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

This chapter presents an overview of the findings of principal cases of ex-post evaluation conducted by MoFA, JICA and JBIC. In the case of the "evaluation by overseas diplomatic offices", "evaluation by recipient country personnel" and "evaluation by local consultants" under the supervision of MoFA, only the outline of each type of evaluation is included here because of the sheer number of these cases. The detailed evaluation findings of MoFA, JICA and JBIC can be found in the full version of this report, the Project Evaluation Report by JICA and the Post-Evaluation Report for Yen Loan Projects by JBIC, respectively.

4.1 Ex-Post Evaluation by MoFA

(1) Country Program Evaluation

Country program evaluation involves macroscopic study and classification of the effects of Japan's ODA on the economic development and enhancement of public welfare in principal recipient countries. The evaluation findings are utilised to formulate Japan's ODA policies regarding these recipient countries. After the completion of an evaluation study, an ODA evaluation seminar is held in the recipient country concerned with the participation of related personnel of the government and the private sector to report and discuss the evaluation findings as a means of feeding back the evaluation findings to ODA-related personnel in the said recipient country.

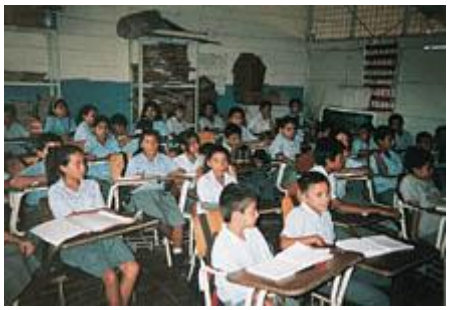
1) El Salvador

Evaluation was conducted by a team led by Professor Hiroshi Matsushita of Graduate School for International Cooperation Studies, Kobe University to produce a macroscopic account of the effects of Japan's ODA on economic development and the improvement of public welfare in El Salvador. The team included Takashi Tanaka, Assistant Professor of College of International Studies, Chubu University, Yasuhiro Koike, Assistant Professor of Department of Spanish and Latin American Studies Aichi Prefectural University, Akira Nagamachi, Deputy Director for Operation, Department of Planning and Program, Foundation for Advanced Studies on International Development (FASID), and Nobuko Fujita, a program officer of the said Department. A seminar was held in El Salvador in September, 1999 to feed back evaluation findings to officials of the Government of El Salvador.

Japan's ODA for El Salvador showed a marked increase in the 1990's, reflecting achievement of the peace agreement and progress of democratisation in the country. The team found that the emphasis of Japan's ODA in El Salvador on the expansion and consolidation of such basic

infrastructure components as transport, transportation, electricity and water supply facilities in the early 1990's was appropriate given the domestic situation where rehabilitation of damage inflicted by the civil war was an urgent priority. The gradual shift of emphasis to the rural reconstruction program and the strengthening of nurse training from the long-term perspective since the mid-1990's when urgent rehabilitation efforts achieved the required results was also approved as a suitable change of the principal aid policy direction. The team pointed out that the Japanese cooperation has significantly contributed to the rehabilitation of El Salvador and to the improvement of public welfare. Although the emphasis of Japan's assistance had been placed more on hardware than on software, the team noted the steady achievements of technical cooperation, including development studies, educational guidance and other work by JOCV members.

In the coming years, an appropriate response must be carefully made to the changing aid conditions for El Salvador. To be more precise, given the situation that El Salvador has grown out of the scope of general grant aid, coping with the problem of poverty which is the largest issue in E1 Salvador, an increase of grassroots grant aid to directly benefit the poor and the promotion of assistance for and collaboration with NGOs which are engaged in various poverty relief activities in El Salvador are pending tasks for Japan's ODA. In addition, the team also urged a new aid approach in view of the rapid advancement of privatisation and decentralisation in El Salvador and the progress of intra-regional cooperation, particularly, economic integration, in Central America in its recommendations.



Teaching scene at a primary school in Portis Village

Drinking Water Supply Project (Santa Monica Village)

2) Mongolia

A field study to evaluate and analyse the effects of Japan's ODA on economic development and the improvement of public welfare in Mongolia from the macroscopic viewpoint was conducted in March, 1999 by a team led by Ryokichi Hirono, Professor Emeritus of Seikei University. The team also included Tsuneaki Yoshida, Professor of Engineering of Tokyo University, Sumio Kuribayashi, Professor of Economics of Tokyo International University, Kozo Ishii, a researcher of the International Development Centre of Japan, and MoFA personnel. A seminar to feed back the evaluation findings to government personnel in Mongolia was held in September, 1999 and opinions were exchanged on the desirable socioeconomic development in Mongolia and Japan's assistance for the country.

Emergency aid to improve the international balance of payments, which was the mainstay of Japanese assistance for Mongolia in 1991 and 1992, proved to be highly effective as an emergency relief measure to help the Mongolian economy avoid a crisis situation. The timely implementation of an aid programme focusing on the improvement of economic and social infrastructure to follow the said emergency aid contributed to the stabilisation of the Mongolian economy. Even though some agricultural and other projects have not fully achieved their anticipated results due to policy changes on the Mongolian side, the team pointed out that trial and error is inevitable, even for ODA, during the transitional period to a market economy. The adoption of a long-term perspective for Japan's assistance for Mongolia was urged by the team as the introduction of a market economy system will be a time-consuming process. The decade between 1990 when Japan began full-scale aid efforts for Mongolia up to the present is described as a decade of foundation building to assist Mongolia's shift to a market economy. As such, the team pointed out the importance of continuous provision of ODA to consolidate and stabilise the market economy system in Mongolia together with the further development of infrastructure.

The biggest task for Mongolia in the coming years will be the implementation of appropriate measures to improve the standard of living of the poor who currently account for some 36% of the total population. It will be necessary for Japan to provide further assistance for the social sector, particularly in rural areas. Another requirement for more effective and efficient aid is the improvement of human resources and the institutional framework to solve the problem on the Mongolian side of coordinating forthcoming foreign assistance.

Interview with government officials

Study visit to the Dharhan Meat Processing Plant

(2) Evaluation of ODA Implementation System (Senegal)

Evaluation of the ODA implementation system aims at studying the ODA implementation system and the general environment for ODA implementation in the principal recipient countries of Japan's ODA, focusing on such issues as the proper use of funds and an appropriate implementation procedure, etc. for grant aid, technical cooperation and loans with a view to recommending suitable measures in the case of finding matters to be improved or rectified. This type of evaluation is conducted with the assistance of experts who are conversant with both the policy and practical aspects of ODA.

Among African countries for which Japan was expected to actively provide aid in the coming years through the TICAD II and other channels due to their prominent problems relating to poverty and the environment, Senegal and Mali were selected as the target countries for this type of evaluation in 1998 to produce concrete recommendations by identifying points for improvement regarding the ODA implementation systems in both the recipient countries and Japan.

Primary school built with Japanese grant aid (near Dhakar, Senegal)

Teaching in progress

Scene of a fishing village in Senegal female vendors of marine products (Kayar, Senegal)

Dhakar Central Fish Market under expansion with Japanese grant aid (Dhakar, Senegal)

(3) Theme-Specific Evaluation (Poverty in Cambodia)

As in the case of country program evaluation, theme-specific evaluation is conducted from a macroscopic viewpoint and is commissioned to private organizations with expertise in Japan's ODA and ODA evaluation. It is designed to analyse the effectiveness as well as shortcomings of Japan's ODA using specific sectors or types of aid as its themes to cut across the multitude of Japan's ODA projects.

The evaluation in question involved a study on such Japanese aid projects in Cambodia as the "Water Supply Improvement Project in Phnom Phen", "Mother and Child Health Centre Project" and "Refugees Resettlement and Agricultural Development Project in Cambodia" and visits to the Japan International Volunteer Centre and projects implemented by the Sotosyu Volunteer Association (presently the Shanti International Volunteer Association) to examine desirable ways for Japan to extend cooperation to solve the problem of poverty.

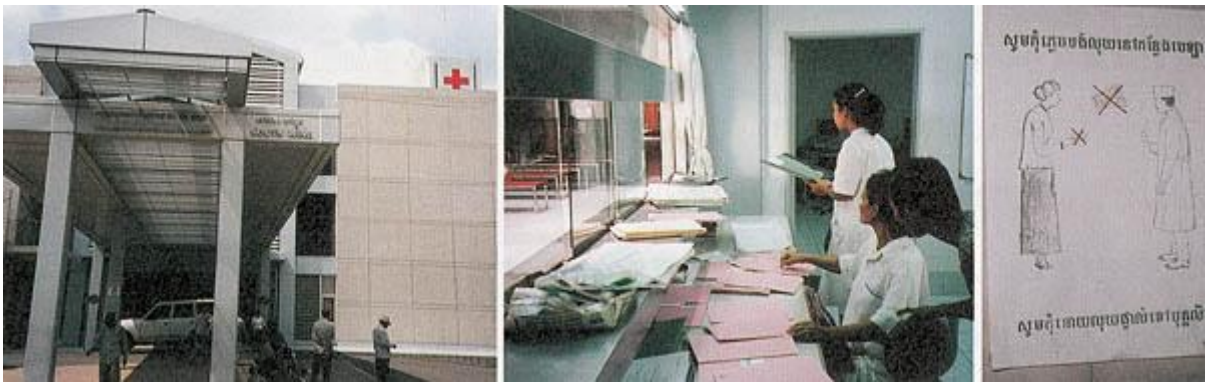
It is evaluated that the Water Supply Improvement Project will substantially reduce the risk of water contamination by sewage water by supplying 160,000 people of 27,000 households with safe water and improving the water leakage rate from 50% to 10 – 15% in two districts of Phnom Phen through the development of the water distribution network in these districts.

The Mother and Child Health Centre provided basic training for 904 medical students and 73 midwives and training on ultrasonic diagnosis for 172 staff members of medical institutions in the period from April, 1997 to December, 1998. It also served 99,553 out-patients and 15,948 in-patients in the same period. Strengthening of the functions of the Centre will lead to improvement of gynecological services in various areas, contributing to the assurance of safe childbirth.

The Refugee Resettlement and Agricultural Development Project has been in progress since 1992 involving JICA experts, JOCV members and experts from four ASEAN countries (Indonesia, Malaysia, the Philippines and Thailand) in conjunction with Japan's contribution to the UNHCR and the UNDP. The Project has already proved to be a great success as a participatory agricultural development project featuring the involvement of not only some 30,000 resettled returnee refugees but also the rural populace in the fields of farming, vocational training, education and public health.

Japan is the largest donor for Cambodia and supports cambodia's reconstruction and development with emphasis on economic infrastructure, BHN relating to health and medical care, etc., agriculture and human resources development. Cambodia is also a target country for the concrete application of the DAC's New Development Strategy (Towards the 21st Century: Contribution Through Development Cooperation).

Subsequent recommendations which have been proposed for future aid for poverty reduction in Cambodia include (1) establishment of political stability and the necessary administrative structure, (2) inclusion of ″poverty reduction projects″ for the poor, such as families with absent fathers, and land mine victims in development programs through collaboration with NGOs and (3) expansion and improvement of agricultural infrastructure with the sub-themes of (i) formulation of a grand design or national plan, (ii) full-scale assistance for agriculture and rural development and (iii) strengthening of grassroots grant aid.



Mother-Child Health Centre (Phnom Penh)

(4) Joint Evaluation with NGO (Cambodia)

"Mutual learning and joint evaluation by NGOs and the MoFA" was proposed at a regular consultation meeting between NGOs and the MoFA as a scheme to clarify the direction for concrete cooperation and collaboration between NGO and ODA projects. This scheme aims at mutual learning, evaluation and recommendation by the reciprocal analysis of NGO and ODA projects. Following the first joint evaluation in Bangladesh in 1997, it was decided to conduct this type of evaluation in Cambodia in FY 1998. The study team members were Stephanie Lenato, Director of the Nagoya NGO Centre, Hiroshi Kanda, a representative of the APEC Monitor and NGO Network, Tatsuya Hata, Secretary General of the Japan Sotosyu, Reliet lomitter, and Yasuhiro Shigeta, Chief researcnad Policy Advocacy Japanese NGO Centre for International Cooperation, on the NGO side and a staff member of the MoFA and of the JICA on the ODA side. Mitsue Mishima, a consultant of the OPMAC (a consultancy firm), also joined the study team for the coordination and arrangement of the evaluation findings. The inclusion of a staff member of the JICA, an aid implementation body, was prompted as a Japan Sotosyu Relief Comitter by the need to include the opinions of those involved at the front-line of ODA lesson learned from the study on Bangladesh.

The subjects of the joint evaluation were the "Basic Education" of the (presently the Shanti Volunteer Association) as an NGO project and the "the Rural Development Ressettleucen Project in Cambodia" (Triangular Cooperation) as an ODA project. Following the suggestion by NGO personnel, the participation of local people was included in the evaluation items.

Although the Improving Basic Education Enviroument project has contributed to the improvement of education, the soft aspects, including the qualitative improvement of teachers, should be taken into consideration together with the construction of school buildings to further improve education and understanding of the importance of public health.

The Rural Development and Resettlement Project involved some 250 people, including Japanese experts, JOCV members, ASEAN experts and Cambodian staff, and flexible and well-planned assistance in wide areas at the grassroots level for which Some. NGOs have special skills,

including technical cooperation based on the findings of studies on rural needs. In this context, this project is a good example of combining the favourable aspects of NGOs and ODA. The use of ASEAN experts to promote south-south cooperation is also significant. A pending issue in the coming years is whether or not the Cambodian side can acquire sufficient knowledge and skills to fulfill the prospect of self-reliant development.

The recommendations made by the study team for further collaboration between NGOs and ODA bodies include (1) personnel exchange between NGOs and ODA bodies, (2) joint work from the project formulation stage, (3) creation of a flexible NGO support system, (4) introduction of regular consultation meetings and (5) consolidation of the "mutual learning and joint evaluation" scheme.

Interview with ASEAN experts

Teaching in progress

(5) Evaluation by Third-Party Experts

This type of evaluation is commissioned to academics, intellectuals, journalists, NGO personnel and foreign experts, etc. with in-depth and advanced knowledge of development economics and other fields relevant to ODA. A special characteristic of this type of evaluation is the fact that each evaluation is conducted from the unique viewpoint of the commissioned evaluator based on his/her own knowledge and experience.

1) China: Beijing Water Supply Project and Urban Gas Project in Four Cities

Susumu Ebe, Deputy Head of the International Headquarters of the Japan Federation of Economic Organizations (Keidanren), and Masanori Nemoto, Head of the European Group of the said Headquarters, were commissioned to conduct an evaluation of the economic infrastructure in China, featuring the above two projects.

The Beijing Water Supply Project involves the construction of a water purification plant (500,000 m^3/day), water intake and conveyance facilities (total length of 70.5 km) and drainage facilities (total length of 52 km) in Beijing to increase the city's daily water supply capacity to one million m^3 and the Phase II work was completed in 1995. The National Development Planning Committee, the External Trade and Economy Department and the Beijing Municipal Water Corporation are cited as evaluating the water purification plant as a success. The service population is 6.5 million with households accounting for 70% of the water supply and commercial and industrial premises accounting for 30%.

There is, however, a problem in regard to the profitability of the project. Despite the supply cost of 1/ton Yen, the maximum water charge is 0.4/ton Yen for industrial use, 0.7/ton Yen for household use and 1/ton Yen for commercial use, making it necessary for the Beijing Municipal Authority to subsidise the Water Corporation. Meanwhile, the water charge collection rate of 98% is excellent and the water leakage rate is only 7.5%. There is also concern in regard to the independence and development prospects of the water supply business as the present general business set-up cannot avoid a recurrent deficit. However, the reliance of the Water Corporation on a public subsidy is said to be understandable given the fact that the water supply business tends to be run by the public sector in not only Japan but also in most parts of the world with the rare exception of the UK.

The Urban Gas Project in Four Cities relates in part to Haerbin to meet the city's gas demand by the construction of a coal gas production plant with a daily production capacity of 600,000 m3. A plant consisting of nine sub-plants for coal washing, pulverising, dressing, gasification and methanol production, etc. was constructed in 1993. The gasification facility uses German equipment supplied by German funding while the methanol production facility uses Russian equipment. Although the design capacity of the plant is 1.89 million m3 a year, the actual production level in 1997 was 0.55 million m3. Because of the lower than anticipated demand, operation was below the break-even level and the equipment operation rate was 51%. Even though subsequent efforts to stimulate the demand achieved a demand increase of 50,000 households a year, expansion of the commercial and industrial demand for gas supply is crucial because of the high consumption level per user.

As the originally planned demand level was somewhat over-ambitious, only three of the five gasification units were in actual use at the time of the evaluation. It may have been difficult for the evaluators to make a judgement on the required surplus production capacity to ensure a stable supply as there is no example of a coal gasification facility in Japan.

One notable effect of constructing this type of plant is the purification of air as the volume of dust emission considerably declined from 190,000 tons in 1992 to 39,000 tons in 1996 with the SO2 emission volume declining from 45,000 tons in 1992 to 23,000 tons in 1996.

The implementation of environmental projects, including a waste water treatment project, as projects relating to water supply and gasification, in the coming years is recommended.

2) Philippines: Family Planning and Maternal and Child Health in Tarlac

In view of the increasing interest in international cooperation among young people and the proclaimed importance of training personnel capable of contributing to international cooperation, two graduate students were invited to participate in the evaluation by a third party expert as the first attempt to facilitate understanding of Japan's economic cooperation among young people in Japan through their actual participation in evaluation.

Yoko Ishi, a Ph.D. student of social anthropology of Tokyo Metropolitan University, and Yumi Kobayashi, a master's degree student of international relations of Waseda University, were invited to participate in the evaluation by a third party expert in the Philippines which was commissioned to Professor Kyoko Kikuchi of Tsuda College and a field survey was conducted while staying at the homes of local families.

The selected project for evaluation was "Family Planning and Maternal and Child Health in Tarlac". At the time of the evaluation, Phase I which had commenced in 1992 was completed and such activities as the "Midwife Service Improvement Program" (support for seminars), "Maternal and Child Health Handbook Instrocution Program" and "Community Drug Insurance Program" were in progress based on the principal concepts of "manpower development" and "participation of local people".

The study team examined the project impacts on local medical care activities, centering on family planning and mother and child health, and on local people. The study team members stayed in a rural village in Tarlac Province, the project site, and interviewed local people on their awareness of the need for medical care. Given the specific character of the Family Planning and Maternal and Child Health Project, it is difficult to quantitatively measure the project effects in a short period of time although the project appears to be functioning well. Pending tasks in the coming years are intensification of the publicity of various programs and extension of the project to a wider area using local women's groups and networks of villagers in order to mobilise people who have not yet participated in the programs.

Vaccination in progress

Treatment of a broken bone by a traditional midwife

3) Laos: Integrated Agricultural Rural Development Project in Savannakhet Province and Project for Construction of Dormitory for Laos Women's Union

Evaluation on the themes of agriculture and gender in Lao was commissioned to Professor Masako Hoshino of the International Department, Kei-ai University (a special advisor for the International Volunteer Centre of Japan), who was the first JOCV member to be dispatched to Laos and who has accumulated much experience of NGO activities over many years.

The Integrated Agricultural Rural Development Project in Savannakhet Province involves the construction/rehabilitation of irrigation facilities, an agricultural support centre, rural roads and water supply facilities and the provision of equipment in the Howai Bak Upstream and Nam Phou Districts in Savannakhet Province in Central Laos. These two districts constitute the project area with a combined population of 15,753, 2504 farming households and a total irrigation area of 1,360 ha.

According to the evaluation, the absence of any strong opposition to the construction of a dam on the part of local farmers is presumably attributable to the fact that the substitute land offers better conditions in the form of better fertility and proximity to a river and a road as a result of the area's local population density and the small scale of the proposed dam. There is no conflict between the project and other organizations projects (UNDP, IFAD, ADB and EU) in terms of the principal concept and activities, etc. The irrigation and water supply facilities constructed under the project, therefore, have achieved significant effects and have had a great impact on not only Savannakhet Province but also on many other areas to the extent that administrators and

farmers from other parts of the province as well as from neighbouring provinces visit the facilities every week to learn from them. The new facilities have also resulted in increased food production and the diversification of crops planted in the project area.

The farmers' association has been reorganized into an irrigation cooperative. While participation in the cooperative is not compulsory, its membership has increased because of the positive impacts of the irrigation channels at the time of a drought. The evaluator notes that voluntary participation in the cooperative is highly noticeable as the farmers themselves are constructing the Phase III irrigation channels with a loan from an agricultural development bank. Because it is a tradition in Lao for real estate to be inherited by the youngest child (usually a daughter), it is women who can obtain a loan from a bank and who take the risk involved in loan repayment. Therefore, women are not only the beneficiaries but are also active participants in development.

Meanwhile, some farmers express the hope to cultivate the local rice variety (glutinous rice) for their own consumption as it promises a stable harvest despite a lower yield than new varieties because of its stronger resistance to diseases and pests and the non-requirement for chemical fertiliser. The evaluator also puts forward her opinion that a posture of assisting changes of local farming practices in line with the changing pace of perception among local farmers is desirable as a hasty change promoted by the provincial authority from self-sustaining agriculture to the cultivation of cash crops could adversely affect the willingness of farmers to make a voluntary commitment to change. A new type of aid scheme is recommended whereby four parties, i.e. the local public body in Laos (Savannakhet provincial government), an NGO in Laos (an irrigation cooperative), a local public body in Japan and a Japanese NGO based in the area of the said local public body (a body capable of involving middle-aged or older farmers), participated from the project planning stage on equal terms with support of the project by an ODA scheme.

Interview with local residents

The Construction of Dormitory for Lao Women's Union was a grassroots grant aid project implemented in FY 1996 and a wooden, two-story dormitory building providing overnight accommodation for 25 – 30 women at the Union's Training Centre in Vien Tiang was constructed to rectify the situation where the lack of overnight accommodation facilities made it difficult to provide effective training for participants from local areas, posing a major obstacle to the

promotion of nationwide women's activities. The building was handed over to the Union in December, 1996.

The training courses provided by the Union mainly focus on gender roles, vocational training planning methods and project planning methods. The Union is also interested in training on agriculture, stock raising, weaving, sewing, flower arranging and foreign languages. As there is no freedom of association in a socialist country, the Union is a government-sponsored organization generally called "a QUANGO" – quasi – NGOs and it appears difficult for women in local areas to conduct spontaneous activities. Nevertheless, bottom-up activities similar to those of NGOs are observed in some areas in Laos and it is recommended that the possibility of implementing future ODA which features women through organizations other than the Union be examined.

According to the UNDP's Human Development Report 1995, the positive value achieved by subtracting the development index relating to the social and cultural gender gap (GDI) from the human development index (HDI) means better equality between genders compared to the average achievement level of human development. However, the actual value is -5 for Japan and +4 for Laos, indicating a low achievement level of gender equality in Japan compared to the average achievement level of human development. The evaluator urges the full consideration of the implications of the perceived high gender gap in Japan in the formulation and implementation of Japan's gender-related ODA projects (WID) in the future.

4) Thailand: Construction of Port Laem Chabang, Outer Bangkok Ring Road Construction Project and Telephone Network Expansion Project

Hideo Tsuchiya, a deputy leader writer of Nihon Keizai Shimbun, was commissioned to conduct evaluation on the theme of economic infrastructure in Thailand.

The construction of Port Laem Chabang formed part of the Coastal Development Project in Eastern Thailand which aimed at constructing a deep water port at Laem Chabang located some 110 km southeast of Bangkok to act as a major commercial port as well as an alternative port for Port Bangkok, the use of which by large ships is difficult. The work ranged from dredging and reclamation, to the construction of sea walls, breakwaters and mooring facilities, etc.

The port was opened in 1991 and its cargo handling volume steadily increased thereafter. From 1996, container ships to and from North America regularly called at the port and four shipping groups currently operate a weekly North American service. In FY 1997, the container handling volume was 1.036 million TEU[*1], reaching the one million TEU level for the first time and accounting for 45% of the total container handling volume in Thailand. In FY 1998, the figure increased to 1.424 million TEU, surpassing Port Bangkok.

The evaluator concludes that the usefulness of this new port is backed by the progress of industrial accumulation in the east coast area, the limitations of Port Bangkok due to its shallow

water and the international recognition of Port Laem Chabang. The evaluator also suggests that even though it will be difficult for Port Laem Chabang to become a hub port in Southeast Asia because of its geographical location deep inside the Gulf of Thailand and near Singapore which is an established major hub port in Southeast Asia, it has the potential to become a central port for the so-called Baht Zone, including Laos and Cambodia as well as Thailand proper, making the construction of motorways to link the port to these countries important.

The Outer Bangkok Ring Road Construction Project aimed at the construction of the eastern section (approximately 64 km between Bang Pain and Bang Puri) of the Outer Ring Road, a by-pass for otherwise through-city traffic. The construction funds were provided by the Government of Thailand and a yen loan on a 50-50 basis. The Eastern Outer Ring Road was originally planned to open in July, 1997 but its completion was delayed by 16 months until December, 1998 due to the slow progress of land expropriation, design changes forced by the soft ground and the adverse impacts of the Asian economic crisis on construction companies. The construction of an outer ring road to divert through-city traffic was essential and this road could also reduce the travelling time from the east coast area to the north of Bangkok once linked to the expressway between Bangkok and Chon Buri (with a Yen Loan). The evaluator states that as far as the transport problem in Bangkok is concerned, Japan has decided to provide a Yen Loan of 4.1 billion Yen for the planning of transport policies and the Transport Facility Improvement Project using the Inland Transport Coordination Committee as the coordinator and that the effects of such project should be carefully monitored.

Under the Telephone Network Expansion Project, a loan was provided for the Thai Telephone Corporation in FY 1989 and FY 1990 to cover the foreign currency portion of the equipment procurement cost as well as the cable laying cost at telephone exchanges. As the telephone network is basic infrastructure for an information-oriented society, the total amount of loans provided for the Corporation since the first loan in 1968 has exceeded 100 million Yen, playing a crucial role in the consolidation of the telephone network in Thailand. In recent years, however, no request for a new yen loan has been made because of the entry of private enterprises into the market through the BOT and the privatisation of the Corporation (planned to take place in January, 1999).

Many recommendations are made in regard to future cooperation for infrastructure development in Thailand, including (1) possible provision of a yen loan for the development of social capital to improve the standard of living in rural areas as such development should mainly be promoted by the public sector, (2) review of the policy of encouraging export-oriented manufacturing industries, (3) development of agriculture and tourism infrastructure, (4) expansion of secondary education for the development of such tertiary industries as the information, service and tourism industries, etc. and (5) increased publicity of yen loans which are not visible as grant aid or technical cooperation as "Japanese aid" in the eyes of the Thai public.

*1: Abbreviation for Twenty Foot Equivalent Unit. There are various sizes of containers, including twenty foot containers (8 x 8 x 20 feet) and forty foot containers (8 x 8 x 40 foot). This unit is used to indicate the cargo container volume by converting it to the twenty foot container equivalent.

5) Project for the Improvement of Medical Equipment of Sanjai Gandhi Post Graduate Institute of Medical Science

Yasuhiro Niizaki: a doctor working at the International Medical Care Centre with rich field experience and expert knowledge, was commissioned to evaluate medical assistance to developing countries.

The Sanjai Gandhi Post-Graduate Institute of Medical Science, the evaluation subject, aims at becoming a leading educational institution specialising in highly advanced medical fields. The objectives of the project were to promote medical research and specialist medical care and to transfer the technology (skills) required to operate advanced medical equipment. The state of research and training when visited indicated the fulfillment of these objectives. Most of the resources input into the project came from the Uttar Pradesh State Government and JICA's input in terms of equipment and human resources accounted for some 10% of the total input. Nevertheless, without Japanese input, it would have been impossible for the School to have become an advanced research institution, competing for the highest reputation with the All India Medical Institute within a very short period of time. The level of Japan's contribution appears to have been higher than Japan's share of funding once the quality of Japan's input is taken into consideration.

The impacts of project implementation were evaluated from three aspects, i.e. impacts of medical treatment, impacts on human resources development and impacts on medical research, in view of the basic concept for the establishment of the Sanjai Gandhi Post-Graduate Institute of Medical Science and the purposes of the technical cooperation project. The evaluation findings verified favourable impacts in terms of the performance of medical treatment, performance of human resources development through Ph. D. courses and the number of research papers submitted to academic conferences. Some useful lessons were also learnt. As the evaluation of impacts was conducted in May, 1999, 12 – 13 years after the granting of the medical equipment and nearly two years after the completion of the technical cooperation project, more time will be required for all of the impacts to be duly observed.

The Government of Uttar Pradesh State is strongly committed to the future of this Graduate School both financially and legally and the First Secretary of the State Government also acts as the President of the Graduate School. The biggest beneficiaries of the project incorporating grant aid and project type technical cooperation by the JICA as well as the major input by the State

Government are teaching staff and researchers at the Graduate School who have been given a strong incentive to strive towards the further development of their beloved institution.

Hospital entrance

Interview in progress

6) Sri Lanka: Aid for Increase of Food Production

Evaluation of Japan's "aid for increase of food production" for Sri Lanka was commissioned to Professor Masahiko Genma of Waseda University.

Japan has been providing Sri Lanka with aid to increase its food production for more than 20 years since 1977. This type of aid features developing countries experiencing a food shortage and grant aid is provided to procure fertilisers, agrochemicals and agricultural machinery which comprise the production inputs necessary to achieve an improved yield per unit area. Under this aid scheme, recipient countries are required to pool a certain percentage of the surplus domestic currency portion resulting from Japanese aid in the form of a counterpart fund which is used for economic development projects and other purposes.

In the opinion of the evaluator, the project in question was efficiently implemented as such inputs as fertilisers and agrochemicals for agricultural production were promptly supplied according to the delivery schedule. End beneficiaries as farmers and farmers' associations received the machinery without delay.

In relation to the fulfillment of the project objectives, the provided agricultural machinery has been properly used in the food producing areas and has contributed to an increase of the food production. The operating rate is high, indicating its appropriateness to meet the needs of small

farmers. The provision of machinery has led to stabilised production management by farming households and has resulted in certain economic effects at the farming household level. In the case of fertiliser (ammonium sulphate), although it has contributed to economic development due to the earning of foreign currency resulting from the predominant use of fertiliser for plantation crops, it has not directly led to increase of food production ad thup, faili to eliminate the food shortage. It is, therefore, pointed out that the supply of urea-based fertiliser which was recommended by the Government of Sri Lanka for rice cultivation would have been preferable to achieve the original objective of the aid for increased food production.

Projects using the counterpart fund are highly evaluated as they have contributed to the qualitative improvement of the standard of living through the long-term improvement of income among small farmers, illustrating the high economic effects of these projects at the farming household level.

In his recommendations, the evaluator points out the medium to long-term importance of (1) changing the fertiliser type in response to the actual needs should the provision of inputs for food production continue, (2) promoting the extended use of machinery mainly in rice producing areas for increased food production and (3) emphasis on cooperation designed to strengthen experiments and extension activities given the current state of food production in Sri Lanka.

Interview at Ministry of Agriculture and Land

Planting of rice in progress

7) Syria: Jandar Power Station Project and Project for Improvement of Waste Disposal Equipment in City of Damascus

Evaluation on the theme of energy and the environment in Syria was commissioned to Yoshiki Hatanaka, a executive chief economist at the Institute for International Economic Studies.

Under the Jandar Power Station Project, a combined cycle power station using gas turbines as well as steam turbines was constructed to realise a stable power supply to alleviate the power shortage in Syria together with the effective utilisation of domestic natural gas resources.

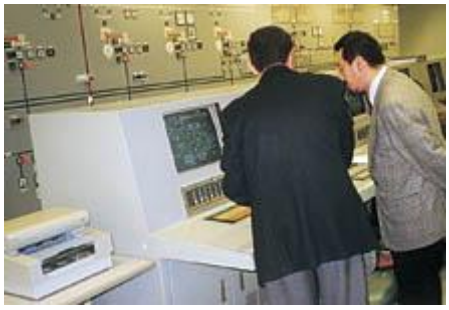
The evaluator found that the power demand had been noticeably increasing at an average annual rate of 8% (1990 – 1996) as originally expected and that the Jandar Power Station was significantly contributing to the development of Syria's economy as the largest power station (accounting for some 20% of the total electric power generation in the period from January to November, 1998) in the country.

In terms of efficiency, a thermal efficiency of 46% and an average operating rate of 70% had been achieved, indicating the satisfactory state of operation, maintenance and repair up to the time of the evaluation. However, the evaluation was conducted in December, 1998, only some three years after the commissioning of the power plant and the real success of the project will be judged based on the response to the future maintenance and repair needs.

The project is judged as appropriate given the facts that the construction of a power plant was a high priority because of the need to increase the power supply capacity for the country's development and that the project's objective of constructing a combined cycle power station was highly appropriate because of its excellent performance in terms of thermal efficiency, operational flexibility and environmental conservation.

The prospect of self–reliant development is also judged to be promising as the operation, maintenance and repair of the Jandar Power station are conducted by staff members working in the area with the efficient use of the tools and equipment. However, as this power station is the first of its kind in Syria, the training of relevant operation and maintenance staff will be necessary in the coming years. Compared to ordinary power stations, a combined cycle power station requires the regular replacement of parts because of their rapid deterioration, posing a task for the Syrian authorities in terms of securing the funding source for parts procurement. As suggested by the evaluator, therefore, the construction of conventional power stations using natural gas as the heat source may be worthy of consideration despite their inferior performance in terms of thermal efficiency, operational flexibility and environmental conservation because of the relatively high total cost, including the parts replacement cost and staff training cost, of a combined cycle power station.

Jandar Thermal Power Station Construction Project: generating facilities



Jandar Thermal Power Station Construction Project: control room

The Project for Improvement of Waste Disposal Equipment in City of Damascus aimed at improving the state of hygiene as well as environmental conservation by introducting of small garbage trucks in the old city and hilly districts with narrow streets and equipment required for landfill disposal.

Following the introduction of the small garbage trucks, the number of vehicles in need of repair has been reduced by some 30% a year, resulting in a reduction of the maintenance cost for the Cleansing Department and an increase of the waste collection volume as it has become possible to collect waste in areas with narrow streets. In addition, the introduction of new vehicles such as compactors, dump trucks and bulldozers has made landfill possible and the prevention of outbreaks of flies, bad odours and flying plastics illustrates the positive effects of the project.

The efficiency of the project is also proven by the effective use and good maintenance of the new waste disposal equipment/materials. There is one note for caution, however. The current final disposal site will soon be fully filled, although the site was not part of the project.

The appropriateness of the set objective, i.e. the provision of small garbage trucks and other vehicles, is verified by the fact that the Damascus Municipal Authority has given the improved efficiency of waste collection and environmental conservation at the final disposal site high priority.

The prospect of self-reliant development is assured as the operation and maintenance of the vehicles and the final disposal site are independently conducted by staff members of the

Municipal Cleansing Department and no special problems are anticipated in the future. However, the fiscal balance regarding waste collection and final disposal in Damascus shows a substantial deficit because of inadequate collection of waste collection charges. Improvement of the fiscal situation is, therefore, essential through the proper collection of the charge from all members of the public.

As part of the lessons and recommendations, it is pointed out that publicity of Japan's aid for the project was considerable as waste collection vehicles carrying a sticker describing their provision by Japanese aid in English and Arabic travelled throughout the city. For the efficient disposal of the collected waste in the coming years, the recommendations include the introduction of a total system by means of establishing collected waste classification centres as well as a medical waste treatment facility and also the introduction of training courses designed to transfer the knowledge and skills required for the maintenance and repair of various vehicles.

The careful noting of several points for the provision of ODA for Arabic countries is also recommended. These points are (1) there is a strong sense of obligation under which the rich provide alms for the poor (zakat or sadaga), (2) many countries generally have mixed feelings towards advanced Western countries because of their past experience of colonisation by European countries, (3) the sense of time often differs from that in the West and (4) it is necessary for donors to fully understand the cultural, social and religious characteristics of the Arab world with a view to guiding the response of recipient countries in a direction where aid can achieve its anticipated results.

Refuse Disposal Equipment Improvement Project in Damascus: refuse collection vehicle

Refuse Disposal Equipment Improvement Project in Damascus: refuse collection work in progress

8) Costa Rica: Project for the Construction of Technical Training Center for Central American Region and Technical Instructor and Personnel Training Center for Industrial Development of Central America

Goro Ono, Professor of Economics of Saitama University was commissioned to evaluate the training on industrial technology for Central America with Costa Rica playing a central role.

The Project for the Construction of Technical Training Center for Central American Region and the Technical Instructor and Personnel Training Center for Industrial Development of Central America was aimed at training personnel in the fields of quality and production control and information processing and to improve quality and process control technologies in order to improve the fiscal as well as trade balance of Central American countries through the planned change of the industrial structure from agriculture-based to industry-based.

In addition to the construction of the Training Center, Japan provided technical cooperation in the form of the provision of equipment (202 million Yen), dispatch of experts (16 long-term and 32 short-term experts) and acceptance of trainees (29 trainees).

The increasing efficiency of the facilities at the Center has been verified. The facilities sufficiently function as education and training facilities and the training courses and seminars planned under the project have been steadily implemented. Both the accommodation facilities and equipment have been effectively utilised.

Results beyond the originally planned targets have already been achieved through the provision of training and personal guidance for leading members of private enterprises. The Center has begun to accept trainees from other Central American countries and the number of subject countries has been increased from 5 to 8, giving the impression that the Center is beginning to assume the status of a key training centre for entire Central America.

The project has had many significant impacts in the production field and the positive effects of the project at factories assisted by the Center include a productivity increase of some 30% due to quality improvement, shortening of processes and a reduction in inventories, etc., reduction of labour accidents, improvement of raw materials quality control, improvement of the maintenance of machinery and development of new products. The relevance of the project is also verified as the project fully qualifies as an aid project for both export promotion and the development of small enterprises, both of which are emphasised by the Government of Costa Rica. Given that the achievements so far surpass expectations, the actual management of the training curriculum is believed to have been properly conducted to meet the objectives of the project.

In regard to the prospect of sustainability both the government and the project implementation body have sufficient enthusiasm and capability, and the Center is highly trusted by industrial

circles, etc. The Government of Costa Rica has continually made the necessary budgetary appropriation for the running of the Center .

Third country training at the Center is now on the right track and the Center is expected to become a core facility for education and training on productivity improvement in Central America. The evaluator points out the desirability of continuous Japanese assistance from the long-term viewpoint until a self-reliant regime by local staff members is firmly established to further consolidate the Center's contribution to the higher objective of the project, i.e. advancement of the industrial structure in Central America.

Work in progress

Exchange of opinions with Costa Rican counterparts

9) Chile and Argentina: Early Diagnosis of Gastric Cancer Project and Digestive Organs Cancer Project

Evaluation of the medical care and technical cooperation in Chile was commissioned to Akihiro Takihara, Head of the Department of Surgery of Obitsu-Sankei Hospital.

In 1974, the Government of Chile made a request for Japanese aid for the purposes of improving early detection techniques for gastric cancer and implementing group examinations for cancer. In response, the Early Diagnosis of Gastric Cancer Project was implemented in 1997, involving the dispatch of experts, training in Japan (for 35 Chilean doctors), third country training (44 specialists) and the provision of equipment. At the time of the evaluation, the early cancer detection rate was as high as 10 – 20%. With the full operation of the provided equipment, the number of tests conducted is very large.

The Japan-Chile Gastroenterological Research Institute has become an essential specialist training body for medical students and is actively used as the venue for third country training. From the epidemiological point of view, cancer of the digestive organs is still a major health problem in Chile, making further development of gastroenterological knowledge and technology essential. Accordingly, the project was appropriately selected for Chile.

The project objectives were (1) improvement of the early diagnostic techniques for gastric cancer and (2) improvement of the group examination techniques for the Early Diagnosis of Gastric Cancer Project and

(1) improvement of the endoscopy diagnosis techniques, (2) improvement of the image diagnosis techniques, (3) improvement of the treatment techniques, (4) improvement of the pathological testing techniques and (5) establishment of a group examination system for colon and rectal cancer for the Digestive Organs Cancer Project in order to cover esophageal cancer, gastric cancer, colon and rectal cancer, bile duct cancer and pancreatic cancer. The transfer of technology (techniques) under the project is evaluated as having been smoothly conducted as (1) many of the participants in the technology transfer training conducted by the Japanese experts are found to be actively working at the front-line, (2) the testing volume has been maintained at a high level and (3) the Institute has been designated a training facility for medical students.

The main impact of the project is the firm rooting of diagnostic and treatment techniques for cancer of the digestive organs in Chile under the project. The Institute currently acts as a model for the diagnosis, treatment and research of gastroenterological diseases for not only Chile but also for South America.

The Chilean authorities evaluate Japan's cooperation over a period of 18 years as having been a success. The Digestive Organs Cancer Project is evaluated as having reached maturity as the framework for self-reliant development is now in place. What is perceived as a future problem, however, is renewal of the supplied medical equipment. While such renewal may take some time because of funding difficulties, self-help efforts on the Chilean side can be anticipated as the electronic endoscopes have already been renewed through own funding.

The recommendations include (1) the use of the Institute as a model place in Latin America for study visits and visits for the exchange of experiences with neighbouring countries, (2) active exchanges at meetings of medical societies in North America and Latin America, mutual submission of documents published in English, hosting of study meetings on medical cases using the Internet, etc. and sending of video materials to the recipients of medical cooperation as part of the cultural PR activities and (3) continued exchanges between Japan and Chile using the personnel network established so far as the core for such exchanges.

10) Tonga: Project for Road Improvement on Tongatapu Island; Western Samoa: Rural Electrification Project and Project for Development of Rural Telecommunications

Yasunaga Takachiho, a senior researcher of the Sakura Research Institute and an expert on the development of rural infrastructure, was commissioned to evaluate aid projects in South Pacific countries. Tongatapu Island where the capital of Tonga is located is the political and economic centre of Tonga and is endowed with rich tourism resources. However, the lack of sufficient road development formerly had adverse impacts on the transportation of products from primary industries, the main industries on the island, to a port of export and on the promotion of tourism. The implementation of the Road Improvement Project has successfully improved the conditions of local roads. The positive results of the project are verified by such comments by islanders as "The roads on Tongatapu used to be extremely poor with innumerous pot-holes, dust after a dry spell and mud after rain. Taxis did not want to travel long distances because their vehicles could be damaged by the uneven local roads. The project changed all that because of the successful outcome of the project, the Government of Tonga began to make its own efforts to extend road paving."

The Rural Electrification Project was implemented in Western Samoa to develop the distribution network in unelectrified areas in line with the plan to switch the power generation source from imported oil which required precious foreign currency to local hydropower and to build up a sufficient power supply capacity to meet the future demand increase. As a result, the electrification rate in Western Samoa has improved from 75% prior to the project to more than 90%, contributing to improving the lives of local people through their access to not only electric lighting but also to refrigerators and other electrical products. The Project for Development of Rural Telecommunications is also highly evaluated as it has contributed to extension of the telephone network in local areas, improving convenience in local life.

Power cables (upper ones) and telephone cables (lower ones)

The relay is powered by a solar system

(6) Evaluation by Think Tank: Financial Sector in the Philippines

This evaluation was commissioned to the Sanwa Research Institute for the purpose of verifying the degree of contribution by structural adjustment loans made by Japan for the financial sector in the Philippines to solving problems faced by the said sector as well as to the subsequent economic growth of the Philippines. Loans made by Japan for the structural adjustment of the financial sector in the Philippines in the period from 1989 to 1993 were commodity loans totalling US$ 300 million.

The evaluation found that the conditionalities set for these loans were almost fully met by the Philippine side and that positive effects on the financial sector in the Philippines were achieved.

Almost all of the objectives, including the revision of laws and the establishment of an institutional framework, such as guidelines, etc., were successfully achieved in all areas. In addition, the macroeconomic indicators were found to have improved in general, illustrating the significant contribution made by these loans.

From the viewpoint of efficiency, although the release of the last tranche was delayed to await the attainment of the conditionalities, the procurement of equipment and the utilisation of the counterpart funding were conducted in an appropriate manner. The timing of fund disbursement was also appropriate.

The impacts of the project included the achievement of economic growth based on exports as direct production sectors were expanded through the settlement of exports using the loans. At the same time, the credibility of the financial sector as the domestic base to support such economic growth was increased. In other words, the loans contributed to the improved efficiency of those sectors meeting domestic demands in the Philippines through an increased bank balance of deposits and an improved earning rate of banks. However, it will be necessary to include newly emerging problems which originate from the subsequent change of the economic conditions in the scope of monitoring together with the specific conditionalities.

(7) Evaluations of Multilateral Institutions: Asian Institute of Technology in Thailand

This evaluation aimed at studying and analysing the state of activities and operation, etc. of projects conducted by Multilateral Institutions for which Japan has been continually providing assistance for the purpose of recommending the desirable future direction for such organizations.

In January, 1999, a study team was dispatched to the Asian Institute of Technology (AIT) in Thailand to evaluate its activities and the Japanese assistance for the AIT.

The AIT is a graduate school of engineering which was established in 1967 to train and upgrade civil engineers who are essential for economic development. As of 1998, 1,367 students from 37 countries were enrolled, illustrating the AIT's great contribution to not only the production of highly educated engineers but also to human resources development in neighbouring countries. The nationalities of these 1,367 students showed 495 from Thailand, 145 from Vietnam, 96 from Nepal, 81 from China, 64 from Bangladesh and others. It is probably no exaggeration to say that the AIT has grown to become a key graduate school in Southeast Asia.

By the time of the evaluation (1998), a total of 9,110 graduate students from 53 countries had completed post graduate study at the AIT. A follow-up study on graduates conducted in 1986 (the total number of post-graduates up to 1986 was 8,667) found that 89% were pursuing a career in Asia. The breakdown by type of employer showed government bodies and private enterprises with 27% each and educational institutions with 25%. These figures indicate that the prevention of the brain drain outside the region, one of the reasons for the establishment of the AIT, has essentially been achieved and that the AIT has made a great contribution to the economic development of Asia which is seen today. It is an accepted opinion that the strenuous efforts of both the public and private sectors to seek and secure foreign investment and the transfer of new technologies form the background of the reputation of Thailand and several other countries in Asia as economic growth centres of the world. In addition, the high level of ability of local people to absorb and digest capital and technologies from abroad must be pointed out as another factor. In this context, AIT graduates can be highly evaluated as having acted as the receivers for foreign capital and technologies for the economic development of their respective countries, making a major contribution to the development of social infrastructure.

(8) Evaluation by Local Japanese Diplomatic Offices

This evaluation is conducted by Japanese embassy and other types of diplomatic offices in line with the guidelines (Guidelines for Implementation of Evaluation by Overseas Diplomatic Offices), featuring Japan's ODA projects in the countries to which they are posted. Many evaluation studies are conducted every year within the limited evaluation budget of the MoFA and this type of evaluation has proven to be invaluable to identify the social and economic effects of aid projects and the state of management of projects in the post-project period in an efficient manner.

In FY 1998, 71 projects in 46 countries were evaluated in this way. The geographical distribution of these projects was 32 projects (13 countries) in Asia, 7 projects (5 countries) in the Middle East, 10 projects (8 countries) in Africa, 15 projects (12 countries) in Latin America, 6 projects (5 countries) in Oceania. (refer to the list of aid projects in the Appendix for the titles of the individual projects evaluated).

(9) Evaluation by Recipient Country Personnel

Recipient country personnel are also commissioned to conduct the evaluation of Japan's ODA. This practice is designed to provide the opportunity for aid-related personnel in recipient countries of seeing the significance of ODA activities and problems to be solved through the evaluation of ODA projects from the viewpoint of the recipient country and the evaluation findings contribute to the more effective and efficient implementation of Japan's ODA.

In FY 1998, 14 projects in 12 countries were evaluated in this way. The geographical distribution of these projects was five projects (four countries) in Asia, 6 projects (5 country) in Africa, six projects (five countries) in Latin America, 2 projects (2 countries) in Oceania.

(10) Evaluation by Local Consultants

The MoFA commissions consultants in recipient countries who have good experience of the type of required study in their countries to utilise their knowledge of the social, economic and cultural conditions and their information-gathering and analytical capabilities.

In FY 1998, 9 projects in 5 countries were evaluated by local consultants. The evaluation in Guinea involved five grassroots grant aid projects and it was verified that these projects were finely tuned to the actual needs of local people.