characteristics.

- a. While importance is placed on the network (communication) with communities, the consistency with the policies of both the governments of Japan and that of the partner country, and the development plans and policies of the target areas are secured.
- b. Aiming to achieve the outcomes within a fixed period of time, flexible project operation is respected, and at the same time, the learning effects on both the community and the project implementing organization are deemed important during the project implementation.
- c. Ingenuity is exercised based on the cooperation of past activities in the partner country and experiences in the target sector.

## (2) Summary of the Diversity and Evaluation Perspectives in NGO-JICA Collaboration Program (Classification\*)

Based on the characteristics mentioned above, the characteristics of the evaluated projects were classified and summarized. The targeted projects were classified from four viewpoints: (a) project implementation style, (b) cooperation scheme, (c) cooperation contents, and (d) project evolution after termination (Table 3-27). These characteristics will be referred to when considering evaluation perspectives in the next section.

# 6-4 Perspectives Required for Evaluation of Grassroots Type Projects

As analyzed in the previous section, grassroots type projects have some similar characteristics. Therefore a flexible evaluation method highlighting these characteristics is neces-

	Project Title	Implementing Body	Cooperation Period
1	Secure Water Supply Project in the Dry Zone Area in Myanmar	Bridge Asia Japan	2000.7-2003.7
2	Improved Access to Primary Education in Rural Areas through Community Participation Project in Cambodia	Shanti Volunteer Association	2000.1-2003.9
3	Negros Original Sericulture Project in the Philippines	OISCA	2000.12-2003.12
4	The Project for Integrated Agricultural and Animal Husbandry Development for Sustainable Environment Protection in Jordan	Nippon International Cooperation for Community Development	2001.4-2004.3
5	eq:wheel Chair Production Project at National Rehabilitation Center in Laos	Association for Aid and Relief, Japan	2000.12-2003.12
Pro	jects evaluated with field surveys		
6	Participatory Rural Development Project through Empowerment of the Poor in Bangladesh	Shapla Neer	2001.8-2004.8
7	Community-operated Reproductive Health Project in Bangladesh	Japanese Organization for International Cooperation in Family Planning	2001.4-2004.3
8	Integrated Rural Development in Kenya	The Institute of Cultural Affairs	2001.4-2004.3
9	Improvement of Living Conditions for the Poor in Kenya	International Development Associates, Ltd.	2001.4-2004.5

\*This classification was made from JICA Partnership Programs subject to this evaluation study and does not reflect the characteristics of all NGOs.

sary. This section summarizes the evaluation criteria and perspectives for evaluating projects that directly benefit grassroots concerns. The summarizing work is conducted according to the framework of evaluation provided in the revised JICA Guideline for Project Evaluation, which is referred to in the evaluation of JICA projects in general. Therefore, these evaluation criteria and perspectives are also applicable to evaluation of general technical cooperation projects; however, the perspectives that are especially important in conducting evaluation based on the characteristics of grassroots type projects are included.

# (1) Understanding Current Condition of Project and Examination

### 1) Assessment of Performance

- Were inputs made as planned? (Comparison with the plan)
- Did the inputs flexibly meet the needs of beneficiaries?
- Were outputs generated as planned?
- Is the project purpose going to be achieved? (Comparison with the target)
- Are changes in the circumstances of beneficiaries observed as a result of the project implementation?

As mentioned in the previous section, many of the grassroots type projects are characterized by projects close to the livelihoods of local residents in line with their needs, and focus on the learning effects during the implementation process. Therefore, activities to change awareness and living situations of the community and encourage behavior transformation are at the heart of those projects. As shown in Case 1 (Box 17) below, it was revealed that confirmation of how beneficiaries changed due to the project makes it easy to measure the attainment of the purpose and goal in the implementation of a grassroots type project.

#### 2) Confirmation of Implementation Process

- Were the activities implemented as planned? (Reasons for changes in the plan and schedule)
- Did the changes in the plan respond to the needs of beneficiaries?
- Were the changes in the plans consistent with the policy of the government?
- Did the implementation process of the project provide an opportunity for people related to the project to learn?
- Was the implementation process appropriately changed according to the local situation?
- Did technical guidance utilize local equipment and materials? Was it appropriate to the technical level of local human resources?
- Was the equipment utilized for technical guidance contrived and applied according to the local situation?
- Was the progress of the project monitored periodically?
- How was the decision related to modification of the project plan made during the process of the project implementation?
- How was the relationship of the project (i.e., implementing body and local implementing organization) with JICA headquarters and the overseas office?
- How was the communication in the project?
- How was the relationship with the local administration and governmental organization?

Since many grassroots type projects respect operations

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Table 3-27 Classification of Evaluated Projects

	Classification		Description	
1	Classification by project imple- mentation style	Direct operation type	The implementing body directly implements a project locally.	
		Partner type	The implementing body and local implementing organization in the target country jointly implement a project.	
2	Classification by	Empowerment focus type	Communities are proactively involved in the implementation of a project and their initiative is emphasized in the process of the project.	
۷	scheme*	Technical guidance focus type	Utilizing techniques of a specialized field, technical guidance is provided to residents or com- munity organizaions with emphasis on human development.	
3	Classification by cooperation con- tents	Multi-sector focus type	A project concerns several issues and some activities are combined to implement the project.	
		Specific sector focus type	A project concerns only one issue and the project is implemented for activities in a specific sector.	
4	Classification of project evolution	Continuous support type	Even after termination, cooperation continues in the form of another cooperation scheme of JICA (such as JICA Partnership Program or Technical Cooperation Project) or an NGO's independent project.	
	after termination	Definite period type	A project is implemented within a definite cooperation period and after ending the cooperation period the activities are taken over by a local NGO or communities.	

\*Projects in the form of service provision can be classified into technical guidance focus type, and delivery focus type, which is cooperation for livelihood improvement among local residents by providing supplies as a substitute for service provision; however the delivery focus type is excluded in this study, as there is no such delivery focus type project.

that flexibly respond to the needs of beneficiaries, it is important to examine whether the plan was modified according to the needs of beneficiaries as well. Importance is also placed on learning effects during the process of project implementation. On the other hand, it is also important to check whether the modification of the plan and the policy of the government were consistent since it is an ODA project.

# (2) Evaluation Using the Five Evaluation Criteria1) Relevance

- Were the characteristics of the target area well understood, and were the needs of the target area and society, as well as beneficiaries, accurately understood from the activity in the target area effectively?
- Was the selection of the target group appropriate? Were the opinions from the target group reflected during the selection process?
- Was there consistency with the development policy of the target country?
- Was there consistency with the aid policy of Japan and JICA Country Program?
- Do the planning process and plan contents of the project, methods, and approaches of cooperation respond to the needs of the target area?
- Did the cooperation project avoid overlap with similar projects of other donors?

Grassroots type projects are implemented to directly interact with local residents of a target country in order to reflect their needs in the process of implementation. Therefore, to evaluate the relevance of a project, specific perspectives were important, such as whether the characteristics of the target area were well understood and whether the needs of the target area and society, as well as those of the beneficiaries, were accurately understood using the activity experience in the target area effectively.

#### 2) Effectiveness

- Did the beneficiaries (the communities of the target area) gain expected effects by implementation of the project?
- Were the effects of the project purpose caused by outputs?
- What kinds of influence did external conditions have on the beneficiaries until the achievement of the project purpose?
- Were the regional characteristics and the existing system understood and utilized for the project implementation?
- Did the NGO demonstrate originality and ingenuity? (Were the superiority and specialty of the NGO utilized?)
- Was an effective mechanism established to spread the cooperation effects?
- Were any human resources who could share their position as a beneficiary included in the project staff (local staff)?

To evaluate the effectiveness of a grassroots type project, it is important to determine whether the beneficiaries (the communities in the target area) receive the expected effects. In many projects, the specialty, originality, and ingenuity of an NGO are utilized to implement community-based detailed cooperation, and this feature often becomes a factor in boosting the effects of a project. Therefore, when evaluating factors that inhibit and promote the achievement of the project purpose, knowledge of the originality and ingenuity, regional characteristics, and the system need to be utilized. It is also

# Evaluation Study: Case 1 Understand the Changes in Beneficiaries due to Project Implementation

# Integrated Rural Development in Kenya

By making a well in the village, the farmers were able to secure safe drinking water. As a result, they are less exposed to infectious diseases borne by water, and their health situation is mostly improved. Introduction of agricultural products more suitable for dry lands has improved the selfsufficiency rate and balanced nutrition, thus promoting better health among the farmers. In addition, training in health care and sanitation have made residents aware of the importance of installing toilets and cupboards and boiling drinking water; and health care and sanitation have been considered at home as well.

In the field survey of this project, discussions by activity groups and group interviews were conducted to collect information to determine how the project has changed farmers' individual lives and how the entire village has changed. The actual activity sites were visited for observation as well. In addition, the personnel of the local administration organization in charge of the project activity, as well as community leaders, were individually interviewed (key informant interview) to collect information. As a result, the following changes were confirmed: the individual lives of the farmers were improved; activity groups started helping one another, and the living environment in the entire village was improved and the infectious diseases borne by water decreased.

(Field survey results)



Group interview for evaluation study (Integrated Rural Development in Kenya)

necessary to consider the presence of a mechanism that has ripple effects on people who are in an environment where the cooperation effect cannot be reached easily (Box 18).

## 3) Efficiency

- Were the contents and scale of the inputs appropriate to achieve the outputs? (Verification result of performance)
- Was the timing of improvements in the facility and equipment and material carry-in appropriate?
- Were the fields of dispatch of experts and the timing of the dispatch appropriate for the project implementation?
- What kinds of inputs (cost sharing) were made by JICA, the implementing organization, the beneficiaries, and other organizations?
- Was the scale of the inputs appropriate for the implementing body and the local implementing organization to utilize effectively?
- Were any substitute methods for more effective inputs sought?
- Were locally available human resources and equipment utilized?
- Were JICA's network and resources utilized?

In a grassroots type project, in addition to the perspective as to whether the inputs were conducted flexibly and in a timely manner, it is necessary to consider whether the inputs were in line with the local situations and needs. Since the operation scale of the implementing organization is not uniform, it is also important to examine whether the scale of the inputs was appropriate for the project management capacities of the implementing organization and local implementing organization.

On the other hand, in a grassroots type project, the bearing of expenses and labor on the beneficiaries' side may promote community participation in the project. It must be taken into special consideration at the time of evaluation. Other perspectives necessary for evaluation include whether substitute methods of more effective inputs were sought, whether locally available human resources and equipment were utilized, and whether JICA's network and resources were effectively utilized in terms of collaboration with JICA.

## 4) Impact

- Is the occurrence of the effects as the overall goal expected by implementing the project?
- What kind of influence does the project implementation have on each class of beneficiaries?
- Are changes generated in the livelihoods and attitudes of beneficiaries?
- Are there any impacts on communities and organizations outside the target area?
- Are there any impacts on the system, ordinances, and rules of the government and administration?

A grassroots type project is directed at the community and takes extensive improvement in livelihoods into account in the implementation process. Impacts can be generated at various levels by the implementation of such project, including changes in awareness and the living situations of the community (beneficiaries), and changes in the peripheral environment. Therefore it is necessary to confirm what kinds of impacts the project implementation brought about at each class of beneficiaries (Box 19), as well as whether changes were generated in the living situations and attitudes of the beneficiaries.

# 5) Sustainability

- Does the local implementing organization demonstrate organizational, technical, and financial sustainability?
- Do the beneficiaries have intentions and plans to maintain the activities?
- Are sufficient funds secured for the beneficiaries to maintain the activities?
- Is ingenuity demonstrated during the project to secure and promote the benefits of the project activities?

Many grassroots type projects have a purpose to benefit local residents directly, and beneficiaries tend to get involved

# Box

# Evaluation Study: Case 2 Mechanism to Spread Cooperation Effects

## Community-operated Reproductive Health Project in Bangladesh

In this project, in order to provide reproductive health/family planning (RH/FP) services for the women in a rural village in Bangladesh, who are restricted from opportunities to go out, a mechanism was established utilizing local family development volunteers (FDV) who visit houses to meet the women directly to deliver the service. In the evaluation study of this project, the project staff and the FDVs were directly interviewed. The survey revealed that women received RH/FP services through the FDV's individual visits and started going to see a doctor in a clinic and confirmed that the mechanism of spreading is effectively functioning.

(Results of terminal evaluation)



Interview during evaluation study (Community-operated Reproductive Health Project in Bangladesh)

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directly in the implementation of activities. Therefore, key factors for judging whether beneficiaries can receive the benefit continuously are whether beneficiaries have intentions and plans to maintain the activities and whether funds are secured for the beneficiaries to maintain the activities from a financial aspect. Additionally, it is also necessary to pay attention to whether any ingenuity was demonstrated during the project to secure and promote the benefits of the project activities so that the activities could be maintained after the termination of cooperation.

In general, many Japanese NGOs that act in development aid are relatively small and implement community-oriented cooperation. Their cooperation projects are implemented for the long-term. In contrast, the NGO Collaboration Program is a part of the ODA, so it has a purpose to achieve project outcomes within a fixed period of time. To sustain the effects generated by a project, organizational, technical, and financial sustainability of the local implementing organization is critical.

# 6-5 Cross-sectional Perspectives Especially Required for Evaluation of Grassroots Type Projects

Based on the perspectives of evaluation provided in the revised JICA Guideline for Project Evaluation, the previous section described important points to be noted in evaluating grassroots type projects. This section introduces the crosssectional perspectives that the evaluation subcommittee extracted as important factors in evaluating grassroots type projects, such as community participation, empowerment, gender and social considerations, and NGO collaboration.

#### 1) Community Participation

- Did the beneficiaries sufficiently participate in the planning and implementing stages?
- Who participated in the project (social conditions of the participants)?
- What were their motivations for and attitudes toward participation?

A grassroots type project respects flexible operation and management. In many projects, it is believed that the implementation process is an opportunity to learn for both local residents and the project implementing side, and proactive participation by local residents in activities is important. Therefore, it is important to evaluate whether the beneficiaries sufficiently participated in the planning and implementing stages.

Target communities have different needs and status depending on the social and economic situation of the local resident. Therefore, it is important to understand the specific social and economic situations of the participants. In addition, their participation status, which differs depending on the degrees of active participation and opinion exchange, as well as participation in decision making processes, needs to be checked. Confirmation by directly interviewing the project staff and the residents are believed to be effective in this regard.



# Evaluation Study: Case 3 Impacts at Various Levels (Activity of Water Supply Improvement)

#### **Rural Development in Kenya**

In this project, a deep well was constructed as a water supply improvement activity, and a water committee was established so that residents could control and sell the water. The activity for improvement of water supply brought a positive impact on each level of the village and individuals. At the village level, the project established an operational and management system of the well with water control and increased opportunities to consider an effective operating method of the organization; for example, how the proceeds from sales should be utilized for the village and how the equipment maintenance system should be operated. The residents became aware of collaboration in the community through experiencing the management and operation of the facility as the provider of the service. It became possible for women to manage the water committee, contributing to the empowerment of women. A youth group started promoting the activities for improving the environment around the deep well by building a fence around it. On the other hand, at the individual level, the project reduced water drawing labor and produced free time, particularly among women, which was in turn spent on other activities (agriculture, small-scale business). Water became available for agriculture and livestock, stimulating activities in the agricultural sector. Securing safe drinking water reduced infectious diseases borne by water and mostly improved the health conditions of the residents. Though water drawing was conventionally regarded as women's work, not a few men showed up to buy water at the water station, which shows that the roles of men and women at home are changing.

This project falls into the multi-sector focus type, which involves various activities. In the evaluation study, group discussions among participants of each activity and individual interviews (key informant interview) were carried out to find out what kinds of changes appeared at the individual level and the village level through the implementation of the project. Questions about changes in life were asked and confirmed for each level of individual, family, and activity group, as well as for the entire village. As a result, it was confirmed that impacts by the project implementation occurred at various levels such as changes in individual lives, and changes in the village.

(Field survey results)

# 2) Empowerment\*

- Were any efforts made to promote empowerment of the beneficiaries? What kind of empowerment was promoted for what kind of people?
- Was the local staff empowered?

As means to promote community participation, the perspective to evaluate the empowerment of beneficiaries is important. In particular, a grassroots type project highlights opportunities to learn for both the local residents and the project implementing side, and tends to encourage voluntary participation from both sides. Therefore, evaluation of a grassroots type project requires attention to empowerment on both sides-the beneficiaries and the project implementing side. Specifically, consideration as to whether any efforts were made to promote the empowerment of the beneficiaries and the local staff is needed to evaluate the project. Target communities have different needs and status depending on the social and economic situation of individuals. Therefore, the ingenuity of how to support empowerment also differs depending on the backgrounds of the beneficiaries. To see the approaches for empowerment, it is necessary to pay attention to what empowerment was promoted for what kind of people. To evaluate the empowerment of the beneficiaries, it is also necessary to consider whether special attention was paid to the beneficiaries who are isolated in an environment that provides socially limited access.

# 3) Gender and Social Considerations

- Was gender considered when observing changes in the living situations and attitudes of the beneficiaries?
- What kinds of approaches were made to the target people?
- What kinds of positive and negative impacts did it have on the target people of different genders and levels?
- Was gender considered when the evaluation was conducted?

A grassroots type project, which is directed at the community as the main beneficiary, tends to directly bring about changes in the ways of thinking and livelihoods in the community. Especially when women are direct beneficiaries and their ways of thinking and livelihoods are changed in the project, the life of the family tends to improve, and the abovementioned perspective becomes more important. Additionally, as received influences on gender differ depending on the gender balance of the people concerned and social positions of each gender, it is also important to understand those issues.

# 4) Evaluation of NGO Collaboration\*\*

The NGO Collaboration Programs are projects combining the advantages of NGO projects and JICA projects, and are expected to generate advantages that cannot be obtained by either project.

- a. Evaluation of JICA side
- Was the expected advantage (specialty) of the NGO applied?
- Did JICA learn from it?
- Was consistency with a JICA project secured? Was expandability promoted through collaboration with a JICA project?
- Were there any problems or tasks generated through the collaboration?

When evaluating the advantages of collaboration with NGOs, it is important to determine whether their past performance in the target area and the valuable information on regional characteristics and specific sectors were utilized in the project formation. It is also important to determine whether the project took advantage of the original viewpoints and ideas of NGOs.

In a grassroots type project, activities that benefit the grassroots people are implemented mainly from micro aspects. Regarding the role of NGOs, especially the role in the NGO Collaboration Programs, it is also important to determine how micro activities are incorporated into the macro system (such as policies of the local government, collaboration with a larger project and policy recommendations). The perspectives of evaluation include, for example, did the NGO Collaboration Program back up the embodiment of any part of cooperation in JICA Country Program? Was there expandability, such as positioning the project by utilizing the characteristics of NGO activities as a component of the program in the process of a program approach?

- b. Evaluation of NGO side
- Were the expected advantages of collaboration applied?
- Did it lead to strengthening the system of the organization?
- Did the NGO learn from it?
- Was flexible project management possible?
- Were there any problems or tasks generated by collaboration?

<sup>\*</sup>Volunteer, NPO Yogo Jiten, Chuohoki Publishers, March 2004 (pp.44-45). Empowerment means the self-realization that allows a person to live fully and individually based on independent decision-making while drawing inherited capabilities. It is necessary to pay attention to individual self-esteem as a precondition to realizing empowerment. It is equivalent to the recovery of self-confidence at the individual and psychological levels. Feelings of acceptance and having a positive opinion about oneself are encouraged and the will and power to insist on one's legitimate interests and rights with regard to the social situation undermining an improvement in one's livelihood are restored. Empowerment is then realized. To raise self-esteem, it is necessary to receive positive power and circulate it through various relationships with other people and environments. Accumulation of experiences such as being recognized, interested, heard, cherished, praised, appreciated, and trusted nurtures self-esteem. Empowerment is realized based on a positive sense of oneself and trust in oneself and others. (Kin, Kayuri)

<sup>\*\*</sup>Information was collected from the minutes of meetings of the NGO-JICA Collaboration Program Examination Committee for the projects subject to literature review, and from interviews with implementing organizations for the projects subject to field surveys.

The purpose of the NGO Collaboration Programs on the NGOs' side is to combine the know-how and experiences of JICA to implement international cooperation that can reach the grassroots level. In the evaluation, it is necessary to consider whether the expected advantage of collaboration was applied. The interviews with NGOs revealed the following points as advantages of collaboration with JICA: smooth negotiations with the government; realization of a project of a large financial scale; reduction of the burden of fund-raising; specialized and useful advice from JICA experts and staff; and effective cooperation obtained by JICA's human network (JOCV, SV, etc.). These points can serve to confirm the effects of collaboration. In terms of strengthening the system of the organization, some evaluation results show that there were chances to learn with regard to ideal project evaluation, appropriate technologies, project implementation system, perspective of sustainability, project formulation with a long-term perspective, and project management.

On the other hand, the NGOs raised the following points as disadvantages of collaboration with JICA during implementation: complications in accounting and other clerical matters, and the negative influence of time-consuming procedures for project implementation, which delayed the timing of an activity. In addition, it was also pointed out that the budgets are difficult to spend flexibly, and that explanations of how to utilize the funds were insufficient. Another problem generated by collaboration was that the involvement of many related personnel from JICA headquarters, overseas offices, and NGO headquarters easily generate gaps in recognition, and the unclear roles of the overseas office had a negative impact on the project implementation.