

JAPAN INTERNATIONAL COOPERATION AGENCY **ANNUAL REPORT**

# JICA 2012



The background features a light blue gradient with several overlapping, curved bands of varying shades of blue on the left side, creating a dynamic, flowing effect.

# **Inclusive and Dynamic Development**

## Foreword

田中明彦

Akihiko Tanaka  
President  
Japan International Cooperation Agency (JICA)



In the aftermath of World War II the international community provided the assistance to kick-start Japan's shattered economy, financing the rebuilding of roads, dams, power systems and the development of innovative projects such as the revolutionary Shinkansen bullet trains.

In 2011 nations across the world once more responded to one of Japan's darkest moments, providing help and support in the wake of the devastating earthquake-tsunami which claimed around 20,000 lives.

In the intervening decades Japan had rebuilt its economy, rejoined the global community of nations and through its Official Development Assistance (ODA), became a major development partner to many of the world's most vulnerable nations.

Those early developments were the forerunners of what we today label globalization and international interdependence—a movement which will surely become even more important in the years ahead.

And a central tenant of globalization is that international cooperation is not a one-way street, but rather a broad two-way highroad on which Japan's own economic and social advancement is inextricably linked with the economic and social health of countries in Africa, Latin America, the Middle East, Asia and other regions.

As the country's comprehensive development institution, the Japan International Cooperation Agency is dedicated to strengthening this movement under the rubric of 'Inclusive and Dynamic Development,'— continuing our traditional cooperation projects, but also forging new alliances and partnerships, exploring new approaches to new challenges and creating new ideas and 'knowledge centers' between Japanese and overseas experts, academics, technicians and private business.

This 'two-way highroad' is complex and challenging. New, middle income countries are emerging. China, South Korea, Thailand, Brazil and India among others are becoming donors. The so-called Arab Spring highlighted the increasing clamor for democracy, social and economic justice. Entrenched poverty, natural disasters and conflict threaten tens of millions of people and the environment, energy, food security and aging populations are more recent global issues.

JICA provides technical cooperation, concessional loans and investment, and grant aid and its operations are based on the concept of providing both the type and level of cooperation appropriate to individual countries or regions, ranging from peace-building to sustainable economic and social growth.

Through such efforts, combining 'tried and tested' approaches and innovative, dynamic new ideas, we hope not only to revitalize the world's developing nations but Japan itself. I hope that the JICA Annual Report 2012 will contribute to both your understanding and support of my agency's activities.

November 2012

# 43,315<sub>people</sub>

The cumulative number of JICA volunteers who have been sent to developing countries (as of March 31, 2012). Volunteers have been assigned to 88 countries. All of these activities are made possible by the voluntary participation of ordinary people in Japan. These grassroots activities have earned the gratitude of the many people who benefit from these programs.

Tonga: A science and mathematics teacher who belongs to the Japan Overseas Cooperation Volunteers (JOCV) teaches a physics experiment. [Photo by Kenshiro Imamura]



# 4,170<sub>km</sub>

The total length of highways that were constructed or rehabilitated with JICA's cooperation between fiscal 2007 and 2011 (five years). This is approximately equivalent to building a highway from Tokyo to Bangkok, Thailand.

Viet Nam: The Saigon East-West Highway [Photo by Koji Sato]

# 13<sub>ports (airport/port)</sub>

The number of airports and ports that were constructed or rehabilitated with JICA's cooperation between fiscal 2007 and 2011 (five years). This includes support for Noi Bai International Airport in Viet Nam, Mombassa Port in Kenya, and Kabul International Airport in Afghanistan.



Sri Lanka: Port of Colombo North Pier Development Project [Photo by Shinichi Kuno]



# 580<sub>million doses</sub>

The number of vaccine doses given to infants and small children thus far in 64 countries. In addition, JICA has constructed or rehabilitated 1,391 healthcare facilities in 54 countries.

Mali: Le projet de renforcement du système de vaccination



# JICA at a Glance

## JICA Activities in Numbers

# 417.52 million people

The number of eligible voters in countries that have received election assistance from JICA. Since 2000, JICA has provided cooperation for the elections of 14 countries by sending experts and providing training.

Elections took place in Egypt. [Photo by Shinichi Kuno]



# 40 countries



The number of countries that have received support from JICA for peacebuilding. In fiscal 2011, JICA contributed to the promotion of peace and prevention of conflicts in 31 post-conflict and conflict-affected countries.

South Sudan: Project for Improvement of Basic Skills and Vocational Training in Southern Sudan Phase 2 [Photo by Shinichi Kuno]

# 34,000 classrooms

The number of elementary and junior high school classrooms established in 47 countries since the 1980s. About 2.1 million children have studied in these classrooms and training has been provided to as many as approximately 200,000 teachers.

Benin: Projet de Construction des Ecoles Primaires



# 28 million people

The number of people who were supplied with safe water during the past five years due to wells and other water supply facilities constructed in 48 countries. JICA also trained 14,000 water supply engineers during this period.



Cambodia: Capacity Building for Water Supply System in Cambodia [Photo by Kenshiro Imamura]

# 16.6 million tons

Soybean production has increased from 430,000 tons in 1975 to 16.6 million tons by the agricultural development of Brazil's tropical savannah (the *Cerrado*) through a joint program of Japan and Brazil. Furthermore, this experience will be extremely valuable for agricultural development of the tropical savannah in Mozambique, a project conducted jointly by Japan and Brazil.



The Cerrado region of Brazil

March 2011~

### Providing Lodging and Assistance for Overseas Disaster Relief Teams and Conducting Reconstruction Seminars

The Great East Japan Earthquake that occurred in the Tohoku region of Japan inflicted enormous damage on many areas of East Japan. With its long record of providing assistance to developing countries through ODA and other measures, over 160 grateful countries around the world extended aid to Japan after the disaster.

As an emergency response, JICA opened up the JICA Nihonmatsu Volunteer Training Center, 50km from Fukushima Daiichi Nuclear Power Station, as a temporary evacuation shelter, accepting about 450 disaster victims. JICA also provided lodgings for the disaster relief teams of other countries and cooperated with their activities.

In addition, in gratitude for the world's generous assistance during the disaster, JICA established reconstruction and disaster prevention and management related training courses and seminars to utilize Japan's experiences from the disaster, bringing approximately 1,000 people from developing countries to participate in the training.



The head of Indonesia's Sub Directorate/ Protection and Empowerment of IDPs of the National Disaster Management Agency listens intently to an explanation of the damage caused by the tsunami in the Great East Japan Earthquake disaster. Indonesia also suffered tremendous damage from a tsunami caused by a major earthquake that occurred off the coast of Sumatra in December 2004.

Related article

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August 2011

### Collaboration with Gates Foundation to Promote the Eradication of Poliomyelitis in Pakistan

JICA signed an ODA Loan agreement with the Government of Pakistan to provide a loan of up to 4,993 million yen to assistance for the Project for the Eradication of Poliomyelitis. Along with Afghanistan and Nigeria, Pakistan is one of the last three countries in the world where polio is still being transmitted among the population. Using the loan, the Government of Pakistan plans to vaccinate children under the age of five with the goal of eradicating the disease.

The project uses an innovative financing

approach referred to as a "Loan Conversion" mechanism, which has drawn a great deal of attention worldwide. Under the mechanism, the Bill & Melinda Gates Foundation will repay the loan on behalf of the Pakistani government if the project is successfully implemented.

Related article

Page 9  
JICA website→"News," August 15 and 18, 2011 press releases



Sadako Ogata, the then President of JICA, and Gates Foundation co-chair Bill Gates signing a strategic partnership agreement to ensure continued progress in the fight against polio

October 2011~

### Comprehensive Assistance for Flood Disaster in Thailand

—From Emergency Relief to Medium- to Long-term Assistance



Thai Prime Minister Yingluck Shinawatra (left) and JICA Visiting Senior Advisor Kimio Takeya (right) exchange opinions on flood control measures. Senior Advisor Takeya is the only foreigner serving on the Thai government's Strategic Committee for Water Resources Management. (Courtesy of Metropolitan Waterworks Authority, Thailand)

April 2011~

## Promoting Public-Private Partnership (PPP) under Japan's New Growth Strategy

Guided by the New Growth Strategy approved by the Japanese government's Cabinet, JICA is leveraging Japan's technology as an effective tool for resolving the development issues of developing countries. The goal of JICA's actions under the strategy is the mutual prosperity of developed and developing nations. To further step up its efforts in fiscal 2011, JICA concluded a loan agreement and an investment agreement for overseas investment projects and experimentally commenced surveys regarding promoting partnerships with small to medium-sized enterprises.

JICA also took proactive action in other areas. It conducted Preparatory Surveys to formulate business plans for PPP infrastructure projects proposed by the private sector and Preparatory Surveys for formulating measures to promote collaboration with Base of the Pyramid (BOP) business.

Related article

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In collaboration with Terumo Corporation, JICA invited Mexican physicians to Japan, conducting the first PPP training course in medical treatment using the method of inserting catheters in the patient's wrist.

July 2011

## JICA Continues to Provide South Sudan Assistance after Independence

Directly after the 2005 Comprehensive Peace Agreement in Sudan, JICA set up a field office in what was then Southern Sudan and began providing assistance. JICA stepped up its efforts after the region became the Republic of South Sudan in July 2011, strengthening assistance in such areas as increasing the capacity of the government and building infrastructure in an effort to consolidate the peace. The field office established in 2006, just a tent at the time, steadily expanded and after South Sudan independence officially became the JICA South Sudan Office. Going forward, JICA is seeking to explore cooperation with Japan's Self-Defense Forces participating in the United Nations Mission in the Republic of South Sudan (UNMISS) and with construction efforts in the infrastructure field, assisting with the development of the new country and the consolidation of the peace.

Related article

JICA website → "Countries," South Sudan



The Juba River Port was established in 2007 with JICA cooperation. Currently, JICA is continuing to provide assistance to increase the capacity of the port system and to further extend the jetty with Grant Aid.

In 2011, the Kingdom of Thailand was struck by massive flooding on a scale seen only once every 100 years. Approximately 18,000 square kilometers were inundated, including industrial zones and agricultural areas. Since many local Japanese companies also suffered damage, the flooding had a serious impact not only on Thailand's economy, but also on Japan's economy.

To provide flood countermeasure assistance and also contribute to the activities of Japanese local companies, JICA quickly conducted a needs survey, provided emergency supplies and dispatched Japan Disaster Relief (JDR) expert teams. In addition, JICA provided comprehensive cooperation with such measures as the formulation of a medium- to long-term flood management plan (master plan for Chao Phraya River Basin in view of utilization of water and flood control) that was praised by Thai government offices at such venues as the Japan-Thailand Prime Ministers Summit.

Related article

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December 2011

## JICA Bonds: The First Issuance of Retail Bonds to Individual Investors

In December 2011, JICA issued a yen-denominated retail bond, becoming the first government organization to issue retail bonds to individual investors. Investment in this JICA bond enables individuals to contribute to solutions to global issues, such as the development of the economies and societies of developing countries and climate change.

In conjunction with the issue of the retail bond, JICA held a seminar in Tokyo to familiarize potential investors with JICA's activities.

Related article

JICA website → "News," December 5, 2011 news from the field



About 250 retail investors attended the seminar.



South Sudan: Livelihood Development in and around Juba for Sustainable Peace and Development [Photo by Shinichi Kuno]

Special Feature

# Japan and the World —Searching for Solutions to Common Issues

## Requirements for Japan to Grow and Develop Along with the Rest of the World

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- Bolivia: El Proyecto de Desarrollo de Aguas Subterráneas en las Áreas Rurales (Fase III)
- Nepal: A class on trash recycling and other environmental subjects [Photo by Koji Sato]
- Kenya: Strengthening Mathematics and Science Education (SMASE)

Back cover photo

Bangladesh: Jamuna Multipurpose Bridge Project (ODA Loan) [Photo by Mika Tanimoto]



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Nan-pro: We cannot overlook 5.5 billion people  
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Bolivia: Children at the experimental farm of the Yapacani City Agricultural Promotion Center (Photo by Fernando Javier Cuellar Otero)

Special  
Feature

# Japan and the World —Searching for Solutions to Common Issues

## Requirements for Japan to Grow and Develop Along with the Rest of the World

While the advance of globalization has led to greater economic activity around the world, it has also raised issues that cannot be handled by individual countries or regions alone. Examples include widening of the income gap and the instantaneous overflow of local economic and financial crises onto the global stage. In 2011, the Great East Japan Earthquake disaster and the flooding in Thailand had a tremendous impact on global manufacturing sectors dependent on Japanese corporations—natural disasters and environmental problems are global issues.

Finding solutions to these issues requires breaking out of the previous framework that had developed countries playing the central role to cooperate with emerging and developing countries. As a member of the international community, finding solutions to these global issues is important to Japan. Leveraging its record in this field and deepening its collaboration with countries around the world, Japan will utilize its knowledge and technology to grow and develop along with the rest of the world.

## 1. ODA's Strategy for the Globalization Age

### Impact of Globalization on Achieving MDGs

Through the UN's Millennium Declaration, the international community defined a set of Millennium Development Goals (MDGs) in 2000. With a target achievement date of 2015, the MDGs are eight specific goals that aim to eradicate extreme poverty and hunger; achieve universal primary education; promote gender equality and empower women; reduce child mortality; improve maternal health; combat HIV/AIDS, malaria, and other diseases; ensure environmental sustainability; and develop a global partnership for development.

More than ten years have passed, and results of the cooperative efforts of the international community are emerging. The World Bank reports that approximately two thirds of developing countries are within reach of meeting the MDGs. Among the countries on track, many are emerging countries from Asia and other regions. They are countries that

not only have high economic growth rates, but high performing policies and systems.

In contrast, the countries that have fallen behind in MDGs programs are countries with low economic growth and fragile government policies and systems. Moreover, they are often dealing with serious conflicts within their borders or with other countries. Regionally, Africa is relatively behind in the drive to achieve the MDGs.

One of the forces that has had a positive impact on such efforts to achieve the MDGs is the progress of globalization. It



In the Palestinian Authority, JICA is providing assistance with improving maternal and child health. It is distributing maternal and child health notebooks to Palestine refugees at Aqabat Jaber refugees camp. (Photo by Kenshiro Imamura)

#### Case Study

#### Pakistan Polio Eradication Project

### After Elimination of Smallpox, Partnership with Gates Foundation on Poliomyelitis

**In August 2011, JICA signed an approximately ¥5.0 billion ODA loan agreement with Pakistan, a country where polio continues to be transmitted among the population. The loan is being used to fund polio campaigns to eliminate polio virus in that country by vaccinating children under the age of five. This new form of assistance is epoch-making because the Bill & Melinda Gates Foundation (the Gates Foundation) will repay the loan on the Pakistani government's behalf if the campaign is successfully implemented.**

There were four countries in the world where polio continues to be transmitted—Afghanistan, Nigeria, India, and Pakistan. However, as of January 2012, India has reported no new reported case of polio for a year. India is no longer on the list. Following the world successful eradication of smallpox declared in 1980, the global effort to eradicate polio is reaching its final stage. However, recent floods and the migration of the population in Pakistan have resulted in large increase of reported cases. The Pakistani government announced the National Emergency Action Plan 2011 for Polio Eradication to kick off a nationwide effort to eliminate polio virus.

Since the 1990s, Japan has cooperated with United Nations Children's Fund (UNICEF) through its Grant Aid projects for procuring polio vaccine. This time, JICA has scaled up its assistance with ODA loans to implement polio campaigns to support measures being taken by the Pakistani government to eradicate polio.

The project has three special features. The first is the collaboration with an emerging private donor, the Gates Foundation. In August 2011, JICA signed a strategic partnership with the Gates

Foundation to address major global issues over a five-year period, with the first project being this collaboration for polio eradication in Pakistan. JICA is utilizing its strong relationship with the recipient country in providing aid and its valuable on-the-ground experience to play a catalyzing role in the relationship between Pakistan and the Gates Foundation. The second is that the project

adopts an innovative financing approach that the Gates Foundation will repay the loan on the Pakistani government's behalf if the campaign is successfully implemented. The approach provides an incentive for the Pakistani government to implement the campaign while avoiding a financial burden for the activities—making it possible to move ahead with an effective polio campaign. The third is that the project is being implemented with the cooperation of multiple development partners, such as the World Bank for co-financing as well as UNICEF for vaccine procurement and the World Health Organization (WHO) for service delivery of the polio campaign.



Oral vaccination of children in Pakistan

has made it easy to move people, goods, funds, information and other resources around the world, bringing many benefits, such as more efficient economies and lifestyles. Conversely, globalization has bred intense international competition, raising concerns of a widening income gap in countries with weak social and economic infrastructure. Soaring global prices have exerted great pressure on the fiscal finances and economies of countries lacking in natural resources, energy or food supplies. Even emerging countries frequently experience economic slumps because of global economic trends. Among recent examples, there was the jump in oil prices in 2004, soaring grain prices in 2007, the worldwide economic recession in 2008, and the most recent economic crisis in Europe. It seems the world is continually fighting off major crises.

Furthermore, countries are dealing with issues that mutually affect various countries. These issues include global risk factors, such as climate change, food supply, and major disasters as well as cross-border issues, such as infectious diseases and international crime.

## Toward Inclusive Development through World Cooperation

These worldwide issues can cast a dark shadow on people's lives. This effect is particularly noticeable in those classes of the population that are socially and economically vulnerable, resulting in a widening of the income gap further. The political revolution that occurred in the Arab world in 2011—the so-called Arab Spring—is said to have been spiked by the international rise in food prices that fueled people's growing anxiety over living conditions. Included in this background were high unemployment among the young and the well-educated and repressive political systems. People's dissatisfaction with their political systems suddenly surfaced because of an expanding income gap driven by globalization and rapid economic growth.

The turmoil in the Middle East not only effects world peace and security, it also poses a major problem for Japan, which depends on the Middle East for approximately 80% of its

imported oil. In addition, the same type of issues are developing within countries in Africa, Asia, South America, and other regions, accelerating political and economic crises.

To avoid and overcome these crises, it is essential that the countries of the world cooperate in controlling the negative aspects of globalization while aiming to maintain sustainable growth. The world must assist underdeveloped and emerging countries to provide solutions to their political, economic and social problems and to prevent and correct the income gap. At this point in time, the world needs to achieve inclusive development where all the people of a country benefit from growth.

## Japan's ODA Strategy— Assistance That Is “Win-Win”

With its ties to many countries around the world, globalization is truly a blessing for Japan.

Japan depends on other countries for approximately 96% of its natural resources and energy and about 60% of its food. Japanese companies not only export industrial products, but also have made extensive direct overseas investments to increase their proportions of overseas production. Moreover, Japanese companies have proceeded aggressively with international division of labor in their operation, such as procuring parts abroad rather than domestically. Through this process, Japanese companies' economic ties with other countries around the world are becoming increasingly stronger. Quite simply, global political, social, and economic stability is essential for Japan because global economic trends directly affect its economy, which is so closely interlinked with other countries.

With these circumstances in mind, Japan has focused its ODA strategy on building win-win relationships with development partners. It does so through cooperation that takes advantage of Japan's technology capabilities and knowledge.

For example, the global demand-supply balance for natural resources and energy is under pressure from the high economic growth of emerging countries. Maintaining the stability of that balance is an extremely important issue to ensure Japan's security and growth. At the same time, the export of natural resources is an important source of foreign currency for developing countries with natural resources. However, developing those resources requires investment in mining and oil and gas field development in conjunction with supplying electric power and building infrastructure, such as roads, railway, and harbors.

Here in lies an extremely significance aspect of Japan's development cooperation. JICA has continued to provide assistance that contributes to stable supplies of natural resources for Japan. In the past, JICA has provided ODA loans for the building of roads, railways, harbors, and electric power facilities required for the development of iron ore mining operations in Brazil. It has also cooperated in planning the construction of a geothermal electric power facility for mining



Egyptians gathering in Cairo's Tahrir Square (Liberation Square), the stronghold of the democratic movement



Port of Colombo North Pier Development Project (1) in Sri Lanka

Nacala harbor, a necessary port for the Nacala Corridor that links the east coast of Africa with the inland. JICA has also worked with countries in the Mekong river basin of Indochina, a promising investment area for Japanese companies, to provide “win-win” assistance. Its projects in this region have included building social infrastructure, promoting regional and economic development, and the nurturing of human resources, such as technicians and skilled workers.

## 2. International Assistance Trends and Japan

### Partnerships for Developing and Growing Along with the Rest of the World

With globalization spreading throughout the world, it has become difficult for Japan to grow on its own. In today’s world, the world must grow in order for Japan to grow.

development in Bolivia. It has pursued assistance that enables the effective development of natural resources by developing countries, such as aid for building facilities for Mozambique’s

#### Case Study

### Malawi Project for Establishment of Integrated Geographic Information System (GIS) Database for Mineral Resources

#### Providing Assistance with Geological and Mineral Resource Information and Capabilities Development through Public-Private Partnership

**Malawi has abundant mineral resources, including rare earth and other precious minerals. However, the government is lacking in basic geological and mineral resource information and has limited human resources with analytical skills. Therefore, the Malawi government appealed to Japan for assistance.**

**As of March 2012, JICA commenced assistance with developing geological and mineral resource information and enhancing the capabilities of the relevant government organization.**

The plentiful mineral resource potential of Malawi has drawn international interest. In recognition, the government of Malawi has considered the promotion of the mining sector as a top priority for achieving sustainable economic growth.

However, mining development requires a broad range of technology. Mining utilizes various technologies for mineral deposit exploration, for extraction and processing, for refining, and for recycling. It also involves environmental protection technologies for mining pollution prevention and other issues.

In particular, it is essential to have a sufficient geological information system (GIS) at the initial stage of mine development—mineral deposit exploration. Unfortunately, the Geological Survey Department (GSD) of the Malawi Ministry of Natural Resources, Energy and Environment does not have any electronic data on geological formations with the exception of some digitized old geological maps from the British colony era. Moreover, there is a lack of adequate staff and skills to update and maintain the information.

To fill this gap, in 2012, JICA started

providing assistance with the collection, processing, and analysis of geological data using remote sensing; establishment of a GIS, and enhancing the capabilities of GSD. Through information exchanges between the Japan Oil, Gas and Metals National Corporation, JOGMEC’s Botswana Remote Sensing Center and other stations, the team built an information base with the goal of sparking greater promotion of investment in the development of the mineral resources of Malawi.

JICA’s future approach to natural resource development will require keeping in mind the possibility of public and private sector collaboration. It will endeavor to put together comprehensive packages of development assistance that will contribute to the development of the mining business in the partner country and ensure a stable supply of natural resources for Japan.



Scene from the first day of a local training seminar on remote sensing theory and other topics



Initiating spectral measurement of rock mid-way through the local training seminar at the request of counterparts that have become accustomed to the technology

Entering the 2000s, Japan, the United States, and other developed countries suffered from stagnant economic growth, while emerging countries, such as China, enjoyed robust growth. However, when Japanese companies began to develop their businesses locally in these rapidly growing countries, they faced many difficulties and risks. These countries still had a lack of adequate infrastructure, such as water and electric power supply and transportation, as well as insufficient skilled labor pools and legal frameworks.

Solving these issues in developing countries through ODA and assisting with the development of stable societies and economies has contributed to the promotion of foreign investment by the private sector, including Japanese companies. This is expected to be of great benefit to development and led to sustainable growth in developing countries through the creation of jobs, increased trade, and the transfer of technology and knowledge from the private sector.

The point that needs to be made here concerns the MDGs “develop a global partnership for development.” In the past, assistance for developing countries was primarily carried out by developed countries through ODA. However, in the past 10 years, conditions have changed substantially.

Consider the development assistance provided by the Development Assistance Committee (DAC) member countries of the Organisation for Economic Co-operation and Development (OECD), an organization comprised of developed countries. During the period from 1995 to 1998, DAC accounted for more than 80% of the assistance provided developing countries. However, during the period from 2005 to 2008, this figure had dropped to 56%. In contrast, the assistance expenditures of the private sector and OECD countries other than DAC member countries increased from 18% to 38%. As new development assistance donors, emerging countries and the private sector are playing a much more significant role.

This trend can lead to more effective assistance for developing countries. The world needs to encourage these activities and recognize the roles of the various players in the development of these countries as well as strengthening broad-ranging cooperation and partnerships.

## Growing South-South and Triangular Cooperation

In recent years, China, India, Brazil and other emerging countries have actively been providing development assistance (South-South cooperation) from the perspective of being developing countries themselves. Their development assistance has been highly independent and has taken a different track than the assistance provided by developed countries (South-North cooperation).

JICA assists South-South cooperation because it finds the fact that developing countries are mutually deepening their ties by helping each other achieve independent development highly significant. Further advancing this format, JICA is also collaborating widely in triangular cooperation, where developed



Japan-Brazil-Mozambique Triangular-Cooperation-based African Tropical Savannah Agricultural Development Program (ProSAVANA-JBM): Running multiple area cultivation trials in the Nacala Development Corridor in Mozambique

countries, international institutions, and developing countries work together to provide development assistance. In ASEAN countries, governments are proceeding with the Initiative for ASEAN Integration to redress intra-regional gaps. JICA is providing assistance to the region by promoting South-South cooperation as a tool for more developed ASEAN countries to offer aid to their less developed neighbors.

This new type of framework for partnerships is being utilized globally to address global environmental and food supply issues as well.

New developments in South-South and triangular cooperation were explored at the Fourth High-Level Forum on Aid Effectiveness (HLF4) in Busan, Republic of Korea in November 2011.

At the Busan High-Level Forum, cabinet-level representatives of developed countries, emerging countries, and developing countries and of NGOs and other organizations got together under one roof to discuss effective development assistance, resulting in a Busan Partnership Document as the outcome document that was ratified even by the emerging countries. In addition to the principals of ownership, mutual accountability, and results put forward in the Paris Declaration on Aid Effectiveness at the second High-Level Forum (2005) and in the Accra Agenda for Action at the third High-Level Forum (2008), the Busan High-Level Forum verified the importance of wide-ranging cooperation such as South-South cooperation, triangular cooperation, private sector partnerships and cooperation with climate change finance organizations.

Going forward, JICA will strengthen its cooperative ties with assistance organizations in the United States and Europe and international organizations. At the same time, JICA will aim to further reinforce its cooperative relationships with new emerging country donor, seeking to contribute to the international community through effective assistance through South-South and triangular cooperation.

## Converting to Green Economies

Global environmental problems are issues common to the entire world.

In June 2012, the United Nations Conference on Sustainable Development (Rio + 20) was held in Rio de Janeiro, Brazil. In 1992, the United Nations Conference on Environment and Development (Earth Summit) was also held in Rio de Janeiro. Representatives of 172 countries attended the Earth Summit, producing the Rio Declaration on Environment and Development that created a worldwide partnership aimed at achieving sustainable development. The Earth Summit also formulated the Framework Convention on Climate Change and the Convention on Biological Diversity, marking the start of a new international trend regarding environmental issues.

The Framework Convention on Climate Change became effective in 1994. At the third meeting of the Conference of the Parties (COP3) held in 1997 at Kyoto, Japan, participants adopted the Kyoto Protocol, which set greenhouse emissions



The forests are shrinking in the Kyrgyz Republic. In order to pursue joint forest management, JICA is providing assistance with developing the capabilities of forest caretakers through practical experience and with building a forest management system.

reduction goals for developed countries. Work also continues on the Convention on Biological Diversity, which was addressed

### Case Study

## Project for the Strengthening of the Utilization of Indonesia-Japan Economic Partnership Agreement (IJEPA)

### Providing Assistance for Application of a Bilateral Economic Partnership Agreement (EPA) in a Developing Country for the First Time

**In August 2007, Japan and Indonesia concluded an Indonesia-Japan Economic Partnership Agreement (IJEPA), which went into effect on July 1, 2008.**

**IJEPA was the first bilateral trade agreement formed by Indonesia. JICA has studied cases of use of the certificate of origin (COO)-based preferential tax system under IJEPA and their economic benefits. The results are being applied to promoting greater use of the system by companies in Indonesia and assistance provided for the development of human resources to appropriately use the system.**

In addition to achieving free and smooth trade in goods and services, Japan concludes EPAs for the purpose of increasing mutual collaboration between countries in a wide range of economics-related areas. Examples include the smooth exchange of personnel and the establishment of investment rules and intellectual property systems. The hope behind the conclusion of EPAs is that they will promote further trade and economic development.

To ensure the success of IJEPA, it is important that Indonesia fully realizes that the trade structures of Japan and Indonesia are mutually complementary and that application of the IJEPA will have positive benefits for Indonesia's economy.

JICA's projects include 1) a study and analysis of cases of use of the COO-based preferential tax system under IJEPA and their economic benefits, 2) promotion of greater utilization of the system by companies in Indonesia and 3) conducting a variety of activities focused mainly on the development of human resources in government-related organizations to enable appropriate use of the system.

For example, together with staff from

municipal government organizations, JICA experts visited companies using the IJEPA-COO system to survey their use of the system and to provide information to assist with solutions to problems and issues. JICA is also actively sharing and utilizing this information at seminars and other events in other regions.

With the cooperation of Japan Customs, JICA is also sending Japanese customs officials to work with the persons in charge of IJEPA-COO-based trade development affairs in local governments as short-term experts. The customs officers give seminars on the Indonesia trade managers by providing specific examples of problems that occurred in the past and encourage improvement by pointing out the problem areas. Through this process, JICA is helping develop the necessary human resources to enable companies from both countries to utilize the system without problem.



IJEPA-COO training seminar being held in Indonesia with invited Japan Customs staff. The participants in the seminar were staff from local government organizations in charge of COO-based trade development and representatives of local export-related companies that use the COO system (March 19, 2012, Surabaya, East Java Province).

at the tenth meeting of the Conference of the Parties (COP10) held in 2010 at Nagoya, Japan.

Twenty years after the Earth Summit, Rio + 20 focused on the two major themes of “How to build a green economy to achieve sustainable development and lift people out of poverty, including support for developing countries that will allow them to find a green path for development” and “How to improve international coordination for sustainable development by building an institutional framework.” Reflecting on the measures implemented thus far regarding sustainable development, the conference looked at ways to achieve further progress in initiatives and activities.

Global environmental issues previously were only the concern of developed countries. However, as evidenced by China becoming the largest producer of carbon dioxide, a greenhouse gas, without including emerging countries where industrialization is progressing rapidly, it is impossible to proceed with any fundamental measures. It can be said that the theme of addressing air and water pollution and waste and other issues must be considered on a global scale to be effective.

The same is true of the biodiversity issue.

A low carbon development project in Malaysia provides a good example of joint assistance provided by JICA and the Japan Science and Technology Agency (JST) through the Science and Technology Research Partnership for Sustainable Development (SATREPS) program. In this project, Kyoto University, the National Institute for Environmental Studies, Okayama University are collaborating with the University of Technology, Malaysia (UTM) and the Iskandar Regional Development Authority (IRDA) to develop a low-carbon society scenario for the Iskandar region of Johor, which is undergoing large-scale industrial development. The goal of the project is to achieve results that can be used as a role model for other regions in Asia dealing with similar issues.

Based on the themes of natural conservation, environmental management, water resources, disaster prevention and

management, climate change, and preserving biodiversity, JICA is involved in a wide range of initiatives to achieve sustainable use of natural resources by local people, and to encourage Capacity Development for environmental management.

## Disaster Prevention As a Common Global Issue

Natural disasters pose a major problem for the world.

Earthquakes, floods, draught and other natural disasters cause loss of human life and property. They also have a large impact on people’s dignity, livelihood and on past development efforts, obstructing the sustainable development of society. In this sense, measures to prevent and manage disasters can be said to have great significance in terms of ensuring the security of humanity. Many developing countries, particularly least developed countries, are located in regions of the world prone to large-scale disasters. It has been pointed out that when large-scale disasters occur, the costs in human lives is greater in least developed countries compared with developed countries. Among the reasons for the higher casualty rate besides physical location are a lack of funds to implement measures to deal with the disaster, the characteristic high population growth in these countries, insufficient capabilities of governments to handle such situations, a lack of technology, and inadequate knowledge and information about disaster prevention and management among citizens.

Nevertheless, disasters can strike anywhere. The Great East Japan Earthquake disaster that happened in Japan as the result of an earthquake off the coast of the Tohoku region of Japan on March 11, 2011 is a case in point. A wide section of the Pacific coast of the Tohoku region was struck by tsunami, damaging a nuclear power facility and causing enormous loss in human lives and property. More than one year after the disaster, Japan is still working as a nation to achieve an early recovery in the disaster-struck region in terms of people’s lives and economic activity.

In the disaster, many factories that produce components essential to automobiles, electronics products, and other manufacturing industries around the world were damaged. The resulting disruption of the supply chain had a major impact on the global economy. The flooding in Thailand in 2011 produced a similar reaction. Clearly, disaster prevention and management is not just an issue for Japan, it is a common global issue.

Japan is frequently visited with many natural disasters, including earthquakes, typhoons, landslides and volcanic eruptions. As a result, the country has accumulated a great deal of experience with disaster prevention and management and effecting quick recoveries from disasters. Despite this experience, the unforeseen scale of the Great East Japan Earthquake disaster caused extensive damage. Including this experience, Japan’s natural disaster measures and experience and capability in rebuilding can be used to help deal with disasters in other countries. During the flooding in Thailand, JICA quickly provided assistance. Utilizing Japan’s technology



Trainees participating in the JICA Tsunami Disaster Prevention and Management Course visit an area in Ofunato City, Iwate Prefecture that was devastated by the Great East Japan Earthquake. The trainees are questioning a local resident (center) about current conditions in the area. The trainees are expected to return to Indonesia, Malaysia and Peru and play a central role in their country’s tsunami countermeasures organization in future.



and knowledge of disaster prevention and management and its experience with international cooperation to assist disaster-stricken countries is one way for the country to give back to the international community and can lead to substantial contributions to the world.

## Post 2015, Greater Collaboration with Diverse Partners

Only three years away, the 2015 target date for MDGs is fast approaching.

Currently, Japan's government and those of other countries and related institutions are reviewing the progress made with MDGs and remaining issues. At the same time, these bodies are beginning a dialogue on pressing development issues for the international community after 2015 and new shared goals.

Within this process, JICA is proceeding with the discussions for establishing a post-2015 international development agenda with Japan's government, and examining specific contribution measures. It is basing its deliberations on its previous assistance experiences and on-the-ground knowledge of projects, taking into consideration changes in the environment of developing countries.

JICA is placing high expectations on greater collaboration through diverse partnerships as being one of the key elements for the Post-2015 era. Through broad ranging collaboration with emerging country donors, the new stakeholders in international assistance; domestic and foreign private sector companies; public organizations; universities; and NGOs and other civil society organizations, JICA will aim to achieve effective assistance programs.

In June 2011, JICA participated in discussions about emerging development issues with China, Korea, Thailand, and others at the Second Asian Development Forum. The forum expressed high expectations for achieving even better results with assistance programs, including triangular cooperation, for least developed ASEAN countries and African countries by leveraging the experiences and records of Asian countries that have achieved great success partially with the help of Japan's development assistance.

JICA already has a record with assistance to triangular cooperation projects. In partnership with Brazil, JICA is providing agriculture-related assistance to Mozambique in Africa. Through a partnership with India, JICA is assisting with the capacity development of African engineers for roads, railways, and other infrastructure. Moreover, with the Technical

### Case Study

## Thailand Assistance for Post-Flooding Restoration Strategy

### Creating a Master Plan of Flooding and Flood Control Measures

**The rainfall during Thailand's monsoon season in Thailand in 2011 was unusually heavy, with the Chao Phraya river basin and many other rivers overflowing and causing substantial damage. Among other aid, JICA sent Thailand emergency supplies and expert teams for drain pump vehicle, contributing to a quick recovery** [\[See the case study on page 139\]](#).

**Furthermore, in response to the government of Thailand's flood recovery plan, JICA also cooperated with such medium- to long-term measures as formulating a flood control measures master plan.**

During the 2011 monsoon season, Thailand experienced heavy rain the likes of which is seen only once in 100 years. The ensuing flooding inflicted heavy damage to an approximately 18,000 square kilometer area, equivalent to the size of Shikoku, Japan, encompassing residential and agricultural areas. Because industrial areas were also inundated, many local Japanese companies suffered damage. The resulting interruption of the supply chain and other consequences had an extremely large impact not only on Thailand's economy, but also on Japan's economy.

Even before the seriousness of the flooding became evident, JICA carried out a survey of the needs of the flooded area. Taking into consideration the requests of the Thai government, it sent emergency supplies and expert teams of Japan Disaster Relief for drain pump vehicle. JICA also quickly provided such assistance as damage surveys of airports, subways, water supply system, and

other social infrastructure and pumping out water from industrial zones and residential districts.

As part of its strategic measures for recovery from the flooding, the Thai government formed a Strategic Committee for Water Resources Management. The only foreigner on the committee, JICA's Visiting Senior Advisor Kimio Takeya, assisted with the formation of policies on flooding measures. The government of Thailand revised its flood control plans, formulating an integrated water management plan combining such measures as promoting afforestation and improved operations of dams, controlling man-induced flooding in the middle sections of rivers and constructing flood control channels to protect necessary downstream portions in Bangkok and other areas. In response, JICA jointly provided assistance with the formation of a master plan based on scientific and engineering analyses of flood control measures for the Chao Phraya river basin.

Other contributors were the University of Tokyo, the Ministry of Land, Infrastructure, Transport and Tourism, the Ministry of Economy, Trade and Industry, the International Centre for Water Hazard and Risk Management (ICHARM), the Japan Aerospace Exploration Agency (JAXA), and other related organizations. JICA also is assisting with building farms and farming communities that were more disaster resistant and constructing infrastructure with Grant Aid that would also contribute to assisting local Japanese companies.

In this manner, JICA is utilizing its experience with flooding and flood control measures in Japan to continue to respond to the needs of Thailand from disaster relief to medium- to long-term assistance. JICA is pursuing comprehensive cooperation that also contributes to the local activities of local Japanese companies.



Inspection of levee monitoring at Suvamabhumii

and Vocational Training Center established in the Republic of Senegal with assistance from JICA at the core of the program, JICA supports South-South cooperation by working with Senegal in offering triangular training courses to citizens of the Democratic Republic of the Congo and other events.

JICA has also introduced new forms of partnerships, such as the collaboration with the Gates Foundation to ensure the smooth execution of a polio vaccination program in Pakistan.

In Japan as well, in response to the package-type overseas infrastructure development measures put forth under Japan's New Growth Strategy, JICA is providing assistance on various public-private partnership programs globally. They include the new passenger terminal at Vietnam's Noi Bai International Airport in Hanoi and development studies for hydroelectric power plants in the Republic of Turkey. Moreover, through ODA Loans, JICA is providing assistance to India with the construction of subways to help alleviate its congested traffic conditions and automobile emissions pollution issues. Japan's advanced construction and vehicle technologies have been highly praised by those involved with the project. Going forward, JICA intends to provide assistances for contributions to energy conservation and environmentally friendly overseas development using Japan's advanced technologies. Furthermore, JICA plans to implement a wide-range of cooperation, including at the grassroots level, for establishing the recycling society in Oceania countries. That cooperation will include partnerships

with Japanese local government and civil society organizations.

JICA is also proceeding with assistance plans for Africa, which is relatively behind in development. As the proposing country of the Tokyo International Conference on African Development (TICAD), Japan is committed to accelerating economic growth in Africa. JICA is extending assistance in developing the economy of the Nacala Corridor that links Mozambique, Malawi and Zambia. It also is providing various assistance to promote agricultural development and create manufacturing industries. JICA is pursuing its assistance programs through diverse partnerships for triangular cooperation with countries in Asia and South America as well as South-South cooperation with African countries.

JICA is committed to accelerating its contributions to the achievement of the MDGs. It also will pursue more effective assistance programs with the goal of implementing solutions to the world's next generation of common global issues.

## Case Study

## Japan-India African Triangular Cooperation

### Collaboration with India in Assistance for Road Construction and Maintenance in Africa

**JICA and the Indian Academy of Highway Engineers (IAHE) invited practitioners in Africa's roads field to New Delhi, jointly holding training seminars four times since December 2011. The training seminars have attracted a great deal of attention as a new form of Japan-India triangular cooperation involving joint activities by the two countries.**

At the Fourth Tokyo International Conference on African Development (TICAD IV), Japan indicated that it was strengthening its assistance efforts in Africa, announcing the doubling its ODA for the continent. India has deep historical, social, and economic ties with East Africa, and has been increasing its presence as an "emerging donor" and has steadily increased its activities in Africa since the 1950s. In 2011 it offered \$US5 billion for

three year under lines of credit and announced its cooperation in the building and operation of eight Material Testing Laboratories for Highways across the continent.

JICA is building closer ties with India, which is increasing its presence as a new partner in African assistance. As part of that process, JICA collaborated with IAHE in a joint Japan-India developing country assistance (triangular cooperation) project in the roads field.

Up to this point, the joint project has held three-week road construction and maintenance training seminars four times. The seminars have been held jointly, with a total of 136 participants from 25 African nations, such as Tanzania and Uganda. During the training, Japanese experts introduced specialized technology for road maintenance and safety measures and road inspection methods using the latest equipment. On the other hand, Indian instructors lectured on such topics as the partnership between the public and private sectors related to road construction and maintenance.



Lecture on inspection methods for road structures by Japanese expert



Japanese experts who acted as instructors and trainees from Africa



Practical training



# Program Goals and Overview

Rwanda: After school, children fill receptacles with water to take home in a rural area near the capital city of Kigali. [Photo by Atsushi Shibuya]

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# Japan's ODA

## 1 What is ODA?

Various organizations and groups, including governments, international organizations, non-governmental organizations (NGOs) and private companies, carry out economic cooperation to support socioeconomic development in developing countries. The financial and technical assistance that governments provide to developing countries as part of this economic cooperation are called Official Development Assistance (ODA).

## 2 Types of ODA

ODA is broadly classified into two types: bilateral aid and multilateral aid. Multilateral aid consists of financing and financial contributions to international organizations, while bilateral aid is provided in three forms: Technical Cooperation, Loan Aid and Grant Aid. In addition, other schemes of bilateral aid includes the dispatch of volunteers.

## 3 JICA's Integrated Implementation of Assistance Schemes

In recent years, developed countries in Europe and North America have expanded ODA as a means of strengthening the efforts to address global issues such as climate change and poverty reduction. Furthermore, new donor countries including China and the Republic of Korea have emerged. Japan, conversely, has decreased its ODA budget as a result of its severe financial circumstances.

In view of this international situation as well as the flow of domestic administrative reforms, the Japanese government has undertaken reforms that strategize ODA policies and strengthen implementation systems with the objective of further raising the quality of its ODA. With the aim of integrating ODA implementation organizations as part of these reforms, Overseas Economic Cooperation Operations of the Japan Bank for International Cooperation (JBIC) and Grant Aid Operations of the Ministry of Foreign Affairs of Japan (MOFA) (excluding those

which MOFA continues to directly implement for the necessity of diplomatic policy) were transferred to JICA as of October 1, 2008, thereby creating a "New JICA." Through this integration, the three schemes of assistance have become organically linked under a single organization, which better enables JICA to provide effective and efficient assistance. The principal schemes of assistance are outlined below.

### Bilateral Aid

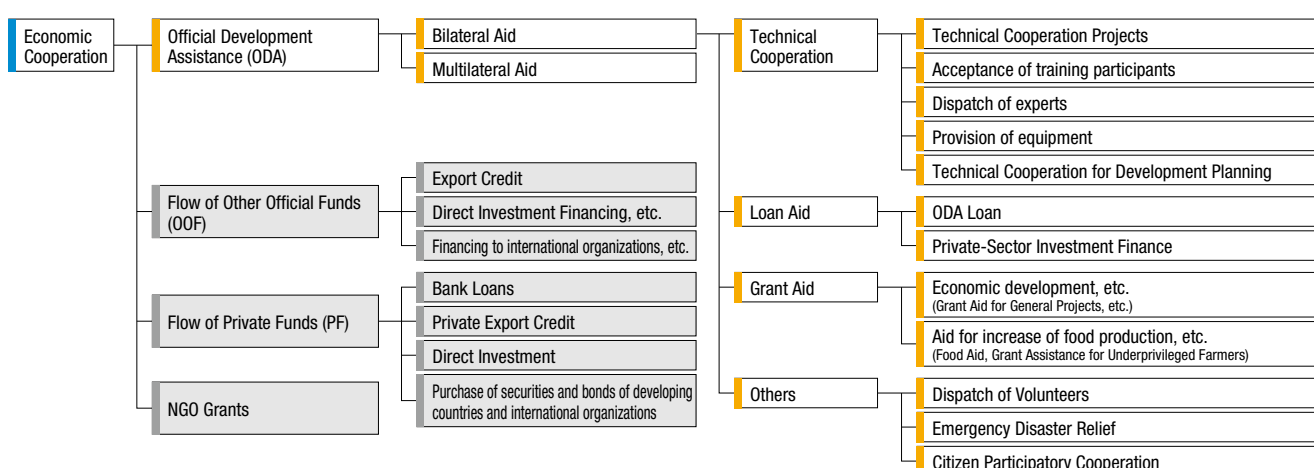
#### ► Technical Cooperation

Technical Cooperation draws on Japan's technology, know-how and experience to nurture the human resources who will promote socioeconomic development in developing countries. Moreover, through collaboration with partner countries in jointly planning a cooperation plan suited to local situations, Technical Cooperation supports the development and improvement of technologies that are appropriate for the actual circumstances of these countries, while also contributing to raising their overall technology levels and setting up new institutional frameworks and organizations. These enable partner countries to develop problem-solving capacities and achieve economic growth. Technical Cooperation includes acceptance of training participants, dispatch of experts, provision of equipment and implementation of studies aimed at supporting policymaking and planning of public works projects (Technical Cooperation for Development Planning).

#### ► Loan Aid

Loan Aid supports the efforts of developing countries to advance by providing these nations with the capital necessary for development under long-term and substantially lower interest rates than commercial rates. The primary types of Loan Aid are ODA Loans and Private-Sector Investment Finance. ODA Loans in particular enable the provision of finance in larger amounts compared with Technical Cooperation or Grant Aid, and therefore this form of aid has been well utilized for building

Table 1 Economic Cooperation and ODA



large-scale basic infrastructure in developing countries.

Unlike Technical Cooperation or Grant Aid, Loan Aid requires full repayment by the recipient country, which encourages the beneficiary country to focus closely on the importance and priority of projects and to make efforts to allocate and utilize the funds as efficiently as possible.

### ► Grant Aid

Grant Aid, which is an assistance method that provides necessary funds to promote socioeconomic development, is financial cooperation with developing countries with no obligation for repayment. Particularly in developing countries with low income levels, Grant Aid is broadly implemented for building hospitals, bridges and other socioeconomic infrastructure, as well as for promoting education, HIV/AIDS programs, children's healthcare and environmental activities, which directly support the improvement of living standards.

Grant Aid is divided into the following categories according to its content: Grant Aid for General Projects; Non-Project Grant Aid; Grant Aid for Grassroots Human Security Projects; Grant Assistance for Japanese NGO Projects; Grant Aid for Human Resource Development (Scholarship); Grant Aid for Cooperation

on Counter-Terrorism and Security Enhancement; Grant Aid for Disaster Prevention and Reconstruction; Grant Aid for Community Empowerment; Grant Aid for Fisheries; Cultural Grant Assistance; Emergency Grant Aid; Food Aid; Grant Aid for Underprivileged Farmers; Grant Aid for Environment and Climate Change; Grant Aid for Poverty Reduction Strategies; and Grant Aid for Conflict Prevention and Peacebuilding (☞ for portion implemented by JICA, see page 130).

## Providing Financing and Contributions to International Organizations through Multilateral Aid

Multilateral aid is an indirect method of providing assistance to developing countries by providing financing or donating funds to international organizations. Funds are contributed to the various bodies of the United Nations, including the United Nations Development Programme (UNDP), United Nations Population Fund (UNFPA) and the United Nations Children's Fund (UNICEF), while financing is provided to multilateral development banks (MDBs) such as the World Bank, the International Development Association (IDA, also known as the Second World Bank) and the Asian Development Bank (ADB).

**Table 2 Japan's ODA in Calendar Year 2011 (According to Aid Type and Provisional Figure)**

Aid disbursements	Type of Assistance (Calendar Year 2011)	Dollar Base (US\$ million)			Yen Base (¥ billion)			Percent of Total ODA Total	
		Disbursements	Disbursements in the Previous Year	Change from the Previous Year (%)	Disbursements	Disbursements in the Previous Year	Change from the Previous Year (%)		
ODA	Grants	Grant Aid	4,273.71	3,465.59	23.3	340.644	304.142	12.0	40.6
		Debt Relief	1,401.16	20.88	6,609.6	111.682	1.833	5,993.9	13.3
	Bilateral ODA	Grants through International Organizations	1,091.03	1,269.15	-14.0	86.962	111.381	-21.9	10.4
		Grant Aid Excluding the Above	1,781.53	2,175.56	-18.1	142.000	190.928	-25.6	16.9
	ODA Loan and Other ODA Credits	Grant Aid (Excluding Disbursements for Eastern European and Graduate Countries)	4,272.07	3,463.74	23.3	340.513	303.980	12.0	40.3
		Debt Relief	1,401.16	20.88	6,609.6	111.682	1.833	5,993.9	13.2
	ODA Loan and Other ODA Credits	Grants through International Organizations	1,091.03	1,269.02	-14.0	86.962	111.370	-21.9	10.3
		Grant Aid Excluding the Above	1,779.89	2,173.84	-18.1	141.869	190.777	-25.6	16.8
	ODA Loan and Other ODA Credits	Technical Cooperation	3,627.61	3,488.50	4.0	289.145	306.153	-5.6	34.5
		Technical Cooperation (Excluding Disbursements for Eastern European and Graduate Countries)	3,614.11	3,478.48	3.9	288.069	305.274	-5.6	34.1
	ODA Loan and Other ODA Credits	Grants Total	7,901.32	6,954.09	13.6	629.789	610.295	3.2	75.1
		Grants Total (Excluding Disbursements for Eastern European and Graduate Countries)	7,886.18	6,942.23	13.6	628.582	609.254	3.2	74.4
	ODA Loan and Other ODA Credits	ODA Loan and Other ODA Credits	-1,719.93	473.95	-462.9	-137.090	41.594	-429.6	-16.3
		(ODA Loan and Other ODA Credits Excluding Debt Relief)	-95.53	480.77	-119.9	-7.614	42.193	-118.0	
	ODA Loan and Other ODA Credits	(Figures for Loans Provided)	7,614.07	8,323.84	-8.5	606.893	730.505	-16.9	
		(Figures for Loans Repaid)	9,334.00	7,849.88	18.9	743.983	688.910	8.0	
	ODA Loan and Other ODA Credits	(Figures for Loans Repaid Excluding Debt Relief)	7,986.28	7,843.07	1.8	636.561	688.312	-7.5	
		ODA Loan and Other ODA Credits Excluding Disbursements of Eastern European and Graduate Countries	-1,623.76	394.75	-511.3	-129.424	34.643	-473.6	-15.3
	ODA Loan and Other ODA Credits	(ODA Loan and Other ODA Credits Excluding Debt Relief)	-276.04	401.57	-168.7	-22.002	35.242	-162.4	
		(Figure of Loans Provided)	7,536.97	8,201.95	-8.1	600.747	719.808	-16.5	
	ODA Loan and Other ODA Credits	(Figure of Loans Repaid)	9,160.72	7,807.20	17.3	730.172	685.165	6.6	
		(Figure of Loans Repaid Excluding Debt Relief)	7,813.00	7,800.39	0.2	622.750	684.567	-9.0	
	ODA Loan and Other ODA Credits	Bilateral ODA Total	6,181.39	7,428.04	-16.8	492.699	651.889	-24.4	58.7
		Bilateral ODA Total Excluding Disbursements for Eastern European and Graduate Countries	6,262.42	7,336.97	-14.6	499.158	643.897	-22.5	59.1
	ODA Loan and Other ODA Credits	Contributions and Financing to Multilateral Organizations	4,341.98	3,684.00	17.9	346.086	322.951	7.2	41.3
		Contributions and Financing to Multilateral Organizations (Excluding Contributions to the EBRD [partially])	4,341.98	3,684.00	17.9	346.086	323.310	7.0	40.9
ODA Loan and Other ODA Credits	Net ODA Total	10,523.38	11,107.95	-5.3	838.785	974.840	-14.0	100.0	
	Net ODA Total (Excluding Disbursements to Eastern European, Graduate Countries and EBRD [partially])	10,604.41	11,020.98	-3.8	845.243	967.207	-12.6	100.0	
ODA Loan and Other ODA Credits	Gross ODA Total	19,857.37	18,957.83	4.7	1,582.768	1,663.751	-4.9		
	Gross ODA Total (Excluding Disbursements to Eastern European, Graduate Countries and EBRD [partially])	19,765.13	18,828.18	5.0	1,575.415	1,652.372	-4.7		
ODA Loan and Other ODA Credits	Nominal Gross National Income (GNI) Figures for Each Category (US\$ billion, ¥ billion)	6,056.73	5,629.29	7.6	48,276.230	49,403.030	-2.3		
	Proportion of GNI (%)	0.17	0.20		0.017	0.020			
ODA Loan and Other ODA Credits	Proportion of GNI (Excluding Disbursements to Eastern European, Graduate Countries and the EBRD [partially])	0.18	0.20		0.018	0.020			

Notes) 1. The following 17 countries are graduate countries that have received ODA: Hong Kong, Singapore, Brunei, Bahrain, Israel, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, Barbados, Trinidad and Tobago, New Caledonia, Cyprus, Malta, Slovenia and Croatia.

2. 2011 DAC designated exchange rate: US\$1.00=¥79.7068 (an appreciation of ¥8.0538 compared with 2010)

3. Individual totals may not be equal to the sums of the individual parts because some numbers have been rounded off.

4. Following the decision of OECD DAC Working Party on Statistics (WP-STAT), from fiscal 2009, contributions for European Bank for Reconstruction and Development (EBRD) will be partially calculated as ODA.

5. Debt relief includes waiver of ODA Loans and debt reductions of collateralized commercial obligations, but excludes deferring of repayments.

6. In the past, grants through international organizations were treated as "contributions and financing to multilateral organizations." However, from 2006, donations for recipient countries identified at the time of contribution are treated as "Grant Aid" for these countries.

## 4 International Trends in Developmental Assistance

As exemplified by the Millennium Development Goals (MDGs) [See page 78–79], an international trend in aid has recently been the accelerating move toward the establishment of common goals by the international community, where various countries and organizations implement aid in coordination with each other to achieve the goals. Compared with aid coordination in the past which emphasized cooperation and coordination on an individual project basis, development assistance in recent years has placed greater emphasis on ownership by partner countries, in which donor countries and aid agencies jointly support developing countries' own development plans and priorities and work together to achieve the development goals of these countries. Providers of aid thus need to offer assistance in accordance with the priorities set out in the development strategies of developing countries.

## 5 Japan's ODA Contribution Level

On a net disbursement basis, in 2011 Japan contributed approximately US\$6,262.4 million (approximately ¥499.2 billion) in bilateral ODA (excluding aid to Eastern Europe and graduate nations) and contributed and donated approximately US\$4,342.0 million (approximately ¥346.1 billion) to international organizations. Accordingly, total ODA contributions amounted to approximately US\$10,604.4 million, down 3.8%

from the previous year (a year-on-year decrease of 12.6% to ¥845.2 billion on a yen basis). With this amount, Japan ranked fifth among the member countries of the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD), after the United States, Germany, United Kingdom and France.

Historically, Japan became the world's top contributor of ODA in 1989, surpassing the United States, which until that time had held the top position. Japan then remained the leader among the DAC countries, maintaining its top rank for eight years from 1993 to 2000. However, the country's contribution dropped in 2001 and began a gradual decline, with the exception of a temporary notable increase in 2005.

Meanwhile, Japan's ODA was equivalent to 0.18% of its gross national income (GNI), ranking it at the low level of 21st among the 23 DAC countries.

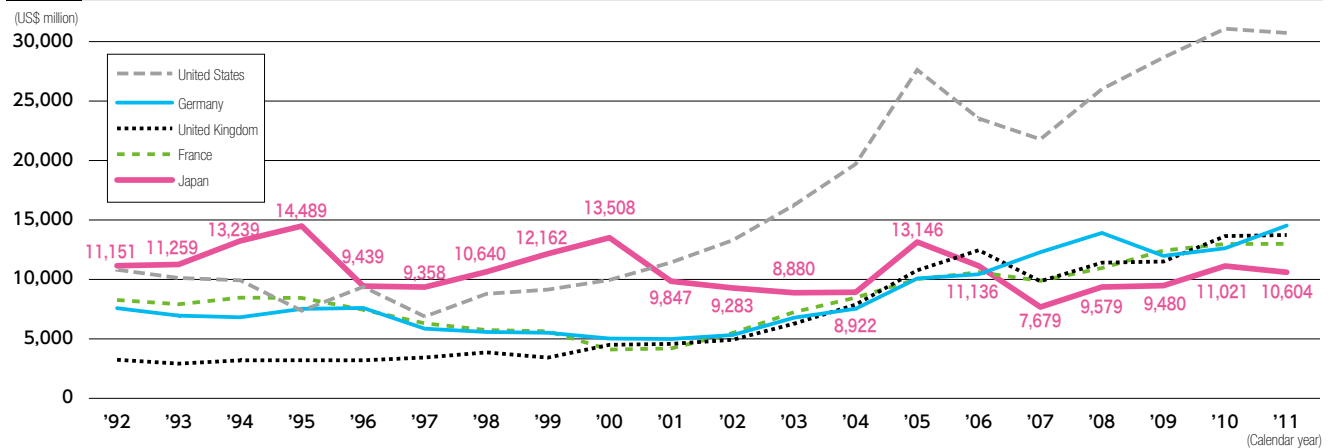
\*MOFA's ODA budget in fiscal 2012 amounted to ¥418.2 billion including the restoration and reconstruction budget managed under a Special Account.

**Table 5 Overview of MOFA's ODA Budget in Fiscal 2012** (Unit: ¥ billion)

	FY2011		FY2012	
	Budget	Percentage increase	Budget	Percentage increase
Entire government	572.7	-7.4%	561.2	-2.0%
Within the Ministry	417.0	0.9%	418.0	0.3%
Grant Aid	151.9	-1.5%	161.6	6.4%
Management grants (General Account)	145.7	-1.6%	145.4	-0.2%
Contributions and donations	60.7	18.0%	51.2	-15.6%
Aid for assistance activities	58.8	-1.7%	59.8	1.8%

\*Overview of MOFA's ODA Budget in Fiscal 2012

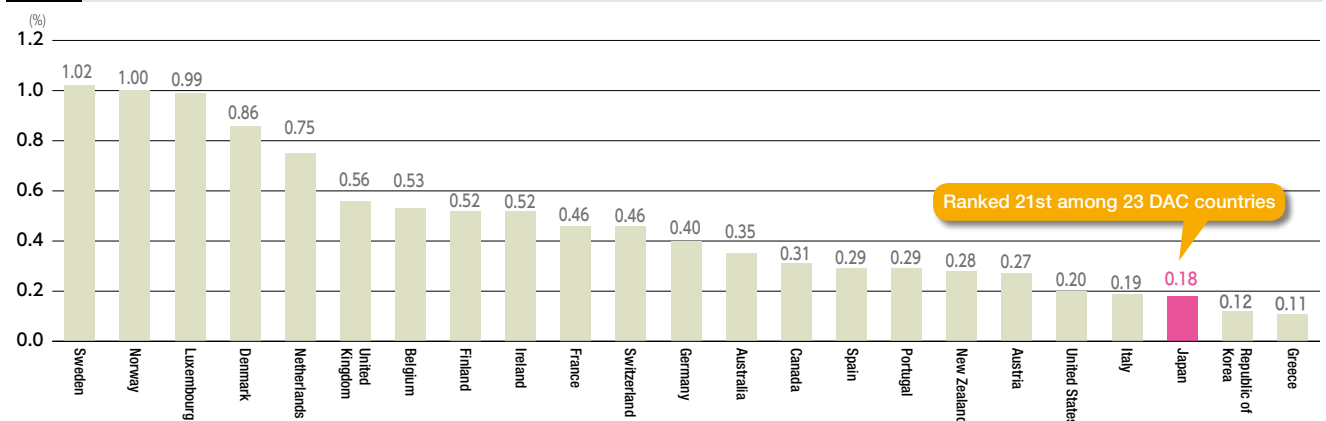
**Table 3 Trends in Major DAC Countries' ODA (Net Disbursement)**



Sources: OECD DAC

Note) 1. Excluding aid for Eastern Europe and graduate countries. 2. Figures for the United States of 1992 exclude military-related debt relief. 3. Figures for 2011 are provisional.

**Table 4 Proportion of ODA to Gross National Income of DAC Countries**



Source: OECD DAC (2011 provisional figures)

# An Overview of JICA's Programs

JICA began implementing a New Growth Strategy in fiscal 2011 that places priority on support for achieving sustained development in developing countries; the achievement of the Millennium Development Goals (MDGs), mainly through support for African countries; peacebuilding in Afghanistan and other countries; environmental and climate change measures; and other activities.

In accordance with the New Growth Strategy, JICA provided cooperation for infrastructure development, mainly in Asia, and for institutional development for the facilitation of trade and investment, and performed other activities. In addition, JICA formulated and implemented programs primarily in Africa that contribute to achieving Japan's assistance pledges as well as MDGs for health, education and other fields. In Afghanistan, the highest priorities for assistance programs are infrastructure development and agricultural and rural development. JICA has started long-term training to increase the capacities of government officials, university instructors involved in these two fields. For environmental and climate change measures, JICA extended cooperation involving new and renewable energy sources, the preservation of biodiversity, and other activities. Furthermore, JICA responded quickly to emergencies during fiscal 2011, such as the Arab Spring movement, the drought in the Horn of Africa and flooding in Thailand.

## Fiscal 2011 Overview of JICA's Activities

### Japan's ODA Disbursements and JICA's Activities

In 2011, Japan's total ODA disbursements (provisional figure) amounted to US\$19,857.4 million (¥1,582.8 billion), including aid to Eastern Europe and graduate nations and assistance to the European Bank for Reconstruction and Development (EBRD). Of this total, Grant Aid accounted for US\$4,273.7 million (¥340.6 billion), Technical Cooperation US\$3,627.6 million (¥289.1 billion) and Loan Aid US\$7,614.1 million (¥606.9 billion).

Turning to JICA's disbursements in fiscal 2011 (Table 6), Technical Cooperation implemented by JICA amounted to ¥188.9 billion, an increase of 11.9% from the previous fiscal year.

As to Grant Aid, which JICA began implementing from October 2008, JICA concluded 163 Grant Agreements amounting to approximately ¥107.6 billion (Grant Agreement [G/A] basis). JICA also implemented 10 projects amounting to ¥3.6 billion (Exchange-of-Notes [E/N] basis) for which JICA was responsible for the promotion of Grant Aid (Table 7 and Table 10).

Loan Aid disbursement amount totaled ¥609.7 billion and was provided to 51 countries and one organization, and Private-Sector Investment Finance disbursement amount totaled ¥10 million and was provided to one organization

Tables 8 to 10 show trends in the scale of JICA's programs for Technical Cooperation, Loan Aid and Grant Aid over the past 10 years.

In fiscal 2011, Technical Cooperation expenses amounted to ¥188.9 billion, an increase of 11.9% (¥20.1 billion) from the previous fiscal year.

The Loan Aid commitment amount totaled ¥949.4 billion in fiscal 2011. Meanwhile, the scale of Grant Aid programs also decreased from the previous fiscal year and reached a total amount of ¥111.2 billion in fiscal 2011.

**Table 6** Distribution by Type of JICA Program in Fiscal 2011 (Unit: ¥ billion)

	FY2011	FY2010
Technical Cooperation *1	188.9	168.8
Acceptance of training participants	20.1	20.7
Dispatch of experts	64.7	24.2
Dispatch of study team members	40.3	10.5
Provision of equipment	8.8	4.2
Dispatch of Japan Overseas Cooperation Volunteers	9.9	12.5
Dispatch of other volunteers	3.9	4.6
Others	41.3	92.0
Loan Aid *2	609.7	677.7
Grant Aid *3	107.6	102.4

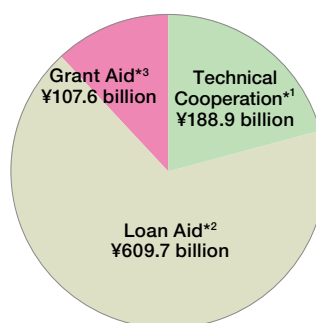
Note) Because the numbers for each project are rounded off to the nearest whole number, the figures do not always match the total numbers.

\*1 Includes costs of dispatching volunteers and other costs.

\*2 Amount disbursed within the fiscal year

\*3 Amount provided under concluded Grant Agreements (G/A basis)

**Table 7** Fiscal 2011 JICA's Operation Scale

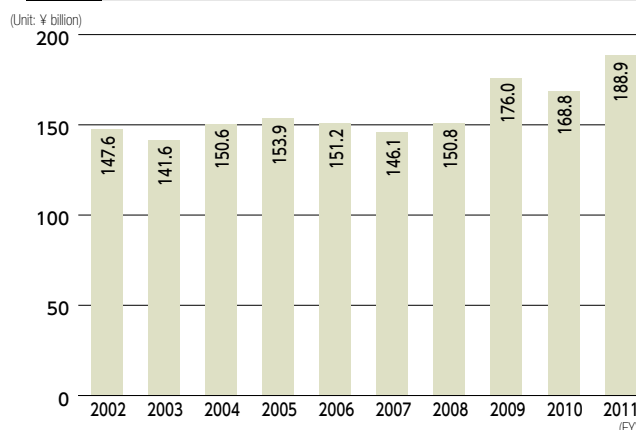


\*1 Technical Cooperation expenses excluding management expenses

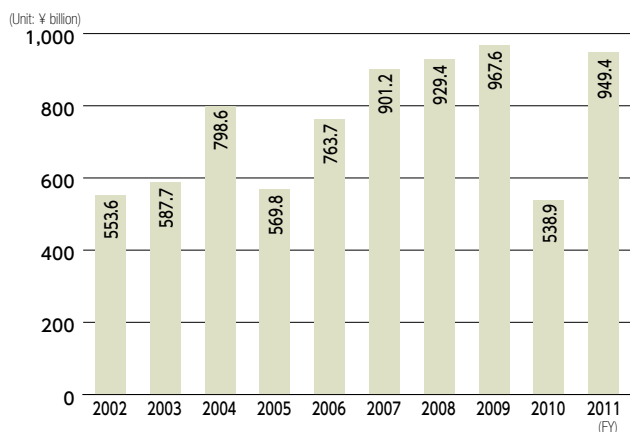
\*2 Amount of Loan Aid disbursed

\*3 Amount provided under concluded Grant Agreements (G/A basis)

**Table 8** Trends in Technical Cooperation Disbursements for the Past 10 Years

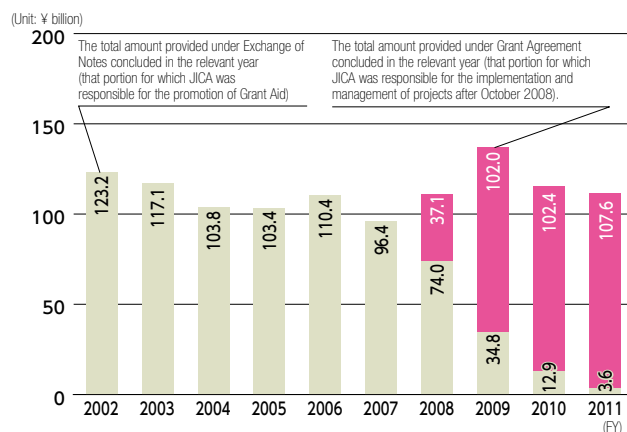


**Table 9 Trends in Loan Aid Agreement Amounts for the Past 10 Years**



Note) Total ODA Loan and Private-Sector Investment Finance

**Table 10 Trends in Scale of JICA's Promotion and Management of Grant Aid**



Note) JICA was responsible for expedition of implementation of Grant Aid until fiscal 2007. From October 2008, JICA has also been performing project management of a portion of Japan's Grant Aid.

### Composition of Distribution by Region

Table 11 shows distribution for Technical Cooperation, ODA Loans and Grant Aid in fiscal 2011 by geographic region.

Looking at disbursements for Technical Cooperation by geographic region, Asia accounted for 35.6%, Africa 24.5% and North and Latin America 8.9%, in descending order. The 21.8% in "Others" include disbursements for international organizations and worldwide projects across countries and regions.

Looking at commitment amounts for new ODA Loans by region in fiscal 2011, Asia accounted for 81.1%, Middle East 8.1% and Europe 4.8%. Following-on from fiscal 2010, Asia's share increased from the previous fiscal year.

On the other hand, the proportion of Grant Aid to Africa was 44.9%, while Asia received 43.2% and Pacific 5.4%. As in fiscal 2010, Africa and Asia accounted for a large proportion of Grant Aid.

### Composition of Distribution by Sector

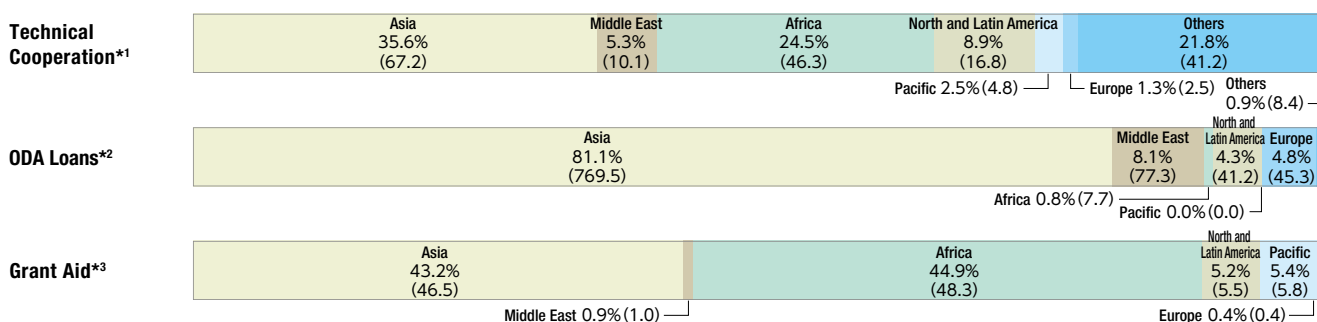
Table 12 shows the composition of distribution by sector in fiscal 2011.

Disbursements for Technical Cooperation by sector were, in descending order, 26.7% for Others, 20.8% for public works and utilities, 13.2% for planning and administration, and 12.5% for agriculture, forestry and fisheries.

For ODA Loans, a large portion, i.e., 49.8%, were allocated

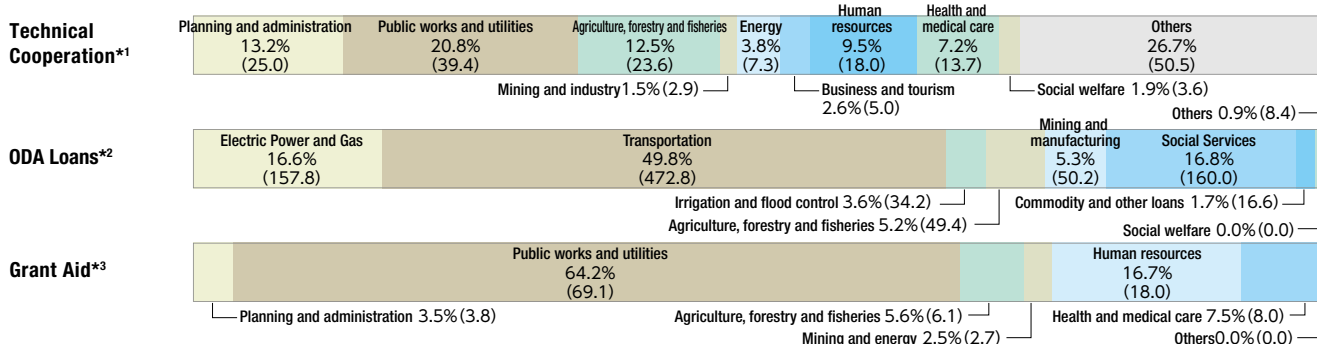
**Table 11 Distribution by Region**

(Unit: %, ¥ billion)



**Table 12 Distribution by Sector**

(Unit: %, ¥ billion)



\*1 Expenses that also include expenses required for dispatching volunteers and emergency aid groups.

\*2 Amounts are based on loan agreements (L/A basis).

\*3 Itemization of ¥102.4 billion (concluded Grant Agreements) for projects to be implemented and managed by JICA.



for projects in the transportation sector, including the development of railways, roads and ports. This was followed by social services at 16.8% and electric power and gas at 16.6%.

For Grant Aid, the share of distribution increased for public works and utilities at 64.2%, followed by human resources, including education and vocational training, at 16.7%, and health and medical care at 7.5%.

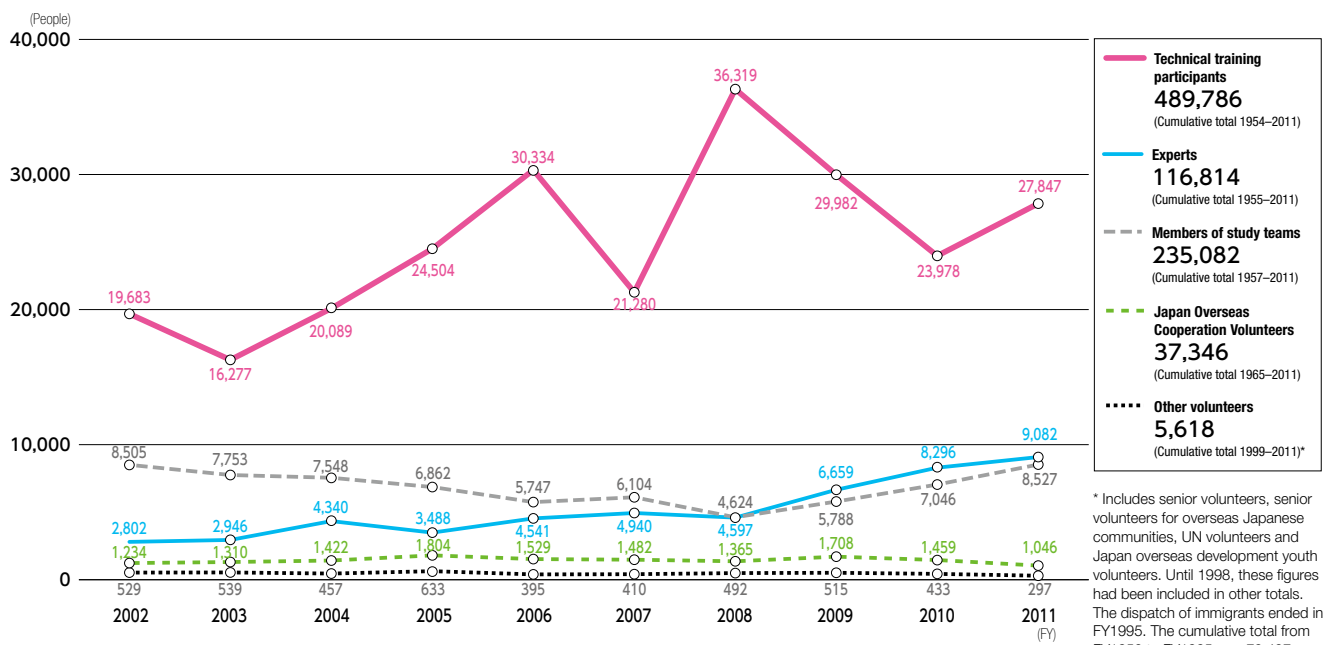
### Number of Personnel by Type of Technical Cooperation

The number of personnel by type of JICA program in fiscal 2011 was as follows. The number of technical training

participants (new) was 27,847, while JICA dispatched 9,082 experts (new), 8,527 study team members (new), 1,046 Japan Overseas Cooperation Volunteers (new) and 297 other volunteers (new). As a result, to date JICA has accepted a total of 489,786 technical training participants (FY1954–FY2011) and dispatched a total of 116,814 experts (FY1955–FY2011), 235,082 study team members (FY1957–FY2011), and 37,346 Japan Overseas Cooperation Volunteers (FY1965–FY2011).

Trends in the number of personnel by type of cooperation since fiscal 2002 are shown in Table 13.

**Table 13** Trends in Number of Personnel by Type of Cooperation



\* Includes senior volunteers, senior volunteers for overseas Japanese communities, UN volunteers and Japan overseas development youth volunteers. Until 1998, these figures had been included in other totals. The dispatch of immigrants ended in FY1995. The cumulative total from FY1952 to FY1995 was 73,437.

# JICA's Path for Development Activities

## JICA's Path for Development Activities in Fiscal 2012

Based on JICA's missions as the implementing agency of Japan's ODA ((1) addressing the global agenda, (2) reducing poverty through equitable growth, (3) improving governance, and (4) achieving human security), JICA will formulate and implement programs that address seven priority issues in accordance with the items listed below, while ensuring consistency with the policies of the Japanese government (e.g., "ODA Review Final Report," Priority Policy Issues for International Cooperation, the New Growth Strategy, Strategies to Revitalize Japan, and other items).

The current instability in the global economy and labor markets is expected to continue. Furthermore, prices of resources, energy and food continue to increase rapidly. The result is growing pressure on low-income countries and vulnerable people. Consequently, there is a need for more inclusive development in programs to promote human security.

ODA is a means for pursuing the shared interests of the world. Bearing this in mind, JICA must target global issues like environmental problems that can impede economic growth.

In addition, JICA will work even harder on "win-win" cooperation that utilizes alliances with private-sector Japanese companies that plan to start overseas operations. This cooperation will reflect the current status of Japan's economy and be consistent with the overriding premise of contributing to poverty reduction and sustained economic growth in developing countries. To provide this cooperation, JICA will aggressively consider the use of Technical Cooperation and financial cooperation (Development Policy Loans (DRL), etc.) that contribute to revisions to policies and systems needed to improve the investment climate.

Furthermore, the positions of traditional partners are declining because of the European economic crisis and tight government budgets. On the other hand, the Fourth High Level Forum on Aid Effectiveness that was held in Busan, South Korea, in November 2011 spotlighted the growing importance of emerging countries and the need to strengthen dialogues with these countries. From the standpoint of development effectiveness and efficiency as well, there is an urgent need to build effective relationships based on partnerships and cooperation through dialogues and support for partnerships with emerging countries. At the same time, assistance alliances with traditional partners will continue to be strengthened.

When implementing these programs, research and other activities will be used for the effective creation, sharing, provision and accumulation of knowledge across the entire organization. The aim is to use this knowledge to help solve problems in developing countries.

## Priority Issues

1. As part of assistance for reducing poverty and achieving sustainable economic growth in developing countries, incorporate the New Growth Strategy, particularly the consideration of alliances with Japanese companies, primarily SMEs planning on starting overseas operations. In addition, increase aid in the Asia-Pacific region based on the 4th Mekong-Japan Summit, 15th Japan-ASEAN Summit and 6th Pacific Islands Summit in the current fiscal year.
2. Environmental and climate change measures based on the U.N. Conference on Sustainable Development (Rio+20) and the 18th session of the Conference of the Parties (COP 18) to the U.N. Framework Convention on Climate Change
3. Cooperation for disaster preparedness, including support for establishing infrastructures that can withstand natural disasters
4. Achievement of MDGs with a focus on assistance to Africa since 2012 is the target year for achieving the TICAD IV pledge
5. Support for peacebuilding in Afghanistan and other countries
6. Support for democratization and new nation-building following the Arab Spring movement in the Middle East
7. Other priorities

In addition to the above priorities, one significant item is support for democratization in Myanmar, a process that is beginning to advance rapidly, in order to achieve regional stability. The primary standpoint is the reduction of poverty. Extending aid to Myanmar is also important from the standpoints of promoting alliances with Japanese companies and supplying aid in concert with ASEAN. While closely monitoring the political status of Myanmar, JICA will study the formulation of projects and business plans that are timely and effective as well as reflect the policies of Japan.



# Concrete Initiatives of JICA's Programs in Fiscal 2011

Viet Nam: Project for the Capacity Development for Transition to the New CNS/ATM Systems in Cambodia, Lao PDR and Vietnam

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# Southeast Asia — Strategic Cooperation for Sharing Prosperity between Japan and Southeast Asia

Southeast Asia is attracting attention as the growth center in the global economy with its high economic growth rate and population of 580 million. This region is also becoming increasingly important for Japan. The Association of Southeast Asian Nations (ASEAN) is moving forward with economic, socio-cultural, and political-security integration with the goal of establishing the ASEAN Community by 2015. Myanmar as well continues to work on opening its markets amid rapid progress with democratization. Timor-Leste is aiming at early accession to the ASEAN.

In 2011, floods in Thailand and the vicinity showed the vulnerability of the region to natural disasters. Floods also demonstrated the close economic relationship between Southeast Asia and Japan through various supply chains. As there still remain several issues in Southeast Asia, such as the development gap among countries in this region, urbanization, environmental issues, and conflicts, JICA continues to support this region to achieve stable development.

**Key Aid Strategies**

**Promotion of Regional Economic Growth and the New Growth Strategy, Inclusive Development and a Regional Approach**

**Promotion of Regional Economic Growth and the New Growth Strategy**

While JICA extends assistance that matches each country's development stage, JICA also strengthens its alignment with the New Growth Strategy of the Government of Japan. This entails the provision of assistance for infrastructure development, improvement of the investment climate and development of supporting industries. By strengthening partnerships with the private sector, such as the promotion of private finance and collaboration with corporate activities, JICA supports the activities of Japanese companies that contribute to the development of Southeast Asian countries.

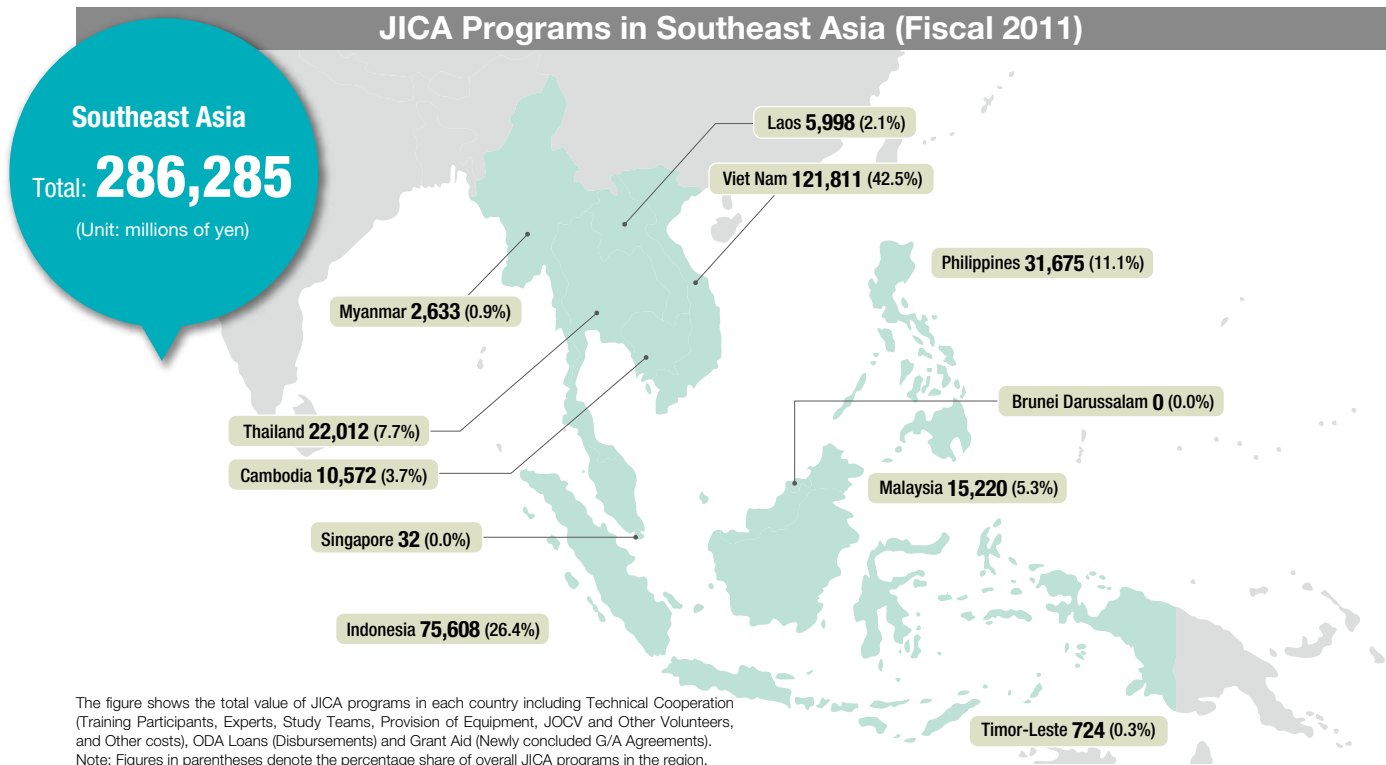
**Promotion of Inclusive Development**

JICA promotes inclusive development in order to eliminate

disparities. This includes narrowing the development gap between the ASEAN's original members—Indonesia, Malaysia, the Philippines, Singapore, Thailand and Brunei—and its newer members, namely Cambodia, Laos, Myanmar and Viet Nam. In the newer ASEAN members, JICA provides assistance for basic education and health care to strengthen the foundations of socioeconomic development, as well as for soft and hard infrastructure development and industry-related human resources development that are in line with each country's stage of development.

Disparity within a country is also a destabilizing factor for society. JICA is promoting inclusive development through the development of transportation and logistics facilities, the development of regional hubs, the establishment of institutional frameworks for regional development, responses to disasters,

JICA Programs in Southeast Asia (Fiscal 2011)





strengthening of disaster management frameworks, the establishment of safety nets, and other measures.

### ■ Promotion of a Regional Approach

The ASEAN launched the Master Plan on ASEAN Connectivity for strengthening physical, institutional and people-to-people connectivity and realizing the ASEAN Community by 2015. The Government of Japan established the Japan Task Force to Support ASEAN Connectivity, which includes both the public and private sectors, and announced the visions of the “Vital Artery for East-West and Southern Economic Corridor” and “Maritime ASEAN Economic Corridor” to support the master plan.

As a member of the task force, JICA is extending assistance to the prioritized projects in the master plan and other programs. In addition, to support the Initiative for ASEAN Integration (IAI) for narrowing development gap among ASEAN member states, JICA is providing support through South-South cooperation, in which original ASEAN member states cooperate with newer ASEAN members. JICA’s activities also include support to improve education and research capabilities of key universities in order to develop human resources in engineering field, as well as to deal with such common regional issues as disaster management and climate change.

### Priority Issues and Efforts

#### ■ Assistance for ASEAN’s Original Member States

To sustain growth, tackling urban issues and eliminating disparities within a country are urgent issues for original ASEAN members.

For urban issues, JICA formulates and develops urban master plans and establishes urban planning systems. Transferring Japan’s technologies in the fields of public transportation system, energy and water supply systems, waste treatment system and others and assisting infrastructure development, JICA promotes efficient and environmentally co-existing cities.

With respect to “soft” infrastructures (institutions), JICA is helping with industry-related human resources development, strengthening the protection of intellectual property rights and using other measures in order to overcome the “middle income trap”\* and make various industries more technologically advanced.

The frequent occurrence of natural disasters in the ASEAN region is an impediment to sustainable economic growth. Once a natural disaster occurs, JICA provides not only humanitarian assistance but also reconstruction and development assistance and other support for medium to long-term disaster prevention, such as the establishment of early warning systems. To address climate change, JICA has many activities that include forest fire prevention, development of geothermal and other renewable energy sources, the construction of urban high-speed rail systems to alleviate traffic congestion and reduce motor vehicle emissions, and adaptive measures for regions that are particularly vulnerable to the effects of climate change.

Other support to original ASEAN members includes assistance for preparing the social security system to deal with issues associated with aging in Thailand and other countries and support for the consolidation of peace in the Mindanao

#### Case Study

#### Malaysia The Malaysia-Japan International Institute of Technology

### A Higher Education Institution Opens after 10 Years of Preparations

**The Malaysia-Japan International Institute of Technology (MJIT) began operations in September 2011 in Kuala Lumpur, the capital of Malaysia. The idea for MJIT was originated in 2001 by former Prime Minister Mahathir bin Mohamad, who promoted the Look East Policy. Since then, the governments of Japan and Malaysia conducted discussions and studies for 10 years to establish this institution.**

With undergraduate and graduate schools, MJIT is dedicated to fostering the development of highly trained individuals with adaptability and R&D skills. The institute uses the “Kohza system” that is centered on research activities, which is a defining characteristic of engineering education in Japan. There are four departments at the institute: Electronic Systems Engineering, Mechanical Precision Engineering, Environmental and Green Technology, and Management of Technology.

For the establishment of MJIT, JICA operates the Development Project for

Malaysia-Japan International Institute of Technology, an ODA Loan program, to assist in the procurement of research equipment, and in the development of curriculums. Support also included Technical Cooperation, such as the dispatch of a JICA expert to serve as a deputy dean of MJIT. Furthermore, a consortium formed by 24 Japanese universities (as of April 2012) has nominated Japanese professors for assignments at MJIT and has cooperated with the institute in many other ways.

The Government of Malaysia has established the goal of making Malaysia a

developed country by 2020. One strategy to achieve this goal is to place emphasis on upgrading and expanding higher education. As an international base for engineering education, MJIT is expected to help make Malaysia and the ASEAN region more globally competitive as well as to contribute to economic and social development through human resources development.



Students at MJIT attend a class led by a professor from Japan

region of the Philippines.

\*A situation where a country with a newly industrialized economy that has overcome poverty and reached the middle-income level cannot proceed to advance to the level of developed countries due to economic stagnation and the loss of international competitiveness caused by rising wages and other factors.

### ■ Cross-Border Development of the Mekong Region

The Mekong River Basin in the Indochinese Peninsula is called the Mekong region. In this region, Cambodia, Laos, Myanmar and Viet Nam have fallen behind in economic development, and are struggling with high poverty rates. Despite these problems, the region is attractive for investments because of its strong economic growth and political stability. With prospects for significant growth in the future, this region is expected to have a stronger relationship with Japan.

JICA is implementing a broad range of projects to narrow the development gap within the region and to develop the region further. These projects are based on the Tokyo Strategy 2012 for Mekong- Japan Cooperation, which was announced at the April 2012 Mekong-Japan Summit Meeting as well as the Vision of the Vital Artery for East-West and Southern Economic Corridor, which is part of Japan's support for ASEAN connectivity, and other initiatives.

## Country Overviews and Priority Issues

### ■ Indonesia

Indonesia's real GDP growth rate was 6.5% in 2011, the country's highest rate of growth since the 1997 Asian currency crisis. With a population of 240 million, Indonesia is expected to see more growth in private-sector consumption and investments. This will reinforce the Indonesia's position as a major source of economic growth in the ASEAN region.

There is a severe infrastructure shortage in Indonesia, particularly in the capital of Jakarta. In 2011, based on an agreement between the governments of Indonesia and Japan, Master Plan Study for Metropolitan Priority Area (MPA) was started to promote investments in the JABODETABEK (Jakarta metropolitan) area. The study also incorporates knowledge on infrastructure investment and needs of private-sector. The aim is to formulate and share plans for the infrastructure projects needed to achieve the 2020 vision for JABODETABEK. This cooperation is intended to improve the investment climate with respect to both hard and soft infrastructure.

The Public-Private Partnership (PPP) approach is attracting attention to efficiently provide quality public services by encouraging private-sector companies to participate in infrastructure projects. JICA provides comprehensive support for promoting PPP approaches. One way is by providing support to the concerned government ministries and agencies for establishing the relevant policies and regulations. In addition, through, formulating model programs, JICA provides cooperation aimed at developing the capacities of government institutions.



When completed, the Jakarta Mass Rapid Transit System, the first subway in Indonesia consisting of elevated and underground sections, is expected to help alleviate traffic congestion.

### ■ Philippines

Economic growth in the Philippines was 7.0% in 2010 and 3.7% in 2011. But the country's economic growth rate over the past 50 years is lower than in Indonesia, Thailand and Malaysia. Moreover, progress with poverty reduction is slow and income disparities are substantial. The Philippines must also deal with an annual average population growth rate of approximately 2.0% and its vulnerability to natural disasters.

To become a middle income country, the Government of the Philippines is promoting infrastructure development through utilization of private-sector resources and improving the investment climate. JICA's cooperation to the Philippines focuses on the following priority issues: 1) sustainable economic growth by promoting investments; 2) overcoming the country's vulnerabilities; and 3) establishing peace in Mindanao.

Under the above priority issues, JICA provides assistance for: infrastructure development through Public-Private Partnership; policy and institutional improvement aimed at improving the investment climate; disaster risk reduction and management; and in conflict affected areas, human resources development and other support. In particular, for infrastructure development using Public-Private Partnership, JICA is providing Technical Cooperation for improving institutions in order to strengthen the capabilities of concerned government agencies. One example of JICA's comprehensive support is the Central Luzon Link Expressway Project, which is a public-build and private-operate undertaking. An ODA Loan agreement for this project was signed in March 2012.



Arterial highways will carry commuters and cargo between Manila and neighboring areas.

### ■ Thailand

The Government of Thailand is implementing the 11th National Economic and Social Development Plan, which is based on the national vision of creating a happy society with equality, fairness and resilience. Under the plan, Thailand is working on sustainable and comprehensive economic and social development. With a GNI per capita of US\$4,210 (2010), Thailand has joined the ranks of upper-middle income countries. However, there are still many issues: making industries more competitive; measures for an aging society; environmental problems and climate change; and strengthening connectivity with neighboring countries.

JICA is extending its cooperation to Thailand in three priority areas: 1) Enhancement of Competitiveness for Sustainable Growth; 2) Responses to Issues that emerge with Maturing of Society; and 3) Joint Assistance to a Third Country.

During the severe flooding of 2011, JICA activities were not limited to emergency aid. JICA also provided comprehensive support that included medium and long-term assistance. Activities include a review of the master plan for flood

countermeasures; the use of Grant Aid to raise the elevation of national industrial road and construct floodgates; and cooperation for the reconstruction and revitalization of the private sector [➔ See the Case Study on pages 15 and 139].

## Cambodia

In Cambodia, nominal GDP in 2010 was US\$11.6 billion, about twice as high as five years ago. However, Cambodia continues to rank low among the ASEAN countries regarding its per capita GNI, infant mortality rate and other development indexes.

In anticipation of ASEAN integration, in order for Cambodia to achieve further economic development and overcome poverty, the country must develop its economic and social infrastructure and continue to engage in institutional and organizational capacity development and human resource development.

JICA is assisting with the development of critical economic infrastructure, such as major arterial roads and electric power facilities. JICA is also supporting the formulation of policies and capacity building in the industrial sector in order to stimulate the private sector and the establishment of irrigation facilities for raising productivity in the key agriculture sector. To achieve inclusive development, JICA is extending assistance in rural areas for the establishment of water supply systems, the enhancement of healthcare services, and human resources development in the education sector. JICA is also helping strengthen the nation's economic foundation and enhance governance as the backbone for social development. These initiatives include assistance for improving the legal system; improving administrative capabilities including for local government; and strengthening national taxation- and customs-related capabilities.

In 2011, there were many symbolic events that demonstrated the benefits of JICA's assistance. Cambodia enacted the Civil Code and Code of Civil Procedure that were established with Technical Cooperation. Wastewater facilities in

Phnom Penh constructed with Grant Aid were put to use during the Mekong River flood. And the special economic zone at Sihanoukville Port\*, which was constructed using an ODA Loan, started advertising for tenants.

\*The Sihanoukville Port special economic zone was completed in May 2012.

## Laos

The GDP of Laos has been increasing at an annual rate of almost 8% and nominal GDP per capita surpassed US\$1,000 in 2010. However, access to social services is limited in rural areas, which are mostly mountainous, which creates the risk that Laos will be unable to attain the Millennium Development Goals (MDGs) concerning health and education.

The Government of Laos established the 7th National Socio-Economic Development Plan in June 2011. The goals are to reach the 2015 MDGs and leave the ranks of least developing countries (LDC) by 2020.

JICA's aid approach is centered on support for the achievement of the MDGs and for building a foundation for economic growth that will be a driving force for the country's self-reliant and sustainable growth. JICA is providing cooperation for the following priority areas: increasing access to basic education, expansion of healthcare services, rural development, social and economic infrastructure development, strengthening of the private sector and improvement of administrative capabilities.

In March 2012, the decision was made to proceed with the Southern Region Power System Development Project, the first Project-type Loan in Laos in seven years. The project will create a national electricity grid by directly linking the separate transmission networks in southern Laos. This is expected to contribute to rural electrification and the stability of the electricity supply.

In addition, JICA has started assisting with countermeasures regarding the large volume of unexploded ordnance in Laos.

### Case Study

### Timor-Leste Industrial Infrastructure Program

## Upgrading National Road No. 1 Using the First ODA Loan to Timor-Leste

**In March 2012, JICA and Timor-Leste signed an ODA loan agreement of up to ¥5.278 billion for the National Road No. 1 Upgrading Project, in the commemorative year of the 10th anniversary of independence of Timor-Leste and the establishment of diplomatic relations between Japan and Timor-Leste. The project is to make the National Road No.1 passable and safe throughout the year in any weather by upgrading the 116km road from the capital city of Dili to the second largest city, Baucau, based on an international standard.**

When Timor-Leste became independent in 2002, almost 80% of the buildings in the capital city, Dili, were destroyed and refugee camps were overflowing. Peace-building activities of the United Nations started in this challenging environment. JICA opened its office in Timor-Leste in 2000 and has been providing a diverse array of cooperation in the areas of rehabilitation of basic infrastructure (roads and bridges, ports, irrigation, water treatment plant, etc.), capacity development

for the operation and maintenance of those facilities, and human resources development.

Since its independence, Timor-Leste has made significant progress in security stabilization, which brought double-digit economic growth to the country. The country's medium-term vision is "to step forward from post-conflict status to the development stage." The country wants to reduce its dependence on energy resources and develop new business opportunities that can be the

nucleus of the economy. Upgrading National Road No. 1 is one of the major national projects listed in the Strategic Development Plan (2011-2030) to accomplish this goal and is expected to contribute to mobilizing more business and economic development opportunities in Timor-Leste in the future.



Timor-Leste Finance Minister Emilia Pires, H.E. Prime Minister Xanana Gusumao and JICA Vice-President Izumi Arai (from left) shake hands after signing the ODA Loan agreement on March 19, 2012.

## ■ Myanmar

The new administration that took over in March 2011 has been implementing reforms for democratization and reconciliation with the people of Myanmar.

JICA is supporting the reforms of the Government of Myanmar and altered its economic cooperation policy in April 2012 to enable the people of the country to see for themselves the benefits of these reforms. As a result, JICA has decided to enlarge the scope of aid programs, which had previously been restricted to the field of basic needs for living. To formulate programs, JICA plans to identify needs in the fields of agriculture, healthcare and education as well as in the infrastructure sector in order to promote economic growth.

Specifically, JICA will continue to implement existing programs, such as the prevention of the three major infectious diseases of malaria, HIV/AIDS and tuberculosis [➔ See the Case Study on page 89] and support for production of alternate crops in northern Shan State as a drug control measure. In addition, JICA plans to provide cooperation that contributes to economic development. Examples include the Economic Reform Program, which uses human resources development, Yangon urban development, and the construction of port facilities and transportation networks.

JICA also plans to increase assistance for minority ethnic groups, use Technical Cooperation for agricultural technology guidance, assist with infrastructure projects and provide other support.

## ■ Viet Nam

In 2011, the strategic partnership between Japan and Viet Nam became even stronger with the announcement of the Japan-Viet Nam Joint Statement by the leaders of the two countries. At a summit meeting, Viet Nam asked for cooperation to upgrade universities to international standards and conduct high-quality human resources training activities. In response, JICA started conducting a survey in order to hold discussions with Viet Nam concerning cooperation in the fields of higher education and industry-related human resources development.

For infrastructure development, an ODA Loan was provided for the Lach Huyen Port Infrastructure Construction Project, the first Public-Private Partnership project in Viet Nam. Support was also extended for technologies to cope with disasters and climate change and for more advanced disaster prevention measures. For this support, Viet Nam received the first ODA Loan for satellite procurement and education to develop and utilize earth observation satellites.

Based on the Viet Nam Socio-Economic Development Strategy (to 2020) that was adopted at the January 2011 Communist Party convention, JICA is also providing support for the creation of strategic industry proposals to make Viet Nam an industrialized country by 2020.

There are many important issues in Viet Nam that require action: efficient infrastructure investments, industrialization, improving productivity, rapid urbanization and widening disparities. By helping make Viet Nam more globally competitive, JICA is helping Viet Nam to achieve sustained growth, overcome vulnerabilities, and progress with nation-building and creating an equitable society.

## ■ Timor-Leste

Timor-Leste celebrated the 10th anniversary of its

independence in May 2012. Being ready to graduate from the reconstruction stage and embark on full-fledged economic development, the Government of Timor-Leste announced the Strategic Development Plan (2011-2030) in July 2011. In accordance with its basic policy of building a foundation to advance from reconstruction to development, JICA has established three cooperation programs: building a base for economic vitality; agriculture and rural development; and upgrading the capacity of governments and the public sector. To support medium-term economic and social development, JICA will offer cooperation that emphasizes invigorating and diversifying business activities for contributing to economic development.

In 2012, as a commemorative event for the 10th anniversary of diplomatic relations between Japan and Timor-Leste, the first ODA Loan agreement was signed between JICA and the Government of Timor-Leste, for the National Road No. 1 Upgrading Project, which links the capital of Dili and Baucau, the country's second-largest city [➔ See the Case Study on page 29].

## ■ Malaysia

Malaysia is undergoing steady growth as an upper-middle income country in ASEAN; it has quickly recovered from the global financial crisis and has returned to a stable growth track. The Malaysian government announced the New Economic Model (NEM) in March 2010. The NEM outlines policies that aim to double annual per capita income by 2020 by shifting to knowledge-intensive industries, among other strategies.

JICA is providing assistance with a focus on the following priority areas: 1) cooperation for balanced development toward a developed country; 2) contribution toward common issues in the East Asian region; and 3) Japan-Malaysia development partnership that goes beyond the East Asia region.

In December 2011, a Japanese ODA loan agreement was signed with the Government of Malaysia for the Development Project for Malaysia-Japan International Institute of Technology (MJIT). This institute started operating in September 2011 for the purpose of introducing Japanese-style engineering education in Malaysia. With the cooperation of 24 universities in Japan (as of April 2012), JICA is providing assistance including Technical Cooperation with the aim of creating even better research and education institutions [➔ See the Case Study on page 27].

## ■ Singapore

Singapore, which "graduated" from JICA's ODA assistance in fiscal 1998, and Japan have been cooperating with each other as partners carrying out approximately 15 to 20 training courses a year mainly for other ASEAN nations under the Japan-Singapore Partnership Programme (JSPP) since 1994. By fiscal 2011, 313 courses had been conducted with the participation of 5,363 individuals from 88 countries.

From fiscal 2009 to 2012, JICA has dispatched a research fellow to the Lee Kuan Yew School of Public Policy of the National University of Singapore to build networks that can enhance JICA operations, through such activities as joint research and seminars.



## Support for Modernization of Customs Operations for Smooth Trade between Asian Countries and Japan

The continuing expansion of the Asian economy is a driving force of the global economy. One result of economic growth is a rapid increase in the volume of trade within Asia and between Asia and Japan. To accommodate this increasing volume, there is an urgent need to improve the efficiency of customs clearance and other trade procedures in Asian countries. The Government of Japan is promoting the “Asia Cargo Highway” initiative that aims to facilitate the seamless movement of goods in Asia. To help make this vision a reality, JICA is providing support for the modernization of customs operations. The assistance includes institutional reforms, training for customs personnel, establishing electronic customs clearance systems and other activities. Through these measures, JICA is contributing to building even stronger partnerships between Japan and the ASEAN countries.

### One Facet of ASEAN Integration

Increasing physical, institutional and people-to-people connectivity within the ASEAN region is vital to achieving ASEAN integration by 2015. The Master Plan on ASEAN Connectivity was approved at the 17th ASEAN Summit meeting in 2010 and measures to realize this plan are being implemented.

For physical connectivity, JICA is providing support based on “Japan’s Vision for Supporting ASEAN Connectivity,” which was announced by the Japanese government at the occasion of 17th ASEAN Summit. The vision consists of two parts: Vision 1: Formulation of Vital Artery for East-West and Southern Economic Corridor and Vision 2: Maritime ASEAN Economic Corridor. Activities include infrastructure projects like roads, bridges and seaports for the East-West and Southern Economic Corridors in the Mekong region, as well as the establishment of a RoRo (roll-on, roll-off) ship network, and other measures. For people-to-people connectivity, JICA is implementing the ASEAN University Network/Southeast Asia Engineering Education Development Network (AUN/SEED-Net) Project to develop human resources in ASEAN countries in engineering field, through (1) enhancement of educational and research capacity of Member Institutions in ASEAN; and (2) strengthening of a network among Member Institutions and Japanese universities.

As a part of this support for connectivity, the Asia Cargo Highway initiative is the most important effort for strengthening institutional connectivity. Building upon past cooperation

with customs of ASEAN countries, JICA is working with the Japanese Customs and Tariff Bureau, Asian Development Bank and World Customs Organization (WCO) to realize this vision.

### Achieving the Vision with Support that Matches Each Country’s Needs

JICA started providing cooperation to customs in ASEAN countries in the 1990s. The Philippines, Indonesia, Malaysia, Thailand and Viet Nam received assistance for improving customs systems and operational processes, establishing customs data systems, upgrading customs personnel training systems, and other improvements. In recent years, JICA has expanded its assistance to other ASEAN countries, i.e., Myanmar, Laos and Cambodia.

The Asia Cargo Highway initiative sets goals in a step-wise manner in order to reflect the diverse conditions in each partner country. The first step for achieving the vision is ratification and adoption of the international rules (tariff classification, custom valuations, etc.) prescribed by the WCO. This step also includes training people on the new rules, introduction of advance rulings, post-clearance audits, and time release surveys (TRS) that set the target time and verify the result. The second step is support for the establishment of an efficient risk management system, introduction of an electronic customs clearance system, and creating one-stop service for customs, immigration, quarantine and other procedures. The third step involves the adoption of the AEO system\*and mutual

recognition among the related countries, establishment of national single window, and international interoperability of the systems among ASEAN countries and Japan.

In conjunction with these measures, JICA signed an agreement with the Government of Viet Nam in March 2012 to provide Grant Aid for the establishment of an electronic customs clearance system. The system will be based on two customs systems used in Japan: the Nippon Automated Cargo and Port Consolidated System (NACCS) and the Customs Intelligence Database System (CIS). Many foreign companies,

including Japanese firms, have been starting operations in Viet Nam in recent years and the volume of international trade is growing rapidly. Using this electronic customs system with advanced Japanese technologies is expected to make Viet Nam’s trade procedures more efficient and strengthen connectivity between Viet Nam and the global economy, including Japan.

\*The Authorized Economic Operator (AEO) system eases and simplifies customs procedures for companies that fulfill the required cargo security management and legal compliance capabilities.

#### From Our Expert

### Project for the Promotion of E-Customs in Viet Nam

Hiroki Sakurai

Viet Nam joined the WTO in 2007 and has been working hard on modernizing customs procedures to ensure even smoother trade procedures. To further increase the pace of these activities, JICA has provided Grant Aid for the introduction of an electronic customs clearance system that is based on NACCS, a technology that was developed and used over a period of more than 30 years by Japan Customs. The system is expected to become operational in 2014.

However, similar to any other electronic system, the benefits of this electronic customs clearance system will depend greatly on how it is used. This is why we need to pay great attention to soft aspects such as amendments of laws and regulations to match the new system, improvement of operational processes, and training of maintenance and management personnel. The Technical Cooperation project, where I am currently assigned, provides assistance for these soft aspects in order to maximize the benefits of using the new system.

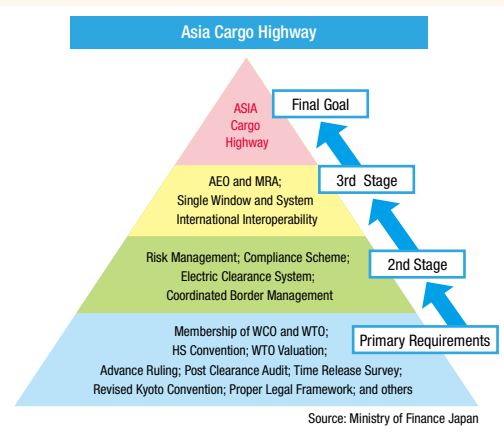
#### From the Grassroots

### Modernization Committee, General Department of Viet Nam Customs Deputy Director Nguyen Manh Tung,

To introduce NACCS, we will amend our laws and regulations as needed while referring to Japan’s laws and regulations on customs. We want to use Japan’s electronic customs clearance system with as few changes as possible with the goal of significantly modernizing Viet Nam’s customs procedures.

We will also incorporate know-how concerning risk management used in Japan in order to perform customs operations effectively and efficiently. To do this, I think that we have to perform a major review of operational processes within Viet Nam Customs. I want to make steady progress with adopting the new system with the cooperation of JICA and the Japanese Customs and Tariff Bureau.

### Trade Facilitation under “Asia Cargo Highway” Initiative



# East Asia — Strengthening of Strategic Partnerships Aiming for a Mutually Beneficial Relationship

China must deal with numerous issues including environmental problems resulting from the country's dramatic economic growth, as Mongolia advances toward rapid development underpinned by its abundant mineral resources. The consistent and sustained development of these countries has become increasingly important for Japan as well as the world.

JICA's cooperation in this region is contributing to building stronger economic relationships with China and Mongolia that are both reciprocal and mutually complementary. Furthermore, as China becomes increasingly influential as an emerging donor, JICA is promoting dialogues, seminars and other measures to strengthen collaboration with China as fellow donor nations.

**Key Aid Strategies**

**Support regional stability and growth that is sound and sustained**

**China**

The Government of Japan established the Economic Cooperation Program for China in October 2001 with emphasis on six sectors. Based on China's economic growth and technological progress in recent years, JICA is currently concentrating on the following three priority areas. Cooperation is extended with regard to shared challenges faced by both countries (for example, measures against pollution, yellow sand, and infectious diseases that cross into Japan, and the resolution of other such issues, as well as the creation of systems and standards to increase the predictability of companies that enter the Chinese market) and promoting mutual understanding at multiple levels.

(1) Cooperation to confront global issues such as infectious diseases and environmental problems

(2) Assistance for the open and reform policy (including promotion of good governance)

(3) Promotion of mutual understanding

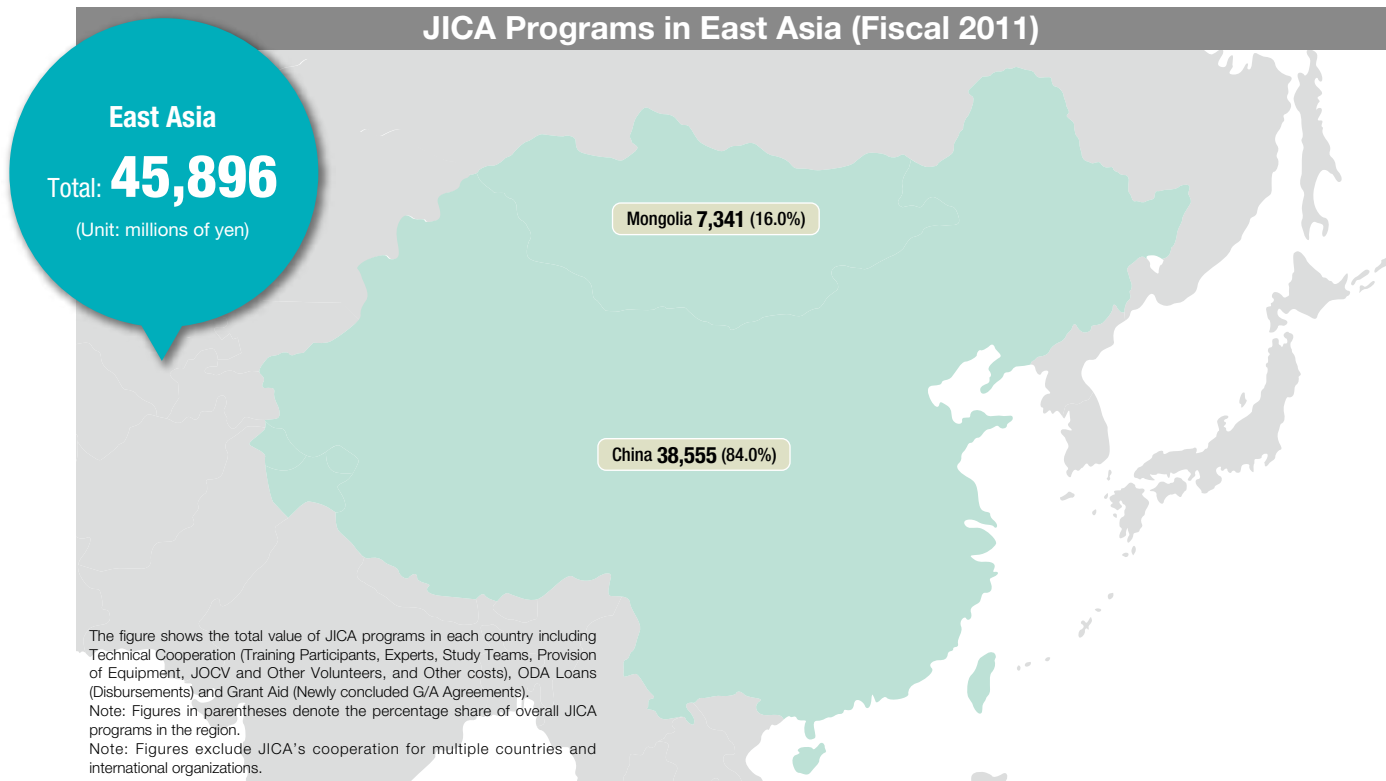
**Mongolia**

JICA is focusing on cooperation on areas in accordance with the three priority areas stated in the Mongolia Aid Policy announced in April 2012.

(1) Sustainable development of the mining sector and enhancement of governance: Establish systems and train personnel to achieve sustainable development of mineral resources, the key element of Mongolia's economic advancement, as well as establish systems for the proper management of revenues from natural resources.

(2) Assistance for inclusive growth: Create employment primarily

**JICA Programs in East Asia (Fiscal 2011)**



The figure shows the total value of JICA programs in each country including Technical Cooperation (Training Participants, Experts, Study Teams, Provision of Equipment, JOCV and Other Volunteers, and Other costs), ODA Loans (Disbursements) and Grant Aid (Newly concluded G/A Agreements).

Note: Figures in parentheses denote the percentage share of overall JICA programs in the region.

Note: Figures exclude JICA's cooperation for multiple countries and international organizations.



at SMEs and smaller companies to diversify industrial activities, and improve basic social services.

- (3) Enhancement of the capacity and function of Ulaanbaatar as an urban center: Improve the city's infrastructure facilities, and upgrade urban planning and management capabilities.

## Country Overviews and Priority Issues

Major projects in this region for priority issues are as follows.

### ■ China

**The Project for Promotion of Municipal Solid Waste Recycling:** The goal of this project is to promote proper management of urban waste materials and recycling (reuse) of waste materials. In addition, the project supports the establishment of national policy and legislative systems through joint research and exchange of Japanese and Chinese experts.

### ■ Mongolia

**Project for Capacity Development of Business Persons through Mongolia-Japan Center for Human Resources Development:** In this project, JICA provides professional development training through the Mongolia-Japan Center for Human Resources Development, constructed through Grant Aid, to nurture individuals who can play key roles in the creation of a market economy. The center offers business courses and provides assistance to SMEs and microenterprises.

**New Ulaanbaatar International Airport Construction Project:** Construction of a new airport in Ulaanbaatar will improve the safety and reliability of air access for the capital city and provide greater convenience for travelers, contributing to further economic development in Mongolia.

### Case Study

## China Environment Construction at Co-existent Areas of Human Beings and Crested Ibis

### For Co-existence of People and Crested Ibis

**The beautiful Crested Ibis often referred to as the “jewel of the Orient,” is in danger of extinction, and her protection is a global agenda. Although Crested Ibis was thought to be extinct in China, seven birds were found in the Shaanxi province in 1981. Since then, continuous effort has raised the population to more than 1,600. The current seven crested ibis in Japan are the descendants of these birds in China. Japan and China have been cooperating for more than 30 years for this endangered species.**

The success in restoring the population has been remarkable worldwide. However, this protection effort has caused another problem. Since Crested Ibis feeds in paddy fields, restrictions in the application of

fertilizers and chemicals result in the income drops from these fields. China is currently struggling with such difficulties in co-existence of human lives and the birds protection.



A crested ibis in flight (photo taken in Shaanxi Province, China)

In 2010, JICA initiated a five-year project to assist Chinese government to tackle the issue in both Shaanxi and Henan provinces. Supports include breeding and protecting Crested Ibis in the region, as well as restoring paddy fields and supporting organic agriculture. The project also has environmental education program for elementary school students in order to foster an understanding of Crested Ibis.

In Japan, the city of Sado in Niigata Prefecture is well known as a Crested Ibis habitat, and programs are underway to facilitate the co-existence of people and Crested Ibis. For instance, the area produces a brand of rice that is grown in a safe environment for the birds. The community also promotes Crested Ibis to attract tourists and for environmental education for children. In the city of Toyooka in Hyogo Prefecture, similar activities to protect Oriental Stork have produced benefits and succeeded in revitalizing the area. Chinese government and people show high interests in these initiatives in Sado and Toyooka. The project in China continues to further facilitate mutual learning of people in Japan and China, and create an abundant environment for coexistence of people and Crested Ibis.

# Central Asia and the Caucasus

— A Region with Many Natural Resources Opened for Asia and Europe That Is Attracting the World's Attention

The Central Asia and the Caucasus region, located in roughly the center of the Eurasian continent, comprises five Central Asia countries—Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan—and three Caucasus countries—Armenia, Azerbaijan and Georgia that gained their independence from the former Soviet Union in 1991.

Achieving balanced development of the entire region is an important global issue because of the increase in economic disparities within this region. Furthermore, Afghanistan, a country that is still unstable, is located nearby.

## Key Aid Strategies

### Supporting Intra-Regional Cooperation for Stable Economic Development

In this region, JICA is concentrating on intra-regional cooperation and the promotion of democracy and market economies. Cooperation priorities are: (1) programs for improving the electric power and transportation infrastructures in the Central Asia and (2) programs to enhance market economies by activating the private sector.

## Country Overviews and Priority Issues

### Uzbekistan

To maintain economic growth that is backed by high prices of natural resources such as natural gas and gold, JICA is supporting three sectors: (1) improving and building the economic infrastructure, focusing on electric power and transportation; (2) supporting human resources development and institution-building to facilitate a market economy and develop industries through the Uzbekistan-Japan Center for Human Development and support for the legal framework; and (3) social support for rural areas.

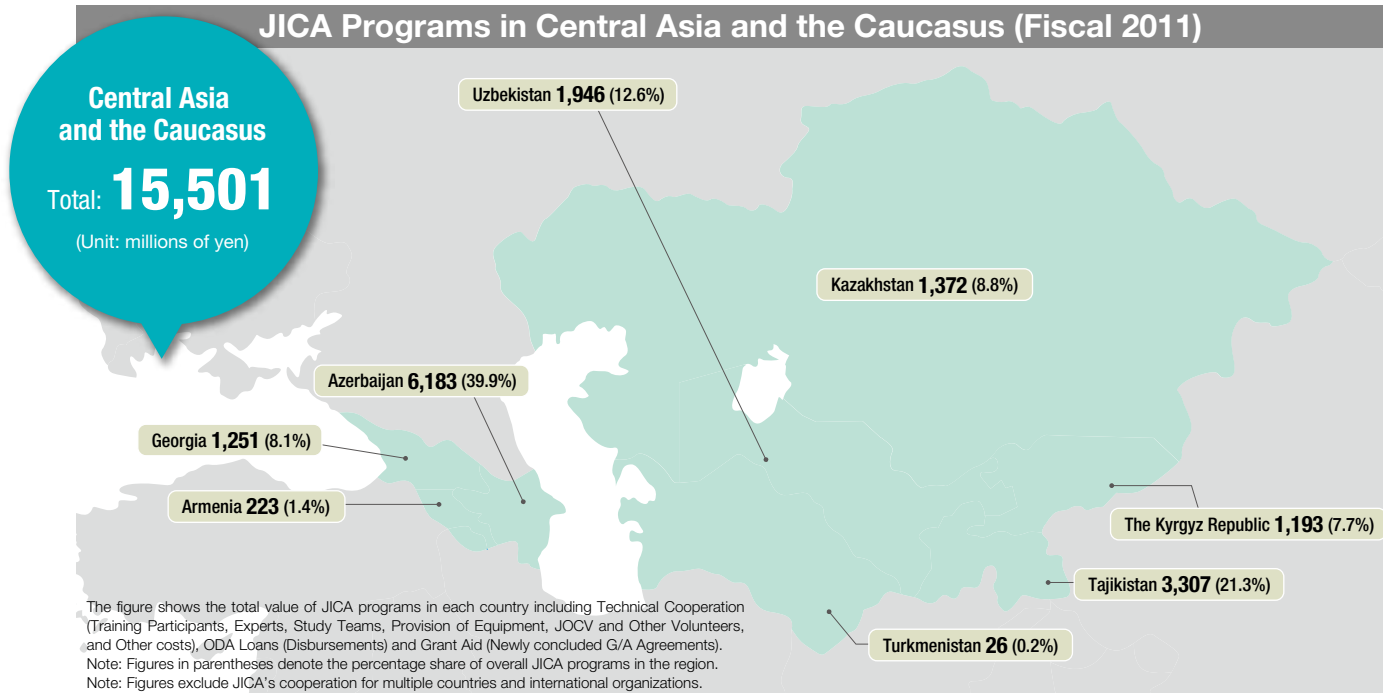
### Kazakhstan

Kazakhstan is endowed with abundant natural resources, including the world's second largest uranium reserves. Diversification of industry in the country is needed to achieve balanced and sustained economic growth. JICA is assisting in this endeavor, with its main emphasis on training human resources through the Japan Center for Human Development and on the economic infrastructure that serves as a foundation for industry.

### Tajikistan

Tajikistan overcame 10 years of civil war after its independence from the former Soviet Union, and has been working on achieving economic and social stability while enacting structural reforms. JICA has three priority areas for assistance: the development of basic social services, rural development and industry promotion, and transportation.

JICA Programs in Central Asia and the Caucasus (Fiscal 2011)





## ■ The Kyrgyz Republic

The Kyrgyz Republic is a mountainous country with few significant natural resources other than gold. The economy is stagnant because it is not on the track of stable economic growth. JICA has set a goal of assistance in promoting the reduction of poverty through economic growth based on the transition to a market economy. To create a foundation for economic growth, JICA is cooperating in the fields of transportation infrastructure, development of agricultural and rural areas, and human resources development for the transition to a market economy.

## ■ Turkmenistan

Turkmenistan has an economy supported by large reserves of natural gas. In recent years, the country has been strengthening ties with the United States, Europe and neighboring countries. Japanese cooperation for Turkmenistan focuses on training so that government workers can learn about Japanese experiences and on other activities.

## ■ Azerbaijan

Azerbaijan's economy has been expanding due to the

country's large reserves of petroleum and natural gas. Improvement of the infrastructure and the development of non-petroleum sectors are major issues for the country. JICA is providing support for the construction of a power plant near the capital of Baku and for the construction of water and sewer systems in provincial cities.

## ■ Armenia

Since its independence from the former Soviet Union, Armenia has proactively pursued democratization and a market economy. JICA is focusing on assistance for infrastructure development to overcome the aging economic infrastructure and prevent environmental degradation.

## ■ Georgia

Georgia aims to use its geographically advantageous position between Europe and Asia to expand its economy and reduce poverty. JICA is providing support for improvement of the East-West Highway, which is an arterial road in Georgia, to develop regional economies by strengthening the transportation capacity.

### Case Study

## The One Village One Product Project in the Kyrgyz Republic

### Small Business Promotion by Ryohin Keikaku and JICA

**Issyk Kul, which means "hot lake," is located along the Silk Road, which passes through the Kyrgyz Republic. The lake is nine times larger than Japan's Lake Biwa and is well known as a resort area among the people in the Commonwealth of Independent States. The One Village One Product Project is taking place in the region around Issyk Kul.**

The One Village One Product Project, which is the Community Empowerment Project through Small Business Promotion by One Village One Product (OVOP) Approach, aims to bring together ambitious people to form an association in each village for a particular product. At the same time, the project's concept of using local materials to make products will be extended to other areas. Taking these actions will promote business activities by facilitating information sharing within regions and building efficient frameworks for manufacturing.

However, many people are still unable to abandon the mindset of the Soviet-era. The concepts of OVOP and manufacturing products remind most people of investments to build large factories and constructing one factory in each village. When seeking a way to end this way of thinking, a joint project with Ryohin Keikaku Co., Ltd. was considered.

The newly formed associations held

discussions with producers of handicrafts that resulted in technical training programs for fabricating felt products such as eyeglass cases made of locally produced wool. When production began, though, it was much more difficult than expected. Everything from procuring raw materials to shipping final products was a new experience for the workers. As a result, problems had to be solved one by one.

The producers complained about the receipt of payments after production and the rigorous quality standards. Managing production was the most difficult task of all. It was extremely difficult to monitor the production activities of 33 groups located around a lake with a shoreline of almost 700km. Monitoring was performed by the project's staff with the support of Japan Overseas Cooperation Volunteers (JOCV). They worked nights and days during the days leading up to shipments.



An expert shows how to measure the size of products

Total production was more than 13,000 eyeglass cases. Fabricating the cases required more than 300 people and approximately four and a half months. The experience was sufficiently effective to alter the communities' attitudes. People learned many things, such as the strict quality standards of Japanese companies and the benefits of working as a team. Furthermore, completing a task that involved entirely manual labor gave everyone confidence and a positive attitude. Currently, the associations are seeking production technology and sales opportunities rather than credit and the provision of free machinery. In addition, the number of people participating in this project has increased.

This joint project of JICA and Ryohin Keikaku is under way again in 2012. Everyone is working hard with the goals of tackling new challenges and using even more efficient production methods.

# South Asia — Cooperation for Long-term Growth in Asia While Reflecting the Region's Diversity

South Asia is about the same size as Europe but has a population that is twice as large. The region is in a geopolitically key position because of its many land and sea links with the Middle East, Central Asia and East Asia. As a result, South Asia is very influential with regard to international politics and economic activity. Countries in this region have many religions, ethnic groups, cultures and languages, making South Asia a region with sources of instability that include income disparities, religious conflicts and other problems. Ensuring economic and social stability and progress in South Asia is vital to the stability and advancement of the entire Asian region, including Japan. JICA is providing a diverse array of cooperation in response to the needs of each country.

**Key Aid Strategies**

**Assistance for Sustainable Growth, Peacebuilding and Reconstruction Assistance, Environmental and Climate Change Measures, Vitalizing of Private Sector Economy**

South Asia includes the nations of India, Bhutan, Afghanistan, Pakistan, Sri Lanka, Maldives, Bangladesh and Nepal. One-third of the approximately 1.5 billion people who live in the region are considered to be impoverished. Poverty reduction is a challenge for the entire region. Numerous challenges exist with regard to health, education and other fields, too. Furthermore, gender disparity is still a serious problem. Consequently, many South Asian countries may be unable to achieve the Millennium Development Goals (MDGs).

In emerging countries with rapidly growing economies, there is an urgent need for transportation, electric power, water and sewerage, and other infrastructure projects to attract the domestic and foreign investments needed to sustain growth. In countries affected by conflicts, peacebuilding and reconstruction assistance are needed. Countries vulnerable to cyclones, flooding, earthquakes and other natural disasters

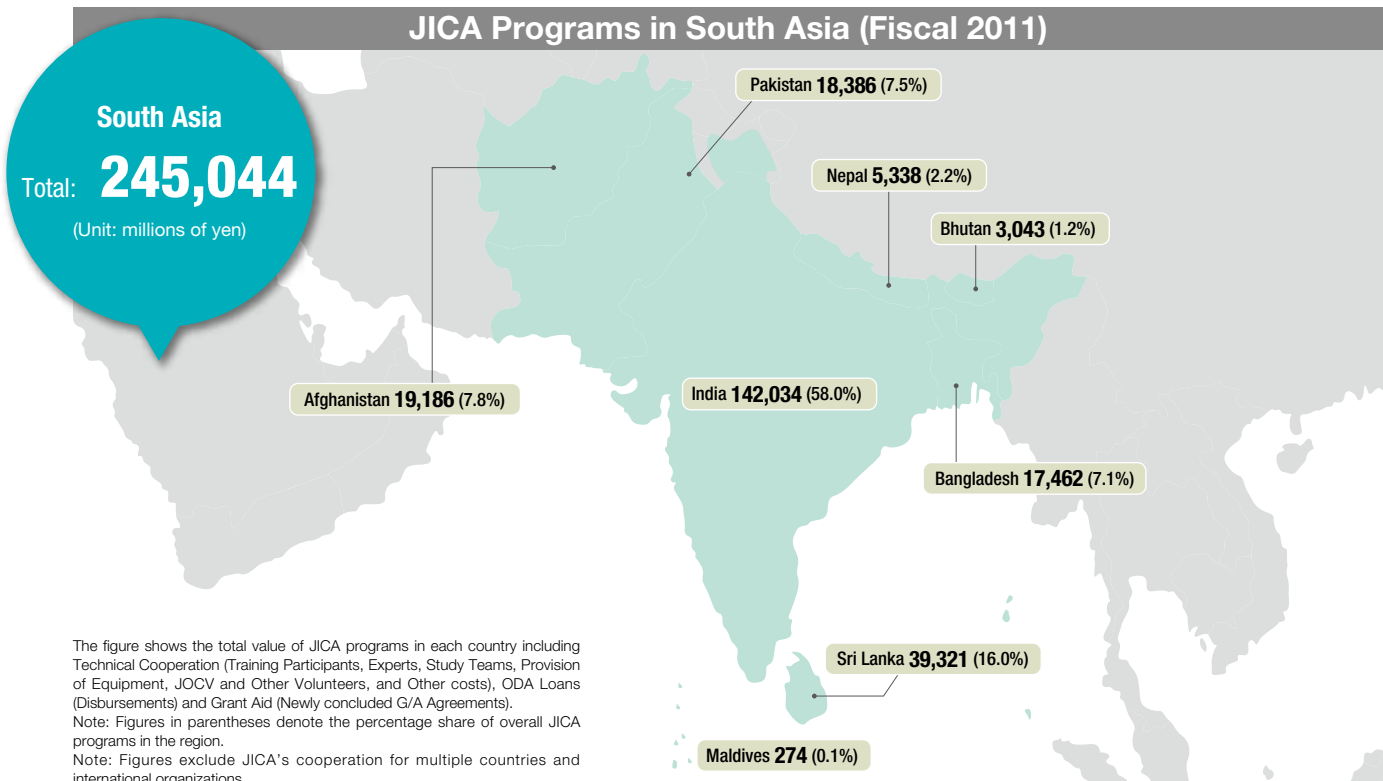
require disaster prevention measures.

JICA has established the following four priority areas in South Asia.

**(1) Assistance for Sustainable Growth**

South Asia requires sustained economic growth as well as measures to deal with widening income disparities, which are a source of instability in this region. Achieving well-balanced economic progress in this region is the goal. One way is support for infrastructure projects that form the foundations of economic growth, including transport, electric power, water and sewerage systems, urban transportation and other sectors. JICA is also engaged in measures to address poverty such with as health and medical care, education, agriculture, rural development, and other programs.

JICA Programs in South Asia (Fiscal 2011)



The figure shows the total value of JICA programs in each country including Technical Cooperation (Training Participants, Experts, Study Teams, Provision of Equipment, JOCV and Other Volunteers, and Other costs), ODA Loans (Disbursements) and Grant Aid (Newly concluded G/A Agreements).  
 Note: Figures in parentheses denote the percentage share of overall JICA programs in the region.  
 Note: Figures exclude JICA's cooperation for multiple countries and international organizations.



## (2) Peacebuilding and Reconstruction Assistance

JICA is formulating and implementing programs that contribute to the peace and stability of regions and countries. There are programs in Afghanistan and Pakistan as well as in Sri Lanka, which is shifting from the reconstruction to development stage following the May 2009 end of 25 years of internal conflict. JICA is also active in Nepal, which is in the process of establishing a government under a new constitution.

## (3) Environmental and Climate Change Measures

South Asia is highly vulnerable to the effects of climate change and natural disasters as was shown by flooding in Pakistan, Sri Lanka and Bangladesh. Furthermore, this is a globally important region for the preservation of biodiversity, particularly in the northern mountainous areas of South Asia. This is why JICA creates and implements projects involving climate change and disaster prevention. Activities include energy efficiency, forest protection, urban transportation and mainline railway networks, disaster prevention, and other programs.

## (4) Vitalizing of Private Sector Economy

Japanese companies are becoming increasingly interested in India and Bangladesh because of the rapid and strong economic growth, and other regions of South Asia. Based on the New Growth Strategies of the Japanese government, JICA is establishing PPP and BOP programs that include participation of the private sector. In addition, JICA is promoting human interaction and technical partnerships and conducting many projects that help improve the investment environment.

## Country Overviews and Priority Issues

### ■ India

India has a rapidly growing presence in the world. The country's population topped 1.2 billion in 2011 and India ranks fourth after the United States, China and Japan in terms of gross national income based on purchasing power parity. In every sense, India has become one of the world's major countries. However, construction of important infrastructure such as highway, railways, power, water supply and sewerage has not kept pace with economic growth. As a result, load-shedding, traffic jams and other infrastructure problems seriously affect Indian economic activities. Early development is expected for infrastructure such as roads, railways and other urban transportation networks, power, water supply and sewerage. JICA is extending cooperation to India by using Japanese experience with infrastructure development.

One major example is the Delhi Mass Rapid Transport System (Delhi Metro) Project to provide efficient transportation to most of the Delhi metropolitan area. As well as ODA Loans for construction, JICA provides technical transfers through training and sending experts from Japan for safety measures at construction sites, car maintenance and rail system operation management. JICA aims to transfer Japan's advanced railway system to India through capacity development together with financial assistance.

More than 450 million people in India are forced to live on less than \$1.25 each day. There is an urgent need for measures to reduce poverty. To achieve inclusive development, the

### Case Study

### India Subway Construction

## Bengaluru Metro Backed by ODA Loan Starts Operations

**India's population is becoming more concentrated in large cities as the population grows. The result is chronic traffic congestion and air pollution from motor vehicle exhaust. The Government of India is building metro systems in large cities and JICA is extending support in the form of ODA Loans. In November 2011, part of the Bengaluru Metro system began operations.**

Located in southern India, Bengaluru has seen its population surge over the past decade from 5.7 million to 8.1 million. One result is chronic congestion on major highways.

To deal with this problem, a plan was created to construct a 43.2 kilometer Bengaluru Metro with an east-west and north-south line. JICA provided an ODA Loan of ¥64.5 billion, which is 20% of the total cost of ¥306.8 billion. Japanese companies participated as consultants for construction of the Bengaluru Metro. The project uses Japan's advanced tunnel boring machines for

the soil on the site, which varies from soft to hard. A Japanese company is also supplying energy-efficient, high-performance metro vehicles and other equipment and technologies. Furthermore, safety systems and environmental measures developed in Japan have been adopted for construction sites and these technologies have been transferred. Seven kilometers of the east-west line opened in November 2011. The entire system is scheduled to be operational in 2013.

India is moving forward with plans to build



The Mahatma Gandhi Road Station of the recently opened Bengaluru Metro

mass transportation (metro) systems in all cities with a population of more than 4 million. JICA extended ODA Loans for construction of the Kolkata Metro north-south line in the 1980s and the Delhi Metro in the 1990s and 2000s (Phase 1 and 2). Furthermore, JICA has provided ODA Loans for the ongoing construction of the Chennai Metro and east-west line of the Kolkata Metro and the Delhi Metro (Phase3). These projects will further contribute to establishing urban transport systems in India as well as to reducing traffic jams and air pollution.

Government of India has been working even harder on the issues of poverty, urbanization, and rural development under the 12th Five Year Plan that started in 2012.

More than 800 Japanese companies are currently operating in India. The number of companies has approximately doubled over the past four years. As a result, the relationship between Japan and India is becoming stronger and deeper rapidly. In August 2011, a Comprehensive Economic Partnership Agreement between Japan and India went into effect, and 2012 is a significant year as the 60th anniversary of Japan-India diplomatic relations.

JICA is extending assistance for Japan-India cooperation such as the Delhi-Mumbai Industrial Corridor (DMIC) Project and the Chennai-Bengaluru Industrial Corridor (CBIC) in South India, as well as assistance to strengthen Japan-India academic-industry networks, and human resources development for industries such as manufacturing. JICA is extending its assistance to contribute to stronger relations between Japan and India.

### ■ Bhutan

In Bhutan, which has a population of 700,000, agriculture, forestry and livestock used to be the main industries for its economy. However in recent years, the country has been promoting sales of electricity to India, generated by water power utilizing its mountainous terrain and abundant water resources, and now it leads steady economic growth in this country. The GDP has increased at an annual rate of more than 8% over the past five years. Moreover, GNI per capita has

increased from \$800 to \$1,880 between 2000 and 2010, showing that Bhutan will soon graduate from the ranks of Lower-Middle-Income Countries.

The Government of Bhutan has proclaimed the fundamental concept of developing Gross National Happiness (GNH), which defines creating a society where everyone can live in happiness as the ultimate goal; economic growth is not the overarching mission.

Based on the priority areas of the Government of Bhutan, JICA is focusing aid programs on four sectors: (1) agricultural and rural village development, (2) establishment of an economic foundation, (3) social development, and (4) strengthening governance. In all areas, JICA is conducting balanced activities that incorporate Technical Cooperation, Grant Aid, Japanese ODA Loan and Japan Overseas Cooperation Volunteers.

### ■ Afghanistan

With an area about 70% larger than Japan, Afghanistan borders six countries and has a multi-ethnic population of about 26 million. The largest ethnic group is the Pashtuns, which account for about 40% of the population. There are also Tajik, Hazara, Uzbek and other groups. The population is 90% Islam with most belonging to the Sunni branch, but there are also Shiite followers. Approximately 40% of the country is mountainous and only about 12% is arable.

Continuous warfare since the 1970s has largely destroyed the country's economic and social infrastructure, forcing many people to flee the fighting and become refugees. Following the creation of a new government when Taliban rule ended in

#### Case Study

#### Afghanistan Training Core Personnel for Nation-building

### Training Programme for People Who Can Support Nation-building

**Development programs have been under way in Afghanistan since 2002 with international support for the purpose of creating a peaceful and stable country. But conflict in Afghanistan has reduced opportunities for education, prompted many skilled individuals to leave the country and created other problems. Consequently, the shortage of human resources who can play a central role in nation-building is a serious issue.**

When Taliban rule ended in 2001, JICA resumed aid programs for the new Afghanistan that was starting to lay the groundwork for democracy. Cooperation has been extended while recognizing the leading role played by Afghanistan in the fields of social infrastructure projects, the development of agriculture and rural areas, and education and health care. Using this cooperation as the base, JICA started the Project for the Promotion and Enhancement of the Afghan Capacity for Effective Development (PEACE) that aims to enable Afghanistan to perform nation-building on its own. PEACE gives government officials and lecturers the opportunities to earn master's degrees or conduct research in Japan in fields associated with the project's main areas of emphasis: urban development and infrastructure and

agricultural and rural village development.

In October 2011, the first group of almost 50 government officials and lecturers arrived in Japan to begin their studies. Up to 500 individuals from Afghanistan are expected to participate in this program until 2015.

Unlike with conventional support for international students, PEACE focuses on research themes in the priority areas of JICA's cooperation. The goal is to utilize the results of this research directly for the development of Afghanistan. PEACE is also a fine textured programme to support before and after

training in Japan. Preliminary training will be prepared before going to Japan in order to enhance basic academic skills. PEACE also includes the resumption of work and participation in JICA projects after returning to Afghanistan.

A long-term is needed for programs to train people to start producing benefits. The first group of students who went to Japan in 2011 will return to Afghanistan in 2013. There are great expectations for the contributions that these people will make to the country's future.



The first group of PEACE students in Japan with PEACE program officials



2001, about 5.7 million refugees were repatriated. The number of people attending schools increased from 1 million in 2001 to 7 million in 2009. However, Afghanistan still ranks among the world's poorest nations, placing 172nd out of 187 countries in the 2011 UNDP Human Development Index. There are severe shortages regarding electricity, transportation, water and sewer systems, and other infrastructure components.

JICA carries out projects that contribute to economic growth, including the creation of employment opportunities and stabilizing the lives of citizens. At the same time, JICA implements the maximum level of safety measures due to the country's unstable security situation. Working closely with the Government of Afghanistan, JICA has been extending aid in two priority categories: urban development infrastructure projects, mainly in the Kabul metropolitan area; and the development of agriculture and rural areas. Work is under way on development projects involving social and economic infrastructure, such as highways and electric power, construction of a new city called Dehsabz, the redevelopment of Kabul, and other areas. Completion of these projects will enable operations involving highways, water resources and other infrastructure components to begin.

For agricultural and rural village development, JICA has established a comprehensive aid framework that covers the next five to ten years and follows the development plan of the Government of Afghanistan. Assistance will have four main elements: (1) Change Management through Capacity Development at the National and Sub-National level; (2) Support for Water Resource Development and Management to vitalize Agriculture and Rural Development sector; (3) Increase in agricultural productivity; and (4) Promotion of Farming System Diversification and Value Added Agriculture.

Assistance also covers improving administrative services and the establishment of systems. In addition, the Project for the Promotion and Enhancement of the Afghan Capacity for Effective Development (PEACE) has started [\[See the Case Study on page 38\]](#). For medium and long-term human resources development, PEACE will send 500 long-term trainees to Japanese graduate schools over a five-year period.

JICA works with the Aga Khan Foundation and other international NGOs, too. Trials are under way to extend aid to areas that have been difficult to reach in the past. In 2011, a liaison office was opened in the city of Bamiyan in order to provide even more effective aid.

## ■ Pakistan

Pakistan ranks sixth among the nations of the world, with a population of about 180 million, and is also one of the most important countries in geopolitical terms. Following the U.S. terrorist attacks of September 11, 2001, since Pakistan has been at the center of the war on terrorism, the international community is placing much importance on the stable and sustainable development of Pakistan. The country's large workforce could be a driving force for economic growth and Pakistan has much potential as an emerging economic market. About one in four residents, however, is poor in Pakistan. Furthermore, there are many other problems, including a weak economic infrastructure and unstable political situation.

The emphasis of JICA's assistance for Pakistan is centered on three themes: (1) ensuring human security and human resources development;



A water pipe is repaired in the Pakistan city of Lahore

development of a sound market economy; and (3) achievement of balanced regional socio-economic development.

For the first theme, JICA uses three schemes (Technical Cooperation, Loan Aid and Grant Aid) in a flexible manner to strengthen polio countermeasures and vaccination programs, build water and sewer systems and establish systems in large cities, and support national initiatives for disaster management. For the second theme, JICA supports the construction of electricity transmission and highway networks by ODA Loans, and also promotes capacity development in industrial sectors through Technical Cooperation. For the third theme, JICA extends assistance to stabilize Pakistan-Afghanistan border areas, and to revitalize the greater Karachi area, the largest regional economy in the country.

Poor water and sewer systems in cities are a serious issue with regard to ensuring the safety and security of the people of Pakistan. In Lahore, the country's second-largest city, demand for water has increased along with rapid urbanization and there is a growing need for the efficient use of water. JICA has sent experts to Lahore and provided other support in order to strengthen institutional management as well as operation and maintenance capacity of the water and sewer public utilities, and establish legal systems. In addition, JICA uses Grant Aid to supply equipment for managing and cleaning sewage and drainage and sewage pumps. There is also an urgent need to be prepared for natural disasters, which have become more severe and frequent in recent years in Pakistan. A powerful earthquake hit the country in 2005 and there was massive flooding in 2010. JICA quickly provided reconstruction aid following these disasters. Furthermore, starting in 2010 JICA co-worked with the Pakistan government to develop a National Disaster Preparedness Management Plan, based on our own knowledge and experience of disaster management in Japan. JICA will continue to support the activities of the Pakistan government to implement the plan.

## ■ Sri Lanka

Sri Lanka has an area that is about 80% as large as the Japanese island of Hokkaido and a population of about 20.45 million. Approximately 70% of its citizens are Buddhists. The country suffered from continuous conflict for almost 30 years between the government, which is composed mainly of the majority Sinhalese ethnic group, and an armed anti-government organization that wanted independence for Sri Lanka's northern and eastern areas. After this war ended in May 2009, economic growth was backed by increasing domestic demand associated mainly with reconstruction activity. In 2011, Sri Lanka's real

GDP growth rate was 8.0%, one of the highest in South Asia. Sri Lanka is now in a full-scale growth period and is positioned as a medium-income country with a per capita gross national income of \$2,290 (2010).

To achieve balanced reconstruction and economic development after the prolonged conflict, the Government of Sri Lanka made utilizing private-sector investments to strengthen the economic infrastructure, such as for transportation and electric power, a key part of its fundamental policy for development. Reducing the income disparity between cities and rural areas is another key element of this policy. The country is moving faster with development activities and has an income-doubling plan by 2016.

In response to Sri Lanka's cooperation needs, JICA placed priority on aid for the purpose of rebuilding the lives of people affected by the conflict and improving their livelihoods. JICA provided extensive assistance for infrastructure projects, too. In addition, JICA is involved with disaster prevention measures because Sri Lanka is highly vulnerable to seasonal heavy rain and other natural disasters that occur every year. JICA is strengthening activities in Sri Lanka by focusing on three primary development themes: (1) establish an economic infrastructure for growth; (2) improve the social environment in lagging regions; and (3) mitigation for vulnerabilities.

There were several major initiatives in the 2011 Japanese fiscal year involving these primary themes. To help establish a transportation network for the Colombo area, the nation's capital, the decision was made to provide financial cooperation

needed to enlarge the terminal at Sri Lanka's only international airport. Aid to expand electricity transmission and distribution and highway networks was provided, too. Furthermore, in the northern part of Sri Lanka that was affected by the conflict, JICA assisted with public facilities like water supply equipment and piers, promoting the development of agricultural and fishing villages, and with preparing a plan for the entire region. Actions include improving the livelihoods of people in areas where progress with development is slow, improving small dairy farms and other measures. In addition, JICA is engaged in a broad range of other activities such as enhancing the capacity of disaster prevention in response to climate change and emergency recovery support for severe flooding.

## ■ Maldives

Maldives is in a geopolitically important position that links Southeast Asia and the Middle East. Consisting of about 1,190 small islands, the country has a population of only 320,000 (2009). The economy is weak and it is difficult to conduct comprehensive social development programs. Maldives has traditionally had a friendly relationship with Japan. Following the tsunami of 2004, JICA extended emergency humanitarian aid and after the recovery from the tsunami has consistently provided aid for redevelopment and disaster prevention programs.

Tourism and fishing are the foundation for the Maldives economy, accounting for about 40% of the country's GDP. In 2008, the global economic crisis brought down the number of tourists from Europe, which represent about 70% of all tourists.

### Case Study

## Sri Lanka Project for Improvement of Basic Social Services Targeting Emerging Regions

### Comprehensive Aid Including ODA Loans to Enhance the Management of Non-communicable Diseases

**Due to improvements in basic health indicators, Sri Lanka now ranks high among countries in South Asia with regard to public health. However, major diseases are shifting to heart disease, brain disorders and other non-communicable diseases (NCD) become more prevalent. Creating a healthy society is one of the priorities of the Government of Sri Lanka. To accomplish this, Sri Lanka is formulating an efficient health care system by strengthening NCD countermeasures with emphasis on prevention, encouraging people to lead healthy lives, and early treatment.**

Assistance provided by JICA since the 1970s for building core hospitals, improving capabilities and other health care programs has earned praise from the Government of Sri Lanka. In response to a shift to NCD as major diseases in recent years, JICA has implemented a Development Study that includes strengthening NCD management and offered proposals for programs. The Technical Cooperation project "Project on health promotion & preventive care measures of Chronic NCDs" is supporting the formulation of an NCD prevention model centered on primary health care facilities, which are closest to the residents of Sri Lanka, and promoting the use of this model.

Upgrading NCD management at secondary health care facilities, which perform the early detection and treatment of these diseases, is

another policy of the Government of Sri Lanka. However, there are shortages of materials and medical specialists. Furthermore, demand for pharmaceuticals is increasing rapidly along with the rising number of NCD patients. As a result, increasing production of drugs has become a priority issue. To deal with these issues, an agreement was reached in March 2012 to extend a new ODA Loan (¥3,935 million) for the Project for Improvement of Basic Social Services Targeting Emerging Regions. The objective is to contribute to strengthening NCD management through improving secondary health care facilities that are the core facilities in each region of Sri Lanka is one aspect of this project. Improving the State Pharmaceutical Manufacturing Corporation (established with 1987 Grant Aid) and other initiatives are also part of this project.

Japanese technologies will be used to install a highly reliable pharmaceutical production line (tablet production, measurements, packaging and other materials, equipment) and provision of ambulances. Furthermore, JICA plans to implement programs that use all three aid schemes (Loan Aid, Technical Cooperation, Grant Aid) in order to expand the NCD prevention model created with Technical Cooperation to all areas of Sri Lanka and strengthen comprehensive NCD management capabilities.



This project has made people in Sri Lanka aware of the need for regular medical check-ups.

Real GDP growth became negative as a result. However, the GDP expanded by more than 4% in 2010 as tourism recovered. This demonstrates how much the Maldives economy is vulnerable to the effects of external factors.

JICA provides cooperation in fields (including adapting to climate change) that can contribute to economic and social development as well as the stability and improvement of the lives of the people of Maldives. Recent activities include the installation of solar power systems and assistance for upgrading the sewer treatment system design and maintenance capabilities that are needed for the proper construction and maintenance of sewer facilities.

## ■ Bangladesh

Bangladesh is only about 40% the size of Japan but has a population of approximately 150 million. The country has the highest population density in the world, other than city-states. About 90% of the country is lowlands (elevation of under 10 meters) and roughly one-third of the country is flooded during the monsoon season. Bangladesh is also highly susceptible to cyclones, flooding and earthquakes. Furthermore, the country is extremely vulnerable to the effects of climate change. Reducing poverty is an enormous issue because approximately 50 million residents, one-third of the population, are poor. On the other hand, with average annual economic growth of 6% during the past decade, Bangladesh is attracting international attention as a market and a destination for investments. However, the country's basic infrastructure is still extremely inadequate with regard to electricity, transportation, water and sewerage systems, and other components.

The Government of Bangladesh has established the goal of becoming a middle-income country by 2021. To help the country accomplish this goal, JICA is providing assistance for achieving sustainable economic growth and eliminating poverty.

For economic growth, JICA continues to provide assistance for building infrastructure facilities such as a power plant. Furthermore, JICA has provided ODA Loans to supply funds to SMEs for capital expenditures in order to foster the development of industries, particularly in the manufacturing sector. Assistance for disaster preparedness is another element of aid in Bangladesh. Grant aid was provided to build multi-purpose cyclone shelters in 117 locations and establish weather radar facilities and Technical Cooperation is provided to strengthen the capacity of the Meteorological Department. These programs and other aid activities have reduced damage caused by cyclones in Bangladesh. Since the country is highly susceptible to earthquakes, JICA's assistance also includes Technical Cooperation for creating standards for earthquake-resistant buildings and reinforcing implementation structure to be prepared for earthquakes.

To achieve the Millennium Development Goals, Bangladesh is working on making improvements in education, health and other fields, too. JICA is extending aid with particular emphasis on improving health of pregnant women and newborn babies in the field of maternal and child health care. Along with Technical Cooperation, JICA also provided the first ODA Loan in this sector to support the dissemination of the

outcome of JICA's cooperation.

## ■ Nepal

Nepal still has the lowest income level in South Asia. Nepal has much diversity in its geography and climate, being located



Road construction in mountainous areas contributes to improving connectivity and accessibility.

between the Himalayas with 8,000 meter peaks at its northern part and flat lowlands with an elevation of around 60 meters at its southern part. The population is about 26.6 million (2011) and consists of more than 100 castes and ethnic groups who speak more than 90 languages.

Nepal experienced 10 years of conflict starting 1996, which formally ended with the signing of the comprehensive peace accord in November 2006. The newly elected Constituent Assembly declared Nepal a federal republic, ending its monarchy. But the country is still politically and socially unstable and there are some imminent political issues such as developing a new constitution.

Per capita income in Nepal is \$490 (2010). Industries with much potential, which include the hydropower and tourism sectors, have not been developed into viable industries that can drive economic growth. The greatest impediment to private economic activities is inadequate infrastructure. The poverty situation has improved as proportion of poor people declined in recent years. On the other hand, some social indicators are still low and widening disparities between urban and rural areas and those related to castes, ethnic groups, and gender are concerns. In the Three Year Plan (2010-2013), the Government of Nepal set the long-term vision of creating a prosperous, peaceful and just Nepal by transforming Nepal from a least developed country (LDC) into a developing nation within a two-decade period.

JICA's overall assistance strategy to Nepal focuses on three fields: (i) Infrastructure and institutional development for sustainable economic growth; (ii) consolidation of peace and a steady transition to a democratic state; and (iii) rural poverty reduction.

For "infrastructure and institutional development for sustainable economic growth", JICA supports construction of a road connecting the Kathmandu metropolitan area and Tarai Plain in the south, a hydropower plant, and water supply facilities. For "consolidation of peace and a steady transition to a democratic state", JICA is extending support for the democratization process, such as drafting civil code and dialogue with members of Constituent Assembly, and strengthening the administrative capacity of the central and local governments. For "rural poverty reduction", JICA has been continuously supporting the agriculture sector, such as irrigation, and the cultivation of fruits and vegetables, education, and the health sector.

# Middle East — Achieving Regional Stabilization through Inclusive Development

The political protests of 2011 in the Middle East brought about a new nation- building movement following democratic elections in some countries. However, some development issues like unemployment and poverty that were the background for the turmoil still exist. Additional political and economic turmoil might be taken place in this region if these situations are overlooked. Since Japan relies on the Middle East as the provider of 90% of its crude oil, peace and stability in this region is important for the security of Japanese economy.

JICA is working on achieving peace and stability in the Middle East through support for democratization and nation- building under the concept of inclusive development that yields benefits for all segments of citizens, along with continuous efforts for peace-building and reconstruction.

**Key Aid Strategies**

**Supporting Democratization, Employment and Industrial Development, Human Resources Development, and Peacebuilding and Reconstruction**

The Middle East has undergone continual conflicts in its history, such as the Arab-Israeli War, Gulf War and Iraq War. Since the Middle East occupies a crucial position as an energy resource for the world, peace and stability of this region is a major issue not only for Japan but also the entire world.

Political protests in Tunisia in January 2011 swiftly spread to other countries in the region like Egypt, Yemen, Libya and Syria. The public’s dissatisfaction with unemployment and social disparities soon expanded to the demand for democratization, which made the region politically unstable.

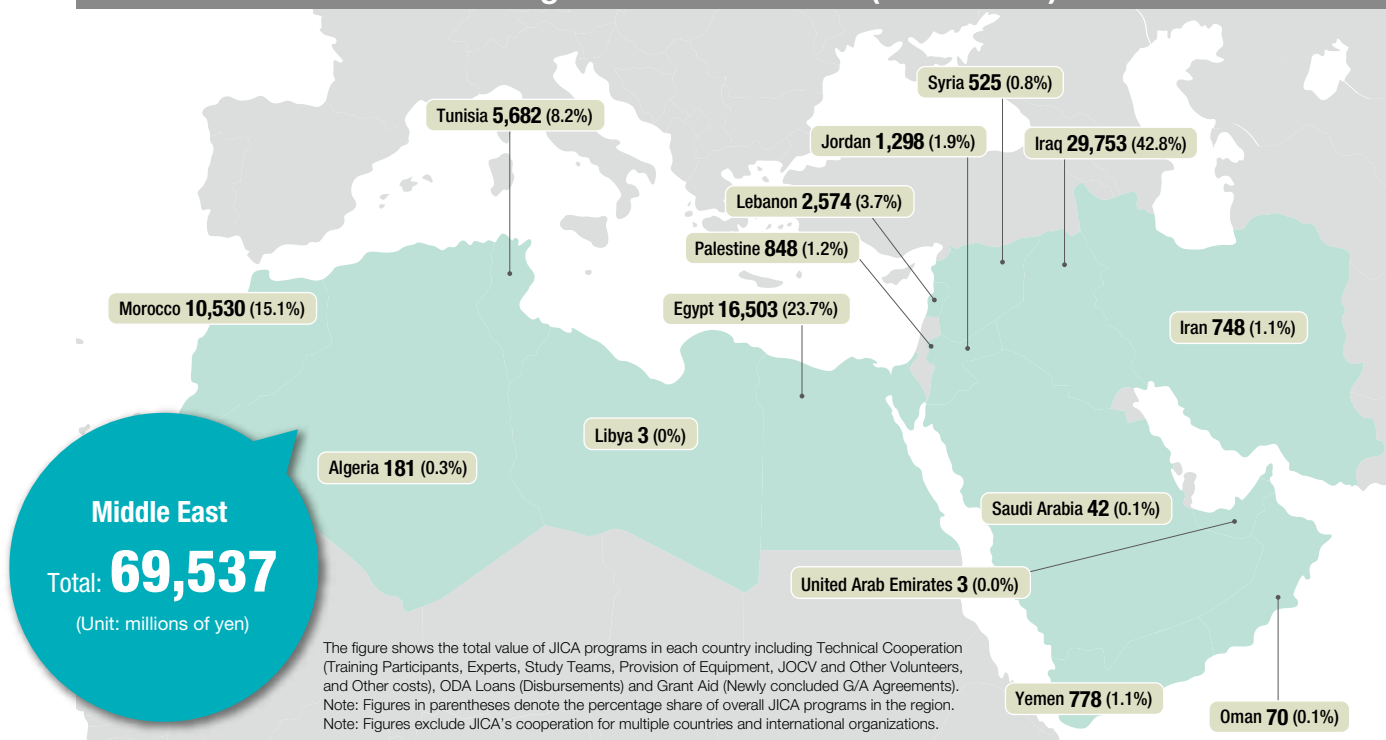
New nation-building movements like the selection of new leaders through democratic elections have occurred in many countries including Tunisia, Egypt, Morocco, Jordan, Yemen and Libya. However, a tumultuous situation still continues in

Syria that makes outlook of the region unclear.

High unemployment, among the young people above all, is a serious problem in these countries. Moreover, the negative economic impact of political turmoil, like the severe blow to tourism and other key industries, can not be overlooked. Dissatisfaction among people with this situation is likely to be a source of instability for the entire region.

In response to these movements, the Government of Japan has announced measures to support the Middle East and North Africa that are centered on three major pillars; 1) support for “fair political process and government” through institutional transition and advancement of reforms; 2) support for “job creation and fostering of industries” in order to resolve the serious unemployment problem; and 3) support for “human

JICA Programs in Middle East (Fiscal 2011)





resource development” for economic revitalization and stabilization.

Japan has gained the confidence of Middle East countries by adhering to neutral stance regarding this region. While utilizing this position, JICA will continue to conduct activities in coordination with international community mainly focusing on; 1) support for democratization; 2) job creation and fostering of industries; 3) human resource development that matches local needs of each country; and 4) peace-building and reconstruction (Iraq, Palestine, Yemen, Libya and other countries).

## Country Overviews and Priority Issues

### Iraq

The repeated conflict and economic sanctions that Iraq has suffered since 1980 have led to the destruction of much of the country’s economic and social infrastructure and impoverished the country. Today, many Iraqis are still living in abysmal conditions with shortages of electricity and clean water. However, Iraq has one of the world’s largest oil reserves and there is enormous demand for infrastructure because of the country’s high economic growth rate and population of more than 30 million. Due to the country’s significant potential as a market, another important issue is the creation of an environment in which the private-sector can be utilized.

In order to meet Iraq’s massive reconstruction and development needs, JICA has provided assistance in the

following four priority areas: 1) Strengthening the foundation for economic growth (improving production and export capacity for oil and gas, improving agricultural productivity); 2) Energizing the private sector (electric power reconstruction, transportation and telecommunication infrastructure); 3) Improvement of the quality of life (water supply and sewage systems, improving the quality of medical care and education); and 4) strengthening governance (building a foundation for administration and developing human resources).

Since the end of the Iraq War, JICA used 15 ODA Loans totaling ¥364.6 billion to support infrastructure projects that are vital to the country’s economic revitalization. In addition, JICA has used Technical Cooperation for training programs for around 5,000 people in Iraq.

In August 2011, JICA started Technical Cooperation for the agricultural sector, which is important with respect to industrial diversification, job creation and other goals. This cooperation included sending Japanese experts to Iraq for the first time since the Iraq War ended. In November 2011, the Government of Japan pledged to provide new ODA Loans to Iraq totaling ¥67 billion for four projects: two projects for oil and gas, Iraq’s core industry; one project in the telecommunication sector, which is vital to energizing the private sector; and one project in the health sector to improve the quality of life of the Iraqi people. As a result, Japan expects to achieve the US\$3.5 billion of ODA Loans that the country announced at the 2003 Iraq Reconstruction Conference.

To further strengthen support on a local level, JICA opened

### Case Study

### Basrah Refinery Upgrading Project

## Improving Quality and Lowering the Environmental Impact by Using Japanese Technologies

**The oil industry is vital to Iraq, accounting for about 70% of the country’s GDP and about 90% of government revenues as well as serving as a source of foreign currency. However, oil refinery capacity has plummeted because of conflicts and economic sanctions since the 1980s. Currently, Iraq’s refineries are operating at about 70% of capacity.**

**JICA is using ODA Loans to provide assistance that includes upgrading large refineries.**

Even though Iraq is an oil-producing country, the nation is forced to import gasoline and other petroleum products from other countries because of the effects of wars and economic sanctions. Expenditures for these imports are exerting pressure on the government budget. There is an urgent need to upgrade refineries in Iraq, which has massive recovery and reconstruction needs. Improving refineries will prevent outflows of foreign currency to buy imports of petroleum products and earn foreign currency through exports of petroleum products from Iraq.

JICA is using an ODA Loan to assist in the construction of a new plant at the Basrah

refinery, which is one of the largest in Iraq. The main element of the plant will be a fluid catalytic cracking (FCC) unit. Building this plant will boost the refinery’s productivity and the quality of its products. For example, daily gasoline output will rise by 20,000 barrels. Another benefit will be a lower environmental impact. This is the first use of a FCC unit in Iraq. The design stage is almost finished and Japanese companies are expected to implement this program by applying the Special Terms for Economic Partnership (STEP).

The Government of Iraq is placing priority on development of the oil industry and wants to upgrade and build many refineries. The

government has great expectations for technologies of Japanese companies. Programs that link Japanese technologies with the reconstruction needs of Iraq would have a significant impact on the country’s economy. As a result, these programs are attracting much attention among Iraqi government officials as well as members of the Japanese business community.



The Basrah Oil Refinery

its office in the capital of Baghdad in August 2011. JICA is providing extensive reconstructive assistance by talking directly with government officials in Iraq and through project site visits and other activities.

## ■ Palestine

In 2006, the Japanese Government proposed the Corridor for Peace and Prosperity concept as a medium- to long-term framework for future co-existence and co-prosperity of Israel and Palestine. This concept is based on the idea that a “two state solution” is crucial to achieving peace between Israel and Palestine. The framework is intended to strengthen the socioeconomic foundation of the Palestinian Authority in order to ensure a smooth transition to economic independence for future statehood, while building trust with neighboring countries through regional cooperation among Palestine, Israel and Jordan. Working towards realizing the Corridor for Peace and Prosperity concept, JICA is providing Technical Cooperation for improving agricultural technologies and supporting the promotion of sustainable tourism and boosting small and medium sized enterprises (SME), assisting the Agro-Industrial Park located in the Jericho area through Technical Cooperation, and constructing related infrastructures.

Furthermore, from the perspective of supporting future nation-building of the Palestinians, JICA is extending support for human resources development and institution building in the following seven priority areas in accordance with the Palestine National Development Plan: 1) SME Development and Trade Promotion; 2) Agriculture; 3) Tourism; 4) Local Governance; 5) Finance; 6) Water and Sewage; and 7) Maternal and Child Health.

Since 2011, JICA has been enhancing collaboration with East Asian countries, especially Indonesia and Malaysia, for capacity development of the people of Palestine. Working with these countries allows providing many types of assistance that utilizes the experiences of East Asian countries concerning economic and social development and their resources. Expectations are increasing on both of the Palestine and Eastern Asian sides for this approach that helps increase the number of actors that can contribute to peace in the Middle East.

## ■ Egypt

In February 2011, long-time Egyptian President Hosni Mubarak resigned as a result of the democratization demonstrations that started in January. After the collapse of the Mubarak administration, Egypt’s constitution was temporarily suspended and presidential authority was entrusted to the Supreme Council of the Armed Forces. Elections for the People’s Assembly were held between November 2011 and January 2012 and Shura Council elections took place in January and February. This was followed by a presidential election in May and June and the inauguration of a new president, Mohammed Morsi. Next, the constitution will be amended. This process is expected to result in a transition from rule by the armed forces to a civilian government.

The political unrest in Egypt is said to be due to the large number of people that have failed to receive the benefits of

development despite the country’s strong macroeconomic growth. For example, youth unemployment is high and the poor face skyrocketing food prices.

JICA provides cooperation that includes sending experts to Egypt with the aim of resolving the urgent issue of establishing an equitable political system and administrative management. One activity is explanations of the electoral systems and role of the media in elections to prepare for conducting democratic elections. Helping create a master plan for a new national development plan is another form of support. In addition, JICA has for some time been providing cooperation with emphasis on sustainable growth and creating jobs, reducing poverty and improving living standards, and other goals. This cooperation is in response to political change in the country, and the importance of these issues has not changed even after the change in Egypt’s government. JICA is providing support in many ways to improve living standards in Egypt and utilize the limited supply of water effectively. There are economic infrastructure programs for transportation, electricity and other sectors, including the Greater Cairo Metro Line No. 4 Project [➡ See the Case Study on Page 117]. Assistance for human resources development includes the establishment of the Egypt-Japan University of Science and Technology (E-JUST), which will promote interest in science and technology in Egypt. Other activities include aid for school health services in upper Egypt, which has a low level of income, and wastewater quality management and reuse systems in the Nile Delta area.

## ■ Morocco

Morocco has been able to steadily achieve economic growth and reduce poverty. One reason is the implementation of economic liberalization policies since the 1990s. Another reason is the adoption since 2005 of the National Initiative for Human Development (INDH), a measure centered on human resources development for reducing poverty and eliminating regional and social disparities. As a result, there was no significant unrest in Morocco even after the political and economical movement began in 2011. However, there are still pressing issues in the country, notably high unemployment among young people and regional social disparities, which were two causes of the movement. The country is enacting measures to make improvements.

Cooperation from JICA focuses on measures to reduce regional and social disparities that are a source of social instability and to achieve sustained economic growth. The goal is to contribute to regional stabilization and balanced economic growth in Morocco. Specifically, JICA supports the development of water and sewage systems in rural areas, improvement of urban environments, construction of rural roads, regional development in Er Rachidia prefecture, and other programs. Furthermore, in cooperation with the Government of Morocco, which is an active participant in South-South Cooperation, JICA places emphasis on third-country training under its Assistance Program for Francophone African Countries. Support is provided for highway maintenance, improving agricultural machinery, assisting small fisheries, and in other sectors.

## Tunisia

In Tunisia, longstanding President Zine El Abidine Ben Ali stepped down from office on January 14, 2011. The political unrest in which citizens went into the streets to force the president out of office is called the Jasmine Revolution, taking the name of Tunisia's national flower. This led to subsequent pro-democracy movements in nearby countries.

Holding elections was an urgent issue following this revolution. JICA sent election experts to Tunisia, held seminars on political contributions, election systems and the role of media in elections, and conducted other activities. For the constituent assembly election in November 2011, the head of JICA's Tunisia office and other staff members were part of an election monitoring group provided by the Japanese government. Election oversight was performed for voting, ballot counting, compliance with rules, and ensuring the transparency, fairness and efficiency of election operations. This support helped Tunisia hold a fair and transparent election.

The Jasmine Revolution was triggered by the self-immolation suicide of a young man without a job. Tunisia has a high unemployment rate, particular for younger people, and unemployment is particularly severe for individuals with higher education levels. The issue is that industries have yet to advance sufficiently to create employment opportunities for these individuals. Furthermore, the areas where the first

demonstrations broke out are rural areas with higher poverty levels than in Tunis, the capital. Therefore, it is also necessary to address the issue of rectifying regional disparity.

JICA provides assistance for developing Tunisia's industries, mitigating disparity, and preserving the environment. Specifically, in addition to using ODA Loans for economic infrastructure such as railways and roads, JICA constructs higher education institutions and research institutes, provides science and engineering training, and supports local economic promotion programs.



JICA personnel were part of the election monitoring group from Japan for the Tunisia constituent assembly election.

### Case Study

## The Political Movement and JICA Election Support

### Assistance for Creating a New Government in Egypt

**The political movement so called "Arab Spring" ended the 30-year rule of Egyptian President Hosni Mubarak. Immediately after the revolution, political power was temporarily given to the Supreme Council of the Armed Forces rather than revolutionary forces. Egypt then faced the issue of how to create a new government. It is often said that "destroying things is much easier than making them." Egypt embarked on the historic process of creating a new assembly, president and constitution. Elections were critical to determining if the event so called "Arab Spring" would truly be spring for Egypt.**

Following the February 2011 revolution, Egypt was determined to shut out unnecessary influences from other countries. The country was even cautious about accepting international assistance for elections. However, Egypt asked Japan and JICA due to Japan's political neutrality.

JICA sent election support experts to Egypt in March 2011. Next, an election seminar was held in Cairo in July. Experts from Japan explained the electoral systems, how to hold an election, the use of political funds and other subjects. The aim was to strengthen the election preparation framework, including Election Commissions and other associated agencies that had not yet been created.

In October, shortly before election day, JICA experts held a media seminar at the Egyptian Radio and Television Union (ERTU), Egypt's public broadcaster, on the themes of democratic election reporting in Egypt and the use of media for democratizing elections. In

addition, JICA supplied materials for the media center and operations room, two new functions of the Election Commissions, which is independent of the government. Equipment included computers, TV conferencing components, equipment to operate a website, and other items. Supplying this equipment helped Egypt supply voters with information about this new election, raise the voter turnout rate, and reduce the number of invalid ballots.

Due in part to the benefits of these activities, Egypt held elections in 2011 and 2012 as scheduled. The People's Assembly and Shura Council convened as planned. The Egyptian public was aware of the election results and respected these results. As a result, the people of Egypt understood that the new assemblies would

determine the future of the country.

JICA has accumulated knowledge and expertise concerning assistance for elections. This includes respecting the right of a country's residents to make their own decisions, understanding the effectiveness of a dual approach using equipment and knowledge, and understanding that media support is the key to holding a neutral and fair election. JICA fully utilized this know-how once again for assistance for Egypt.

Normally, several years are required to firmly establish reforms associated with frameworks and institutions. This is why more time will probably be needed until spring truly begins in Egypt. JICA's support for elections in Egypt is expected to lead to support for the newly formed parliament as well as for the permanent central and regional Election Commissions.



The new People's Assembly of Egypt that was chosen through a democratic election includes members who were imprisoned during the previous administration.

# Africa — Strong Economic Growth Presents an Excellent Opportunity for Poverty Reduction

Strong economic growth continued in Africa in 2011 as this region posted an economic growth rate second only to Asia. The 5th Tokyo International Conference on African Development (TICAD V) will take place in Yokohama in June 2013. This conference is expected to discuss a number of new themes, such as the increasing role of the private sector in African development, collaboration between the private sector and ODA, and strengthening partnerships with emerging countries.

## Key Aid Strategies Continue to Energize Africa

### Progress and Issues Concerning the Development of Africa

In 2011, the average real GDP growth rate was 5.3% in Sub-Saharan Africa (estimate)\*<sup>1</sup> and the 2012 forecast calls for growth of 5.5%\*<sup>2</sup> to 5.8%\*<sup>3</sup>. Furthermore, foreign direct investments in this region in 2010 were higher than in India\*<sup>4</sup>. In particular, there has been rapid growth in African investments and aid by China, India, Brazil and other emerging countries. Overall, this region is attracting much attention on a global scale.

Four African countries, Ethiopia, Ghana, Malawi and Cape Verde, are expected to achieve the MDGs by about 2015\*<sup>5</sup>. These countries have made significant progress with improving the child and material mortality rates and stopping the spread of HIV/AIDS and malaria.

However, about half of Africa's population lives on a daily income of less than \$1.25. Furthermore, the Horn of Africa in eastern Africa is struggling with the worst drought in 60 years. Approximately 12.4 million people in Djibouti, Ethiopia, Kenya

and Somalia require assistance. The central issue in Africa is how to use strong economic growth to overcome these weaknesses, reduce poverty and create jobs.

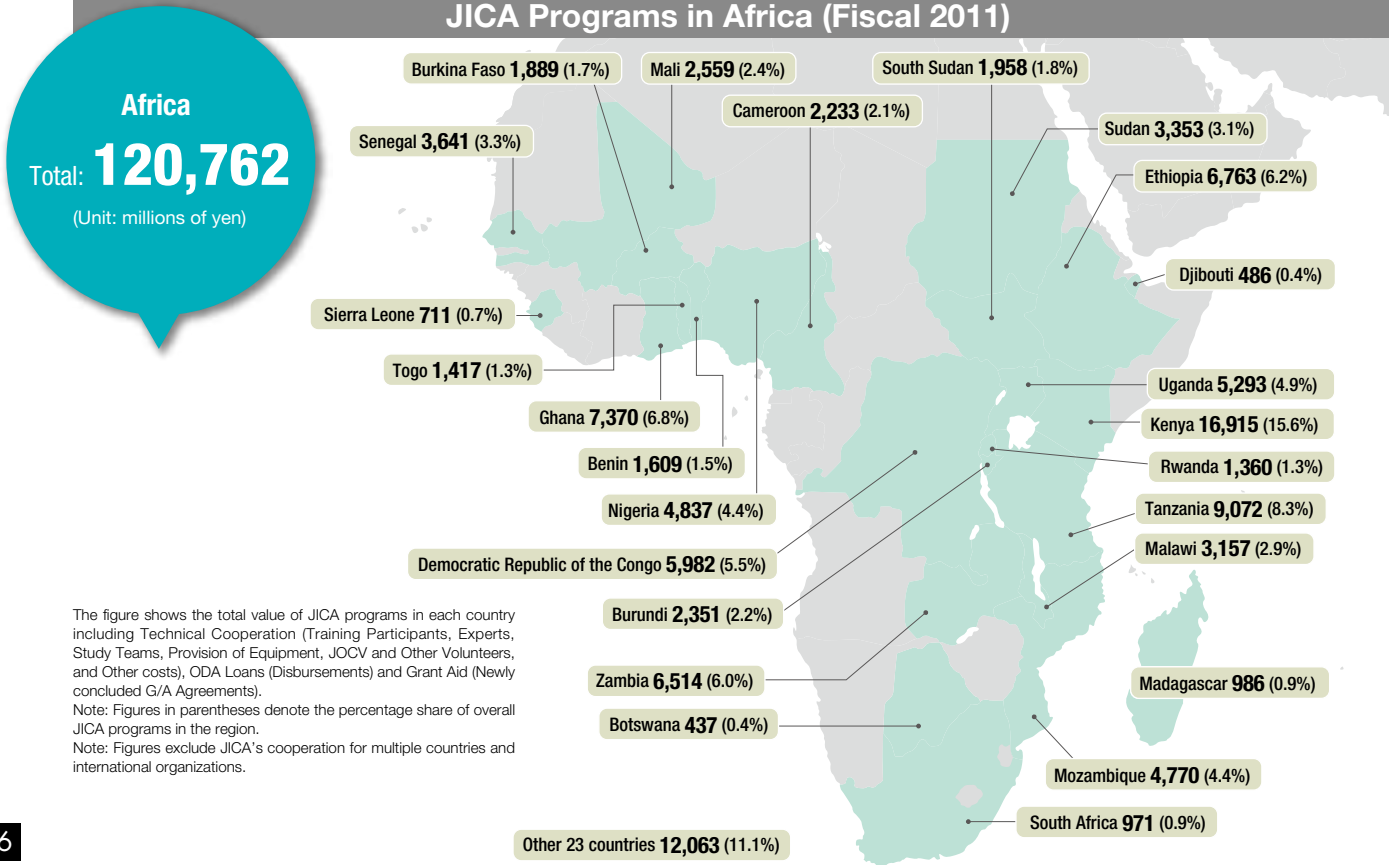
### Looking Ahead to TICAD V

JICA has been providing support for economic and social development in Africa based on the Yokohama Action Plan that was adopted at the 4th Tokyo International Conference on African Development (TICAD IV). The plan has four main components: boosting economic growth, achieving the MDGs, addressing environmental and climate change issues, and consolidation of peace.

TICAD V, which will take place in June 2013, will be held by the Government of Japan, United Nations, World Bank and African Union Commission. Governments of African countries,

\*1 World Bank Group, *Africa Regional Brief 2012*  
 \*2 World Bank Group, *Africa Regional Brief 2012*  
 \*3 IMF, *World Economic Outlook*, September 2011  
 \*4 World Bank Group, *Africa Regional Brief 2012*  
 \*5 World Bank Group, *Africa Regional Brief 2012*

## JICA Programs in Africa (Fiscal 2011)



The figure shows the total value of JICA programs in each country including Technical Cooperation (Training Participants, Experts, Study Teams, Provision of Equipment, JOCV and Other Volunteers, and Other costs), ODA Loans (Disbursements) and Grant Aid (Newly concluded G/A Agreements).  
 Note: Figures in parentheses denote the percentage share of overall JICA programs in the region.  
 Note: Figures exclude JICA's cooperation for multiple countries and international organizations.





Case Study

Support for the “Horn of Africa” Struggling with Drought

Assistance for Enhancing the Region’s Resilience to Drought

In 2011, the Horn of Africa (Somalia, Kenya, Ethiopia and other countries) suffered the most severe drought in 60 decades. According to the United Nations, more than 13 million residents of this region required emergency humanitarian aid. Even now, the drought is having a serious impact on a large number of people.

JICA has provided emergency aid along with support in Kenya and Ethiopia for increasing the capacity of communities to respond to this disaster.

The Horn of Africa has suffered from droughts and received humanitarian aid repeatedly since more than 30 years ago, partly because of the effects of climate change. During the current drought as well, humanitarian aid in the form of emergency aid supplies has produced benefits to some degree. However, this crisis has once again demonstrated that short-term humanitarian aid alone is insufficient as a response to the underlying problems associated with droughts that are expected to continue occurring frequently in this region.

JICA believes that it is important to strengthen the residents’ resilience to drought based on a medium to long-term development framework. Full-scale activities for this purpose are under way in Kenya and Ethiopia.

In addition, JICA resumed the provision of aid in Somalia for the first time in 20 years due to the severity of the drought crisis, including about 250,000 people in danger of starvation.

Kenya

JICA has medium and long-term activities in the arid region of northern Kenya to assist people who raise livestock. One is a project that aims to facilitate the sustainable management of natural resources like grass and water and to diversify sources of income\*1. The goal is to use measures to

make these people more resilient to drought to transform them from recipients of humanitarian aid into contributors to the economy. In the semi-arid areas of Kenya, mainly the central and southern parts of the country, JICA plans to implement a project\*2 to increase the use of small irrigation systems in order to secure a reliable supply of agricultural water.

For the host community of the Dadaab refugee camp for refugees from Somalia, JICA has greatly expanded its activities within the framework of an ongoing Technical Cooperation project\*3. For example, a water supply truck and water supply tank have been provided to the community.

Ethiopia

Droughts occur repeatedly in Ethiopia. JICA has started projects targeting the fields of water and agriculture. For the water sector, the project involves drawing a map of water sources and a water supply master plan. The objective is establishing a water supply system for the arid area including the refugee camps and nearby communities. For the agriculture sector, JICA implements a variety of projects to increase resilience to unstable weather. One is to assist former pastoralists in raising agriculture productivity by establishing irrigation facilities. Another is to assist farmers to improve livestock raising skills and establish livestock markets. There is also a project for weather insurance for farmers that will ensure a minimum level of income even with small harvests. The goal of these projects is to strengthen the resilience of residents from a medium- to long-term perspective.



The Kebri Beyah refugee camp in Ethiopia does not have an adequate supply of water.

Somalia

To support Somalia, which has been severely impacted by the current drought, JICA for the first time in 20 years conducted third-country training in Kenya and other neighboring countries to improve the capacity of government officials in the fields of health and roads.

Furthermore, in Mogadishu, the capital of Transitional Federal Government at the time, there are large numbers of refugees from other regions of the country due to the drought and continuous civil war. It has also caused an increase in people suffering from infectious diseases by contaminated water. In collaboration with International Organization for Migration (IOM), JICA implemented a survey to find condition of water supplies and hygiene at camps for internally displaced persons (IDPs) near Mogadishu. JICA plans to continue supporting in Somalia while identifying the needs of this country.

Collaboration with Development Partners

These responses to the drought in Africa led to an agreement arranged by the Intergovernmental Authority on Development (IGAD) for comprehensive programs covering the entire Horn of Africa region. JICA will respect the framework for aid that is centered on IGAD in order to work with the World Bank, U.K. and U.S. international development agencies, and other organizations assisting drought victims with the goal of helping upgrade the resilience of this region.



A water supply facility in Gode in the Somali region of Ethiopia

\*1 The Project for Enhancing Community Resilience against Drought in Northern Kenya

\*2 Sustainable Smallholder Irrigation Development and Management in Semi-Arid Lands Project (SIDEMAN-SAL)

\*3 Water Supply and Hygiene Improvement Project in Host Communities of Dadaab Refugee Camps

\*4 Rural Resilience Enhancement Project and Jarar Valley and Shebele Sub-basin Water Supply Development Plan, and Emergency Water Supply Project

international organizations and agencies, private-sector companies, emerging countries and Asian countries, NGOs and many other participants will discuss a new action plan for 2013 and afterward.

The environment for development activities in Africa is undergoing significant changes along with the growing roles of the private sector and emerging countries. Africa must no longer be viewed simply as region that requires aid, as in the past. Japan and African countries need to build mutually beneficial partnerships with both sides functioning as equals in order to deal with issues shared by Japan and Africa. Specific measures to achieve this goal will be debated at TICAD V.

## Priority Issues and Efforts

### 1. Acceleration of Economic Growth in Africa

#### (1) Building infrastructures to support economic growth

Africa has many landlocked countries. As a result, building an international transport infrastructure is vital to promoting trade, increasing economic activity and reducing poverty.

The volume of traffic in Africa has been increasing in recent years because of trade and other factors. However, the transportation infrastructure is not sufficient to accommodate this volume. This causes chronic traffic congestion. In addition, different customs procedures of individual countries pose another barrier to the smooth flow of goods.

In order to enable the efficient flow of goods at border areas, JICA is not only providing assistance for physical infrastructure such as highways, but also introducing the One Stop Border Post (OSBP) system, by which neighboring countries share and apply common and simplified border procedures. One illustration is Rusumo, the border crossing between Tanzania and Rwanda, a key economic corridor in eastern Africa. The highway in this region has been improved and an OSBP system established.



Trucks wait at Rusumo, Rwanda, to cross the border between Rwanda and Tanzania.

Plans call for the use of the OSBP system throughout Africa. But using OSBP requires coordination in many categories. JICA has used its experience in this field to prepare an *OSBP Source Book* that lists the steps needed to implement this system. This book is used not only in areas receiving JICA aid but also in other countries and by other aid organizations. The purpose is to contribute to the efficient implementation of the OSBP system in all areas of Africa.

Many African countries are not improving and building highways networks fast enough. This is creating a number of problems, notably the inability to rapidly transport agricultural goods from producers to markets. Consequently, inadequate highways also have an effect on food security. JICA is assisting with highway improvement and rehabilitation projects to ensure the efficient movement of agricultural and other goods, thereby helping to revitalize and expand industries.

#### (2) Promotion of trade and investments

Foreign direct investment in Africa has grown rapidly from \$10 billion in 2000 to \$55 billion in 2010. These investments have created jobs in Africa as well as many opportunities for economic growth.

However, there are still numerous problems. For example, many African countries still have inadequate policies and systems for private-sector development and the promotion of trade and investments. Moreover, most private-sector companies are SMEs and even smaller businesses. This situation is creating a large number of issues, including the need to make companies more competitive in terms of their technologies and ability to develop products.

JICA is supplying aid in three sectors: (1) establishing an environment for investments and supporting Japanese companies; (2) supporting the local private sector; and (3) increasing exports of products made in Africa.

In Ethiopia, JICA is implementing the Project on Capacity

Building for Dissemination of Quality and Productivity Improvement (*KAIZEN*). This project incorporates the bottom-up approach that is utilized in Japanese manufacturers. The aim of this project is to strengthen companies' global competitiveness by upgrading manufacturing skills and improving the working environment.

In Japan, an Africa Caravan that started in Hiroshima traveled to all areas of the country. The caravan promoted African trade and investments by Japanese companies in order to support economic

growth in the developing countries of Africa.

### (3) Ensuring food security for everyone

In 2011, the United Nations announced a famine declaration for the Horn of Africa because of a drought of unprecedented severity. JICA sent emergency relief supplies. In addition, to address the food crisis caused by the constant drought, JICA started providing support to improve access to water and to strengthen the resilience of farmers and livestock holders in the region [See the Case Study on page 47].



The 5S program was introduced at this Ethiopian factory participating in the KAIZEN project.

In all areas of Africa, the demand for food exceeds the supply and imports of food to the continent are about the same as Japan's total imports. JICA is providing support to increase rice productivity in Africa under the Coalition for African Rice Development (CARD), an initiative with the goal of doubling Sub-Saharan Africa's rice production during the 10-year period ending in 2018. Thus far, rice production in the 23 countries receiving CARD assistance has increased by 30%. At the 4th CARD conference that took place in November 2011, participants discussed productivity improvement, market access, and private sector engagement. These activities will contribute to strengthening upcoming CARD programs.

For example, to increase agricultural productivity and the income of farmers in Mozambique, the Tropical Savanna Agricultural Development Program (ProSAVANA) was started. R&D, infrastructure improvement and other activities that have started under this program are expected to attract private-sector companies to Mozambique in the future.

## 2. Achieving the MDGs, Prerequisite for Growth

### (1) Education for the promotion of economic growth

Primary education is the first step in the realization of each person's full potential and thus forms the basis for development. JICA is implementing the School for All Project in western Africa, where the school enrollment rate is extremely

#### Case Study

### Kenya Water Supply and Hygiene Improvement in Host Communities of Dadaab Refugee Camps

**The North Eastern province of Kenya, which borders Somalia, is the site of the Dadaab refugee camps, which are home to about 450,000 refugees from Somalia. This is a semi-arid region with annual rainfall of less than 300mm and limited amounts of water, grazing grass and other resources. Many reports indicate that Kenya has suffered more than any other country from the summer 2011 drought in the Horn of Africa.**

Hosting a long-term refugee camp with the increasing number of the refugees is an enormous burden for local communities, who must cope with a challenging environment themselves. Refugees receive water, health and hygiene services, education and other support. In comparison, the livelihoods of local communities have become even more difficult. In response to this situation, JICA decided to start extending support for the supply of water to the local communities near Dadaab refugee camps.

The Water Supply and Hygiene Improvement Project in Host Communities of Dadaab Refugee Camps started in November 2010. Initially, the project covered four districts in the North Eastern province within a 100km radius of the camps. The primary activities were the drilling of 11 deep wells and construction of two ponds. Then, in response to a request for drought aid, JICA enlarged the project to cover the entire North Eastern province (21 districts) as an emergency response. By March 2012, JICA

had sent 16 more water supply trucks, 450 more water supply banks and other additional supplies. In association with the expansion of support, the Northern Water Service Committee, which is the counterpart agency, contacted the water supply managers in each district to quickly explain the nature and volume of support.



Desks from JICA at a Dadaab refugee camp

Schools serve as regional bases for drought aid. In addition to supplying water, schools provide meals for children and distribute food to nearby residents and perform other roles. Consequently, JICA gave desks, dormitory beds and other supplies to 13 schools in host communities. These activities have increased the interest of residents towards school education. There are reports that applications to attend school are increasing as a result. This leads to expectations for a major benefit for this region where the school enrollment rate is low.



One of the water trucks provided by JICA

low. By supporting school management with the participation of the local population, this project is improving school management and raising the enrollment rate. In recent years, the primary education enrollment rate in Sub-Saharan Africa has been improving. JICA is taking the School for All Project even farther with the aim of providing high-quality education.

In addition, improving the quality of mathematics and science education is important given the possible contribution of future engineers to economic growth. JICA is implementing science education training programs for teachers in many countries. JICA's activities also include sending Japan Overseas Cooperation Volunteers who assist in these training programs. Furthermore, Kenya has played a pivotal role for establishing the regional network for the strengthening of mathematics and science education in African countries. In 2011, JICA has strengthened its efforts by, for example, expanding the operations of the Centre for Mathematics, Science and Technology Education in Africa.

## (2) Improvement of health and medical services to support public health

Health management and preservation is vital to the development of a country. However, there is an enormous number of issues to tackle in Africa, such as epidemics of infectious diseases or the lack of suitable health and medical services.

JICA is implementing the Better Hospital Services Program with the aim of extending support for improving the quality of hospital services. The program uses Japan's total quality management and *KAIZEN* methods to improve the quality of these services. One example is Mali where, with the objective of providing safe and suitable medical services, the program is implemented very extensively through activities such as keeping medical facilities neat and clean and organizing the process for sorting waste.



Mathematics and science education training for teachers in Sub-Saharan Africa (Kenya)

## 3. Consolidation of Peace and Good Governance

In recent years, conflicts that have continued for many years have come to an end in many African countries. As a result, countries are advancing step by step toward consolidation of peace. Consolidation of peace will require the formation of a society in which all residents of a country feel that they can live in peace and safety.

JICA is using development assistance in many ways to support peace building. Supporting landmine removal in Angola to ensure the safety of residents is a good example. In addition, JICA has reopened its office to restart operations in Cote d'Ivoire, where the situation is stabilizing.

The Republic of South Sudan became an independent state

in July 2011. Immediately after the 2005 peace accord in Sudan, JICA began providing support for the development of both northern and southern Sudan. With the goal of enabling as many people as possible to live in a peaceful society, assistance has been provided for highways, water supply systems, job training, education, health and many other fields. Furthermore, aid programs were implemented not only in the capital city but also in rural areas that suffered damage caused by the long-lasting conflicts.

## 4. Climate Change Countermeasures and Disaster Reduction for Sustainable Development

Africa is highly vulnerable to droughts, flooding and other effects of climate change, creating an urgent need for countermeasures. For instance, Kenya has an average of about 5,000 flood victims every year. JICA has started extending support for disseminating community-based activities for disaster reduction.

Japan has extensive knowledge about dealing with disasters because of the frequency of earthquakes. Examples include the Great Hanshin Earthquake of 1995 and the Great East Japan Earthquake of March 2011. To pass on this knowledge, JICA invited government officials involved in disaster response activities from many African countries to attend an Africa Disaster Relief Management Seminar. The seminar confirmed that Japan and Africa share many of the same issues concerning disasters even though the types of natural disasters that threaten Japan and Africa are different.

Africa has one of the largest areas of forests in the world. The Congo River watershed in central Africa is the world's second-largest tropical forest. This region requires proper management and protection from the standpoints of forest resources and the preservation of biodiversity. In fiscal 2011, JICA started sending specialists to the Central Africa Forests Commission (COMIFAC). The purpose is to coordinate forestry and environmental policies based on the collection of information about forests and collaboration with aid agencies of other countries.

## 5. Promotion of South-South Cooperation

The TICAD process is fulfilling its role of serving as a "forum to facilitate sharing Asia's development experience with Africa." South-South cooperation is a key element of this process. Asia-Africa cooperation is expected to enable the provision of effective assistance in Africa. This cooperation utilizes technologies, human resources and good practices that have been accumulated in Asia over the many years of JICA assistance provided in this region. Japan and India have started a joint training program targeting the capacity development of engineers and workers in Africa for highway construction and maintenance. The program utilizes the respective strengths of Japan and India, such as by having instructors from Japan handle subjects where India has little experience.

South-South cooperation within Africa or regional cooperation has been well utilized in the region. JICA as well is planning on upgrading training programs conducted in African

countries such as Kenya, Senegal and Egypt. The Senegal-Japan vocational training center (CFPT) has been providing technical training courses for engineers to improve their vocational skills by accepting trainees from more than 10 countries in French-speaking African countries [[➔ See the Case Study](#)].

Case Study

Project for Vocational and Technical Training in Senegal and Republic of the Congo

Using the Senegal-Japan Vocational Training Center for Education of Instructors in the Democratic Republic of the Congo

The Senegal-Japan vocational training center (CFPT) was established in 1984 with the support of Japan. With the backing of JICA, the CFPT has educated engineers in Senegal and served as a third-country training facility to educate many trainees from French-speaking African countries.

For the Democratic Republic of the Congo, which is starting reconstruction activities following a period of conflict, third-country training has been provided in cooperation with the CFPT. This training is part of JICA's activities to develop the capacity of instructors at the Congo's National Institute for Professional Preparation (INPP).

JICA has been providing support to the INPP for training engineers in the fields of electricity and electronics, automobile mechanics, freezers, and other fields since the 1980s. However, cooperation was suspended in about 1991 because of growing unrest in the Democratic Republic of the Congo. Due to progress with establishing peace starting in about 2000, JICA started a vocational training program in 2010 for

human resource development to contribute to industrial development.

One part of this program is a Technical Cooperation project for developing the capacity of instructors at the INPP Kinshasa School. The aim is to upgrade and improve training skills by strengthening instruction methods for basic technologies and specialized technologies (automotive mechanics, freezing and air conditioning).

These activities include training in the Democratic Republic of Congo and Japan and also mutual cooperation with the CFPT for use as a third-party training center and for sending specialists from the CFPT to the INPP.

Cooperation with Senegal, which has economic and cultural similarities with the Democratic Republic of the Congo as a French-speaking country, facilitates the efficient transfer of technologies. Furthermore, mutual cooperation between African countries holds the promise of leading to new channels for international interaction.

Thus far, the CFPT has trained about 2,300 intermediate and advanced engineers in the fields of electronics, electricity, mechatronics, automobile maintenance, information processing and automation. Approximately 15% of these students came

from countries other than Senegal. Ousseynou Gueye, who has been the director of the CFPT since 1992, received The Order of the Rising Sun, Gold and Silver Rays, from Japan in the spring of 2011.



An instructor explains the operations of a processing machine to students at the CFPT in Dakar, Senegal.

# Central America and the Caribbean

## Promoting Effective Development Cooperation as a Partner

Mexico and the countries of Central America and the Caribbean\*<sup>1</sup> share many commonalities with respect to language, culture, etc. At the same time, however, the region has diverse needs due to marked differences in the size and socioeconomic situation of each country.

While taking into consideration the unique context of each country as well as the regional integration and intra-regional cooperation initiatives to overcome region-wide development issues, JICA assists in the stable development of this region by placing a priority on the following three areas: 1) Infrastructure development for sustainable economic growth; 2) Addressing global issues (measures against climate change, environmental conservation and improvement, and disaster prevention); and 3) Poverty reduction from a human security perspective.

**Key Aid Strategies**

**Establishing an Economic Infrastructure, Dealing with Global Issues and Supporting Impoverished People**

The Central American Crisis (a collective term for the series of civil wars that occurred in numerous Central American countries), which continued for over 10 years starting in the late 1970s, severely impacted the social and economic development of the Central American region. Later, as the various conflicts wound down and the peace process advanced in the 1990s, democracy began to establish itself and today most Central American countries are experiencing stable economic growth. The Caribbean region is also maintaining a certain degree of economic growth thanks mainly to its tourism industry and to remittances from migrants residing in the United States.

However, Central America and the Caribbean continue to face numerous challenges, as every year the region experiences natural disasters such as hurricanes, and also on account of its vulnerable economic structure, which remains dependent on the export of primary commodities and on remittances from overseas. With the aim of overcoming these common issues, regional organizations such as the Central American Integration

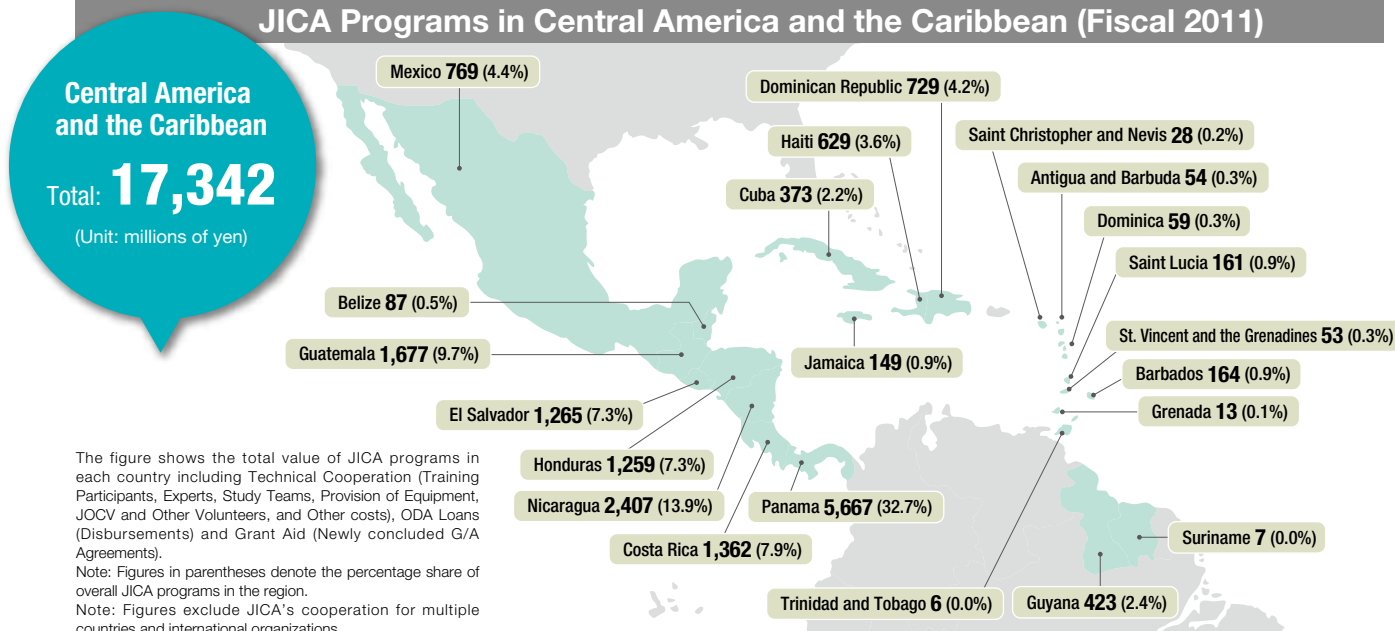
System (SICA) and the Caribbean Community (CARICOM) work actively to promote regional integration and intra-regional cooperation.

In consideration of language and cultural commonalities and regional integration as well as intra-regional cooperation frameworks, JICA works to provide assistance on a regional scale (regional cooperation) to overcome common development issues that affect each country. JICA works in partnership with international organizations such as the Inter-American Development Bank (IDB) and other aid-donors.

Celebrating 70 years of diplomatic relations between Japan and five Central American countries, 2005 was designated as the Japan-Central America Year and was marked by the Japan-Central America Summit, which led to the adoption of the Tokyo Declaration and the Action Plan\*<sup>2</sup>.

Using the Action Plan as a guideline, JICA implements assistance for the establishment of peace and democracy, further economic cooperation, development, promotion of

JICA Programs in Central America and the Caribbean (Fiscal 2011)





tourism, and disaster prevention.

In consideration of the agreement concluded at the 2nd Japan-CARICOM Ministerial-Level Conference held in 2010, JICA is providing the CARICOM member states with assistance for environmental and climate change countermeasures, mitigation of the impacts of the economic crisis, reconstruction following the Haiti earthquake, etc.

Through frameworks like the Japan Mexico Partnership Program (JMPP), JICA promotes triangular cooperation for the purpose of providing assistance to developing countries in the region by working with Mexico and other emerging countries.

## Priority Issues and Efforts

### Infrastructure Development for Sustainable Economic Growth

This region has fallen behind in building and restoring a basic economic infrastructure due to many years of civil war and frequent natural disasters like hurricanes. The lack of this infrastructure is one impediment to economic growth in the region.

JICA is providing support for the construction of highways and bridges in order to facilitate the efficient movement of goods throughout the entire region. In Nicaragua, the Government of Japan and JICA have provided Grant Aid to replace many bridges on the international arterial highway that links the capital of Managua on the Pacific coast to the Port of El Rama on the Atlantic coast. Facilitating the smooth and safe domestic and international movement of cargo is expected to stimulate regional economic growth along the coasts of Nicaragua.

This region has been recovering from the global financial crisis that started in the fall of 2008, but the pace of this recovery has been slow. As a result, there is an increasingly greater need for initiatives to achieve sustained economic growth and eliminate socio-economic disparities. In Costa Rica, the Government of Japan and JICA have provided Grant Aid, and JICA has implemented Technical Cooperation to establish the Centro Para la Formación de Formadores (CEFOF, now the

UTN-CEFOF, Universidad Técnica Nacional-Centro de Formación de Formadores y Personal Técnico para el Desarrollo Industrial de Centroamérica) and develop human resources for small and medium-sized enterprises (SMEs). Instructors at UTN-CEFOF have been training local people to be facilitators for supporting SMEs in Central America and the Caribbean. This regional cooperation project is aimed at contributing to strengthening SMEs support activities in this region.

Japan has been strengthening its economic ties with Mexico following the enactment of an economic partnership agreement (EPA) in 2005. In 2011, JICA implemented its first training based on public-private partnership to instruct Mexican physicians on the use of a surgical procedure called transradial coronary intervention (TRI)<sup>\*3</sup>, in response to a proposal from Terumo Corporation, one of the world's leading manufacturers of catheterization products. The number of deaths in Mexico caused by ischemic heart disease is expected to decline due to this training. This program is consistent with the aim of the Government of Mexico to increase international health care interaction as part of its new growth strategy. Furthermore, the program is an opportunity to share Japan's highly advanced catheter technology with other countries. As a result, the program is highly beneficial for both the public and private sectors.

### Addressing Global Issues

#### Climate Change Measures (Renewable Energy, Energy Conservation, and Disaster Prevention)

In the area of climate change, JICA assists mitigation measures by such means as developing renewable energy and introducing methods for energy conservation. JICA also assists climate change adaptation measures, such as enhancement of disaster prevention. In March 2012, a framework agreement was signed between JICA and the IDB for the implementation of co-financing under the CORE (COfinancing for Renewable energy and Energy efficiency) scheme for Central America and the Caribbean. Under this new scheme, JICA will provide ODA Loans for projects aimed at reducing greenhouse gas emissions in the region.

In July 2011, JICA started a study concerning the construction of a geothermal power plant in northwestern Costa Rica. This country has announced the goal of becoming carbon neutral<sup>\*4</sup> by 2021 and is aiming to balance economic growth with environmental protection. The Government of Costa Rica focuses on geothermal energy, which is a renewable energy source, to provide a stable supply of electricity throughout the year, anticipating support from JICA.



A geothermal well drilled by the Costa Rican Electricity Institute (ICE). JICA is implementing the Preparation Study for the Geothermal Energy Development in Guanacaste Province to assist in steam data analysis for this well and other activities.

\*1 Antigua and Barbuda, Bahamas, Barbados, Belize, Costa Rica, Cuba, Dominica, Dominican Republic, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Saint Christopher and Nevis, Saint Lucia, Saint Vincent, Surinam, and Trinidad and Tobago.

\*2 As a follow-up to the Tokyo Declaration and Action Plan, Japan and the Central American countries hold the Japan-Central America Forum every year in order to continue dialogue and strengthen relations.

\*3 TRI is a surgical procedure in which a catheter is inserted through a vein in the wrist. This method has a smaller physical and economic impact on patients than with conventional procedures.

\*4 Carbon neutral aims to cancel out CO<sub>2</sub> emissions from human activity by absorbing the same or greater amounts of CO<sub>2</sub>.

Hurricanes, earthquakes and other natural disasters occur frequently in Central America and the Caribbean. Due to the high vulnerability of this region to these disasters, there is an urgent need to make this region more resistant to disasters.



An expert from Mexico holds a training session for physicians and nurses concerning neonatal emergency resuscitation (Guatemala).

JICA has been supporting reconstruction efforts of the Government of Haiti following the devastating earthquake of January 2010. In addition, JICA is sharing and promoting the application of community disaster preparedness expertise by using Japan's knowledge in this area. In El Salvador, JICA is extending support to create an infrastructure reconstruction plan for El Salvador following damage from heavy rains in 2011 [\[See the Case Study below\]](#).

### Support for Impoverished People for Ensuring Human Security

Although countries in Central America and the Caribbean are achieving economic development to some degree, there are still large numbers of people living in poverty who have no access to basic education, health and medical services, and safe drinking water. Based on the principles of human security, JICA is aiming for inclusive development in Central America and the Caribbean, a region with significant socio-economic disparities. JICA plans and implements programs that place

#### Case Study

### El Salvador Plan for Economic Infrastructure Rehabilitation Assistance and a Regional Disaster Preparedness System

#### Support for Disaster Preparedness and Recovery Extending from Communities to Regions

Like Japan, El Salvador experiences frequent natural disasters such as floods, landslides, earthquakes and volcanic eruptions that cause injuries, deaths, and property damage. JICA implements Japanese technology and experience to provide a broad range of support that extends from the community level to infrastructure reconstruction.



The La Zorra Bridge in La Paz Province in southern El Salvador was damaged by rain from a tropical depression in October 2011.

#### Suffering Natural Disasters in El Salvador

In El Salvador, there were more than 200 deaths due to Hurricane Mitch in 1998 and more than 500 deaths due to landslides in residential areas near the capital of San Salvador, when a major earthquake hit in January 2001. In order to mitigate the country's vulnerability to natural disasters, JICA has extended cooperation based on technology and experience accumulated in Japan. In the Project on Capacity Development for Disaster Risk Management in Central America "BOSAI" (The "BOSAI" Project), JICA supported community-level initiatives to protect people's lives and property from natural disasters. In the Enhancement of the Construction Technology and Dissemination System of the Earthquake-Resistant "Vivienda

Social" Project, JICA provided solutions for the construction of earthquake-resistant residential buildings and promoted the use of earthquake-resistant construction methods by making residents of El Salvador more aware of the issue. These activities have produced positive effects.

#### Upgrading Disaster Prevention Information

The "BOSAI" Project, which JICA is conducting in six Central American countries including El Salvador, assists in enabling not only disaster response agencies but also residents themselves to gather and communicate information to be prepared for disasters, which leads to prevent or reduce the loss of life and property. Meanwhile, El Salvador does not have sufficient equipment for the measurement of the magnitude of earthquakes and height of tsunamis. The country needs more equipment in order to collect the accurate information that is needed for the evacuation of residents.

JICA started a survey in 2012 for the Grant Aid project for Improvement of Equipment for Disaster Risk Management (tentative name). The goal is to provide local residents with faster evacuation instructions by installing equipment, ocean height meters and the systems for transmitting the data from these

meters, all of which apply Japanese technologies and experience.

#### Support for Economic Infrastructure Reconstruction

In recent years, damage to social and economic infrastructures from heavy rains has become more frequent and severe in El Salvador. Rainfall from a tropical depression in October 2011 caused immense damage. For instance, 12 bridges on main highways collapsed and 37 were damaged. Trucks with large trailers carrying agricultural goods and other cargo were blocked, which created a major obstacle for economic activity in the country.

To support the rapid restoration of the economic infrastructure, JICA implemented the Economic Infrastructure Rehabilitation Assistance Project from March to November 2012. Through this project, JICA is providing assistance to create plans that will enable rapid repairs to damaged bridges. Restoring the country's land transportation network is expected to return El Salvador to normal



Runoff from heavy rain washed away part of the downstream side of this bridge, which was closed off by nearby residents.



priority on increasing the capacities of governments, communities and people.

In the health sector, a Technical Cooperation program is under way in three particularly impoverished western departments of Guatemala. The goal is to provide proper healthcare services to mothers and infants.

In the governance sector, JICA is implementing Technical Cooperation programs in Honduras and other countries to enable local governments to plan, formulate and execute development projects that meet the needs of their residents. The aim is to upgrade administrative services of these governments, thereby building stronger ties with residents based on trust and increasing transparency.

With regard to assistance for individuals with disabilities, the Kaloie Project in Costa Rica one of JICA's Technical Cooperation programs, assists in enabling people with disabilities to become self-reliant. By participating in this project, people who previously stayed at home and were not part of society have become empowered. JICA played a leading role in establishing an independent living center and has encouraged governments in Costa Rica to support disabled people and improve systems for providing them with subsidies

[ See the Case Study on page 91]. Furthermore, JICA continues to provide assistance through Third-Country Training and other activities to share the results of this project with other countries in this region and promote these programs.

Haiti is the poorest country in Central America and the Caribbean. Here, a triangular cooperation project\*<sup>5</sup> is under way for the purpose of upgrading the skills of agricultural engineers in Haiti. This project was realized by means of collaboration with the Government of the Dominican Republic, which has gained knowledge about agriculture from cooperation provided by the Japanese government and JICA. Dissemination of agricultural techniques of the Dominican Republic that are suitable and applicable to Haiti is expected to increase agricultural productivity in Haiti.

By conducting these activities, JICA is also promoting efforts to share the experiences of individual countries and results of previous cases with other countries in Central America and the Caribbean, a region where all countries are confronting common issues.

\*<sup>5</sup> Triangular cooperation involves three countries: a partner country (Haiti), a country that provides aid resources (Dominican Republic), and cooperation provided by the Government of Japan and JICA.

## Case Study

### Dominican Republic Project for Sustainable Tourism based on Public-Private Partnership

## Developing New Tourism Destinations with a New Approach by Using Tourism Product Development and Community Participation

**In the Dominican Republic, the government has promoted expansion of the tourism industry by attracting and utilizing foreign capital since the 1960s. However, it is often said that tourists seldom step out from resort hotels in the country because most facilities for tourists, so called all-inclusive resort hotels, have their own shops and restaurants. In response, JICA has provided cooperation for establishing a new framework for tourism in which local residents receive benefits, too.**

The Province of Puerto Plata is the third-largest tourist destination in the Dominican Republic, but local residents receive limited benefits from the tourism industry. With JICA's cooperation, the Sustainable Tourism based on Public-Private Partnership project has started.

To implement the project, a working group was formed in each of the nine municipalities in the Province of Puerto Plata. Members include representatives from local governments, NGOs, civic organizations, local companies and other participants from the public and private sectors. Each group identified natural and cultural resources in its respective area and created its own map showing the locations. This process is giving local residents a renewed sense of pride in their home regions, thereby further motivating all participants in this project. Local residents are gaining a feeling of pride in local resources that had not been attracting attention before, such as a product or a type of music. Adding episodes and other

information to these resources allows the development of tourism products with distinctive regional characteristics (like a particular product, such as high-quality coffee). This public-private partnership with residents playing a central role leads to give the Puerto Plata area a new type of appeal for tourists.

Hotel and the tourism sector are the most important industry for the residents of Puerto Plata. However, the number of tourists has been decreasing steadily because of competition with other resorts in the Dominican Republic and nearby countries. As a result, hotel and tourism operators as well have high

expectations for this project because the tourist product development process meets their needs, too. In the past, communities have had almost no involvement with tourism development in the area. This project is expected to help establish a win-win relationship for residents and hotels.

In March 2012, this project received the Puerto Plata Outstanding Achievement Award, which is given to the organization that makes the greatest contribution to the Province of Puerto Plata. Receiving this honor has further heightened the motivation of the participants in this project.



An expert from Japan gives advice concerning a hands-on tour (making chocolate by hand from cacao) under development by a working group consisting of local residents.

# South America — Promoting Effective Aid While Advancing Inter-Regional Partnerships

South America, gifted with fertile soil and abundant natural and mineral resources, is achieving strong economic growth spurred by the recent increases in worldwide demand and prices of resources and foods. At the same time, however, South American countries are still characterized by large disparities in both income and access to social services, where large numbers of people are forced to live in poverty in the shadows of economic growth. Taking into account the specific circumstances under which each country lives, JICA addresses the issues that are considered to be priorities in each country, and also focuses on environmental conservation of the region's resources, such as the Amazon Basin, which have a significant impact on the global environment.

Going forward, JICA will focus on extending cooperation on economic infrastructure development, global issues, and mitigating disparities, while assisting the development of countries inside and outside of the region through private sector partnerships and partnerships with countries in the region that have achieved relatively high income levels and possess advanced technology, such as Brazil.

**Key Aid Strategies**

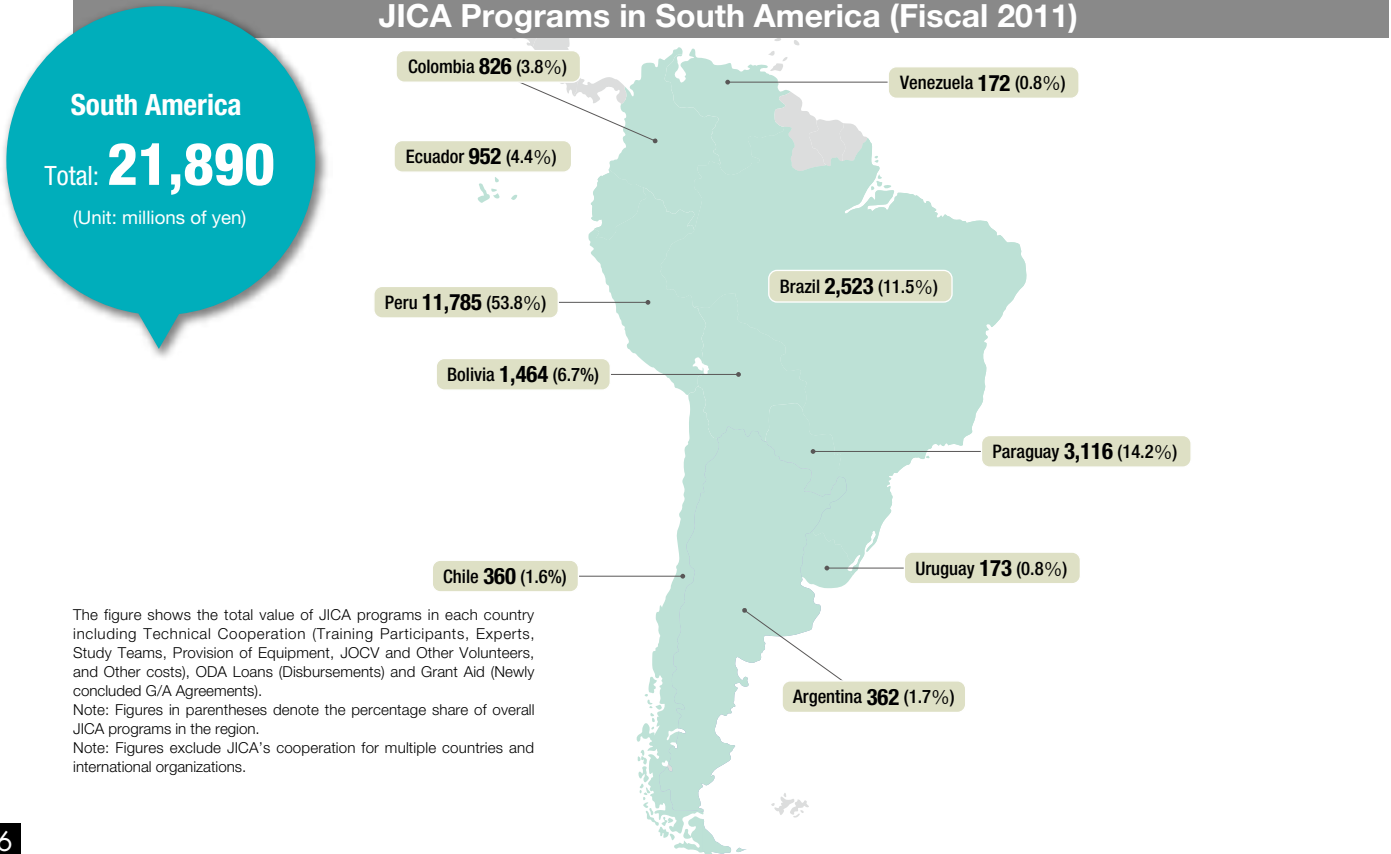
**Contributing to Regional Stability by Developing Economic Infrastructure, Addressing Global Issues and Mitigating Disparities**

South American economies depend heavily on the production and export of primary products, which makes them extremely vulnerable to global economic and market trends. In the future, these countries will need ongoing industrial development, trade promotion, and an improved investment environment, as well as economic development that facilitates sustainable growth. It is also essential to strengthen the administrative capacities of the governments and maintain stable security as a foundation for encouraging private sector economic activity. Moreover, there are many areas in which urban environmental problems are growing more serious due to economic growth, and these problems require an urgent response as well.

In the shadows of the strong economic growth of recent years, there persists considerable social anxiety created by the presence of economic disparities at the national and regional levels. Under these circumstances, in addition to undertakings to foster economic growth, efforts are being made to mitigate disparities and stabilize the economy and society in the region.

It is important to address global issues in South America because the Amazon, the world's largest rainforest, greatly impacts global climate change, and because this area still offers significant potential for developing both agricultural land and natural resources, which are related to food and energy security.

**JICA Programs in South America (Fiscal 2011)**



The figure shows the total value of JICA programs in each country including Technical Cooperation (Training Participants, Experts, Study Teams, Provision of Equipment, JOCV and Other Volunteers, and Other costs), ODA Loans (Disbursements) and Grant Aid (Newly concluded G/A Agreements).  
 Note: Figures in parentheses denote the percentage share of overall JICA programs in the region.  
 Note: Figures exclude JICA's cooperation for multiple countries and international organizations.



South America has witnessed frequent major natural disasters in recent years, including an earthquake in Chile and flooding in Brazil, Colombia, and Venezuela, making disaster prevention countermeasures an important issue.

While placing a priority on utilizing this key aid strategy, JICA implements assistance by keeping the next three points in mind:

- 1) Mitigating disparities both within regions and within countries
- 2) Contributing to development while maintaining respect for the ownership of the recipient countries
- 3) Ensuring that the benefits of growth are extended to the poorest segment of the population

In addition, JICA is strengthening its relationships with Brazil, Argentina and Chile, where income levels have grown higher and technological capabilities have also improved compared to other countries in the region, by reinforcing partnerships to address development in neighboring countries and in Africa.

In recent years, Japan has been importing more and more of its resources and food from this region. Based on the large Japanese immigrant community numbering more than 1.6 million people, the relationship between Japan and South America is likely to deepen further in future.

## Case Study

## Ecuador Vocational Training for Socially Vulnerable People

### Vocational Skills for Ending Poverty and Aiming for a Better Future

In Ecuador, JICA has been continuously providing aid for training industrial workers through the Vocational Training Improvement Plan (Grant Aid) and the Vocational Training Improvement Project (Technical Cooperation). During the three-year period from 2008 to 2011, JICA conducted the Project on Strengthening of the Occupational Training for the Vulnerable Sector (Technical Cooperation). Under the leadership of President Rafael Correa of Ecuador, who has committed to helping socially vulnerable people, this project has helped to reduce poverty among these people. More than 70% of people who completed the training reported that they received additional benefits such as by raising their incomes, starting small businesses or receiving a higher-paying job.

#### Daily Income Below \$2 for About 40% of Residents

The Andes mountain range covers about one-third of Ecuador. There are many more impoverished small farmers in mountainous areas of the country than along the coast, resulting in a high poverty rate. Although Ecuador has a gross national income of more than \$3,000 per capita, about 40% of the country's population of approximately 14 million is impoverished with a daily income below \$2. Many of these impoverished people are women, people with disabilities, refugees from Colombia\* and other socially vulnerable individuals. They are unable to break away from poverty mainly due to the lack of skills required to find a job.

#### Basic Skills Training Follows Industrial Human Resources Development

The new administration of Ecuador is taking actions to support socially vulnerable people and help impoverished people. Under this policy, Ecuador has been offering Basic Skills Training Courses for socially vulnerable people at vocational training centers nationwide since 2007. However, there is insufficient know-how to operate these courses as well as a need to strengthen the capabilities of instructors.

JICA has been providing support in the vocational training sector of Ecuador in order

to foster the development of industrial human resources. In addition, JICA received another request from the Government of Ecuador for aid for basic skills training that is specially targeted to socially vulnerable people. In response, JICA started the Project on Strengthening of the Occupational Training for the Vulnerable Sector. Assistance was provided for the development of model courses for basic skills training for vulnerable individuals and for the creation of a framework for widely utilizing these models. A needs survey was performed so that the project could contribute to reducing poverty among socially vulnerable people. Based on the survey, model courses were developed for six sectors: food preparation, sewing, electricity, building construction, machinery and metals, and automobile maintenance. The developed models were then implemented at eight vocational training centers that are representative regional centers and where there are large numbers of refugees from Colombia.

#### Training Improved the Lives of 70% of Participants

This project developed a curriculum and teaching materials for 20 basic skills training courses in seven fields. In all, 425 courses were conducted and approximately 7,500 people attended the courses. About 70% of people who completed these courses had improved

their lives due to an increase in income, new job, start of a new business, better quality job, new job with a higher income or other improvements. To increase employment opportunities and improve the livelihoods of socially vulnerable people, the Government of Ecuador has decided to expand the model of basic skills training to all 18 training centers in the country.

#### From the Grassroots

#### Shiro Kikuchi, Project Leader (descendant of emigrant to Paraguay; recipient of a 2011 JICA Recognition Award)

Before the start of this training, socially vulnerable people had no opportunity to gain new skills that could be used as a source of income. This is why they studied so hard and expressed their sincere appreciation after finishing the course. I hope that the useful knowledge and technologies they acquired will enable them to find jobs and start businesses that can increase their incomes.

\*Colombia suffered from a prolonged internal conflict between the government and left-wing guerrillas and a right-wing militia. Many people were forced from their homes and became refugees who now live in Ecuador, Panama, Venezuela and other nearby countries.



Students in the bread baking and confectionery course

## Priority Issues and Efforts

### ■ Building a Foundation for Sustainable Economic Growth

Blessed with abundant natural resources, South America has achieved steady economic growth in recent years, primarily driven by private-sector investment. Although the region was impacted by the global economic crisis in 2008 and by volatile prices for natural resources, the economy recovered in 2010. JICA is providing support to reinvigorate the economies of rural areas in consideration of mitigating domestic income disparities, which is an important development issue faced by various countries in the region.

In Paraguay, 87% of the roads are unpaved and are frequently unusable in the rainy season. This threatens the country's social foundation, as it hinders sales channels for the livestock industry, Paraguay's major industry, as well as slowing down economic activity and restricting access to schools and hospitals. JICA is implementing the Rural Roads Improvement Project with emphasis on regions with particularly low pavement ratios.

The Altiplano region of Bolivia, which is a plateau high in the Andes, has lead, zinc and other mineral resources as well as tourism resources like Salar de Uyuni salt flats and the Potosi silver mine, which is a UNESCO World Heritage site. Nevertheless, this area has the country's highest poverty ratio. Average monthly income is less than half the national average and the income disparity between urban and rural areas is more than four times. Agriculture and livestock are the primary industries in this region. However, the infrastructure is inadequate and the climate is challenging because of the altitude of more than 4,000 meters. In addition, the effects of climate change have been lowering agricultural and livestock productivity in recent years. As a result, livelihoods in the future is a main problem that residents concern.

Japan is strengthening its economic ties with this region by constructing geothermal power plants and developing mineral resources. Along with these activities, JICA is supporting the creation of plans for industrial promotion in the tourism sector and agriculture and livestock sector with the aim of improving the livelihoods of residents by increasing the scale of these two sectors.

In Peru, there are expectations for even stronger economic ties with Japan since an Economic Partnership Agreement between the two countries became effective in March 2012. JICA plans to provide financial support for economic growth in the entire country while contributing to help Peru to eliminate disparities within the country, such as through tourism development projects in the country's poorest areas.

### ■ Addressing Global Issues

South America tends to be affected by global issues such as climate change, but at the same time the region can have a significant impact on the resolution of such problems. Accordingly, JICA is cooperating in this field with many South American countries. Since this is a region where some

countries have relatively advanced levels of technology, JICA pursues research cooperation together with Japanese universities and other research institutes by utilizing Japanese science and technology in order to contribute to resolving global issues.

Chile is a country with many earthquakes and tsunamis, just as in Japan. In 2010, the sixth most powerful earthquake ever recorded devastated a large area of the country. Damage caused by the tsunami was particularly severe. This disaster raised many questions in Chile. JICA has been sharing with other countries information and lessons learned regarding the Great East Japan Earthquake of March 11, 2011 and working on measures to strengthen tsunami preparedness in order to prevent this type of tragedy. Starting in 2011, JICA has been implementing the Research Project on Enhancement of Technology to Develop Tsunami-related Communities under the Science and Technology Research Partnership for Sustainable Development (SATREPS) with a research team consisting of universities and organizations in Japan (Lead research institute: Port and Airport Research Institute). Objectives of this joint research project include developing tsunami damage prediction technologies and a highly accurate tsunami warning method in Chile.

Ninety-nine per cent of the world's tropical glaciers are concentrated in the Andes Mountains of South America, and these glaciers are disappearing rapidly due to climate change. Through the Study on Impact of Glacier Retreat on Water Resource Availability for cities of La Paz and El Alto Project (SATREPS) in Bolivia, conducted jointly with Tohoku University and other partners, JICA is supporting the research and development of a water resource management model that reflects climate change and changes in the social environment in order to reduce the impacts of disappearing glaciers.

In Argentina and Chile, JICA cooperated with the Project to Strengthen the Capacity to Measure the Ozone Layer and UV Radiation in Southern Patagonia and the Projection towards the Community (Technical Cooperation) with the National Institute for Environmental Studies and Solar-Terrestrial Environment Laboratory of Nagoya University and other organizations. This project supports activities related to observing the ozone layer, and warning and educating residents about limiting the health impacts that result from ozone layer depletion.

### ■ Poverty Reduction and the Correction of Disparities

Measures to address poverty and the correction of disparities are an issue common to all South American countries as well as a cornerstone of each nation's governmental policy.

In Colombia, more than 40 years of internal armed conflict has caused many serious and complex problems. For peacebuilding in this country, it is vital to eliminate the poverty problem through improvements in the lives of internally displaced persons (IDP) and other socially vulnerable people by enabling them to earn incomes. JICA supports the "One Village, One Product" project, which aims to enable impoverished and socially vulnerable people to earn incomes and improve their lives. Under the strong leadership of the Government of

Colombia, as part of the national strategy of strengthening the capabilities of local governments, the “One Village, One Product” project is being implemented on a nationwide scale.

Peru has enacted macroeconomic policies that achieved rapid growth but is still working on correcting disparities. JICA is providing support for fighting poverty and improving the livelihoods of rural residents of the Amazon regions of Peru. JICA supports Peru with two ODA Loans; 1) the Rural Amazonia Water Supply and Sanitation Project, which aims to build water supply and sanitation facilities in rural villages of Amazonia; and 2) the Sierra Small and Medium Scale Irrigation Project, which aims to improve agricultural productivity in mountainous regions, and a Technical Cooperation, the Project for Improving the Livelihood of Small-scale Farmers in Cajamarca. In addition, JICA provided Technical Cooperation for the care of victims of domestic and social violence through the Project of Strengthening the Integrated Health Service for People Affected by Violence. As a result, there have been rapid increases from 2009 to 2011 in the number of small medical care districts that can provide comprehensive health care services and in the number of under-controlled victims served, the number of people who receive medical care, and the number of referrals to associated institutions.

### Strengthening Relationships with the Japanese Government and People

Aid from national governments themselves or from foreign countries has a relatively smaller impact on the overall

economy in comparatively higher income countries, where private sector economic activity drives development.

In South America, Japanese private companies have entered the mining industry to start with in particular because of the region's rich mineral, energy and other resources. The progress of these private sector economic activities will serve to promote further economic development, while also contributing to strengthening the relationships between these countries and Japan.

With demand for electricity expected to continue to climb in Brazil, the country needs to secure sources of electricity needed to support sustainable growth. In response, the country is moving forward with smart grid and smart community\* initiative. By collaborating with the New Energy and Industrial Technology Development Organization (NEDO), JICA invited key members of the electricity sector in Brazil to Japan to explain initiative of the Japanese government and advanced case studies at Japanese companies. Smart grid technology is one of the central elements of the Japanese government's New Growth Strategy. These activities are helping to build a network of relationships among key stakeholders in Japan and Brazil. It is expected to increase understanding and interest involving extremely advanced technologies, thereby contributing to the use of these technologies in Brazil.

\*The smart grid and smart community use electricity supply systems that incorporate IT in order to make all functions of a city more efficient, resulting in substantial energy conservation.

#### Case Study

### Carbon Dynamics of Amazonian Forests

#### Working with Global Partner Brazil to Deal with Global Issues

**A joint research project is under way in the Amazonian forests with the aim of contributing to the establishment of a new framework for fighting climate change.**

Discussions are ongoing worldwide about the establishment of the REDD-plus mechanism (reducing greenhouse gas emissions from deforestation and forest degradation and other causes). One of the major issues involving the design of this mechanism is the creation



In the central Amazonian forest, where very few surveys have been performed, data on plants and other subjects have been collected at about 1,000 locations by measuring tree diameters, collecting flowers and conducting other activities.

of a method for the accurate and efficient calculation of carbon sequestration in forests that are changing due to deforestation and forest degradation. To devise a method, the Carbon Dynamics of Amazonian Forests Project is being implemented as part of the Science and Technology Research Partnership for Sustainable Development (SATREPS), a joint undertaking of JICA and the Japan Science and Technology Agency (JST).

The project is performing research by



In the upper Amazon basin, members of the on-site team weigh a tree to estimate the amount of carbon inside.

operating in two teams: the on-site team and remote-sensing team. The on-site team consists primarily of the Forest Products Research Institute of Japan and National Institute for Amazonian Research of Brazil. Team members have been repeatedly performing on-site surveys to calculate as accurately as possible the amount of carbon stored in the Amazon rainforest.

Members of the remote-sensing team come mainly from the University of Tokyo and the Brazil National Institute for Space Research. The team uses information from on-site surveys to obtain highly accurate carbon storage volume data for each type of forest. The team also performs research concerning methods to calculate the volume of carbon sequestration in the Amazon region by using satellite images and other remote sensing information.

This cooperation that combines the scientific technologies of Japan and Brazil is expected to make a valuable contribution to international discussions that may lead to establishment of the REDD-plus mechanism.

# The Pacific — Using Region-Wide Cooperation to Overcome the Island Country Challenges of Small Size, Isolation and Remoteness

The countries of the Pacific Region have a number of common characteristics. One is their small domestic markets due to limited land areas and populations. Another is isolation because countries consist of many islands separated by vast expanses of ocean. A third characteristic is remoteness because of the poor access to international markets. In addition, this region is vulnerable to natural disasters and the effects of climate change as well as to the environmental burden from waste materials and other sources. Furthermore, countries in the Pacific Region have very little resilience to economic crises such as sharp increases in the price of fuel or food.

Taking the situation of each country into consideration, JICA is providing a wide range of cooperation to overcome such challenges. JICA is also extending region-wide cooperation to address common concerns throughout the region, such as disaster risk management and the environment.

**Key Aid Strategies**

**Region-Wide Cooperation Using Japanese Resources Applicable for Island Countries**

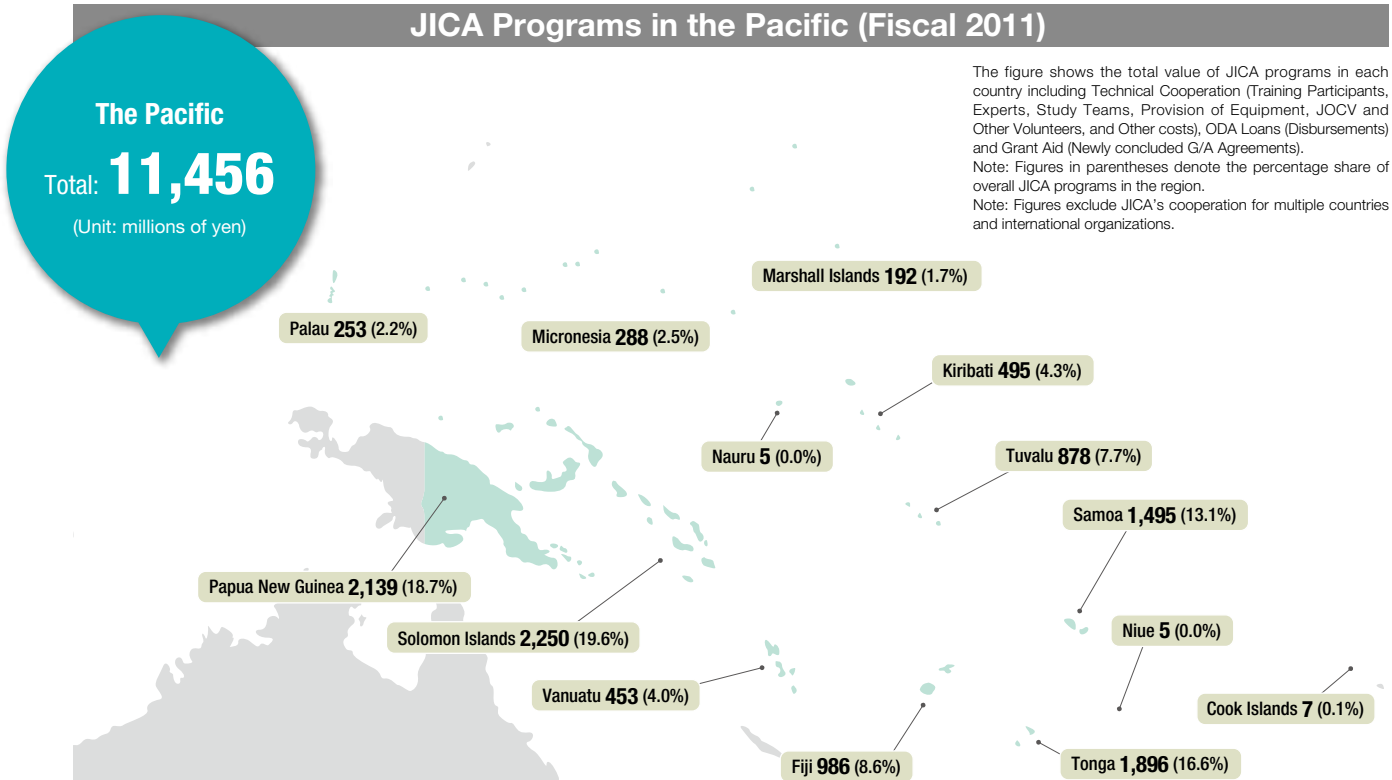
JICA provides assistance to the following members of the Pacific Islands Forum (PIF): Fiji, Kiribati, the Marshall Islands, Micronesia, Nauru, Palau, Papua New Guinea, Samoa, the Solomon Islands, Tonga, Tuvalu, Vanuatu, the Cook Islands and Niue. These countries are dispersed across the three sub-regions of Polynesia, Melanesia and Micronesia, each with its own diverse languages and cultures.

The island countries of the Pacific have shifted to import-dependent economies as the influx of modern economic and cultural influences altered their traditional self-sufficient economies. Many countries have large trade deficits as a result. Countries must also deal with the environmental issue of accumulations of waste materials that cannot all be treated on

the islands. Furthermore, since these countries consist of many small islands, they face a lack of transportation infrastructure and cannot easily deliver such social services as education and health. These problems have made it difficult to achieve social and economic development and become self-reliant.

JICA is providing region-wide cooperation in order to address issues common to these island countries while paying due regard to the uniqueness of each country. In this kind of cooperation, JICA's approach involves the creation of development models to be shared across the region by sending experts to countries that play key roles. These models are then extended to neighboring countries through such schemes as third-country training programs. As declared at the Sixth

**JICA Programs in the Pacific (Fiscal 2011)**





Pacific Islands Leaders Meeting (PALM6) of May 2012, JICA is also providing cooperation that utilized Japanese resources, such as Okinawa's experience in overcoming issues unique to islands.

## Priority Issues and Efforts

### ■ Protecting the Environment

Waste management is a challenge for all of the small islands in the Pacific. JICA has supported Samoa since 2000 in its efforts to improve waste disposal sites and enhance management and operation capacities. JICA subsequently supported activities in neighboring countries for improving waste management practices. In cooperation with the Secretariat of the Pacific Regional Environment Programme (SPREP)\*, JICA has provided support to 11 countries in the region since 2011. The goals are building systems for sustainable waste management and training programs. Cooperation is provided at the regional level and the individual country level for implementing the Solid Waste Regional Strategy 2010-2015, which is the target of the entire region. By conducting these activities, JICA is supporting a reduction in the environmental impact of human activity, such as the generation of waste materials, and helping to establish a sound

material-cycle society on these small islands [[See the Case Study on page 63](#)].

\*SPREP: An organization consisting of 21 Pacific island countries and Australia, France, New Zealand and the United States.

### ■ Natural Disasters and Climate Change

Countries in the Pacific Region are highly vulnerable to damage from frequent natural disasters including cyclones, earthquakes, tsunamis, and floods. Communications and transportation are limited due to the large number of remote islands, which makes it difficult to provide residents with disaster warnings as well as to deliver emergency aid.

JICA is combining Technical Cooperation and Grant Aid to make the entire region better prepared for natural disasters. One theme is enhancing capabilities involving weather observation and issuing forecasts and warnings. In Fiji, experts from neighboring countries gathered to participate in training at the country's Meteorological Service. JICA also provided support for weather observation facilities in Samoa and for other activities. In Tuvalu and the Solomon Islands, radio broadcast networks for disaster information were established to give residents quick access to the information. In Fiji and the Solomon Islands, JICA is offering cooperation for creating a framework for enabling residents to evacuate properly in accordance with the



A JICA expert and counterparts examine the volume and contents of trash at a disposal site.

information provided. Overall, JICA is supplying a broad range of cooperation for disaster preparedness.

Pacific Region countries are very vulnerable to the effects of climate change, too. In particular, Tuvalu and other low-lying coral reef countries are vulnerable to sea level rise and other events associated with climate change. With the cooperation of the University of Tokyo and the Japan Science and Technology Agency (JST), JICA is providing Science and Technology Cooperation for bioengineering research concerning the mechanism by which coral reefs, foraminifera and other organisms produce, transport and pile up sand.



Scientists study a beach in Tuvalu.

### ■ Transportation Infrastructure

Consisting of islands that cover a vast area of the ocean, Pacific Region countries have a critical need for infrastructures for the transportation of people and cargo. Marine transport is truly a lifeline for these countries. JICA has provided Grant Aid for rehabilitation of harbors and provision of passenger and cargo vessels in Micronesia, Samoa, Tuvalu, Tonga and other countries in this region. In June 2012, an ODA Loan agreement was signed for the construction of an international cargo wharf in Port Vila, the capital of Vanuatu. By implementing this project, JICA will help facilitate stable imports of vital household goods as well as the development of the tourism industry, which supports Vanuatu's economy.



The Lady Samoa III, a ferry given to Samoa, operates between the islands of Upolu, the capital city of Apia, and Savaii.

### ■ Social Services

In the Pacific Region, the World Health Organization (WHO) and many other donor organizations have been achieving some successes, including the eradication of Poliomyelitis from the region. Previously, many countries in the region had an insufficient capacity to manage the networks needed for the transport and storage of vaccines. As a result, systems required for safe immunizations were not adequately established. To address this issue, in 2004 the governments in the region, international aid organizations such as the WHO and United Nations Children's Fund (UNICEF), and bilateral donor agencies from countries such as Australia, New Zealand, the United States and Japan committed themselves to extending cooperation for the Pacific Immunization Programme Strengthening (PIPS) framework as a means of invigorating immunization projects. Since 2005, JICA has been playing a leading role in PIPS by supporting the dissemination of technology and human resource development related to the management of immunization projects and vaccines in the Pacific Region.

In remote areas and islands, limited access to education is a serious issue. JICA is providing cooperation for using television, radio and satellite communication networks, as well as other methods, to increase opportunities for education and improve the quality of education. With the support of Australia and New Zealand, Grant Aid was provided in 1998 to the University of the South Pacific (USP), which was established by 12 Pacific Region countries, for establishing a satellite network. This network allows interactive communication between the main campus in



A junior high school class in Papua New Guinea that uses video teaching materials prepared with the cooperation of JICA

Fiji and branch campuses located throughout the region. JICA is currently providing support to upgrade facilities and equipment and enhance the ICT education implementation system [↗ See the Case Study on page 73]. In Papua New Guinea, where the basic education enrollment rate is low, JICA has constructed a national education media center and provided cooperation for the production of educational programs. Cooperation has also been provided for using television for delivering classes in model schools to elementary and junior high schools in other areas of the country. These activities are making basic education available to more people and upgrading the quality of this education.



## Preserving the Beauty of Islands for a Better Future

At small, isolated islands, there is a great impact on the overall environment from the growth of cities and modernization. For example, the accumulation of large volumes of waste and declining water and air quality can have a negative effect on public health. Since tourism is critical to these islands, the deteriorating coastal environment, which ruins an island's scenery, is a serious problem.

JICA is working with the SPREP to assist in formulating a waste material strategy for the entire region in developing waste management systems and training people in each country. JICA and the SPREP have also been working on a model project. The objective of this support is to establish a sound material-cycle society that will facilitate economic and environmental sustainability for small islands.

### Obtaining the Cooperation of Local Governments, Universities, Residents and Others

JICA has been working on waste management since 2000, which is an issue for all countries in the Pacific Region. In Samoa, the Tafaigata disposal site was upgraded to serve as a landfill that can be operated and managed at a low cost. The facility is based on the semi-aerobic landfill method developed by Fukuoka City and University of Fukuoka. The same method was then used to upgrade landfills in Palau, Vanuatu and Micronesia.

Proper disposing of waste is vital. Equally important are measures to prevent the one-way flow of goods to islands from external sources. Islands must do as much as possible to stop the accumulation of waste materials. Countermeasures include limitations on inflows of goods, promotion of on-island recycling, and shipping recyclable and hazardous materials off the islands. In collaboration with Shibushi City in Kagoshima Prefecture, which has devised a way to reduce the amount of waste and raised the recycling rate without the use of an incinerator, JICA assists Pacific countries to promote waste separation to reduce the volume of waste and raise the recycling rate. In Palau, there is an organic garbage composting program with the cooperation of Mie Prefecture and the International Center for Environmental Technology Transfer. In Tonga, JICA is helping reduce the amount of waste produced and use waste materials effectively with the cooperation of Naha City in Okinawa Prefecture and the Okinawa Citizens Recycling Movement. Through programs like these, JICA is providing cooperation in association with local governments and non-governmental organizations in Japan.

### Formulating a Strategy for the Entire Region

JICA formulated the Solid Waste Regional Strategy for the Pacific in 2005 with the cooperation of the SPREP. Based on this strategy, JICA has subsequently provided support for creating national plans for dealing with solid waste in each country and training people in the field of waste management.

In January 2011, JICA and the SPREP started

a new cooperation program based on more than 10 years of experience in order to achieve the targets of the Solid Waste Regional Strategy, which is a goal for the entire Pacific Region. Cooperation is provided for human resources development within the Pacific Region by people trained by past cooperation, strengthening cooperation among countries in this region, and implementing sustainable solid waste management using the know-how of the 11 Pacific Region countries.

### The Sixth Pacific Islands Leaders Meeting

Japan held the first Pacific Islands Leaders Meeting in 1997 and the sixth meeting took place in May 2012 in Nago City in Okinawa Prefecture. At this gathering, participants reaffirmed the importance of initiatives concerning environmental problems that include waste and water management.

Okinawa is similar to Pacific island countries in terms of its climate and geography. Over time, Okinawa has overcome many problems while struggling with issues that are unique to islands. JICA is planning to provide comprehensive support for the establishment sound material-cycle societies for the sustainability of people's lives and the environment on Pacific islands. To accomplish this, the experiences of Okinawa Prefecture and other locations will be used for solid waste countermeasures as well as for protecting water resources and other components of the environment.

#### From Our Expert

### Japanese Technical Cooperation Project for Promotion of Regional Initiative on Solid Waste Management in Pacific Island Countries (J-PRISM)

**Shiro Amano**  
Chief Advisor

J-PRISM is region-wide Technical Cooperation based on cooperation extended over the past 10 years. The project truly demonstrates that "endurance makes you stronger." To enable residents of this region to acquire and pass on skills themselves, we want to use as much as



possible the local capacity developed through past cooperation. This is why we are increasing mutual horizontal transfers with counterparts in the region. Furthermore, many former JOCVs and other people from Japan who were involved in this project have come back and are working with J-PRISM again. We will continue to support the creation of systems for sustainable solid waste management and the training of the people to operate these systems.

#### From Our Partner

**David Sheppard**  
SPREP Director-General

SPREP has been cooperating with JICA since 2000 with initiatives involving the solid waste management, which is one of the most important challenges in the Pacific. Our partnership has enabled Pacific island countries to benefit from an outstanding Japanese waste disposal technology called the Fukuoka method in the Pacific. In recent years, our collaboration has become even greater with the launch of the J-PRISM project. With the cooperation of JICA, we are working on improving the capacities of governments in this region for reducing the volume of waste, promoting recycling, and collecting and disposing waste materials properly.



#### Before



#### After



The Tafaigata landfill in Samoa This landfill adopts the Fukuoka method, the standard structure for ordinary landfills in Japan that can be used at a low cost to match the needs of developing countries.

# Europe — Support to Set the Stage for Becoming an EU Member

Europe is a complex region with a heritage of economic and social development. Most countries belong to the European Union (EU) and countries that are not yet members are working on economic and social development in order to become a member.

JICA's cooperation leverages its own expertise and Japan's strengths while taking into consideration the recipient country's EU ties and potential to graduate from ODA in the future. Measures include support for nation-building in countries in the western Balkans region, which has experienced ethnic conflicts. Cooperation utilizes JICA's knowledge and sectors where Japan has much expertise and is focused on three sectors: (1) Environmental protection; (2) Peace consolidation; (3) Market oriented economies.

**Key Aid Strategies**

**Support for Environmental Protection, Peace Consolidation and Market Oriented Economies**

**Environmental Protection**

Countries aiming to join EU must establish environmental standards that conform to EU standards. For example, countries will have to comply with restrictions on pollution from thermal power plant emissions and produce 30% of their electricity from renewable energy sources. Aid from JICA is also intended to provide support for achieving these requirements.

The Flue Gas Desulphurization Construction Project for Thermal Power Plant Nikola Tesla is the first ODA Loan to Serbia. Installing this equipment will reduce SO<sub>2</sub> and dust emissions. This will both improve Serbia's environment and help the country meet EU environmental standards in order to achieve EU membership in the future.

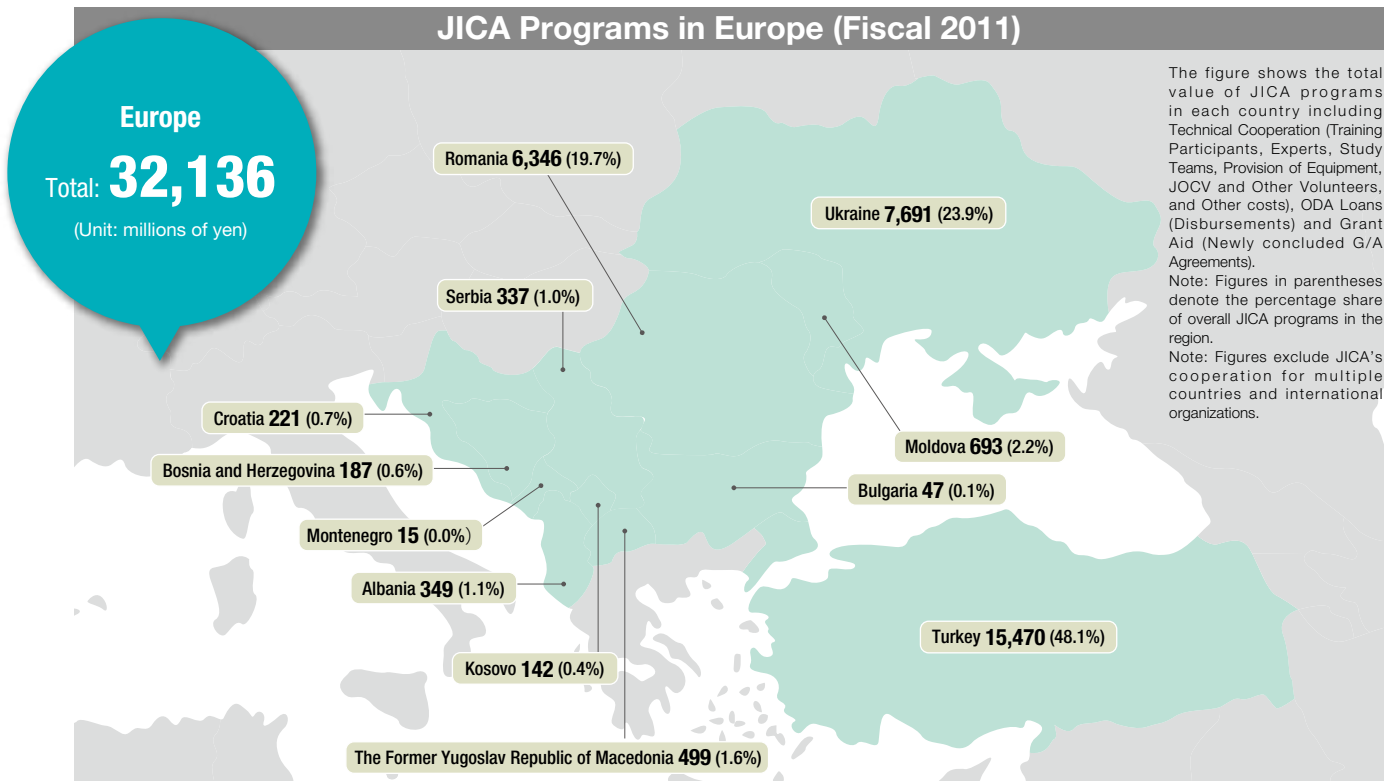
ODA Loans for environmental equipment at thermal power

plants have been extended to Bosnia and Herzegovina and Romania, too. JICA extends cooperation in Kosovo for waste management and has many other environmental programs. Overall, cooperation for protecting the environment is a major element of JICA's activities in Europe.

**Peace Consolidation**

Countries in the western Balkans have achieved a measure of reconstruction from ethnic conflicts and civil wars in the 1990s. However, these countries face many challenges that include high unemployment and simmering ethnic tensions. Building stable social situations in which different ethnicities can coexist is a major theme, and international support will be needed to accomplish this. At the Conference on Peace

JICA Programs in Europe (Fiscal 2011)





Consolidation and Economic Development of the Western Balkans, which was held in 2004, participants agreed that stability of the Balkans would be achieved within the framework of EU membership.

JICA is providing assistance, primarily in Bosnia and Herzegovina, for progress with ethnic coexistence and encouraging countries to achieve EU membership. The Project for Confidence-Building in Srebrenica on Agricultural and Rural Enterprise Development, which is Technical Cooperation, supports activities for agricultural and rural development based on joint measures by residents of different ethnicities. By facilitating interaction among ethnic groups, this project is making steady progress with fostering bonds based on trust.

### ■ Private Sector Development

The Balkans along with Moldova and Ukraine has the potential to become major sources of exports to EU countries. In particular, the Balkans is a huge market because of the region's relatively high per capita gross national income and population of more than 50 million. Furthermore, there are no tariffs within this region because of the Central European Free Trade Agreement (CEFTA).

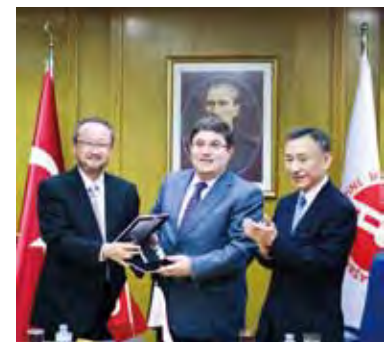
Due to these opportunities, JICA is extending aid aimed at increasing economic activity, such as by promoting tourism, the growth of SMEs and infrastructure projects.

In Ukraine, work was completed in May 2012 on the Boryspil State International Airport Development Project, which used an ODA Loan for enlargement of the international terminal

[\[ See the Case Study \]](#). The airport is expected to increase social and economic vitality in Ukraine by helping attract more investments and tourists from other countries.

### ■ Turkey

Due to remarkable economic growth, Turkey has urgent needs for environmental improvement and human resources development, and JICA has been contributing to these needs through Japanese ODA loans and technical cooperation. Since Turkey is an earthquake-prone country like Japan, JICA is also providing technical cooperation including training in Japan for disaster preparedness over the long term. In January 2012, JICA signed a memorandum of understanding with the Turkish Cooperation and Coordination Agency (TIKA) in order to promote joint projects, and technical cooperation projects have begun in cooperation with Turkey in Central Asia and the Middle East.



The signing ceremony for the ODA Loan for the Coruh River Watershed Rehabilitation Project (June 2011)

#### Case Study

### Ukraine Boryspil State International Airport Development Project

## New Terminal Welcomes European Football Championship Players and Spectators

**The Boryspil State International Airport Development Project used an ODA Loan for the enlargement of the international terminal of this airport, which serves Kiev, the capital of Ukraine. A ceremony was held in May 2012 to mark the completion of this project.**

Boryspil Airport is the largest international airport in Ukraine and serves as the gateway to the country. The number of passengers and volume of cargo at this airport have been increasing steadily as EU expanded eastward and Ukraine's economy grew. Enlargement of the international passenger terminal was needed to accommodate the higher number of passengers.

This was the first ODA Loan project in

Ukraine. Work encompassed the international passenger terminal and associated facilities such as the apron, highway and parking area.

Ukraine and Poland jointly hosted the 2012 UEFA European Football Championship over a period of about one month starting in June 2012. The terminal was completed in time for this major international event, allowing players and fans from all over Europe to enjoy this new facility.

The economic crisis of 2008 dealt a severe blow to the Ukraine economy. The economy subsequently began recovering and the country posted growth rates of 4.1% in 2010 and 5.2%\* in 2011. There are big expectations for the

new terminal to make a significant contribution to Ukraine's economic and social vitality by attracting more tourism and business travelers as well as more foreign investments.

\*IMF, *World Economic Outlook*



The international departures lobby at Boryspil Airport

# Millennium Development Goals (MDGs)

The Attention and Cooperation of the International Community are Essential in the Resolution of Issues of Poverty and Human Development

## Defining Millennium Development Goals (MDGs)

During the Millennium Summit held in September 2000 in which 189 countries participated, the United Nations (UN) Millennium Declaration was adopted, and it set the goals to be achieved by the international community in the 21st century. The Declaration served to clarify the direction and role of the UN on issues of peace and security, development and poverty, the environment, human rights, and protecting the vulnerable. The Millennium Development Goals (MDGs) were then established as a common framework by integrating this Millennium Declaration and the international development goals adopted by major international conferences and summits in the 1990s. The MDGs consist of eight goals to be achieved by 2015.

At the UN MDG Summit held in September 2010, it was deemed that the achievement of the MDGs by 2015 is feasible with the further efforts of the international community, while the progress towards the MDGs varies by goal and region and challenges remain, including rising food prices, economic crises, climate change, and conflict. In this context, the Government of Japan unveiled the Kan Commitment, which sets out specific measures in the areas of health, including maternal and child health, and education, beginning with basic education—the areas where progress has been slow.

In order to follow-up on the MDG Summit, JICA co-hosted the MDGs Follow-up Meeting in Tokyo in June 2011 with the Government of Japan, the World Bank, the United Nations Development Programme (UNDP), and the United Nations Children's Fund (UNICEF). At this meeting, participants shared lessons learned and other knowledge that is useful for the achievement of the MDGs. The event was the beginning of an international debate for establishing a post-2015 international development agenda. Later, the Post-MDGs Contact Group on

the initiative of Japan held informal meetings for a policy dialogue on the post-2015 development agenda that also included JICA.

The United Nations established a High-level panel on the post-2015 development agenda in July 2012 and appointed Naoto Kan, former Prime Minister of Japan, as one of the panel's members. The UNDP as well believes that the future development agenda should incorporate the citizens' voices. To accomplish this, national-level dialogues in more than 50 developing countries and thematic dialogues were started that include NGOs, private organizations or enterprises and many other stakeholders. Discussions for the establishment of the post-2015 development agenda are becoming increasingly widespread as they span many regions and institutions.

## JICA Activities to Achieve the MDGs

JICA has been working toward poverty reduction through a comprehensive approach integrating human resource development and capacity development, improvements in policies and institutions, and development of social and economic infrastructure in developing countries.

JICA is taking initiatives for the achievement of the MDGs based on these perspectives.

### Human Security and the MDGs —JICA's Philosophy to Achieve the MDGs

JICA recognizes "Human Security" as an important concept for achieving the MDGs, which focuses on people and takes a holistic view of the various threats that they face. As one of the vital approaches to realize "Human Security," JICA supports "Capacity Development" in developing countries, which helps them overcome problems and manage risks. Further, the role of infrastructure in development is critical. JICA expands cooperation in "infrastructure development" as a foundation

### The Eight MDGs



Eradicate extreme poverty and hunger



Achieve universal primary education



Promote gender equality and empower women



Reduce child mortality



Improve maternal health



Combat HIV/AIDS, malaria and other diseases



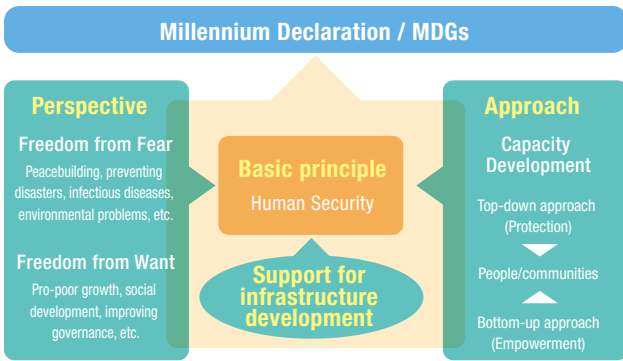
Ensure environmental sustainability



Develop a global partnership for development

Logos created by the NPO Hottokenai Sekai no Mazushisa (Don't let it be - World Poverty)

## JICA's MDGs Achievement Efforts



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 cooperation 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 support the endogenous process of enhancing the capacities of developing countries for dealing with their own problems (“Capacity Development”)

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

that underpins people’s potential.

JICA will continue to strengthen the following actions toward the achievement of the 2015 targets.

### ■ Applying the Experiences of Asia to the World —Poverty Reduction through Sustained and Inclusive Growth

In Asia, integrated efforts for developing economic and social infrastructure, human resources and institutions have promoted the growth of the private sector and led to economic growth and more employment opportunities. Economic growth has contributed to strengthen the financial foundations of governments and expanding public expenditures in social sectors such as education, health and medical fields.

Through its own experiences with modernization, postwar reconstruction and cooperation to Asian countries, Japan has learned that ownership of developing countries is the driving

force of development, and that continuous inclusive growth is essential to sustain and scale up outcomes of development, including the achievement of the MDGs. JICA continues to share the successful lessons learned from Asia with people around the world.

### ■ Overcoming Global Risks around the MDGs —Taking Measures to Tackle Global Issues

Problems such as climate change and rising energy and food prices are high risk factors that could be detrimental to the achievement of the MDGs, and it is essential to take appropriate measures against those global risks. Also, the achievement of the MDGs and peacebuilding are closely related to one another, and hence more efforts need to be made for the consolidation of peace through prevention of armed conflicts and their recurrence.

JICA aims to achieve the MDGs and ensure that results remain into the future by boosting efforts directly related to the MDGs such as education, health and water, and by countering potential risks detrimental to achieving the goals.

### ■ Catalyzing Development Partnerships

In recent years, emerging countries are actively expanding international cooperation, and actors engaging in development issues have become more diverse, as seen in the expansion of the South-South cooperation between developing countries. NGOs and private foundations are also increasingly involved in development cooperation, and private enterprises are also expanding corporate social responsibility (CSR) activities. It is important to build and utilize effective networks among those actors to enhance the quality of development cooperation. Further, to strengthen collective efforts to achieve the MDGs through these partnerships, more financial resources are required from such sources as ODA, private investment and innovative mechanisms including International Solidarity Levies.

JICA continues to enhance development effectiveness by facilitating South-South and triangular cooperation, and exploring close partnerships with NGOs and the private sector.



Children plant mangrove seedlings (Philippines: Improvement of QOL through Means of Reforestation of Mangroves in Negros Island Project)



Pipes link the water storage tank with houses in the community (Bolivia: “Water is Health and Life” Project)

# Economic Infrastructure Development

— Infrastructures that Fulfill the Hopes of People



Of the eight Millennium Development Goals (MDGs), relevant goals are shown in color.

**In developing countries, the insufficient economic growth is caused by the lack of public infrastructure itself or the absence of basic frameworks for its operations and maintenance.**

**Although rapid urbanization can boost the efficiency of economic activities and drive economic development, it can also trigger problems such as worsening living environments and public safety. Urbanization also increases disparities between urban and rural areas. The promotion of effective urban and regional development requires not only region-specific approaches but also macro-scale planning, linked with the relation among the other countries, cross-border economic zones.**

**To develop sustainable economic infrastructures, JICA establishes urban and regional development plans that incorporate studies of suitable social systems and institutions. Based on these plans, JICA extends cooperation for the development of transportation infrastructures and information and communication networks, as well as for strengthening the organizations and human resources that maintain and manage these infrastructures and networks.**

## Urban and Regional Development

### Overview of Issue

The world's population has currently estimated to be 7 billion. In developing countries, the urban population has grown from 680 million in 1970 to 2.56 million in 2010. By 2030, about 80% of the world's urban population is expected to be centered in developing countries.

Growth of urban areas is vital to a country's economic development. However, large cities in developing countries cannot provide enough housing, infrastructure and employment institutions to keep up with the rapid inflow of people who are seeking jobs. As a result, many people are forced to live on unstable incomes in poor living environments. Furthermore, growth of urban populations causes pollution due to traffic congestion and the large volume of garbage, a decline in public security, and many other urban problems that are becoming more complex and serious every year.

### JICA Activities

In the postwar years, Japan as well experienced urbanization at an unprecedented pace that created a variety of urban problems. To solve these problems, Japan constructed infrastructures and developed housing while establishing the standards required for urban development. Japan also focused on the development of new technologies in order to reduce pollution and boost productivity. In addition, Japan quickly began taking actions for disaster preparedness and recovery in order to reduce risks associated with earthquakes, typhoons and other natural disasters. JICA uses Japan's experience and technologies involving urbanization to support urban and

regional development in developing countries in the following six sectors.

1. Establish a basic infrastructure that contributes to economic activities
2. Establish quality housing
3. Establish low-carbon urban areas
4. Establish urban areas that can withstand natural disasters
5. Establish sound city management systems
6. Achieve the revitalization of urban areas

### Inclusive and Dynamic Urban Development

JICA provides support for the creation of cities that can generate a positive cycle of economic growth and poverty reduction. Activities are based on rapid responses from medium- and long-term perspectives to the problems encountered by urban areas in all developing countries. To accomplish this goal, JICA is guided by the vision of "inclusive and dynamic urban development." JICA places priority on development projects in which all types of people can participate in order to prevent the benefits of urban development from being concentrated on a particular group of people.

### Comprehensive Support from Creating Development Concepts to Human Resources Training

JICA is dedicated to meeting the diverse needs associated with urban and regional development in developing countries. Meeting these needs requires assistance at many stages, including the preparation of development plans, implementation of development programs in line with plans, and operation and maintenance of the completed facilities. To execute these processes in a self-reliant manner, the capacities of

## Laying the Groundwork for Package Infrastructure Overseas Operations

The number of passengers is increasing rapidly at Noi Bai International Airport, which serves Hanoi, the capital of Viet Nam. The passenger terminal that was designed to accommodate 6 million passengers every year is already far above capacity, having served 9.5 million passengers in 2010. JICA extended an ODA Loan to construct a second passenger terminal at this airport and is assisting in the establishment for systems to operate and maintain the terminal.



Opinion exchange among public and private relative parties

### Rapid Growth in Passenger Volume

Expanding the passenger capacity of Noi Bai International Airport is vital to the continued growth of Viet Nam's economy. In 2010, JICA signed an ODA Loan agreement for the Terminal 2 Construction Project in Noi Bai International Airport. The loan is for construction of a second passenger terminal, which will raise the airport's annual capacity to 10 million passengers, along with all associated facilities. Construction has started and the terminal is expected to begin operations in 2015.

Plans call for Terminal 2 to incorporate state-of-the-art technology used for the first time in Viet Nam. To allow Airports Corporation of Vietnam (ACV) to properly operate and

maintain the terminal after the building has been completed, the project requires quickly creating the necessary organization and training program within the limited time that is available. Concurrent preparations also include coordination with associated agencies and other measures.

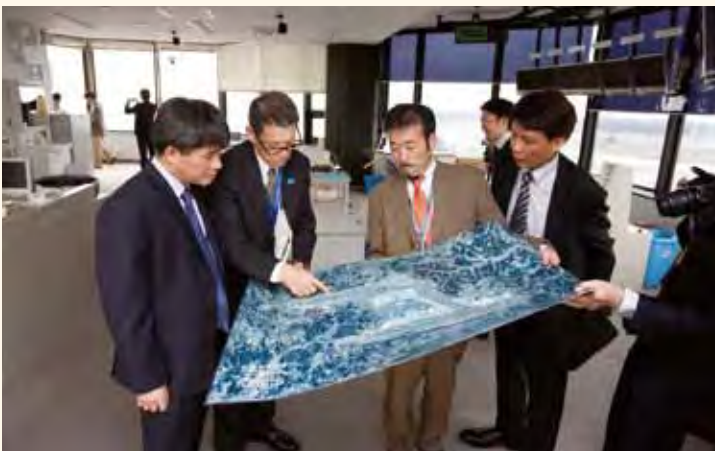
In response to the requests of ACV, JICA used an aid scheme (loan account Technical Cooperation) to provide know-how concerning airport operations that use public-private partnership. The goal is to maximize the development benefits by using knowledge and experience about the operation and maintenance of state-of-the-art Japanese systems so that Terminal 2 can be fully utilized.

### Using Public-Private Partnership to Establish a Framework for Aid from Japan

The Terminal 2 Concurrent Preparations Committee was formed in November 2011 primarily to provide centralized oversight of preparations involving the airport project. Committee members come from the associated agencies of Japan and Viet Nam. The committee is chaired by the president of ACV. Other members from Viet Nam are directors of ACV and managers of departments involved in the project. Committee members from Japan come from JICA, the Ministry of Land, Infrastructure, Transport and Tourism Civil Aviation Bureau and Narita International Airport Corporation. Furthermore, since the Special Terms for Economic Partnership (STEP) are applied to this project, Japanese companies are serving as the contractors and construction supervision consultants. Under this entirely Japanese framework, the strengths of each company will be leveraged to extend support for the construction as a public-private partnership of a passenger terminal with highly advanced operating systems. The goal of this support is to enable ACV to conduct sound airport management.

### Japan's First Management Support for Operating a 10 Million Passenger Terminal

This project is the first time that Japan has extended support for the operation of an enormous airport terminal. Assistance involves establishing a committee with authority to oversee progress with concurrent preparations, the use of a JICA aid scheme, and the participation by Japan in a committee that uses private-public sector collaboration. The infrastructure project is being conducted as a single package that combines the building and other facilities with support for management skills. Using this approach will make it possible to take full advantage of Terminal 2's capabilities in order to increase the development effectiveness of this project.



Individuals involved in the Terminal 2 project in Viet Nam tour Narita International Airport

organizations and people involved in implementing urban and regional development plans must be increased, the necessary legal systems must be improved, and other measures are also needed. JICA uses a diverse aid menu that includes Technical Cooperation, financial cooperation, volunteer programs and other activities in order to provide comprehensive aid for urban and regional development.

## Transportation

### ■ Overview of Issue

In developing countries, the slow development of transportation infrastructure, including roads, railways, ports and airports, has impeded economic growth and contributed to poverty. Transportation infrastructure is the means for the movement of people and goods, and its development is indispensable to sustainable growth.

The demand for transportation infrastructure development is high worldwide, and the need to maintain, repair and upgrade aging structures has been rising rapidly. Securing funds is a big challenge because these projects require significant financing. The limited public funds available are not sufficient to develop all necessary infrastructures. Other funding sources need to be secured, including private capital, in order to provide transportation services without waste in a sustainable manner.

Furthermore, assistance is needed for initiatives which enhance the environment and society of the counterpart country, including initiatives for the elimination of traffic

congestion through the introduction of modes of public transportation and changes in transportation methods; CO<sub>2</sub> reductions through more efficient distribution means; and air pollutant control.

### ■ JICA Activities

JICA's main goal for cooperation in transportation is the swift, smooth and safe transportation of people and goods in order to vitalize socioeconomic activities and to ultimately improve income levels and enrich people's lives.

When developing transport infrastructure in developing countries, it is not enough to simply build roads and bridges. Establishment of a plan to ensure an efficient transportation system, development of human resources and the strengthening of organizations that will appropriately maintain and manage the infrastructure, and creation of social and institutional arrangements that support the organizations are necessary. JICA actively promotes participatory cooperation with the residents and collaboration with NGOs with a focus on the beneficiaries, including users and residents, in view of who will use the system and for what purpose.

In addition, cooperation for the transportation sector needs to consider a variety of perspectives, including: "international transportation" for promoting the international flow of goods and people and the development of regional economic zones which transcend borders; "national transportation" which ensures people's fair access to transportation and balanced national development; "urban transportation" which supports



Engineers examine cables of the Matadi Bridge in the Republic of the Congo, which was constructed about 30 years ago with an ODA Loan. The bridge is still properly maintained after all these years.



sustainable urban development and enhances living standards; and “rural transportation” for improving the living standards of rural areas which tend to be left behind from development. The aim of JICA is indeed to pursue “inclusive and dynamic development.”

### Contributing to New Growth Strategy

The New Growth Strategy, which was announced by the

Japanese government in 2010, includes the goal of using ODA to support the entry of private-sector companies in developing countries and provide aid for sustainable economic growth in these countries. In response, JICA has been strengthening public-private partnerships and programs that involve science and technology. In addition, in the field of transportation, JICA is supporting overseas railroad projects, which are one of 11 key fields of “package of infrastructure-related system

#### Case Study

### South Sudan Comprehensive Planning and Support for Urgent Projects on Social Economic Infrastructure

#### Responding to the Greatest Needs for Nation-building

**In South Sudan, which gained its independence in 2011, JICA is extending cooperation for social economic infrastructure development in Malakal Town (state of Upper Nile), one of the country’s three major cities. Projects will make improvements in highways, rivers, water supply systems and other elements of the infrastructure.**

South Sudan has succeeded in becoming an independent country. But a new nation cannot be built without progress in developing all regions of the country.

JICA aims to conduct inclusive development for the purpose of meeting the greatest needs for nation-building that are recognized by everyone in the Government of South Sudan. To perform this development, JICA in February 2012 started a project in Malakal Town, a regional city in South Sudan.

Following the peace accord, there was clearly visible progress with development programs in the capital city of Juba. Roads were paved with asphalt, water supply systems constructed and schools reopened. But Malakal Town, one of the country’s three major cities, is separated both politically and geographically from Juba. Though Malakal Town was once well developed as a fortified city, it is the base of the biggest opposition political party and is 600km from Juba. Furthermore, there is no highway between this city and Juba. As a result, there has been absolutely no development in this region after independence was declared.

Providing “dividends of independence” to residents of this geopolitically important city is therefore critical with respect to assisting the residents of Malakal Town and establishing peace throughout South Sudan.

The project aims to establish a comprehensive infrastructure development plan for this “forgotten city” in about six months. Then pilot projects will take place over the next 18 months to improve community roads, rivers and ports, and water supply facilities. South Sudan has a strong desire not only for infrastructure projects but also for infrastructure training programs. JICA therefore plans to assist in the revitalization of Malakal Town with three-point support consisting of infrastructure projects, training and on-the-job training.



A water purification facility constructed more than 50 years ago supplies very poor quality water. Residents must use water directly from the Nile River instead. South Sudan is believed to have the lowest water supply ratios in eastern Africa.



Malakal Town has almost no paved streets and the city’s so-called “black cotton soil” makes streets impassable even to four-wheel-drive vehicles and donkeys during the monsoon. This turns the city into a virtual land-locked island.



Malakal Port is used as the main harbor for the entire region. But the port’s aging facilities create difficulties for workers regarding efficiency and safety.



South Sudan needs training programs due to the absence of skilled people following 20 years of conflict. In December 2011, JICA invited people from the leadership class of the state of Upper Nile to talk about how to proceed with reconstruction and regional development in South Sudan and Upper Nile while learning from Japan’s own postwar reconstruction and development experience.

exports," a major element of the New Growth Strategy. As part of this support, JICA invited individuals from the national railways of developing countries to Japan to attend a high-speed railway seminar, conducted an exchange of thoughts about overseas operations with companies in railway-related industries, and used other activities to create an environment in which Japanese companies can easily do business in other countries.

## Information and Communication Technology (ICT)

### Overview of Issue

Information and communication technology (ICT) has been advancing remarkably in developed countries. Applicable in the administrative, social and economic fields, ICT has been used to computerize central government operations (e-governance), educate via the Internet (e-learning) and facilitate digital trade and commerce (e-commerce). ICT also has the potential to support a variety of improvements that can enhance the quality of life, including increasing the efficiency of the economic and social systems of countries, raising productivity and conserving energy.

In many developing countries, however, the spread of ICT has been slow. This has led to a digital divide with developed countries, which in turn has worsened economic disparities.

### JICA Activities

JICA believes closing the digital divide is necessary to increase the effectiveness and efficiency of various cooperation programs. To close this divide, JICA is contributing to the greater use of ICT in developing countries.

At the G8 Kyushu-Okinawa Summit of July 2000, Japan asserted its stance to help bridge the digital divide in developing countries by promoting the use of ICT in development aid, such as through distance learning. Furthermore, Japan announced the establishment of ICT bases in 30 locations to use ODA funds more efficiently. Through activities like these, JICA is providing cooperation for the greater use of ICT in developing countries, mainly in Asia.

### ICT Policies Linked to Social and Economic Development

JICA offers the following five approaches to increase the use of ICT in developing countries:

- 1) Improve ICT policy-planning capabilities: Dispatch advisors to support the formulation of IT policies in such areas as national strategy concerning electronic communication and development of relevant industry.
- 2) Develop ICT infrastructure: Formulate a plan to develop central communication networks and rural communication infrastructure, and reinforce their maintenance and management systems.
- 3) Improve aid effectiveness and efficiency through ICT use: Increase project effectiveness and efficiency by adopting ICT in government administrative departments and using ICT for cooperation projects in a variety of sectors, including education, health care, and commerce.



Students attend classes at the University of the Philippines Information Technology Training Center, which is part of the Advanced IT Human Resources Development Project in the Philippines.

4) Train skilled ICT personnel: Implement a human resource development project to enhance the capabilities of technicians and policy planners in order to further spread ICT usage. This step comprises a large proportion of JICA's ICT support efforts.

5) Broadcasting: Extend cooperation to spread Japanese-style digital terrestrial broadcasting, which can withstand interferences and permits stable reception, etc.

## Case Study

## Fiji JCT for Human Development and Human Security Project

### Expanding Distance Learning by Using a Satellite Communication Network

**The University of the South Pacific, which was established by 12 South Pacific nations, receives support from JICA. About 48% of students already use distance learning. By upgrading the satellite communication network, even individuals living in remote islands will have the opportunity to receive an advanced education.**

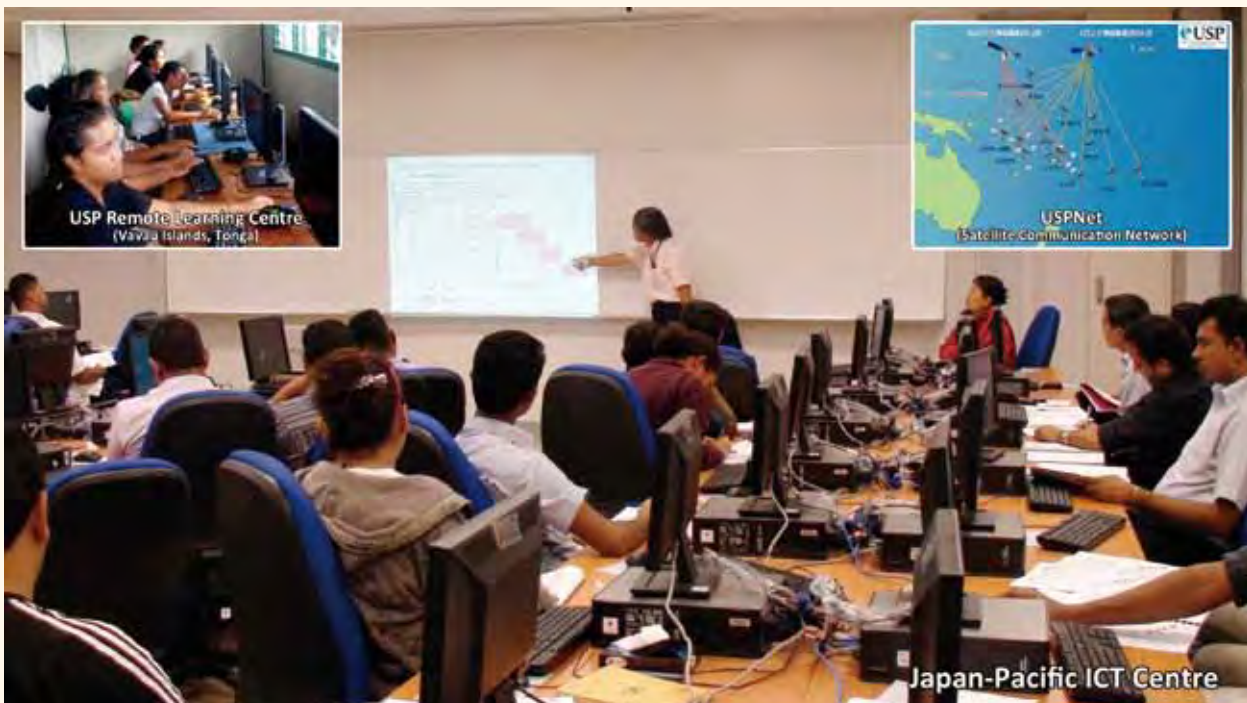
The University of the South Pacific was established in 1969 by 12 island nations: Fiji, Vanuatu, Tuvalu, Tonga, Tokelau, Solomon Islands, Samoa, Niue, Nauru, Marshall Islands, Kiribati and Cook Islands. Created by financial contributions from all these nations, the university is the highest-ranking international institution of higher learning in this region. Exchange students from other countries attend classes at the university's main campus in

Suva, the capital of Fiji. In addition, due to the geographic characteristics of the South Pacific, classes are also provided via a satellite network to students in other countries in this region. In fiscal 2011, 48% of the university's approximately 22,000 students used the satellite network.

Grant Aid from Japan has been provided to upgrade educational programs using ICT in order to handle the increasing number of students. Aid was used for the construction of the Japan-Pacific ICT Centre, which is the nucleus of ICT in Oceania, and a multi-purpose lecture hall in Suva. The official opening for both buildings was in February 2012.

There are few institutions of higher learning in Oceania and the remote campuses of the University of the South Pacific are the only form of advanced education in many countries. As a

result, JICA is implementing the ICT for Human Development and Human Security Project, a Technical Cooperation project that goes from February 2010 to January 2013. The aim is to provide opportunities for higher education to residents of Oceania and improve the quality of this education. The project includes support for bachelor's degree programs, strengthening the satellite communication network, improving distance learning systems, effectively using the Japan-Pacific ICT Centre, and other activities. Satellite antennas have been placed even in remote islands that previously did not have access to distance learning. By giving residents access to the same remote classes as in their respective nation's main islands, this program has eliminated the digital divide for learning.



Upper left: Students attend a satellite communication network class at the Vava'u campus in Tonga.  
Center: A class at the main campus of the University of the South Pacific in Suva, Fiji  
Upper right: The satellite communication network of the University of the South Pacific

# Public Policy — Realizing High Quality Public Services Based on Peoples' Needs



Of the eight Millennium Development Goals (MDGs), relevant goals are shown in color.

**To achieve stability and sustainable development in developing countries, it is essential that the countries become capable of mobilizing, allocating and managing their resources efficiently and in ways that reflect the will of the people. To this end, “governance,” or the mechanisms to manage a country’s affairs encompassing not only the government but also the civil society and the private sector, will be key. JICA’s public policy assistance helps to strengthen governance in developing countries through cooperation for developing legal and judicial systems which support the backbone of society, increasing administrative efficiency and transparency, and improving administrative capacity of local government, and by strengthening fiscal and financial systems. This support aims to promote sustainable growth in these countries and realize a fair and democratic society.**

Many developing countries suffer from weak institutions and foundations, including legal and judicial systems, administrative organs and fiscal management, as well as lack human resources to operate these processes properly. Inadequate social infrastructure can be a hindrance to a country’s development and may significantly undermine the efficacy of development assistance.

Recognition of the importance of good governance and a strong sense of ownership of developing countries are indispensable elements in ensuring effective public policy assistance for strengthening the countries’ basic mechanisms and institutions. JICA places emphasis on the notion of capacity development (CD) as a means to support intrinsic developmental processes at individual, organizational and societal levels.

## Legal and Judicial Systems

### Assistance for Establishing Legal and Judicial Systems

#### ■ Overview of Issue

Establishing the “rule of law,” namely the assurance of the legitimacy of established rules, the establishment of impartial dispute-resolution systems and the guarantee of access to these systems, is essential to the building of good governance.

People may resort to violence or payoffs to resolve disputes in societies that do not have suitable rules or a fair and transparent procedure for conflict resolution. This could lead to violations of the rights of disadvantaged groups such as the poor and women, and even to social unrest. In addition, methods of resolving conflict may be unreasonable and unpredictable, which could add to the cost of transactions and hinder economic activity.

Capacity development for the legal and judicial sector also helps prevent corruption through improving transparency and accountability of administrative execution and by increasing the clarity of standards for conflict resolution. However, it takes a

long time for this process to take hold since it is not sufficient to simply set in place rules and institutions. It is also necessary to gain the trust of the public in legal and judicial systems.

#### ■ JICA Activities

Beginning from the Meiji Restoration in the late 19th century, while Japan has incorporated the advanced legal systems of other states, it has customized and adapted those laws to the cultural and societal factors present within the existing system. The Japanese experience contained useful knowledge that can contribute positively to the “rule of law” promotion processes, which many developing countries are undertaking today. These experiences include those of drafting, promulgating and revising laws and systems in accordance with the conditions and changes particular to the development of the nation, and which has led to the upgrading of legal systems in line with international standards and the realization of social stability and economic growth.

JICA provides support for the process of strengthening legal and judicial systems in developing countries with the aim of improving governance to ensure social stability and sustainable development, mainly in countries shifting to a market economy and those undergoing the reconstruction process. JICA’s support rests on the following core elements: 1) supporting the development of rules and regulations; 2) supporting the improvement of the capacity of public organizations that implement laws; 3) supporting the legal empowerment of people and society; and 4) supporting the development of legal professionals.

JICA believes in the importance of laws and legal systems that are in harmony with existing systems, culture and social and economic norms. Attention also needs to be given to the stage of development in the country and changes in the social landscape. JICA emphasizes dialogue in its approach and respects the ownership of a developing country in supporting the process of drafting rules and strengthening the judicial system.

The aim is to provide support that takes root in the society itself.

JICA began its involvement with Technical Cooperation in the legal and judicial sector in 1996 with the launch of the Project in the Legal and Judicial Field in the Socialist Republic of Viet Nam. Since then, JICA's cooperation in this field has expanded toward developing countries shifting to a market economy or post-conflict countries.

JICA's cooperation in this field primarily involves assistance for drafting basic civil laws (Viet Nam, Laos, Uzbekistan, Cambodia, Nepal, China, Timor-Leste), economic laws, e.g., competition law (Viet Nam, China, Indonesia) and development of a civil dispute resolution mechanism (Mongolia, Indonesia).

Since it takes time to promote the establishment of the "rule of law," JICA respects each country's ownership over the process and supports their self-help efforts so that countries, even those that have been assisted in this regard, promote legal and judicial development by themselves in the future.

## Support for Establishing Democratic Systems

Instead of merely imposing political reforms, JICA's main objective is to provide support in establishing a political system that the public can trust and widely participate in the policymaking process. Support efforts in this respect include strengthening of election management committees to ensure fair elections, as well as strengthening legislative bodies and improving capabilities of the mass media, which can keep watch over government authority. When the Arab Spring movement emerged in 2011, JICA provided support to countries going through change of government and elections through strengthening the media's capabilities so that the people in these countries could receive information about the elections from a neutral and fair viewpoint [See the Case Study on page 43]. Also in South Sudan, which gained its independence in July 2011, we extended assistance by helping to improve the skills of journalists.

### Case Study

## Cambodia Legal and Judicial Development Project (Phase 3)

### New Civil Code Enacted Four Years After Promulgation

**Following the termination of all laws of the Pol Pot regime in the 1970s and expiration of the former Civil Code, Cambodia had no structure for basic laws concerning social activities. There were no laws or regulations to underpin such important systems as inheritances and contracts. JICA started providing legal and judicial development assistance in 1999, which included support for drafting a Civil Code and Code of Civil Procedure and enacting these laws and for drafting associated laws and regulations.**

In drafting the laws, a Cambodian drafting team held extensive discussions with working group members and experts from Japan. Drafts for each article were prepared by referring to Cambodia's former Civil Code and current laws

and customs, as well as Japan's Civil Code and civil codes of other countries such as France and Germany. Creation of new legal terminology was also necessary since some concepts and laws were new to the Khmer language.

The new Code of Civil Procedure was applied in 2007, one year after its promulgation. On the other hand, the Civil Code, which has 1,305 articles, was promulgated in 2007. However, this code required consistency with many associated laws and regulations as well as the creation of the necessary systems and other actions. Therefore, a separate Civil Code Implementation Law was formulated to decide on the date of enactment. During this period, JICA extended support for drafting the Civil Code Implementation Law, registrations

and other related laws and regulations. The Civil Code was applied on December 21, 2011, four years after its promulgation.

JICA will continue providing assistance to Cambodia to ensure that the new Civil Code and the Code of Civil Procedure are utilized in a suitable manner so that the people of Cambodia can lead stable lives, including support for rooting and familiarizing the new laws among Ministry of Justice members, legal professionals, university instructors and others.



Ceremony marking the enactment of the new Civil Code

## ■ Support for Public Safety

In the field of public safety, JICA extends assistance to countries working to establish police forces that serve the people, such as support for training programs and improvement of scientific investigation techniques. Our support efforts include

providing assistance for civilian police activities in Indonesia and improving the ability to respond to crimes in the Philippines. Additionally, to reinforce public safety in post-conflict countries like Afghanistan and Timor-Leste, we provide assistance such as training of police officers.



Instructors from Japan share their knowledge with journalists at Tunisia's national broadcasting station during the Tunisia Media Seminar.



A workshop at the Civil Procedure Code Seminar in Laos that is part of the Laos Project for Human Resource Development in the Legal Sector



A training session on the State Redress Law that was held in Viet Nam (Photo by Mika Tanimoto)

## Public Governance

### ■ Overview of Issues in Public Administration

JICA defines the role of public administration as managing society's resources, providing services and developing rules and environments for private-sector activities in order to fulfill the three missions of 1) guaranteeing the people's social rights and their right to exist, 2) enhancing social justice and adjusting disparities, and 3) promoting economic stability and growth. The provision of efficient government services is an issue that requires initiatives in all fields.

In many developing countries, the number of administrative officials is limited, the tax revenue structure is often weak and resources are not properly focused on key government services, making the efficient provision of various public services difficult. Furthermore, there is often a lack of transparency in public works projects planning and tendering processes, as well as insufficient participation by local citizens and the private sector and lack of oversight by the mass media, which in some cases lead to fraud, corruption and graft.

In order to tackle these challenges in developing countries, it is necessary to 1) boost administrative quality and efficiency, 2) ensure optimal allocation of financial and human resources by increasing and strengthening their capacities, and 3) increase transparency by encouraging participation by citizens and the private sector. Therefore, it is necessary to promote administrative reform aimed at improving administrative institutions and

systems; to enhance the capacity of administrative agencies; and to advance decentralization aimed at formulating development plans close to citizens, the beneficiaries of public services, and providing efficient public services.

### ■ JICA Activities in Public Administration

JICA provides assistance in numerous areas for strengthening public administration. This includes strengthening the capacity of civil servants in the formulation and management (e.g., monitoring and evaluation) of development projects aimed at strengthening administrative functions. JICA also supports efforts aimed at decentralization and enhancing the capabilities of local administrative officials so that local governments can provide services that satisfy the needs of local residents. Elsewhere, JICA supports the development of statistics, such as population and economic censuses, which are indispensable to the formulation of a country's development plan.

From the perspective of improving the efficiency and quality of administrative functions, JICA provides assistance bearing in mind: the delivery of better public services to community residents and organizations; extending support from a mid- to long-term perspective while strengthening the ownership of the partner country; enhancing the capabilities needed for the institutions developed to function; and urging the efforts of relevant ministries, agencies and organizations at multiple levels. Also as part of the measures to support local governments, we aim to make public administrations more transparent by

#### Case Study

#### Cambodia Project on Improving Official Statistics in Cambodia (Phase 3)

### Support for Cambodia's First National Census

**While civil war and other issues prevented Cambodia from establishing a framework for collecting statistics, in March 2011, the country conducted its first economic census. JICA provided Technical Cooperation and Grant Aid to help Cambodia gather highly reliable statistics.**

An economic census is a national survey to gather information about a country's businesses and establishments. In this census, information about the location, workforce, sales, assets and

other aspects of businesses in Cambodia were collected.

JICA provided both Technical Cooperation and Grant Aid for this project, dispatching experts from Japan to hold various training sessions for provincial guidance personnel and census takers, and utilizing counterpart funds to recruit approximately 4,000 census takers. As a result, Cambodia was able to produce highly reliable statistics that clearly show the current status of businesses throughout the country for the first time.

Ministries and agencies of the Cambodian government are showing high interest

in this economic census. The Ministry of Commerce hopes the census will help resolve the difficulties in collecting trademark registrations data. The National Bank of Cambodia commented on the importance of the census in determining the national income and GDP.

Results of the fiscal 2011 census are expected to be utilized by the national and local governments in various policymaking and planning, as well as by universities and research institutes for academic researches, and by businesses for formulating strategies and conducting market researches.

#### From the Partner Country's Government Official

#### **Chhay Than, Minister of Planning**

The economic census makes possible planning based on data, which will greatly contribute to social and economic development. I believe this census will be valuable to many people.



A census taker visits a business to gather information

encouraging the participation of local residents.

Our support efforts also take into consideration the improvement of government budgeting systems, which is essential for achieving proper allocation of public-sector resources in order to provide efficient and effective government services as well as to ensure the sustainability of development plans.

### ■ Overview of Issues in the Fiscal and Financial Sector

Sound fiscal management and financial systems are vital to a country's sustainable economic development. If these systems collapse, the impact on people's assets and livelihood as well as on economic activities in the private sector would be devastating. The breakdown of the system may lead to a decline in the provision of government services and in financial intermediary functions, and inflation. In addition, all kind of support assistance for developing countries is more effective with sound fiscal and financial systems and economic stability as its underpinning. However, foundations of the economy in many developing countries are fragile and economic management unstable.

Many ASEAN countries suffered from the loss of their assets and employment in the Asian financial crisis that hit in 1997, causing enormous economic loss. Vulnerability in ASEAN countries' financial systems was cited as one of the main factors behind the crisis. The global financial and economic crises of 2008 reconfirmed the need to bolster financial systems.

It is essential to utilize limited financial resources effectively and efficiently in public financial management, such as by properly managing income and expenditures, allocating funds to priority areas of development based on a budget, and efficiently implementing plans that have budget allocations. However, such initiatives have not been adequately implemented in many developing countries.

JICA's support in this sector is aimed at fundamentally strengthening the structure of developing countries to handle fiscal and financial matters.

### ■ JICA Activities in the Fiscal and Financial Sector

It is important to expand the tax base and increase tax revenues in order to implement policies and provide government services in developing countries. For that reason, JICA's initiatives aim to strengthen the administrative capacity of collecting agencies of national tax and tariffs. JICA supports efforts to enhance the policy formulation capabilities of the central government and governmental agencies, including the Ministry of Finance. JICA also promotes capacity development of tax administration agencies to ensure appropriate tax collection based on laws as well as the suitable management and utilization of tax revenues. In addition, JICA provides assistance to internal auditing functions in the public sector and auditing capabilities of supreme audit institutions and other inspection agencies to strengthen their ability to perform audits that identify whether their finances are being appropriately managed.

To reinforce financial systems, JICA provides support with regard to boosting capacity in financial supervision, enhancing financial intermediary functions and improving small business finance. Stability in financial systems and efficient management of these systems underpins the foundations for a country's stable economic policies; therefore, JICA supports development of capacity of central banks and development banks.

For the development of a macroeconomic management infrastructure, JICA provides support for the establishment of economic laws such as competition law, the formulation of macroeconomic models and the improvement of economic statistics including industry-related tables.

Since there are a number of donors with a proven track record in general budget support\* in the fiscal and financial sector, it is important to harmonize with their support and promote collaboration between financial support and technical assistance. Raising the profile of Japanese assistance while taking limited cooperation resources into account is a future challenge in the fiscal and financial sector.

\*General budget support: A method of assistance aimed at driving development at the national level in which funds are injected directly into the general account of the recipient country in accordance with an agreed-upon strategy between the developing country and donor countries/institutions.



Bhutan Local Governance and Decentralization Support Project (Phase 3)  
The district manager and staff from a neighboring province observe a pilot project



Rule books for international trade that was prepared as part of the Indonesia Project on Capacity Development for Trade-related Administration





An anti-monopoly law seminar held in China

## Case Study

## Philippines Analytical Survey of Preferential Taxation Systems

### Use of Preferential Taxation Systems and Proposals for Improvements

The Philippines offer a number of preferential taxation measures such as tax exemptions, deductions and refunds in public service fields like education, health and environment. However, the government has not been able to grasp how these systems were being used, how much tax revenue was being lost and if they were achieving their policy objectives. Thus, JICA conducted a survey to determine the usage of these systems, and proposed reforms and formulated action plans to improve their effectiveness and efficiency.

The utilization survey revealed that about 40% of preferential taxation systems were not in use. Moreover, it showed that it was impossible to estimate the amount of lost tax revenue because there is no monitoring in



The final survey report

place. (An estimate using a different statistical data showed that the largest source of lost tax revenue was corporate tax exemptions for NPOs and cooperative associations in addition to VAT exemptions for seniors.) Furthermore, weak auditing and supervisory functions were allowing for the preferential taxation systems to be abused or used for other purposes, revealing how the systems were creating an inefficient condition in respect to achieving policy targets.

JICA took the findings to make a number of proposals for improvements, such as establishing guidelines for actions that include auditing, tax investigations, sharing of information among associated departments and agencies, publicizing data on tax expenditures and confirming eligibility for preferential taxes. Introducing sunset clauses\* was another recommendation. A compiled report

of proposals was presented at a seminar attended by government officials, legislators, NPO representatives and others. We look forward to seeing the proposals being applied to produce benefits in the future.

\*A clause that automatically terminates a preferential taxation system at the end of a certain period.

#### From the Partner Country's Government Official

**Gil Beltran, Deputy Minister,  
Ministry of Finance**

I believe the results of this survey will help improve our preferential taxation systems, particularly regarding management



of these systems and monitoring their use, as well as ensuring the transparency of procedures. Moreover, I think that some of the suggestions can lead to the improvement of the systems' framework itself.

# Gender Mainstreaming

## Clarifying Gender-Based Development Issues, Needs and Impacts



Of the eight Millennium Development Goals (MDGs), relevant goals are shown in color.

**Gender can be defined within social and cultural contexts, and can refer to the roles of men and women as well as their mutual relationship. On a global basis, females are far more likely to be placed in socially, politically and economically disadvantaged positions than men. As such, one of the Millennium Development Goals of the United Nations is “gender equality and the empowerment of women.”**

**JICA promotes “gender mainstreaming,” a comprehensive approach to incorporate the perspective of gender in all stages of planning, formulation, implementation, monitoring and evaluation in all policies, programs and projects to clarify gender-based development issues, needs and the impacts.**

### Overview of Issue

The ultimate goal of gender mainstreaming is to achieve “gender equality”<sup>\*1</sup> in all fields of society. It is a process of identifying men’s and women’s development issues and needs, as well as the impact on men and women of development policies, programs and projects, at each of the stages of planning, implementation, monitoring and evaluation, on the premise that the formulation processes and impacts of development policies, programs and projects are not neutral but affect men and women differently.

Gender is often unconsciously constructed based on the mentality, culture, traditions and customs of a country and therefore also affects various policies, systems and organizations. Consequently, it is essential to support national machinery (national agencies, mechanisms and organizations striving for gender equality) such as the Ministry of Women’s Affairs to ensure that the policies and systems in partner countries adopt a gender-based perspective.

In most cases, however, statistics, data and indices are not tabulated according to gender. If a philosophy of gender is introduced without fully comprehending the society in a target region, it may in fact produce negative results such as exacerbating gender disparity. It is critical to collect and comprehensively analyze fundamental data needed for plans and projects by gender, age, ethnicity and religious affiliation, and to develop human resources who have this perspective.

Although it is important to promote women’s empowerment as part of efforts to advance gender mainstreaming, focusing solely on women may not achieve the desired results. This also requires changing the consciousness of men, decision-makers and socially influential people such as administrative officials, educators, politicians and religious leaders. In other words, it is necessary to reform the social structure and systems surrounding women. It is essential to review areas and projects that at first glance may appear not to require a gender perspective and provide support based on the different roles of men and women. For example, one form of support would be

developing agricultural equipment that is easy for women to use since they are responsible for the majority of agricultural work. Another example would be encouraging the participation of women in water quality control organizations.

### JICA Activities

For many years, JICA has considered the importance of gender issues and developed a basic strategy for implementing gender-responsive projects. JICA has also established an organizational framework for gender mainstreaming.

Actual assistance includes strengthening organizational capacity and creating policies and systems for gender equality in Afghanistan, Cambodia and Nepal by supporting national machinery. To promote the empowerment of women, JICA provides support in wide-ranging areas. JICA works to activate women’s centers in Nigeria, nurture entrepreneurs, particularly women, in poverty-stricken areas of Honduras, and improve education for women in Yemen.

Moreover, efforts are made to ensure that the perspective of gender is reflected in the results and actions in various fields. In the forestry industry in India, in addition to simply employing women, additional support was provided to increase their income so that women don’t have to cut young trees to get firewood; they can purchase alternative fuel instead. Under the Smallholder Horticulture Empowerment Project (SHEP) in Kenya, JICA focused on the role that women play in agricultural activities. The project secured the equal participation from both men and women in all types of farming activities, and conducts educational activities for men and women about gender related issues.

In recent years, there has been increasing recognition of the

<sup>\*1</sup> According to the “DAC Guidelines for Gender Equality and Women’s Empowerment in Development Co-Operation” issued by the OECD Department of Assistance Committee (DAC), “Gender equality does not mean that men and women need to become the same, but that their opportunities and life chances are equal. The emphasis on gender equality and women’s empowerment is not based on a single model of gender equality for all societies and cultures, but reflects a concern that women and men have equal opportunities to make choices about what gender equality means, and work in partnership to achieve it. Because of current disparities, equal treatment of women and men is insufficient as a strategy to achieve gender equality.”

need to address new issues in gender and development, such as trafficking in persons and other forms of gender-based violence. Trafficking in persons is a serious crime and a grave violation of human rights that inflicts severe emotional and physical suffering on the victims, who are mainly women and children, but include men as well. It calls for prompt and appropriate response from a humanitarian perspective, as well as from the perspective of putting a stop to international organized crime. In 2009, JICA started a project in Thailand to strengthen the capacity of organizations and staff to combat trafficking in persons [See the Case Study].

In Nicaragua, serious crime problems are increasing, and young people account for a large share of both criminals and victims. Domestic violence and sexual abuse are also increasing. These social risks for young people face in this country have become an enormous problem. To reduce these social risks, the project has now been working on developing an integrated service mechanism for social risk prevention and attention that effectively responds to the needs of communities and families. The preventive measures are aimed at improving family relationships and rebuilding regional societies.

“Attention,” which is the other measure, is for responding to problems that have already occurred in communities and families. To deal with the social risks that threaten women and children, the project will formulate a training plan and conduct a survey in the communities with gender perspectives.



A local official provides advice on the registration of child's birth in the community

## Case Study

## Measures against Trafficking in Persons—Region-Wide Cooperation in the Mekong Region

### Activities in Thailand and Other Mekong Region Countries

**Trafficking in persons has been a serious problem in Thailand since the 1980s because of the country's rapid economic growth and the globalization of information. JICA and the government of Thailand have been jointly implementing the Project on Strengthening of Multi-Disciplinary Teams (MDTs) for Protection of Trafficked Persons in Thailand since March 2009.**

Thailand is an origin, destination and transit country for human trafficking. As an origin country, Thai people are trafficked to Japan, Middle-East, Europe and other areas. As a destination country, people from the neighboring countries are being trafficked to Thailand. As a transit country, people pass through Thailand on the way to neighboring countries. The government of Thailand established the legal framework required for comprehensive measures, such as national policies and a plan to combat trafficking in persons in 2003, and the Anti-Trafficking in Persons Act was enacted in 2008.

To combat trafficking in persons, it is necessary to use a comprehensive approach composed of four dimensions: policy, prevention, prosecution and protection. The project focuses on protection and reintegration of trafficked persons and aims to strengthen multi-disciplinary team (MDT) functions, which consist of various related agencies and NGOs, coordinated by the Thai government's Ministry of Social Development and Human Security. Ongoing activities include holding workshops and classes, developing operational guidelines to

strengthen the MDT's functions, formulating plans to assist victims, and nurturing case managers. In addition, the project provides support for the activities of peer groups, which consist of victims. Based on the information received through the peer group support activities, MDTs strengthen their efforts to supply services from the perspective of victims.

In conjunction with moves to achieve the integration of the ASEAN region, there are worries about growth in the number of victims of trafficking in persons as integration increases movements of people in this region.

JICA is also helping with support to enhance the network in ASEAN countries and strengthen capacities of related personnel who are associated with the problem of trafficking in persons. In February 2012, the Third Mekong Regional Workshop took place in Bangkok. About 90 people from Japan, Thailand, Viet Nam, Myanmar, Laos and Cambodia attended this event to discuss ways to share information and work more closely together to combat trafficking in persons. Furthermore, with the cooperation of Thailand's Chiang Mai University, JICA's third-

country training program Capacity Building on the Return, Repatriation and Reintegration of Trafficked Persons has been implemented in order to develop networks in the Mekong region.

JICA will launch two new projects in 2012 to reinforce regional measures to combat trafficking in persons in the Mekong region, based on the experience in Thailand. In Myanmar, the project will enhance the capacity of social workers for protecting victims of trafficking in persons and providing self-reliant support. In Viet Nam, JICA is providing assistance to set up a hotline to help prevent trafficking in persons and support the victims. Also, due to the complexity of issues of human trafficking, knowledge and lessons learned from these JICA projects in the region will be shared through a network within the Mekong region. These efforts will lead to strengthening overall capacities of the Mekong region.



Individuals who have received vocational training at shelters

# Peacebuilding

## Peacebuilding Support for Preventing Relapses of Conflicts



Of the eight Millennium Development Goals (MDGs), relevant goals are shown in color.

**Most conflicts are internal disputes that take place in developing countries, primarily in the poorest countries and regions. In such internal conflicts, not only combatants but also ordinary citizens and children become both victims and perpetrators. Consequently, the impact on people's lives is significant even after the conflict ends.**

**In order to contribute to the promotion of peace and the prevention of conflicts and their recurrence, JICA is making concerted efforts toward the reconstruction of social capital and economic recovery to solve economic disparities—one cause of conflict—and provide equal opportunities as well as restoring the state system and functions and enhancing security.**

### Overview of Issue

The majority of conflicts in the world today are internal conflicts in developing countries, most of which take place in the poorest countries and regions in economic terms. While increasing number of ordinary citizens are victimized, the divide between the military and civilians is fading as the number of conflicts where ordinary citizens or children are perpetrators increases.

Armed conflicts do more than just destroy the infrastructure that serves as a foundation for people's livelihoods; they also tear the bonds holding the society together and increase mutual distrust and hatred. They destroy and leave a bitter legacy on the path to reconstruction. According to some statistics, close

to 50% of countries return to a state of war within five years of signing a peace or cease-fire agreement.

Aid for peacebuilding requires a comprehensive approach that combines three frameworks: military, political and social/economic. Military measures and political methods, such as preventive diplomacy, are important factors in the prevention and resolution of conflicts and the consolidation of peace, as is development assistance to correct economic disparities, and improving unequal opportunities and other factors that lead to conflict.

### Case Study

## JICA's Assistance Responding to the Issue of Landmines and Unexploded Ordnances

### Eradicating the Insidious Legacy of Conflicts

**Landmines and unexploded ordnances (UXO) that remain after a conflict pose a serious threat to people for many years and are also an impediment to agriculture and economic development. JICA has provided aid in Cambodia to remove landmines and is drawing on this experience for UXO removal in Laos through South-South cooperation.**

In Cambodia, landmines and UXO are said to exist or may exist in about 46% of agricultural settlements. JICA has been providing assistance since 1999 for the purpose of strengthening the capacity of the Cambodia Mine Action Centre (CMAC), a government agency responsible for removing landmines, providing Technical Cooperation by sending experts to Cambodia. JICA also assisted with the procurement of metal detectors and heavy machinery for removing vegetation and landmines as well as the procurement of materials to strengthen logistics support systems (tents, communication equipment, vehicles, etc.). Cooperation provided to CMAC produced benefits by improving

the demining rate and creating a stronger organization and workforce, making it possible to provide aid through CMAC under the South-South cooperation framework for demining activities and UXO clearance in other countries.

In 2011, the Lao National Unexploded Ordnance Programme (UXO Lao) and CMAC began holding joint workshops to share their knowledge. The objective is to use CMAC's know-how to assist in the removal of the estimated 78 million UXO in Laos that remain from the Viet Nam War era. Workshops have been held in Vientiane, Phnom Penh and Okinawa, where about 800 unexploded bombs are still discovered every year. UXO Lao and

CMAC plan to continue holding these workshops for sharing their know-how. In addition, JICA plans to continue providing assistance to UXO Lao for removing UXO in Laos. Support includes sending experts to assist with poverty reduction by improving training and management capabilities and helping with the safe disposal of UXO. JICA also supplies ordnance detection equipment and materials for improving logistics support.



Members of UXO Lao visited Cambodia for a knowledge sharing workshop with CMAC and observed a bomb disposal facility and removal activities.

## JICA Activities

JICA is working to contribute to the prevention of both the occurrence and recurrence of armed conflicts, taking into account the need for conflict prevention and pursuing positive impacts of the projects. JICA has assisted in attempts to alleviate the various difficulties faced by people during and immediately after the conflicts and to subsequently achieve stable development over the medium and long term. Specifically, JICA supports 1) the reconstruction of social capital, 2) economic recovery, 3) rebuilding the governance system, and 4) security enhancement.

In recent years, JICA has been placing emphasis on strengthening links between central and regional governments in the post-conflict statebuilding process to eliminate disparities among different regions, which is one cause of conflicts. For example, JICA is extending aid for urban planning and

implementing an emergency reconstruction project in Malakal in the South Sudan state of Upper Nile, which is near the border with Sudan. Development of the city of Malakal is vital to establishing peace in all of South Sudan, where the pace of reconstruction is slow. This cooperation is aimed at eliminating disparities among different regions and building stronger ties between the central and regional governments.

In addition, JICA is reviewing its experiences in past projects in order to identify lessons that can be used to conduct projects that are effective at improving livelihoods and securing jobs for the residents of post-conflict countries and regions.

Going forward, JICA will strengthen its support in conflict-affected countries and regions, and intensify its support in the field of peacebuilding, through efforts such as human resource development to supply experts who can become involved in the process.

### Case Study

### Support for Sudan

## Reconstruction Aid in Post-Conflict Sudan

**Sudan has faced several domestic conflicts in its west, south, and east, which have been having a severe impact on the lives of residents. In order for the country to recover from conflicts, JICA has been providing comprehensive support, including capacity building of government officials for the proper delivery of public services.**

The Darfur region has faced fierce conflicts between the government and anti-government groups since 2003. A number of causes, such as scarce rainfall, desertification, conflicts over natural resources, population pressure, and ethnic conflicts, are intertwined. In this region, a comprehensive peace agreement has not been signed, though some of the anti-government forces signed a peace agreement.

The three protocol areas, the states of Blue Nile and South Kordofan and the Abyei district—along the border between Sudan and South Sudan are home to many internally displaced persons (IDPs) from southern Sudan, and the conflicts continue to produce large numbers of IDPs. The conflicts also have caused growing concerns about starvation. To end the conflict, and reconstruction of the region is a major issue in the country.

Given the impact of the prolonged conflict, the Three Protocol Areas and Darfur are suffering underdevelopment in basic public services and human resources.

In this regard, JICA has been extending a variety of Technical Cooperation since 2009 in these areas (except in Abyei due to security reasons) to improve the capacity for better services including water supply, healthcare, and vocational training. JICA also supports

provincial governments in formulating development plans and in other areas including public financial management, staff training for water supply, health, and vocational training.

In eastern Sudan (states of Red Sea, Kassala and Al Qadarif), there was an armed uprising by anti-government group against the government in 1994 that was sparked by dissatisfaction over underdevelopment. In 2005, a battle with the Sudanese military took place in this region. After the battle, the two sides reached a peace agreement in 2006. Although the security situation of this region has been improving since then, assistance to the region is still limited. As a result, development of the region has fallen far behind.

Furthermore, Kassala has been absorbing refugees who escaped from conflicts and political instability in neighboring Eritrea and Ethiopia, and IDPs who escaped from starvation and droughts.

Since May 2011, JICA has been extending comprehensive support to the state government of Kassala to strengthen the capacity of service delivery in the fields of water supply, health, vocational training agricultural/livelihoods, and project formulation.



Farmers in the village of Abuda in Kassala learn how to operate agricultural machinery.

### From Our Expert

#### Kiyofumi Tanaka, Project Manager

As leader of the Capacity Development Project for the Provision of Services for Basic Human Needs in Kassala in the eastern Sudan state of Kassala, which has fallen behind other states in Sudan in terms of development, our aim is to prevent another conflict from breaking out by improving public services in areas where the needs of residents are the greatest. We hope to achieve sustainable regional development so that the people can see for themselves the benefits of peace.

The project respects the ownership of the state government of Kassala. We provide Technical Cooperation in order for the government to analyze problems, select priority issues and make an action plan to resolve those issues. As a result, the government has made this undertaking its highest-priority project, approving a budget with 100% of the government's share of the project's cost.

# Poverty Reduction — Supporting the Development of Essential Capabilities of the Poor



Of the eight Millennium Development Goals (MDGs), relevant goals are shown in color.

The proportion of the poor in developing countries as a whole has declined from 41.7% in 1990 to 25.7% in 2005 due in part to economic development in Asia. Nonetheless, nearly half of the population in Sub-Saharan Africa still suffers from extreme poverty. Moreover, recent increases in food prices and financial crises have led to fears that an increasing number of people will fall into poverty.

In order to promote JICA's vision of "inclusive and dynamic development," JICA identifies "reducing poverty through equitable growth" as one of its four strategies. JICA extends assistance for human resources development, capacity building, improvement of policies and institutions, and the development of social and economic infrastructure in developing countries.

## Overview of Issue

Poverty is an issue that cannot be ignored from the perspective of "human security," as outlined in the Japanese ODA Charter. The number of people living in poverty on less than US\$1.25 per person a day is estimated at over 1.4 billion worldwide.

In addition, natural disasters, environmental destruction and other factors make it difficult to continue traditional means of livelihood. This means some people are extremely vulnerable to poverty. Problems such as disease, unemployment, lack of education and social discrimination each impact the other. Once a person falls into this vicious cycle, the situation becomes even more serious, as the original problems lead to other problems and a person cannot escape from this cycle easily. This is sometimes referred to as the "deprivation trap" and has become an urgent issue when tackling poverty reduction. Neglecting poverty and vulnerability may widen the gap between the rich and poor and intensify competition over resources, causing instability in society.

In recent years, the notion that poverty is the state in which the following five capabilities are lacking has become dominant: Ability to ensure stable and sustainable livelihood (1. economic capability); Ability to be healthy, receive basic education, and live in a sanitary environment (2. human capability); Ability to cope with various "threats" which threaten peoples' lives (3. protective capability); and Ability to participate in a society in which people's dignity as humans and their culture and customs are respected (4. political capability, (5. socio-cultural capability).

## JICA Activities

In order to advance equitable growth and sustainable poverty reduction, JICA will strive

to enable each and every person in poverty to escape from it by reinforcing five capabilities and supporting the development of an environment in which these capabilities may be manifested. Specifically, JICA both: 1) carries out "poverty measures" to directly assist the poor; as well as 2) makes "poverty considerations," by incorporating creative approaches into projects in order to improve the circumstances of the poor by maximizing the projects' benefits to the poor.

To this end, JICA gathers information on where and what kind of people suffer from poverty (targeting) and accumulates methods that are effective for poverty reduction. In addition, regarding methods that have been attracting attention in recent years, JICA furthers concerned-persons' understanding through trainings and study meetings. The goal is to enable



Local residents help build community roads (Timor-Leste)

The construction of nearby community roads allows people to visit clinics, schools, markets and other places with ease. In addition, since the residents themselves took part in building these roads, the project helped increase their self-reliance as well as their commitment to maintaining the community roads.

the poor who are living on an unstable income to be able to make stable expenditures every month on items such as health care, education, and food. These meetings cover topics such as “microfinance,” which provides savings services and very small loans; “conditional cash transfers (CCT),” in which a government redistributes income by directly providing cash or

cash equivalents to individuals or households on the condition that they are qualified and fulfill certain obligations; and “labor-based technology (LBT),” which can generate short-term employment for the poor.

## Case Study

## Initiatives for Microfinance (Capability Enhancement Training)

### Promote a Broad Understanding of Microfinance

**About 2.5 billion working-age people in the world do not have access to formal financial services. This is a serious impediment to achieving sustainable economic growth. JICA supports microfinance through Technical Cooperation and Loan Aid in order to contribute to poverty reduction by providing access to financial services.**

Financial inclusion, which has been attracting much attention recently, refers to providing access to high-quality and affordable financial services to everyone, including the poor. Activities are under way worldwide to achieve financial inclusion. Microfinance is viewed as an effective tool for assisting the poor to become economically self-reliant by giving them access to financial services.

JICA has incorporated microfinance in its projects for rural development, forest protection and other purposes. JICA also provides financial assistance for financial services for the poor through government and other public-sector financial institutions.

Microfinance has been used to achieve progress in developing countries but is still a newly emerging field that is rapidly growing. As a result, there is an urgent need to train people who can conduct microfinance projects based on an understanding of the latest developments in this field.

JICA held a Capability Enhancement Training – Microfinance Course in February 2012 for Technical Cooperation experts and others who want to play a part in poverty reduction in developing countries in the future. Participants studied the theory of microfinance and case studies, acquiring knowledge and technologies that are vital to using microfinance to supply aid. Giving participants a better understanding of the microfinance program of JICA was another objective of this training. Overall, this training course had 10 major themes.

- (1) Poverty reduction and microfinance
- (2) The transition of microfinance and international trends
- (3) Benefits and issues of microfinance
- (4) Services and markets of microfinance
- (5) Legal framework for microfinance
- (6) Operation and management of microfinance organizations

- (7) Roles of governments, donors and the private-sector in microfinance
- (8) Evaluation methods for microfinance
- (9) Component-type microfinance
- (10) Case studies at JICA and other organizations

The subjects of the course include basic theories about microfinance and case studies. They also include new measures that utilize IT such as mobile banking. In addition, participants studied how to measure the social performance of microfinance, consumer protection and other topics of international interest. The curriculum was structured to increase the understanding of all items that must be considered when starting and operating a microfinance project at project sites. Furthermore, participants in the training program assumed the viewpoints of the microfinance organization and its customers to practice how to determine customers' needs and develop loan products. The course had practice sessions for financial analysis of microfinance organizations and the preparation of business plans that can achieve financial sustainability as a financial institution while meeting the social goal of contributing to poverty reduction. To give participants a broad perspective on this subject, a prominent individual in the field of microfinance research, donors, individuals from NGOs that support

microfinance organizations, and other people served as instructors.

There were many positive responses from participants. One said the event had a well-organized curriculum that gave everyone a good understanding of issues involving microfinance. Another remarked that he had viewed microfinance as similar to aid but now understands the importance of sustainability as finance. Another participant said that the training course gave him a comprehensive understanding of JICA's microfinance activities.

JICA plans to continue to conduct this microfinance training program.



Microfinance in Djibouti (Photo by Osamu Funao)

# Human Development — Helping People the World Over to Lead Richer Lives



Of the eight Millennium Development Goals (MDGs), relevant goals are shown in color.

The international community is making concerted efforts to achieve the Millennium Development Goals (MDGs) by 2015. Yet, there are still many people who are unable to live decent lives. For instance, there are as many as 67 million out-of-school children around the world, and more than 20,000 children die under five years of age every day.

With the aim of enabling people to live healthy and creative lives each day and seek their own meaningful goals, JICA has been cooperating in the fields of education, healthcare, and social security, based on the concept of human security.

## Education

### Overview of Issue

Education is the cornerstone of all development. Acquiring knowledge and skills through education enables people to open up and improve their prospects in life. In addition, people's building of their own capacities promotes poverty reduction, economic growth, and scientific and technological development. Furthermore, the promotion of mutual understanding across all religions and ethnic groups is essential for the stability and peace of the world, and education plays an important role in this regard as well.

Developing countries, however, face many problems both in terms of the quantity and quality of their education. Although the number of children not attending school has decreased by as many as 38 million compared with 1999, more than 67 million children are still not attending school. In addition, in the least developed countries, one third of the children who enroll in elementary schools drop out before graduation. Even in countries where primary education is generally accessible, the enrollment rate of secondary education (including technical

education and other specialized courses) has remained low.

Furthermore, interest in higher education has been increasing rapidly in recent years in developing countries. There are considerable expectations for higher education institutions to play a central role in responding to the needs of creating a knowledge-based society in each country by such means as creating knowledge and innovation (research), developing human resources that drive socioeconomic development (education), and resolving development issues that are becoming increasingly complex in keeping with the steady globalization of the economy and society, as well as by returning benefits to industry and society (social contribution), with a focus on the post-MDGs period.

For Japan, the enhancement of partnerships between universities in Japan and those in Asia in particular is important from the perspective of promoting the internationalization of higher education institutions as well as of boosting economic growth in the region through fostering the highly skilled human resources required by industry, which can also lead to an increase Japan's social and economic vitality.

There is a clear need for regional collaboration. One

illustration of this need is the shift of factories and parts supply bases out of Japan following the 2011 Great East Japan Earthquake. Disruptions of Japan's supply chains caused by widespread flooding in Thailand further underscores the need for collaboration. On the other hand, in reality, many institutions of higher education in the developing countries face issues such as shortages of sufficiently qualified and skilled academic staff and of facilities and equipment for education and research, making it difficult for them to provide high-quality education and research activities. These points show that there is a significant need for aid for higher education.



Students view flowers as one part of a "research class" in which instructors open their classes to other instructors to further improve their teaching methods. (Zambia)



## JICA Activities

### 1. Basic Education

Basic education refers to education that provides basic knowledge and skills such as reading, writing and numeracy, and includes not only primary and secondary education but also early childhood development and non-formal education (including literacy education and community education).

Developing countries are facing diverse issues in the basic education sector. Among them JICA places a particular priority on the three issues of 1) enhancement of access to primary and secondary education, 2) improvement of the quality of primary and secondary education, and 3) improvement of education management (education administration and school management).

In particular, JICA is promoting cooperation with a focus on i) capacity building of teachers through the improvement of teacher training, ii) establishment of participatory school management systems that involve the community, iii) construction of school facilities by local contractors, and iv) capacity development of administrative officers of central and local governments in charge of education, which is essential for sustaining the effects produced by these other efforts.

In particular, in the Sub-Saharan African countries that are the least-developed in the area of education, JICA is providing focused and comprehensive support in accordance with the Yokohama Action Plan that was announced at the 4th Tokyo International Conference on African Development (TICAD IV) in

May 2008, for i) expansion of access (provision of educational opportunities to about 400,000 children through construction of 1,000 elementary and secondary schools with 5,500 classrooms), ii) improvement of the quality of education (provision of training for 100,000 science and mathematics teachers), and iii) improvement of school management (expansion of the School for All project, a community-participatory model for improving school management, to 10,000 schools). Due to this support, these countries are on the verge of accomplishing these goals.

It is the responsibility of the international community to provide support to enable as many people as possible in the developing countries to receive quality education. JICA is continuing to provide steady support for basic education leading up to 2015, the target year of the Education for All (EFA) and MDGs.

### 2. Higher Education

Higher education is positioned as the final stage of a country's education system. With a view to improving the quality, quantity and equality of higher education, which have been attracting particular attention in recent years, JICA is implementing efficient and effective projects with the cooperation of Japanese universities. With the main targets being the core universities that play a leading role in promoting the higher education sector of each respective country or region, JICA provides support for the improvement of their

#### Case Study

#### Myanmar Project for Strengthening of Child-Centered Approach Phase 2 (SCCA2)

### Education to Promote Skills for Creativity, Deep Thinking and Problem Solving

**Myanmar has been making steady progress in increasing access to primary education and the primary school enrollment ratio has increased to 97%. However, only about 70% of students complete all five years. One of the reasons for the low completion rate is the quality of education. The classes are mainly memorization and recitation, which fails to make students more interested in learning.**

JICA started providing cooperation in the field of basic education in 1997 and introduced Child-Centered Approach (CCA) that encourages children to improve learning skills which include critical thinking skills, creative thinking skills, inquiry learning skills and problem solving skills. JICA also recommended to Myanmar revise the primary education curriculum on Basic Science, Social Studies and General Studies.

Upon the request from the Myanmar Ministry of Education to support its introduction of CCA in the country, the Project for Strengthening of Child-Centered Approach (Phase 1) started in 2004. The support included the capacity building of counterparts at the Basic Education Resource Development Center (BERDC), training for in-service teachers, revising the curriculum of Education College, development of education

evaluation methods, and other activities.

Phase 2 started in 2008. To disseminate CCA nationwide in Myanmar, cooperation was provided to reinforce the teacher training mechanism, to establish a system for continuous training for in-service teachers, and to improve classroom teaching by teachers. By the end of the Phase 2 in March 2012, the total number of teachers who benefited from this program reached about 50,000. Technical support was also provided for CCA training for officials of the Ministry of Education, 20 instructors from Education Colleges and primary teachers from 64



Fostering children's ability to think by incorporating group work in classes

townships. Furthermore, teaching materials for this training, arithmetic teaching materials and other materials were developed.

Due to the remarkable results of these activities, the Government of Myanmar is conducting their own training programs that will extend CCA to the remaining 261 townships of all areas of the country by 2015.



An E-JUST engineering class on mechatronics and robotics

education and research capabilities through such means as improving the capabilities of academic staff, improving the campus and the education and research equipment, enhancing the university's governing structure, promoting industry-university-community links, and establishing a network between universities.

In Asia, while focusing support on the ASEAN University Network/Southeast Asia Engineering Education Development Network Project (AUN/SEED-Net), JICA is also extending cooperation to other core universities, when necessary, and endeavoring to foster highly-skilled human resources through long-term training in the formal courses at Japanese graduate schools. As for India, where there are increasingly stronger economic ties with Japan but there can be more active mutual academic interaction, a project has been started to strengthen ties among industry, the public sector and academic institutions both in Japan and in India.

In the Middle East and Africa, JICA extends its cooperation to foster the highly-skilled human resources required by industry with a focus on support for Egypt-Japan University of Science and Technology (E-JUST) that was partially opened in February 2010.

At this time of rapid advances in technology and the associated dramatic social changes, JICA will continue to support the fostering of human resources who can meet the needs of the world today, promote innovation and contribute to the progress of their home countries.

## Health

### ■ Overview of Issue

In developing countries, many people lose their lives because they are not able to receive adequate health care or medical services. In the health sector, it is generally recognized that it will be difficult to achieve health-related MDGs by 2015 despite the large contribution made by various partners including donor countries,

private funds, and international organizations such as the World Health Organization (WHO). The Government of Japan has also made a commitment to providing continuous support at TICAD IV, the MDGs meetings and other conferences. JICA is addressing issues such as the improvement of maternal and child health, infectious disease control, and strengthening health systems, in coordination with other actors involved in global health issues.

### ■ JICA Activities

#### 1. Improving Maternal and Child Health

Approximately 99% of the 360,000 pregnant women who die during pregnancy or childbirth and the 8.1 million children who die before reaching their fifth birthday every year live in developing countries. This fact indicates that the health and well-being of pregnant women and young children is one of the most serious issues facing the developing countries.

In fiscal 2011, JICA prepared a thematic guideline for maternal and child health and has been extending its cooperation for strengthening health systems that make a comprehensive "Continuum of Care for maternal and child health" more widespread and sustainable. Specific measures being taken under this framework include: developing administrative and management capacity of central and local health authorities; improving and upgrading health facilities; strengthening capabilities of midwives and other health service providers; improving community solidarity and systems; and strengthening the coordination among health centers, primary and referral health facilities.

In fiscal 2011, JICA started the Project for Cordillera-wide Strengthening of the Local Health System for Effective and Efficient Delivery of Maternal and Child Health Services in the Philippines and the Project for Improving Maternal and Child Health Care System in Khatron Oblast in Pakistan. Both projects are aimed at enhancing the implementation system for enabling safe deliveries for expectant mothers and providing adequate care for newborn babies. In Bangladesh, JICA conducted the Safe Motherhood Promotion Project (SMPP) under the government's health care program and the approach for improving health services for expectant mothers and newborn babies taken by this project was recognized by the Government of Bangladesh as a package worthy for replication. In order to incorporate the approach in health policies and strategies for maternal and child health in Bangladesh and to extend this approach to all areas of Bangladesh, JICA has been extending its cooperation through the Safe Motherhood Promotion Project (Phase 2), the dispatch of a policy adviser for the Ministry of Health and an ODA Loan for training people, supplying equipment and building facilities in order to improve maternal and child health care.

## Priorities are Fighting Major Infectious Diseases and Strengthening the Capacity of Basic Health Staff

Bilateral aid organizations around the world have long been unable to extend aid to Myanmar because of the prolonged period of political instability. From the standpoint of human security, JICA has been providing continuous aid in humanitarian sectors like health and education that support human rights.

In the health sector, the Major Infectious Diseases Control Project (MIDCP) started in 2005 and the Project for Strengthening Capacity of Training Teams for Basic Health Staff started in 2009. Both are Technical Cooperation projects.

This aid of the MIDCP is helping to prevent HIV/AIDS, tuberculosis and malaria and promote treatments for these diseases.

In Myanmar, the number of people who are afflicted with three major diseases (HIV/AIDS, tuberculosis and malaria) and deaths from these diseases are high. Fighting these three diseases, which pose a serious threat to the people of Myanmar, is the highest priority of the country's national health plan. Based on this situation, JICA started the Major Infectious Diseases Control Project in 2005.

To combat HIV/AIDS, the blood donor selection system was upgraded, HIV tests strengthened and skills of the staff enhanced in order to improve the national AIDS Control program. One result was a drop in the HIV prevalence of blood donors nationwide from 0.7% in 2005 to 0.4% in 2008. Furthermore, the HIV prevalence of blood donors at seven major hospitals fell from an average of 1.27% to an average of 0.26% in 2010.

To combat tuberculosis, the Project has been conducted in two administrative regions, Yangon and Mandalay, to strengthen the national tuberculosis control program. Improving tuberculosis laboratory service, strengthening private/public-sector partnership and health education on tuberculosis were the main activities. As a result, the case detection rate (CDR) rose from 70% and 65% in Yangon and Mandalay, respectively, in 2006 to 82% and 67% in 2009. Furthermore, the treatment success rate improved from 78% and 75% in Yangon and Mandalay, respectively, to 86% and 83% in 2010.

To combat malaria, a community-based malaria program has been implemented in the 16 townships in the east and west Bago Division (the Magway Division and Rakhine State were added for the extension phase). A package was developed to be able to adopt the extension of implementation to other areas of Myanmar. Reinforcing the national malaria program lowered malaria deaths in east and west Bago from 106 in 2004 to 38 in 2010. In Magway and Rakhine, the average number of malaria deaths decreased from 146 and 67 (average from 2006 to 2009), respectively, to 57 and 23 in 2010.

MIDCP Phase 2 started in March 2012 with the goals of further strengthening measures to

fight these diseases, covering larger areas and improving the quality of activities.

"By conducting activities with deep local roots and working with the Ministry of Health, JICA is the only organization that is providing direct technical assistance to the ministry," says Project Formulation Advisor Kayo Yokomori of the JICA Myanmar Office. We will use the relationships of trust we have established with the government and people of Myanmar as the base for taking Phase 1 to the next step. Due to Myanmar's political stability, The Global Fund to Fight AIDS, Tuberculosis and Malaria and other international aid agencies and NGOs have started providing aid to the country. JICA will work and cooperate with these organizations to fight these diseases on a nationwide level. We want to contribute to containing and eradicating these three major diseases."

### Training the Basic Health Staff Who Protect the Public

Myanmar has an infant mortality rate of 54 per 1,000 births (2009), and under 5 mortality rate of 71 per 1,000, and a maternal mortality rate of 240 per 100,000 births (2008). These figures are generally high even in comparison with the averages for Southeast Asia (infant mortality rate of 45, under 5 mortality rate of 71 and maternal mortality rate of 240) (*WHO, World Health Statistics 2011*). One cause is the inability to provide appropriate health care services. Basic health staff who provide basic health care and are at the forefront of health care services, are so busy that they have few opportunities to upgrade their skills.

In May 2009, JICA started the

Project for Strengthening Capacity of Training Teams for Basic Health Staff (BHS). The project supported strengthening the capacities of the central training team established by the Ministry of Health, and training teams in states, divisions and townships. The project supported continuous medical education for BHS through the development of systems and tools for effective training, such as methods for teaching, training management and training evaluation.

In addition, a training information system is built to collect and analyze the training information from each township covered by the project. This system can assist to improve the training plan.

### From Our Expert

#### Strengthening of Basic Health Staff Project Chiyoko Hashimoto, Chief Advisor

The project has been implemented for three years. We prepared "Handbook for Training Teams" for training management, evaluation and information systems. The project has covered a half of Myanmar and training management is becoming well established at the township level. Training methods have changed from the one-way provision of information from instructors to an interactive format for instructors and basic health staffs. Furthermore, a basic health staff has told us that the establishment of training targets and objectives clearly shows them what they need to learn. We are producing consistent benefits and I want to continue these activities to make the project even better and more widely utilized.



Mosquito nets are distributed in Myanmar

## 2. Infectious Disease Control

With three major infectious diseases, namely HIV/AIDS, tuberculosis and malaria, alone claiming the lives of over 4 million people each year, infectious diseases pose a direct threat to the people in developing countries and they are also a factor in hindering economic and social development. Infectious disease control is an issue that needs to be addressed not only by specific countries or regions, but also by the entire world, as those diseases spread on a global scale through economic activities and as a result of the development of transportation.

In the field of infectious disease control, JICA mainly provides support for the improvement of access to and the quality of testing, the collection and analysis of health information, and strengthening service providers' capacities to provide necessary treatment and care services. Moreover, JICA supports policy making at the national level, and enhancing service delivery at health facilities at the sub-regional level. In fiscal 2010, JICA launched a project entitled "Health Systems Strengthening for HIV and AIDS Services Project in Tanzania", which provides support to strengthen monitoring and evaluation systems with supervision in order to improve the quality of HIV and AIDS responses implemented at health and medical facilities. In addition, JICA is implementing various projects under the Science and Technology Research Partnership for Sustainable Development (SATREPS) in Asia and Africa, utilizing Japan's knowledge in the field of research and development on infectious diseases, and is also promoting joint research on tropical diseases.

## 3. Health System Strengthening

"Health systems" refer to the frameworks that form bases for the provision of health care and medical services to people (improving governance, improving medical facilities, managing proper medical products, identifying and effectively utilizing accurate health information, and securing and managing financial resources) as well as to the fostering and managing human resources for health. While it is necessary to take a balanced approach to addressing the issues of specific diseases and strengthening of entire health systems a number of partnerships have been established by various organizations that specialize in strengthening key components of health systems. In light of this situation, JICA is expected to play a role in supporting developing countries, in harmony with international initiatives and these existing partnerships.

JICA actively contributes to the formulation of national health plans and budgets, and supports the smooth implementation of these plans. A preparatory survey was conducted concerning the provision of an ODA Loan to support the improvement of the health system in Iraq through the construction of core regional hospitals. In Kenya, JICA strengthens management capacity of local health administration and community-level strategies that support community activities to promote good health based on the policies of the Ministry of Health. In Tanzania and South Sudan, JICA provides support to establish databases for health service providers to support the management of these

individuals and for increasing the use of these databases. In addition, to deal with issues throughout Africa, JICA implements programs to promote the creation and sharing of knowledge within Africa and to reinforce self-reliant health systems. One activity is a health system management personnel training program. This is a joint program with the Government of Kenya and the African Health Leadership and Management Network, which consists of African higher education institutions in the field of health care. JICA also provides cooperation for the management of human resources for health in French-speaking areas of Africa. Another program aims to utilize a Japanese management method called 5S-KAIZEN to improve the management of hospitals and other health facilities.

## Social Security

### ■ Overview of Issue

In recent years, widening economic disparities among the countries and regions of the world, including both developing and developed countries, have become an issue and social unrest associated with these disparities is becoming increasingly widespread. There are countries as well as larger regions that have achieved remarkable economic growth in recent years. On the other hand, many vulnerable people are being left behind in receiving benefits from economic growth.

In order to establish a stable society while maintaining economic growth, it is essential to enhance health care and income security. It is also important to build a safe and sound society in which society as a whole is prepared to deal with various risks. Furthermore, providing support for the independence of socially vulnerable people promotes participation in social and economic activities, which also has the potential to contribute to successful nation-building.

JICA is extending comprehensive cooperation in the area of social security from the perspective of promoting inclusive cooperation.

### ■ JICA Activities

Based on Japan's knowledge and experience in social security systems, JICA is undertaking projects aimed at improving the social security systems of developing countries, focusing on the three areas of social insurance and social welfare, assistance for persons with disabilities, and labor and employment.

#### 1. Social Insurance and Social Welfare

JICA supports the development of social insurance systems such as health care security and income security (including pensions), as well as strengthening social welfare policies for the elderly and the others. There is a great need for people to study Japanese know-how in Japan so this knowledge can be used when creating social insurance systems that reflect the economic and social characteristics of their home countries. JICA continues to provide cooperation by inviting key personnel

at government ministries associated with social insurance systems to visit Japan to attend a training courses and exchange opinions with people involved with social insurance.

## 2. Support for Persons with Disabilities

Even though support for persons with disabilities is generally considered as a part of social welfare services, JICA views persons with disabilities not simply as recipients of welfare services but also as important actors of development. JICA's ultimate goal is to build a society that is comfortable to live in for all people, regardless of disabilities.

JICA aims at realizing the “full participation and equality” of people with disabilities in developing countries, with emphasis on support that ensures active participation of persons with disabilities in society. JICA is working to empower persons with disabilities through leadership trainings and strengthening capacities of disabled people's organizations, as well as creating barrier-free environments [[See the Case Study on page 91](#)].

## 3. Labor and Employment

In addition to support for the development of policies for labor and employment, JICA provides support in such fields as occupational health and safety and job placement services.

In developing countries, in contrast to the achievement of economic development, legal frameworks and enforcement of such legislation in the field of occupational health and safety tend to be underdeveloped, resulting in a significant increase in labor accidents. When workers who have been injured at work cannot receive adequate compensation, they lose their source of income and face the risk of immediately falling into extreme poverty. Labor accidents also pose a great risk not only to laborers and their families, but also to employers and to society. As a result, employment problems have become a serious issue worldwide in recent years.

JICA is providing support primarily in Asia for the improvement of occupational health and safety and job placement services.

### Case Study

## Costa Rica Reinforcement of the Integral System of Rehabilitation with Community Participation

### “We All are from the Same Earth” – Promoting Community Participation of People with Disabilities in Costa Rica

**The Republic of Costa Rica, in Central America has a population of 4.57 million and the disability ratio is approximately 5% (2000 Costa Rica National Census). JICA has been supporting persons with disabilities in Costa Rica since the mid-1980s by dispatching Japan Overseas Cooperation Volunteers (JOCV). To take the next step, a Technical Cooperation project called “the Reinforcement of the Integral System of Rehabilitation with Community Participation in Brunca Region of Republic of Costa Rica, with Focus on Human Security” (known as the Kaloie Project, which means “We All are from the Same Earth” in Spanish ), started five years ago in 2007. The goal was to establish a model mechanism to promote participation of people with disabilities in Costa Rica. The Government of Costa Rica plans to use the model in the Brunca region in order to expand it throughout Costa Rica.**

Costa Rica enacted the Equal Opportunity Act for Persons with Disabilities in 1996. However, there was little progress on cooperation among health and medical care, education, labor, and other agencies. There was also a shortage of technologies for medical rehabilitation, difficulties with having communities gain an understanding of people

with disabilities and other problems. The result was inadequate social services, making it difficult for them to become members of the community.

To deal with this issue, Costa Rica formed a National Council for Rehabilitation and Special Education of Costa Rica (CNREE) made up of people from related government ministries and agencies. The plan was to create a model in a pilot site and the mechanism would then be used nationwide. Costa Rica asked for Japan's cooperation to support these activities.

In 2006, JICA conducted a preparatory survey in the Brunca region, the potential pilot site to the southeast of the capital city of San Jose. The region has a high poverty rate as well as a large number of people with disabilities.

Then the Kaloie Project

started in 2007. The first step was establishing a framework to enable many sectors to be involved under the theme of community participation of people with disabilities. For networking these sectors, a committee that consists of national and local government officials, health care professionals, people with disabilities and others was formed. Upgrading medical rehabilitation services was another step. This involved the provision of rehabilitation equipment and training for physical therapists and other specialists. Furthermore, JICA experts with disabilities were sent to Costa Rica and people with disabilities from Costa Rica came to Japan for Independent Living Training and other training. These activities were all aimed to empower people with disabilities in Costa Rica.

As a result, empowered people with disabilities in Costa Rica who learned their rights and responsibilities started to participate in community activities. Then agencies and medical institutions can accurately identify their needs, which leads to improvements in social and medical services for people with disabilities.

The Government of Costa Rica has incorporated the concept of “inclusive development” in its National Development Plan and is currently extending this model to all areas of the country.



People with disabilities who have joined JICA training on empowerment became empowered instructors to pass their experience to others.

# Global Environment

## For the Termination of the Vicious Cycle of Poverty and Environmental Destruction



Of the eight Millennium Development Goals (MDGs), relevant goals are shown in color.

In developing countries, a vicious circle occurs as the destruction of the environment, which is a basis for human life, causes the further escalation of poverty. Each passing moment brings the further destruction of the irreplaceable natural environment on which humanity depends, driving the need for the creation of a sustainable society based on the concept of harmony with the environment. JICA is implementing cooperation widely for the conservation of the global environment. Key initiatives focus on nature conservation, environmental management, water resources, disaster prevention and management, and climate change.

## Nature Conservation

### Overview of Issue

Over the past decades, excessive resource consumption and large-scale development have led to the rapid destruction of nature worldwide that includes deforestation and reduction in wetland, soil degradation and the extinction of wildlife species. It is reported that the area of forest land is declining by approximately 13 million hectares, equivalent to one-third of the land area of Japan, every year due to factors such as logging wood to be used as fuel or construction material, conversion to agricultural land, and slash-and-burn cultivation that does not provide adequate time for forests to regenerate. As a result, more than 60,000 wildlife species are considered to be in danger of extinction.

Our existence depends on the bounty of nature. Destroying the balance of the ecosystem has a huge impact on people's lives. In particular, since many of the poor in developing countries rely on the surrounding forests for the water, food, medicine, and other natural resources needed in their daily lives, the destruction of the natural environment leads to a further deterioration in their lives.

We are faced with conserving the natural environment that forms the basis for the survival of humanity, including forests and wetland that are rapidly vanishing from the earth. We need to achieve a society that can maintain harmony between human activities and the ecosystem.

### JICA Activities

During the period from 2000 to 2011, JICA pursued natural conservation activities on 13.62 million hectares of land (forest conservation, 11.3 million ha; ecosystem conservation 2.32 million ha). In addition to conducting activities such as collecting forest data, formulating management plans and improving the lives of local residents, JICA carried out afforestation activities for forest restoration on 3.05 million hectares in various countries. A total of approximately 10.69

million people benefited from these activities. Because eliminating the vicious cycle of environmental destruction and poverty and promoting the formulation of a society in harmony with the ecosystem has become an important issue, JICA provides cooperation on nature conservation in the following three areas, with the aim of facilitating harmony between the maintenance of the natural environment and human activities.

### 1. Sustainable Use of Natural Resources by Local Residents

In developing countries, many people use natural resources in their daily lives. A steep rise in population, however, has meant that the use of those resources exceeds nature's ability to recover, causing the deterioration of the environment that supports human life.

Working in partnership with governments and citizens of other countries, JICA aims to build an organization for systems that can promote the sustainable utilization of natural resources. It undertakes to spread technology that targets improving living standards while making effective use of surrounding natural resources.

### 2. Conservation of Biodiversity

The blessing of biodiversity sustains our daily life in forms such as food, clothing, medicine, and wood products. However, because of such factors as the excessive utilization of natural resources due to deforestation, overgrazing, and the harvesting of firewood and charcoal materials, as well as to overhunting of wildlife, introduction of alien species, and the threat of climate change, it is considered that a large number of wildlife species, including unknown species that remain undiscovered, are becoming extinct every year, and the functions of the ecosystem are deteriorating all over the world.

With the aim of establishing a sustainable society in which human activities co-exist in harmony with the natural ecosystem, JICA is developing protected area management plans in cooperation with governments and citizens, setting up

survey and monitoring and management systems, providing technical assistance for improving the capabilities of administrative officers and researchers, introducing and promoting eco-tourism, and developing and disseminating agricultural technologies that can help strike a balance between the improved productivity and ecosystem conservation. In particular, JICA is prioritizing activities for the conservation of important regions such as Ramsar Convention registered wetlands, national parks and biodiversity hotspots.

JICA is supporting the efforts of developing countries to contribute to achieving the world's goals for conserving biodiversity. These goals were set by the "Aichi Target" that was adopted at the tenth meeting of the Conference of the Parties to the Convention on Biological Diversity (COP 10) held in Nagoya, Japan in October 2010.

### 3. Sustainable Forest Management

Forests not only function as lumber resources, they also have the function of retaining and providing stable supplies of water, conserving soil while absorbing and accumulating CO<sub>2</sub> and prevent climate change, conserve nutrients in soil and prevent natural disasters such as floods and landslides. Amid accelerating deforestation around the world, not only is it critical to replace forests by planting trees, it is becoming increasingly important to make sure existing forests are not depleted above current levels via adequate conservation and management.

JICA provides technical guidance for determining the state and monitoring of forests and develops reforestation technology to regenerate wooded areas. It also works to raise awareness among citizens of the importance of forests and offers support

in establishing systems for properly conserving and managing forests. In addition, JICA is extending cooperation on the conservation of forests, with a view to contributing to the establishment of the REDD-plus system, which has been advanced by the international community in recent years as part of the measures against climate change [[See the Case Study](#)].

\* REDD-plus: In addition to Reducing Emission from Deforestation and Forest Degradation (REDD), REDD-plus seeks to support the conservation of forests, the sustainable management of forests and the enhancement of forest carbon stocks.

## Environmental Management

### Overview of Issue

Along with recent economic development, environmental issues such as water and air pollution and inappropriate disposal of waste have spread throughout the world. This threatens the health and life of humans and other wildlife, and inhibits the sound development of economic activities. Japan's experiences in the past prove that it is too late to address environmental issues once our ecosystems and human health are tangibly damaged. Measures that emphasize precaution are needed. It is very important to strengthen the capacity to respond to environmental issues such as the ability to assess and manage the environment and create a framework for implementing environmental measures.

### JICA Activities

Because many environmental issues involve complex factors in a multilayered manner and are spread over a wide spatial area, it is difficult to find solutions in a short period of time.

#### Case Study

### Reducing Greenhouse Gas Emission by Preventing Deforestation and Forest Degradation

#### Providing Assistance for REDD-plus and Forest Conservation as a Climate Change Measure

**REDD-plus is a concept that adds promoting strategic forest conservation and sustainable forest management with the goal of increasing forest carbon stock to the purpose of REDD—reducing emissions from deforestation and forest degradation in developing countries. JICA is providing cooperation and assistance for REDD-plus measures in various developing countries, including forest management in Indonesia, forest policy development in Laos, and enhancing forest resource monitoring capabilities in Papua New Guinea.**

JICA began working with Indonesia, Laos, Papua New Guinea, and other developing countries on REDD-plus measures after the concept was highlighted as a major issue in the 2009 Conference of the Parties (COP15). In 2010, JICA signed a Memorandum of Understanding with the International Tropical Timber Organization (ITTO), planning to cooperate with ITTO on promoting REDD-plus measures.

In 2011, JICA commenced a project to assist Cambodia in initiating a REDD-plus strategy and formulating policy. Cambodian forests are shrinking by 1% annually because of the

conversion of forests to farmland, excessive harvesting and other factors that come with economic growth. In 2010, the Cambodian government formed a national forestry plan, establishing boundaries for the country's forests, strengthened administration of these resources, and promoted their sustainable use. In addition, with the assistance of the United Nations, the World Bank, and other institutions, the government formulated and began implementing a REDD-plus Road Map.

Over the period of five years up to 2016, JICA will be assisting Cambodia with its

implementation of the road map. It will be involved with a variety of activities, such as the setting of a national REDD-plus strategy, on-site forest conservation activities, measuring forest carbon stock, and research and development.

JICA is also planning to extend the reach of its cooperation with REDD-plus programs beyond Southeast Asia. JICA will be working with such countries as the Gabonese Republic and the Democratic Republic of the Congo, home to Central Africa's Congo Basin, which along with the Amazon Basin is known as "the lungs of the world," and Southern Africa's Republic of Mozambique.



Forest observation station in Indonesia

Sound “environmental management” is important as a means of achieving sustainable development while keeping the overall burden of human activity on the environment to a minimum.

JICA provides various forms of support in accordance with the development status of each developing country or region. In so doing, JICA recognizes that it is essential to enhance the capacity of the organizations and individuals to conduct environmental management. Accordingly, in recent years, JICA has been further strengthening the capacity development of the environmental management.

### 1. Water Environment

JICA supports measures to prevent pollution in rivers, wetlands and oceans. This includes support for increasing the capability to monitor water quality, for drafting management plans and making policy proposals. JICA also provides support for the drafting of plans and the operation and management of facilities needed to treat waste water from households and industry and improve the hygienic environment, such as support for the improvement of sewage facilities.

### 2. Atmospheric Environment

JICA supports measures to prevent air pollution, such as increasing the capability to monitor air quality, and improving capacity for drafting management plans and making policy proposals. JICA is also providing support for the development of air pollutant removal facilities, and new methods to measure contaminants.

### 3. Waste Management

JICA supports measures for improving waste management, such as increasing the administrative service capabilities for the collection, transportation, intermediate treatment and final disposal of waste, and improving capacity for drafting management plans and making policy proposals. Recently, JICA is increasing its support to create a sound material-cycle society by promoting the 3Rs (Reduce, Reuse, Recycle) of waste [\[See the Case Study on page 63\]](#).

### 4. Other Areas of Environmental Management

In addition to supporting the formulation of a basic plan for environmental management, JICA also supports more advanced environmental management such as measures for treating chemical substances.

## Water and Sanitation

### ■ Overview of Issue

Water is essential for human life. In addition to drinking water, water directly and indirectly supports human existence as a necessity for food production and various economic activities to maintain lives of people.

However, the water resources available to humans are not unlimited. The amount contained in relatively easily accessible rivers and lakes is a mere 0.01% of all water on the earth.

Nevertheless, the demand for water continues to rise in developing countries as their populations expand. Consequently, these countries are now facing the extremely difficult problem of how to allocate limited water resources for the survival of their citizens, for national economic development as well as for the preservation of the natural environment.

Another issue closely related to water is sanitation. Around the world, 1.5 million children 5-years old or younger die from diarrhea annually. Diarrhea in many cases is caused by infection with pathogenic bacteria discharged from feces transferred to people’s mouths through water, food, fingers or other means. Therefore, building sanitation facilities (toilets) is extremely important to isolate human excreta from the living environment. In addition, the infection routes can be cut off by such hygienic practices as washing one’s hands after defecation and keeping areas around water supply facilities clean. In other words, a mutually complementary relationship exists between improved sanitation that is essential to keep water safe to drink, and water that is vital in such hygienic behaviors as washing one’s hands. The simultaneous improvement of water supply and sanitation is extremely important to reduce water-related diseases.

Japan has experience in steadily developing water supply and sewage systems to build sanitary society, while overcoming flooding and drought during postwar economic growth. On the other hand, Japan remains a major water-consuming country, importing large volumes from other countries directly or indirectly. This makes Japan responsible for taking part in solving the water and sanitation problems of developing countries.

### ■ JICA Activities

#### 1. Water Resource Management and the Efficient Use of Water

The appropriate management of water resources is essential in the situation where available water resources are limited against the growing demand for water. This refers to a need for coordinating water allocation to different sectors while preserving the water environment. Avoiding this coordination would increase the disorderly use of water, resulting in repeated environmental destruction such as “the Tragedy of the Aral Sea”. Effectively using limited water resources to improve sanitation through a stable water supply, and reducing poverty by simultaneously maintaining stable food production and promoting industrial development, while protecting the water environment, are extremely difficult and complex tasks for developing countries that require mobilization of the wisdom of Japan and the international community. From the perspective of promoting integrated water resource management, JICA actively supports developing countries mainly in the formulation of water resource management plans.

One of the most important factors in these daunting challenges is to improve efficiency of water use. This includes the promotion of water-saving and reuse of treated wastewater. JICA is proactively providing assistance in this area, particularly



in the reduction of non-revenue water caused by leaks from pipes, etc., where Japan's experience and technology can be put to good use.

## 2. Improving Access to Safe Drinking Water and Sanitation Facilities

The access to safe drinking water and basic sanitation facilities (toilets) is included in the Millennium Development Goals (MDGs) and is one of the major development challenges of the international community. Moreover, the access to safe water and sanitation was declared a "human right" at the

United Nations' General Assembly held in July 2010.

Nevertheless, in 2010, 780 million people around the world still did not have access to safe drinking water and 2.5 billion were without access to basic sanitation facilities.

As a member of the international community, JICA is working proactively to accelerate the progress towards improving the situation. Specifically, JICA is promoting construction of water supply facilities through financial assistance while strengthening operation and maintenance of the facilities through technical assistance both in urban and rural settings. Particularly in urban water supplies, JICA deals with the

### Case Study

### Bhutan Study on Glacial Lake Outburst Floods

## Using Japan's Science and Technology to Study Glacial Lake Outbursts

**In recent years, global warming has caused glaciers in the Himalayas to retreat. As they shrink, they have left many glacial lakes behind, raising the concern of damage from outburst flooding.**

**Since 2008, JICA has been implementing projects under a new ODA category of Science and Technology Research Partnership for Sustainable Development (SATREPS). As part of the program, JICA conducted joint research on glacial lake outburst flooding in Bhutan that began in 2009 and ended in March 2012.**

#### Joint Research on Sustainable Development

Situated on the southern slopes of the Himalayan mountain range, Bhutan is said to have more than 2,000 glacial lakes. Most of these lakes have been created by damming of the water from the melted ice by moraines built up from soil and rock carried by the glaciers. Since the moraines are poorly formed, there is the concern of a sudden outburst of water should they be broken by glacial ice slides or other causes. In 1994, there was an outburst from one such moraine that sent tons of soil and rock down on the ancient capital of Punakha, causing substantial damage.

Since fiscal 2008, JICA has been collaborating with Japan's Ministry of Education, Culture, Sports, Science and Technology and Japan Science and Technology Agency on the SATREPS program to promote science and technology partnerships between Japan's universities and research bodies and counterparts in developing countries. These partnerships aim to find solutions to global issues, such as weather change, food, energy, biological resources, destruction of nature, and infectious diseases. During the first year of the program, JICA initiated 12 projects.

One of those projects was the study on glacial lakes in Bhutan that commenced in 2009. Professor Kouichi Nishimura of the Graduate School of Environmental Studies at Nagoya University led the Japanese team of scientists. The team included researchers in the fields of snow and ice, disaster prevention, and remote sensing. In partnership with the Bhutan's Ministry of Economic Affairs' Department of Geology and Mines, they formed the Study on Glacial Lake Outburst Floods in the Bhutan Himalayas Project.

#### Visualization of the Degree of Risk and Potential Scale of Flooding

Project research targeted a wide range of

topics, including assessing the degree of risk of outbursts by glacial lakes, investigating the mechanism of the swelling size of glacial lakes, establishing an early warning system when outburst flooding occurred, and creating a hazard map.

To start with, the project team used satellite data to identify and analyze glacial lakes in the Bhutan Himalayas and surrounding region that were considered to be at high risk. Following this step, the team initiated an actual study of the Mo Chhu river basin. The glacial lake sits in a highland more than 5,000 meters above sea level. The study was carried out under difficult conditions, occasionally having to clear blocked mountain paths and fighting with high altitude sickness. In addition, to investigate what the impact of floods would be, the team had to measure the lower valleys and study the remains of previous landslides. In the second year of the project, the team also began active fault surveys to study the possible earthquakes that could instigate an outburst.

Over the approximately three years of study up to March 2012, the team was successful in building a model that visualizes the degree of risk of outburst by glacial lakes and the potential scale of flooding. The team also revised the assessments of the 25 glacial lakes in greatest danger of outbreak floods. In addition, they produced a distribution map of the potential landslide and active fault areas, distributing the results to Bhutan's Ministry of Economic Affairs, but also to regional government and educational bodies.

Another major success of the project was the transfer of technology to the Bhutan project members and the training of a core of people to carry on the work. Thanks to JICA's assistance, steps are being taken in Bhutan to rapidly respond to the threat of outburst flooding by making municipal bodies and communities more



Surveying of Himalayan glacial lakes in Bhutan

aware of the dangers. The government is producing hazard maps for other river basins, proposing setting up other early warning systems, and using the results of studies to plan locations for hydroelectric power stations.

#### From Our Expert

**Jiro Komori**  
Project Assistant Professor, Graduate School of Environmental Studies, Nagoya University (Currently affiliated with Teikyo Heisei University)

I was previously involved with a partnership study done by Japan and Bhutan on glacial lakes that started in Bhutan in 1998, joining the project in 2002. That experience provided me with the opportunity to work on the current project. The people of Bhutan have a great deal of trust in the Japanese and my experience with it on location left a deep impression on me. One of the major reasons for their trust is the long history of international assistance provided by Japan that began with the work done by the late Keiji Nishioka. He was a JICA advisor who contributed to the modernization of agriculture in Bhutan for 28 years, starting in 1964. In addition, the long years of experience and record of Japanese researchers in Nepal also contributed to the progress of the project. Since the global warming problem is serious not only for Bhutan, but also other countries in the Himalayas, the technology and knowledge gained on this project must be widely applied in other regions as well. Clearly, the SATREPS scheme offers a range of benefits for Japan and the partnership country in the areas of assistance and research. As a result, I am confident that this type of partnership activity by countries can only continue to grow.

improvement of water supply utilities' management, mobilizing private sector financing to meet the huge needs for developing water supply facilities.

With regard to the stagnant progress towards improving access to sanitation facilities, JICA is steadily expanding its intervention primarily in Sub-Saharan Africa.

## Disaster Risk Reduction

### ■ Overview of Issue

The prevalence and damage of disasters has increased in the past 30 years or so, as storm and flood damage, earthquakes, volcanic activities and other disasters occur across the globe almost daily. People in developing countries are particularly vulnerable due to urbanization, which accelerates the concentration of people in cities and delays the provision of social infrastructure. Natural disasters do more than claim life; they directly impact people's livelihood and aggravate the poverty cycle. Whereas the previous mainstreams of disaster assistance were centered more on structural measures such as construction of dams and levees, there is also a need for compound measures that emphasize non-structural assistance such as installation of disaster warning systems, creation of hazard maps, and evacuation drills to improve the emergency response of people and society to disasters.

### ■ JICA Activities

#### 1. Activity Policy

Based on a disaster management cycle (DMC), which entails emergency response, recovery and reconstruction, and prevention and mitigation activities, JICA leverages its experience to provide assistance in the following areas.

##### 1) Efforts toward a Safe and Secure Society

The risk of natural disasters is increasing in developing countries. JICA makes use of Japan's leading technical capabilities in disaster prevention to evaluate risk in developing countries, propose measures to mitigate latent risk and preventive measures for conceivable disasters so that people can live with peace-of-mind.

##### 2) Supporting the Formulation of Integrated Disaster Management Plans

JICA supports the formulation of integrated Disaster Management plans and action plans that include identifying disaster-related hazards and risks, improving the disaster management systems and capabilities of administrative institutions, establishing the relevant legal framework, enhancing awareness and strengthening response.

##### 3) Support from the Viewpoint of Human Security through Community-Based Disaster Risk Management

Based on Japan's experience, in addition to "public-help," "self-help" by developing countries and "mutual-help" are important. However, community-based measures are especially key in developing countries where the disaster management capabilities of administrative institutions remain insufficient. To

keep such measures operating on an ongoing basis, JICA directs assistance toward strengthening such capabilities among communities and individuals, as well as reinforcing collaboration by these groups with public organizations.

### 2. Major Activities

JICA collected and analyzed training and other materials used during the Great East Japan Earthquake [➡ See the Case Study on page 97]. Based on that analysis, JICA proposed a new international disaster cooperation approach aimed at creating a "Disaster-Resistant, Flexible Society." The three points of the approach are 1) The ability to recognize risk and take action properly (Risk Literacy), 2) mitigating the risk of disaster by formulating disaster measures for multiple cases and including a disaster prevention perspective of activities in other fields (Redundancy) and 3) continuously upgrading disaster measures to adapt changes in society and scientific verification (*KAIZEN*).

Among other activities, major flooding occurred in Thailand for more than three month commencing in July 2011. The flooding affected as many as 2.3 million people. Industry, including Japanese-affiliated companies suffered serious damages. JICA quickly dispatched investigative and expert teams and pumper trucks, implementing an emergency response and activities to support recovery and reconstruction [➡ See the Case Study on page 15 and 139].

## Climate Change Measures

### ■ Overview of Issue

The issue of climate change has an impact on the entire infrastructure of human life, including the ecosystem, society and the economy. It is a global challenge that poses an enormous threat to equitable economic growth, poverty reduction and human security. Recently, phenomena considered as negative effects of climate change, such as the submersion of coastal lowlands due to rising temperatures and sea levels and increases in extreme weather and natural disasters including droughts, torrential rain, floods, and declines in food production and water resources, have been reported in various places. The impact of climate change is expected to seriously affect our lives more intensively and extensively in the future.

### ■ JICA Activities

#### 1. Supporting Efforts for the Reduction of Greenhouse Gases

In recent years, greenhouse gas emissions from developing countries have been increasing rapidly. In order to minimize the negative effects brought by climate change, it is essential that the ongoing efforts to reduce emissions of greenhouse gases or "mitigation measures," involve not only developed countries but also developing countries.

For developing countries faced with a large number of issues including poverty reduction, it is important to take an approach that both reduces greenhouse gas emissions and bears benefits such as improvements in livelihood and economic development.

JICA extends cooperation in areas including the introduction of renewable energy, promotion of energy saving, improvement of urban public transportation system, solid waste management, forest management and support for afforestation. JICA also provides extensive support for the formulation of policies and strategies, such as development of national greenhouse gas inventories, establishment of energy-saving laws and low-carbon urban development.

## 2. To Protect People in Developing Countries from the Negative Impact of Climate Change

Developing countries, and the poor in particular, are extremely vulnerable to the impact of climate change.

JICA provides support to adaptation measures in accordance with each country's needs. These include developing capacity in shore protection and embankments, construction of drinking water supply facilities, appropriate management of water resources, ecosystem protection, promoting irrigated agriculture and dissemination of drought-resistant agricultural crops.

Furthermore, JICA is formulating and implementing adaptation measures tailored for each region and country based on meteorological observation, climate change prediction and impact evaluation. Such cooperation will become increasingly important in the future.

The climate change issue is closely related to a variety of issues faced by developing countries in such areas as energy, transportation, forests, water resources, disaster prevention, agriculture, and health and sanitation. For the developing countries, the climate change issue is inseparable from development.

By drawing on past experiences and achievements in supporting sustainable development, and on the basis of international discussions, JICA provides support for climate change measures in developing countries from a number of angles, from the policy level to implementation of projects, research, etc., while collaborating with concerned domestic and international organizations.

### Case Study

### Lesson from the Great East Japan Earthquake

## Sharing the Experience of the Major Earthquake with the World

**The March 2011 Great East Japan Earthquake and following tsunami caused enormous damage primarily to Eastern Japan as well as great loss of life. After the disaster, JICA opened up its research facilities as evacuation centers for the victims of the disaster and cooperated with the aid efforts of NPOs active in the disaster region and with the tsunami damage assessment efforts of Tohoku University and other institutions. Furthermore, JICA took action to apply the experience of this major earthquake to disaster prevention measures in developing countries. Cooperating with Tohoku University in conducting a survey and study to review the experience gained and lessons learned from the Great East Japan Earthquake, JICA is making efforts to reflect those lessons in its operations and share them with others.\***



Mr. Saroj Jha, Ex-Manager of the World Bank's Global Facility for Disaster Reduction and Recovery exchanges opinions with others at the Disaster Measures Headquarters in Higashi Matsushima's City Hall.

### Three Approaches

In Japan, disaster plans are formulated by establishing a scenario of the damage that would be done by a possible disaster, and then combining hardware and software to create a disaster plan and prepare countermeasures. Hardware includes such measures as building levees and dams, while software covers non-structural measures, such as disaster drills, warning systems, and disaster prevention education. Despite this thorough approach, regions and communities that had taken these measures suffered substantial damages in the Great East Japan Earthquake. This result forced Japan to recognize that implementing various measures was not enough, it was necessary that the measures be effective. The survey and research done by JICA aimed to review the major cases of damage done by the major earthquake and produce a list of points regarding "the necessary perspective for implementing effective disaster measures."

As a result of the study, the team considered that there were various gaps between the expected capacity of regions and communities to respond to disasters at the planning stage and at the point of occurrence of a disaster. Furthermore, they discovered that developing countries had these gaps in common with Japan.

In response, JICA set its disaster prevention cooperation goal as the "establishment of disaster-resilient communities." To reach this goal, it is important to fill in the gaps in planned and actual capacity. JICA formulated an integrated approach based on an overall strategy of reducing the risk of disaster. The approach incorporates three points of view—*KAIZEN*, Risk Literacy, and Redundancy—and has been termed the Three Principles Approach.

### Mainstreaming Disaster Risk Management

Within the Three Principles Approach, redundancy measures are particularly important, and therefore require adequate discussion. In

developing countries, it is not easy for the disaster prevention center alone to invest sufficient funds to deal with all issues. However, if a disaster prevention perspective is added to road, harbor, and other infrastructure management, it is possible to further reduce disaster risk.

Adding a disaster risk management perspective to various fields in this manner is called disaster risk reduction mainstreaming. Other countries providing aid to developing countries besides Japan have also begun to promote this concept. The question now is what is the most effective method of achieving disaster risk reduction mainstreaming. Collaborating with developing countries and other aid-providing institutions, JICA intends find answers to that question and contribute to reducing disaster risk.

\* [http://www.jica.go.jp/english/operations/thematic\\_issues/water/earthquake/index.html](http://www.jica.go.jp/english/operations/thematic_issues/water/earthquake/index.html)

# Rural Development — Addressing Global Food Security and Poverty



Of the eight Millennium Development Goals (MDGs), relevant goals are shown in color.

In 2011, the average price of food was as high as in 2008 when a big increase in the cost of food created a serious problem. One cause is structural due mainly to the vulnerability of international markets to the effects of rising demand for grain in emerging countries and restrictions on export to certain regions. More costly food was probably caused as well by short-term factors like unfavorable weather in the Horn of Africa and other regions. Other factors include a sharp increase in the cost of energy resulting from political instability, such as the Arab Spring, in oil-producing regions and other events. Rising food prices pose a threat to the food security of developing nations. High food prices are having a particularly severe impact on the urban poor and on small farmers and fishermen who cannot even produce and catch enough food to meet their own needs.

JICA is providing cooperation to address the issues of agricultural, maritime and rural development. The goal is to contribute to the MDGs of “eradicating extreme poverty and hunger” by offering aid involving food production, food supply and nutrition to the residents of both rural and urban areas.

## Agricultural and Rural Development

### Overview of Issue

The environment surrounding agricultural and rural development has been diversifying because of such factors as the rapid advance of globalization, export restrictions imposed on agricultural products due to poor harvests, climate change, skyrocketing food and crude oil prices, growing demand for biofuels, global competition for farmland, and post-conflict rehabilitation. In many developing countries farmers account for the majority of the population and three-fourths of impoverished people live in rural areas. As a result, rural residents in developing countries are greatly affected by these changes.

### Stable Food Supply

According to an estimate by the Food and Agriculture Organization of the United Nations (FAO), the number of people in developing countries suffering from malnutrition reached one billion for the first time in 2009. This was a reflection of a sharp increase in food prices and the subsequent global economic crisis. In 2010, this number remained high at 925 million. It will therefore be difficult to achieve one of the targets of Goal 1 of the MDGs, namely to “Halve, between 1990 and 2015, the proportion of people who suffer from hunger.”

Consistently providing people with the food that they need (food security) is the foundation for economic and social stability and an important policy issue. However, the food security of many developing countries is easily affected by unstable climates due to such factors as lack of government planning and implementation capacity, underdeveloped agricultural infrastructure, low levels of production technology, and inadequate distribution systems, so that their citizens are exposed to threats of food security.

Consequently, this situation impacts health deterioration,

causes the outflow of valuable foreign currency to pay for food imports, and accelerates urban shifts as well as the abandonment of farming. This in turn leads to a worsening of poverty in urban areas, which is one a contributory factor to a country’s social and economic instability.

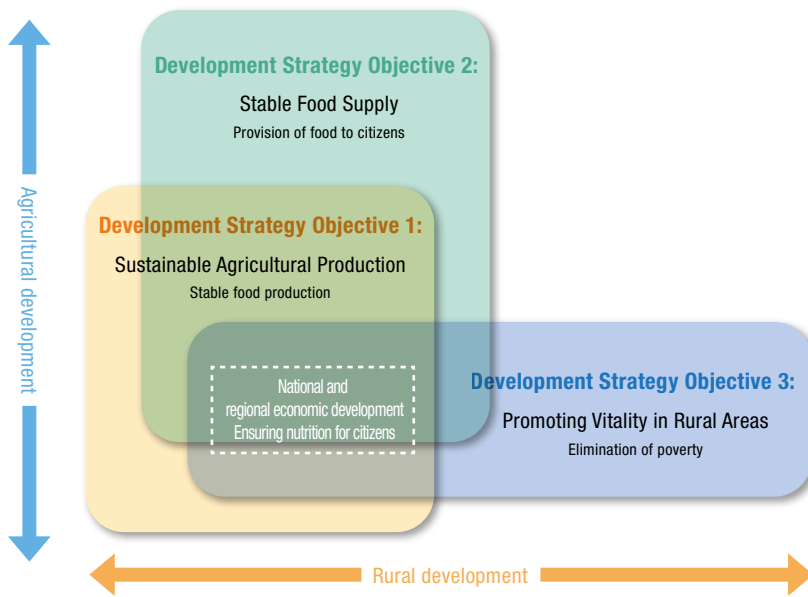
### Reducing Rural Poverty

According to analysis by the World Bank covering the four-year period since 2008 that was announced at the end of February 2012, at the current rate of decline, the number of people who live on below \$1.25 a day will still be about 1 billion even in 2015 compared with 1.29 billion in 2008. In addition, there are major disparities between the rates of poverty reduction in different regions. According to the World Bank’s extreme poverty monitoring survey data for 2005-2008, the \$1.25-a-day poverty rate in Sub-Saharan Africa is 47%, or almost half, of the total population. In regions such as South America and Southeast Asia, self-sufficiency rates for major grains have improved somewhat and the urban middle class is growing. In these regions, there is a need to devise ways to narrow the increasing economic gap between urban and rural areas.

### JICA Activities

JICA’s assistance in agricultural and rural development aims to ensure a stable food supply to people in both rural and urban areas, reduce poverty in rural communities and thereby drive economic development at national and regional levels. Through these activities JICA strives to contribute to achieving Goal 1 of the MDGs. Sustainable agricultural production is the basis of food security. This production is also the premise for reducing poverty by providing a stable food supply nationwide through the supply of food to urban areas as well as by reducing food shortages in rural areas.

## Agricultural and Rural Development Assistance Objectives, Philosophy and Goals



For this reason JICA has established the following three specific cooperation objectives.

### 1. Sustainable Agricultural Production

Risks involving the food supply are a complex combination of short-term factors, such as poor harvests owing to bad weather and accompanying speculation, and long-term factors, such as population growth in emerging countries, changes in the demand structure in those countries, limitations on production resources such as land and water, vulnerability to climate change, and competition between rising demand for biofuel and food. As a result, dealing with these issues requires determining measures for each cause based on the differing circumstances of each region. JICA is aiming to achieve sustainable agricultural production in order to address these diverse problems.

In its approach to enable stable agricultural production, first, JICA provides support for drafting agricultural policies that reflect the characteristics of the partner country's overall agricultural sector. Based on these policies, JICA assists in the improvement of agricultural management. Initiatives include establishing, maintaining, and managing infrastructures for agricultural production such as irrigation systems; improving the procurement and use of seeds, fertilizer and other agricultural production materials; and establishing and utilizing production technology for grain, livestock and other items while supporting institutional strengthening of associated organizations.

In addition, JICA has started examining and taking actions regarding increasing the resilience of agriculture to climate change. Activities include the development of second-generation biomass energy, which does not compete with food production; establish stockpiling systems; use agricultural statistics and introduce weather insurance.

Africa accounts for the largest portion of people suffering

from malnutrition in the world (29% of the total population in 2008), and is in the greatest need of increased food production. The amount of rice consumed in Africa is growing rapidly and there are excellent prospects for achieving sustainable growth in rice production. Therefore, rice is believed to be the key to eradicating food insecurity on the continent.

With other donors, JICA launched an initiative called the Coalition for African Rice Development (CARD) in 2008. The goal is to double rice production in Africa from 14 million tons to 28 million tons over the 10-year period ending in 2018. To reach this target, JICA is supporting the formulation of National Rice Development Strategies in the 23 rice-producing countries in Africa and providing assistance for boosting rice production in line with the strategy of each country. In the CARD first group of 12 countries, rice production increased 30% from 11.96 million tons in the 2007 reference year to 15.64 million tons in 2010.

### 2. Stable Food Supply

Sustainable production is the premise for the provision of a stable food supply to the people of a country. In addition, ensuring a stable supply requires the establishment of food supply and demand policies for an entire country that reflect international food security. Creation of a framework for food imports and the proper use of food aid are also necessary.

For example, Mozambique is in a tropical savanna that has immense potential for expanding agricultural production. Here, JICA is implementing triangular cooperation with Brazil, which has become one of the world's leading exporters of agricultural products through the development of its *Cerrado*, which is also a tropical savanna. This cooperation is aimed at alleviating poverty among small-scale farmers and reducing domestic food problems. In addition, the "responsible investing" initiative by



As part of measures to deal with frequent droughts, a study was performed to select prospective sites for the construction of small irrigation facilities with the participation of nearby residents. The study also included confirming activities of agricultural organizations, the potential for agricultural land, crop growing during droughts and responses to droughts, and other items (preparatory survey for Sustainable Smallholder Irrigation Development and management in Semi-Arid Lands Project (SIDEMAN-SAL) in Kenya).

private-sector companies is being used so that medium and large-scale farmers can enter international food markets. As a result, this contributes to international food security. In Ethiopia and Kenya, which suffer from frequent droughts, JICA is doing more than providing emergency and welfare measures to assist in the proper use of food aid. JICA has also started providing support to increase the capacity of these countries to produce and maintain a stable supply of food through their own efforts.

### 3. Promoting Dynamic Rural Communities

For rural development in order to reduce poverty, it is important to aim for achieving social changes and invigoration in rural villages from the standpoint of developing agricultural economies and enhancing the livelihood of people. Accomplishing this goal requires going beyond simply raising productivity. Agricultural management must be improved, too.

For instance, the distribution and sale of food must be improved, the food processing sector energized, export promotion measures strengthened, and non-agricultural income increased.

Furthermore, support is needed that brings together a diverse range of fields. Local administrative functions must be strengthened and rural infrastructures such as community roads and drinking water supplies established. The rural living environment must be improved and level of health and education for residents upgraded. Other examples of support are the participatory development of rural areas and elimination of gender disparities.

To stimulate rural development, JICA helps local administrative institutions to draft development plans with the participation of rural residents, for the establishment of implementation systems that enables the community to raise

#### Case Study

### Afghanistan Project for the Development of Wheat Breeding Materials for Sustainable Food Production

#### Fostering a Frontier Spirit for the “Second Green Revolution”

**JICA positions the development of agriculture, Afghanistan’s core industry, and rural villages as the highest priorities in this country. JICA is providing aid with the aims of building a foundation for the sustainable and self-reliant development of agriculture and rural villages in Afghanistan.**

#### Food for Life: A single seed can save the world

A diverse agricultural infrastructure and sustainable training for people are needed to enable farmers to grow crops that can support stable lives. Land (farmland) and water (irrigation) must be maintained and managed, crops must be grown properly based on accurate information, and other measures are necessary. Seeds are one of the most vital elements from the standpoint of farmers. They require access to seeds (varieties) that are well suited to the region’s natural, social and economic environments in order to produce consistent yields.

Due to conflict that has been going on for more than 25 years, Afghanistan has lost systems for the preservation of genetic resources and improvement of varieties. This

is true even for wheat, which is the key element for food security in this country. Many farmers in the country must deal with difficulties created by frequent droughts and floods. Since they use low-yielding varieties, these farmers must use traditional methods that produce unstable harvests according to the amount of rainfall. Furthermore, there is a severe shortage of researchers and scientists in Afghanistan who play a central role in improving agricultural technologies. There are also very few extension workers who can disseminate new technologies to farmers.

To deal with these problems, JICA is implementing the Project for the Development of Wheat Breeding Materials for Sustainable Food Production from April 2011 to March 2016 under the Science and Technology Research Partnership for Sustainable

Development (SATREPS) with the Japan Science and Technology Agency (JST). The project involves scientific cooperation through joint research with research institutions in developing countries for the use of Japanese technologies to solve global issues. The Afghanistan Ministry of Agriculture, Irrigation and Livestock is the

counterpart agency for this project. JICA is also collaborating with the Kihara Institute for Biological Research at Yokohama City University, the University of Tottori, RIKEN, CIMMYT and ICARDA for this project. The project is training young researchers in Afghanistan who can contribute to developing a wheat breeding system for the sustainable production of food.

Specifically, this program is attempting to combine modern and old varieties of wheat to develop a new variety that is highly resistant to droughts and diseases. The project uses the genetic resources of conventional wheat that was collected in Afghanistan in 1955 by the Karakorum and Hindu-Kush expedition (led by Dr. Hitoshi Kihara) as well as seeds of wild wheat (stored at the Kihara Institute for Biological Research), the ancestor of this conventional wheat. Japanese scientific technologies are used for analysis of the properties of these historically and globally valuable genetic resources. The project to develop useful wheat germplasm that can withstand droughts and diseases using Afghan genetic resources preserved in Japan is moving forward under Japan’s leadership at research institutions in Japan and other countries.

In November 2011, wheat genetic resources from Afghanistan returned to Kabul for the first time in more than 50 years. Currently, researchers in Afghanistan are conducting experiments with these seeds. It is expected that the people who were trained by this project and the new wheat variety seeds may contribute to an increase in wheat harvests in Afghanistan in the near future.



Agricultural scientists study methods for growing wheat

income and improve people's livelihood, as well as for improving the distribution and sale of agricultural products.

In the Philippines, for example, in order to support farmers who have acquired new farmland in the course of the currently ongoing agricultural reform, JICA has been providing Loan Aid for communities consisting of benefitting residents for more

than 10 years. Aid is aimed at developing infrastructure facilities such as irrigation facilities, postharvest treatment facilities, and access roads to markets in an integrated manner, while also improving agricultural productivity and increasing the income level of farmers by strengthening agricultural cooperatives and irrigation associations. As a result, there have been

## Case Study

### Iraq Improving and Disseminating Horticultural Technology in the Kurdistan Region

## The First Technical Cooperation Project in Postwar Iraq—The First Step to Revitalizing the Agricultural Sector

**In Kurdistan region of Iraq, agricultural technologies have not been passed on to young farmers due to the devastation of rural villages caused by political pressure and turmoil during the regime of Saddam Hussein. In response to a request from the Ministry of Agriculture and Water Resources, Kurdistan Regional Government, Iraq, JICA decided to implement a Technical Cooperation Project for the improvement and dissemination of horticultural technologies that can contribute to increasing income of farmers.**

### Suitable Horticultural Technologies That Respond to Market Needs

The Project on Horticulture Technology Improvement and Extension started in August 2011. The project's purpose is to ensure that "horticulture technologies suitable to local agricultural conditions are disseminated to target farmers to respond to market needs." This is the first JICA Technical Cooperation project since 2003 that includes the dispatch of Japanese experts in Iraq.

These experts and their counterparts are struggling to verify the project's purpose and disseminate the outcome, working on establishing the seamless collaboration of the Ministry of Agriculture and Water Resources and three directorates in each governorate: the Directorate of Agricultural Research, Directorate of Horticulture and Directorate of Extension.

### Initiatives for Rural Villages Revitalization and Farmers Returning Home

At one time, the Kurdistan region was one of the prime agricultural regions in Iraq. However, rural villages were destroyed and farmers were forced to leave during the rule of Saddam Hussein and the following period of conflict. Consequently, many villages are no longer able to pass on technologies and

experience from one generation to the next.

To resolve this problem, the Ministry of Agriculture and Water Resources is taking actions to foster the development of farmers. Within Iraq, rainfall in the Kurdistan region is relatively high at 300mm to 1,200mm each year. The region has much potential for high agricultural productivity as a result. Farmers could obtain cash income by cultivating and selling horticultural crops (fruit and vegetables) even in small fields by adopting intensive cultivation. That means these crops can help improve the livelihoods of rural village residents. Based on a thorough understanding of the advantages of horticultural crops, the Ministry of Agriculture and Water Resources has been supplying vegetable farming facilities, new varieties of fruit trees and other materials with the aim of revitalizing rural villages and bringing farmers back to these villages.

However, the ministry has not been able to sufficiently update farming to suitable technologies, educate people involved with farming or establish a system for agricultural extension services.

### Moving Forward Together Step by Step

In response to this problem, as part of the project, JICA sent experts from Japan. These

experts are working at the Ministry of Agriculture and Water Resources and they are careful to work together with their counterparts at the ministry to plan project activities one by one. Furthermore, they are trying to encourage the counterparts to execute the activities by themselves to enable them to gain experience. This process is exactly the same as the passing on of technologies and experience from generation to generation that used to take place at many rural villages before.

To conduct a baseline survey, a Survey Committee was established at the ministry. JICA experts worked with ministry personnel and counterparts throughout the Kurdistan region for each step from selecting survey items to preparation of the survey forms. These experts also assisted their ministry and regional counterparts with interviews of about 300 farmers in each governorate and other survey activities. The aim was to achieve sustainable and self-reliant capacity improvement without relying on the experts. Furthermore, the analysis of survey results and preparation of reports are also being performed jointly with the Japanese experts.

Tests to evaluate the adoptability of technologies as well were determined by the experts and counterparts. This too is a step to enable the counterparts to gain knowledge and reach conclusions on their own.

Due to the difficult situation in security in Iraq, the experts use bulletproof vehicles to travel around the three governorates in the Kurdistan Region covered by this project. They extend support for building an implementation framework that enables people in each governorate to take the lead in planning, executing and monitoring project activities. Although this is a time-consuming process, the experts are working hard so that counterparts at the Ministry of Agriculture and Water Resources can acquire first-hand experiences one by one and will have the skills to continue these activities on their own after the project ends, with the cooperation of JICA headquarters and the JICA Iraq Office.



Visiting a location in Sulaymaniyah where seedlings are grown



A test plot at an agricultural research center in Dohuk

improvements in water distribution for irrigation and market access for ARC and the livelihoods of residents have gradually improved, too.

## Fisheries

### Overview of Issue

Fisheries resources from the oceans, rivers and lakes are important sources of food for people in developing countries that can be acquired at a relatively low cost. Nearly 20% of animal protein intake in developing countries is dependent upon fisheries, according to FAO. The fisheries industry is also a valuable means of securing food and livelihood for people without land or steady income. It provides a valuable livelihood for poorer segments of the population and women as well. Developing countries account for 50% of the world's exports of fisheries products in monetary terms and 61% in volume terms, making this industry vital to the economies of these nations.

Global production volume of fisheries products increased almost sevenfold between 1950 (approximately 20 million tons) and 2008. However, production volume of marine fisheries reached a peak in the 1990s and the use of marine resources has been at the limit since then. Amid increasing pressure on natural resources, production volume in the fish farm industry has continued to grow since the 1990s, and now accounts for one-third of total fisheries production.

Even in the developing countries the decline in marine resources due to overfishing and the destruction of the environment is a serious problem. However, the concept of

resource management has not yet been sufficiently disseminated to fishermen, and as people who face hard living conditions they have a strong tendency to prioritize immediate benefits. Therefore, it is not easy to manage fishing activities effectively at a sustainable level. Managing and preserving fisheries resources and encouraging a sustainable fisheries industry are key challenges.

### JICA Activities

While being a key sector for developing countries, the fisheries industry faces the problem of resources diminishing and becoming depleted through poor management and environmental degradation. Chronic poverty and other issues in coastal fishing villages are also problems. It is important not only to develop the fishing industry but also to develop the fishing villages in order to improve the livelihoods of the people.

JICA's cooperation in the fisheries industry has three main objectives: ensure the stable supply of food to local people, eliminate malnutrition by providing valuable nutrition and reduce poverty by providing a livelihood to the poor. Appropriate preservation and management of fisheries resources are prerequisites to achieving these objectives and key to the development of fishing villages based on sustainable utilization of these resources. JICA has established the following three goals for its cooperation.

#### 1. Vitality in Local Fishing Communities

Bringing vitality to fishing communities to alleviate chronic poverty requires a comprehensive approach. One element is

#### Case Study

### Morocco Fishery Resources Management for Artisanal Fisheries

#### Artificial Reefs Yield Benefits for the Fisheries Industry

**The depletion of fishery resources caused by overfishing has become a problem in Morocco in recent years. In response, the Ministry of Agriculture and Fisheries has shifted its stance. Previously, the ministry encouraged the development of the fisheries industry to increase the supply of fish. But now the ministry is focusing on sustainable fishery resources development based on the proper management of resources. JICA is assisting in these activities by sending experts to Morocco to help small-scale fisheries to start using fishing methods based on resource management.**

Fishery is one of the major industries of Morocco and small-scale fisheries account for about 35% of people who directly work in this sector. In economically vulnerable small-scale fishing villages, there is an urgent need to improve the livelihoods of fishermen while introducing fishing practices based on sustainable resource management.

JICA has assisted in the implementation of sustainable resource management for fishery at four fishing villages between April 2008 and March 2012. To provide this support, JICA sent experts in fishery resources management for artisanal fisheries to Morocco. Activities

also helped energize and strengthen the fisheries industry organizations and increase the income of fishermen.

An artificial reef has been used for the first time as a method of resource-management for fisheries in Morocco. The reef protects fishing areas by blocking the entry of illegal fishing boats. Benefits thus far include the recovery of major species of fish, which had largely disappeared, and the creation of a new ecosystem. Small-scale fishermen as well as government officials were very impressed as a result.

Fishermen played a central role in these



A meeting about an artificial reef project created by fishermen, including information about the location and period when fishing will be prohibited

activities, but many associated institutions such as fishing research institutions were also effectively brought into the project from planning to implementation. People recognized this approach as a useful resource management method and it was voluntarily implemented in other areas, too.

Furthermore, plans are currently being made to work with other donors in order to extend this program beyond the fishing villages in this project to all regions of Morocco.



support aimed at stabilizing household incomes by giving people a correct understanding of sustainable fishing and selecting appropriate technologies. This approach must also include the vitalization of agriculture and other industries along with the provision of education and health services and other social development programs.

JICA supports efficient management and cost reduction of fishing activities by such measures as the construction of fish markets and strengthening of fishermen organizations [🔗 See the Case Study on page 102]. JICA also works to improve the capacity of fisheries organizations as well as activities by women's groups in small fishing villages, from fish processing to sales.

## 2. Stable Food Supply (Effective Utilization of Fisheries Resources)

Developing countries face the serious problem of food shortage due to rapidly rising populations, which puts further pressure on capturing fisheries resources.

JICA supports the development of extensive fish farming using traditional low-cost techniques from the perspective of securing animal protein intake in light of the severe conditions of marine resources. In inland water aquaculture, JICA supports the combination of agriculture and livestock with fish farming for carp, tilapia and catfish by making use of ponds, paddy fields and irrigation canals. JICA also assists with the relatively simple ocean aquaculture of seaweed and shellfish. Elsewhere, efforts are made to construct facilities to promote and proliferate aquaculture and for the integrated human resource development of researchers, engineers, promoters and other human resources in this field.

Because marine products must be refrigerated or frozen for storage, in developing countries where the distribution infrastructure, especially for storage is underdeveloped, these products are often discarded due to deterioration or rotting. JICA is supporting efforts to improve the freshness and quality of marine products and promoting the effective use of marine resources by developing distribution facilities such as fishing platforms and fish markets, and improving the technologies for simple processing of dried-salted products and smoked products, as well as for frozen processing. For example, in Mauritania, JICA is assisting in the quality management of octopus through the dispatch of experts for the classification and quality control of cephalopod products. Most of the octopus caught in Mauritania is exported to Japan. Therefore, providing this support contributed to the safety and stability of the food supply in Japan, too.



JICA is providing aid in Mauritania for the classification and quality control of octopus. This photo shows octopus after sorting by size.

## 3. Appropriate Preservation and Management of Fisheries Resources

Fisheries resources propagate and grow within the natural environment as long as catches can be controlled within certain limits. Fishing must be conducted while holding the use of marine resources to an appropriate level while maintaining volume. It is important to raise awareness among local governments and fishermen. Furthermore, in addition to collecting scientific data and promoting broad cross-border initiatives, it is also necessary to focus not merely on fishing but also on preservation of the marine environment as well as the management of rivers and forests upstream. These efforts to conserve marine resources must be taken from a long-term perspective with consideration of land and marine ecosystems.

JICA supports the formulation of fishing management systems in administration and enhanced operating capacity from the standpoints of fisheries resource management and fish environment preservation. This entails increasing awareness through a participatory approach that includes fishermen and local residents. With the participation of small fisheries, JICA works to regenerate and preserve seaweed beds, which nurture fisheries resources, and to recover resources through artificial production and discharge of experimental seedlings.

## 4. Joint Research Programs by Scientists in Japan and Developing Countries

JICA works with the Japan Science and Technology Agency (JST) to implement the Science and Technology Research Partnership for Sustainable Development (SATREPS), which performs joint research projects with research institutes in developing countries. One objective is acquiring new knowledge that can enable the use of Japan's scientific technologies for solving global issues. Another goal is using the results of this research contribute to society in the future (return to society of specific benefits of research activities). Japan provides cooperation for international joint research involving the latest scientific technologies in the marine products sector, a field where Japan has a relative advantage. In Panama, the decline in the number of wild tuna is a serious problem. In response, the Comparative Studies of the Reproductive Biology and Early Life History of Two Tuna Species for the Sustainable Use of These Resources research project is under way. The aim is to acquire the scientific knowledge (about reproductive biology and early life) needed for the sustainable use of yellowfin tuna and Pacific bluefin tuna. In Thailand, JICA is implementing the Development of Aquaculture Technology for Food Security and Food Safety in the Next Generation Project. The objective is to upgrade technologies for raising fish and shellfish that are resistant to diseases and grow quickly. The project is developing new fish farming technologies needed for the sustainable production of high-quality fish and shellfish that are highly marketable, such as sea basses and tiger shrimp.

# Industrial Development

## Supporting Developing Countries in Promoting Industry and Creating an Economically Independent Society



Of the eight Millennium Development Goals (MDGs), relevant goals are shown in color.

In the field of industrial development, JICA supports the development of the private sector, which serves as an engine for economic growth. While focusing on promoting trade and investment, tourism development, small and medium-sized enterprises development, and the vitalization of local industry and economy, JICA provides broad-ranging support to develop industrial infrastructure in developing countries, including support for the stable supply of electric power, mining, renewable energy, and energy conservation. The objective is to empower developing countries to build industrial bases, advance industry, increase job opportunities and create a society in which local residents can receive benefits from economic development.

Public-Private Partnerships are an important theme in today's global economy. JICA is placing emphasis on cooperation by utilizing Japan's advanced technologies such as in the environment and other sectors as well as yield benefits for industries in both countries.

## Private Sector Development

### Overview of Issue

Efforts to develop the private sector aim to promote economic growth in developing countries by enhancing the capacity of the private sector and local industries. The growth and expansion of private sector corporations and local industries are essential to diversifying and strengthening the competitiveness of industries in developing countries. Improving the investment climate for private firms will contribute not only to energizing industries by making them stronger but also to developing communities by exploiting local resources and the self-fulfillment of the people. The governments of developing countries are being asked to tap the vibrancy of their private sectors from a dynamic and inclusive perspective in order to expand job opportunities and thus reduce poverty.

In addition, the New Growth Strategies of the Government of Japan require building stronger ties between Japan and countries in Asia and other areas with rapidly growing economies. This is another reason for the increasing importance of private-sector development.

### JICA Activities

JICA's private-sector development initiatives have so far centered on Southeast Asia and East Asia. Today, both of these regions are experiencing tremendous economic growth. In light of this fact, there is an increase in requests from Africa to learn from the experiences of Asian countries.

The volume of trade and investment in the global economy has risen substantially due to globalization. Asian countries that have grown into emerging economies on the world stage, as well as many developing countries in Africa and other regions, are actively taking part in international frameworks such as the World Trade Organization (WTO) and Economic Partnership

Agreements (EPA).

On the other hand, economic globalization has increased the likelihood that one country's economic crisis will spread quickly, widely and significantly damaging the economies of vulnerable countries and regions, as witnessed in the global financial and economic crises that struck in autumn 2008 and the instability in a number of Middle Eastern countries since early 2011, and the negative effects of the Great East Japan Earthquake on the economy of developing countries. As globalization progresses, JICA supports developing countries in building their industrial bases, increasing job opportunities and creating societies that can reap the rewards of economic development through their own efforts.

### 1. Promoting Trade and Investment

By increasing trade and promoting investments, developing countries can create new markets, introduce expert knowledge such as finance and management know-how and technology, create jobs and strengthen international competitiveness.

JICA can provide comprehensive support that extends from industrial policies, a high-level form of cooperation, to the implementation of programs to increase exports and investments. Assistance is extended from three perspectives. First is aid for the development of industrial bases. This involves creating legislation in areas such as intellectual property rights and certification of standards that are needed to promote trade and investments. This perspective also includes establishing the physical infrastructure for industrial progress. Second is aid for organizational/institutional reinforcement, which covers institutions that play key roles in trade and investment promotion. Third is aid for capacity development for government officials who create and implement policies and for people in the private sector.

Recent successful projects include the Project on Enhancing

the Investment-related Services of Council for the Development of Cambodia, the Project for Strengthening Intellectual Property Rights Protection and the Project on Strengthening of the Utilization of the Indonesia-Japan Economic Partner Agreement in Indonesia, and the Project on Strengthening the System and Operation on Standards and Conformance in Viet Nam. Furthermore, to enable aid activities to assist the overseas

operations of Japanese companies, JICA sends many investment policy advisers to provide advice to the investment promotion agencies of other countries.

In Cambodia, JICA has supported the establishment of a special economic zone (SEZ) on approximately 70ha of land near Sihanoukville Port, the country's only international port. The SEZ is expected to attract foreign direct investment for the

## Case Study

## Indonesia Project for Promotion of Clean Coal Technology (CCT)

### Aid for the Adoption of High-Efficiency, Low-Carbon, Low-Pollution Coal Power Generation Systems

**While Indonesia is the second-largest supplier of coal to Japan, demand for coal is increasing within Indonesia as well due to rapid growth in demand for electricity resulting from the country's economic growth.**

**JICA is extending assistance for the introduction of Clean Coal Technology (CCT) that utilizes technologies for highly efficient coal power generation systems with the aim to assist Indonesia effectively use its coal resources while lowering GHG emissions and pollution.**

#### Using Coal Efficiently with Minimal Environmental Impact

Coal accounts for about half of the world's energy. Demand for coal is growing rapidly in emerging countries and has reached the point where even China, the world's largest producer of coal, was also the world's largest coal importer in 2011.

Japan, formerly the world's largest coal importer, relied on coal for about 25% of its electricity. However, coal has become even more important to Japan due to increased dependency on coal-generated electricity following the Great East Japan Earthquake.

As Indonesia is the second largest supplier of coal to Japan, the governments of the two countries have established a close, multi-tier relationship through policy discussions and collaborative projects regarding the use of coal.

JICA has been extending cooperation in Indonesia for the efficient use of coal along with assistance for developing geothermal power plants and promoting energy conservation. In April 2011, JICA started implementing a project to promote the use of CCT that takes advantage of the Japan's latest technologies.

#### Incorporating Technologies of the Future for 50% Power Generation Efficiency

CCT encompasses a broad range of environmentally friendly coal use technologies for reducing CO<sub>2</sub> and other emissions from activities extending from coal mining to power generation and the disposal of waste materials. Reducing emissions from coal-fired power generation was the focus of this Technical Cooperation in Indonesia. The primary objective was to utilize technologies in the manner best suited to Indonesia for high-efficiency power generation that significantly cuts emissions of CO<sub>2</sub>, oxides of sulfur and nitrogen, and other gases.

The thermal efficiency (net, LHV) of sub-

critical coal-fired power plants, the primary means of generating electricity from coal, is about 36%. Ultra-supercritical coal-fired power plants, which generate electricity using steam with higher temperatures and pressure, have the potential of raising efficiency to 42%. Japan has the world's most advanced technologies and accomplishments in this field, and also leads the world in research involving integrated gasification combined cycle (IGCC) power generation, in which coal is turned into a gas for combustion and then both steam and exhaust gas are used to generate electricity. This technology of the future aims to boost thermal efficiency to 50%.

For the implementation of CCT in Indonesia, JICA has provided suggestions concerning the formulation of medium and long-term policies. This includes the establishment of a roadmap extending to the use of IGCC as well as basic studies for a model power plant development plan.

As part of these activities, a seminar was held in November 2011 at the JICA Research Institute International Conference Hall on Indonesia's electric power policies, electric power development plan and plan for promotion of the introduction of CCT. The seminar was attended by representatives of the Indonesian Ministry of Energy and Mineral Resources, State Electricity Company (known as PLN, Indonesia's government-owned power



A seminar to discuss the latest developments in Indonesia regarding the implementation of CCT (November 2011)

company), the Japanese government, and power companies in Japan. At the seminar, representatives of PLN stated that, based on the recommendations of this project, they plan to start ultra-supercritical thermal power generation in about 2016. They also have a plan to study the use of IGCC as early as 2025, depending on the status of commercial use of IGCC in other countries. JICA's suggestions are anticipated to be reflected in the official electric power development policy of the Government of Indonesia.

JICA is also supporting the use of CCT through financial cooperation. One example is the provision of an ODA Loan for construction of the Indramayu coal-fired power plant (ultra-supercritical), which is scheduled to begin operations in about 2018. This cooperation facilitates the transfer of Japan's advanced technologies while also helping secure stable energy resources by strengthening the relationship between Indonesia and Japan.

#### A View from Our Partner

#### Indonesian official involved in policymaking

A reliable supply of electricity is vital to improving the living standards of the people of Indonesia. With our economy now posting strong growth (Indonesia's economic growth rate marked 7.5% in 2011), the importance of electricity is now even greater. Building coal-fired power plants is critical in Indonesia in order to meet this demand for electricity while using our natural resources effectively. However, we must also keep in perspective to reduce the environmental impact of these plants, such as by cutting down on CO<sub>2</sub> emissions.

Consequently, the cooperation for our formulation of a plan to start using CCT by about 2025 was very timely. I hope to see the results of this plan incorporated in upcoming activities to build coal-fired power plants. Using CCT will be important regarding the effective use of coal resources, lowering GHG emissions and maintaining a reliable supply of electricity, and I look forward to receiving continuous cooperation from Japan.

development of Cambodia's export-related industries, which can generate employment opportunities particularly for young people. The SEZ will also strengthen functions for attracting investments at many levels.

## 2. Promoting Small and Medium-Sized Enterprises

Small and medium-sized enterprises (SMEs) perform many functions and roles in society and the economy, such as conducting distinctive business activities, creating jobs, and helping form economic infrastructures. Consequently, many countries place priority on supporting these enterprises.

However, in developing countries, growth for SMEs has been stifled by the delayed development of policies and institutions that support SMEs, coupled with the lack of corporate networks, insufficient technical and managerial know-how, and poor access to finance. Efforts to train industry human resources that can work in these enterprises are also inadequate.

JICA provides cooperation for strengthening implementation capacity of the government institutions in charge of SME promotion as well as educational institutions, human resource development and improving the quality and productivity (*KAIZEN*) at enterprises. Moreover, since it is difficult for SMEs to receive financing, JICA aims to provide effective support with financial aid offered in the form of ODA Loans.

Recently, emphasis has been placed on extending cooperation for developing countries where large numbers of Japanese firms have established a presence, such as Thailand, Viet Nam and Mexico. This cooperation is aimed at creating a mutually beneficial relationship between the partner country and the Japanese firms operating there. In Viet Nam, for example, JICA is extending comprehensive support to government agencies that promote SMEs, educational institutions, financial institutions and other organizations with the cooperation of Japanese firms in the country, aiming to empower industries in Viet Nam to become supporting industries that supply parts and materials to local Japanese firms, and to cultivate industry human resources that can work at Japanese firms.

JICA also extends cooperation for strengthening of public institutions that provide companies with support services for Japanese business improvement techniques such as "5S" activities and the quality/productivity improvement *KAIZEN* methodologies. In Cambodia, for instance, policy dialogue regarding the roles of corporate support services was carried out in consideration of the results of a model corporation where the 5S and *KAIZEN* methodologies were applied, and these methods were reflected in governmental policy.

Furthermore, JICA is supporting careers at corporations and entrepreneurship for individuals placed in vulnerable positions, such as the families of surrendered soldiers in Colombia.

## 3. Promoting Local Industry and Vitalizing Local Economies

Regional disparities, as an impact of economic growth, have become an important issue in many developing countries.

Developing countries face an increasing need to create local employment opportunities and to promote local industries by vitalizing their local economies. In response to this demand, JICA supports the development of local industry under a program called "One Village, One Product" and encourages the use of local resources in attempt to create employment and promote regional economies.

In Africa, in particular, JICA has announced that the "One Village, One Product" project will be implemented in 12 countries as part of the Yokohama Action Plan released at the 4th Tokyo International Conference on African Development (TICAD IV). Surveys and projects are being implemented in countries such as Malawi, Kenya, Uganda, and Nigeria, where efforts are now being carried out to develop governments' structures for assisting small local producer groups, provide support for accounting and other basic business skills as well as production technologies, and strengthening the collaborative structure that ties together markets and producer groups. Similar programs are also being carried out in Asia, Central America, and South America.

## 4. Tourism Development

Previously the tourism industry in developing countries was led by foreign-capital entities such as tourism developers, travel companies and hotel chains. This is regarded as heteronomous tourism. Although not necessarily adverse, it does not allow local people to fully reap the benefits of this sector.

JICA initiatives aim to promote autonomous tourism development, in which the local people develop the industry under their own steam and sustainably by utilizing their own resources.

JICA provides support in the following areas: (1) promotion of Public-Private Partnerships in which public institutions such as the Ministry of Tourism and local tourist bureaus, private enterprises such as travel companies and guide associations, and local people can work together; (2) nurturing of human resources to convey the necessary know-how to advance tourism; (3) development of tourism products using tourism resources such as places of historical importance or extraordinary scenic beauty in addition to locally produced items such as handicrafts and folk art unique to a region; and (4) strengthening tourism promotion and marketing capacity and the implementation system. Through such support, JICA aims to ensure sustainable tourism that helps realize regional advancement contributing to poverty reduction. This is attainable by increasing the income of local citizens, creating jobs and strengthening the impetus of social harmony.

For instance, in Palestine and El Salvador, JICA is providing support for developing tourism products using local resources and carrying out promotions for those products. In the Dominican Republic, a project called Sustainable Tourism based on Public-Private Partnership is being implemented, which aims to create foundations for tourism development that provide benefits to the local community in a sustainable manner [\[▶ See the Case Study on page 55\]](#).

The Laos Pilot Program for Narrowing the Development Gap towards ASEAN Integration (LPP) (tourism promotion component) aims to rectify disparities among member states of the Association of Southeast Asian Nations (ASEAN). Under this project, JICA is providing support to promote tourism development for Laos, one of the least developed Southeast Asian countries, by utilizing natural, cultural, and historical tourism resources in an appropriate and sustained manner.

In this way, JICA assesses the needs of each country and the condition of local communities and supports tourism development that is necessary and suitable for each country or region.

## Energy and Mining

### Overview of Issue

Momentous changes on a global scale are occurring in the energy and mining sector. In the mining sector, the structure of the market has shifted completely from a buyers' to a sellers' market. Prices of many mineral resources are rising rapidly in response to economic growth in emerging countries and other events. Furthermore, purchasing rare earth metals and other scarce resources has become difficult for geopolitical reasons as well as because of the rapid increase in demand.

Consequently, securing mineral resources has become a major issue for countries around the world.

In the energy sector, the world is shifting to low-carbon energy sources in order to achieve both sustainable economic growth and the reduction of GHG emissions. For example, the United Nations declared 2012 the International Year of Sustainable Energy for All and called on all nations to provide people with inexpensive and efficient access to advanced energy sources, which will also help achieve the Millennium Development Goals. Determining how to supply energy is clearly gaining recognition worldwide as a critical issue for fighting global warming and reducing poverty. However, while some developed countries have a strong commitment to increasing the use of renewable energy sources that are better for the global environment but relatively expensive and less reliable in terms of stable supply, many developing countries are seeking inexpensive and stable energy supplies in order to support steady and sustainable economic growth, revealing a significant gap in perception of the issue.

In Japan, the Cabinet approved the Strategies to Revitalize Japan in December 2011 with the objective to utilize Japan's advanced environmental and energy technologies as the world shifts to a "green" economy.

Assistance for securing low-cost, low-carbon and reliable

### Case Study

## Turkey Support for the Development of Pumped Storage Power Generation

### Japanese Technology in Variable-Speed Pumped Storage Power Generation to Accommodate Peak Demand

Electricity demand in Turkey is increasing at an annual rate of 7% as the economy continues to expand. There are fears that peak demand will exceed the supply of electricity as soon as 2015. Furthermore, due to the addition of substantial output from wind turbines, Turkey must also deal with AC frequency problems and other issues involving the stability of its electricity supply.

The Government of Turkey sought assistance from the Government of Japan, and in response, JICA performed a survey in 2010 to determine the proper composition of energy sources for electricity and create a plan. The survey showed the need to construct a pumped storage power generation system in Turkey. JICA began sending experts to Turkey in 2011 and accepting trainees from Turkey to learn the variable-speed pumped storage power generation system, which is a technology where Japan has a comparative advantage.

Pumped storage systems use surplus nighttime electricity to transfer water from a lower reservoir to an upper reservoir. During peak demand, water flows back down to generate more electricity, in effect, creating a "giant battery." In addition, supplying electricity to the generators transforms them into motors that drive the pumps. With a variable-speed system, the amount of output can be adjusted during power generation and water pumping, which helps maintain consistency of the AC frequency during peak and off-peak periods, and resulting in more efficient use of the power generation system.

Since the 1980s, Japan has been developing the world's most advanced variable-speed pumped storage generation systems, leading to Turkey asking Japan for assistance with this project.

JICA experts started performing a study in 2010. While most of Turkey's electricity came from thermal power plants, the country aimed to increase the use of wind, solar, and other renewable energy sources. However, the seasonal variations between the wet and dry seasons and between summer and winter weather posed challenges. The study concluded that pumped storage is the best



Electric power technicians from Turkey observing the Kazunokawa Pumped-Storage Power Station

choice with regard to meeting peak demand and maintaining the stability and quality of the electricity supply. Two locations were then chosen as potential site for the facility.

Government agencies in Turkey associated with electric power have high expectations for the country's first variable-speed pumped-storage power facility. Starting in 2011, Turkey has received technical advice from Japan regarding its provisional plan. In addition, power company personnel from Turkey were invited to Japan to participate in training sessions held at a variable-speed pumped storage facility. The Turkey Electric Power Seminar was held concurrently to forge relationships between the visitors from Turkey and Japanese power companies and power generation equipment manufacturers.

energy supply in developing countries is a very difficult task but a vitally important mission of a nation like Japan that has advanced and efficient technologies. JICA will provide extensive aid that can produce substantial benefits for developing countries and utilize Japan's strengths in order to achieve peace and sustained economic growth in the world.

## ■ JICA Activities

### 1. Electric Power and Energy

The key aspects of JICA's support in the energy and power sector are, 1) support for sustainable economic growth through the stable supply of electric power, 2) promoting the reduction of greenhouse gas (GHG) emissions by implementing optimal technologies, and 3) promoting rural electrification in view of reducing poverty.

In order to ensure the stable supply of electric power, it is important to develop the systems of power generation, transmission, and distribution facilities in a timely and coordinated manner, as well as to cultivate administrative and technical capacity of human resources. Taking this into account, it is possible to develop electric power facilities in a swift and integrated manner by providing Technical Cooperation for the development and planning of facilities in accordance with each country's unique circumstances and implementing financial cooperation via ODA Loans at the construction stage. Furthermore, providing technical training for the operation and maintenance of power generation equipment allows the people of developing countries to operate their new facilities in a sustainable manner, and realize further benefits from cooperation.

As the global community steps up efforts to reduce GHG emissions, developing countries have also started to increase the use of renewable energy sources such as solar, wind, and geothermal power generation, and high-efficiency thermal generation technologies. With extensive knowledge in these fields, Japan responds to calls to help developing countries reduce GHG emissions in their energy sectors.

Rural electrification projects must reflect the characteristics of people who benefit from these projects. Therefore, it is important to provide assistance for creating and implementing electrification plans that reflects the needs of residents from their viewpoint, the development of local industries and other development plans. Also, due to the shortage of technicians working in power generation and distribution in developing countries, the maintenance and management capacity must be enhanced at the same time.

JICA also implements cooperation in countries that are undergoing reconstruction, such as Rwanda and Sierra Leone, including human resource development that contributes to the management of electric power facilities.

### 2. Mining (Mineral Resources)

Demand for mineral resources has been increasing rapidly along with the economic development of medium-developed countries. A major structural shift has occurred in markets for

these resources that gives sellers rather than buyers the upper hand. Prices are climbing fast and it has even become difficult to secure sufficient amounts of mineral resources without holding ownership of mines. From a different perspective, the boom in demand for mineral resources is creating an opportunity for developing countries with these resources to achieve sustained economic growth. JICA is conducting aid projects in a manner that creates a mutually beneficial relationship for developing countries and Japan. We support systems for the promotion of sustainable mining development and investments as well as for human resource development and the creation of master plans [\[See the Case Study on page 109\]](#). We also advise on environmental countermeasures for mining, development plans for infrastructure taking into account the environment and related industries, and support plans for community development.

### 3. Energy Conservation

JICA provides assistance for the training of energy management technicians in order to support energy conservation efforts using sophisticated Japanese technologies. This program has produced many positive outcomes. For instance, JICA had provided support for the establishment of Energy Manager systems and the education of technicians that can manage thermal and electric power in Thailand, Turkey and Poland. Due to this cooperation in Turkey, the country is able to operate an energy-conservation training center on its own. This center is producing substantial benefits, including its use as a training facility the people of neighboring countries as well.

In ODA Loans, JICA is providing Two-Step Loans\* in India and Viet Nam focused on energy conservation and renewable energies. Two-Step Loans strengthen financing and the ability to establish energy conservation projects, and increase the effectiveness of support by complementing Technical Cooperation. Through this scheme, it is easier to provide financial support for private-sector activities.

\* Scheme where ODA Loan funds provided to development finance organizations of the borrowing nation are used for loans to small and medium-sized enterprises in the borrowing nation.

## JICA Activities Involving Aid for Trade

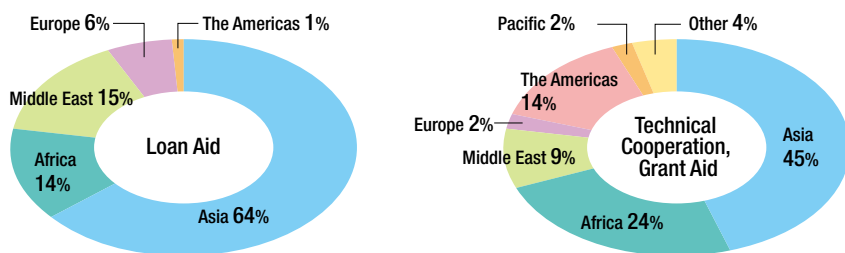
### ■ What is Aid for Trade (AfT)?

AfT refers to assistance provided to developing countries that helps to build supply-side capacity and trade-related infrastructure, so that these countries can benefit from trade expansion and reduce poverty. It will enable these countries to earn trade profits, and consequently, achieve economic growth through these profits.

### ■ JICA Activities

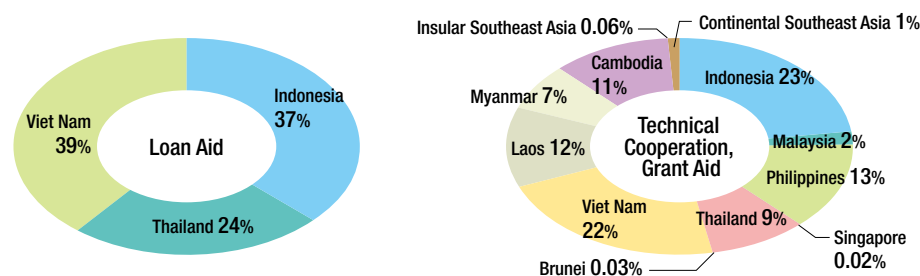
JICA is actively engaged in AfT. Approximately 54% of all ODA Loan projects were devoted to AfT in 2009.

**Figure 1 Breakdown of AfT by Region (2010)**



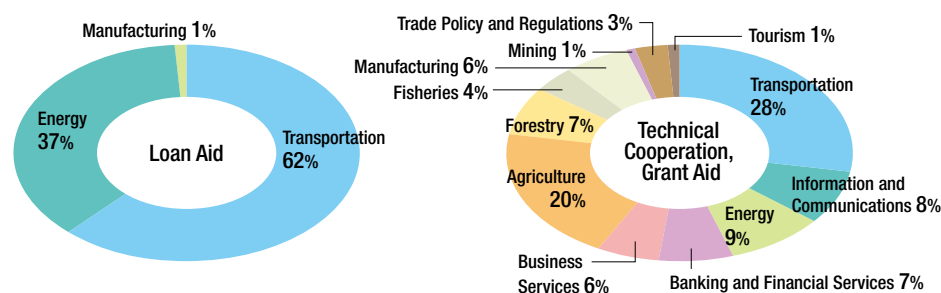
- AfT-related Loan Aid, Technical Cooperation and Grant Aid are concentrated in Asia. In 2010, Asia accounted for 64% of AfT-related Loan Aid and 45% of AfT-related Technical Cooperation and Grant Aid.
- Africa accounted for 24% of AfT-related Technical Cooperation and Grant Aid, second behind Asia.

**Figure 2 Breakdown of AfT by ASEAN Country (2010)**



- Over half of all AfT-related Technical Cooperation in the ASEAN region takes place in Cambodia, Laos, Myanmar and Viet Nam.

**Figure 3 Breakdown of AfT by Industry in ASEAN Countries (2010)**



- JICA focuses on development of economic infrastructure in the ASEAN region with the aim of promoting economic growth that will benefit the lives of every individual.

Note: Figures in the charts are rounded to the nearest whole number. Totals may not add to 100.

**Case Study**

**Oman Project for Energy Conservation Master Plan in the Power Sector**

**Cooperation for Electricity Suppliers Is Followed by Support for Energy Conservation Measures among Users**

Demand for electricity in Oman is expected to increase at an annual rate of more than 10% as the country's population and economy expand.

JICA extended cooperation from 1997 to 1998 for rationalizing systems used by the country's electricity suppliers. Starting in 2012, JICA is providing assistance in creating a master plan for the promotion of energy conservation by users of electricity.

Thermal power plants fueled by gas produced in Oman accounts for more than 90% of the country's electricity. Since electricity rates are low, people have little interest in the conservation of power. However, electricity consumption has been rising rapidly in recent years because of population and economic growth, with demand increasing in Muscat, the capital, and other areas in Oman. During the summer, there are even rolling blackouts at times. As a result, energy conservation has become an important issue in Oman.

From 1997 to 1998, JICA performed a rationalized survey on the electricity supply

and demand management system. In this study, JICA provided advise about a system to mange power in response to changes in the demand for electricity. However, there were no initiatives for the users of electricity.

The Oman Public Authority for Electricity & Water requested Japan's support in improving the management between the supply and demand of electricity by promoting energy conservation among users. In response, JICA started the Project for Energy Conservation Master Plan in the Power Sector in February 2012.

The purpose of the project is to study a Master Plan for energy conservation in Oman



A survey to determine electricity use in Oman

up to 2020. This plan is based on on-site surveys and energy diagnosis to determine electricity use at factories and other business sites, buildings, stores and homes. How to utilize Japan's experience and technologies in energy conservation will be determined. The recommendation may include 1) the creation of standards for energy-efficient products as well as promoting their use, and 2) activities to raise awareness of the need to conserve energy.

# Research — The JICA Research Institute Provides Feedback on Development Work and Input into the World's Development Agendas



Of the eight Millennium Development Goals (MDGs), relevant goals are shown in color.

The JICA Research Institute (JICA-RI) carries out research activities with the main objectives of: conducting analysis of development issues in developing countries and contributing to JICA's operation strategies; and strengthening the transmission of information to Japan and abroad and leading the development assistance agenda; while utilizing the wealth of experience and know-how it has accumulated as a development assistance organization.

The results of this research are published in the form of working papers, policy briefs, books, and are released broadly through websites and other means.

## Basic Policy for Research Activities and Priority Research Domains

The international community has been grappling with the problems facing developing countries—including poverty, armed conflict and environmental degradation—but solutions to many of the most basic problems remain elusive. To promote value-added research aimed at producing policy recommendations, JICA-RI has laid down four basic policies and four key research areas.

### Basic Policies

#### 1. Incorporating a Comprehensive Perspective

JICA-RI will incorporate a comprehensive perspective in its cross-field research and analysis of development issues, encompassing individuals, society, the state and the market.

#### 2. Integrating Past and Future

JICA-RI will conduct studies based on the past experiences and analytic results of development aid organizations worldwide, including JICA, and make them available for use in future aid activities.

#### 3. Sharing Experiences in Japan and East Asia

JICA-RI will analyze the growth experiences of Japan and its East Asian neighbors and explore the applicability of these experiences to other regions.

#### 4. Sharing Information with the International Development Community

JICA-RI aims to be a research institute that is open to both Japanese and international partners, including researchers, aid-implementing organizations, governmental bodies, private-sector corporations and NGOs.

### Key Research Domains

#### 1. Peace and Development

JICA-RI conducts comparative analysis of past experiences to uncover ways to effectively prevent and manage armed conflict, and promote post-conflict peacebuilding. It also

analyses past experiences in regional and international efforts to resolve difficult cross-border problems that cannot be handled by individual countries, such as infectious diseases, transnational crime and environmental degradation.

#### 2. Growth and Poverty Reduction

Japan and its East Asian neighbors are considered economic development success stories, having realized growth and reduced poverty. JICA-RI studies these cases from the multifaceted perspectives of individuals, state, market and society, and conducts comparative analysis with economic development in African countries.

#### 3. Environment and Development/Climate Change

Regional and global environmental deterioration are major threats to human security in developing countries. JICA-RI promotes the formulation of measures to promote environmental conservation and adapt to environmental change caused by climate change using the latest knowledge in natural sciences, and experience and data gained from JICA's field operations.

#### 4. Assistance Strategies

Utilizing Japan's experience and knowledge, JICA-RI makes recommendations on the roles and functions of international cooperation while conducting research on the modalities of assistance based on principles such as the "capacity development" approach aimed at enhancing the capabilities of people, South-South cooperation, organizations and society across diverse domains, and the concepts of "human security" and "dynamic development that benefits all people."

### Research Activities in Collaboration with Other Research Institutions around the World

An overview of these research projects can be found on the JICA-RI website\* along with preliminary findings in the form of working papers. Seventeen working papers in English were



released in fiscal 2011.

Policy briefs are also published in series, which summarize in a concise manner the political and practical implications drawn from the research findings detailed in the working papers. These policy briefs are intended to offer suggestions for the formulation of policies and the consideration of the directions of assistance.

In fiscal 2011, two books by JICA-RI were published by internationally prestigious publishers: *Catalyzing Development: A New Vision for Aid* (Brookings Institution), published in June, presents the results of joint research activities by JICA, the Korea International Cooperation Agency (KOICA) and the Brookings Institution's Wolfensohn Center for Development. In March 2012, *Good Growth and Governance in Africa* (Oxford University Press) was published, reporting on the results of joint research conducted by the Initiative for Policy Dialogue (IPD), a U.S. think tank led by Columbia University Professor Joseph Stiglitz, with the cooperation of JICA.

The results of these research activities have been announced at many international research seminars, academic gatherings and other events. In November 2011, JICA-RI held a side event at the Busan High Level Forum (➡ see Case Study) to present the

results of research about triangular cooperation and South-South cooperation. In addition, JICA-RI co-hosted the East Asia consultation meeting to discuss the contents of the United Nations Development Programme's human development report for fiscal 2012 and 2013. Furthermore, JICA RI prepared a background paper for the World Development Report 2012: Gender Equality and Development.

In conducting research activities, JICA-RI attaches importance to network-oriented research based on partnerships with not only local but also international research organizations and assistance agencies. JICA-RI carries out joint research with the researchers of overseas institutions, such as the World Bank and the Asian Development Bank (ADB), Harvard University in the United States, Oxford University in the United Kingdom, IPD and the Brookings Institution.

In addition to disseminating such information internationally, JICA-RI has also carried out research as the Project History Series, which analyzes Japan's contribution to the development of developing countries from a long-term perspective, and published the research findings in three volumes in Japanese.

\*JICA Research Institute website: <http://jica-ri.jica.go.jp/>

## Case Study

### The Pre- /Main-High Level Forum 4 Conference in Busan, Korea

#### Sharing JICA's Knowledge on South-South and Triangular Cooperation

**The Fourth High Level Forum on Aid Effectiveness (HLF-4) took place in Busan, Republic of Korea, in 2011 from November 29 to December 1, attended by more than 3,000 participants from 156 countries and organizations. South Korean President Lee Myung-bak, U.S. Secretary of State Hillary Clinton, U.N. Secretary General Ban Ki-moon, and other dignitaries discussed issues involving development aid policies**

When the high level forum was inaugurated in 2003, countries and international agencies that were members of the Organisation for Economic Co-operation and Development (OECD) and Development Assistance Committee (DAC) played leading roles. Today, the forum is also attended by various parties including private-sector companies and emerging countries.

JICA RI was represented at the pre- and main events by Director Akio Hosono and two others.

The pre- event, co-hosted by the Korea Development Institute (KDI) and Korea Association of International Development Cooperation (KAIDEC), focused on the theme of international initiatives concerning the aid effectiveness.

At the pre- event the topics discussed are mainly the major themes of HLF-4, including a conceptual debate about the shift from aid effectiveness to development effectiveness, and topics such as development aid methods at emerging donors versus traditional donors, capacity development, and measures to build systems.

At this event, JICA RI Director Hosono gave a presentation on JICA's South-South and triangular cooperation conducted for the past 40 years.

Garnering the most attention was the successful case study of JICA's triangular cooperation, which U.S. Secretary of State Clinton mentioned in her keynote address at the opening ceremony. JICA extended technical and financial assistance to Brazil to

implement a project to transform the country's barren savanna into one of the world's largest agricultural regions. Today, with Japan's cooperation, Brazil is extending aid to Mozambique for growing crops.

In addition, JICA RI Director Hosono spoke on the importance of South-South and triangular cooperation at HLF-4 sessions for specific themes and at a side event held by JICA.



Akio Hosono, Director of JICA Research Institute



**なんとか  
しなきゃ!**  
見過ごせない——55億人

**Nantokashinakya Project**  
**Nan-pro: We cannot overlook 5.5 billion people.**

# Efforts from the Second Year

**The Nantokashinakya\* Project—We cannot overlook 5.5 billion people (Nan-pro), which was started on July 2010, is promoting international cooperation through public participation. The aim of the project is to expand awareness, understanding, support, action and participation in international cooperation, by distributing information in collaboration with organizations involved in international cooperation such as domestic citizen's groups, international organizations, government agencies, corporations, local governments, and educational institutions, in order to spread the concept like a ripple to society-at-large.**

\*"Nantokashinakya" is a Japanese expression used to say that a problem must be solved by using a variety of actions or to express the commitment to achieving a resolution.

Fiscal 2011, the second year of the Nan-pro, began with confusion about what message to send from Japan, which had just suffered massive losses from the Great East Japan Earthquake. At that time, we received a constant stream of information about well-known project members and international cooperation NGOs moving quickly to provide emergency aid and reconstruction support in the Tohoku region. Personal relationships and know-how established over Japan's many years of international cooperation activities was utilized to provide assistance in Japan.

Many developing countries as well supplied aid to damaged areas of Japan. This catastrophe is therefore an opportunity to take another look at the bonds between Japan and the rest of the world and discuss the best way to supply international cooperation in the future. To facilitate this debate as well as mark the first anniversary of the Nan-pro, journalist Mr. Akira Ikegami hosted a discussion on the subject of Japan that receives and gives aid.

This event included a stage presentation by Dr. Norihiko Kuwayama, president of the NPO Stage Earth, titled *The Stage Earth – The Great East Japan Earthquake and International Cooperation*. While serving as president of this organization, Dr. Kuwayama continued to work as a physician at the Tohoku International Clinic, which was damaged by the earthquake. He used a song to convey his thoughts about people from overseas who rushed to



A photo of Dr. Norihiko Kuwayama performing *The Stage Earth – The Great East Japan Earthquake and International Cooperation*



The Nan-pro first anniversary event at which Akira Ikegami led a discussion about Japan as a country that receives and gives assistance

the area to give aid during the most difficult time and others who came to help with reconstruction.

In the second half of fiscal 2011, the Nan-pro concentrated on the SOS Africa Campaign. The purpose is to tell the world about the severe drought and food crisis in Somalia and other countries in eastern Africa. About 13.3 million people may die in this region because of this disaster. A total of 18 organizations, including UN agencies, international cooperation NGOs and others, came together to make even more people aware of the dire situation in eastern Africa. There were information meetings for the media, panel discussions and other events for this purpose.

A new Facebook page became the most reliable means for this campaign to send this message to the world. Facebook made it possible to use photos and videos to show others the current situation and aid activities in eastern Africa. More than 7,000 people became a "fan\*" of this Facebook page over a four month period. As a result, information about this disaster was sent to more than 1.9 million people via Facebook.

In early March 2012, the Nan-pro created its own Facebook page. In fiscal 2012, the third year of this project, we plan to use our website and Facebook to supply information regarding the themes of environmental protection, poverty reduction, education and African development.

\*Number of people who selected "Like"



SOS Africa Campaign page on Facebook