## **Chapter 2**

# Respond to Diversifying Needs for Assistance

-Technical Cooperation Projects-

Education project in China

#### **Tailor-made Cooperation Plans**

#### What is a Technical Cooperation Project?

The needs of developing countries exist in various areas as follows: assistance in developing human resources in the agricultural, educational, and medical care fields; establishing a legal system; operation and meintenance of social infrastructure; and post-conflict reconstruction, represented by Afghanistan. Those needs have become more diverse and multi-phased. Developing counties call for prompt response to their requests in order to reconstruct their nations and escape from poverty as fast as possible. Therefore, it is important to plan and implement highly effective cooperation based on the situations and development issues of each country, as well as response to requests from each country more accurately and promptly.

After receiving a request from a developing country, JICA adopts various cooperation approaches (cooperation tools) such as dispatching experts to provide technical cooperation, inviting people from developing countries to Japan for training, and providing necessary equipment. In order to achieve objectives set up to solve the problems of developing countries, JICA determines how to combine these cooperation tools, how long they will be implemented, and how to time them for the most effective and efficient results. The technical cooperation project stands for cooperation implemented according to the plan made through consultations with the recipient country from the aforementioned viewpoint. In technical cooperation projects, cooperation plans are tailor-made to address each problem so that a broad range of needs of developing countries can be met effectively and efficiently.

#### Cooperation with Respect to Ownership

Japan's cooperation is provided based on the concept of

supporting self-help efforts of developing countries. Technical cooperation projects are implemented jointly by personnel from the recipient country and Japan. "Ownership\*" of the project lies strictly with the recipient country, and Japan's status is that of a cooperating partner. Personnel from the recipient country need to exercise ownership in the project. Most technical cooperation projects thus incorporate participatory development\* methods which involve residents of project's target region and community in connection with planning, administration, and evaluation.

If the recipient country is unable to obtain sufficient funds to implement the project, Japan may share local costs\* such as construction costs on research and study facilities and agricultural fields and research expenses. In order to support the self-help efforts of the recipient country, however Japan must request to bear the costs in principle. Once the cooperation period is over, the recipient country is expected to continue the project alone. Scale and implementation plans of a project are drawn up based on forecasts of the capacity of the organization responsible for implementing the project in the recipient country to defray the costs after the cooperation period has concluded.

More effective technical cooperation requires not merely transferring Japan's technology and experiences as they are, but refining them into technology and institutions that are in line with local situations while deepening understanding of each country's culture and society. In promoting cooperation activities, Japan's technology, know-how, and experiences must be the catalyst of a basic approach for technical cooperation by stimulating, enhancing and root-taking potentials of human resources, organizational structure, and potentials of society that are already in existence in developing countries.

## Cooperation with Private Organizations and NGOs in Japan

More projects, such as those in the IT field, benefit from technical know-how and experience accumulated in the private sector. In fiscal 2001, JICA introduced a method of consigning the entire management of a project to a private organization by utilizing human resources and know-how in the private sector. The introduction of this method is expected to bring about a wider range of result-oriented projects.

Furthermore, in fiscal 2002, JICA introduced proposaltype technical cooperation projects, which are formulated based on ideas solicited from NGOs who put their experience to goo use.

#### Planning and Evaluation of Technical Cooperation Projects

In planning a project, the significance and validity of the project is examined as an ex-ante evaluation.

The ex-ante evaluation is performed in terms of five criteria: relevance, effectiveness, efficiency, impact, and sustainability. This evaluation is designed to estimate the outcome of the project as quantitatively and objectively as possible in order to set a clear target. The relationship between the results and the target are illustrated using input and activities in a logical matrix, which is called the project design matrix\* (PDM). All the information that has been prepared and analyzed in the process of the ex-ante evaluation is compiled in a project document (report). Creation of this project document with the government of the recipient country helps boost the ownership of the recipient country and project participation of the personnel as well as improve their planning capabilities.

Technical cooperation projects that will be implemented continuously for more than three years incorporate mid-term evaluations in the middle of the term of cooperation. This evaluation is designed to look at progress and achievements at a middle point of the project, and if the progress does not comply to analysis at the ex-ante evaluation phase or the initial planning phase, the cause will be examined and the plan reviewed in order to ensure the success of the project. A final evaluation is performed before a project ends. The purpose of mid-term and terminal evaluations is to study and analyze the project on the basis of five items—relevance, efficiency, effectiveness, impact, and sustainability—and to determine whether or not the projection before starting the project is correct. As a result of the final evaluation, cooperation projects may be extended for a couple of years if necessary.

#### **Project Results and Activities**

#### Social Development Cooperation

Social development cooperation covers a wide range of technical activities in the following fields: construction, operation and maintenance of social infrastructure (e.g., urban planning, road transport, ports, marine transportation, telecommunication, water supply and drainage); vocational training; school and university education; research; disaster prevention (e.g., earthquakes and floods); labor safety and health (education in prevention of accidents at work); and global issues\* (e.g., the environment, poverty alleviation measures, and welfare of persons with disabilities).

Looking at trends in different areas, projects in education, especially at the elementary and intermediate levels, are being carried out. Behind this trend lies international recognition of the significance of basic education centering on primary education in the World Conference on Education for All held in Jomtien, Thailand, in 1990. As a result, education has become a priority area in Japan's ODA. Especially in the basic educational field, JICA is examining the possibility of extending its cooperation scope to literacy education and non-formal education (out-of-school education), without confining it to education in natural sciences and arithmetic, which has been implemented since earlier times. In order to provide more people with opportunities for education, distance education is also promoted. Human resources development, including vocational training in addition to these educational projects, account for 60% of all our activities.

Another priority area is poverty alleviation. The DAC New Development Strategy\* adopted in 1996 declared a goal of reducing extreme poverty to half of the 1990 level by 2015. This goal was confirmed in the United Nations Millennium Summit in September 2000 as a development goal. In addition, a comprehensive development plan with a focus on alleviating poverty (PRSP: Poverty Reduction Strategy Papers\*) that the World Bank has requested becomes the mainstream plan of international solutions to poverty. Poverty issues have gained more worldwide attention recently.

In 2001, JICA, which had conventionally addressed poverty alleviation as a priority area, set up the Poverty Reduction Task Force to formulate projects with a sustainable mechanism that assures poverty alleviation. Moreover, even in the basic educational field, an issue-specific team was set up to enhance operations to address each field. In March 2003, the International Year of Freshwater, the Third World Water Forum was held in Kyoto. Interest in water has risen more and more recently worldwide. Cooperation regarding water has been provided in the field of social development. Examples of various types of cooperation from a broad range of viewpoints are: training of technicians in the water and drainage field from a viewpoint of establishing the urban infrastructure; construction, maintenance, and management training of flood control facilities from a viewpoint of effective use of water resources, such as river water; construction and maintenance of flood and soil erosion control facilities, and establishment of a regional disaster prevention system from the viewpoint of preventing disasters such as floods.

In the field of social development, 62 technical cooperation projects were implemented in 30 countries in fiscal 2002, 35 projects in Asia, eight in the Middle East, 10 in Africa, seven in Latin America, one in Oceania, and one in Europe.

#### Cooperation in the Field of Health and Medical Care

The health and lives of many people living in developing countries are compromised by poor hygiene conditions, malnutrition, and endemic diseases. The high frequency of infant deaths and stillbirths puts pressure on individuals and family life and also prevents social and economic development. HIV/AIDS, tuberculosis, malaria and other infectious diseases are not just health issues that threaten the lives of people in developing countries. They also have a great impact on families, communities, and countries, resulting in the loss of workers in the prime of their lives and an increase in the number of orphans. Recent advanced globalization prompted frequent international transportation of people and goods across borders, leading to the expansion of newly emerging infectious diseases such as SARS (Severe Acute Respiratory Syndrome) and HIV/AIDS on a global level, thus posing a threat to the whole international society.

The Millennium Development Goals (MDGs)\* adopted at the United Nations General Assembly in September 2000 specify reductions in child mortality, improvement of maternal health, and infectious disease control as some of the development goals of international society in the 21st century. The Japanese government has announced aggressive measures against infectious diseases including global parasitic disease control and the Okinawa Infectious Diseases Initiative. JICA also has been actively providing cooperation in infectious disease control and the health of mothers and children.



Endoscopy performed in the project for Improving Setatirat Hospital in Laos

A wide range of cooperation has been provided in the field of infectious disease control, including vaccination and education to spread necessary knowledge in the prevention of infectious diseases raging in developing countries such as HIV/AIDS, tuberculosis, parasitic and vector-borne diseases, Malaria, and polio. Advanced technology such as virus examination and research is also applied.

As for cooperation regarding the health of mothers and children, JICA is carrying out the Expanded Program on Immunization (EPI) in cooperation with the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO) as well as providing cooperation in promoting the use of maternal and child health hand books and disseminating necessary knowledge regarding family planning and safe childbirth.

Steady efforts are required to raise the standard of health and medical care in developing countries. For example, the health and medical care system represented by hospitals and health centers needs to be improved and medical professionals such as doctors and nurses need to be trained.

In the health and medical care field in fiscal 2002, 49 technical cooperation projects were implemented in 32 countries: 25 projects in Asia, four in the Middle East, 11 in Africa, and nine in Latin America.

#### Agricultural Development Cooperation

The drastic increase of population in the last half of the last century created a chronic shortage of food for several hundred million people on earth, mainly in developing countries. In these countries, the increase in population has continued in this century, while food production has not caught up with the increase. Thus, conditions surrounding the supply and demand of food are expected to deteriorate further in the future. The problems regarding population increase and food shortage have led to over-cultivation, over-grazing, and deforestation, all of which cause serious destruction to the environment, including the exhaustion of water resources and soil. Moreover, income disparities between urban and rural areas caused by delayed rural development led to the concentration of population in urban areas, triggering other environmental problems. In order to realize more affluent living conditions, it is necessary to tackle the difficult challenge of promoting poverty alleviation through comprehensive rural development, including food productivity improvement, while keeping sustainable utilization of the limited resources in mind.

In March 2003, the Third World Water Forum was held in Kyoto. Water is one of the most important resources for all living forms including humans. However, the tightness of water demand is serious, and an effective use of water resources has to be realized immediately in terms of food security and environmental conservation. Japan has accumulated various techniques in the effective use of water such as economization of water consumption and modern agriculture. At the Water Forum, JICA introduced project activities in the field of agriculture under the theme "agriculture and water" and at the same time invited training participants to deliver a message of how important water is to agriculture.

Other efforts in the field of agriculture include development of agricultural and livestock techniques suitable for developing areas (research at universities and laboratories, etc.), training for agricultural disseminators for the purpose of dissemination of techniques, promoting conservation and proper use of agricultural resources. In this way, JICA contributes to food security by increasing food production, correction of regional disparities by improving the income and living standard of farmers, effective use of resources and environmental conservation.

In the agricultural development cooperation field in fiscal 2002,56 technical cooperation projects were implemented in 29 countries: 29 projects in Asia, three in the Middle East, five in Africa, 18 in Latin America, and one in Europe.

### Cooperation in the Field of Natural Environment Conservation

Human beings depend on the many natural resources, which are also fundamental for sustainable development\*. However, the natural environment is being threatened daily on a global scale and conservation of the natural environment



Rice Exhibition for small-scale farmers in Bolivia (Project for the Dissemination of High-Quality Rice Seeds)

and recovery of lost ecosystems are urgent issues to be tackled. JICA regards conservation of the natural environment to be one of the priority issues that need immediate action and works earnestly for the cooperation.

In order to strengthen cooperation directed at natural environment conservation, JICA established the Forestry and Natural Environment Department in January 2000, and expanded its field to wetland conservation, coral reef conservation, and wildlife protection area management, in addition to conventional fields such as extension of afforestation technology, social forestry, aquaculture, and fishery training.

For the conservation of the natural environment, understanding and cooperation of local communities are crucial as well as assistance for the developing country's government. Consequently, JICA strives to establish a system in which local communities take the initiative to work on environmental conservation by encouraging their participation at the stages of identification, formulation and implementation of a project.

Moreover, the information and experience gained up to now in the cooperation of conserving natural environment have been systematically compiled to contribute to formulating future programs, specifically, in examining cooperation policies and strategies and building a database.

Recognizing that cooperation with many other organizations and individuals working in the same field in Japan is important in providing more effective and efficient cooperation for natural environment conservation, JICA holds symposiums and seminars to actively promote opinion exchange and public relations.

In fiscal 2002, cooperation in the field of the natural environment conservation resulted in 39 technical cooperation projects in 28 countries: 18 projects in Asia, three in the Middle East, five in Africa, 11 in Latin America, and two in Oceania.

### Cooperation in Economic, Trade, Industry Development

In the field of economic, trade, and industry development, JICA has provided cooperation concerning industry promotion for the small and medium-scale enterprises that will lead the future economic development, as well as cooperation concerning the development of mineral resources. In the last decade, more projects have been implemented to assist in establishing industrial infrastructure required to promote industrialization, management techniques across industries to improve productivity, environmental conservation along with progress of industrialization, and global issues such as securing energy. In the field of industry promotion cooperation, advanced technology such as Information Technology (IT) has been added to conventional technologies including metal forging and casting. In this trend, JICA has recently been implementing cooperation focused on the following three points.

First, cooperation is directed at industrial promotion with a focus on policy and institution building and the promotion of trade and investment.

With the founding of the World Trade Organization (WTO), international activities represented by Asia-Pacific Economic Conference (APEC) require improvements in institutions and standards based on international rules to promote trade and investment. JICA helps developing countries engaged in industrial promotion make industrial standards, property, and human resources development, and implements projects to strengthen the technical and administrative capacities of organizations in charge of building and implementing these institutions and standards. In fiscal 2002, JICA held workshops in the field of investment targeting African countries jointly with the WTO.

The second type of cooperation is directed at promotion of IT. In line with a comprehensive cooperation package that addresses the international information gap announced at the G8 Kyushu-Okinawa Summit in July 2000, JICA bridges the digital divide\* in its cooperation activities while expanding ongoing cooperation towards the cultivation of IT related human resources and promotion of IT applications.

Finally, JICA takes an active approach to environmental and energy problems. Rapid industrialization promoted by



Measuring instruction for building measurement standards in Thailand

developing countries expands the demand for energy, resulting in global issues related to natural resources and the environment across all developing and developed countries.

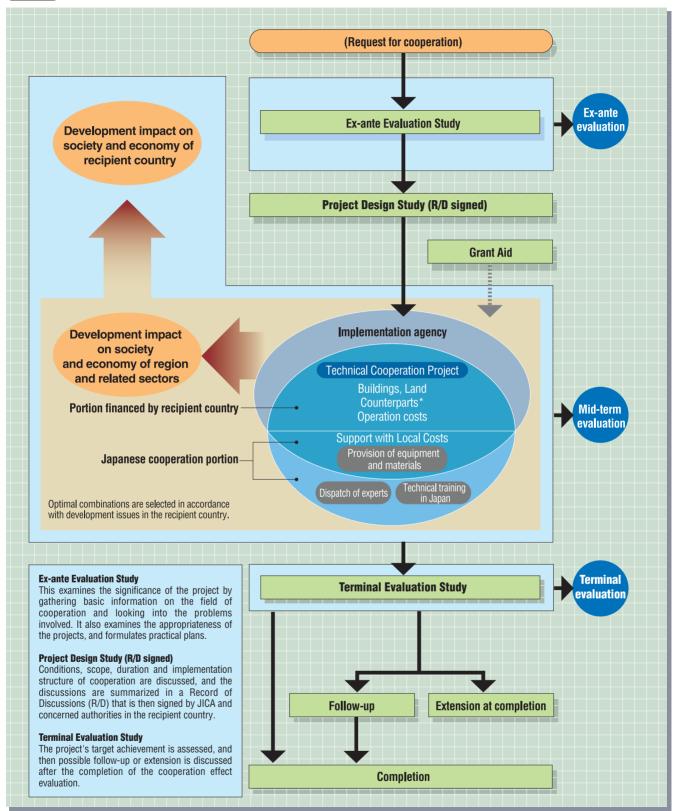
In order to secure stable supplies of electricity in developing countries, JICA supports the establishment of an electric technology standard and power supply technology as well as implementing energy conservation cooperation utilizing Japanese techniques in the effective use of energy, which Japanese industries have accumulated. The fact that JICA takes notice of measures against global warming that have been increasingly adopted by the international community is apparent in the Kyoto Protocol and the United Nations Framework Convention on Climate Change. Recognizing that the advance of global warming will influence developing countries in various aspects, thus obstructing their sustainable developments, JICA has been actively adopting measures against global warming.

In the field of economic trade industry cooperation, using know-how we acquired by the implementation of energy conservation projects, JICA is examining cooperation concerning Clean Development Mechanism (CDM). CDM helps developing countries bring in technical transfer and investment and serves as a mean to reduce greenhouse gas for Japan.

In fiscal 2002, JICA conducted basic studies for identification and formulation of a specific cooperation project, and started dialogs for the capacity building\* which will be the foundation of the sustainable development that suits the mechanism of developing countries, based on our past cooperation results for the developing countries.

In the field of economy, trade and industry for fiscal 2002, 35 technical cooperation projects were implemented in 19 countries: 20 projects in Asia, seven in Middle East and eight in Latin America.

#### Figure 3-2 Flowchart of Technical Cooperation Project



Technical Cooperation Projects