CHAPTER 4 EX-POST EVALUATION IN FY 1998: AN OVERVIEW

4.2 Ex-Post Evaluation by JICA

(1) Country-wise Evaluation:

Bangladesh

This evaluation aimed at producing recommendations to improve JICA's future aid strategy for Bangladesh through the comprehensive evaluation of JICA's aid activities in the country since its independence in 1971, including verification of the suitability of selected priority sectors and issues. In other words, the suitability of aid policies and analyses of poverty and gender.

At the time of independence in 1971, Bangladesh suffered absolute shortages of food and infrastructure comprising the basis for development. The Government of Bangladesh and foreign donors placed emphasis on the development of infrastructure, ranging from both agricultural and rural development to the development of electricity, natural gas, transport and transportation, and flood control measures, with the priority development targets of "poverty reduction" and "economic independence". They also promoted the industrialization of state enterprises.

Following the second half of the 1980s, while the emphasis on infrastructure development has remained unchanged, the priority of development has gradually shifted from the agricultural and industrial sectors to the social sector, focusing on education against the background of an improved food supply self-sufficiency rate and a change of the industrial development policy from state enterprise-led development to private enterprise-led development. Throughout these years, agricultural and rural development has been the main target of JICA's assistance with "transport and transportation" and "flood control measures" also designated as priority sectors. These coincide with the priority sectors for the Government of Bangladesh and other donors. Based on the positive impacts of various development projects so far, JICA's cooperation has a fair share of the positive achievements in each sector. Even though it would have been preferable for a greater aid emphasis to have be on placed on the educational sector, JICA has been providing appropriate aid for Bangladesh in terms of both (i) priority sectors and project selection and (ii) achievement of positive impacts considering the advantages and shortcomings of its own aid system in regard to the character of its aid schemes, availability of experts and relative advantages/disadvantages of Japanese technologies, etc. In short, JICA aid for Bangladesh so far is judged to have steadily contributed to the development of the country.

The average annual GDP growth rate in Bangladesh from 1988 to 1998 was 4.7% (annual GNP growth rate per capita of 3.1%). However, the ratio of the poor has little improved since

1991–1992 despite the acceleration of economic growth. The stagnant ratio of the poor can be attributed to the fact that the benefits of economic growth have not spread to poor people in rural areas, who are the most important targets for poverty reduction, because (1) the main beneficiaries of economic growth are people above the poverty line in urban areas, (2) the growth of employment has not sufficiently absorbed surplus labor and (3) the number of landless farmers and farmers cultivating extremely small areas of farmland has been increasing in rural areas. Given this situation, JICA should tackle future aid aimed at the poor and poor areas by promoting (1) rural development projects including the development of rural industries, literacy education, and vocational training; (2) training programs to increase employment opportunities for women in rural areas; (3) technical cooperation for the enforcement and qualitative improvement of compulsory primary education; (4) literacy education and vocational training for adults in urban areas; (5) projects to improve access to hygiene services; and (6) projects to strengthen local administrative bodies, through enhanced collaboration with NGOs. In addition to these microscopic attempts to reduce poverty, macro-level technical cooperation, including the dispatch of advisors on economic policies, is required to ensure a sustainable increase in incomes.

JICA projects in Bangladesh related to Women in Development (WID) have so far been, in every field, either conventional projects targeting only women or projects which have separate roles for men and women. While this approach should be continued in the future because of its advantage of providing more opportunities for women, it may have restricted the areas in which Bangladeshi women can participate in development. If the purpose of providing training for women is to assist the economic independence of women as well as to increase household incomes, real effects cannot be anticipated unless the norms surrounding gender are included in the aid perspective in addition to providing opportunities for women to learn production skills. These norms relate to the resources and capital required for production, management techniques and participation in rural markets monopolized by men. As the emphasis of development projects has been shifting towards rectification of the gender gap, it is necessary to include improvement of the gender structure, i.e. improvement of unfair access to resources and opportunities between men and women, in the scope of even aid projects which primarily target women. Moreover, in order to achieve a real increase of employment and incomes, these projects must be implemented as part of the development of rural infrastructure in a balanced manner.

(2) Theme-specific Evaluation

1) Sri Lanka:

Women in Development (WID)/Gender

The importance of the role played by women in development has been emphasized in recent years on such occasions as the International Conference on Population and Development in 1994, the

World Summit for Social Development and the Fourth World Conference on Women in 1995. Although JICA has long been committed to gender care in its projects since the establishment of the Study Group on Development Assistance for WID in 1990, there has been virtually no evaluation of the actual state of gender consideration in JICA projects and its effects. Against this background, evaluation featuring five projects in Sri Lanka was conducted to produce recommendations for the more effective inclusion of gender in future JICA projects.

Among the five evaluated projects, the Dental Education Project at the University of Peradeniya was the most prominent in terms of gender. The fact that female experts were dispatched to prepare a curriculum suitable for the needs of women and that the male experts fully understood the importance of the gender standpoint contributed to making this project highly distinguishable in terms of gender. Positive effects were also assured by the active use of workshops from the project formulation stage to improve awareness of gender issues among all people involved, including those on the Sri Lankan side.

When the composition of experts and counterparts in any project is male-dominated, there is a tendency for the idea that men are solely responsible for productive labor to be formed. What is important is the equal provision of technical guidance and work assignments for men and women. This leads to the advancement of gender equality. Women should be encouraged to participate in development activities through the establishment of groups to play even a peripheral role at the beginning in view of nurturing their leadership abilities to gradually make inroads into the core activities and positions of a project. It is also essential during the project implementation period for ODA-related personnel in partner countries to be made aware of the importance of gender.

In the case of male-dominated organizations, it is often the case that there is a lack of understanding that women can also play an active economic role because of women's exclusion from decision-making processes. The gender balance should always be taken into consideration when selecting the decision-making members of organizations, including a steering committee established to implement a project. The closer the gender ratio is to even, the easier it is to formulate and implement a project which reflects women's needs.

As most of the projects evaluated this time lacked gender-based data, it was extremely difficult to evaluate them from the viewpoint of gender. This suggests the importance of gathering and compiling gender-based statistics and other data at all stages of a project, from initial planning to evaluation, to allow time-series analysis so that the activities under a project can be reviewed based on analysis of these statistics and other data.

2) Kenya:

Wildlife Conservation

The protection of wild animals constitutes an area for which JICA can actively provide assistance in the coming years as it contributes to the conservation of biological diversity. In addition, the development of eco-tourism provides a means of income. Japanese cooperation for the protection of wild animals in Kenya combines grant aid with the dispatch of experts and JOCVs. This evaluation was conducted to verify the effects of this collaboration between different aid schemes and to acquire lessons and recommendations for future cooperation.

In this cooperation, vehicles and construction equipment for the protection of wild animals were provided by grant aid in three national parks (the Nairobi National Park, the Tsavo West National Park and the Tsavo East National Park), where JOCVs have long been assigned to provide guidance on maintenance of equipment. The experts have provided guidance on the maintenance of equipment, etc., managed by the Kenya Wildlife Service (KWS), the project implementing agency on the Kenyan side. Such collaboration has greatly contributed to the effective use of the equipment provided and the realization of the project effects.

The respondents of an interview conducted as part of the field survey state that illegal hunting has almost ceased to exist in these three national parks. In the case of the Tsavo East National Park in particular, the once prominent illegal hunting of wild elephants is said to have greatly declined in recent years. Following the progress of road construction and improvement, law enforcement to prevent illegal hunting has become much easier to implement and the safety of tourists has been improved, contributing to the growing satisfaction of tourists.

Cooperation centering on the provision of equipment for the protection of wildlife, the subject issue of this evaluation, is believed to constitute a model case in the midst of the diversification of aid for the protection of the natural environment. Even though the provision of equipment to support protection activities is only a small part of the overall activities to protect wildlife, the availability of such equipment has had a great impact on improving the morale of KWS staff and improving the efficiency of their activities. Meanwhile, there is a limit for Japan's continuation of the type of cooperation involving the provision of equipment. Fusthermone, the problem of equipment deterioration will soon become a reality. From the long-term point of view, therefore, it is essential to shift the focus of cooperation to improvement of the management system and the fee collection system of the KWS together with the commercialization of its vehicle maintenance and repair shop.

3) Zambia:

Sustainability of Grant Aid Projects

Japanese grant aid has mainly been provided for countries with relatively low income levels and JICA is responsible for "preliminary studies," "promotion of aid implementation" and "follow-up work" for grant aid for general projects, grant aid for fisheries, food aid and grant aid for increased

food production. Grant aid means Japanese funding for the procurement of equipment and the construction of facilities, etc., undertaken by the governments of partner countries. Although partner countries are primarily responsible for the effective utilization of the equipment and facilities to achieve the intended development effects, it has become increasingly important for Japan to ensure the prospect of self-reliant development of grant aid projects under an approach which emphasizes results in line with "the changing emphasis from quantity to quality" for Japan's ODA. Against this background, two projects featuring "health and medical care" and "water supply" in Zambia were evaluated to verify the state of self-reliant development and for JICA to learn lessons in connection with future Japanese grant aid.

In general, the facilities and equipment provided under the two projects subject to evaluation have been effectively used, contributing to the improvement of medical services and the provision of clean water for local people. It appears that this success can be attributed to the facts that the medical equipment provided under the health-related project-does not require high operation skills or advanced maintenance skills, enabling repair by local technicians and that, in the case of the water supply project, a participatory program designed to organize local people, to provide education on hygiene and to strictly collect the water charge was simultaneously implemented through collaboration with a local NGO which was assisted by the DFID of the UK right from the beginning of the water facility construction work under the project.

Grant aid mainly comprises the provision of funding for the development of "infrastructure" which forms the basis for other development projects. From a comprehensive viewpoint, the prospect of the autonomous development of any project is quite limited unless there are proper arrangements in terms of the organization, manpower and budget, etc. to manage the project implementation process, backed by sufficient ownership of the project implementation body or the beneficiary (beneficiaries) of the project. Particularly in regard to LLDCs of which financial and organizational bases are quite fragile, there have been few cases where the required project management system has been fully established simply by means of the autonomous efforts of the partner countries. Now, when aid quality is demanded more than ever, determining to what extent expecting the partner country to support itself is realistic and effective in the long term, and the type of cooperation necessary to aid the sustainability of the development of the partner country have become important to settle on the content of cooperation. The necessary measures include the selection of equipment which can be repaired locally, preparation of manuals, participation of local people from the project formulation stage and education activities featuring local people, etc. Although the implementation of some measures is found to be difficult within the framework of grant aid, JICA should be able to respond to most requirements by combining grant aid projects with various types of technical cooperation. Collaboration with other aid organizations and NGOs should also prove effective and such collaboration must be continuously sought for JICA's future aid efforts.

(3) Third-Party Evaluation

1) Singapore and Malaysia:

Industrial Projects

JICA has long contributed to human development in Singapore and Malaysia through such various aid schemes as the dispatch of experts, acceptance of trainees and project type technical cooperation to assist the industrialization efforts of these two countries. For the present evaluation, Mr. Hiroshi AOKI, a journalist with considerable front-line experience in reporting on international cooperation, was commissioned to head the study to identify the cooperation effects, particularly the social impacts, through interviews with many counterparts (including ex-trainees), government officials and entrepreneurs in these countries.

As a country with few natural resources like Japan, Singapore has been implementing an industrialization policy which emphasizes the building of international competitiveness while promoting industrial development, the main components of which are the information industry and high productivity, following the model of Japan.

Japan conducted the Japan-Singapore Institute of Software Technology (JSISI) Project for ten years from December 1980. At the beginning of this project in 1980, there were only 850 software engineers in Singapore. During the ten years of the project, however, the JSISI sent out some 1,400 trained engineers to the information industry, contributing to phenomenal annual growth of 38% of the industry throughout the 1980s. The number of JSISI graduates up to the present exceeds 3,000.

Following the ASEAN Human Resources Development Centre Initiative proposed in 1982, Japan conducted the Productivity Development Project (PDP) from June 1983 to May 1990. Wide-ranging activities were conducted under the PDP, ranging from preparation of training manuals and textbooks to holding of seminars and improvement of profitability through the introduction of the 5S [seiri (organization), seiton (tidiness), seiso (cleaning), seiketsu (sanitation) and shitsuke (discipline)] movement at model factories. As a result, the productivity improvement movement spread to every industry in Singapore.

These two projects which were almost simultaneously implemented in the 1980s constituted a strong driving force for Singapore to change its industrial structure from a labor-intensive type to a knowledge-intensive type under the leadership of Prime Minister Lee Kwan Yew. Even though the fact that Singapore is a unique city state proved to be advantageous, the combination of clean, strong leadership and commitment, in other words, good governance and ownership, was the basis for the successful outcome of the cooperation provided by Japan and other donor countries.

In Malaysia, Prime Minister Mahathir, who assumed the position in 1981, promoted the so-called Look East Policy, implementing an industrialization drive focusing on household electrical

appliances, automobiles and semiconductors. Under the above-mentioned ASEAN Human Resources Development Centre Initiative, Japan conducted the Centre for Instructors and Advanced Skill Training Project (CIAST), aimed at training skilled workers and engineers essential for the industrialization of Malaysia, from August 1982 to March 1991. By the end of 1993, as many as 10,826 people had undergone training at the CIAST. The production value of electric and electronic manufacturing industries in Malaysia exceeded that of agriculture, forestry and fisheries for the first time in 1987. By 1989, the industrial structure had dramatically changed with the export value of household electrical appliances and semiconductors, etc. exceeding that of palm oil and crude oil. In the face of such a rapid transformation of the industrial structure, however, vocational training and fostering skilled workers lagged behind.

The Government of Malaysia then sent a large number of Malays to study at technical colleges and science courses at universities in Japan using yen loans, etc. to learn new technologies. Some of these students were recruited by Japanese subsidiaries on their return to Malaysia to learn business management and technical operations at the front-line and eventually become entrepreneurs running their own businesses. Such development illustrates the fairly successful domestic training of engineers as well as human resources development abroad, notably in Japan, based on Malaysia's own initiative.

2) Egypt:

Maritime Education and Training

JICA has been extending its cooperation for the Arab Maritime Transport Academy (AMTA) in Egypt for nearly 20 years under various aid schemes. The present evaluation was conducted to verify the effects of this long-standing cooperation for the AMTA and also to learn lessons and to produce recommendations for future cooperation in seamen training against the background of the need to promote further cooperation by Japan for the Middle East and Africa as part of the follow-up for the 2nd Tokyo International Conference on African Development (TICAD II) held in Tokyo in October 1998. Mr. Katsutoshi KAMATA of the Nikkan Kogyo Shimbun (Daily Industrial Newspaper), Ltd. was commissioned to conduct the evaluation from the viewpoint of "Effects of ODA in the eyes of the taxpayers".

Many of the 24 counterparts trained under the project type technical cooperation still work for the AAST&MT, which is the successor of the AMTA, some 20 years after .... commencement ..... . The total number of persons trained at the AMTA (now AAST&MT) now exceeds 60,000, including those from other Middle Eastern and African countries, and 146 persons from 31 countries in Africa attended a third country training program in the ten year period from FY1985 to FY1994. The training vessel provided under the grant aid was used 37 times for ocean training in the period from February 1992 to March 1999 and a total of 1,333

persons received training at sea. A voyage lasting four to five months to the Mediterranean or the Red Sea was involved on 14 occasions.

The AAST&MT has a well development management system and functions as a training institution for seamen and its educational and training activities have been well coordinated. The equipment provided by Japan, including a training vessel, has been well maintained and fulfills its purposes.

The newly prepared Aid Program for Africa by Japan following the TICAD II calls for "the provision of assistance for 2,000 African people to undergo training under South-South cooperation in the next five years." A shortage of seamen is expected to occur in Africa in the coming years. There is, therefore, a strong need for manpower development in the maritime sector in African countries. In response, it is strongly hoped that Japan will restart the third country training program, which ended in FY 1994. It will be extremely important for JICA to actively publicize past examples of its aid in order to enhance the understanding of and support for Japan's ODA on the part of the Japanese public.

3) Kenya and Tanzania:

Agricultural Projects

Mr. Shinichi TAKEDA, a journalist working for the Kahoku Shimpo and with considerable experience in reporting on international cooperation in the field, was commissioned to act as the team leader and overall coordinator for an evaluation study emphasizing identification of the impacts (particularly the social impacts) of JICA's cooperation for rice cultivation in Kenya and Tanzania.

Moshi in Tanzania is situated on the southern slope of Mt. Kilimanjaro (elevation of 5,895 m) and some 1,100 ha of paddy fields and 1,200 ha of dry farmland with irrigation channels constructed with aid provided over 20 years from 1978 are spread in the nearby Lower Moshi area. Prior to the provision of aid, the yield of local rice of natural rain-fed farmland was approximately 2 tons/ha. However, the introduction of the intensive cultivation of rice variety IR54 (locally called Japani) and the improvement of rice cultivation techniques has increased the yield to 6 - 7 tons/ha. While the GNP per capita in Tanzania is currently around US$ 210 (22,000 Yen), some 45,000 Yen - 50,000 Yen net profit is produced per crop in the project area from an average cultivation area of 0.5 ha. As a result, some 500 ha of farmland has been voluntarily created in neighboring areas to the project area in the last clecocle and the local rural population has doubled in 20 years. In Kilimanjaro Province in which Moshi is located, rice cultivation using IR54 has spontaneously spread to cover 4,200 ha of land and rice production in the province has increased five-fold in the last five years to 55,000 tons/year.

In Kenya, four JOCV members with an assignment period of two to three years each were dispatched to Siaya on the shore of Lake Victoria to supervise rice cultivation from 1978 to 1987.

With the introduction of an intensive cultivation method and a high yield variety, the local rice yield trebled. Following the provision of a rice cleaning machine, the last JOCV member left the village, terminating the link between the village and Japan and leaving the operation and maintenance of the machine to the villagers. In 1998, the villagers spent the huge sum of 0.7 million Kenyan shillings (approximately 1.4 million Yen) out of the funds accumulated over the years from charging a rice cleaning fee as advised by the JOCV members to purchase exactly the same rice cleaning machine as that originally provided. As of 1999, 180 villagers are engaged in the cultivation of rice on 80 ha of paddy fields and the rice cleaning volume is greater than 2 tons/day. Some 300 farmers outside the village also use this machine.

Africa frequently suffers from severe drought. While dry field farming is the traditional form of agriculture in Africa, the fallow period has become increasingly shorter due to the rapid population increase, causing progressive deterioration of the soil. Unlike dry field farming, paddy rice has the advantage of using the same farmland every year and, therefore, rice cultivation could prove to be the key to a sufficient food supply for Africa in the 21st Century. There is unlimited scope for Japan, which calls itself a country of rice and which has advanced rice cultivation skills and a rice culture, to provide assistance for the development of rice cultivation in Africa.

Assistance for the agricultural sector would be a simple matter if it only entailed the provision of funds and facilities. However, crops only grow in harmony with the land and other environmental conditions. Unless the skills to grow crops are rooted locally, fine facilities are useless. While facilities eventually deteriorate, skills remain forever. Education and extension activities to pass skills on to local people are, therefore, the most appropriate form of assistance. The great achievements in Lower Moshi and the history of grassroots assistance in Kenya are the first steps towards achieving this goal. "It is essential to encourage the start of rice production in Africa and to assist its subsequent growth from a long-term perspective of 10 or even 20 years without insisting on short-term achievements." These words of the people who worked so hard in the field must be taken seriously.

4) Senegal:

Vocational Training

Senegal is a priority country in Africa for Japan's ODA and is also a priority country for the DAC's New Development Strategy. This evaluation was conducted to learn lessons and make recommendations for the formulation and implementation of sustainable cooperation for human resources development in Africa in the coming years and was commissioned to Mr. Takuo KAWADE of Mainichi Newspapers whose work has often involved verification of the impacts of public works in Japan. The subject project is the Japan-Senegal Technical and Vocational Training Centre Project which is a representative human resources development project conducted by JICA in Africa.

The objective of the Project was to establish the Japan-Senegal Technical and Vocational Training Centre (CFPT) to train core technicians dealing with industrial equipment (in the electric, electronic and machine industries) in Senegal through the transfer of technology to counterparts who in turn will conduct technical and vocational training to provide trainees with basic knowledge and skills in these fields. This objective was fully achieved through Japanese cooperation lasting a decade.

At present, CFPT graduates mainly work in the maintenance department of various enterprises and are often responsible for the monitoring of the latest machinery. Some have been appointed to the position of manager of small and medium-scale enterprises. Their work morale, basic academic knowledge and skills are duly appreciated by their employers and they receive reasonable wages.

What is remarkable about the CFPT is that with the first acceptance of trainees from neighboring countries in 1990, it has become one of the best three training centers in French-speaking African countries (21 in total), enjoying a good reputation in not only Senegal but also French-speaking Africa.

Since the end of Japan's cooperation period, the CFPT has actively continued and expanded its activities with Senegalese staff, overcoming its financial difficulties.

Japan should give follow-up assistance priority to the CFPT and other projects which have maintained sustainable development based on autonomous efforts, producing a number of impacts. In this way, further impacts can be anticipated, ensuring a high level of investment effects.

5) Paraguay:

Vocational Training

The Paraguay Vocational Training Centre (CEV) was selected as a typical example of Japan's cooperation for human resources development to contribute to economic development in South America and Mr. Takaaki NAGASAWA of Jiji Press, Ltd. was commissioned to conduct a third panty evaluation from the broad perspective. He evaluated the factors facilitating and inhibiting the positive impacts of cooperation for training core engineers who will comprise the basis for South American economic development.

It has been 15 years since the handing over of the CEV to the Paraguayan side in 1983 after a technical cooperation period of five years. The education system emphasizing guidance for and discipline among students which was established with the assistance of Japanese experts is now firmly rooted. With the excellent management capability of Mr. Piera, the Principal, and very committed teaching staff who strictly enforce equipment maintenance, the management of the

CEV has been very smooth except in the financial aspect. In all aspects, the CEV has been reborn as Paraguay's own project.

The original objective of the CEV at the time of its opening in 1979, i.e. the training of junior technicians who can make a living in the labor market by providing vocational training for those who have only completed primary education for one reason or another in a short period of one year, has been fully achieved and this basic philosophy of the CEV has been actively upheld throughout the years under the leadership of the Principal and teaching staff.

However, the CEV has been very slow to respond to the needs of the MERCOSUR, particularly in the technological field. It is trailing behind the times in terms of equipment renewal and the advancement of teaching techniques, etc. Although the Paraguayan side hopes for renewed Japanese cooperation for Phase II of the CEV, the Government of Paraguay must firstly achieve a consensus within the government on a uniform basic policy for training engineers in response to the age of the MERCOSUR.

The Government of Paraguay commenced a review of the educational system in 1993 and an experimental new educational system started in FY1998. There was also a political change from the Wasmosy Administration to the Cubas Administration in August 1998. The new administration is currently conducting a full policy review with the main focus on restructuring of government finances. Even if Japan plans to provide some kind of assistance to the CEV, it must carefully monitor the outcome of the educational reform prior to making any concrete move.

6) Fiji/Papua New Guinea:

Training Program

This evaluation was commissioned to Professor Isami TAKEDA of Dokkyo University who is a specialist on international relations in Asia and Oceania to verify how the third country training program conducted in Fiji, the leading country in the South Pacific, and in Papua New Guinea which has a strong need for human resources development, has contributed to human resources development of island countries in Oceania and also to examine the training needs of and the direction for future Japanese cooperation for Oceania.

The third country training on "telecommunications" held in Fiji has trained 298 people from Asia and Oceania in 15 years. Both the trainees and their superiors highly praise the training and say that the training targets have been fully achieved. 88% of trainees say knowledge and skills acquired through the training are actively used on their return home. Some trainees have eventually become managing directors or teachers, indicating the strong social and economic impacts of the training program. As the telecommunications sector is characterized by the exceptional speed of technological innovation and vigor of the private sector, it is desirable to

leave training on the latest technologies to the private sector with the public sector providing training on policy planning and administration to complement that provided by the private sector.

The third country training program on "coastal fisheries development" held in Papua New Guinea has trained 235 people from Asia and Oceania in 15 years. The training is highly praised by the trainees themselves and by their superiors as 93% of them assess it as either "good" or "very good." 90% of the trainees say the knowledge and skills acquired through the training are actively used for their work.

While there is a common impression that Japan's ODA offers large-scale infrastructure development, the two third-country training programs evaluated this time have proved quite successful for the practical training of fisheries-related personnel and telecommunications specialists in island countries in Oceania, albeit in an unspectacular manner.

The trainees who have participated in third-country training programs should be considered valuable assets for Japan. However, it is difficult for JICA to follow up the activities of the trainees after their return to their own countries because of institutional, personnel and budgetary constraints. The relationship between ex-trainees and JICA should be strengthened in order to ceate a manpower bank for Japan and for the effective as well as efficient implementation of Japan's ODA.

(4) JICA/Overseas Economic Cooperation Fund (OECF) Joint Evaluation

Thailand:

Eastern Seaboard Development Program

Japan has provided active assistance for the Eastern Seaboard Development Program which was promoted by the Government of Thailand as one of the highest priority tasks of the National Socioeconomic Development Plan since the 1980s through JICA and OECF (presently the Japan Bank for International Cooperation (JBIC)). In view of their involvement, JICA and OECF conducted joint evaluation of their cooperation efforts for the East Coast development. Because of the different evaluation viewpoints adopted by these two organizations, JICA's evaluation placed emphasis on the learning of lessons for future regional cooperation centering on industrial development. The main subject of the evaluation by JICA was the Development Study on the Laem Chabang EPZ/GIE Industrial Promotion.

The project in question was implemented in a timely fashion one year before the opening of the Laem Chabang Industrial Park and contributed to the decision on the basic development concept of the planned industrial base. By 1997, all the available plots in the Laem Chabang Industrial Park had been taken up, achieving the objective of the project, i.e. the attraction of non-pollution, export-oriented labor-intensive industries other than heavy and chemical industries. Total

investment of 75 billion baht (more than 80% of which was foreign capital) has been made in the Laem Chabang area by the private sector, creating jobs for 48,000 people, of which more than 80% are employed by joint ventures between Japanese and other foreign enterprises. As a result, the transfer of technology to local enterprises has been greatly accelerated. Meanwhile, the construction of a hospital, school, shopping center and golf course around the industrial park has contributed to the development of the region.

An industrial park cannot be expected to be successful unless it attracts private enterprises. The timing for the creation of an industrial park must be carefully decided through an advance, in-depth survey on the market conditions. The development prospects of such a park are largely determined by the economic trends of the country in general and the area surrounding the park in particular. As the Laem Chabang Industrial Park offers favorable site conditions, such as proximity to a major port and its location within a 20 km radius of the provincial capital where basic social infrastructure is in place, most enterprises moving into the industrial park have expressed their willingness to stay. This finding emphasizes the importance of including the living environment for employees in the selection of an industrial park site.

The burden of selling plots can be lessened by placing the sales emphasis on attracting such key tenants as assembly makers and member enterprises of local financial groups. Creating a strategy to attract them as new industrial activities by key tenants in the park will attract the relocation of supporting industries and groups of small and medium-scale enterprises around the industrial park, likely contributing to the development of local industries.

(5) Evaluation by Overseas Office

1) Asian (Southeast Asia)

Indonesia:

Radio and Television Training Center
(grant aid, project-type technical cooperation)

Radio and television play an important role in the promotion of national unification and modernization in Indonesia, an island country with great geographical and cultural diversity. Japan provided grant aid for facilities and equipment for the Multi-Media Training Center (MMTC) in FY1982, followed by project-type technical cooperation from FY1983 to FY1992 to improve the MMTC's capability to train broadcasting engineers. In the meantime, the provision of additional equipment and the replacement of old equipment were conducted in FY1990 with grant aid. The engineer training function of the MMTC has been greatly enhanced through the provision of the latest training facilities and equipment and improvement of the training capability of the counterparts. The number of people attending training courses at the MMTC steadily increased

from 72 in 1985 to 204 in 1992, and further to 252 in 1998. The course completion rate also improved from 81.2% in 1985 to 97.5% in 1992 and 98.9% in 1998.

The MMTC has become the central organization to train key personnel in the broadcasting sector. It is expected to extend the scope of its training activities in response to recent technical innovations, including digitalization.

Myanmar:

Urban Water Supply Project
(grant aid)

Extreme water shortages, including of drinking water, in the arid area of Central Myanmar caused serious problems of declining health and hygiene. Even though water supply was partially available in urban areas, the fiscal difficulty and population increase worsened the water supply situation. In order to improve this situation, Japan provided grant aid in FY1981 and FY1985 to improve the water supply facilities in 11 cities located in the arid area of Central Myanmar and surrounding areas which faced severe water shortages. In FY1995, spare parts for the water supply facilities were provided under a follow-up cooperation. As a result of the improved water supply facilities, some 690,000 people living in these 11 local cities began to receive a sufficient supply of clean water and the health and hygiene conditions of these people were improved. Accordingly, the labor productivity in these cities was also increased.

Although the Myanmar side has sometimes struggled to replace deteriorated parts of the equipment, it has properly maintained the equipment to the extent that all of the water supply facilities are still in working order today. Nevertheless, the provision of spare parts under a follow-up cooperation is highly desirable in view of the severe aging of equipment and facilities provided by Japanese grant aid in the past and frequent breakdowns of water pumps due to the unstable power supply.

Philippines:

Cooperation for Sewage Treatment in Baguio City
(grant aid)

Rapid urbanization of Baguio City, a tourist city, without the accompanying development of urban infrastructure led to the discharge of untreated sewage to rivers, contaminating the river system in the catchment area. In FY1984, Japan provided grant aid for the construction of a sewage treatment plant to urgently solve this problem. As the Baguio side could not proceed with the planned construction of a sewerage network because of the deteriorating financial situation of the city, in turn caused by typhoon damage, Japan provided further grant aid to develop the sewerage network in FY1991 and FY1992.

This sewage network covers 63 districts of the city's 129 districts and the daily treatment volume of sewage now stands at 5,556 m3 which is proof that the sewage treatment system constructed under a Japanese grant aid project is fulfilling an important function in the city. The Biological Oxygen Demand (BOD) value of Balili River to which the treated sewage is discharged has also improved.

The maintenance conditions of the sewage treatment facilities and equipment are generally good. It is hoped that the Philippine side will seek to further increase the sewage treatment volume and to consolidate the operation system by means of implementing continual improvement of the sewerage network, encouraging households to connect to a sewer and improving the sewage charge collection system, etc.

2) Asia (East and Southwest Asia)

China:

Project for Promotion of Computer Systems at National Railway Management College (project-type technical cooperation)

The railway network in China began to rapidly expand from the second half of the 1980s, making computerized railway management and the training of senior executives and engineers an urgent necessity. Japan provided technical cooperation from 1987 to 1991 for the transfer of railway management skills using computers for training senior railway executives and engineers at the National Railway Management College, followed by after-care cooperation for one year from 1994.

When the technical cooperation was first provided, the introduction of computers for the railway management system in China was an epoch-making event. As such, the project greatly contributed to raising the standard of railway technologies in China. The improved railway management skills resulted in such positive effects as increased railway passenger and freight transportation volumes and a longer freight transportation distance.

Although the system introduced under the project was an advanced system at that time, the insufficient renewal of program software despite the rapid development of computer technology in subsequent years led to a decline of the training need for this system. As part of its administrative reform as well as internal reorganization of railway operation, the National Railway Management College merged with Northern Jiaotong University in 1997. For cooperation in those fields using computers, the technological advancement of which is extremely rapid, careful analysis is required to select the most appropriate method of cooperation as the transferred technologies may become obsolete after only a few years.

India:

Elisa Reader and Elisa Washer Supply Project
(provision of equipment)

Since it was first discovered in Madras in 1986, the number of AIDS patients in India has been steadily increasing every year. While the largest cause of infection is sexual contact (with 74.1%), blood transfusions are reported to account for 7% of all cases. Under these circumstances, Japan provided 20 units of AIDS testing equipment for Maharashtra State, which accounted for some 55% of all HIV positive patients in India and which showed the highest HIV infection rate through blood transfusions, for the purpose of securing safe blood to prevent HIV infection through blood transfusion.

At the 20 blood centres which received equipment, the HIV blood testing capability has improved and the collection of safe blood has become possible. Consequently, the risk of HIV infection through blood transfusion in the State has declined dramatically and the risk of Hepatitis B infection through blood transfusion has equally diminished.

The project has proven to be very effective. However, it is desirable that JICA consider the provision of additional equipment in view of the persisting need for blood testing equipment in India while verifying the equipment maintenance system in India.

Sri Lanka:

National Training Centre for Automobile Engineering
(grant aid, dispatch of experts)

Transport and transportation in Sri Lanka mainly relies on roads and the number of vehicles on the road sharply increased following the liberalization of imports. However, many local garages were small and the level of vehicle maintenance skills was not particularly good, resulting in an increase of the number of road traffic accidents caused by poor maintenance. Under these circumstances, Japan provided grant aid for the establishment of the National Training Centre for Automobile Engineering and also dispatched experts to develop the training curriculum and to transfer advanced automobile maintenance skills.

Sixty-nine mechanics completed the training course in 1989 with 1,058 mechanics, i.e. 1.5% of all employees of garages in Sri Lanka, having since been trained at the Centre. The level of satisfaction among employers regarding the skills of these mechanics is very high. The Centre now provides a short-term course to upgrade the skills of existing mechanics (some 300 attend the course every year) and training commissioned by enterprises (approximately 10 cases a year), indicating that the project represents an example of an effective tie-up between Japan's grant aid scheme and technical cooperation scheme.

It is, however, necessary for the Centre to improve its management by strengthening its relationship with industrial circles if it is to properly provide training in response to the market needs in the coming years.

One important lesson for future implementation of similar projects is the inclusion of improved management capability in the scope of technology transfer to poster self-reliant development of partner countries.

Appropriate Technology Research and Development Centre (ATRDC)
(project-type technical cooperation)

The Government of Sri Lanka has been trying to foster small and medium-scale enterprises and to vitalize small-scale farming in order to develop rural areas and has established the ATRDC as part of its efforts. Japan has provided project type technical cooperation to assist the manufacture of small machinery and parts and the development of low cost energy resources (wind power and fuel cells) at the ATRDC and to spread the achievements of the ATRDC to rural areas.

From 1995 up to the present, approximately 900 enterprises/factories out of a total of 5,981 enterprises/factories in Kurunegala where the ATRDC is located have enjoyed some type of service provided by the ATRDC. 120 Training College graduates have undergone further training at the ATRDC's Center Workshop. Many of these have established their own factories or are employed by factories, illustrating the positive impact of the project on local industries development.

Following the change of the industrial policy of the Government of Sri Lanka from the protection of domestic industries to market liberalization, low cost machinery has begun to be imported, eroding the price competitiveness of many types of equipment and energy sources developed under the project. As the project involved the comprehensive transfer of technology, ranging from clarification of the needs for development, training and extension, the ATRDC is continuing its activities in those areas which are not in competition with imported products, such as the manufacture and improvement of special equipment and parts, etc., using transferred technologies despite difficult conditions in terms of manpower and finance. As technological needs are continually changing, the continuous development of projects to sufficiently respond to changing needs demands conscious efforts to improve the capability of implementing organizations of projects, including the clarification of needs, development, training and extension instead of simply focusing on technology transfer in a specific area.

3) Middle East

Jordan:

Project for Improvement of Waste Disposal Equipment in Rural Areas
(grant aid)

In view of the unhygienic situation in areas in Jordan where waste collection was not conducted because of a shortage and deterioration of waste collection vehicles in addition to problems at final disposal sites of bad odor and natural combustion due to simple dumping instead of more hygienic landfill, Japan provided the necessary vehicles and equipment to improve waste disposal operation in local cities and rural areas under a grant aid project.

At the time of evaluation, all equipment provided under the project was fully utilized and waste disposal operation in the project areas had greatly improved. Expansion of the collection areas and increasd collection volume have improved the environment and hygiene in the project areas, enhancing the beautification of urban areas. Positive effects are also observed at disposal (landfill) sites in the form of improved hygiene and reduction of bad odor.

At present, while no major financial or technical problems are observed, the required volume of spare parts is expected to increase with the aging of the vehicles and equipment in the coming years. It is thus desirable that the Jordanian side review the current waste disposal charge collection system to ensure adequate funding to cover the maintenance cost which will certainly increase.

Saudi Arabia:

Cooperation for Saudi Arabian Standards Organization (SASO)
(dispatch of experts)

SASO is the sole standards organization in Saudi Arabia and is responsible for the preparation, approval, and revision of national standards. Since 1980, Japan has dispatched more than 140 individual experts to SASO's Laboratories to conduct the transfer of technology based on the standards system in Japan.

Despite such problems as the frequent transfer of counterparts and insufficient communication between Japanese experts and counterparts, the cooperation method combining equipment provision and the acceptance of counterparts for training in Japan with the dispatch of experts playing a central role has proved to be quite effective. The transfer of technology has fairly smoothly progressed. With technical cooperation over a long period of time, the ability of the counterparts to prepare, manage, measure and test standards has shown marked improvement while the specialties of Laboratories have been advanced. The counterparts have been able to learn not only measuring techniques but also know-how on planning and schedule control.

In the coming years, SASO will find it necessary to replace its analog equipment with digital equipment. Japan's provision of assistance for further improvement of SASO's technical strength

through the dispatch of short-term experts and other means, while linking to the third country training program for "Safety Requirements for Household Appliances" which is currently being implemented at SASO, is desirable.

Turkey:

Istanbul-Tuzla Vocational and Technical High School Project
(project-type technical cooperation)

Japan conducted project type technical cooperation to improve the standard of training at the Tuzla Vocational and Technical High School to assist the Government of Turkey which was facing an urgent need for training electrical, electronic and computer engineers in particular as a result of the country's rapid industrial development.

The quality of the education at the School has markedly improved with the use of teaching curriculum and textbooks prepared under the Project. The School has become a model for the education of engineers in Turkey. The ability of the counterparts has also improved and most of the 61 draft textbooks prepared by them during the project period and the 27 books prepared and published without outside assistance following the completion of the project have subsequently been approved as proper textbooks by the Ministry of Education. The curriculum has also been approved and is now used by other technical high schools.

The Tuzla Vocational and Technical High School is trying to extend the latest technologies transferred from Japan to other parts of the country by means of organizing summer training courses for teachers of technical high schools throughout the country and training courses for personnel in the private sector. Given its budget and manpower limitations in following the development of new technologies, it is desirable that Japan assist its efforts from the side by seizing appropriate opportunities.

4) Africa

Malawi:

Ground Water Development Project
(grant aid)

When this project was implemented, there was an urgent need in Malawi for the construction of water supply facilities for domestic and agricultural purposes in the face of a severe water shortage caused by drought and bad weather. The project involved the construction of wells in northern Kawinga, the area with the strongest need for such facilities. Spare parts were provided under follow-up cooperation in FY 1995.

With the construction of wells, people in the project area have been able to obtain a sufficient quantity of clean water and the positive impacts of the project include elimination of water shortages in the dry season, improved standards of hygiene, shortening of the time required by women and children to fetch and carry water and a reduction of water-borne diseases. As people in northern Kawinga are starting to permanently settle, agricultural productivity has improved together with improvement of the household economy.

Maintenance of the wells in the post-project years has been somewhat difficult because of the unavailability of spare parts for the French water pumps selected for the project in Malawi or neighboring countries and also because of the funding shortage on the part of the Government of Malawi. However, the provision of spare parts under follow-up cooperation in FY 1995 has ensured that most wells are in working order today, more than 10 years since the completion of the original aid project.

Airport Equipment Maintenance Project

Lilongwe International Airport in Malawi was opened in 1982 with a Japanese yen loan. The Special Assistance for Project Sustainability (SAPS) which was conducted by the Overseas Economic Cooperation Fund (OECF) ten years later recommended the urgent rehabilitation and repair of the aged facilities and equipment and the assignment of a sufficient number of airport personnel for the safety of the airport. In response, a follow-up project was implemented by Japan for two years from 1993 to rehabilitate the functions of the airport.

Replacement and rehabilitation of the guidance system and renewal of facilities and equipment under the follow-up project upgraded the facilities and equipment at the airport to international standards, improving the reliability of the airport. The maintenance skills of airport personnel were also improved to successfully achieve the project objectives. The assured reliability of aviation has contributed to a shortening of the travel time between Malawi and other countries and the promotion of trade and tourism together with the general economic growth of Malawi.

From the financial viewpoint, however, the operation and maintenance of Lilongwe International Airport are facing problems because of the low level of income resulting from the relatively small number of flights using the airport. In addition, not many of the counterparts to whom skills were transferred are currently working at the airport due to relocation and retirement, etc., indicating a need for Japan to provide after-care for the training of personnel on equipment maintenance and radar operation.

Tanzania:

Malaria Control Programme
(grant aid)

In Tanzania where there is a nationwide hazard of malaria which constitutes a serious threat to public health and the economic growth of the country, Japan implemented the Malaria Control Programme under grant aid in two cities, i.e. Dar es Salaam and Tonga, which are centers for socioeconomic activities in Tanzania and which are areas strongly affected by malaria.

The program involved construction of drainage ditches for a total length of 461,749 m, regular aerial spraying of insecticide, scattering of polyethylene beads on 14,727 toilets and distribution of 26,494 insecticide-treated mosquito nets at cost price. As a result of the program, the proportion of malaria-carrying mosquitoes among all mosquitoes in those cities declined from 17.4% in 1998 to 1.1% in 1994, and the malaria contraction rate also declined by 25-30% from the previous level.

When providing cooperation for malaria control, it is important to strengthen the capability of municipal authorities responsible for implementing of malaria control measures from the viewpoint of ensuring the continuity of control activities. In addition, the ownership of local people must be built up by encouraging their active participation in local malaria control activities.

5) Latin America and the Caribbean

Mexico:

Mineral Processing Plant Operation Technology
(project-type technical cooperation)

Mexico is promoting the modernization of the mining sector in its National Development Plan. As part of the modernization drive, the Comision de Fomento Minero (CFM) prepared a modernization plan for its 17 mineral processing plants to improve the low productivity of small processing plants amidst the sluggish market for silver, a major mining product in Mexico. Under these circumstances, Japan conducted a development study and then provided project type technical cooperation for the Parral Mineral Processing Plant, one of the 17 plants run by the CFM, for the modernization of its operation.

Immediately prior to the implementation of the project, the new Mining Law was promulgated, abolishing the CFM. As a result, the project implementation body was changed to the Consejo de Recursos Minerales (CRM). Despite a delay in the assignment of counterparts due to this change, introduction of Japan's mineral dressing management technology and installation of modern instruments increased the actual yield at the Parral plant to a level of 8 to 10% higher than the national average and substantially improved the refined ore quality. The increased actual yield reduced the amount of dressing agent used and the amount of heavy metals accumulated at the slag dam, reducing negative environmented impacts. The transferred technology has now been extended to major mines throughout Mexico by personnel trained under the project. It is hoped that further extension to small mines will take place in the coming years.

At present, there is an ongoing process in Mexico of merging or combining small mining operations with large-scale operations and the importance of the Parral processing plant which serves small and medium-scale mines is declining. As a result, it is becoming difficult to secure the quantity of ore required to maintain the operation profitability. If this trend continues, it will be difficult for the Parral plant to secure sustainability in the future.

6) Oceania

Samoa:

Project for Reconstruction of Tuasivi Hospital
(grant aid)

Samoa is situated almost at the center of the South Pacific and is an island country consisting of two main islands, Upolu and Savai'i, and other smaller islands. While Tuasivi Hospital on Savai'i Island was the main hospital on the island at the time of this grant aid project, its medical services were of a limited nature because of the deterioration of its facilities and equipment. Japan provided grant aid for the reconstruction of the hospital.

As a result of the project, Tuasivi Hospital has become capable of accepting local patients who used to be sent to the national hospital in Apia, the capital on Upolu Island. The number of patients treated has increased by 125% to 1,800 to 2,000/month compared to the pre-project period. The bed occupancy rate has also increased by 70 to 74%. The number of tests carried out has increased by 150% as many new types of tests have become possible. The reduced time and cost burden on the health service has expanded the access of islanders to health services, generally improving health care on Savai'i Island. As the concentration of patients at the natinal hospital has been reduced, the project has contributed to improving the efficiency of the medical care system in the entire country.

The main factor for such positive impacts of the project is that the scale of cooperation was realistically and adequately designed based on proper verification of the maintenance capability and end user needs at the preliminary study stage.

Cooperation for Filaria Control
(Japan Overseas Cooperation Volunteers (JOCVs), Senior Overseas Volunteers, training in Japan)

Filaria is a vernacular disease in Samoa and a joint study conducted in 1964 by the World Health Organization (WHO) and UNICEF recorded a detection rate of as high as 21%. In collaboration with WHO, Japan has been continually providing technical cooperation since FY1976, mainly involving the dispatch of JOCVs, to assist the activities of Samoa to eliminate filaria.

Through the cooperation, the basic skills of the counterparts for filaria control have shown a marked improvement and the filaria detection rate has dropped to 1.1%, showing the considerable contribution of the project to improved health of the Samoan people. In addition, the environmental beautification movement to prevent filaria has made it easier to control dengue fever which is carried by the same mosquito that carries filaria.

The long-lasting efforts of JOCVs and others have upgraded the technical skills of the Health Department's staff, who are now capable of conducting filaria eradication activities without external aid. Samoan will hopehilly promote the filaria examination program based on self-help efforts in the coming years with assistance from the WHO.

Project for Reconstruction of Clinics

The Government of Samoa prepared a plan for the construction of local clinics to improve the country's medical services and Japan provided grant aid for the construction of a clinic at Leulumoega on Upolu Island and Sataua on Savai'i Island. As the Sataua Clinic was severely damaged by a cyclone in 1990, Japan provided grant aid for the reconstruction of the clinic in FY1991. The proximity of the clinic site to the sea is believed to have been a possible contributing factor for the extensive damage, illustrating the importance of careful site selection in such countries as Samoa which face severe natural conditions.

Both of the clinics were found to be providing services which meet the medical needs of local people. Coupled with the fact that these clinics also provide emergencey medical care assistance for the airport, port and factories nearby, it appears safe to conclude that the project objectives have been achieved. The Leulumoega Clinic clinic sends medical teams to nearby villages to provide medical services at the grassroots level through collaboration with local women's groups in addition to providing treatment at the clinic. The construction of these two clinics has greatly contributed to improving the health of local people, who had previously experienced difficulty in accessing medical services. The Leulumoega Clinic has also contributed to alleviating the excessive concentration of patients at the national hospital in the capital of Apia, on Upolu Island.

Samoa/Tonga:

Cooperation in the Fields of Transportation and Traffic
(grant aid, training program)

The development and maintenance of an efficient transport and transportation system is an important task for island countries in Oceania to proceed with socioeconomic development while overcoming such disadvantages as widely scattered islands, geographical isolation from the rest of the world and a small national land area and domestic market. In this context, Japan has provided grant aid for Samoa and Tonga for the construction of port facilities and assisted human

resources development in these countries by means of providing opportunities for nationals to attend training in Japan as well as a third country training.

In Samoa, Port Mulifanua and Port Salelologa, whose facilities were improved under the project, are now accessible by large ferries conducting three return trips a day between Upolu Island and Savai'i Island, the two main islands of Samoa. The number of passengers and vehicles using this ferry service substantially increased from 120,000 persons and 14,400 vehicles in 1983 to 414,000 persons and 36,000 vehicles in 1998, indicating its major contribution to increased activities in the domestic transportation sector. Similar improvement of Port Apia is facilities under the project resulted in an increase of the cargo handling volume from 180,700 tons in 1986 to 258,631 tons in 1997. As the long-standing planned establishment of a port management authority has now been finally approved, it is expected that this authority will ensure an improved port management service and its economic sustainability.

In Tonga, a multi-functional tugboat provided under the project helps ships to safely come along side and to depart from a pier, reducing the risk of damage to the hull of ships in the port. In addition, this tugboat is also used for disaster relief activities to deal with incidents involving a collision, grounding, ship fire and waste oil spillage, etc. The safety around the port has been significantly improved. As a result, the number of ships calling at Port Queen Salote gradually increased from 122 in 1993 to 149 in 1997 and is expected to steadily increase in the future.

As maritime transport is an important sector for the economic development of Oceania, Japan's continual provision of cooperation in this sector including port management is desirable from the long-term perspective.