



Part III ●

JICA Programs by Development Issue

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Working to Achieve Millennium Development Goals

Challenges shared by the international community toward achieving human development and the eradication of poverty



A community meeting to operate a water management committee: community empowerment is essential to achieving the MDGs. (Senegal)

What are the Millennium Development Goals?

In September 2000, the United Nations Millennium Summit, the largest-ever gathering of world leaders involving 189 countries took place in New York. The Millennium Declaration, which serves as the goals of the international community for the 21st century, was adopted at this meeting. Based on the declaration, eight millennium development goals (MDGs) were compiled as important goals to be shared by the entire international community in order to address the most urgent issues involved with promoting human development. The MDGs cover several areas, including poverty reduction, education, gender, health, and the environment, and include 18 targets and 48 indicators. As such, the international community employs the MDGs as a framework for measuring development programs and achieving the goals by the deadline of 2015.

In the United Nations General Assembly in September 2005—five years after the Millennium Declaration was adopted—a follow-up summit was held for the mid-term review of the entire declaration including the MDGs. In the summit's outcome document, the international community announced its strong determination to achieve development goals based on ownership of and partnership among individual countries, actively working to contribute to achieving the MDGs in collaboration with the international community.

Figure 3-1 Eight MDGs

- 1 Eradicate extreme poverty and hunger
- 2 Achieve universal primary education
- 3 Promote gender equality and empower women
- 4 Reduce child mortality
- 5 Improve maternal health
- 6 Combat HIV/AIDS, malaria and other diseases
- 7 Ensure environmental sustainability
- 8 Develop a global partnership for development

JICA's Approach to the Millennium Development Goals

Human Security—Achieving the MDGs by Focusing on People

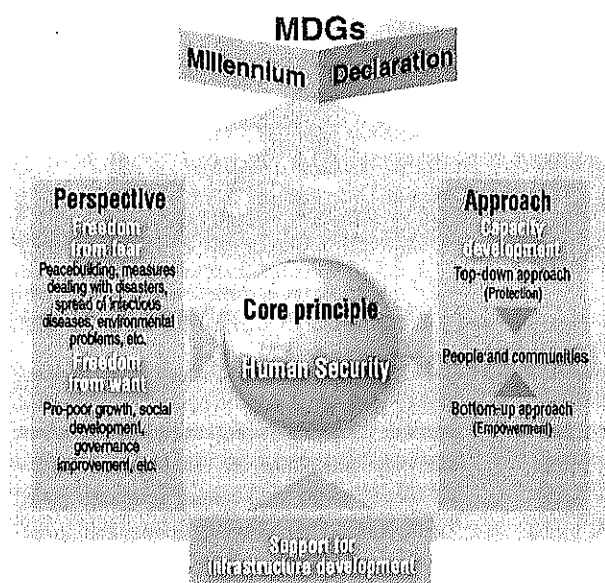
In order to further support developing countries in achieving the MDGs, JICA emphasizes the core principle of “human security” with a focus on people. Under this concept of human security, JICA expects that developing countries' efforts and the outcomes of their achievements in relation to the MDGs will be sustained by means of their ownership through capacity development (developing countries strengthening their own capacity to solve problems in development). With emphasis on the importance of infrastructure as the base to support achievement of the MDGs, JICA strives to contribute to the MDGs by supporting infrastructure development that leads to poverty reduction.

1. Human Security and the MDGs

The MDGs address development and poverty reduction in the objectives of the Millennium Declaration. Other objectives, such as “peace, security, and disarmament,” “human rights, democracy, and good governance,” “protecting the vulnerable,” etc., are closely related to one another, and the outcomes are not sustainable unless they are tackled comprehensively.

JICA understands that human security, which focuses on people and pays attention to whole threats that people face, is vital for realizing the principle of the Millennium Declaration. JICA incorporates the perspective of human security into all the programs in order to improve their quality, and at the same time, from the perspective of human security, comprehensively supports peacebuilding processes including reconstruction, along with

Figure 3-2 JICA's Approach to the MDGs



The MDGs are the specific objectives of the development agenda outlined in the Millennium Declaration. JICA is working toward achieving the MDGs and sustaining the outcomes of this achievement by providing assistance based on the principle of "human security." This principle has two aspects:

- (1) Perspective: addressing the need for not only "freedom from want" but also "freedom from fear."
- (2) Approach: applying both top-down and bottom-up approaches to help developing countries enhance their capacities for dealing with their own problems ("capacity development").

Underpinning these efforts is our cooperation in the area of infrastructure development.

disaster and conflict prevention for the purpose of supporting developing countries in achieving the MDGs.

2. Capacity Development and the MDGs

Japan has gained knowledge and systems from developed countries in the process of modernization and has developed its own society and institutions. Based on such experience, JICA supports human development, organizational strengthening, and institution-building by focusing on the process of capacity development, which empowers people in developing countries to solve their own problems.

By the definition of capacity development, capacity is regarded as the problem-solving ability of a developing country. Capacity is not something that is brought in from outside, but rather something a country develops itself. Donors in support of capacity development are required to be catalysts that indirectly support endogenous processes so that developing countries can develop their own problem-solving capacities, and not just act as providers of technology, equipment, and capital.

JICA supports developing countries in achieving the MDGs by incorporating the perspective of capacity development into its activities so that the outcomes of the achievements can be sustained.

3. Infrastructure Supporting the Achievement of the MDGs

Following World War II, Japan attained economic growth by developing its infrastructure, productive sectors, and industries. Based on this experience, Japan has provided assistance to developing countries, mainly in Asia, with an emphasis on economic and social infrastructure, thereby greatly contributing to their current development. However, it has been revealed that the benefits of infrastructure development do not always reach the people in need and that infrastructure development has occasionally harmed their living situations and natural environments. With this in mind, JICA redefined infrastructure as the basis necessary for achieving the development goals—including poverty reduction, the MDGs, and economic growth—and eventually realizing the potential of the people (Study report: A New Dimension of Infrastructure, JICA, 2004).

JICA is focusing more on people than it has in the past based on the "human security" concept, and is striving to contribute to achieving the MDGs by assisting in infrastructure development that will provide the basis for people's livelihood, support the economic growth of the nation and regions, and help reduce poverty.

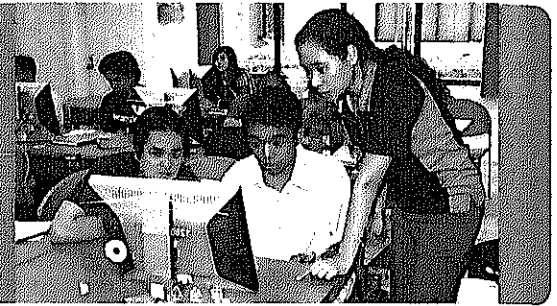
Table 3-3 Proportion of MDGs-related Fields in JICA Projects

MDGs-related fields	Portion of total operating cost (fiscal 2004)
Poverty reduction (Goal 1)	27%
Basic education (Goal 2)	4%
Gender equality (Goal 3)	9%
Maternal and child health, reproductive health (Goals 4 and 5)	4%
Infectious disease control (Goal 6)	16%
Environment (Goal 7)	17%
Finance, trading, vocational training, information communication (Goal 8)	13%

Note: Some projects are counted more than once in the summation because they encompass several goals. See Figure 3-1 for Goals 1 to 8

Social Development

Governance/ICT/Transportation, Urban and Regional Development/Peacebuilding, Reconstruction Assistance/Japan Center



Staff member, who has received training in the Information Technology Human Resource Development Project, giving guidance to students (University of the Philippines Information Technology Training Center)

Overview of the Social Development Field

In many developing countries, basic systems and the framework of society, such as administrative systems and basic infrastructure, are underdeveloped or incomplete. This hinders development in these countries. Capacity development is what forms the core of JICA's activities, and JICA provides cooperation in social development that aims for the capacity development of society.

Establishment of appropriate social systems and framework, formulation of proper regional development plans, and social net-

work development (transport and traffic infrastructure, information communications, etc.) are important to develop the capacity of society while maintaining adequate governance. In recent years, demand has grown for cooperation in the field of post-conflict or post-disaster reconstruction and peacebuilding, and it is necessary to improve facilities, systems, and networks comprehensively by viewing society in a cross-cutting manner.

In this section, overview, priority issues, and activities for each social development field are introduced.

Governance

Overview

Since the 1990s governance has been a focus of attention as something that can have an impact on the effectiveness of development assistance. JICA believes that governance should be pursued so that the entire system for inputting, distributing, and managing resources in a country efficiently while reflecting the opinions of the public can be built and operated for national stability and development. Governance in developing countries is an important condition for determining the effectiveness of economic assistance and JICA is thus committed to contributing to economic development by giving good impact on the entire system of developing countries while supporting governance through technical cooperation.

JICA's Efforts

JICA places importance on efforts of the government of the partner country to improve governance and promote the progress and institution of democratization with their ownership and initiative. To that end, JICA takes two approaches—one for offering options and one for thinking together—in assisting the partner country with selecting, building, and operating systems themselves while providing information and having a dialogue in support of an endogenous process of reformation. JICA's specific roles are as follows.

- 1) To provide options for institution-building and evoke a change in awareness of governmental organizations and the people involved
- 2) To support the creation of new systems or institutions
- 3) To support the development of measures and methods to operate the systems or institutions, organizational improvement, and human development

Specifically JICA's assistance in the governance field covers the following three categories: building democratic systems, improving administrative functions, and development of legal systems.

Building Democratic Systems

Support for building democratic systems focuses not on building systems and institutions closely related to political values, but on nurturing awareness of issues among the people involved and promoting changes in their awareness by introducing systems and institutions of various countries, including Japan, and showing options. One example is the Seminar on Democracy and Good Governance in Palestine.

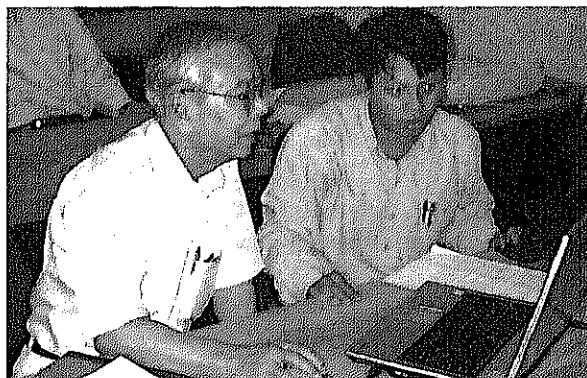
Improving Administrative Functions

Support for improving administrative functions focuses on contributing to improved administrative functions, the promotion of balanced decentralization of power, and promoting citizens' participation and improving transparency. In support of contributing to improved administrative functions, assistance for improving statistics capacity of the government is being implemented in Cambodia. In support of contributing to promoting balanced decentralization, Regional Development Policies for Local Government and Human Resources Development for Local Governance are being implemented in Indonesia. In support of contributing to promotion of citizens' participation and improvement of transparency, capacity building of auditors is being implemented in Thailand.

Development of Legal Systems

Support for legal systems focuses on developing basic laws,

including civil law and commercial law to promote the transition to a market economy or establish the rule of law. For example, support for the drafting and enactment of legislation and nurturing the legal profession (judges, prosecutors, lawyers) are provided in Viet Nam and Cambodia.



Expert giving instructions on how to create tables and graphs to government staff in charge of official statistics (Improving Official Statistics in Cambodia)

Improving Official Statistics in Cambodia

CASE STUDY

Due to the long civil war, official statistics in Cambodia were underdeveloped. Although progress has been gradually made since the 1990s, the accuracy of official statistics still remains an obstacle when formulating development policies. Thus, organizational enhancement and human resources development in the area of statistics are issues of importance.

In *Improving Official Statistics in Cambodia*, JICA provides training in official statistics for the personnel in charge of statistics operations in various governmental ministries, including the Statistics Agency, as well as local governments. This training helps them gain necessary knowledge and skills as specialists in statistics and offers various courses from the basics of official statistics to statistical

design, implementation, collection, counting, analysis, disclosure, and use of results. Participants can select courses that will benefit their respective jobs. The purpose is to develop personnel who will play a leading role in formulating official statistics so that the government of Cambodia can provide statistics with higher quality.

In the course about creating tables and graphs (necessary for official publications of statistical survey results) 30 participants receive practical training after a lecture, creating tables and graphs using personal computers. When doing so, JICA experts give personal instructions in cooperation with the counterparts and run the course while confirming whether the participants have acquired the necessary competencies.

Front Line Pakistan

Improvement of Public Administration for Local Governments in Punjab

Support Town-building in Collaboration between Citizens and Administration

System for development in line with local needs

Citizens' needs in their daily lives, such as education and medical care, have yet to be fulfilled in Pakistan. Meanwhile, the Citizen Community Board (CCB) system was introduced based on the Local Government Law enacted in 2001. Under this scheme, if a group of 25 or more citizens develops a development project in line with local needs and is prepared to bear more than 20% of the costs, the development budget of the government bears the rest of the costs.

JICA is implementing the Improvement of Public Administration for Local Governments in Punjab to make sure that this scheme is managed effectively. In the Hafizabad district, Punjab, JICA has compiled an improvement plan for CCB system management based on the results of a survey on issues both of local residents and the district government, and is trying out the plan using the CCB support center as a base, which was set up jointly with the district government.

Emphasis on utilization and development of local human resources

The center is equipped with various types of staff who provide information about the CCB system in an easy-to-understand way and support citizens and administration in working together as players for development. In particular, CCB coordinators who act as liaisons between citizens and the government, who had no dialogue previously, in order to build trusting relationship between them, are selected only from natives of Hafizabad, and Japanese experts and intellectuals provide technical guidance for them.

It is about six months since the training for CCB coordinators began and things have progressed to a point where a female CCB coordinator wearing a traditional head scarf called a dopatta could question a stern-faced chief of the district government, saying "Even though a project plan was sub-

mitted from the citizens according to the designated format, nothing has been heard from responsible personnel of the district government. What is going on?" The development project plan in which this woman is in charge is expected to be approved soon as the first CCB project implemented with the support of the Improvement of Public Administration for Local Governments in Punjab.

(JICA Pakistan Office)



Female CCB coordinator explaining the CCB system to village people while being observed by JICA experts and study team members (Iran)

Gender Support

From the viewpoint of reviewing social and economic structures, systems, and policies as the source of gender disparity, JICA provides gender support. In Afghanistan where many years of conflict have ended, JICA is implementing support for the economic empowerment of women through community development

with the counterpart, the Ministry of Women's Affairs. In Cambodia, JICA is assisting staff members of the Ministry of Women with various skills from data collection and analysis in gender statistics to policy making, implementation, and evaluation.

ICT (Information and Communication Technology)

Overview

ICT and Socioeconomic Development

Information and communication technology (ICT) is applied in various fields such as administration, education, and medical care, contributing to the improvement of socioeconomic development. However these benefits are not available to many people in developing countries, generating a digital divide. To bridge this digital divide utilizing ICT to improve economic growth and social services in developing countries have become development issues.

Prior to the Kyushu-Okinawa Summit in July 2000, the Japanese government announced a comprehensive cooperation package to address the international digital divide. IT Strategy Headquarters was installed in the Cabinet Office and e-Japan strategy was formulated in 2001. The strategy specifies promotion of cooperation in the ICT fields for foreign countries mainly in Asia and cooperation to bridge digital divide for developing countries as the international policy.

Important Points in Implementing Cooperation

There are some points to keep in mind in the implementation of cooperation in this sector. First, since the major players in the ICT sector are in the private sector, division of roles with ODA must be clarified. Second, due to the fast speed of progress of ICT, cooperation must be implemented flexibly so that the initial expected outcomes are not obsolete at the end of cooperation. Third, computers and software need to be updated every few years, so the necessary fiscal measures for maintenance and oper-

ation in the partner country must be checked before making equipment and material plans.

JICA's Efforts

JICA's Development Strategies

JICA identified five development strategy goals according to the comprehensive cooperation package on digital divide announced by Japan.

The first goal is capacity building in the area of ICT policy formulation. JICA dispatches advisors for making national ICT strategies, telecommunication policy, ICT industry development policy, policies to alleviate domestic disparities, etc.



Students from both ethnic groups learning with IT teaching equipment provided by Japan (Bosnia and Herzegovina)

Informatics Curriculum Modernization at the Grammar School Mostar in Bosnia and Herzegovina

CASE STUDY

It has been 10 years since the peace accords were signed in Bosnia and Herzegovina. However, school systems, curriculum, and textbooks differ among the ethnic groups of Muslims (Bosniaks), Croats, and Serbians, showing how the remnants of civil war remain in education.

Thanks to the encouragement of the international community, an attempt at ethnic reconciliation in education began and in September 2004, both Croats and Muslims, who had, in the past, fought fiercely with each other, started to study together in Grammar School Mostar (regular high school). However, they still study in different classrooms using different curricula.

Under such circumstances, in October 2004, the government of Japan provided teaching equipment to be installed in an IT laboratory of Grammar School Mostar with grassroots human security grant aid on the condition that both ethnic groups use the equipment together. When JICA

supported extra-curricular lessons using this laboratory, a clay animation drew much attention from the students of both ethnic groups, resulting in production of a school introduction video film by teachers and students from both ethnic groups.

At the same time, in response to the decision of the government of Bosnia and Herzegovina to introduce a common core curriculum that integrates educational contents, starting with materials that would not stir up ethnic tensions, JICA supports the development of the curriculum for regular and extra-curricular lessons in the course of information studies common to both ethnic groups.

It is expected that through such cooperation the course of information studies in Bosnia and Herzegovina will be improved and at the same time students of both ethnicities can attend same classes, contributing to ethnic reconciliation.

The second is human resources development in the ICT sector. To spread ICT to all the citizens, JICA cooperates in training technicians, policymakers, etc. Cooperation is provided in different ways: a human development project for the purpose of improving capacity of ministries and agencies, training centers and universities; construction of facilities and provision of equipment; and inviting human resources to Japan for training. Senior volunteers and JOCVs are dispatched to polytechnic and vocational training schools. Human resource development is provided to a wide range of people and has gained importance in technical cooperation in the ICT sector.

The third is development of a communications infrastructure. In order to develop the backbone communication network and the rural communication infrastructure, JICA assists in the formulation of a master plan of the communication network, cooperates with implementation of priority projects, and supports strengthening the maintenance and operation system.

The fourth is improvement of efficiency and benefits through ICT use in various sectors. JICA supports e-government in administration, e-learning in education, e-health in medical care, e-commerce as well as the introduction of ICT in various sectors such as statistics, map-making, and weather observation, leading to improvement of efficiency, effectiveness, and service.

The fifth* is the use of ICT to improve aid efficiency and effectiveness. The JICA-Net (distance technical cooperation) program corresponds to this.

JICA continues to implement various cooperation to connect ICT to effective social and economic development by selecting appropriate ICT in line with the actual situation of a country and region while considering the initiative of the partner country.

In December 2003 the thematic guidelines in the ICT sector were formulated to utilize for project formulation, etc., and regional cooperation policies are planned to be formulated grad-

ually in the future.

* The comprehensive cooperation package of the Japanese government consists of four goals. The fourth goal, the promotion of ICT use in assistance, is divided into the fourth goal, improvement of efficiency and benefits through the utilization of ICT in various sectors, and the fifth goal, use of ICT to improve aid efficiency and effectiveness, in the development strategy goals of JICA's cooperation.

JICA-Net

The JICA-Net program, which aims for the use of ICT to improve aid efficiency and effectiveness, consists of (1) distance lectures and seminars, (2) multimedia contents, (3) web-based training (WBT) that allows self-study using the Internet, and (4) video conferencing.

Since the JICA-Net program started in 2002, effectiveness of distance technical cooperation has been increasingly recognized and utilization enhanced in combination with the expansion of overseas satellite centers and accumulation of the developed contents. The contents that have been developed so far include "The Lessons from Livelihood Improvement Experiences in Postwar Japan," which raises the efficiency of technical cooperation by presenting Japan's experiences in an easy-to-understand manner, and "Remote Sensing and GIS Course," which can replace the conventional type of face-to-face training.

JICA will continue to promote the use of JICA-Net in the field of various cooperation: specifically, (1) JICA will actively incorporate distance technical cooperation into planning of a project such as the Japan Center; (2) JICA will further promote collaboration with outside organizations including mutual use with the World Bank's GDLN (Global Development Learning Network), joint hosting of distance seminars, and joint development of contents; and (3) JICA will utilize JICA-Net in public participatory projects, where students in Japan are connected to interact with students in a school overseas through a JICA-Net satellite center.

Transportation, Urban and Regional Development

Overview

To support sustainable development and growth in developing countries, it is essential to develop economic and social infrastructure in urban and rural areas where people gather and live as well as transportation infrastructure that serves to transport goods and people who live there.

JICA actively promotes residents' participation and collaboration with NGOs, etc., to develop infrastructure that takes into consideration "for what and for whom," focusing on the users and peripheral residents and not just targeting infrastructure development alone.

Transportation

The purpose of cooperation in the field of transportation is to contribute to income generation and better living conditions, as well as to promote economic stimulation through the efficient transportation of people and goods. The demand for improved transportation infrastructure, such as roads, railways, ports, and airports, remains substantial throughout developing countries and the rest of the world. The need for maintenance, management, repair and modernization of aging facilities is expected to increase

rapidly.

However, development of a transportation infrastructure has the potential to cause environmental problems and it is therefore necessary to consider the impact on natural environment and social development and countermeasures to deal with problems.

In addition, transportation infrastructure development requires a substantial amount of funds and securing financial resources for that is a big issue. It is difficult to develop all the necessary infrastructure with limited public funds. It is becoming increasingly important, therefore, to consider securing various financial resources, for example, introducing private funds, in providing transportation services expected by users sustainably and efficiently.

Urban and Regional Development

In developing countries, urbanization is progressing due to population growth and influx from rural areas. While the progress of urbanization has had positive impacts in terms of economic development and efficient urban management, it leads to problems unique to urban areas such as deterioration of the urban living environment, heavy traffic, deterioration of public security,

emergence of slums (a group of houses where people with low incomes live in a poor environment). Furthermore, urban fringe areas and rural areas face various problems such as the decline of regional economies and lack of public services.

These problems which occur in urban and rural areas are an inter-affected complex of various phenomena and solving these problems one by one has limitations. It is therefore necessary to consider specific urban or rural areas spatially and take a comprehensive approach in addressing development issues in a medium- and long-term perspective.

JICA's Efforts

Through development in the transportation sector and urban and regional development in developing countries and regions, JICA increases the reliability and safety of people's living situations and promotes smoother transportation and development of sustainable urban and rural living environments, thus contributing to economic growth and improvements in living standards.

Transportation infrastructure is defined as infrastructure contributing to the well being of people. In addition to conventional cooperation targeting hardware such as roads, JICA is implementing a wide range of technical cooperation such as (1) assistance for the development of basic capacity to improve administrative capacity, (2) assistance responding to globalization and regionalization to facilitate international movement of people and goods and to promote development of regional economic sphere, and (3) assistance to ensure a fair movement of people responding to sustainable development and improvement of living standards in urban areas. Furthermore, in order to improve the living standard in rural areas, JICA provides cooperation to upgrade the



A road in Mozambique, which Japan plans to repair (The Study on Upgrading of Nampla-Cuamba Road in Mozambique)

transportation infrastructure to the minimum necessary level.

In the field of urban and regional development, in order to facilitate economic and social development focusing on the people living in urban and rural areas, JICA formulates urban development master plans and integrated development plans and implements technical cooperation related to these activities.

Formulation of urban development master plans and regional development plans includes analysis of issues and tasks facing urban and regional areas, creating medium- and long-term visions, formulation of development policies, sector-specific plans, and recommendations of concrete action plans to realize them. The formulation of these plans creates mutual consistency among a group of projects and clarifies inter-relationships and priority

The World Reaffirms the Significance of Infrastructure Assistance

Infrastructure assistance for poverty reduction

For a long time, Japan has rendered assistance for infrastructure aiming for the economic growth of developing countries. In particular, records of infrastructure assistance in Asia are numerous and the results are evident in the growth of the Asian economy. However, when looking at it globally, the amount of infrastructure assistance has declined since the latter half of the 1980's; instead, assistance related to social development directly targeting the poverty group has become the mainstream.

Nonetheless, the concept of poverty reduction through economic growth has been reaffirmed in recent years, and infrastructure assistance for economic growth has regained momentum. The United Nations, the World Bank, the Organisation for Economic Co-operation and Development (OECD) also advocate the importance of infrastructure assistance, and call for its implementation.

Growing assistance for Africa

What has gained impetus along with infrastructure assistance is assistance for Africa. Major donors in succession have laid down policies of assistance for Africa and pledged increases in aid. Japan also announced that it would double its ODA to Africa in the next three years. When it comes to assistance for Africa, the international community emphasizes the NEPAD (the New Partnership for Africa's Development), which was established by the initia-

tive of African governments in 2001. In July 2005, Japan also established the NEPAD steering committee, chaired by the Ministry of Foreign Affairs, which undertakes the formulation and implementation of NEPAD infrastructure projects with the participation of JICA, the Japan Bank for International Cooperation (JBIC), and the Japan External Trade Organization (JETRO).

In October 2005, the Infrastructure Consortium for Africa (CIA) was launched by G8 member countries, forming an international framework to discuss infrastructure assistance for Africa. JICA promotes the sharing of information and coordinated implementation among donors through economic analysis on infrastructure needs and project implementation in African countries and building a database of infrastructure projects conducted by those donors.

Expectations for Japan

The international community and African countries have high expectations for Japan in the field of infrastructure assistance. Japan takes pride in its infrastructure assistance and desires to make use of its experience in Africa. In 2008, Japan will host the fourth International Conference on Africa's Development (TICAD IV) and G8 Summit, and thus expectations for the role of Japan in infrastructure assistance for Africa are likely to grow more in the future.

orders of those projects. Thus, effective and efficient implementation of plans will be possible. JICA's technical cooperation in urban areas includes support for formulation of urban plans,

strengthening of human resources capacity to improve living environment, and improvement of geographic information system to promote effective urban development.

Peacebuilding and Reconstruction Assistance

Overview

Japan's Medium-term Policy on ODA defines the objectives of peacebuilding as to prevent occurrence and recurrence of conflicts, alleviate various difficulties people face during and immediately after conflicts, and achieve stable development for a long time subsequently. What is needed is assistance in accordance with the stage; for example, prevention of occurrence and recurrence of conflicts, post-conflict rehabilitation and reconstruction, and medium- and long-term development. In particular, post-conflict assistance needs to achieve effects that can be observed in a short period of time with speed and flexibility and which brings peace of mind to the people under unstable circumstances in which the government does not fully function.

JICA's Efforts

Based on the perspective of human security, JICA has implemented peacebuilding assistance incorporating the following viewpoints: (1) medium- and long-term development assistance, (2) consistency in assistance, (3) speedy and effective assistance, (4) combination of assistance for the government and local communities, (5) consideration for the socially vulnerable, (6) assistance taking into account neighboring countries, and (7) assistance to prevent occurrence and recurrence of conflicts. JICA also promotes assistance with an emphasis on partnership and coordination with international organizations and others.

Japan Center

Japan Center was envisaged as the base to support human development responding to the transition to market economies in East and Central Asia and the Indochina area. It also serves as a place for exchange and mutual understanding between people of the partner country and Japan. The Japan Center not only cooperates in the economic field but also aims to be a center wide open to the general public by introducing each country's society and culture, as well as providing Japanese language courses.

JICA launched Japan Center projects in September 2000. At the moment 10 centers in nine countries are in place and operating (Hanoi and Ho Chi Minh in Viet Nam, Laos, Cambodia, Myanmar, Mongolia, Kazakhstan, Uzbekistan, Kyrgyzstan, and Ukraine). Though activities differ depending on the situation of each country, business program, mutual understanding promotion program, and Japanese language courses are the core of the basic activities at all centers.

In these countries, it is an urgent matter to foster human resources in the private sector to support the real economy and the

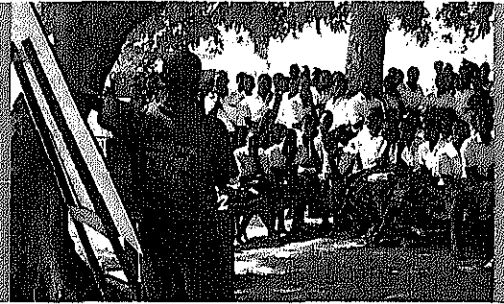
For example, in Sri Lanka, which has experienced more than 20 years of civil war between Tamil militant groups and the government, since 2004 JICA has been working on community development and basic infrastructure improvement involving residents' groups, in Mannar district in the Northeast Province, which is on the frontline of the civil war, in order to support resettlement of more than 40,000 refugees and internally displaced persons. JICA also conducts emergency relief activities and reconstruction assistance in Northeast Province and South Province, where the Indian Ocean Tsunami unleashed massive destruction. As for reconstruction assistance, JICA undertakes formulation of a plan for the construction of Japan-Sri Lanka Friendship Village of the Japanese government, and capacity building of residents' groups, incorporating the concept of self-help, mutual help, and public help. This scheme is designed to help them stand up against dual hardships, poverty from long lasting civil war and natural disaster, and to promote reconciliation among conflicting ethnic groups. JICA aims to rapidly improve living standards through development of infrastructure and increase in income, and to empower people through reconstruction and strengthening of the divided community, while providing opportunities for dialogue and collaboration between opposing groups of Tamils and Muslims, and creating a momentum for coexistence and reconciliation.

business program is expected to offer necessary knowledge and know-how for such human development. Lectures and case studies regarding the Japanese style of management, and practical contents including the diagnosis of factories, have been praised greatly and as a result, there has been a case where former students formed "Kaizen Association" to spread the Japanese style of management by themselves to a wide area.

In the mutual understanding promotion program, provision of information on current situations and education for foreign students in Japan, etc., exchange of opinions from students of both countries are conducted through various events and the Internet services. The Japanese language course, which offers up to an advanced class, leads to broad opportunities for jobs and studying in Japan. These activities are carried out in linkage with one another and it is expected that human resources developed on the basis of Japan Center will cultivate a network that is meaningful for the future of each country and Japan.

Human Development

Basic Education/Higher Education, Technical Education and Training/Health/Social Security



Children learning about infectious diseases in a health education class in an open-air classroom (Guinea Worm Eradication in Ghana)

Overview of the Human Development Field

In the human development field, JICA provides technical cooperation in three sectors: (1) education (basic education, higher education, technical education and training), (2) social security (social insurance and welfare, support for persons with disabilities, labor and employment), and (3) health (infectious disease control, maternal and child health, health systems, human resource development for health). These are all fundamental and important issues in human life closely related to the concept of human security. They are also related to five* of the eight Millennium Development Goals (MDGs) that were adopted by the UN as being important for the future prosperity of humankind.

In the basic education area, JICA is working to increase the enrollment rate of students by encouraging community participation, and also to increase quality by improving teachers, education, textbooks, etc. In the educational administration area, JICA cooperates in the formulation of education development plans. In the non-formal education area, literacy education, which is important from the perspective of human security, is also supported.

Higher education and technical education and training are essential for economic development, and JICA supports human development at universities and research centers to respond to the needs of the industrial world. From the perspective of peace-

building, programs related to social reintegration of ex-combatants are implemented as well.

In the social security sector, JICA provides cooperation for welfare enhancement to protect the socially vulnerable, medical and vocational rehabilitation for persons with disabilities, and occupational safety.

In the health sector, JICA implements projects related to infectious disease control such as avian influenza, SARS, HIV/AIDS, malaria and maternal and child health to protect the health of women and children. In addition, JICA provides cooperation for improving vulnerable health administration systems in developing countries and developing human resources for health.

Through these activities, JICA aims to secure the existence, livelihood, and dignity of humankind within the meaning of human security in developing countries in the human development field.

* The MDGs related to human development are (1) achieve universal primary education, (2) promote gender equality and empowerment of women (elimination of gender disparity in education), (3) reduce child mortality, (4) improve maternal health, and (5) combat HIV/AIDS, malaria and other diseases. (The other three goals are to eradicate extreme poverty and hunger, ensure environmental sustainability, and develop a global partnership for development.)

Basic Education

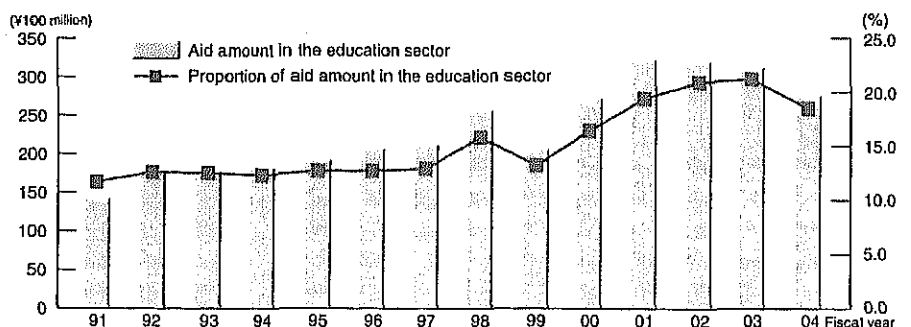
Overview

Even in the 21st century there are about 800 million illiterate adults worldwide and the number of children who do not attend school stands at about 100 million (55% of whom are girls). Under such circumstances, the World Education Forum was held in Dakar, the capital of Senegal, in 2000. Delegates from 181 countries, international organizations, and NGOs participated in the forum, which reconfirmed the importance of basic education* and adopted the Dakar Framework for Action. The framework set up goals such as ensuring access to primary education of all children by 2015 and eliminating gender disparities in primary and secondary education by 2005. Two of the eight MDGs announced in the UN General Assembly in 2000 are related

to basic education, and various activities are implemented in respective countries to achieve these global common goals.

In line with such international trends, Japan's ODA policy prioritizes support for basic education. In the Basic Education for Growth Initiative (BEGIN) announced by Prime Minister Koizumi at the G8 Kananaskis Summit in 2002, the Japanese gov-

Figure 3-4 Performance of JICA's Cooperation in the Education Sector



Source: "Global Issue 2004" JICA Planning Group, Planning and Coordination Department

ernment clarified its emphasis on support for basic education based on the recognition that investment in education is an effective measure for poverty reduction and economic growth.

The actual amount and share of JICA's entire cooperation for education at the beginning of the 1990s was about ¥15 billion annually (about 12% of JICA's operation); however, it has now increased to about ¥30 billion annually, which accounts for about 20% (Figure 3-4).

* Basic education is defined as educating activities enabling individuals to acquire the knowledge and skills required to live in society. Specifically, pre-primary, primary, lower secondary education and non-formal education are collectively called basic education.

JICA's Efforts

Under the basic policy of providing cooperation in line with the needs of partner countries, JICA has identified the following five points as priority areas for cooperation in basic education.

- 1) Increase of enrollment in primary and secondary education
- 2) Improvement of the quality of primary and secondary education
- 3) Reducing gender disparities
- 4) Promotion of non-formal education
- 5) Improvement of education management

Increase of enrollment in primary and secondary education

Activities for quantitatively expanding primary and secondary education include building schools and facilities, and improving the educational environment surrounding children inside and outside of school.

There are various reasons why children are not enrolled: for example, parents cannot afford to pay the tuition; children have to work so they cannot go to school even when they have access to school. One of the more notable reasons is that children cannot learn sufficiently even if they go to school because of a shortage of teachers. To raise the enrollment rate, it is necessary to not only construct schools but also to develop an environment inside and outside of school under which children can go to school.

For these reasons, in order to increase the understanding of parents and communities, efforts are made such as an awareness

campaign, a school management committee, school construction and improvement by community participation, teaching material development, and teacher development. For example, a project in Niger called School for All is working on expanding educational opportunities and improving the educational environment by training principals, teachers, parents and community members, who all constitute a school management committee, and improving capacity of local education administrators.

In developing countries where gender disparities in education are significant, emphasis is placed on improving education for girls as well.

Improvement of the quality of primary and secondary education

In developing countries, there are not a few classes focused on rote memory, and the demand for classes that boost children's interest and understanding is becoming more intense. In response to these needs, JICA has been working to enhance teacher quality by improving both pre- and in-service teacher training, improving teaching methods, and developing and disseminating textbooks and teaching materials. Japan's science and mathematics education is of particularly high interest to the developing world and since the middle of the 1990s, JICA has implemented projects for training pre- and in-service teachers as well as developing teaching methods, textbooks, and teachers' manuals. As in Strengthening Child-centered Approach in Myanmar Education,



Teacher and students at a target school in School for All project (Niger)

Improvement of School Management through Community Participation (commonly known as School for All) Project in Niger

CASE STUDY

Niger is one of the poorest countries in sub-Saharan Africa. The total enrollment rate for primary education is the lowest in the world, and regional and gender disparities are significant, too. The factors that contribute to the low enrollment rate are considered to be the absolute lack of schools and the community's and parents' mistrust of schools. For the former factor, Niger government constructed schools jointly with many donors, including the World Bank, and Japan also supports it with grant aid.

For the latter factor, the Niger government is promoting the establishment of a school management committee (COGES) consisting of six members: the principal, a teachers' representative, PTA representative, and a mothers'

association representative. This is an effort to eliminate community mistrust in schools and change the recognition of schools by having the community participate in school management.

However, COGES are not functioning sufficiently in many schools. In response, JICA is demonstrating an operation model for COGES in this project. JICA also conducts educational activities to raise interest in education and training for local education administrators, principals, teachers and local residents with the aim of promoting capacity development (enhancement of skills to deal with development issues by developing countries themselves) for local education administrators.

cooperation to improve teaching methods in subjects other than science and mathematics has been provided. In addition, in Africa and Central America, regionwide cooperation in which the outcomes of teacher training projects in Kenya (Strengthening of Mathematics and Science in Secondary Education, Phase 2) and Honduras (The Improvement of Teaching Method in Mathematics, Phase 2) are spread to other countries in the region has been started.

Recently, cooperation in the integrated areas between education and health such as infant care, early childhood development (ECD), and school health has also begun.

Promotion of non-formal education

Education needs are too large to be accommodated by school education alone. Cooperation for non-formal education that is defined as organized educational activities outside the school education system is very important from the viewpoints of satisfying basic learning needs and realizing human security that ensures the existence, livelihood, and dignity of humankind and assures the freedom to act for oneself. Non-formal education is widely intended for people from adults to children and specific activities include promotion of literacy programs and life skills* acquisition programs.

Non-formal education excels in diversity, flexibility, and readiness, and contributes to various fields such as health, natural environment conservation, peacebuilding, and livelihood generation, in addition to education. JICA has been strengthening activities in this field recently, and projects have been imple-

mented in countries such as Pakistan, Nepal, and Afghanistan.

* Life skills is a collective term for various types of know-how and skills necessary for life; for example, social life skills such as decision-making, problem-solving, critical thinking and effective communications and simple vocational training, environmental education, health and hygienic education and infectious disease control such as HIV/AIDS, in addition to literacy and numeracy. (Study Report: Approaches for Systematic Planning of Development Projects by JICA 2002).

Improvement of education management

Education management, including education administration and finance, formulation of education plans, decentralization, and school management, is an issue common to all educational stages. Improvement in this area is crucial for the self-sustaining development of education. For education development, it is critical to formulate education development plans that reflect local needs, secure education budget, ensure an effective use of the budget, and establish education statistics. In addition, at the school level, securing an adequate school budget, promoting student enrollment, and improving teaching skills by providing teacher training are the keys to improving the quality and quantity of education.

Establishing a cooperative relationship with communities is also an important factor for improving education. It has come to our attention that if the community participates in school management through discussions and collaborative activities and their interests in schools increase, parents are more likely to send their children to school, resulting in improved working situations for teachers and a positive impact on their teaching.

Higher Education, Technical Education and Training

Overview

In many developing countries, opportunities to receive quality education and training tend to be limited. Consequently, opportunities to gain sufficient earnings are limited and human resources are not effectively utilized. The fact that human resources that lead industries are not developed has become a major bottleneck to industrial promotion and development.

In addition, in response to globalization, which has promoted transition to knowledge intensive economies and progress of information communications, the role of higher education that cultivates core human resources and provides and spreads knowledge has been growing recently.

Today, as basic education is being expanded worldwide, providing basic education graduates with more options is our next task. In order to ensure their social participation and lead to further economic development, JICA considers response to education and training after basic education to be important.

JICA's Efforts

Higher Education

In today's global society, which is called the society of knowledge economy, higher education institutions are strongly required to collect, create, diffuse, and use knowledge and information. In developing countries as well, the role that should be played by higher education institutions has become greater to cultivate human resources that will lead nation-building, improve the intel-

lectual level of the entire society, and meet the expectations of society, such as contributing to regional development.

In response to these changes in roles, JICA's policy of supporting higher education is changing. JICA's cooperation has been conventionally focused on installing and expanding faculties and departments in the technical, engineering, and science fields that are considered directly beneficial to industrial promotion and technical development. However in recent years, JICA's cooperation has been extended to support higher education administration, social science education, and management of universities. JICA is also making efforts to improve the research capabilities of graduate schools and research centers, strengthen collaboration with the industry, promote regional integration by utilizing intra-region network connecting universities, provide distance and regionwide education, and expand support for students coming from surrounding countries. From the global and long-term perspective, flexible cooperation activities meeting the needs and the situations of the partner countries are provided.

The ASEAN University Network/Southeast Asia Engineering Education Development Network (AUN/SEED-Net) currently implemented in Southeast Asia aims to 1) establish an education and research cooperation network with the participation of 19 universities from 10 ASEAN member countries and 11 Japanese universities; and 2) improve the education and research capabilities in the engineering field of participating universities in cooperation with the Japanese universities. The education and research net-

work including the Japanese universities established in a common educational area is expected to be the foundation for improving the education and research capabilities even after JICA's cooperation project is completed. The regional study abroad programs and research networks not only lead to improvements in educational standards of regional universities as part of South-South cooperation but also are important for the integration of ASEAN.

Technical Education and Training

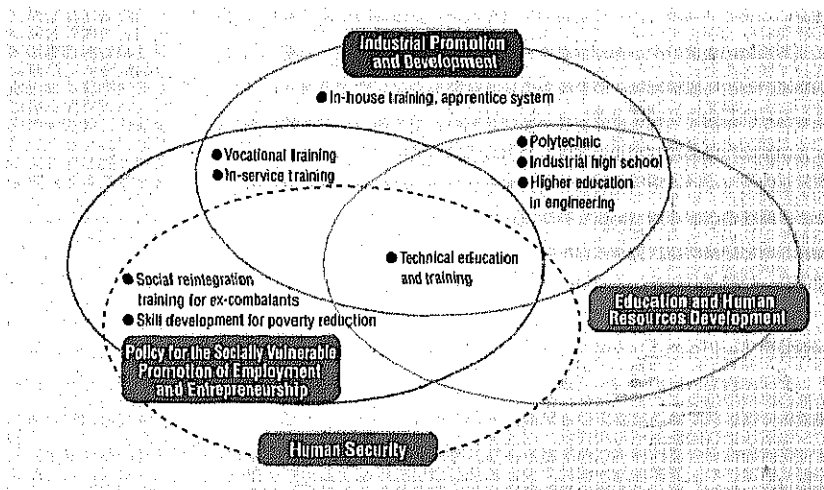
Human resources demanded by society differ depending on the state of development in each country. In ASEAN and countries in South America, with economic development by investment of foreign capital in the background, cultivating human resources to meet the needs of industry is needed. In contrast, in sub-Saharan Africa, Southwest Asia, and post-conflict countries, industries are undeveloped and employment in large enterprises is not much expected. Therefore, it is necessary to cultivate human resources that can work in small businesses or start-up businesses based on the concept of acquiring practical basic skills, thus addressing poverty reduction and improvement of livelihood. Especially in post-conflict countries, ex-combatants who have just been demobilized are given technical training to promote social reintegration.

In order to develop industrial human resources, it is necessary to provide appropriate education and training in line with the needs of the industry by effectively coordi-

nating with the industry. For example, in Ecuador, where human development in the engineering sector is necessary for economic development, JICA is implementing a project to foster trainers at Ecuadorian Occupational Training Service (SECAP) so that vocational training courses in line with the needs of local companies can be provided.

It is also necessary to make efforts to spread the outcomes of past cooperation projects to other countries and regions. In Uganda, up-grading training is provided to Ugandan vocational instructor and those from neighboring eastern African countries at the Nakawa Vocational Training Institute, where JICA provided support from 1997 to 2004 to spread the outcome of the project to surrounding areas.

Figure 3-5 Conceptual Diagram of issues in the Higher Education, Technical Education and Training Fields



Health

Overview

While people's health conditions have improved and average life spans have been extended in many countries throughout the world, many people's health conditions remain unimproved or have deteriorated in some areas in developing countries. The MDGs adopted at the UN General Assembly in September 2000 specified a reduction of child mortality, improvement of maternal health, combating infectious diseases, etc. as development goals for the international community of the 21st century. In order to achieve the MDGs, in June 2005, the Japanese government announced the Health and Development Initiative so that individuals and regional societies can protect their own health. It declares that Japan will continue to provide comprehensive support for capacity enhancement of developing countries and indicates Japan's policy to expand further its contribution to the health sector.

Under the initiative, JICA aims at achieving the MDGs through various projects, including infectious disease control, such as HIV/AIDS, improvement of reproductive health, improvement of health administration, and development of human resources for health.

Infectious Disease Control

The spread of emerging infectious diseases such as avian influenza has become a worldwide concern. Nevertheless, HIV/AIDS, re-emerging infectious diseases such as tuberculosis and malaria, and parasitic diseases remain threats to the people's health in developing countries. While prompt countermeasures against emerging diseases are called for, the spread of HIV/AIDS in sub-Saharan Africa has escalated further.

JICA is pushing forward various projects in harmony with



A JOCV conducting a promotional activity in rural communities by singing Ndima'ukonda, a promotional song for HIV/AIDS prevention in the local language (Malawi)

international aid trends against infectious diseases so that developing countries can proactively decrease threats of infection. Specifically, JICA provides cooperation for the promotion of influenza control by establishing laboratory systems in Viet Nam, infection prevention mainly in Africa, disseminating counselling, testing and care for HIV/AIDS control, tuberculosis control, malaria control, and parasite control to develop human resources and strengthen public systems involved in those health activities.

Maternal and Child Health, Reproductive Health

In developing countries, the health problems of women and children are still serious. In the world, more than 500,000 women die during pregnancy or childbirth every year. It is one of the primary issues related to women's causes of death. More than 10 million children die of preventable diseases before their fifth birthdays.

Under such circumstances, based on the MDGs, JICA is proactively committed to providing cooperation to improve the health of women and children. Specifically, projects for improving reproductive health such as maternal care are implemented in Myanmar and Syria. Also, projects for strengthening health services and expanded program on immunization (EPI) for the purpose of improving the health of children, are carried out in Laos and Oceanic countries.

Health System Development and Reconstruction

In order to strengthen maternal and child health and infectious disease control programs in a sustainable manner, it is necessary to improve the entire health system; including development of administration and institutions, service providing facilities, optimization of drug supply, as well as ensuring financial resources.

In recent years, many developing countries are experiencing institutional rapid changes such as decentralization and expansion of health insurance, which potentially have a significant impact on the access and quality of health services. JICA provides assistance in line with such trends.

In fiscal 2005, the Study on Evidence-based Management for the Health System in Sri Lanka (development study) commenced. JICA provides support for the realization of the plan focusing on hospital management, chronic non-communicable disease control, which were selected from the national health development master plan that was developed with JICA's support in Sri Lanka

On the other hand, as conflicts occur in many parts of the world, prompt restoration of health systems are called for as an emergency measure after the resolution of conflicts in most cases. In that term, JICA provides support to Afghanistan and Iraq.

Human Resources Development for Health

People involved in health are the key to functional health systems and provision of necessary services. In many developing countries there are problems with insufficient numbers of health professionals and the inadequate quality of services provided. In response, JICA is implementing cooperation to develop health professionals in line with the situation of each country. In fiscal 2005, JICA started new cooperation projects in Laos, Viet Nam, Mozambique and Saudi Arabia.

Nurses, who make up a large portion of health professionals, are important actors in primary health care. JICA has compiled policies and points to remember in working on nurse training into thematic guidelines for nursing education. The guidelines are available on the JICA website.

The Project for Capacity Development for National Institute of Hygiene and Epidemiology to Control Emerging and Re-emerging Infectious Diseases in Viet Nam (Avian Influenza Control)

CASE STUDY

The avian influenza H5N1 virus that has been spreading widely in recent years has been proven to be highly pathogenic based on the fact that an enormous number of infected birds die. Although the virus does not spread to humans unless the humans are in close contacts with birds, there is concern that the H5N1 virus may mutate and become a new influenza virus strong enough to spread from human to human while remaining pathogenic, and thus result in a pandemic similar to Spanish influenza in the past.

Viet Nam suffered the most serious damage from the avian influenza with a death toll of over 40, and preparing for

the emergence of a new type of influenza is an urgent task. For this purpose, the Vietnamese government requested Japan to provide cooperation for the construction of a laboratory at bio safety level 3 (BSL-3) that is necessary for discovering early and addressing promptly a mutated virus. Since there are currently no public BSL-3 laboratories in Viet Nam, JICA will first implement a technical cooperation project to improve the testing capabilities, establish a system to conduct the test safely, and improve the laboratory management skills before constructing a laboratory with grant aid.

Social Security

Overview

The economic crisis that affected Southeast Asian countries from July 1997 through 1998 had a substantial impact on the living situations of citizens in the region, as well as on the economy. As a result, the immaturity of the social security systems, which protect the socially vulnerable groups and form the medium- and long-term foundation that prevent people from dropping into the vulnerable group, was exposed in those countries, and the

necessity for expanding those systems was reconfirmed.

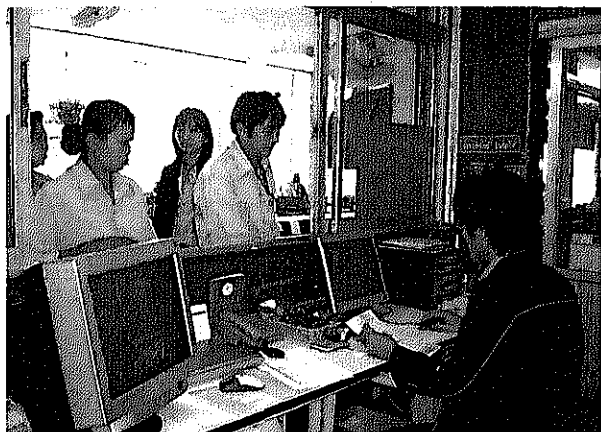
JICA provides cooperation in the following sectors based on the experience and knowledge of Japan related to the development of social security systems.

JICA's Efforts

Social Insurance and Social Welfare

This sector encompasses, medical security and pension pro-

grams, which usually are provided in a form of social insurance, and social welfare measures for elderly persons, children, etc. It also includes protection of the socially vulnerable, such as delinquent youth and ex-combatants. Specifically, projects for the development of the medical security information system in Thailand, improvement of the rural pension system in China (see p.42), strengthening the elderly welfare policy in Chile, and social rehabilitation support for street children in Mexico City, are being implemented.



Patients registering in the medical security plan at a local hospital: beneficiaries are entitled to basic medical care at 30 baht per visit in the plan (Thailand)

Support for Persons with Disabilities

Although welfare for persons with disabilities is usually included in social welfare, JICA does not regard persons with disabilities only as the beneficiaries of welfare services, but rather emphasizes support that assists them in living in local communities with non-disabled persons and proactively taking part in social activities as actors in development. Specifically, this field can be divided into sectors such as medical rehabilitation, vocational rehabilitation, community-based rehabilitation (CBR), education for disabled persons and children, development of disabled leaders, development and strengthening of disabled persons' organizations, support for independent life, and promotion of barrier-free societies. Cooperation is being implemented in countries such as Thailand, Malaysia, Indonesia, China, Egypt, Syria, Rwanda, Bosnia and Herzegovina, and Chile.

Labor and Employment

JICA implements cooperation for policy-making and institution-building in a wide-ranging sector covering labor policy, employment policy, employment service, labor standards, occupational safety and health, labor relations, as well as labor insurance such as unemployment insurance and worker's accident compensation insurance. In relation to occupational safety and health, JICA is implementing projects to support the establishment of a center to develop related human resources in ASEAN countries.

Front Line Syria

Community Based Rehabilitation Project

Address Issues of Persons with Disabilities in Communities

Launch of cooperation that incorporates the CBR concept

JICA's cooperation in Syria for persons with disabilities had been conducted mainly at rehabilitation facilities and schools for the disabled. However, in line with the given cooperation period, this leads to limited number of beneficiaries. In reality, most persons with disabilities stay home isolated from the communities. In response, in 2003, JICA started a pilot project introducing the concept of community based rehabilitation (CBR) so that persons with disabilities can obtain the same opportunities for education and employment as non-disabled persons to participate in society.

Through the dispatch of experts and JOCVs to villages, in order to change the mentality of the communities towards persons with disabilities and promote their social participation, JICA has cooperated in creating opportunities where persons with disabilities can engage in activities with non-disabled persons in coordination with various local groups and facilities including the youth and

women's associations, schools, village offices, and health centers. JICA also provides technical support necessary for the vitalization of community activities as well as training villagers, including persons with disabilities, as CBR volunteers.

JOCVs stay in villages to make house calls, provide technical support in hand-crafting to female groups of the village and assist in recreational activities and basic education by opening local schools up to the public. Persons with disabilities who stepped out of their own homes for the first time through CBR activities say, "I now have hope for life." CBR activities have been creating many 'first time' opportunities.

From small villages to change in the national consciousness

Three years have passed since the project started. The Syrian government now recognizes the value of the CBR approach, and decided to organize national CBR committees in various fields and establish a five-year action plan

at the national level. This marks a big outcome where activities in small villages moved the government. Because CBR is still a new approach, JICA is expected to provide instruction and advice at a national level and technical support to government officials as well as logistical support and skill dissemination in communities in order to support the initiative by the Syrian side.

Individual mind sets are the key to the realization of a community without discrimination. JICA will support to sustain the creation of many 'first time' opportunities.

(JICA Syria Office)



Training course to train CBR volunteers

Global Environment

Nature Conservation/Environmental Management
(Pollution Control)/Water, Disaster Prevention



Soil erosion control training for rural residents (The Integrated Community Forestry Development Project in Senegal)

Overview of the Global Environment Field

Trends in Environmental Cooperation

At the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992, the seriousness of environmental issues was widely recognized throughout the world. The agenda 21 was adopted as guidelines for an approach to global environmental issues, and achievement of sustainable development was determined as a common global goal. The United Nations General Assembly Special Session (UNGASS) was held in June 1997, five years later, and the Millennium Development Goals (MDGs) adopted at the UN Millennium Summit, which was held subsequently in September 2000, advocated "to ensure environmental sustainability."

In the disaster prevention area, under the basic policy that societies resistant to disasters bring about sustainable economic growth, the Yokohama Strategy was formulated at the World Conference on Disaster Reduction held in 1994. In January 2005 the Second World Conference on Disaster Reduction was held in Kobe to sum up the ten-year activities, including the Yokohama Strategy, and create a new strategy.

In Japan, environmental issues in developing countries are recognized as important issues that have a serious impact not only on the developing countries concerned but also on international communities, and environmental measures through ODA have conventionally been emphasized. At the UNCED the Japanese government announced the expansion and enforcement of its environmental ODA from ¥900 billion to ¥1 trillion within five years starting in 1992, and subsequently announced the Kyoto Initiative (assisting developing countries in combating global warming) at the third Conference of the Parties to the United Nations Framework Convention on Climate Change (COP3) in December 1997. Also the Medium-term Plan on ODA issued in August 1999 specifies environmental conservation as one of the primary issues, and refers to the proactive promotion of the Kyoto Initiative and more consideration for the environment when implementing assistance.

In September 2002, the Japanese government announced the

Environmental Conservation Initiative for Sustainable Development (EcoISD) at the World Summit on Sustainable Development in Johannesburg, designating (1) efforts to address global warming; (2) pollution control; (3) fresh water issues; and (4) conservation of natural environment as priority areas. As for the disaster prevention area, at the Second World Conference on Disaster Reduction in January 2005 the Japanese government announced its commitment to cooperation in disaster prevention suitable to stages such as disaster prevention, emergency relief, and subsequent rehabilitation and reconstruction assistance. Utilization of excellent disaster prevention techniques cultivated through Japan's past experience in disasters was expressed here as well.

JICA's Response

JICA has realized concrete plans in the environment field based on these basic principles and action plans. However, its past efforts took various forms of aid and crossed over several sectors.

JICA established the Global Environment Department on April 1, 2004, to build a system that allows consistent effective and efficient operation, from identification of issues to formulation and implementation of a project, in order to address complicated problems in developing countries. In addition, the Guidelines for Environmental and Social Considerations targeting all the projects were formulated and implemented in fiscal 2004.

Recently, biodiversity conservation, desertification control, and global warming prevention measures, acid rain control, preventive measure for earthquakes, and other disasters, have become major issues. To address these complicated environmental issues, JICA extensively implements cooperation for global environment problems based on a conventional approach consisting of (1) nature conservation; (2) environmental management (pollution control); and (3) water, disaster prevention. At the same time, JICA accumulates know-how in the global environmental conservation field to develop and implement effective aid methods.

Nature Conservation

Overview

Human societies have developed thanks to a wide variety of blessings from nature, including forests, lakes, marshes and the ocean. However, in recent years, the natural environment has rapidly deteriorated due to excessive utilization of natural

resources, threatening the foundations of existence for future generations. Such degradation, combined with poverty and starvation, could lead to serious social problems such as regional conflicts. Therefore, there is an increasing need for developing a more appropriate relationship between human beings and nature, which

leads to a society living in harmony with the environment.

JICA's Efforts

JICA considers nature conservation as an important area of international cooperation. JICA has actively provided assistance in line with its goal to achieve harmony between nature and human activities. To accomplish this goal, it is important to understand nature scientifically and empirically (understand), to develop technical expertise and a resource utilization system for preventing environmental degradation (protect) and to establish sustainable use by society (use).

JICA provides a broad range of assistance for developing countries in enhancing research and study capabilities; raising community awareness; improving policies and institutions; developing appropriate technologies; enhancing managerial capacity of institutions engaged in environmental conservation; developing communities that exist in harmony with the environment; and other diverse cooperation.

JICA places special importance on activities to promote understanding and participation of stakeholders, including the residents. Conservation of the natural environment is not attainable by the government alone, but understanding and proactive par-

ticipation in activities for conservation by the stakeholders including the residents are essential. JICA aims to improve administrative capacities as well as promote participation of communities in order to establish a system to conserve the regional natural environment in cooperation with the stakeholders.

Three Priorities

In order to work on conservation of the natural environment in a strategic way, JICA provides cooperation by identifying three priorities (Figure 3-6 and Figure 3-7).

The first priority is sustainable use of natural resources. In the regions where the people overuse natural resources for their living, thereby deteriorating the natural environment, JICA provides cooperation with the aim of improving the incomes and living situations of residents and conserving the natural environment.

In these regions, people rely on natural resources for their livelihood. Therefore, sustainable use of natural resources, which offer livelihood sustenance, is essential to protect the life of the people, instead of using them up. JICA provides support to enhance people's capacity to manage natural resources and to establish a system to appropriately manage the natural resources so that the people can protect and use their own resources con-

Figure 3-6 Concept of JICA's Cooperation in Nature Conservation

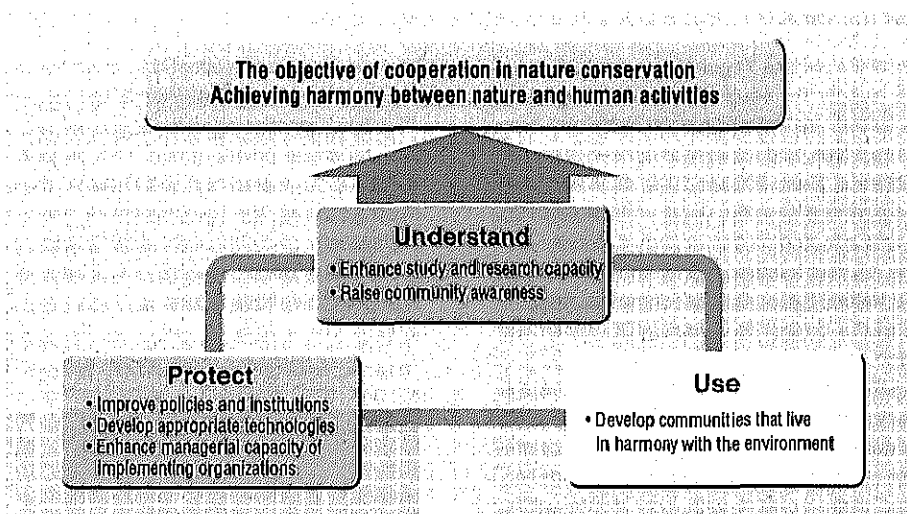


Figure 3-7 Three Priorities and Major Activities

- (1) **Sustainable use of natural resources**
 - Sustainable use of natural resources by communities: support for improving livelihoods of residents, support for strengthening the management capacity of natural resources
 - Sustainable forestry management: survey on forestry resources, support for formulating forestry management plans
- (2) **Biodiversity conservation**
 - Development of data on nature, development of management system of reserves, environmental education, support for creation of alternative sources of income such as ecotourism, measures for waste and contaminated water treatment
- (3) **Rehabilitation of degraded land**
 - Survey of current conditions and causes of degraded land, support for formulating land use plans, development and dissemination of rehabilitation technologies

tinuously. Additionally, in order to enable developing countries to sustainably use natural resources such as forests in a planned manner, JICA supports studies on forest resources and formulating forest management plans, in an attempt to ensure compatibility between the improvement of forest management capacity and forest conservation. In recent years, JICA's cooperation has paid attention to the function of forests in fixing carbon dioxide.

The second priority is biodiversity conservation. In regions endowed with rich biodiversity and where the value of nature is left intact for posterity, collection of data on the natural environment (to accurately understand the current conditions), development of management system of reserves, environmental education, measures for waste and contaminated water treatment, and support for livelihood that does not adversely affect nature (such as ecotourism) are implemented. All these activities are designed for the conservation of valuable nature and improving the income of the people living in the environment.

The third priority is rehabilitation of degraded land. In regions where the destruction of the natural environment has been accelerated by excessive grazing, cultivation, and logging, soil erosion, desertification, and other problems emerge, imposing difficulties on people's lives. In these regions, JICA provides support for the development of appropriate restoration technologies

and maintenance and management system in an effort to restore the natural environment, which is the basis of livelihood for the people.



Mangrove afforestation by a residents' group (The Study on Integrated Mangrove Management through Community Participation in the Ayeyawady Delta in Myanmar)

The Sustainable Watershed Management Project in the Upper Area of the Sabana Yegua Dam in the Dominican Republic

CASE STUDY

In the vicinity of the Sabana Yegua Dam, which provides the major water supply for southern part of Dominican Republic, native forests are lost because of slash-and-burn cultivation and forest fires, and watershed conservation has become a critical issue. From 2000 to 2002, JICA formulated a forest management plan in the upper watershed of the dam. This plan was adopted as the country's priority program. Under the 15-year contract term, the Ministry for Environment and Natural Resources has commissioned the implementation of the project to a local NGO called Sur Futuro Foundation.

For three years starting in 2006, JICA supports this foundation, offering cooperation to promote watershed management activities by the local residents and strengthening the project management capacity of the foundation. While maintaining close contact with local communities, JICA supports the introduction of simple irrigation agriculture and agroforestry* in the mountainous areas. JICA has made a deal to the effect that local residents will discontinue slash-and-burn cultivation and instead plant trees, in an attempt to establish a framework which allows both the improvement of livelihood and the restoration of forests. It is also planned that the foundation will collect and manage some of the proceeds from irrigation agriculture to secure funding for expanding their activities. It is our aim that local people will, by their own initiative, protect forests and

improve their own livelihood through these activities.

In order to utilize the know-how of the private sector, JICA has commissioned the implementation of this project to a Japanese private group. This project, which works to conserve the watershed and improve the livelihood of the people through the involvement of various organizations, such as administration, a local NGO, and a Japanese private group, is a good example of JICA's cooperation that responds to various issues.

* A method of land-use that cultivates various crops and stock-breeding, while growing various types of trees



President Leonel Fernandez (center) attends the signing ceremony for the launch of the project, indicating high expectations towards the project.

Environmental Management (Pollution Control)

Overview

It is becoming apparent that air and water pollution and the problem of solid waste disposal resulting from globalization and

growth in developing countries is having a deleterious effect on health and living conditions. There is now a strong sense of crisis about cross-border environmental problems, such as global

warming and acid rain, resulting in multilateral treaties related to the environment that are ratified by many developing countries. Developing countries have promoted solutions to these problems at their own initiative by setting up environmental ministries or similar bodies and updating relevant legislation. However, environmental problems are a relatively new area and they have not been addressed satisfactorily for lack of expertise, personnel, and financial resources. Taking action after global ecosystems and people's health have already been damaged would be too late. Efforts in line with the international framework based on prevention principles are therefore necessary.

JICA's Efforts

In response to the announcement of Our Common Future by the World Commission on Environment and Development in 1987 and the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992, JICA has strengthened its response to environmental management (pollution control). Environmental issues are widespread, involving many factors and people, so these problems cannot be solved in a short period of time. Therefore, JICA is implementing cooperation projects that aim to improve the capacity for dealing with the environment (capacity development) so that the people in developing countries and related organizations can solve the problems on their own in a sustainable way. The focus is placed on graduated cooperation suitable for the development situations of

partner countries, various types of participation in development, and the development of effective environmental management capacities based on environmental science and technology. In cooperation for environmental centers that serve the base of environmental analysis and human development in each county, South-South cooperation to support neighboring countries is implemented to spread the effects of cooperation efficiently and promote cross-border support for environmental issues.

JICA's specific measures are as follows.

- 1) **Support for environmental centers:** JICA indirectly provides assistance through environmental centers and similar facilities, helping developing countries disseminate the necessary expertise for environmental analysis and measures on a nationwide scale.
- 2) **Air pollution countermeasures:** JICA provides support to strengthen environmental-monitoring capacity and countermeasures planning capacity.
- 3) **Water pollution countermeasures:** JICA provides support for measures to prevent the pollution of rivers, lakes, and seas.
- 4) **Solid waste disposal:** JICA provides support for measures related to the collection, transport, disposal, and 3Rs (reduce, reuse, recycle) of general and industrial waste.
- 5) **Global warming:** JICA supports building a foundation for global warming control systems, including designated national authorities (DNA)*1 and other relevant bodies that will play a pivotal role in fighting global warming.

The Project for Regional Environmental Management Improvement in the Arab Republic of Egypt

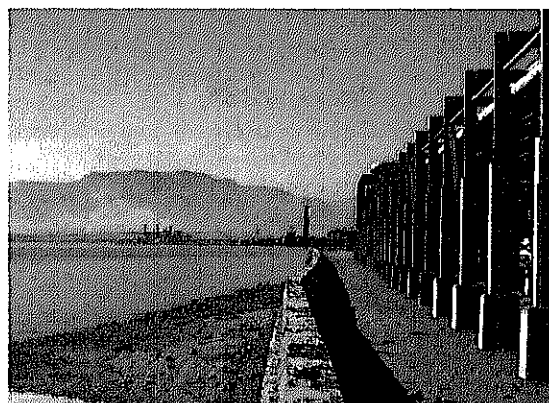
CASE STUDY

In Egypt which is experiencing rapid growth of its urban population and industrialization, air and water contamination in urban areas has become a pressing issue and health issues of the citizens have gradually surfaced. In the meantime, there have been signs of a downturn in tourism. Particular concerns are air contamination in the greater Cairo metropolitan area where the population is concentrated, and water contamination in the Suez Canal and the Red Sea Coast. Air pollution in the greater Cairo metropolitan area is said to be caused by emission gas from cars and factories and smoke from slash-and-burn agriculture in rural areas. Water contamination in the Suez Canal is said to be caused by spilled oil (emission, leakage) from ships crossing the Canal and oil-related facilities in the canal basin.

The Environment Agency of Egypt has taken measures to control contamination sources through monitoring and on-site inspections at the factories that are the sources of contaminants. However, in order to address environmental issues that possibly involve multiple contamination sources, a specific ability to recommend measures based on accurate and scientific knowledge is required. In response, JICA launched a three-year project in November 2005 to pave the way to solve complex environmental contamination issues.

In order to tackle these complex environmental contamination issues, it is important that competent authorities and local governments, as well as businesses such as factories, maritime operators, and citizens understand the issues and the importance of measures and make concerted efforts together. To that end, JICA divided the project into two components: capacity development of the

Environment Agency, and training for business operators and awareness-raising activities for citizens. JICA decided to undertake the former component and leave the latter to Egypt in respect of ownership of the partner. For the former component, JICA provides support for capacity development of the government officials to accurately manage, analyze, and evaluate data and information obtained through monitoring, so that they can make convincing recommendations consequently. For the latter, JICA provides support to raise awareness of various stakeholders. This series of activities is being carried out in three cities, Cairo, Alexandria and Suez, and the experience gained there will be applied and spread to other local areas in Egypt.



Petrochemical complex (further back) considered as one of the causes of contamination of the Suez Canal. Countermeasures against spilled oil into the Suez Canal is also being carried out in the project.

6) Acid rain countermeasures: JICA supports training of personnel needed to operate the Acid Deposition Monitoring Network in East Asia (EANET)*2.

*1 Designated national authorities (DNA) are governmental bodies whose establishment was stipulated under the Marrakesh Accords, which provides detailed rules for implementing the Kyoto Protocol. A CDM

project requires the approval of the DNA.

*2 Monitoring Network in East Asia (EANET) was formed at the initiative of Japan in January 2001, and consists of 13 East Asian countries. Its activities include monitoring, data assessment, and quality assurance/quality control (QA/QC), with the purpose of strengthening the monitoring network with respect to acid rain.

Water, Disaster Prevention

Overview

Water shortage, water pollution, flood disasters, and other problems associated with water resources are becoming increasingly serious and varied due to the rapid growth of population and economic development on a global-scale. At present, one-third of the world's population is facing a water shortage and 1.1 billion people have no access to safe drinking water. Every eight seconds one child dies of water-borne diseases, and 80% of the causes of diseases in developing countries are reportedly contaminated water. In addition, many problems are associated with water resources, including flood damage and deterioration of the water environment caused by inappropriate water use and treatment. Various water-related problems are recognized as urgent global issues, and a global response has intensified against the back-

ground of the deteriorating situation regarding water resources.

On the other hand, various disasters take place every day throughout the world. Especially in developing countries where social infrastructure is poorly developed, disasters directly affect the people's livelihood, aggravating poverty. Past support for disaster prevention was centered on reinforcing physical structures, but recently a combined approach that incorporates non-physical measures has gained greater importance. JICA is cooperating with community disaster prevention, which focuses on activities by local communities and on strengthening their capacity to deal with natural disasters.

JICA's Efforts

Synchronizing with the Third World Water Forum in 2003,

The Fourth World Water Forum Local Actions for a Global Challenge

Tri-annual world water forum

The Fourth World Water Forum was held in Mexico in March 2006. The World Water Forum is an international conference to discuss global water issues every three years. It is held around the World Water Day, March 22, for about one week. The Fourth World Water Forum was attended by approximately 19,800 participants from 149 countries, including officers and representatives of governments, international organizations, private companies, NGOs, research institutes, etc.

The theme of the Fourth Forum was "local action for a global challenge," and individual countries presented their activities, based on the Third World Water Forum held in Japan in 2003. The World Water Forum comprises session meetings, ministerial level meetings, exposition/water fair, etc. Together with the Ministry of Health, Labor and Welfare and the International Water Association (IWA), JICA co-hosted a session meeting to discuss appropriate operation and maintenance of water supply and sanitation facilities. In the meeting, the project officers from each country made presentations about their activities in JICA's technical cooperation projects, the Project on Capacity Building for Water Supply System in Cambodia and the Project on Safe Water and Community Activities in Senegal (PECTAC), and JICA Partnership Program, Project on Improvement of Water Supply Management in Mexico City. JICA set up its own booth at the Exposition Hall to conduct PR activities with regard to JICA's efforts in the field of water and the activities of JICA Mexico Office.

The importance of water issues for sustainable development

The main water issues discussed at the Fourth Forum were as follows.

- (1) Importance of addressing integrated water resource management (IWRM), which is cross-cutting management of water resources including groundwater
- (2) Necessity of efforts that combine improvement of hygiene with improved access to drinking water
- (3) Importance of participation of stakeholders from a wide-range of communities in all local activities

JICA also needs to seek ways to support developing countries in the future, while paying attention to the world trend.

On the closing day, a ministerial declaration that reaffirmed the importance of water issues for sustainable development and specified the contributions of the Fourth World Water Forum to further promoting international accords and commitments was adopted. The Fifth World Water Forum will be held in Istanbul, Turkey in 2009.



JICA, the Ministry of Health, Labor and Welfare, and IWA co-host a session meeting.

JICA announced its basic policy of cooperation in the water sector for the future, and reinforced measures in the disaster management field after participation in the Second World Conference on Disaster Reduction held in 2005. As concrete measures, four goals are set for water and disaster prevention, respectively.

The goals for water are as follows.

- 1) **Promoting comprehensive water resources management:** JICA proactively supports integrated and comprehensive water resources management systems, considering the multifaceted nature of water resources, including flood control, water usage, and water environment.
- 2) **Ensuring efficient and sustainable supply of safe water:** JICA supports safe and stable water supply for all people.
- 3) **Improving flood control to protect life and property:** JICA supports implementation of balanced flood control measures for the entire watershed from the upstream to the downstream in view of a combined approach with the focus on hardware and software aspects.
- 4) **Conserving the water environment:** JICA provides support for enhancement of the framework for conserving the water environment through a range of activities, including establishment of environmental standards, implementation of monitoring, control measures for contamination sources, and educational activities.

The goals for disaster prevention are as follows.

- 1) **Addressing socioeconomic development incorporating the viewpoint of disaster prevention:** JICA supports sustainable development including mitigation measures for existing risks and preventive measures for new risks.
- 2) **Supporting study on disaster risks:** JICA supports activities to identify disaster risks such as creation of a hazard map as well as sharing risk information at each level by utilizing the technology of Japan, which is an advanced country in disaster prevention.
- 3) **Supporting planning for comprehensive disaster prevention:** JICA supports the formulation of an comprehensive disaster prevention plan (master plan) based on identification of risks, improvement of disaster prevention system and capacity of the administrative organizations, modernization of related legal systems, improvement of disaster prevention awareness and strengthening the capacity to deal with disasters, and the formulation of related action plans.
- 4) **Support from the perspective of human security through education and diffusion activities to the residents:** JICA supports direct activities to strengthen the disaster prevention capacity of the community and individuals, and coordinated activities for disaster prevention by the administration, communities, and individuals.

Front Line Turkey

Disaster Mitigation Project

Aiming to Improve the Capacity for Responding to Disaster of Administration and Enhancement of Disaster Prevention System

Developing unique training curriculum for Turkey

Turkey was affected by two great earthquakes of magnitude 7 on the Richter scale in 1999, which claimed the lives of more than 25,000 people. Since the extent of the damage was considerably greater than expected, government agencies were unable to accurately respond to the disasters. Learning from the experience, the Turkish government has made various efforts to improve the response capacity of the administration and strengthen disaster prevention system.

JICA has been working on capacity development of the disaster prevention of administrators since 2001, in cooperation with the Turkish Ministry of Interior. In 2001 and 2002, deputy governors and county governors, who are responsible for disaster prevention in the local governments of Turkey, visited Hyogo prefecture and received training in measures for restoration and reconstruction from the Great Hanshin-Awaji Earthquake. Turkey then realized that disaster prevention training for administra-

tors was of great use. Led by those returned training participants and in cooperation with JICA overseas office, Turkey has devised its own training curriculum. In 2003 and 2004, the Disaster Management Training Project was carried out for deputy governors and county governors of the Turkish Ministry of Interior, and attended by 260 participants, which account for roughly one third of the incumbent deputy governors and county governors of Turkey.

Training for local governments

After the completion of the project, training participants made a request for training for officials of local governments, which serve as actual construction administrative bodies. In response to the request, JICA launched the Disaster Mitigation Project, focusing on

training for mayors and officers in charge of urban planning in local governments in 2005. After a six-month-long preparation for training curriculum and training for trainers, four training sessions for mayors were held from March 20, 2006. Attendance in the training sessions was more than expected, with 130 participants.

(JICA Turkey Office)



A staff member of a fire station explaining the importance of disaster prevention to the mayors