Part I

ODA and JICA Programs

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Chapter 1

Topics in JICA Programs

1 Water Issues and International Cooperation

Residents drawing water from a well in Sri Lanka

International Approach for Water Issues

Based on the Third World Water Forum

The Third World Water Forum was held in Osaka, Kyoto, and Shiga for eight days, from March 16 to 23, 2003. There were 24,000 participants, or nearly three times the number originally expected. During the Forum, the United States and United Kingdom attacked Iraq, thus providing the participants with an opportunity to consider water issues within the context of the preciousness of peace.

Water Forum and JICA

The World Water Forum consisted of forum sessions, the Ministerial Conference, and Mizuno-en (water fair event). JICA participated mainly in the forum sessions held at the Kyoto International Conference Hall.

For the forum session titled Poverty and Floods, which JICA co-hosted, a series of regional conferences were held in Bangladesh in September 2002, in Manila in October, and in China and Viet Nam in January 2003, for the purpose of deepening discussion on the theme prior to the session in March.

Ministerial Conference at the World Water Forum

During the Forum, 351 sessions covering 33 themes, such as Water and Poverty and Water for Peace, were held. JICA co-hosted four sessions: Poverty and Floods, Water Development Partners Panel, Sustainable and Efficient Use of Irrigation System & Water and Farmers Participation, and Agriculture, Food and Water in Africa. JICA officials and staff participated as guest speakers or panelists at the Day of Africa and the Day of the Middle East and the Mediterranean. For sessions such as the Gender and Water Panel and Trends and Prospects of International Cooperation in Technologies of Water Supply Systems, JICA senior advisors* and counterparts* invited from overseas gave presentations on JICA's activities, or lectures. Among the many academic research presentations and conceptual panel discussions, these presentations and discussions, which delivered specific hands-on experience in developing countries, were well received by the participants.

In Osaka, a special symposium Water in the World and Japan, co-hosted by JICA, was held. Guests, including actress Misako Konno, a goodwill ambassador for the United Nations Development Programme (UNDP), participated in this symposium and actively exchanged opinions with other participants.

JICA's Basic Policies in the Water Sector

Approximately one-third of the world's population faces water shortages and more than one billion people have no access to safe drinking water. Rapid destruction of the environment and population growth causes water pollution and floods due to abnormal weather are likely to threaten our existence.

Most of the socially vulnerable and the poor in developing countries live in poor environments, such as rural areas, the outskirts of cities, low wetlands, and arid zones. However, these people tend to be neglected.

In order to improve conditions for these people in developing countries, JICA has decided to strengthen capacity-building cooperation as well as conventional cooperation. Utilizing various technical cooperation in the field of water based on the following policies, JICA strives to contribute to poverty mitigation in developing countries.

1. Steady supply of safe water

People living in areas where a steady supply of safe water is unavailable have no choice but to use contaminated groundwater and unhygienic surface water. As a result, many of these people suffer from water-borne infectious diseases, such as cholera and dysentery, and other diseases such as one transmitted by Guinea worms (a kind of parasite) in Africa.

Securing a steady supply of safe water in poor areas is an important task that is directly connected to the lives of the local residents. An immediate solution is required.

JICA will implement various technical cooperation projects that place importance on the socially vulnerable and the poor through studies on water resources, development and management planning, water supply planning, promotion of health and hygiene education, etc.

2. Promotion of comprehensive water management

Since floods, soil overflow, and deforestation that occur at the upper reaches of rivers with large basins have a great impact on the lower reaches, comprehensive control of the whole basin is important. However, in many developing countries, adequate basin control is not carried out for various reasons, including the complexity of water issues, conflicts of interest, lack of adequate control mechanisms, and a shortage of human resources.

There are more than 200 international rivers (including lakes and marshes) in the world, and their basin area size occupies approximately half of the earth's land. In some international rivers, conflicts between basin countries frequently occur to secure water resources. Those conflicts sometimes develop into armed clashes. Thus, it is necessary to draw up proper water management plans and rules on water usage. Accordingly, hydrology and data analysis for making fair rules are urgently required.

JICA assists in compiling the basic data, planning, and institution-building for comprehensive water management, as well as developing organizations and human resources underlying those plans and institutions, giving full consideration to the participation of interested parties and environmental and social conditions. JICA will also implement various technical cooperation projects for the recovery and conservation of forests to cultivate water resources, conserve the soil, and prevent floods in the basin.

3. Environmental conservation through water quality improvement

In many developing countries, drastic economic development and concentration of population in urban areas have increased domestic and industrial wastewater. Deterioration of water quality has becomes a serious problem. This serious problem is not only harmful to residents' health in the area, but also leads to an overabundance of nutrients in lakes and marshes and the destruction of ecosystems. Therefore, improving water quality and promoting the proper use of water according to water circulation in the basin is needed.

JICA contributes to the conservation of the regional environment by strengthening environmental monitoring systems, such as water quality monitoring and legal systems, providing small-scale water treatment technologies, disseminating sewage technologies, and promoting environmental education.

4. Food security through proper water use

Securing food corresponding to population increases is a major issue in developing countries. Steady supply and efficient use of irrigation water for agriculture, which accounts for approximately 70% of water demand, are crucial. On the other hand, inadequate water management aggravates water shortages and soil salinity. There is also the problem of unfair distribution, where poor farmers in developing countries have no access to water for food production.

JICA provides assistance for sustainable water usage and fair distribution of water, with a focus on unification of rice paddies that enable cultivation of field crops in addition to paddy rice. The aim is to end malnutrition and alleviate poverty by increasing food production and promoting participatory water management through nurturing water management organizations, small-scale water resources development at the village level, and development and promotion of low-cost, water saving technologies for water use.

A JICA public relations booth at the Water Forum venue

To collect opinions concerning water from all groups and areas that could not participate in the Forum, the "Water Voice" project was carried out. Approximately 27,000 "water voices" from 150 countries throughout the world assembled. In cooperation with its overseas offices and international centers in Japan, JICA collected opinions at the grass-roots levels and submitted 2,125 "water voices" from 73 countries to the secretariat. This was the second largest number of submissions in the world, and JICA received a commendation as one of the Best Partner Organizations. During the Forum, JICA set up booths for public relations at three locations. Ministers from various countries and numerous groups and individuals interested in collaboration with and support from JICA visited the booths, showing high interest in JICA activities.

Adoption of Ministerial Declaration

Ministerial Conferences were held on the last two days of the Water Forum. The general meetings and sessions invited active opinion exchange based on the preliminary draft of the ministerial declaration prepared at the senior officials' meeting. As a result, on March 23, the last day of the Forum, the Ministerial Declaration: Message from the Lake Biwa and Yodo River Basin was adopted based on the outcomes of a series of discussions. The ministerial declaration consists of 28 items comprising the following six general themes

1) General Policies
2) Safe Drinking Water and Sanitation
3) Water for Food and Rural Development
4) Water Pollution Prevention and Ecosystem Conservation
5) Disaster Mitigation and Risk Management
6) Water Resources Management and Benefits Sharing

The ministerial declaration states that the primary responsibility for water actions lies in each country, and expresses the importance of empowering local governments and communities as well as assistance for water issues by international organizations.

It is notable that due consideration is given to poverty level and gender*as a basic approach throughout the items in the declaration. It demonstrates that the international community has recognized that water benefits or water-related natural disasters have the greatest impact on the poor and women directly, and that good governance* and capacity-building* cannot be realized without considering the socially vulnerable.

The ministerial declaration also places importance on collaboration and coordination among the countries concerned. Especially with regard to basin management in cross-border rivers and securing a supply of safe water in the poorest countries, technical support, cooperation in human resources development, and capacity-building in target countries are called for from the international community.

As for fundraising that is crucial for the maintenance of water management facilities, the declaration expresses the need for a cost recovery approach in line with the actual regional and social conditions. The protection of benefits of the poor and the public benefit from water needs to be considered in recovering costs. Furthermore, it clarifies the importance of using recovered funds in the most efficient and effective way while maintaining transparency. Solutions to this fundraising issue will be more important in the future for securing sustainable water resources in developing countries.


A step pump displayed at the JICA public relations booth

Future Directions

Addressing water issues was given as part of the major agenda at both the Third World Water Forum in Kyoto, Osaka and Shiga in March 2003 and the Summit of the Group of Eight (G8 Summit) in Avian, France, in June. It was discussed at the Third Tokyo International Conference on African Development (TICAD III) held in September. These movements show that expansion of cooperation in water sectors for developing countries will be required in the future and improving quality as well as quantitative expansion should be emphasized.

JICA has implemented various technical cooperation and assistance for solving water issues for developing countries. In the future, we think it is important to contribute to poverty alleviation by solving water issues by working for: 1) further expansion of network by sector and issue in water resources development; and 2) further expansion of cooperation in the water sector bearing JICA's basic policies in mind and based on the outcomes of the forum sessions at the Third World Water Forum and the major points of the Ministerial Declaration. As for the future directions of JICA's operations, we will give due consideration to the socially vulnerable in particular, as stated in the aforementioned Ministerial Declaration.

Study Group on Cooperation in the Water Sector: Response to Water Issues in Developing Countries

Not limited to the issue of safe water supply, various other issues regarding water are emerging, such as water shortages, water quality deterioration, groundwater problems, floods, water problems related to urbanization, and conflicts over water in international rivers. The comprehensive management of water resources has become a task for the international community. Water issues are most serious in developing countries, and food shortages caused by water shortages and outbreaks of infectious diseases due to contaminated water afflict people in developing countries.

Amid worsening water problems, the JICA Study Group on Cooperation in the Water Sector was set up for the purpose of comprehensively re-examining issues in each area in the water sector that were traditionally addressed individually, and providing suggestions on basic aid policies and methods for solving water issues in developing countries.

Prior to launching a full-fledged study group in February 2002, JICA set up a preliminary discussion group in March 2001 to review its experiences and invited experts from outside.

The study group first studied water issues around the world and overviewed Japan's aid implementation results. Then the study group adopted two basic policies in providing future cooperation in the water field: 1) problems related to "too much water" shall be addressed as a primary aid field, since Japan, located in Monsoon Asia, has a lot of experience in this field unlike Western countries; and 2) addressing problems related to "too little water" shall be strengthened as a major donor*. As for sectors and issues whose importance should be addressed as priorities in future cooperation in the water field, the following five suggestions were made, as well as specific cooperation methods, including cross-sector approaches in providing more efficient and effective assistance. The five suggestions are: comprehensive water management in Monsoon Asia; regional environment conservation through measures to stop water quality deterioration; sustainable supply and fair distribution of agricultural water; supply of safe water for arid areas and the poor; and strengthening support of management of international basins.

The report of this study group was completed in November 2002 and distributed to people interested in water issues as a message from JICA at the Third World Water Forum held in Kyoto, Osaka and Shiga in March 2003.

Please see JICA homepage for details of this report (www.jica.go.jp/activities/report/field/2003_01.html).

2 New Threat of Infectious Diseases

JDR expert team providing advice regarding medical treatment and control of SARS patients

Newly Emerging Infectious Diseases

Threat of SARS

Severe Acute Respiratory Syndrome (SARS) broke out suddenly in April 2003 and spread from Hong Kong, Viet Nam, and Guangdong Province in China to other areas of the world, posing a new threat of infectious diseases in the globalized international community.

JICA helped prevent the spread of SARS infection by dispatching Japan Disaster Relief (JDR) expert teams and sending supplies to Viet Nam and China. As a result, the World Health Organization (WHO) announced that Viet Nam contained SARS on April 28. WHO declared that SARS was no longer spreading through mainland China on June 24.

However, the threat of SARS has not disappeared, since there is still a possibility that SARS, believed to be a type of corona virus, would reappear in the winter just like other corona viruses, and that medical facilities would be confused since the initial symptoms of SARS resembles those of influenza. Moreover, it will take at least several years before a vaccine is discovered, tested for safety, and ready for manufacture. The only effective measures at the moment are to prevent the spread of infection by completely isolating patients and infected persons and identifying infection routes.

Importance of Infectious Disease Control

Regarding cooperation for infectious disease control, JICA has implemented various measures in the fight against major infectious diseases, including AIDS, tuberculosis, Malaria, and parasitic diseases, and has provided assistance for vaccinations such as polio and measles in close collaboration with international organizations such as WHO and the United Nations International Children's Fund (UNICEF). In 2000, polio was declared eradicated in the western Pacific region.

However, in the case of AIDS, infection spread to countries where measures had not been taken at the beginning of the epidemic. Five million people around the world are infected by HIV/AIDS every year, three million die from AIDS, and the number of people with HIV/AIDS totals 42 million.

As is obvious from the AIDS situation, infectious disease control becomes even more important in the borderless society of the 21st century, in which the cross-border movement of people and goods becomes more frequent. In addition to providing conventional, steady, and broad cooperation, it is important to establish a system to immediately correspond to the outbreak of infectious diseases like SARS.

SARS Outbreak and Control in Viet Nam

On February 23, 2003, a 47-year-old Asian American male who arrived in Hanoi, Viet Nam, via Shanghai and Hong Kong, developed a severe and acute respiratory syndrome of unknown origin. He was admitted to the French Hospital in Hanoi on February 26. He was transferred as an emergency patient to a hospital in Hong Kong on March 5, but he died on March 12 with the origin of the disease unidentified.

On March 5, medical personnel at the French Hospital were confirmed to have developed the same symptoms as this Asian American man, including high fever, headache, and severe coughing. By March 12, 26 medical personnel and staff members of this hospital were admitted as patients. The hospital suspended all medical examinations on March 11, and isolated the patients admitted to the hospital with causes unknown.

WHO named this disease Severe Acute Respiratory Syndrome (SARS), and for the first time since its founding in 1948 announced a Global Health Alert, which was sent out to the world on March 15.

In response to a request from the Viet Nam government on March 13, Japan decided to dispatch its first expert team of JDR to Hanoi on March 14, 2003. They remained in Viet Nam from March 16 to 25. Subsequently, upon the additional request from the Viet Nam government for cooperation and advice from experts on March 24, the Japanese government decided on the same day to dispatch a second team from March 26 to April 1.

The first team arrived in Hanoi on March 16 as the SARS infection spread. In close collaboration with the Ministry of Health and WHO, the team collected and analyzed information regarding the SARS outbreak, provided advice and guidance on SARS patient treatment policies and infection prevention systems, and supplied equipment for infection prevention at Bach Mai Hospital, where a JICA technical cooperation project was ongoing. The hospital was busy treating infected persons, just like at the French Hospital. The second team also provided advice and guidance on infection prevention systems and provided additional equipment for infection prevention in close cooperation with medical-related organizations in Viet Nam.

During the dispatch of the first and second teams, the census data of the Ministry of Health and WHO confirmed that the increase of infected persons in Viet Nam stopped while SARS was spreading worldwide. On April 28, the Viet Nam Ministry of Health declared that SARS had been contained, and WHO removed Viet Nam from the SARS-infected list on the same day.

This accomplishment is attributed to the prompt dispatch of JDR expert teams and appropriate guidance and advice of team doctors who confronted the mysterious pneumonia of unknown origin. The activities of the teams thus contributed a

SARS Eradication in Viet Nam through Prompt Collaboration

"Japan provided support immediately when we were suffering and in dire need of support. Japan is our true friend. Thank you very much."

Following the 16-day dispatch of JDR expert team (hereinafter called the expert team), when I visited the Viet Nam Ministry of Health to make a final report, everyone involved said this to me. During the dispatch, we carefully washed our hands and mouths, became nervous about people coughing, ran around collecting information, established trust with the WHO teams, and got very little sleep organizing data and making reports. When I heard these words, I realized that our frantic work was over for the time being.

It was March 16 when the fight began against "the mysterious pneumonia," Severe Acute Respiratory Syndrome (SARS), whose infection routes were unidentified and preventive measures and treatment methods were unknown. The attention of the world was drawn to the situation in Iraq. The massive outbreak of atypical pneumonia was first confirmed in Viet Nam on March 5. On March 12, a week later, WHO announced a Global Health Alert for the first time in its history. However, it received little attention due to the aforementioned reason. In this situation, the Japanese government received a request for assistance from the Viet Namese government on March 13, and decided to dispatch the specialist team through JICA the next day. This notable decision was made with a close collaboration between JICA, the Ministry of Foreign Affairs, the Ministry of Health, Labour and Welfare, and the Ministry of Finance, although this is not well known by the public.

For the first time in the history of JICA disaster relief operations, an expert team was dispatched to fight a newly emerging infectious disease. We had no way of determining what kind of activities we would be conducting for this unprecedented dispatch. We collected all possible equipment we thought would be necessary for our activities in one day and left Japan for Hanoi.

The expert team carried out various activities regarding SARS infection prevention for the Viet Nam Ministry of Health in close collaboration with WHO teams, Medecins Sans Frontieres (MSF), the Japanese Embassy, the JICA office, and the Bach Mai Hospital project. The activity plan, which was blank in the beginning, soon became full. Although the activities of a team of three was limited, we tried our best to meet the expectations of the Viet Namese people, assuming the possibility of a SARS outbreak in Japan.

On April 28, Viet Nam announced it had contained SARS. The prompt and accurate response and efforts of the Viet Namese government to halt the massive outbreak of SARS led to this success. Because of the expertise and outstanding teamwork of the Japanese team, as well as the efforts of many related parties who support our activities, we contributed to this success.

(Coordinator of JDR expert team)

great deal to SARS eradication in Viet Nam.

Behind the success of these expert teams lies long-term close collaboration and coordination efforts between JICA and WHO, as well as human resources development in the technical cooperation project for improving hospital infection control at Bach Mai Hospital, which was constructed with Japan's grant aid in 2000.

SARS Control in China

Based on the success in Viet Nam, on May 9, the Japanese government decided to dispatch a JDR expert team to China in response to the request from the Chinese government. Nearly 100 Chinese people were being infected with SARS every day. From May 11 to 16, the team provided advice and guidance for hospital infection control to medical personnel of the Japan-China Friendship Hospital in Beijing, where JICA's technical cooperation was ongoing. The Chinese government, amid the fierce spread of SARS, showed great respect toward the expert team who entered China at the risk of infection, and appreciated Japan's prompt response to the Chinese request and its technical guidance and provision of medical equipment in line with their needs.

SARS, originating from Guangdong Province in China, immediately spread worldwide, causing more than 8,000 reported probable cases and 800 deaths, thus posing a serious threat to the world. There is no way to predict when and where newly emerging diseases like SARS will occur in the future. JICA continues to fight infectious diseases in developing countries in order to prepare for a new threat with three pillars: human resources development through technical cooperation; strengthening collaboration systems with WHO; and dispatch of JDR team in emergencies.

SARS seminars in China

3 Current Support for Social Infrastructure

The Suez Canal Bridge and Egyptian stamps featuring the bridge

Significance of Social Infrastructure

Lack or shortage of social infrastructure* has a profound influence on problems faced by developing countries. As evidenced by the population explosion, population influxes into urban areas, deterioration of urban environments, the impoverishment of rural areas, human and physical damage caused by natural disasters such as floods and earthquakes, and deterioration of living environments caused by armed conflicts, these problems are worsened by inadequate social infrastructure. On the other hand, there are countries such as Singapore and the Republic of Korea that have achieved economic development, called "miracles in East Asia," through the establishment of social infrastructure, and thus graduated from development aid and continue to grow. The establishment of social infrastructure contributes to social and economic development and environmental conservation in developing countries, bringing great benefits from national development to improvement of the quality of people's lives.

Utilizing outcomes of techniques for building social infrastructure and the economic development that Japan promoted to become a developed country through its post-war reconstruction period, Japan has provided development aid in relation to establishing social infrastructure in order to contribute to the development of developing countries.

However, current development aid for infrastructure requires greater attention to the natural and social environments of a country and formulating a participatory project plan.

International trends for aid have recently stressed poverty alleviation. Major aid countries and organizations, including the World Bank, the Asian Development Bank (ADB) and the Japan Bank for International Cooperation (JBIC)*, regard the establishment of social infrastructure as an effective measure for alleviating poverty, and the recognition that aid for social infrastructure is a major component in development programs has been reemphasized.

Therefore, in implementing aid for social infrastructure, we need to address new issues while evaluating its importance.

Results of Aid for Social Infrastructure

The need for building a large-scale social infrastructure that will become a national framework remains high in developing countries. Establishment of a social infrastructure is a crucial factor in supporting the economic development of the country. Below are examples of cooperation in the field of bridge construction and electricity.

Egypt:
The Project for Construction of the Suez Canal Bridge

Egypt has promoted large-scale development in the vast desert area that accounts for most of the country's land. One major project is the Sinai Peninsula Development Plan approved in 1994. This project aims to provide settlements to approximately three million permanent citizens by 2017, by

effectively utilizing potential resources in the Sinai Peninsula and promoting agriculture, mining and manufacturing industries, and tourism development.

An obstacle in promoting this development plan smoothly was the Suez Canal. In order to deal with the increased traffic crossing the canal, the Egyptian government had run ferry services at five locations and constructed a tunnel in the south of the canal. However, because the ferries ran between ships traversing the canal, there has been concern about inefficiency and the risk of accidents. Consequently, the Egyptian government requested the Japanese government to conduct a development study regarding a bridge to cross the canal. Based on the results of the study, which started in 1995, the construction of a bridge began with Japanese grant aid cooperation (11.725 billion yen) in 1997 and was completed in October 2001. Japanese grant aid cooperation was responsible for the central 1,850-meter portion of the 4,000-meter Suez Canal bridge which includes the installation road. Egypt undertook the construction of both ends. The bridge was designed with diagonal bracing that utilized wires to support the bridge girders. The distance from the water surface to the bridge girders measures 70m, which is the highest in the world as a route margin. A commemorative stamp was issued in Egypt upon the completion of this bridge.

This bridge not only stimulated the development of the Sinai Peninsula, but is also a symbol for peace in the Middle East, demonstrating to the world the Egyptian government's resolution to promote peace in the Middle East instead of entering a state of war again.

Laos: Feasibility Study on the Nam Nigiep Hydroelectric Power Project

From 1998 to 2002, a feasibility study was conducted to construct a 260,000kw hydroelectric power plant on the Nigiep River, a tributary of the Mekong River, which runs approximately 100km northeast of Vientiane, the capital city of Laos.

During the study, the Laos government, with support from JICA, made information open to related residents, including people who will be required to move because of the dam construction, and held 12 public hearings in order to incorporate residents' requests into planning. At the public hearings, a questionnaire survey was carried out taking into consideration people who feel uncomfortable speaking out. Moreover, special assistance was provided to illiterate people and gender* experts conducted a hearing survey among females.

Based on the results of these public hearings and other studies, the final plan for the construction of a power plant was drawn up with a smaller reservoir area than the initial plan, including policies for reducing the impact on residents.

A power plant will be constructed based on this final plan and Laos's domestic electrification, which is currently only about 30%, will be improved and foreign currency will be obtained by electricity export, thus contributing to the economic development in Laos.

Approaches to Planning the Social Infrastructure Building

In plans to build social infrastructure, local residents, administrative parties, and project members such as NGOs must participate from the very beginning. Plans incorporating various opinions obtained through interactive dialogue and examined from various aspects are believed to be more effective. It is essential to consider things from the viewpoint of local residents in planning the social infrastructure building. JICA strives actively to incorporate such viewpoints into our planning.

Philippines: Earthquake Impact Reduction Study for Metropolitan Manila

A study for planning disaster prevention in the regional community, as well as for earthquake impact reduction in Metropolitan Manila, is ongoing, starting in August 2003 and scheduled for completion in March 2004.

In planning disaster prevention in the regional community, JICA has developed a system to utilize local human and material resources for disaster prevention after analyzing the community sociologically and anthropologically, and has been examining disaster prevention activities based on self-help and mutual help. Specifically, three Barangaai (the smallest administrative district unit in the Philippines) are selected as model areas in Metropolitan Manila and a disaster prevention plan involves participation of the residents in the areas to fully reflect their opinions. Planning proceeds with the participation and cooperation of NGOs acting closely with the communities and the local residents.

The disaster prevention plan will be examined fully as to whether or not it functions effectively during an actual disaster through emergency drills. The results of the examination will

be utilized in the disaster prevention project in Metropoilitan Manila.

Thailand: Study on Application of Participatory Planning in Rural and Agricultural Development in the Lam Pa Chi River Basin

In the Mae Klong River basin, which spreads from the Myanmar border in western Thailand to the Gulf of Thai, regular Monsoons bring flood damage to farmland and rural areas. In 1997, numerous houses, farm facilities, and farmland were heavily affected. In order to reconstruct the damaged areas and prevent the recurrence of flood damage, various measures need to be taken: establishing a stable agricultural and livestock production system through proper management of natural resources such as water, soil and forests; environmental conservation; establishing and disseminating basic living infrastructure such as water supply in rural areas; and educational activities necessary for the improvement of quality of life and organizing residents to carry out the activities.

Agricultural areas mainly producing field crops, such as sugarcane, in the Lam Pa Chi River basin of the Mae Klong River tributary (2,500km^2) are subject to this study (from 2000 to 2005). Although this study has the ultimate goal of making a master plan (overall plan) with a participatory planning method, this study also served as an opportunity for Thai counterparts* (engineers) to learn the actual study process, including a verification study. They learned and practiced the principle of participatory development*, and through trial-and-error, are pursuing an administrative system to support the solution of regional problems with residents' participation.

The contents are as follows.

1) Collecting social and economic data through a baseline (basic) study
2) Understanding current conditions and the needs of residents through a Rapid Rural Appraisal (RRA) study
3) Formulating a plan under the initiative of residents using the Project Cycle Management (PCM)* Method

At the moment, various stages have been completed, and a development plan for the whole region is being formulated, a verification study regarding the water resources development was implemented, and a master plan reflecting the study results has been refined to be more effective.

Thai counterparts earnestly listening to residents, using the PCM method