

Concrete Initiatives of JICA's Programs in Fiscal 2009



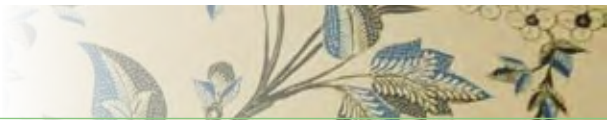
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Southeast Asia



Facilitating Partnerships between Southeast Asia and Japan to Achieve Sustainable Development

The nations of Southeast Asia have shaken off the recent global financial and economic crises, and they continue to record steady economic development. The Association of Southeast Asian Nations (ASEAN) has agreed on a roadmap to establishing the ASEAN Community by 2015, and is taking steps to achieve economic integration including the elimination of regional tariffs. It is incumbent on Japan, as the largest investor in Southeast Asia, to build new partnerships with the region.

Growth has also brought widening disparities within the ASEAN region, and individual countries also face serious concerns about increasingly evident urban and environmental issues, as well as domestic disparities. The region also continues to face many challenges including the prevalence of natural disasters and civil unrest. JICA is addressing these factors with new projects designed to contribute to sustainable growth in Southeast Asia.

Key Aid Strategies

Achieving Regional Economic Growth, Remediating Disparities and Securing Regional Stability

Southeast Asia consists of the 10 ASEAN member countries, plus Timor-Leste.

In response to the global financial and economic crises of 2008, JICA provided emergency financial support in 2009 to prevent a recurrence of the Asian Financial Crisis that occurred over a decade ago. In total, approximately ¥100 billion was provided including assistance for climate change projects. Fortunately, the nations in the region are steadily recovering despite the impact of the global financial and economic crises.

ASEAN established the ASEAN Free Trade Area (AFTA) in 1992 through the Framework Agreements on Enhancing ASEAN Economic Cooperation to liberalize regional trade, encourage direct investment from abroad and intra-regional investment, and strengthen the international competitiveness of local industries. JICA is leveraging

its experience with extending ODA over the past half century in an effort to strengthen cooperation for the future of ASEAN.

The challenge facing Southeast Asia is the disparity in development between ASEAN's original members—comprising Indonesia, Malaysia, the Philippines, Singapore, Thailand and Brunei—and its newer members, namely Cambodia, Laos, Myanmar and Viet Nam. To remedy these disparities and achieve development for the region as a whole, it is essential that poverty be reduced through development of cross-border social and economic infrastructure, and that comprehensive environmental conservation measures be taken.

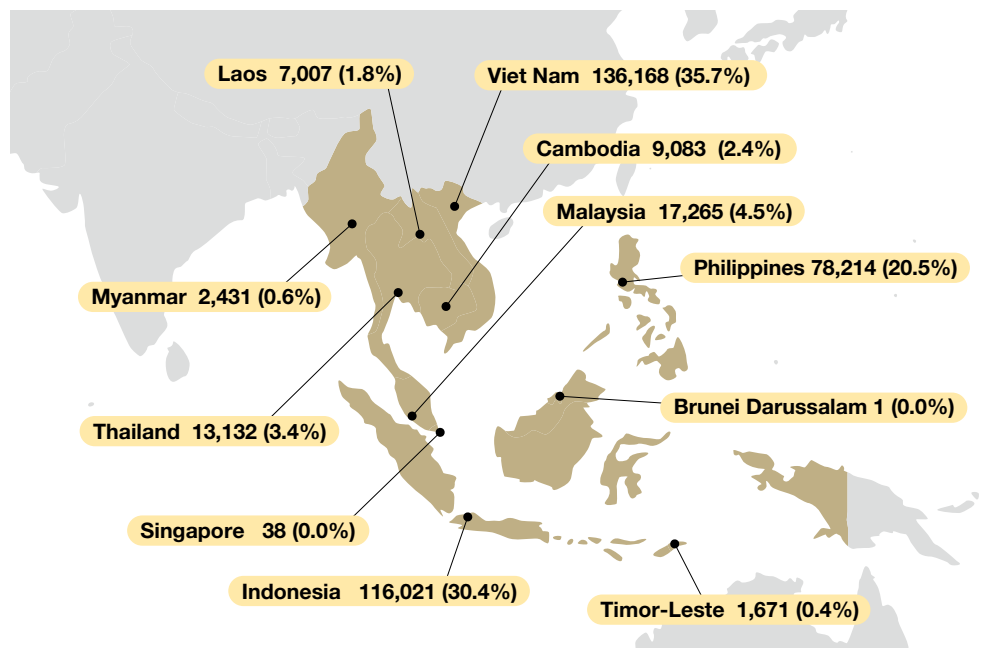
JICA is collaborating with countries such as Thailand, which has reached the level of the middle-income countries, in providing effective solutions for regional issues, including the development of

JICA Programs in Southeast Asia (Fiscal 2009)

The figure shows the total value of JICA programs in each country including Technical Cooperation projects, dispatch of volunteers, other expenditures, 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.

Southeast Asia Total: 381,032
(Unit: millions of yen)



Note: Figures exclude JICA's cooperation to multinational and international organizations.

cross-border infrastructure in areas like the Mekong River basin.

Countries such as Myanmar and Timor-Leste, the latter of which achieved independence in May 2002, continue to deal with political instability. For these countries, JICA is strengthening its support for nation-building activities that improve administrative

capabilities and develop human resources, as well as assistance which contributes to poverty reduction.

Priority Issues and Efforts

Supporting the Original ASEAN Member States, Remediating Regional Disparities and Countering Natural Disasters and Climate Change

Among ASEAN's original member states, Indonesia, Malaysia and Thailand are recording steady economic growth.

Rapid economic development in these nations has brought a widening gap between urban and rural areas, and issues such as urban traffic congestion, pollution and urban waste have intensified. Meanwhile, in rural areas, many people have no access to basic social services such as health and medical care, education, information, and water and sanitation, pointing to a strong need for JICA to support social development.

Countries such as Indonesia and the Philippines have in recent years experienced a rash of natural disasters in the form of flooding and earthquakes, which are impediments to sustained economic growth. These countries require humanitarian assistance when natural disasters occur, as well as subsequent support for reconstruction of economic infrastructure, and support for disaster prevention.

Measures to address climate change are another critical challenge facing this region. They range from forest fire prevention and development of geothermal and other renewable energies to the development of urban high-speed rail in order to alleviate traffic and reduce exhaust gas emissions, as well as adaptation measures to address the region's vulnerability to the effects of climate change.



A tropical storm caused devastation in the Philippines in 2009.

Cross-Border Development of the Mekong Region

The Mekong River measures 4,800km in length, flowing from the Tibetan Plateau through China's Yunnan Province and the Indochinese Peninsula. The basin area of the Mekong River is more than twice the size of Japan's total land area.

The Mekong region encompasses Myanmar, Laos, Thailand, Cambodia and Viet Nam in the Indochinese Peninsula. Of these countries, newer ASEAN members—comprising Cambodia, Laos, Myanmar and Viet Nam—lag behind in economic development, and to this day are struggling with high poverty rates.

However, these countries are experiencing continued economic growth which attracts investment from Japanese firms, leading to expectations for further development in the future and even stronger ties with Japan.

JICA has made it a priority to support development in the Mekong region. Representatives from nations in the region expressed high praise for Japan's contributions at the Japan-Mekong Foreign Ministers' Meeting held in Tokyo in November 2009. The Tokyo Declaration adopted by the meeting outlined Japan's commitment to provide more than ¥500 billion in ODA Loans to five nations over a period of three years. The Mekong-Japan Action Plan 63 was also announced following the Tokyo Declaration, and outlines three areas of focus: projects in Viet Nam and Laos under an initiative called "A Decade toward the Green Mekong"; further development of both hard and soft infrastructure, promotion of public-private cooperation; and overcoming vulnerabilities to natural disasters in Myanmar.

Under the guidance of this action plan, JICA will collaborate with Thailand and other new providers of development assistance working in the region in order to implement a broad range of projects.

Country Overviews and Priority Issues

■ Indonesia

As of 2008, Indonesia continued to register a high poverty rate of 14.2% (2009, World Bank), but its gross national income (GNI) per capita reached approximately US\$2,238 (2008) to gain middle-income country status and become a driving force for ASEAN economic growth. Looking ahead, Indonesia needs infrastructure development in the energy sector in order to achieve sustainable growth, as it works to become an upper-middle-income country and do its part in addressing the global issue of climate change.

JICA is providing cooperation to Indonesia with a priority on: (1) achieving sustainable growth driven by the private sector; (2) creating a democratic and equitable society; and (3) securing peace and stability.

JICA has provided several Climate Change Program Loans to Indonesia. These ODA Loans support policy reforms in Indonesia aimed at reducing greenhouse gas emissions and addressing climate change. Loan agreements were signed in September 2008, December 2009 and June 2010. JICA has also provided support for many geothermal power plant projects designed to encourage renewable energy use, such as the Lahendong Geothermal Power Plant in North Sulawesi.

■ Philippines

The Philippines government is concentrating on implementing policies that accelerate economic growth and create new employment to address the basic issue of poverty. However, in 2008, soaring international prices for energy resources and food (rice, etc.), combined with the global economic crisis, caused a downturn in the Philippine economy that was particularly hard on the lives of the country's impoverished.

JICA is committed to the following priority issues: (1) sustainable economic growth aimed at creating employment opportunities;

(2) support for the self-reliance of impoverished people and improvement of their quality of life; and (3) peace and stability in Mindanao.

Under the Logistics Infrastructure Development Project launched in 2009, medium- and long-term financing is being provided through the Development Bank of the Philippines to develop logistics infrastructure for private companies and local governments. This initiative is expected to assist with building a logistics network that achieves a best mix of marine transport and intra-island transportation.

JICA continues to provide cooperation aimed at promoting peace and securing stability in the conflict region of Mindanao. Specifically, JICA is implementing various projects to strengthen administrative capabilities and improve basic lifestyle conditions based on surveys of the needs of local residents and a regional development plan.

■ Thailand

The government of Thailand is pursuing the 10th National Economic and Social Development Plan (2006–2011), which aims to enhance human resources and policies to facilitate adaptation to future change, and achieve further globalization. With this aim, Thailand is taking steps to strengthen international competitiveness, boost domestic demand and strengthen grassroots economies. The GNI per capita of Thailand has reached US\$3,760 (2009), as the nation shifts its focus to development that addresses challenges in working toward becoming an upper-middle-income country.

JICA is extending its cooperation to Thailand in three priority areas: (1) Enhancement of Competitiveness for Sustainable Growth to drive further development; (2) Adaptation to the Development Issues in a Maturing Society with a view to resolving the challenges that come with growth; and (3) Joint Cooperation to Third Countries, taking into account Thailand's shift to becoming a donor nation.



Indonesia has more geothermal resources than any other country.



Development in the Philippines has also brought growing economic disparities.

Based on these three priority areas, JICA is taking both hard and soft infrastructure initiatives. These initiatives include development of human resources and institutions for industrial promotion, development of infrastructure such as the Mass Transit System in Bangkok, support for strengthening environmental management systems and climate change-related policies, cooperation on development issues for the aging society, support for the socially vulnerable including measures against human trafficking and

cooperation on promotion of South-South Cooperation.

■ Cambodia

Cambodia has seen its economy grow by more than 7% on average in the last five years. Cambodia's GNI per capita improved to US\$640 (World Bank) in 2008, yet its Human Development Index (HDI), which includes literacy and infant mortality rates, remains among the lowest of ASEAN countries.

Case Study

Using Satellite Technology to Prevent the Spread of Forest Fires

Indonesia

JICA's Cooperation Program for Responding to Climate Change

JICA has been providing assistance to Indonesia for forest fire prevention since the 1990s to address the frequent large-scale forest fires that ravage the country. Under JICA's cooperation program for addressing climate change, research is being conducted on satellite observation and fire spread simulations, with a focus on preventing peat fires that emit high levels of greenhouse gases.

Massive Forest Loss due to Fires

Major forest fires that erupted in Sumatra in 1982 and Kalimantan in 1997 razed several million hectares of the country's forest land. Haze from the fires drifted as far as Malaysia and Singapore, affecting the health of people throughout the region. The disasters also upset transportation and had serious consequences for the tourism industry.

In 1991, JICA provided assistance to conduct a fact-finding study on forest fires, and in 1993 dispatched forest fire experts to Indonesia. When fires broke out in Kalimantan, the Japanese government made emergency arrangements to provide firefighting equipment and materials through Grant Aid, and dispatched a Japan Disaster Relief team comprised of experts from the Fire and Disaster Management Agency and Tokyo Fire Department. After the fire was extinguished, JICA provided assistance to help with the recovery of a national park, restoring greenery to 360ha of park land.

In 1996, JICA initiated Technical Cooperation for the Forest Fire Prevention Management Project to build a system for the early identification of fire hotspots using meteorological satellites and develop basic technology for early fire suppression. In Phase 2 of the project begun in 2001, JICA provided cooperation for the development of fire spread danger maps and the creation of fire prevention guidelines for national parks, and supported other disaster prevention initiatives such as the establishment of fire-

fighting groups and citizen patrols. Since 2006, JICA has also been involved in pursuing fire prevention activities through resident-led initiatives in areas that experience frequent forest fires, namely Riau, Jambi and East Kalimantan.

Utilizing Satellite Detection Technology for Fire Spread Prevention and Evacuation

Building on its track record in Indonesia, JICA launched a five-year project in 2009 to provide cooperation for measures to address peat fires—which emit high levels of greenhouse gases—as a neutralization measure under JICA's cooperation program on climate change. Indonesia has many areas with distributions of peat deposits, which are particularly hazardous in case of forest fires. To prevent peat fires, JICA is collaborating with Hokkaido University to develop a system for detecting fire hotspots through analysis of information from the Advanced Land Observing Satellite (ALOS), called Daichi, and other satellites, and

conducting research on fire spread simulations in order to rapidly predict the spread of fire for evacuation and firefighting activities.

A Grassroots View

Shigeru Takahara

Chief Advisor, Project for Facilitating the Implementation of National Forestry Strategic Plan

Indonesia ranks fourth in the world in greenhouse gas emissions and is in urgent need of action to counteract climate change, including measures to limit the loss of forest land in the country. JICA has been cooperating with Indonesia to deal with fires in peat regions, which emit large amounts of carbon dioxide. These initiatives are an extension of JICA's ongoing cooperation to address forest fires, with a focus on assistance that is directly linked to the fight against climate change.



Putting out peat fires in Riau, Indonesia.

In order for Cambodia to achieve further economic development and overcome poverty, the country must develop its economic and social infrastructure, and continue to develop policies and human capacity in a variety of areas.

JICA is providing support for both hard and soft infrastructure to meet Cambodia's needs. JICA is assisting with the development of critical economic infrastructure such as the Sihanoukville Port and key trunk roads, as well as special economic zones to promote the private sector. JICA is also working to improve power supply and assist the development of frameworks for attracting investment. In the key agricultural sector, JICA is helping to develop irrigation facilities, encourage the adoption of agricultural technology and develop models for improving logistics, while providing cooperation for human resource development.

To assist Cambodia in capitalizing on the fruits of growth and social development, JICA is extending cooperation for the development of social infrastructure, including improved water supply, healthcare services and education in science and mathematics.

JICA is also working to strengthen the nation's economic foundation and enhance governance as the backbone for social development. These initiatives include strengthening legislation and policies and developing legal professionals; enhancing the management of public finances; and improving administrative capabilities including for local government.

■ Laos

Laos is promoting the adoption of market economic principles in an effort to eradicate poverty. Laos is grappling with extreme poverty, in that 33% of the nation's population of 6.3 million (2008) live below the poverty line. Some 82% of the country's workforce subsists through agricultural means, while an estimated 49 ethnic groups make up a highly multiethnic society. Mountainous terrain comprises 80% of the landmass in Laos, and along with an undeveloped infrastructure, each region tends to be isolated from the others, making it difficult for people to access social services.

JICA's approach to extending assistance to Laos revolves around three principles: (1) support for the steady achievement of the United Nations Millennium Development Goals (MDGs); (2) support for building a foundation for economic growth that will serve as a driving force for the country's independent and sustainable economic growth; and (3) support for capacity development as a prerequisite for Laos to achieve self-reliant efforts. Under these goals, JICA has designated the following priority areas: basic education, healthcare services, rural development, social and economic infrastructure development, strengthening of the private sector and improvement of administrative capabilities.

Guided by these principles and priorities, JICA supports the Capacity Development for Sector-Wide Coordination in Health (Phase 2) project, which aims to strengthen the business regulation

capabilities of the Ministry of Health (Lao PDR). JICA has also extended a Budget Strengthening Support Loan to provide joint financing for Laos to implement reforms through its own efforts, and is conducting the Study on the Improvement of Water Environment in Vientiane Capital. These initiatives are aimed at helping Laos to rise out of its impoverished state and achieve self-reliance.

■ Myanmar

Myanmar has been under military rule since 1988. The Japanese government has in principle withheld any new proposals for assistance to the country since Aung San Suu Kyi was detained and put under house arrest in 2003. However, as an exception, Japan is supporting high urgency and true humanitarian issues, issues of human resource development for democratization and economic restructuring and issues that target all ASEAN or CLMV countries (Cambodia, Laos, Myanmar and Viet Nam). Specific assistance includes support for eradication of the drug trade, prevention of the three most threatening infectious diseases—malaria, HIV/AIDS and tuberculosis—and support aimed at providing water supply to villages in the central dry zone that face a critical lack of supply.

In 2008, Myanmar was ravaged by Cyclone Nargis, which took an unprecedented toll on the country. JICA is supporting recovery and restoration efforts in the Ayeyarwady delta area, an area that was particularly hard hit by the cyclone, with a focus on disaster prevention, protection of agriculture and mangrove rehabilitation.



JICA medical team provides care in the aftermath of Cyclone Nargis in 2008.

■ Viet Nam

Since 1990, Viet Nam has recorded average GDP growth of more than 7.5%, and its poverty rate has significantly improved, dropping from 58.1% in 1993 to 14.5% in 2008.

Now welcomed into ASEAN Free Trade Area (AFTA), Asia-Pacific Economic Cooperation (APEC) and the World Trade Organization (WTO), Viet Nam must strive to enhance its international competitiveness. Meanwhile, issues such as income disparities between urban and rural citizens and environmental destruction have emerged.

JICA is providing support through a combination of financial and Technical Cooperation focusing on the following priority areas: (1) promotion of economic growth and strengthening of international

competitiveness; (2) improvement in living and social conditions and corrections of disparities; (3) environmental conservation; and (4) strengthening of governance.

Case Study

Building the Resilience of the Nation and Community to Natural Disasters

Philippines

Disaster Risk Management Program

The Philippines is exposed to many natural disasters including typhoons, floods and volcanic eruptions. Natural disasters are an obstruction to economic development, and are a major challenge in the nation's efforts to reduce poverty.

JICA, building on lessons learned from more than four decades of extending assistance, is promoting a disaster risk management program to assist with hard and soft community and nation building aimed at strengthening the Philippines against natural disasters. JICA also provided support to assist recovery from the effects of typhoons that struck the Philippines in 2009.

Aiming to Reduce Loss of Life by Half

In Japan, residents voluntarily evacuate to safe places such as schools and public halls in response to typhoon or torrential rain forecasts. These evacuation centers are stocked with emergency rations, drinking water and blankets. Hazardous areas are routinely inspected and improved, and sandbags are prepared against possible water intrusion, all part of measures learned from past disasters.

The Philippines, like Japan, is exposed to many natural disasters, which extract a human toll as well as being an impediment to the nation's economic development through the destruction of roads, and flooding and runoff in agricultural lands. Natural disasters are a major challenge to the Philippines in its efforts to reduce poverty.

JICA is leveraging Japan's expertise as a nation with an advanced disaster risk management infrastructure. For more than 40 years, JICA has been providing ODA Loans and Grant Aid to support sediment and flood countermeasures for rivers, and supplied Technical Cooperation to strengthen the capabilities of engineers involved in disaster risk management and river management. Building on knowledge gained from these initiatives, JICA initiated a disaster risk management program in 2008 that is aimed at building the resilience of the nation and community to natural disasters in the Philippines. The program encompasses assistance for the construction of flood control and sabo facilities, and comprehensive

support for soft measures such as capacity development on disaster risk management at both the government and community levels, and improving the quality of disaster information. The aim of the program is to halve the loss of human life in disasters by 2017.

Disaster Recovery and Protection of Lives and Land

In 2009, Tropical Storm Ketsana and Typhoon Parma devastated the Philippines on a scale rarely seen worldwide, bringing torrential rain the likes of which statistically occurs once every 180 years. Close to 1,000 people lost their lives in floods and landslides, with the typhoons also causing significant damage to essential roads and bridges needed for the economic lives of Philippine citizens, and damaging flood control facilities needed to protect human lives. JICA cooperated with the implementation of studies spearheaded by the World Bank, and formed an infrastructure rehabilitation project through ODA Loans signed in May 2010, responding to requests from the Philippine government. This project

aims to assist the recovery of economic and social activities in disaster-stricken areas, and work toward prevention of secondary disasters.

JICA also launched a plan to build a meteorological radar system in 2009. The aim is to reduce the toll from future typhoons by strengthening the nation's typhoon monitoring capabilities and improving announcements for typhoon warnings.

A Grassroots View

Minoru Kamoto

Expert in Integrated River Basin Management

The people of the Philippines have displayed real strength and solidarity, with little sign of yielding to social uncertainty in the face of repeated disasters—something that Japan can stand to learn from. At the same time, funding, personnel and technology are insufficient, and work on prevention, recovery and restoration is moving slowly. Given the circumstances, JICA's assistance for disaster risk management in the Philippines is extremely significant.



A disaster site in West Mangahan.



In fiscal 2009, JICA extended ¥47.9 billion in ODA Loans to Viet Nam for emergency measures to address the global financial and economic crises. JICA is providing support for many initiatives aimed at developing small and medium-sized enterprises and supporting industries. The initiatives include ODA Loans to finance small and medium-sized enterprises, assistance from JICA experts to strengthen policy frameworks, Technical Cooperation projects and volunteers to improve the technology and expertise of small and medium-sized enterprises, and Technical Cooperation projects to train skilled technicians.

JICA has also emphasized support for Viet Nam's water environment sector. The support includes Technical Cooperation to help administrative agencies better manage water environments, and Technical Cooperation to boost the capacity of research institutes. In addition, JICA extends ODA Loans to build sewage and drainage facilities in metropolitan areas.

■ Timor-Leste

Public order in Timor-Leste has been gradually improving since the latest Presidential elections and National Parliament elections in 2007. Under the slogan, "Goodbye Conflict, Welcome Development," the government of Timor-Leste has stepped forward into a stage of development.

For the sake of peace and stability in the Asia-Pacific region, JICA has been providing assistance to Timor-Leste in the following priority areas: (1) human resource development and institution building; (2) maintenance and improvement of infrastructure; (3) agricultural and rural development; and (4) consolidation of peace.

For maintenance and improvement of infrastructure, JICA has provided capacity building assistance for "life-line" roads, maintenance, policy development for road rehabilitation and technical transfer to engineers. JICA is focusing on providing assistance for the development of economic infrastructure that contributes to the country's economic growth, such as in the transportation sector, shifting away from the emergency and recovery aid which JICA has been heavily involved in so far.

In addition, for poverty reduction purposes, JICA is supporting rural development through improvement of irrigated rice cultivation systems to increase rice crop productivity, and the dispatch of experts to strengthen water management associations.

■ Malaysia

Malaysia is achieving steady growth and has become one of the more developed ASEAN nations. The Malaysian government announced the New Economic Model (NEM), a long-term economic roadmap for the country, in March 2010. The NEM plan outlines policies that aim to increase annual per capita income to US\$15,000 by 2020 through strategies such as a shift to knowledge-intensive industries. In order to aid Malaysia in building more equitable and cooperative partnerships, JICA will continue providing assistance

with a focus on the following four priority areas: (1) enhancement of mutual interests between Japan and Malaysia; (2) overcoming challenges associated with rapid growth; (3) resolving regional issues; and (4) strengthening capacity development as a donor and promoting Japan-Malaysia cooperation.

Major projects currently being implemented through ODA Loans include the Pahang-Selangor Raw Water Transfer Project for supplying water to the Malaysian capital of Kuala Lumpur and the Higher Education Loan Fund Project, or HELP3 initiative, which gives local students the chance to study science and engineering in Japan. Major projects being implemented through Technical Cooperation are the Bornean Biodiversity & Ecosystems Conservation Programme Phase II (BBEC II) initiative in Sabah and the Improvement of Ability in Maritime Safety and Security project aimed at enhancing the capabilities of the Malaysian Maritime Enforcement Agency (MMEA).

JICA is also implementing the study to analyze the economic structure of Malaysia, to confirm the process, conditions and policies for economic development in Malaysia over the past 30 years, in order to organize the information necessary for future discussions on economic growth policies. The study will also be used to analyze issues that remain for Malaysia and the potential for assistance.



Environmental training at the Rainforest Discovery Centre in Sabah
(Photo by Arase Sugawara)

■ Singapore

Singapore has achieved remarkable economic development, having already joined the ranks of the developed nations. JICA closed its Singapore liaison office in fiscal 2009. JICA will implement the Japan-Singapore Partnership Programme for the 21st Century (JSPP 21), and send a research fellow to the Lee Kuan Yew School of Public Policy of the National University of Singapore, to initiate network-building activities such as joint research and seminars to capture useful input for JICA projects.

Case Study**Boosting International Competitiveness by Raising the Level of Industry****Viet Nam: Cooperation Program on the Development of Small and Medium-Sized Enterprises (SMEs) and Supporting Industries (SIs)**

Viet Nam continues to achieve steady growth, and it faces the challenge of developing supporting industries that can supply parts with stable quality, cost and delivery (QCD) to foreign-affiliated assembling companies in order to enhance its international competitiveness amid ongoing globalization. JICA is providing multifaceted support including assistance for formulating policies to promote small and medium-sized enterprises, and for human resource development among business owners and skilled technicians.

Leveraging Business Expertise from Japanese Companies

In Viet Nam, JICA is implementing the Cooperation Program on the Development of Small and Medium-Sized Enterprises (SMEs) and Supporting Industries (SIs). The program is focused on the following primary support: strengthening policy formulation and frameworks for implementation; improving access to finance for small and medium-sized enterprises; developing human resources for industry by fostering business owners and skilled technicians; and strengthening technology and business expertise for small and medium-sized enterprises in supporting industries.

Since shifting to a market economy, Viet Nam has sought direct investment from overseas, touting its large labor pool and low labor costs, in order to achieve steady growth. The private sector has also grown through government support. However, Viet Nam will face cutthroat international competition in the future in implementing various international commitments based on its WTO accession, and considering that AFTA member countries will abolish intra-regional tariffs by 2015.

Small and medium-sized enterprises comprise the majority of Viet Nam's private

sector. The Cooperation Program on the Development of Small and Medium-Sized Enterprises (SMEs) and Supporting Industries (SIs) seeks to expand the supply of business resources in human resources, financing and technology. It is critical to the development of small and medium-sized enterprises and supporting industries by strengthening capacity of administrative agencies in charge of policy implementation to assist the promotion of small and medium-sized enterprises.

Since 1998, JICA has provided assistance through the following projects: study for the plan to promote small and medium-sized enterprises; two-step loans for small and medium-sized enterprises; the Viet Nam-Japan Human Resources Cooperation Center; the Project for Strengthening Training Capability for Technical Workers in the Hanoi Industrial College; policy advisors for small and medium-sized enterprises; and the Project for the Reinforcement of the Small and Medium-Sized Enterprises Technical Assistance Center in Hanoi.

Leveraging this experience, and under the framework of the Japan-Viet Nam Joint Initiative to Improve Business Environment with a View to Strengthening Viet Nam's Competitiveness, which is implemented together with public and private authorities of Japan and Viet Nam, JICA is providing multifaceted assistance aimed at maintaining and strengthening the international competitiveness of the manufacturing industries in Viet Nam. This assistance is undertaken in collaboration with relevant authorities in Viet Nam, local chambers of commerce, Japanese-affiliated companies and public agencies in Japan.

A Grassroots View

Shinya Abe
General Director, Panasonic Vietnam Co., Ltd., and Chairman of the Japan Business Association in Viet Nam

As a Japanese-affiliated company with operations in Viet Nam, we have a strong desire for improvement of the investment environment in Viet Nam. These range from the human resource development for industry, promotion of supporting industries, development of infrastructure and simplification of administrative procedures. The development of supporting industries is highly critical to ensuring that Viet Nam's manufacturing industries are able to survive when intra-regional tariffs are abolished.

A Grassroots View

Ha Quyet Than
Kim Long Company

Doing business with foreign-affiliated companies helps to expand our business, and their exacting demands drive improvements to our work and services. It also provides opportunities for Vietnamese companies to strengthen creativity. The weaknesses of small and medium-sized enterprises like ours are management and production capacity. We expect that JICA will assist us to acquire modern management methods, and also expect that government of Viet Nam will provide financial support in order to increase production capacity.

Nguyen An Phon
Director, Phong Nam Company Limited

Vietnamese companies can learn a lot about management methods from foreign-affiliated companies. In order to expand business with foreign-affiliated companies, it is necessary to earn their confidence by implementing 5S practices, respecting delivery dates and having the same expectation of quality. JICA is providing extensive support for the acquisition of management expertise and technology, but we also hope that JICA will provide a bridge for low-cost financing and disseminate information on financial support.



Senior Volunteer provides instruction to Vietnamese students.



Vietnamese students receive hands-on training.

East Asia

Strengthening Partnerships with Japan's Neighbors in East Asia and Promoting Mutual Understanding

East Asia has achieved remarkable economic growth and maintains close ties with Japan. JICA is effectively providing cooperation to East Asia, recognizing that the stable development of the countries in the region is of prime importance not only to Japan but to all of Asia.

China will become the world's second largest economy in terms of GDP in 2010. However, China faces many challenges including growing regional disparities and issues such as environmental pollution and infectious diseases that have raised concerns about their impact on Japan. In 2009, JICA extended support to China to encourage a recycling-oriented economy and to support food safety, co-existence of people and ibises, disaster prevention and forest recovery.

Mongolia faced a severe shortage of revenues when prices of copper—a key export commodity for the country—collapsed with the onset of the global economic crisis in late 2008. In addition to extending emergency assistance to Mongolia, JICA is providing support for human resource development, regional development, environmental conservation and infrastructure development in the nation.

Key Aid Strategies

Supporting Stability and Sound, Sustainable Development

JICA's support for China focuses on the three priority areas listed below. Across all three, it emphasizes intellectual support for the development of policies and programs, together with technology transfer and human resource development. JICA also provides various kinds of cooperation such as support for disaster prevention and reconstruction.

- (1) Cooperation to tackle environmental and other global issues including measures against environmental pollution and infectious diseases
- (2) Assistance for the reform and open policy, covering promotion of sound governance and the transition to a market economy
- (3) Promotion of mutual understanding

Mongolia took its first steps toward democratization and the pursuit of a market economy in 1990. Since then, Japan has been a top donor nation to Mongolia, extending support in the four priority areas listed below. In recent years, JICA has been supporting Mongolia's efforts to diversify its national industries beyond those that are dependent on natural resources. JICA is also extending support to solve urban issues in the capital city of Ulaanbaatar, and is assisting with expansion of basic social services.

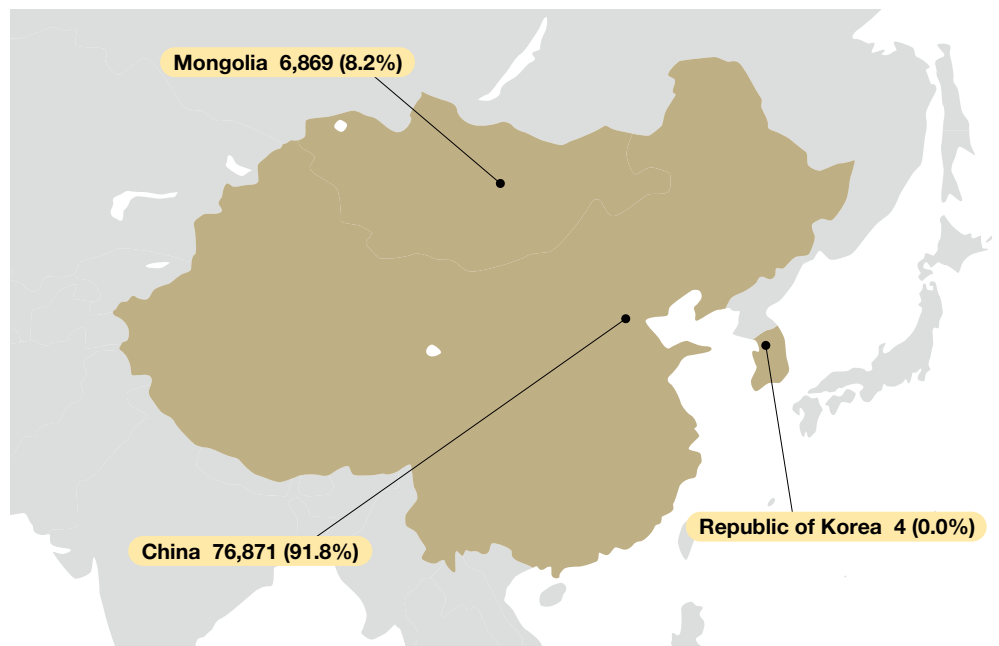
- (1) Institution-building and human resource development to promote a market economy
- (2) Rural development
- (3) Environmental conservation
- (4) Infrastructure development to promote economic activity

JICA Programs in East Asia (Fiscal 2009)

The figure shows the total value of JICA programs in each country including Technical Cooperation projects, dispatch of volunteers, other expenditures, 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.

**East Asia
Total: 83,744**
(Unit: millions of yen)



Note: Figures exclude JICA's cooperation to multinational and international organizations.

Priority Issues and Efforts

■ China

China has sustained a high level of economic growth, having achieved a real economic growth rate of more than 9% averaged over the last 20 years. In 2009, the country's GNP per capita reached US\$3,687.

At the same time, the high rate of economic growth has caused distortions to emerge in Chinese society, and these demand solutions as China seeks to develop a balanced and harmonious society. China faces major issues in terms of lagging behind in the areas of environmental pollution and socioeconomic policy in particular. These issues cannot be neglected as economic ties between China and Japan grow stronger. China is also the world's biggest producer of carbon dioxide, and has a major role to play in the effort to build a low-carbon society.

Japan has continued to provide assistance to China since 1979, following the signing of the Treaty of Peace and Friendship between Japan and the People's Republic of China in 1978. JICA is strengthening the partnership between the two nations to resolve these challenges, while providing effective and efficient cooperation that leverages Japan's experience and knowledge.

1. Addressing Environment Pollution and Infectious Disease

To help China address environmental issues, JICA provides

policy and technical support to combat climate change and to encourage the development of a recycling-oriented economy in China. The Promotion of Circular Economy Project is a Technical Cooperation project under which JICA is extending support to facilitate environmentally friendly business activities, raise the environmental awareness of Chinese citizens, foster optimal waste management and develop human resources in the forestry sector.

In 2009, JICA initiated intellectual cooperation to develop a new program for extending government compensation to victims suffering from pollution-related health problems, and started a project to upgrade sewage treatment facilities and operations. JICA also launched a project to build a regional environment for the co-existence of people and ibises, in an effort to preserve biodiversity. Although no new ODA Loans were extended to China in 2009, JICA is supporting environmental conservation initiatives under existing ODA Loans. The ongoing initiatives involve the development of water and sewage infrastructure, measures to address water and air pollution, and measures to promote afforestation and prevent desertification in China.

In the fight against infectious diseases in China, JICA cooperates with the World Health Organization (WHO), particularly in combating HIV/AIDS. JICA's efforts also reach out to individual communities, supporting the improvement of their sanitation and health services.

Case Study

Reconstruction after the Great Sichuan Earthquake

Japan-China Cooperation Plan of Earthquake First-aid Capacity Training / Human Resource Development Project for Aseismic Buildings / Project for Capacity Development on Mental Health Services for Reconstruction Support of Sichuan Earthquake / Project on Forest Restoration after the Earthquake in Sichuan Province

China is working hard to rebuild after the Great Sichuan Earthquake that devastated a large area in the country in May 2008. JICA is providing multidimensional support including for the development of frameworks of emergency rescue, development of human resources in the field of seismic construction, mental healthcare for earthquake victims and recovery of forests destroyed by the earthquake.

When the Great Sichuan Earthquake hit China, JICA dispatched a Japan Disaster Relief team and medical team and provided emergency supplies. In February 2009, JICA conducted a seminar in Chengdu, China, focusing on mental healthcare for earthquake victims as part of reconstruction efforts. The seminar was attended by mental healthcare practitioners including community workers, school teachers, psychology specialists and nurses who are involved with disaster victims. In June 2009, JICA conducted training for mental healthcare practitioners in Japan under the theme of planning for mental health services after disasters. As part of the training, JICA arranged for the participants to visit areas that

were impacted by the Great Hanshin-Awaji Earthquake and Chuetsu earthquake.

JICA, with the cooperation of the Ministry of Housing and Urban-Rural Development of China, is conducting training and sending



JICA conducted training under a plan to provide mental healthcare for earthquake victims in China. The participants visited a classroom at a Kobe elementary school in Japan that is used to display memorabilia from the earthquake.

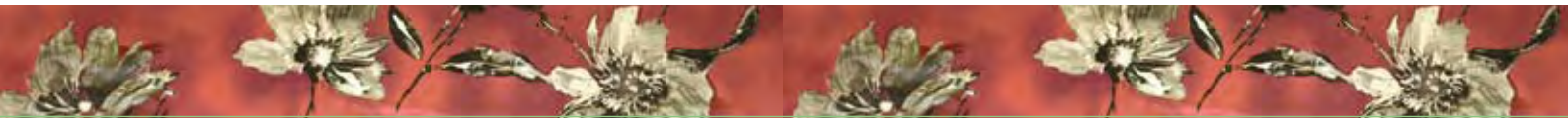


JICA seminar for mental healthcare practitioners

experts to China under a project to develop human resources in the field of seismic construction. This initiative is designed to assist with the development of Chinese building standards for the design and construction of buildings that meet seismic standards. JICA also initiated a project in March 2010 to develop suitable local methods for restoring forest vegetation damaged by landslides from the earthquake, leveraging Japanese technical expertise in afforestation and the development of administrative programs.



Studying forest vegetation that was impacted by the earthquake.



2. Pursuing a Market Economy and Sound Governance

China has achieved spectacular economic growth, and with its acceptance into the World Trade Organization (WTO) needs to establish a market economic system harmonized with international rules.

JICA is providing support for China to develop a sound market economy. These initiatives include the development of legal systems for economic activity, development of basic rules such as for food inspection and development of human resources for the suitable administration of these systems. In addition, JICA is extending support to enhance central and regional governance in China in order to correct regional disparities associated with the nation's rapid economic growth.

3. Enhancing Mutual Understanding

Enhancing the level of mutual understanding between the citizens of Japan and China is essential to achieving good long-term relations between the two nations. JICA sends volunteers to China, promotes exchanges between local governments and conducts youth training and business training for new managers and middle management through visits to Japan, while also supporting the activities of NGOs. For example, in 2009, JICA supported a grassroots Technical Cooperation project to provide the visually impaired with narrated movies and sporting events through the cooperation of the Japan Braille Library.

In addition, JICA is implementing diverse initiatives that are designed to develop human resources who possess a good understanding of Japan, while helping to increase opportunities for direct exchange between the citizens of both nations, and to enhance the level of understanding of each other's culture and society. JICA's Higher Education Project aims to contribute to good relations through an ODA Loan which seeks to improve the level of higher education with a focus on inland China.

4. Supporting Disaster Prevention and Reconstruction

JICA responded to the Great Sichuan Earthquake that devastated China in May 2008 by dispatching a Japan Disaster Relief team and medical team following a decision by the Japanese government, and by providing emergency supplies. Hu Jintao, President of the People's Republic of China, expressed his gratitude to Japan for these activities, which promoted mutual understanding between the two nations.

In 2009, JICA initiated support focusing on human technical assistance to leverage Japanese experience, knowledge and technical expertise in post-earthquake reconstruction in response to the Chinese government's wish to learn from Japan's experience with reconstruction from the Great Hanshin earthquake. Specifically, the initiative involves the following activities: development of human resources in the field of seismic construction, mental healthcare for earthquake victims, assistance for the restoration of damaged forests and assistance to strengthen the capabilities of personnel involved in earthquake rescue.

5. Building Stronger Ties with External Economic Assistance Organizations

In January 2009, JICA and the Export-Import Bank of China conducted a joint workshop on external economic cooperation. The Export-Import Bank of China, like other government-supported financial institutions in China, functions in many ways like JICA's ODA Loan operations. Therefore, it is important for both sides to develop further mutual understanding and strengthen their collaborative relationship. Through the workshop, officials from JICA and the Export-Import Bank of China exchanged opinions on a diverse range of topics and explained their respective methods for developing and evaluating new projects and engaging in risk management.

■ Mongolia

Mongolia shifted to a market economy system in 1990. The country maintained a high average economic growth rate of around 9% from 2004 to 2007, and its GNI per capita reached US\$1,590 in 2009. Meanwhile, the global economic crisis in 2008 caused a sharp drop in natural resource prices, which seriously affected the country's economy due to its dependence on copper and other resource exports. The country's economic foundation needs to be strengthened through industrial diversification and other measures.

Against the backdrop of a rapid demographic shift from rural areas to Ulaanbaatar—the nation's capital, which accommodates 40% of the entire population—and interregional disparities, nearly 35% of Mongolia's population lives in poverty. The migration to the city has caused rapid urbanization, giving rise to serious problems including delays in constructing basic infrastructure and environmental pollution, particularly in the Ger districts where most of the immigrants from rural areas reside.

The finance situation for resources development in Mongolia is expected to improve in the future, but the country is increasingly looking to Japan to support the development of a stable and harmonized socioeconomic situation.

1. Supporting the Promotion of a Market Economy

Mongolia has completed the groundwork for its transition to a market economy, and the country's future depends on its stable economic growth. Accordingly, JICA is focusing on providing assistance for establishing legal systems required for a market economy, promoting the private sector and fostering human resources. Major projects in the legal systems area include the reinforcement of taxation functions and the introduction of settlement systems. In private-sector promotion, JICA extends medium- to long-term loans to small and medium-sized enterprises (SMEs) and holds business seminars. In human resource development, JICA is supporting the maintenance of elementary school facilities and the improvement of teaching methods with an emphasis on basic education.

2. Supporting Rural Development

Rapid economic growth has brought increasing disparities between Ulaanbaatar and rural areas. The poverty rate in rural areas is nearly 10% higher than that of the country's capital, and the establishment of social services in rural areas is lagging far behind the capital. In order to reduce these disparities, JICA is providing support to improve the income of farmers and livestock farmers by fostering the development of the livestock and agriculture sector, which is a key industry in the country. At the same time, JICA is assisting with the establishment of social service systems, focusing on education, medicine and water supply.

3. Strengthening Economic Functions in Ulaanbaatar

Ulaanbaatar has experienced a number of urban problems, such as deterioration in living environments and environmental pollution due to the rapid influx of immigrants. JICA has been helping the city to formulate an urban development plan since 2007. Based on this plan, JICA has provided assistance in institution-building and human resource development to accelerate urban development and improve the living environment. JICA has also assisted the city in enhancing its comprehensive urban functions through the construction of an international airport and roads.

Case Study

Focus on Social Welfare, Healthcare, Education and Urban Development

Mongolia: Social Sector Support Program

The onset of the global economic crisis in late 2008 caused Mongolia's budget deficit to expand even further, which led the country to implement structural reforms under the guidance of the International Monetary Fund (IMF). Under this initiative, JICA and the Asian Development Bank (ADB) collaborated to prepare a policy matrix for the nation through which JICA provides assistance that aims to integrate various schemes for ODA Loans, Technical Cooperation and development studies.

Using ODA Loans for Policy Implementation

The onset of the global economic crisis caused copper prices to collapse worldwide, with value plunging by 60% on the London Metal Exchange. The collapse of copper prices put the brakes on the Mongolian economy, which is dependent on revenue from copper resource exports. Up to that point, Mongolia had achieved steady economic growth driven by its mineral resource sector, and had set about to expand its social services based on anticipated

revenues from that sector. The collapse of copper prices upset the fiscal balance and plunged the nation into financial crisis.

In response, the IMF Standby Arrangement program directed Mongolia to carry out broad structural reforms covering public finances, the mining and financial sectors, and the nation's social safety net. Under the IMF guidance, JICA and ADB provided budget support for the Mongolian government and formulated a joint policy matrix for protecting the poor during the recession covering the sectors of social welfare, health, education and urban development. The policy matrix in the areas of education and urban development relates to the JICA project and draws from Technical Cooperation and volunteer projects. JICA supported the policy matrix and set up the matrix as a conditionality of the budget support loans for supporting the poor during the financial difficulties. The loan, which amounts to approximately ¥2.9 billion, will provide funds to assist Mongolia in efforts to reduce the impact of the global economic crisis.

In the field of education, the Teaching Methods Improvement Project toward Children's Development in Mongolia initiated in 2006 has entered its Phase 2 implementation. Under the Phase 2 project, JICA has launched a number of initiatives in fiscal 2010 for improvement of secondary education textbooks, improvement of teacher training in connection with the dissemination of new teaching methods and evaluation of teachers under new education standards.

In the field of urban development, JICA supported the drafting of the City Master Plan of Ulaanbaatar through 2030 and the urban development program within the project. Conditionalities of the matrix in the urban development sector are promoting the finalization of the City Master Plan which will benefit the poor and improve living conditions in the Ger districts where most of the underprivileged reside in Ulaanbaatar.

JICA strongly supports Mongolian efforts to build a stable, solid foundation for economic change.

Education Initiative Featuring the Picture Book *The Legend of City*

JICA is using the children's book, *The Legend of City*, written by acclaimed Mongolian author Dashdondog and featuring the work of illustrator Nurmaajav, to promote integrated learning at elementary schools in Mongolia under an initiative to improve the quality of primary education.

The picture book conveys a message about the importance of city development using a community participation approach. To promote the book, the author visited a state orphanage center and elementary schools in the suburbs of Ulaanbaatar. He read the book aloud and interacted with students on the theme of city development. In connection with this project, JICA organized a drawing contest entitled "My Dream City—Our Participation" among the students in elementary schools targeted by the JICA project. Using the winners' paintings, a 2010 calendar was also produced.



Golden Award-winning painting



Winners' interview at the awards ceremony



Painting book author Dashdondog reads to students in Mongolia.

Central Asia and the Caucasus

An Open Community of Nations Linking Asia and Europe with Abundant Natural Resource Repositories

The Central Asia and Caucasus region comprises five Central Asia countries—Uzbekistan, Kazakhstan, the Kyrgyz Republic, Tajikistan and Turkmenistan—lying east of the Caspian Sea, and their three neighbors to the west of the Caspian sea, namely Azerbaijan, Armenia and Georgia. The region is situated near the center of the Eurasian continent, and its close proximity to Russia, China, the Middle East, Afghanistan and Pakistan makes it susceptible to geopolitically unstable regional conditions.

All of the countries in the region gained independence following the collapse of the former Soviet Union in 1991. While they are all pursuing market economic systems, there are significant disparities in economic development due to each nation’s respective natural resources and other factors such as the pace of reforms. JICA’s assistance is tailored to the individual circumstances of each nation and focused on encouraging intra-regional cooperation.

Key Aid Strategies

Enhancing Regional Dialogue and Strengthening Cooperative Relationships

The Central Asia and Caucasus region lies at a strategic point on the Silk Road linking Asia and Europe, and historically has experienced an extensive flow of people and goods. The region is endowed with abundant natural resources, ranging from oil and natural gas to uranium and rare metals, which are a focus of the international community. The Central Asia and Caucasus region also plays a critical role in larger regional affairs, contributing to the stability and development of unstable regional situations such as in nearby Afghanistan and Pakistan.

At the same time, the region faces many challenges that need to be addressed through intra-regional cooperation. These challenges include conflict, terrorism, the drug trade, transportation, effective use of water and energy resources, accelerated trade and investment, and environmental protection.

In 2004, the Japanese government launched the “Central Asia

plus Japan Dialogue” as a framework for promoting communication between Japan and Central Asia countries. In 2006, the Second Foreign Ministers’ Meeting took place in Tokyo under the framework. The discussions from this meeting led to the formulation of an action plan outlining nine priority areas* in the following support fields: political dialogue, intra-regional cooperation, business promotion, intellectual dialogue, and cultural and human resource exchanges. JICA is working to address the challenges within the Central Asia region, centering on the nine priority areas. JICA also provides assistance to the Caucasus region for development of human resources to facilitate a market economy, and for infrastructure development.

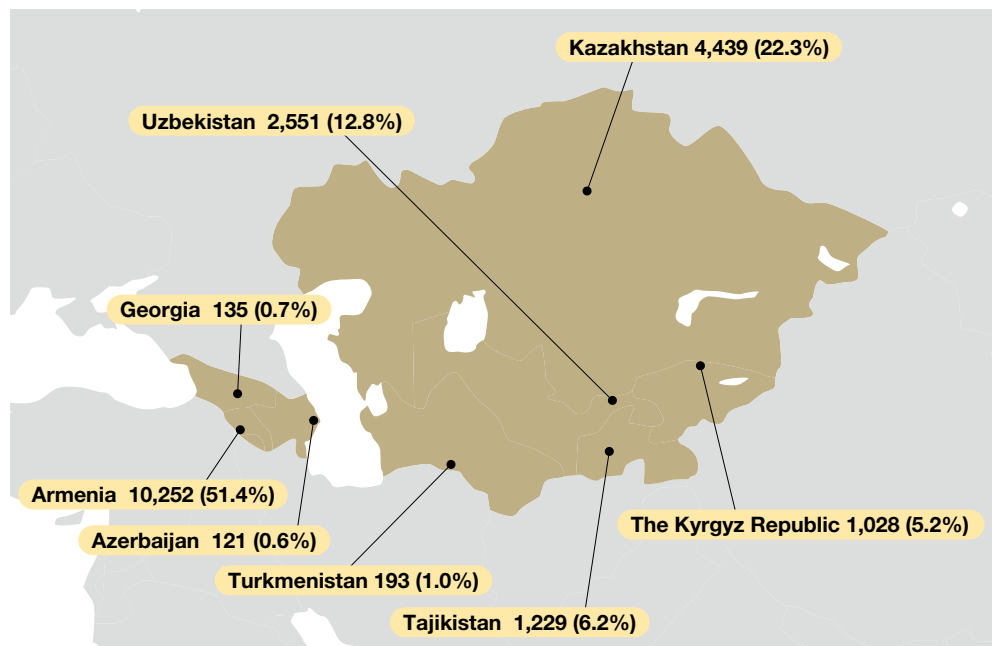
* The nine priority areas of the action plan are: (1) measures against terrorism and narcotics; (2) clearance of anti-personnel mines; (3) poverty alleviation; (4) health and medical care; (5) environmental protection; (6) disaster prevention and reduction; (7) energy/water; (8) trade and investment; and (9) transport

JICA Programs in Central Asia and the Caucasus (Fiscal 2009)

The figure shows the total value of JICA programs in each country including Technical Cooperation projects, dispatch of volunteers, other expenditures, 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.

Central Asia and the Caucasus Total: 19,948
(Unit: millions of yen)



Note: Figures exclude JICA’s cooperation to multinational and international organizations.

Priority Issues and Efforts

The Central Asia and Caucasus region is centrally situated in the Eurasian continent and is endowed with abundant energy and mining resources. The region is close to unstable regional conditions in Afghanistan and Pakistan, so its stability and prosperity are of strong interest not only to Japan but also to the international community. In order to support the economic foundation of the region, there is a growing need to develop broad area infrastructure such as for electric power and transportation, while encouraging intra-regional cooperation.

JICA has been providing assistance to develop infrastructure and region-specific training programs in line with the framework for regional cooperation that includes Central Asia Regional Economic Cooperation (CAREC). JICA's assistance aims to help

resolve issues that transcend national borders as well as other issues common to the region based on such government policies as the Central Asia plus Japan Dialogue.

In the nearly two decades since the countries in this region gained their independence, the disparities in economic development within the region have grown wider. Furthermore, there are growing disparities in living standards between urban and rural areas in each country. JICA will assist the pursuit of market economies through the development of legislation and policies for economic activities together with development of human resources for private companies and stronger measures to address regional economic development and poverty issues.

Country Overviews and Priority Issues

■ Uzbekistan

Support Focused on Four Priority Areas for Cooperation

Uzbekistan is richly endowed with underground resource, including natural gas repositories, and has experienced moderate inflation compared with other former Soviet republics. The country has recorded positive GDP growth since 1996. The challenges facing the country include privatization of state-owned enterprises and modernization of financial markets and agriculture, in which the country lags behind. In September 2006, Japan formulated the Country Assistance Program for the Republic of Uzbekistan, which identifies four priority areas for assistance: support for human resource development and institution-building to facilitate a market economy and develop the economy and industry; support for restructuring the social sector; economic infrastructure renovation and improvement; and promotion of intra-regional cooperation.

Among those priority areas, human resource development should be highlighted. JICA opened the Uzbekistan-Japan Center

for Human Development in 2000 to encourage the development of Uzbekistan's market economy and increase mutual understanding between the two nations. The center offers programs for business training, Japanese language education and the promotion of mutual understanding and up to 2010, those who visit the Center reach as much as approximately 460,000 people. The center is contributing to the rapid economic growth and improved living standards that Uzbekistan has achieved in recent years. In addition, it is notable that JICA is supporting Uzbekistan economic growth by infrastructure renovation and improvements such as constructing power plants and a new railway, and the development of enterprise-related legislation.

■ Kazakhstan

Building Economic Relations through Joint Government and Private-Sector Cooperation

Kazakhstan is endowed with abundant energy and mining resources, including the world's second largest uranium reserves. Japan is providing cooperation to Kazakhstan for the peaceful use of nuclear energy, such as the development of the uranium mining industry.

In June 2008, Japan and Kazakhstan agreed to build a joint government and private sector framework for the negotiation of broad economic relations. Under this framework, the two countries conducted the first round of negotiations in March 2010 to establish a Japan-Kazakhstan Investment Accord. Kazakhstan intends to pursue a joint project for energy conservation and renewable energy use based on mechanisms ratified under the Kyoto Protocol, a project that JICA supports as a climate change measure.



Uzbekistani children at a *medrese* (theological school) (Photo by Sanae Numata)

■ Tajikistan

Dispatching Personnel and Providing Assistance in Four Priority Areas

Tajikistan is situated at the southern gateway to Central Asia. The country overcame a civil war with the signing of a peace accord in 1997, and has since pursued macroeconomic stability and structural reforms. Tajikistan has recorded positive GDP growth since 1997, recording GDP growth of 1.7% that year for the first time. From 2005–2008, the country recorded a high rate of GDP growth, at 6–10%, supported by rising international prices for raw cotton and aluminum as key national exports, and inflow of cash sent by migrant workers in Russia and other countries.

In April 2009, the Japanese government formulated the Country Assistance Program for the Republic of Tajikistan, which identifies four priority areas for assistance: rural development and industry promotion; transportation (road development, maintenance and management); border control; and development of basic social services. JICA is providing Technical Cooperation for a project to improve a framework for providing agricultural guidance through Grant Aid cooperation to develop roads and improve water supply in areas bordering Afghanistan.

■ The Kyrgyz Republic

Reducing Poverty by Supporting Economic Growth

The Kyrgyz Republic has fewer natural resources and leading industries than other countries in the region, and has been exposed to intense international competition due to rapid liberalization. The country still suffers from a high poverty rate due to unstable development. In line with the Kyrgyz Republic's goal to halve poverty by 2010, JICA has set a goal of promoting the reduction of poverty through economic growth based on the transition to a market economy. JICA is promoting intra-regional cooperation in priority support areas based on: (1) developing a foundation including

transport infrastructure; (2) support for social sectors; and (3) the Central Asia plus Japan Dialogue.

■ Turkmenistan

A Permanently Neutral Country Starting to Accept ODA

Turkmenistan possesses one of the world's largest repositories of natural gas, an asset that drives the nation's industry through natural gas extraction and exporting. Other key industries are oil and the production and processing of raw cotton. In 1995, the United Nations (UN) General Assembly acknowledged Turkmenistan's position as a permanently neutral country. Except for the UN, Turkmenistan does not participate in any multinational organizations and refrains from participation in intra-regional mechanisms in Central Asia. However, a change in leadership in February 2007 has led to a gradual increase in foreign diplomacy under the new president, with the government taking steps to strengthen relations with Europe and neighboring countries. The direction of Turkmenistan today has a strong impact on gas pipeline strategy in the Eurasian continent, as exemplified by the country's opening of a gas pipeline to China in December 2009.

Little Japanese cooperation is extended to Turkmenistan other than training projects. JICA supports a project in which members of the Turkmenistan parliament and government workers are invited to Japan to study and learn from Japan's postwar rebuilding process and Diet management.

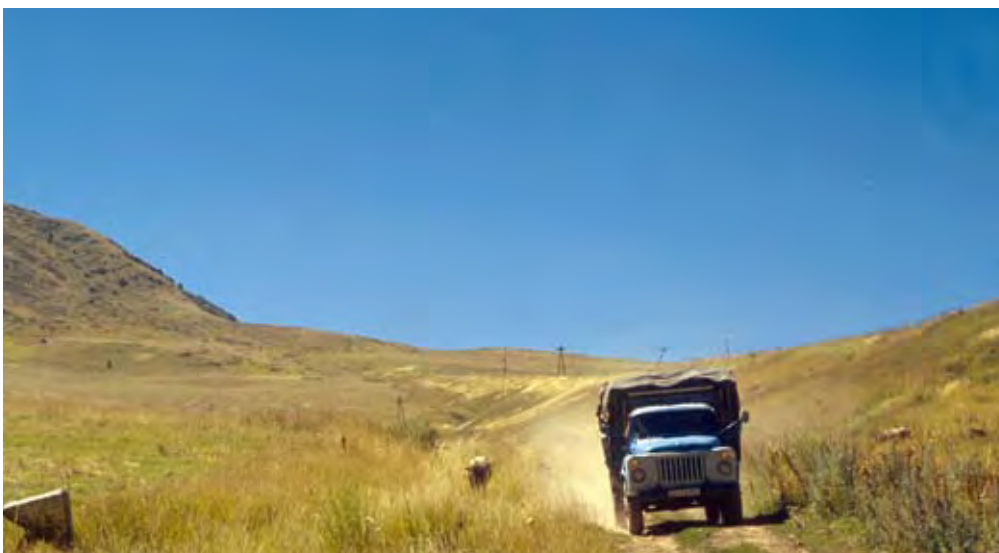
■ Azerbaijan

Assistance to Improve Quality and Access to Social Services

With steady petroleum development in the Caspian Sea, Azerbaijan is finding both economic and political stability. However, the development of non-petroleum sectors has become an urgent issue to ensure sustainable economic development. JICA has focused on three priority areas in its development support for the country:

economic infrastructure, the social sector and human resource development.

JICA is providing support for water supply and sewage infrastructure development in provincial cities through Japanese ODA Loans, and extends support in the fields of government administration and agricultural development.



Prairie in the Kyrgyz Republic (Photo by Sanae Numata)

■ Armenia

Fostering a Market Economy through the Program for Supporting the Energy Sector

Armenia has proactively pursued democratization and a market economy since the collapse of the Soviet Union. Japan is extending assistance to Armenia with a focus on infrastructure development

to support nation building, overcome aging economic infrastructure and prevent environmental degradation.

JICA is providing ODA Loans for the Electricity Transmission and Distribution Project and Yerevan Combined Cycle Co-Generation Power Plant Project as a priority area under the Program for Supporting the Energy Sector.

Case Study

Enhancing Road Management Capabilities

The Kyrgyz Republic Transport Technical Capability Improvement Program

The Kyrgyz Republic is lacking in resources and industry relative to other nations in the Central Asia and Caucasus region, and lags behind in the development of economic infrastructure such as roads. JICA is providing cooperation to help the Kyrgyz Republic develop transportation infrastructure for the promotion of industry and to improve access to social services as a way to reduce poverty through economic growth.

Updating Obsolete Standards to Improve Management Capabilities

The Kyrgyz Republic possesses important road transportation routes that link China and Southwest Asia, making the nation critically dependant on its roads. However, the majority of the country's land surface is made up of mountainous topography, and only 40% of its roads are paved. In addition, the country has faced tough economic conditions since gaining independence, leading to inadequate road maintenance, except for select arterial roads that have been repaired through the support of the international community. Road inventory systems are essential to carrying out road maintenance, but the nation uses outdated systems that have been in place since the time of the former Soviet republics. Upgraded road inventory systems are needed that are tailored to practical circumstances in the nation, including the need for updated road design standards. The nation's road management capabilities also must be improved from the standpoint of promoting industry such as tourism and raw cotton harvesting, and to expand social services.

In response to requests from the Kyrgyz Republic government, JICA initiated a preparatory study in 2007 for the Project for the Capacity Building of Road Maintenance and Road Administration Advisor Project, which were later initiated in 2008 as three-year Technical Cooperation projects.

Pilot Project Expanded to National Implementation

In September 2009, JICA initiated a pilot

project to improve road maintenance and management capabilities in Kochkor, located 230km south of the national capital of Bishkek.

The project selected an area with particularly severe road damage for improvement, using a cement stabilization technique that involves mixing cement into the damaged paved road base, with the use of stabilizers provided through Grant Aid and motor graders owned by the Kyrgyz Republic. In addition, road administration advisors and project experts provided technical guidance for advancing the construction efficiently by working separately on two-way lanes, as well as providing technical guidance on materials testing and cement mixing and design for repair construction. Local engineers can now use this cement stabilization technique to repair minor to moderate pavement damage and avoid complete road reconstruction unless there is extensive damage. A video that documents the application of this technique will be used in the future for road management throughout the nation. In addition to providing construction technology, JICA is assisting road management through the integration of a Vehicle Intelligent Monitoring System (VIMS) that facilitates the monitoring of road pavement conditions.

In September 2009, JICA conducted a seminar for engineers of provincial and national road management offices of the Kyrgyz Ministry of Transportation and Communications to introduce a new pavement design manual for road maintenance and management and to explain how the new

standards are to be applied. JICA also supplied 11 computers for regional offices of the Ministry of Transportation and Communications to use in preparing new road inventory systems.

A number of three-year projects will conclude in fiscal 2010, but new challenges have emerged for the country, including a shortage of funds due to the severe economic circumstances in the nation. JICA will expand its support to encompass international arterial roads in the Kyrgyz Republic, and assist the transfer of technology and expertise to facilitate efficient and low-cost road management.

A Grassroots View

Toshio Kimata

The Kyrgyz Republic faces the challenge of transferring engineering expertise to the next generation and establishing an engineering base that is adapted to actual circumstances in the nation. These challenges stem from the fact that engineering expertise was inadequately transferred when the nation originally gained independence, and a generational change as experienced engineers reach retirement age. The Minister of Transportation and Communications of the Kyrgyz Republic has high hopes for Japan's assistance. JICA is focusing its energies on helping younger engineers to gain the experience needed to deploy their skills on a broader scale.



Providing technical guidance with a focus on practical application in the Kyrgyz Republic



■ Georgia

Road Infrastructure to Assist with Regional Economic Development and Postwar Rehabilitation

Georgia depends on the livestock industry and agriculture as its key economic drivers. Since gaining independence, Georgia has faced a downturn in industry combined with ethnic conflict, and at one point recorded the greatest economic decline of any nation of the Commonwealth of Independent States (CIS). While the nation's economy has recovered in recent years, it faces a number of major challenges including development of domestic industry and small and medium-sized enterprises, and improvement of education, healthcare and social services, whose quality continues

to deteriorate due to financial difficulties and aging infrastructure.

Following the armed conflict with Russia in mid-2008, Georgia is facing the challenge of rehabilitation of its infrastructure, which is urgently needed for future economic growth. In October 2008 at the Georgia Donor's Conference, Japan announced it would provide up to US\$200 million, under which JICA signed a Japanese ODA Loan agreement for the East-West Highway Improvement Project to improve the East-West Highway that is an important part of the international transportation network between Europe and Asia. This project will contribute to the economic development and postwar rehabilitation of Georgia.

Field
Comment

Utilizing Expertise from Hokkaido

The Kyrgyz Republic Support Project for the Dissemination of Biogas Technologies

Kunio Nishizaki, Chief Advisor

Approximately 40% of the land mass in the Kyrgyz Republic lies at high elevations of 3,000m or higher. As a nation that is reliant on hydroelectric power, global warming is causing the melting of snow and glaciers in the Kyrgyz Republic that have existed for tens of thousands of years, and low water levels needed for hydroelectric generation have led to frequent blackouts. Since 2007, JICA has provided support to encourage the adoption of biogas technology for obtaining methane gas from the fermentation of livestock wastes and raw garbage waste.

Roughly 70% of the nation's population comprises agricultural dwellers including nomads, and its citizens have shown strong interest in adopting biogas plants, which can generate gas and fertilizer from livestock wastes. Many farmers have visited the project offices seeking our advice.

The objective of the project is to deploy biogas systems in impoverished farming communities. This will facilitate rural

development by enabling communities to use the gas for cooking, showering and heating, while utilizing the fermented waste for fertilizer. Encouraging the use of biogas energy as a renewable energy source also alleviates pressure for logging of forests. In addition, the biogas systems use human wastes, and we are trying to improve living conditions in rural areas through the adoption of indoor toilets as an alternative to outhouses.

Numerous biogas plants have been installed in the Kyrgyz Republic through assistance from other donors and NGOs, but many are neglected because they do not function properly in the harsh winter conditions that the country faces. To address this issue, JICA is using improved technology to enable stable biogas generation even in the harshest winter conditions. The improvements also make it easier to add livestock wastes and preserve heat for biogas digesters to enable improved gas generation.

The rural citizens we have helped are

delighted that they can now produce gas for cooking and showering. Since gaining independence, the Kyrgyz Republic has been entirely dependent on imports for chemical fertilizers, but the supply only meets a quarter of the actual demand. As a result, there are great expectations for the biogas systems to produce by-product fertilizer. We have received reports from some farmers who use the systems that they are seeing good leaf growth from potato plants planted using the by-product fertilizer.

In Japan, development and deployment of biogas technology is centered in Hokkaido, which shares a similarly cold climate as Central Asia along with a sizable livestock industry. We will continue utilizing experience gained in Hokkaido to establish biogas technology that can operate year-round and withstand the harsh winters experienced in the Kyrgyz Republic.



Construction of a biogas plant in the Kyrgyz Republic



Inspection of a biogas plant

Case Study

Development of Small and Medium-Sized Enterprises and Supporting Industries

Uzbekistan's industry still retains the blueprint of a planned economy, a remnant of when the nation was a Soviet republic. As a result, the private sector is not nearly as active as it is in Japan, and there is little foreign investment to trigger economic growth. To help overcome this situation, JICA opened the Uzbekistan-Japan Center for Human Development in 2000. The center provides business training as a core component for encouraging private sector activities, with the aim of achieving sustainable economic growth built on market economic principles. The center also extends cooperation to build an environment that facilitates the activities of private companies by lending support for the development of legislation and policies and improvements to tax administration.

10 Years of Center Operations

Uzbekistan's key industry is the harvesting of raw cotton, and the nation is also endowed with natural gas, oil and rare metal resources, which combine to offer excellent potential for economic growth. Although the Uzbekistan government is implementing economic reforms in pursuing a market economy, it still needs to address many challenges in order to capitalize on its potential, such as improving the environment for doing business. Uzbekistan is also doubly landlocked—neither it nor any bordering nation has access to the sea—and this translates to high transportation costs. Furthermore, Uzbekistan was previously politically distanced from the West, so that there is relatively little direct investment of foreign capital. For these reasons, Uzbekistan has not been able to fully capitalize on its economic potential.

In 2007, the Uzbekistan government announced the Welfare Improvement Strategy to encourage national development. The plan places a priority on initiatives for human resource development, and the establishment of policies to promote economic and industrial



Participants learn about *kaizen* (continuous improvement) techniques

activity, in seeking to resolve the challenges facing Uzbekistan.

In line with this strategy, JICA is providing assistance to Uzbekistan for the development of legislation and policies and improvement of tax administration, aimed at encouraging the activities of private companies. JICA also established the Uzbekistan-Japan Center for Human Development in 2000 as part of its focus on human resource development in the nation. Some 460,000 visitors have passed through the center's doors, including those taking Japanese-language courses or participating in the exchange programs that the center offers, while some 200 people take business and Japanese-language courses every year through the center. In 2005, the center strengthened its business courses with more content to provide practical knowledge and expertise for the development of small and medium-sized enterprises and supporting industries. Uzbekistan citizens who have taken business courses at the center are now applying their skills in the business world.

Transferring Japanese Management Techniques

One of the major prerequisites for promoting foreign investment is to have supporting industries in place with the degree of technical sophistication and reliability needed to support foreign companies that establish operations. The JICA-funded Uzbekistan-Japan Center for Human Development has assembled a curriculum based on surveys of the needs of Japanese companies, and offers courses in collaboration with the Japan Chamber of Commerce in Uzbekistan and other economic organizations. The center also supplies company information and up-to-date information on industry trends in Japan, and gives seminars to convey practical knowledge and technical expertise, in addition to conducting training in Japan.

JICA arranges for experts from Japanese companies to give seminars on specialized topics such as production management and *kaizen* (continuous improvement) techniques in the capital of Tashkent as well as workshops for entrepreneurs in provincial cities. Senior Volunteers also provide personal business consulting, which has been a popular service. As well, JICA personnel provide guidance for sericulture and tourism hospitality, to support Uzbekistan's traditional industry and tourism resources.

Uzbekistan Private Sector Development Program**A Grassroots View**

Lenorat Tajibaeva
Staff Member, Business Course Project

The business courses offered by the Uzbekistan-Japan Center for Human Development are designed for people who run businesses. The course disseminates MBA-level knowledge and expertise, and we have seen more and more students going on to achieve success after completing the courses. The training in Uzbekistan also teaches Japanese-style management techniques and gives the participants a chance to network with Japanese experts. When we first offered the courses, it was a struggle to get the word out about the program, but today the courses are well-known and we have expanded the content. They now draw participants from other Central Asian countries, and there is a real sense that the project is having an impact on human resource development and economic development in the region.

A Grassroots View

Naoko Kuwahara
Long-Term Expert in Assistance for Legislative Development

I was appointed to this position in 2005, and have been working for the last four years to assist with the development of legislation and policies to facilitate corporate activities in Uzbekistan. The first year saw a lot of trial and error, but through the dedication of my counterparts and intense discussions, we developed a flexible approach to reviewing and improving the activities, and have successfully contributed to the creation of legislation and policies that are necessary for corporate activities. In this former socialist republic, the understanding of corporate activities differs from that in a capitalist country. At first, it was a struggle to communicate market-oriented ideas, but JICA's assistance focuses on having Japanese experts work side-by-side with their counterparts in the same workplace. This approach paid dividends by encouraging a better mutual understanding of one another's values, rather than pushing ideas on our counterparts. As a result, we have been able to develop quality human resources. This is a tough job that requires long hours and involves a lot of work, but it is extremely meaningful. In the last two or three years, I have witnessed remarkable strides being made by young people who are passionate about developing legislation and policies. Combined with the changes I have witnessed in Uzbekistan, this is a great source of personal inspiration.

South Asia



Flexible Assistance to Address Diverse Challenges in Each Country

South Asia encompasses not only India, which has grown to become the third largest economy in Asia, but also many countries that face a pressing need to build a foundation for economic growth and overcome conflict to achieve stable peace and rebuilding. Poverty remains high in the region, while climate change and disaster prevention also present critical challenges.

JICA is utilizing various schemes to provide sustained and flexible assistance tailored to each nation's circumstances. To secure sustainable economic growth in the region, JICA is extending assistance in areas such as social and industrial infrastructure development—including electricity, transportation, and water and sewage infrastructure—and development of supporting industries. JICA is also cooperating with the South Asian Association for Regional Cooperation (SAARC) to encourage intra-regional collaboration and human exchange.

Key Aid Strategies

Sustaining Strong Economic Growth, Addressing Climate Change, Preventing Disaster and Building Peace

South Asia is comprised of the nations of India, Sri Lanka, Pakistan, Bangladesh, Nepal, Bhutan and Afghanistan. One-third of the roughly 1.5 billion people who live in the region are considered to be impoverished, and eliminating poverty is a challenge facing each nation. Many countries also need to develop their social services, including the need to expand access to primary education and medical services, while facing a pressing need to develop key agricultural industries and provide social services and living infrastructure. Furthermore, countries and regions that face political and social instability also have a critical challenge in terms of improving governance and enhancing administrative capabilities.

JICA has set four priority areas for reducing poverty in the region:

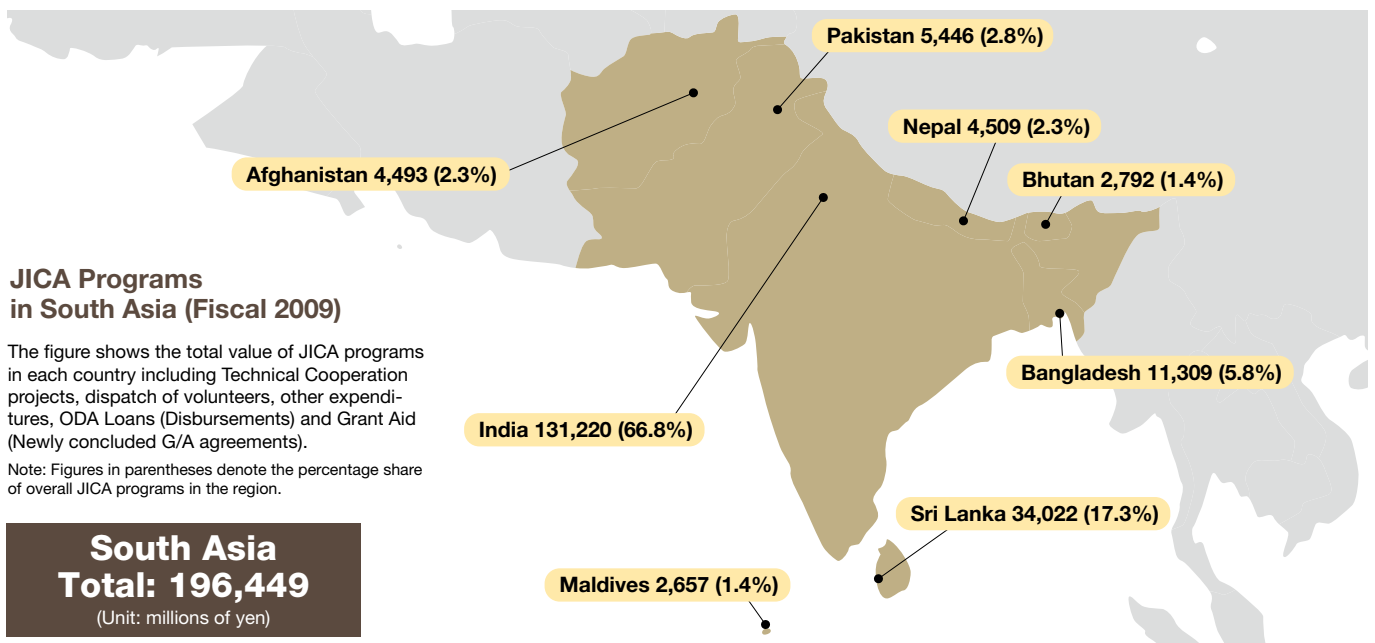
1. Reduce poverty including through the development of public services, community development and human resource

development

2. Assist sustained high rates of economic growth, including through the development of economic infrastructure such as transportation, electricity and assistance to the private sector
3. Ameliorate climate change and strengthen disaster prevention
4. Foster peacebuilding that contributes to political and social stability

JICA's assistance to address these critical challenges is based on a human security perspective, aiming to minimizing negative impacts on people and increase their capacity to solve issues themselves and achieve self-reliance.

SAARC was formed in 1985 with the objective of promoting cooperation in South Asia for socioeconomic development and in the



Note: Figures exclude JICA's cooperation to multinational and international organizations

cultural field. In addition to encouraging intra-regional cooperation, SAARC has in recent years sought to cooperate with countries outside the region and international organizations. The Japanese government has indicated its active support for promoting

democratization, peacebuilding, intra-regional collaboration and human exchange, guiding JICA's pursuit of broad initiatives in the region.

Priority Issues and Efforts

Reducing Poverty—Improving Public Services, Developing Community and Human Resources

JICA's highest priority in the region is reducing poverty. Under this direction, JICA is providing assistance to build water supply facilities, develop rural areas, and improve access to social services. All these aim to assist persons living in poverty who lack access to basic living infrastructure and regions facing agricultural devastation due to conflict or other influences.

In Pakistan, JICA initiated a project in January 2009 which maintains and manages irrigation facilities and improves productivity in pilot areas in Punjab Province, a major grain-growing region in the country. JICA experts are providing training to strengthen farming cooperatives and develop human resources, with plans to expand the pilot areas results to all areas in the target region by 2013.

In Bangladesh, JICA implemented a project focusing on conditions surrounding the poor, who make up more than half of the rural population. Under the project, JICA sought collaboration at the national and regional government levels and involving local communities to build frameworks that facilitate rural citizens' access to suitable administrative services, and for citizens to examine and raise issues with governments. Although the project ended in fiscal 2009, the Bangladesh government plans to pick up where the project left off by expanding the project's initiatives, which JICA will continue to support.

Maintaining High Rates of Economic Growth—Supporting Employment Creation

India has a major presence in the economy of South Asia. In fiscal 2009, India sustained a high GDP growth rate of 7.4% despite the global financial and economic crises, and is expected to continue to be a driving force in the regional economy. India's stable development is crucial to peace and prosperity in Asia. Despite its economic growth, some 36% of India's 1.03 billion citizens are living in poverty, while the literacy rate for persons aged 15 years and above is just 66%.

To achieve stable development in India, JICA is extending assistance to secure economic growth and reduce poverty, mainly through ODA Loans.

In 2009, JICA extended an ODA Loan for the Dedicated Freight Corridor (DFC) Project between Delhi and Mumbai. The Project

seeks to develop a trunk transportation line as a backbone for the Delhi-Mumbai Industrial Corridor (DMIC), the largest industrial belt linking two mega cities. The DFC Project is expected to establish more efficient and stable logistics. The ODA Loan for the project builds on development studies that were initiated in 2006 and Technical Cooperation extended in 2008. During fiscal 2009, JICA also provided assistance for metro development projects in Delhi, Kolkata and Chennai, and the Sikkim State Biodiversity Conservation and Forestry Management Project.

In an effort to raise the overall level of the economy in the South Asia region, JICA has been providing assistance to Afghanistan for the Study on Groundwater Resources Potential in Kabul Basin through Technical Cooperation, and assistance to Sri Lanka for development of the water sector through ODA Loans. JICA will pursue broad regional initiatives for the development of economic and social infrastructure and to assist the private sector.

Addressing Climate Change, Preventing Disaster—Raising Flood Forecasting Accuracy

Many countries in South Asia are deeply influenced by the effects of climate change and are in need of mitigating measures to reduce greenhouse gas emissions in conjunction with measures to address the effects of climate change.

The region also faces many natural disasters, with the critical challenges of requiring disaster relief and assistance for recovery and restoration in addition to assistance for disaster prevention and awareness-raising.

A case in point is the Lai Nullah River in Pakistan, which flows through the capital city of Islamabad and Rawalpindi city. The river is subject to heavy rains during the monsoon season, which causes flooding about every three years. JICA conducted a development study in 2002, which led to the formulation of a master plan under which JICA extended assistance to develop the Lai Nullah Flood Forecasting and Warning System (FFWS), initiated in 2005 through Grant Aid. In 2007, JICA initiated a Technical Cooperation project to improve the accuracy of flood forecasting, inform citizens of evacuation procedures after flood warnings are issued, and strengthen collaboration between local governments while enhancing their capabilities for flood planning. JICA has also continued to extend cooperation to reduce flood damage in the Lai Nullah River region, such as the implementation of evacuation

drills for residents in pilot areas.

In Bangladesh, JICA is implementing various Grant Aid projects including the installation of a meteorological radar system and construction of multipurpose cyclone shelters.

Post-Conflict Peacebuilding —Assistance for Conflict Prevention

With Sri Lanka and Nepal facing political and social instability, it is a major challenge to effectively assist peacebuilding in these nations. Afghanistan's political situation and security problems are even more challenging. In that country, assistance must involve close monitoring of the nation's political situation as well as trends in assistance from other donors and the impact on the political situation in neighboring countries including Pakistan.

Nepal has recently come through a decade-long civil war, and in April 2008 held a general election for its Constituent Assembly.

JICA is providing assistance to help rebuild the nation through the development of policies and programs, human resource development and awareness-raising initiatives, which focus on both democratization and peacebuilding.

Sri Lanka reported in May 2009 that it had ended its civil war. However, the nation has been deeply scarred by civil war, leading to debate in the international community about the direction for rebuilding Sri Lanka and the shape of new assistance.

In 2008, Japan extended Grant Aid to Afghanistan for the construction of a new international terminal to help rebuild the Kabul International Airport, which was damaged by the conflict. JICA is providing training for staff of the Afghanistan Ministry of Transport and Civil Aviation in the area of airport management.

Case Study

Outer Ring Road Development with ETC Technology

India: Hyderabad Outer Ring Road Project

Economic growth in India has been accompanied by rapid urban population growth. It causes major cities to face critical pollution issues such as traffic congestion and vehicle emissions. The Hyderabad metropolitan area, which is experiencing rapid development as a center for IT and biotechnology industry, also faces serious traffic congestion issues. To address this challenge, JICA has agreed to finance up to ¥83.9 billion in ODA Loans to support construction of the Hyderabad Outer Ring Road, which incorporates an intelligent transport system (ITS) to optimize road traffic. The ITS deployment will provide road users with real-time traffic information, while electronic toll collection (ETC) will be used to improve traffic flow at toll stations.

The Hyderabad Outer Ring Road will be 158km long when completed. JICA is supporting

the construction of the north section of the ring road, with 71km long. Construction of the south section of the ring road has gone ahead under a public-private partnership (PPP), creating the pressing need to build a framework for ITS operation in anticipation of opening the road.

The ITS deployment is the first of its kind in India, and because of the difficulty of trying to implement such a project without outside assistance, JICA is working closely with the implementing agency to pursue the project through a Technical Cooperation scheme. The Technical Cooperation is being implemented with the cooperation of such parties as East Nippon Expressway Co., Ltd. in order to leverage Japan's experience. Specifically, JICA is providing assistance for ITS deployment planning, development of operating manuals and ETC toll collection training. Japan's

expertise is helping to meet the major challenge of steadily developing the framework for ITS operation without affecting the fast pace of the PPP project.

A Grassroots View

Seiya Matsuoka
Chief of ITS Deployment Project,
ALMEC Corporation

ITS including ETC will be crucial for India as the traffic volume continues growing. We are committed to adapting this advanced technology to India's actual circumstances to build a system that offers real convenience and serves as the best ITS model in India.



On-ramp for the Hyderabad Outer Ring Road (under construction) in India.



Indians visit a highway traffic management center in Japan.

Case Study

Supporting the Self-Reliance of Internally Displaced People

Pakistan: Rapid Assistance through Existing Projects

In 2009, a Pakistani military offensive to remove militants from the northwestern region of the country bordering Afghanistan led to the temporary internal displacement of as many as 2.5 million people. JICA responded to the situation by utilizing the framework of existing Technical Cooperation projects to extend emergency assistance for Internally Displaced People (IDP).

Emergency Mobile Medical Camps

The military offensive to remove militants from the region led to the temporary displacement of as many as 2.5 million people—a number that represents some 10% of the population there. A study conducted by Save the Children, an international NGO, found that around half of the IDP were children, and some 80% of all IDP persons suffered from symptoms such as diarrhea, respiratory illness, infectious disease and psychological stress.

JICA has been implementing the EPI/Polio Control Project in Pakistan since 2006, targeting the Swat, Buner and Shangla districts in Khyber Pakhtunkhwa Province (then called North-West Frontier Province), as well as the Haripur District. In response to the mass displacement in May 2009, JICA set up mobile medical camps and conducted vaccination programs for infectious disease in collaboration with local doctors in an area of Haripur District that was not affected by

the military offensive. JICA also collaborated with local companies to supply safe drinking water to some 500 families and 3,000 IDP in order to prevent dehydration and the spread of infectious disease.

The government offensive had wound down by July 2009, as the IDP began their repatriation, but many remained in IDP camps out of fear, prompting JICA to continue running the mobile medical camps through August. Hiroto Miyagi, chief advisor to the project, was involved throughout. “We provided emergency assistance to the IDP doing what we could by taking a nonconventional approach. This extra effort enhanced our collaboration with local physicians and NGOs. We were also able to build greater trust with district health authorities,” said Miyagi.

Technical Cooperation to Assist IDP

Starting in July, JICA provided assistance to IDP with disabilities as part of the Project on Promotion of Social Participation of Persons with Disabilities, a Technical Cooperation project that was initiated in 2008 in Abbottabad, Khyber Pakhtunkhwa Province. The assistance included the implementation of background surveys and provision of information for living assistance. JICA also implemented leadership training for those who play a key role in the project, held awareness-raising workshops and provided mental health counseling and organized

recreational activities. Thirteen support staff who themselves possessed disabilities were actively involved in the project. JICA based the assistance on lessons learned about the importance of mental healthcare for the self-reliance of earthquake victims with disabilities, from assisting the 2005 Kashmir Earthquake in northern Pakistan. JICA staff focused their efforts on providing soft assistance such as providing training for daily living so that persons with disabilities could be self-reliant once being repatriated.

Speaking on the project, one displaced woman said, “I use to feel embarrassed about my leg, which made me reluctant to go out except for work. When I saw the positive attitude of the project staff—people who had disabilities that were worse than mine—it changed how I felt about my disability.”

Stability in Pakistan, which borders Afghanistan, has a direct impact on the stability and peace of the entire international community. At the Pakistan Donors Conference that took place in Tokyo in April 2009, the Japanese government announced that it would extend up to US\$1.0 billion in assistance to Pakistan over two years. Under the assistance package, JICA will continue to contribute to stability and sustainable development in Pakistan.



Mobile medical camp set up in a refugee camp in Pakistan.



Refugee children in Pakistan receive vaccinations.

The Middle East

Regional Peacebuilding: The Key to Global Economic Development

Approximately 60% of global oil reserves and 40% of the world's natural gas reserves are in the Middle East. Japan depends on imports from the Middle East for nearly 90% of its domestic oil consumption, which makes the peace and stability of this region a critical factor for Japan's economic development.

The Middle East has undergone many conflicts in its history, which have impoverished its people and also had a grave impact on international politics and the global economy. Problems with access to resources have led to economic disparities, and even countries with abundant resources are confronted with the challenge of creating jobs and developing a forward-looking economic foundation that does not depend solely on oil exports.

JICA provides support with the aim of playing a key role in the international community, as well as in the Middle East, by addressing these issues. For example, JICA focuses on aid for peacebuilding in Iraq, where public order has been improving, and aid that contributes to the future establishment of a Palestinian State and peace in the Middle East.

Key Aid Strategies

Supporting Peacebuilding with Six Priorities – Collaborating with the International Community

The Middle East has developed from ancient times as a strategic stop along trade routes, connecting the civilizations of the East and West. However, the region has been the scene of interminable ethnic and religious conflicts, as well as the Gulf War, the Iraq War and the Arab-Israeli wars. As a result, aid for peacebuilding in the conflict-torn countries, as well as aid for state-building and state reconstruction, is crucial not only for the stable supply of energy from the Middle East but also for global politics and economy.

Japan seeks to build on the trust it has earned by maintaining a neutral and objective position toward all parties in the Middle East. This allows JICA to collaborate with the international community in

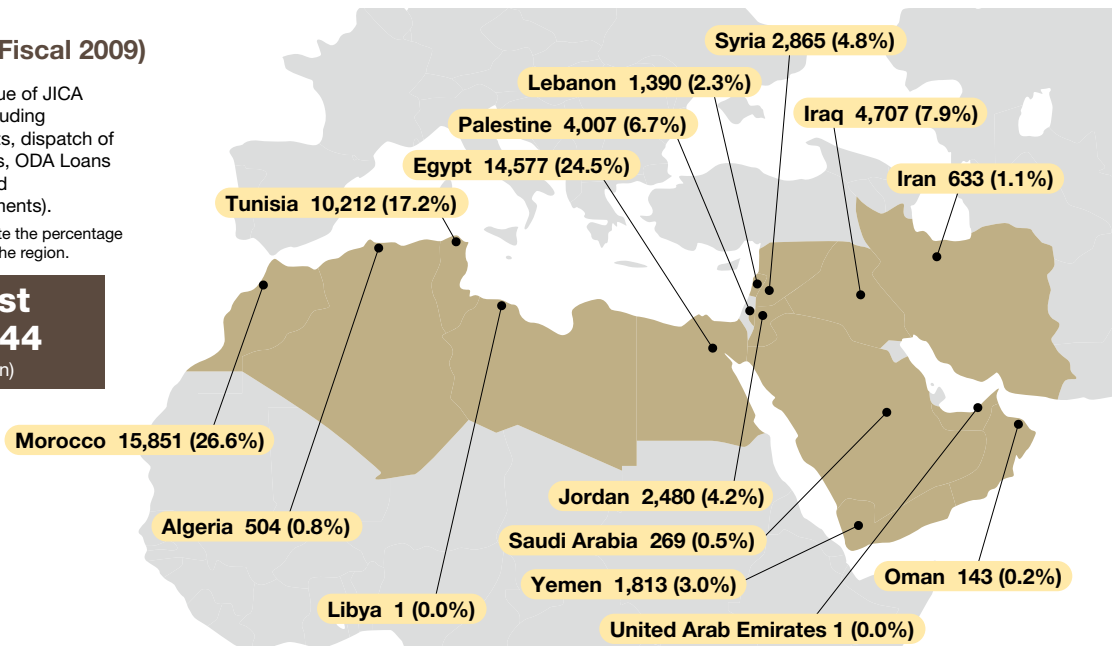
leading a series of initiatives aimed at peacebuilding in the region under the following six priorities: (1) support for peacebuilding in Iraq and the Palestinian Territories; (2) support for the ongoing peace process in the Middle East via assistance provided to the Palestine Authority and surrounding Arab nations; (3) support for democratization in the region; (4) development of socioeconomic infrastructure and support for measures mitigating poverty in low- and middle-income countries; (5) support for water resource management; and (6) support for human resource development tailored to the unique local needs of each country.

JICA Programs in the Middle East (Fiscal 2009)

The figure shows the total value of JICA programs in each country including Technical Cooperation projects, dispatch of volunteers, other expenditures, 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.

Middle East Total: 59,544
(Unit: millions of yen)



Note: Figures exclude JICA's cooperation to multinational and international organizations.

Priority Issues and Efforts

Assistance Tailored to the Different Needs of Oil-Producing and Non-Oil-Producing Nations

The Middle East is home to countries that enjoy high incomes from oil production as well as non-oil-producing countries. Its populations are characterized by diverse ethnic backgrounds and cultures, which has created a complex social makeup that requires finely tuned aid that meets the individual needs of each country.

JICA carries out peacebuilding and reconstruction assistance in Iraq and the Palestinian Territories. It also provides various kinds of

support tailored to various countries' needs in the areas of water resource management, industrial development, technician training and environmental conservation, which are all strong needs shared across the region.

Raids on ships by pirates in the Indian Ocean and the Straits of Malacca have been more frequent in recent years, and JICA is providing aid for anti-piracy measures. These include training for officers in charge of the coast guard authorities in Yemen, Oman and some Asian countries in 2009.

Country Overviews and Priority Issues

■ Iraq

Pursuing Regional Balance to Enable Self-Development

The repeated wars and terrorist activities that Iraq has suffered from since 1980, including the Iran-Iraq War, the Gulf War and the Iraq War, have led to the destruction of much of the country's socioeconomic infrastructure and impoverished the country. Now, seven years after the Iraq War, many Iraqis are still living in abysmal conditions. Iraq has the world's third largest oil reserves, and the government relies on revenue from oil exports for approximately 90% of its annual revenue, which means that trends in oil prices have a major impact on the country's finances.

Under these circumstances, JICA has used the three schemes of Grant Aid, Loan Aid and Technical Cooperation to provide comprehensive reconstruction assistance in the following four areas: (1) Strengthening the Foundation for Economic Growth (oil, gas, agriculture, manufacturing and mining sectors); (2) Activation of the Private Sector (electric power, transportation and telecommunication sectors); (3) Rehabilitation of Basic Living Infrastructure (water supply, sewage, health and education sectors); and (4) Governance Development (foundation for administration and human resources).



Offshore crude export terminal from which about 80% of crude oil exports are shipped from Iraq; export capacity will be doubled as a result of aid provided through an ODA Loan project.

Since the Iraq War ended, JICA has committed to 15 projects for a total of ¥364.6 billion, through ODA Loans, and has carried out various training courses for more than 4,200 Iraqis through Technical Cooperation. In fiscal 2009, JICA committed to provide ODA Loans for three projects, including the Water Supply Sector Loan Project in Mid-Western Iraq and the Al-Aikkaz Gas Power Plant Construction Project. These projects are significant in that they target the Mid-Western Iraq region in which reconstruction and development has been slow to get underway due to security problems. The reconstruction and development support in this region, in which Sunnis took the central role, helped to balance out other aid provided to the northern Kurdish region and the southern region (in which Shias dominate), and thus furthered efforts to provide aid that will lead to the sound and sustainable development of the entire country.

Political developments still bear close observation, on the other hand, as a new government has not yet been formed after the General Parliamentary Elections on March 7, 2010.*

JICA set up an office in Erbil in the Kurdistan region in March 2009 and sent staff to reinforce cooperation on the ground. JICA is also working to deepen direct dialogue with Iraqi government officials as it proactively provides aid for socioeconomic reconstruction.

* As of December 21, 2010

■ The Palestinian Authority

Economic Independence for Achieving Peace

In accordance with the Oslo Accords signed in September 1993, a Palestinian Interim Self-Government was established and the international community accelerated aid in order to achieve peace in the region. However, the outbreak of the Second Intifada in September 2000 caused deterioration of the security situation in the area and the peace process stalled at that point. Subsequently, the Israeli government has imposed a blockade on the occupied territories, and the Palestinian economy has been severely damaged because of the restrictions imposed on transportation and limited distribution of goods as well as a decline in job opportunities for the Palestinian workers within Israel.

In July 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 framework is based on the idea that a “two state solution” is crucial to achieving peace between Israel and Palestine, and 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.

Starting in 2005, JICA has provided various Technical Cooperation projects for local government, maternal and child health, and waste management, primarily in the Jericho area, to improve living environments in the region. JICA has also provided technical support for improving agricultural technology and for attaining sustainable tourism, and has conducted surveys on construction of the Agro-Industrial Park for materializing the Corridor for Peace and Prosperity concept.

■ Egypt

Playing a Key Role in Bringing Peace and Stability to the Middle East

As a major country in the Middle East, Egypt is expected to play a key role in the realization of peace in the Middle East, and achieving this



Palestinian refugee camp in Zubeidaa near the border with Jordan
(Photo by Kenshiro Imamura)

role is premised on Egypt having a competitive and stable economy and society. JICA is implementing projects that emphasize Realization of Sustainable Growth and Employment Creation, Poverty Reduction and Improvement of Living Standards, and Promotion of Regional Stabilization, all tailored to Egypt's unique development issues.

In its aid to promote Realization of Sustainable Growth and Employment Creation, JICA provides financial support for the development of infrastructure such as wind power and solar energy to balance energy supply with environmental considerations, as well as Technical Cooperation with the establishment of the Egyptian Export Promotion Center and the Kaizen Center. JICA carries out various activities in tourism and culture, such as providing aid for the construction of a museum and the preservation and restoration of cultural assets, as well as supporting the establishment of the Egypt-Japan University for Science and Technology (E-JUST) aspiring to achieve industrial human resource development.

JICA supports Egyptian efforts to reduce poverty and improve living standards by providing basic infrastructure such as water and sewage systems in the Nile Delta, promoting school health services in Upper Egypt and developing capacity for water resource management in the Nile Delta.

JICA also contributes to peacebuilding, regional stability and social development in the Middle East and Africa through the Third Country Training Program.

■ Morocco

Addressing Regional Disparities and Water Resource Development

Morocco has achieved steady economic growth and reduced poverty as a result of its economic deregulation policies implemented since the 1990s. However, the economic disparities between urban areas and rural areas remain large, and mitigating these gaps has become a major issue.

JICA provides ODA Loans for aid with a focus on the development and revitalization of agriculture and fisheries and the development of water resources, such as water for agricultural purposes and drinking water. Accordingly, JICA supports projects for the construction of water and sewage systems in rural cities, improvements to the urban environment and the construction of rural roads. In addition, JICA concentrates on the Third Country Training Program as a



Third Country Training Program to learn about engine models and the operation of construction equipment (Photo by Shinichi Kuno)

program to support French-speaking Africa.

Case Study**Support for Economic Sustainability in the Palestinian Authority****The Palestinian Authority: The Corridor for Peace and Prosperity and the Jericho Agro-Industrial Park**

JICA carries out Technical Cooperation to improve agricultural technology and plans to construct the Jericho Agro-Industrial Park (JAIP) in the suburbs of Jericho city with the aim of materializing the Corridor for Peace and Prosperity concept announced in July 2006.

Focusing on Developing the Agricultural Sector, Processing Agricultural Products and Revitalizing Distribution Systems

Approximately 70% of the population in the Jericho area on the West Bank of the Jordan River work in agriculture, and revitalizing the agricultural sector plays a crucial role in regional stability and development. However, because of poor agricultural techniques and weak distribution and sales systems for agricultural products, farmers are failing to earn enough income from their work.

With this background, JICA has provided research and training that meets the local workers' needs, aiming to improve economic conditions for small-scale farmers by developing the capacity of leaders who promote better techniques in the local community.

It is also important to establish agro-industrial areas intended to add value to the agricultural products and/or distribution bases to maintain freshness and ensure regular shipments. This approach of revitalizing industries utilizing specific bases such as industrial parks is an effective approach to



A reenactment of a traditional wedding at the Jericho Festival held with the support of JICA

promoting industry in a region like Palestine where local firms operate all commercial activities with limited information and under Israeli restrictions. Other donors also plan to develop industrial parks in the Palestinian Territories.

The Jericho Agro-Industrial Park is expected to provide opportunities to the small- and medium-sized Palestinian companies that currently operate in individual cities to expand their business. The park is located close to the Allenby Bridge, which is the only gateway to Jordan, so that the local companies will be able to export their goods via

Jordan, which would in turn result in great economic opportunities for Palestine as a whole.

Aid to Promote Public Services, Education and Tourism

In addition to support for the agricultural sector, JICA also provides various programs to reinforce the capacity of local government administration, to strengthen social services and to develop tourism in the Palestinian Territories.

JICA intends to improve the social sector by developing capacity of the local governments, upgrading public facilities such as roads, hospitals and schools, managing disposal of wastes, and introducing maternal and child health handbooks to enhance medical services. In the tourism sector, JICA aims to help with attracting tourists to the world's oldest city, Jericho, by utilizing cultural assets as tourism resources, supporting the Jericho 10000 Festival and holding regular bazaars for tourists, as well as establishing a committee for promoting tourism via a public-private partnership.



Meeting between Palestinian President Mahmoud Abbas and JICA President Sadako Ogata in February 2010



Rendering of the Jericho Agro-Industrial Park (Stage I)

Tunisia

Meeting Demand for More Competitive Industry

Tunisia has achieved steady economic growth. However, the tariffs imposed on EU products have been abolished in phases since 2008, making it essential that domestic industries raise their level of competitiveness.

In addition to aid aimed at reducing poverty, mitigating disparities and conserving the environment, JICA provides support for projects to raise industrial competitiveness. These include the development of railways, roads and other infrastructure, the construction of higher education institutions and research institutions using ODA Loans, the training of science and technology personnel, and programs to revitalize local economies. JICA also focuses on the Third Country Training Program for programs supporting French-speaking Africa and the Middle East.



Technology Park currently being built in Borj Cedria in the suburbs of the capital Tunis

Spotlight

Jordan's Eco-Museum — Utilizing Living Cultural Heritage as Tourism Resources

Jordan's living heritage is attracting attention as a new resource in the tourism industry. This approach attempts to attract tourists by presenting its historic and quaint streets and local lifestyles as an ecological museum.

Jordan attracts many tourists, primarily from Europe and the United States, who are interested in visiting the Dead Sea; the remains of Petra, a world heritage site; and the Wadi Rum Desert. The tourist industry accounts for 20% of its invisible trade balance. JICA has provided support for tourism promotion with ODA Loans since 1999 for the upgrade of tourism zones and museums in the four regions of Amman, the Dead Sea, Karak and Salt. JICA also supported efforts to reinforce capacity for the independent administration of museums with Technical Cooperation from 2004.

In addition to these endeavors, JICA is supporting the creation of a new ecological

museum in Salt. This is an attempt to transform the beautiful streets of Salt, surrounded by low hills, into a museum. Noriaki Nishiyama, a Hokkaido University professor cooperating with JICA's tourism development in Salt, explains it this way, "Salt, a town of traders, overflows with appealing resources, including unique Islamic buildings and souks (markets). I am confident that this is the tourist site best suited as a stage on which to display the Jordanian people's hearts and culture."

A study team was sent in 2008 made up of Japan Overseas Cooperation Volunteers (JOCV) to turn this ecological museum idea into reality. As well as devising an overall plan, Kayo Murakami and the other team members actually walked the streets and surveyed the buildings made out of Salt rock (yellow limestone), orchards and souks, and also held interviews with elders well-versed in the city's history.

"At first, the residents asked us 'why are you doing this?,' but now when we are out conducting interviews, they casually ask us if we want some breakfast. I want to create a museum that will convey the warmth of these people."

Ms. Murakami and her team collected data on over 1,000 buildings and opened a photograph exhibit on Salt. Jordan's Ministry of Tourism and Antiquities and museum staff were instructed in these methods, and JICA will continue to provide further aid even after the study is completed so that it can continue.



The streets of Salt, surrounded by low-rolling hills



Ms. Murakami surveying the town



Interacting with local children

Case Study

Pursuing Sustainable Energies to Balance Economic Development in Developing Countries and Global Environmental Conservation

Egypt: Zafarana Wind Power Plant Project and the Gulf of El Zayt Wind Power Plant Project

JICA actively supports the development of sustainable energies in Egypt. In addition to an ODA Loan for the Zafarana Wind Power Plant Project (total output of 120MW), which began operating in July 2009, JICA newly provided an ODA Loan for the Gulf of El Zayt Wind Power Plant Project in March 2010.

Support for Building the World's Largest Wind Farm

Power demand in Egypt has surged as its economy grows, and the Egyptian government is focusing on utilizing new and renewable energy in order to conserve the environment. Accordingly, the government has announced a goal of obtaining 20% of its total power generation from renewable energy by 2020, of which 12% will be from wind power.

The pilot plant for wind power generation was the Zafarana Wind Power Plant built along the Red Sea, southeast of the capital Cairo. The wind direction and speed in this region is consistent throughout the year and has attracted the development of large-scale wind farms with the cooperation of countries including Denmark, Germany and Japan.

Based on these successes, the Egyptian government planned the development of a wind power plant in the Gulf of El Zayt region, further south of the Zafarana region. With average annual wind speed over 10m per second, this is one of the best sites in the world for wind power generation, and in March 2010, JICA signed an ODA Loan agreement with the Egyptian government to build a wind power plant with a maximum output of 220MW, the largest in Egypt as a single facility, and about three times the output of the Shin Izumo Wind Farm in Japan, which has a total output of 78MW. This project will increase Egypt's total power generation capacity by about 1%, and will reduce CO₂ emissions by 490,000 tons per year as compared to an equivalent quantity of power produced with fossil fuels.

The JICA project has been followed by ODA from other countries such as Germany and Spain, and projects run by private companies are also underway in this region, with plans to make this the world's largest wind farm with a total output of more than 900MW.

Since attracting private-sector investment is essential to achieving Egypt's national strategic goals, it is important to promote public-private partnerships. The goal is to have government and related organizations devise

basic plans and undertake the pilot projects to demonstrate the project's feasibility, and then develop large-scale plants with private-sector investment. JICA's projects play an extremely important role in laying the groundwork for these public-private partnerships.

CDM Project Attracts the World's Attention

The Zafarana Wind Power Plant Project was registered as the world's first Clean Development Mechanism (CDM)* project carried out with large-scale ODA Loans. JICA is also supporting preparations for formation of the CDM component of the Gulf of El Zayt Wind Power Plant Project under the post-Kyoto international framework.

Given the escalating need around the world to shift to new energy sources to build low-carbon societies with lower greenhouse gas emissions, even emerging economies are working to develop and promote renewable energy to meet growing energy demand. This has raised interest in CDM projects carried out in cooperation with developed nations. Currently, CDM projects are concentrated in countries such as China, India and Brazil with strong market and economic potential, but the development of renewable energy through public-private partnerships in Egypt is also attracting attention as projects demonstrate the growing potential of CDM.

JICA also supports other major renewable energy projects, such as the Kuraymat Integrated Solar Combined Cycle (ISCC) Power

Plant, and will continue to support efforts in a wide range of sectors to achieve a balance between Egypt's economic development and global environmental conservation by providing aid for new wind power plants, feasibility studies for photovoltaic power plants and biofuel development.

* The Clean Development Mechanism (CDM) is one of the Kyoto Mechanisms for developed countries and countries transitioning to a market economy to carry out projects to reduce greenhouse gases. These reductions (emission credits) are given to the country as a credit that can be used to achieve their own targets. This framework also contributes to the sustainable development of developing countries.

A View from Our Partner

**Abd El Rahman Salah El Din
Chairman, New & Renewable Energy
Authority (NREA)**

This wind power plant built with Japanese ODA Loans began operating smoothly in 2009. This loan was indispensable in pursuing this project and bolstering its economic potential, and we are very grateful for this cooperation from the Japanese government and JICA.



Zafarana windmills stand like a forest on the Red Sea coast.

Africa



Supporting Self-Reliance to Foster Growth

As a result of the global financial and economic crises and erratic fluctuations in crude oil prices, Africa's economic growth rate was a mere 2.5% in 2009 (5.6% in 2008), and 2.1% when looking at Sub-Saharan Africa alone (5.5% in 2008). However, Africa is blessed with abundant natural resources such as oil, natural gas and rare metals, and the continent is expected to achieve steady growth. It also holds promise as a massive market of more than 900 million people in 53 countries. There have been signs of economic recovery in 2010. Of course, Africa has many issues to resolve such as reducing poverty, but just as the sense of ownership of its own challenges is growing, affiliations in Africa overall and between subregions are coming to life.

As the advocate of the Tokyo International Conference on African Development (TICAD), Japan has worked to support Africa's sustainable growth since the 1990s. At TICAD IV, held in Yokohama, Japan, in 2008, the Japanese government made an international commitment to double its aid to Africa by 2012. To fulfill this commitment, JICA carries out activities focused on supporting Africa to achieve self-reliance.

Key Aid Strategies

Following Up on TICAD IV Commitments and Implementing the Yokohama Action Plan

The Yokohama Action Plan, which was adopted at TICAD IV in May 2008, prioritizes three issues through expanded partnerships between the international community and Africa.

1. Boosting Economic Growth in Africa

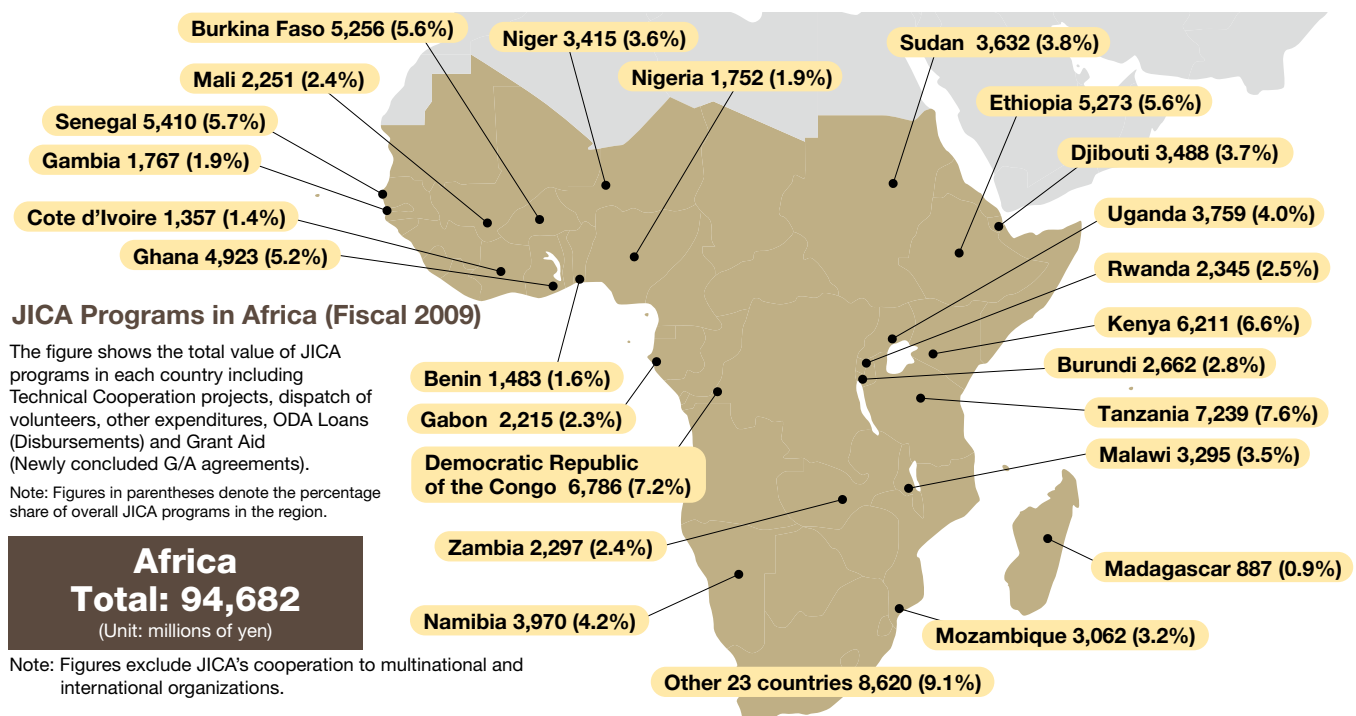
- Establishment of regional infrastructure, such as transportation and energy; expansion of support for the One Stop Border Post (OSBP) Project
- Support for improving agricultural productivity with a focus on rice production, and increasing food production through the Coalition for African Rice Development (CARD)

2. Ensuring Human Security

- Assistance to achieve the United Nations Millennium Development Goals (MDGs), such as support for construction of primary schools and measures against infectious diseases
- Assistance for development and reconstruction projects that contribute to regional stability, sustainable peace and good governance

3. Addressing Environmental and Climate Change Issues

- Formation and implementation of projects to enhance African countries' ability to adapt to climate change and ameliorate its impacts
- Water resource management including safe water supply



The African economy has steadily expanded in recent years, spurred by an increase in overseas investment following the end of regional conflicts and surging prices for resources such as crude oil and minerals. Average growth in the past 10 years has been over 5%, with some countries achieving economic growth of more than 10%. However, the global financial and economic crises in late 2008 weakened political, economic and social foundations and had a particularly severe effect on Africa which faces problems such as poverty, low agricultural productivity and inadequate infrastructure development.

Priority Issues and Efforts

Fulfilling Japan's Commitment to Double ODA to Africa by 2012

The Japanese government has made a commitment to double its ODA to Africa by 2012 compared with the baseline average in 2003-2007.

JICA is working to achieve tangible results over the five-year period by comprehensively reviewing the needs for aid in African countries and regions and focusing aid resources on priority areas in line with the objectives of the Yokohama Action Plan.

Boosting Economic Growth in Africa

Specific initiatives include: (1) the establishment of such basic infrastructure as transportation, telecommunication and energy systems; (2) the construction of trade and investment frameworks to drive growth; (3) the boosting of agriculture, a sector on which approximately 70% of the entire African population depends; and (4) the development of human resources to achieve sustainable growth, particularly in science, mathematics and technical education.

1. Emphasizing the Development of Regional Infrastructure

Many African countries are landlocked, meaning that delays in building trans-border infrastructure and improving the efficiency of customs procedures impede the integration of regional economies, the expansion of markets and the revitalization of rural economies.

JICA prioritizes the development of regional infrastructure such as trans-border road networks and power grids. JICA's aid is not limited to building physical infrastructure but also encompasses the development of human resources in the areas of maintenance, management and operations, as well as community development.

For example, the project to improve roads between Kenya and Tanzania through an ODA Loan was packaged with human resource development of the customs officers to simplify the procedures required at the border (One Stop Border Post). It is worth noting that Africa's first OSBP began operating in December

Under these challenging circumstances, JICA established a TICAD IV Follow-up Office under its Africa Department in October 2008. The department was renamed the Office for TICAD Process in May 2009 and put in charge of confirming the effectiveness of the assistance provided through TICAD IV, as well as of formulating and coordinating JICA's overall plans to follow up on TICAD IV initiatives. The Office is intended to help JICA more accurately identify and analyze the new assistance needs of each African nation and steadily implement the Yokohama Action Plan.

2009 at the Chirundu border crossing between Zambia and Zimbabwe. In Mozambique, multi-functional roadside facilities known as *michinoeki* have been set up so that local residents using the road can receive the profits.

2. Encouraging Trade and Foreign Direct Investment

Foreign direct investment in Africa expanded sharply from US\$10 billion in 2000 to about US\$90 billion in 2008. Investment from emerging countries such as China, India and Malaysia has particularly grown, creating jobs and opportunities for growth in Africa.

However, many African countries have not yet established policies and systems to promote private-sector development and trade and investment. Moreover, the private sector consists almost entirely of small and medium-sized enterprises, which means that competitiveness on the basis of technical expertise and product development prowess is not very high, among other issues.

JICA provides: (1) support for the establishment of an investment climate and corporate social responsibility (CSR) activities by Japanese companies; (2) support for the local private sector; and (3) support for the promotion of the export of African products, such as product development and improvements to the import environment.

In Zambia, JICA supports the Zambia Investment Promotion Project—Triangle of Hope (ZIPP-ToH), which creates an environment conducive to investing in cooperation with Malaysia. To improve the impact, 12 task forces have been formed, each made up of representatives of the public and private sectors, focusing on issues such as multi-facility economic zones, information and communication technology (ICT), and tourism.

In addition, African private-sector companies have been given a total of US\$300 million in loans and investments through the African Development Bank.



3. Increasing Food Production by Revitalizing Agriculture

Food shortages caused by skyrocketing food prices around the world and natural disasters such as drought and flooding are a severe problem in Africa. Given the 3-4% annual increase in grain imports and the strong population growth rate in the high 2% range, increasing food production is an urgent issue.

However, production techniques in African agriculture are poor; the use of fertilizers and agricultural chemicals, as well as the development of irrigation facilities, is also inadequate. This has kept land productivity low. As a result, farmers' income fails to increase and they are unable to allocate resources to improving production techniques. This creates economic and social problems such as an increase in food imports, the degradation and desertification of natural resources and the excessive flow of the population to cities as farming is abandoned.

JICA supports the development of New Rice for Africa (NERICA), a variety which is suited to Africa's climate, and provides aid with a particular focus on promoting Africa's rice cultivation. The Coalition for African Rice Development (CARD) was announced at TICAD IV with the goal of doubling rice production by 2018. To achieve these goals, JICA works with the Alliance for a Green Revolution in Africa (AGRA), the Food and Agriculture Organization of the United Nations (FAO), the Africa Rice Center, the International Rice Research Institute (IRRI) and others to develop and disseminate rice cultivation techniques suited for a wide range of cultivation styles. These include rain-fed rice cultivation and irrigation rice cultivation, with a focus on the cultivation and agricultural management techniques verified in aid projects thus far. Based in Uganda, Ghana and Tanzania, these initiatives are expanded to neighboring countries.

4. Developing Scientific Technology to Enhance International Competitiveness

In this era characterized by globalization and the knowledge economy, Africa must proactively develop a wide range of human resources to achieve economic growth.

This effort cannot be limited to basic education, but must involve the framing and implementation of higher education policies tailored to national and industrial policy. Africa must also create an environment that will prevent brain drain and bring back talented Africans who moved overseas. JICA supports the development of human resource infrastructure, which encompasses the entire education sector.

For example, based on the need for scientific technology and industrial development in Sub-Saharan African countries, JICA strives to spread technology to neighboring countries from its cooperation base for the technical education and vocational training sector in Uganda and Senegal. Moreover, in Rwanda, JICA has set a goal of shifting to a knowledge-based economy by training technicians with ICT skills. Accordingly, JICA supports projects to reinforce human resource development in scientific technology through the entire

curriculum, such as technical, vocational and educational training in math and science education and secondary and higher education. JICA also supports economic development through the revitalization of industry.

Ensuring Human Security

To contribute to development and poverty reduction, JICA aspires to foster freedom from deficiencies such as poverty, starvation, lack of education and inadequate access to health and medical services. For peace and security, JICA fosters freedom from fear provoked by conflicts, terrorism, crime, human rights violations, infectious disease outbreaks, environmental destruction, economic crises and disasters. JICA also emphasizes the importance of ensuring that the benefits of its cooperation reach every individual in providing support for community development, education, health and peace-building initiatives.

1. Community Development to Improve Lives

JICA carries out many projects that are designed to be rooted in the community, to be comprehensive and to cut across sectors.

The development of Rwanda's Eastern Province is intended to improve the daily lives of residents of rural villages and raise livelihoods. The community is being developed using a comprehensive approach combining water and sanitation, agricultural and rural development, and transportation. In Kenya, JICA is carrying out the Program on Rural Community Empowerment and the Program on Smallholder Empowerment for Income Generation, which support horticultural crops and rice production. In Tanzania and Uganda, JICA is implementing the Agricultural Sector Development Program based on the promotion of rice cultivation. In addition, JICA supports agricultural and rural village development, including efforts to raise agricultural productivity, and initiatives to improve access to water in Ethiopia and Madagascar.

The One Village One Product (OVOP) program, based on Japan's experiences, is spreading through many countries. In Malawi, more than 20 new products have been created through residents' ingenuity and circulated through the local market. Shea butter has been marketed in Ghana and exported overseas to Japan and other countries in soap and handcream. JICA provides support tailored to each country's conditions and systems in order to popularize the OVOP program.

2. Improving Basic Education and Secondary Math and Science Education

JICA endeavors to expand access to basic education, raise the quality of education and improve management.

In the School for All project in Niger, located in West Africa where access to elementary education lags the furthest behind, JICA encourages residents to participate in their schools' administration and promotes affiliations with local governments in an effort to spur

children's school attendance. Impressed by the results achieved in the pilot region, the Niger government has issued a policy to introduce the model to improve school administration developed in

this project to elementary schools nationwide. JICA is considering expanding these activities to neighboring countries in West Africa.

In Kenya, JICA has been carrying out a project to strengthen

Case Study

Road Repairs for the Future of the Nacala Economic Corridor

Mozambique: Nampula-Cuamba Road Upgrading Project

The Nacala Economic Corridor, which runs from Mozambique's Nacala Port through Malawi and Zambia, is an arterial road forming the core of comprehensive development in this region.

Under Enhanced Private Sector Assistance for Africa (EPSA for Africa), in March 2010, JICA provided a Japanese ODA Loan of approximately ¥6 billion through co-financing with the African Development Bank and others to improve the Nampula-Cuamba Road.

Upgrading Arterial Roads Damaged in Civil War

Nacala City, which faces the Indian Ocean in Mozambique's northern region, is an important distribution center not only for Mozambique but also for landlocked countries such as Malawi and Zambia. In addition to arterial roads, railways run all the way to Malawi. However, the country's land was decimated in civil wars lasting 17 years from the 1970s, and major roads and railways in the country were destroyed. Since improving road infrastructure is essential to reducing poverty in Mozambique, the World Bank and the EU have been carrying out road and bridge management programs since the 1990s.

The 353km stretch of the Nampula-Cuamba Road along Mozambique's N13 highway, which makes up part of the Nacala Economic Corridor, is entirely unpaved, despite its importance as an arterial road, and even traveling on it becomes difficult in the rainy season. This road is important not only for the economic development of the surrounding region, but also for local development across national borders under the New Partnership



The unpaved Nacala Economic Corridor frequently becomes impassable in the rainy season. (Photo by Mika Tanimoto)

for Africa's Development (NEPAD). Accordingly, the Mozambique government planned improvements, and JICA provided a Japanese ODA Loan with co-financing from the African Development Bank. With cooperative funding from the Economic Development Cooperation Fund of Korea, this project is also the first co-financed Japan-Korea ODA Loan project.

Supporting Agriculture, Ports, Education and Healthcare for Comprehensive Development JICA carried out a Project Formulation Study in 2006. The road work would ensure smooth passage even in the rainy season, which in turn would revitalize commercial activities along the Nacala Economic Corridor and also make major contributions to jumpstarting the economies of Niassa Province and Nampula Province—regions that have made particularly slow progress in developing in Mozambique—and reducing poverty. These considerations led to this Japanese ODA Loan.

JICA is conducting a study on repairing a 150km road stretching from Cuamba to the western border with Malawi in order to enhance its function as an international corridor. JICA also plans to conduct a study on repairing and expanding Nacala Port, which is expected to handle heavier volumes of cargo when the Nacala Economic Corridor is developed. In addition, JICA is comprehensively considering support for agricultural development through affiliations with Brazil, education and the health sector in order to promote development of the regions surrounding the Nacala Economic Corridor.



A busy scene around containers piled up at Nacala Port

A Grassroots View

Aderito A. Guilamba
Director, Project Department, Administração Nacional de Estradas (ANE)

Paving the Nampula-Cuamba Road is a major priority for the government. Residents, agricultural workers and small and medium-size enterprises are all impatient for the start of construction. Once the road is opened, travel time will be shortened from nine hours to five hours, and travel costs will also be reduced. I have been involved in this project since the planning stage, and I am not only confident that improved distribution will expand the economic effects, but that it will also greatly improve the lives of poor people living in the area.

A Grassroots View

Ioustauro Antonio
Mayor of Ribáuê City, Ribáuê District in Nampula Province, Mozambique

The paving of the Nacala Economic Corridor will have a great impact in speeding up the development of the city. Not only will it encourage economic expansion, but it will improve residents' lives, so we are very grateful.

Saimon Nburma
Secondary School Teacher in Ribáuê City, Ribáuê District in Nampula Province, Mozambique

Residents of neighboring regions as well as city residents are waiting eagerly for the completion of the paved road. The roads to the hospital in Nampula are so bad that cars often run off the road halfway there, and many people have died on the way to the hospital. Rain is important for agriculture, but it makes us depressed just to think that we can't use the roads when it rains. All we can do is pray that nothing bad will happen. With this road improvement, we won't have to fear the start of the rainy season.



secondary math and science education since 1998. This has attracted the interest of neighboring countries, and in 2002, a regional network was established, and this project has now been expanded to 34 countries.

3. Preventing Infectious Disease, Improving Maternal and Child Health and Strengthening Health Systems

Infectious diseases, complications of pregnancy and childbirth, children's disorder and undernutrition represent real threats to people's health.

JICA provides support for measures combating infectious diseases with a focus on individual diseases, such as HIV/AIDS prevention, education and awareness campaigns, as well as support for the maternal and child health and reproductive health sectors in countries such as Angola and Senegal. These are intended to achieve the health-related goals of reducing the under-5 mortality rate, improving the health of pregnant women, preventing the spread of infectious diseases in the United Nations Millennium Development Goals (MDGs).

Initiatives to strengthen the health system are aimed at reinforcing the capacity of local health administrations and strengthening community health activities. JICA hopes to expand activities such as those in Ghana's Capacity Development of Government Administration Project in a wide area.

4. Post-Conflict Peacebuilding

Peace and security are prerequisites for socioeconomic development in Africa. Political conditions are stabilizing as Africa's many conflicts end. In post-conflict Mozambique, Angola and Rwanda, peace is taking root as the rule of law and ethnic reconciliation advance.

JICA supports peacebuilding by, for example: (1) providing support for urban planning for Juba, the central city of Southern Sudan, and the reconstruction of urgent basic infrastructure such as bridges; (2) training to democratize the police in affiliation with the United Nations in the Democratic Republic of the Congo; and (3) support for the social reintegration of children who had suffered tragic experiences in Sierra Leone's civil war and support for the restoration of electricity and water supply facilities.

Addressing Environmental and Climate Change Problems

Given that climate change poses a serious risk to African development, JICA provides various kinds of support for both mitigation and adaptation. Japan uses funding mechanisms to provide support to developing countries trying to balance economic growth and environmental conservation. This support aids efforts to: (1) reduce greenhouse gases to address climate change; (2) address the negative impacts of climate change to achieve adaptations to it; and (3) promote the use of clean energy in order to popularize alternative energy such as solar energy, hydraulic power and

Passing Asia's Experiences on to Africa Under the TICAD Process as Advocated by Japan

In contrast to the growth achieved in many countries in East Asia and Southeast Asia from the mid 1970s, Africa's economy remained stagnant for many years.

In Asia, about 60% of Japan's bilateral ODA was dedicated to infrastructure development. The international community praised this aid for creating the conditions necessary for private-sector investment and the synergistic effects it generated. Since Asia and Africa have vastly different histories, natural environments, societies and economic environments, Asia's experiences cannot simply be transferred to Africa as is. However, it is important that Africa itself is aware of the "East Asian miracle," re-examines the role of government, income allocation and sustainable development, and recognizes the need to establish its own development strategies.

Since TICAD I was held in Tokyo in 1993, Japan has consistently advocated the importance of the African countries themselves taking ownership of African development as well as the importance of partnerships with the international community. This concept was

embodied in the New Partnership for Africa's Development (NEPAD), a comprehensive development concept devised by Africa itself in 2001.

To contribute to NEPAD, JICA is facilitating Public-Private Partnerships between ODA and private-sector investment in cooperation with Asian countries based on their own experiences.

In Asia-Africa cooperation, JICA supports efforts to apply the 5S of quality management (sort, set in order, shine, standardize and sustain) used in medical management in Sri Lanka to hospitals in African countries, Indonesia's support of agriculture in Madagascar and Malaysia's support of efforts to establish an investor-friendly environment in Zambia.

Milestones for the Tokyo International Conference on African Development (TICAD)

TICAD I October 1993 (Tokyo)	Participants included 48 African countries, 12 donor countries and international organizations. The Tokyo Declaration was adopted as the expression of agreement that Africa's development is a priority issue for the international community.
TICAD II October 1998 (Tokyo)	Participants included 51 African countries, 29 partner countries and international organizations. The Tokyo Agenda for Action was adopted, expressing agreement on policies for social development, economic development, good governance, conflict prevention and post-conflict development.
TICAD III September 2003 (Tokyo)	Participants included 50 African countries, 39 partner countries and international organizations. TICAD Tenth Anniversary Declaration was adopted, emphasizing the establishment of peace, people-centered development and poverty reduction through economic growth.
TICAD IV May 2008 (Yokohama)	Participants included 51 African countries, 34 partner countries and international organizations. The Yokohama Declaration was adopted. Japan pledged to double its aid with a focus on agricultural development, trade and investment, tourism promotion and human resource development. Yokohama Action Plan was presented as a five-year roadmap for aid to Africa; a monitoring mechanism was established.

geothermal heat.

JICA's activities prioritize support for adaptive measures such as addressing flooding, drought, desertification and water problems, cooperation to develop and popularize the New Rice for Africa (NERICA)—a strain of rice that is strongly resistant to drought—the construction of irrigation facilities and measures combating malaria. Moreover, JICA is augmenting its measures to alleviate problems in the countries around the Sahara Desert such

as the development of forest resources to prevent desertification and the development and spread of renewable energy such as hydraulic power and solar energy.

JICA gave its first Climate Change ODA Loan in Sub-Saharan Africa for a project to expand the Olkaria Geothermal Power Station.

Case Study

Helping Infants and Pregnant Women

Ghana: Project for the Scaling up of CHPS Implementation

Ghana's progress in improving the Under-5 Mortality Rate and Maternal Mortality Rate has been slow because of the lack of access to basic health services. In particular, the infant mortality rate in rural areas in the north is about twice Ghana's overall average.

To address this, JICA cooperates with Ghana Health Service from 2006, an executing agency for the government's health services, and provides support intended to strengthen basic health services in the Upper West Region in Ghana's northern region.

Working to Improve the Local Health Environment

Ghana has devised a poverty reduction strategy accompanied by economic growth, and has designated access to healthcare services, malaria prevention and HIV/AIDS prevention as priority issues. As part of this effort, the government is aspiring to draft the Community Based Health Planning and Services policy to provide basic health services to its citizens and improve the local health environment.

In its bid to improve the local health environment, Ghana's government, in particular its district health management teams, played the central role in dividing the country into zones of 3,000-5,000 people, with a community health committee set up for each zone. While cooperating with residents, community health officers (CHOs) make health visits to households, offer health check-ups at schools, promote family planning and make initial diagnoses, and serve as the link to higher medical institutions. However, a report stated that by 2004, only 84 zones nationwide had completed the final step and only 1.9% of the population was benefitting.

Accordingly, JICA offered Technical Cooperation to Ghana Health Service in response to a request by Ghana's government,

and initiated a project (Stage 1) in advance in two districts in the Upper West Region from 2006.

Integrating JOCV and Grant-Aid Cooperation

In Stage 1, JICA provided support with the aim of augmenting basic health services provided by CHOs. Moreover, in an affiliation with the project, Japan Overseas Cooperation Volunteers (JOVCV) promoted activities to improve health with participation of residents.

JICA also provided educational materials for community health nurse training schools for CHOs, medical equipment for hospitals and healthcare centers, and equipment to enhance and promote the Community Based Health Planning and Services policy through Grant Aid from 2007. Moreover, JICA provided support to strengthen systems aimed at improving basic healthcare services even in Technical Cooperation projects.

In Stage 2, started in 2008, activities were carried out to expand the output of Stage 1 to the remaining six districts in the Upper West Region based on Ghana's own efforts. The project was completed in 2010, by which point 81 zones had functioning community-based healthcare compared with 24 when the project started in 2006, and 160 CHOs had been trained.

One elderly woman said, "The CHOs have worked a miracle. The illness I had been resigned to suffering was cured as if by magic!" JICA will continue providing support to sustain the joy of people who have gained access to medical care.



JOVCV carrying out educational campaigns

A View from Our Partner

Dr. Sylvester Anemana
Deputy Minister, Ministry of Health (then director, Personnel Division, Ghana Health Services)

After the success of the pilot project in the Upper East Region, this policy was intended to scale up JICA's support. In 2008, the Upper West Region's indicators passed their worst point thanks to the efforts of the regional health management team, district health management teams and community people to make improvements. Study tours from other regions even came to visit to learn about our achievements. The Ministry of Health even changed its policy based on the views of people on the ground, and beginning in 2010 CHOs began to officially receive midwifery training, and a system was set up to give mobile phones to CHOs so that they could call an ambulance in emergencies.

Central America and the Caribbean

Strengthening Development Partnerships for Regional Integration and Intra-Regional Cooperation

In the Central America and Caribbean region, regional integration and cooperation movements such as the Central America Integration System (Sistema de la Integración Centroamericana (SICA)) and the Caribbean Community and Common Market (CARICOM) are very active, and democracy and market economies are taking root and expanding steadily. At the same time, many countries in this region face serious development problems such as poverty and income disparities.

Under these circumstances, JICA is actively involved in development cooperation efforts including climate change measures, infrastructure development for sustainable growth and aid for the impoverished, and will continue to support the stable development of the region. JICA also prioritizes support in the area of natural disasters, as exemplified by its emergency aid and recovery assistance to Haiti in cooperation with the international community after the earthquake in January 2010.

Key Aid Strategies

Facilitating Cooperation on Poverty Reduction, Sustainable Economic Growth, Environmental Conservation and Climate Change

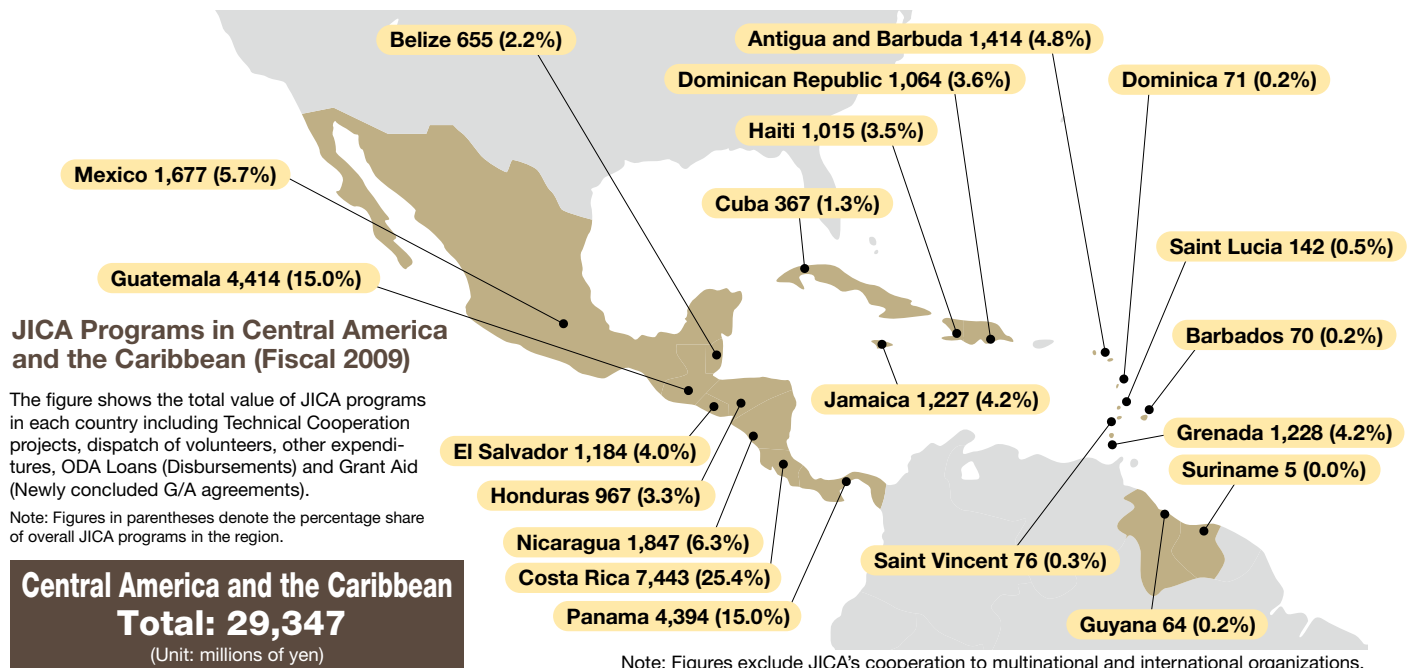
Although Mexico, Central America and the 15 Caribbean countries, including Guyana and Suriname share some common ground in terms of language and culture, they differ in size and condition, and cannot be considered homogenous. While Mexico is home to over 100 million people, the populations of SICA member countries (not including Belize), Cuba, Jamaica and Haiti range from a few million to over 10 million, and the region also includes smaller countries with populations of less than one million.

This region includes relatively stable economies such as Mexico and Costa Rica, which boast international competitiveness in the manufacturing industry and possess advanced industrial structures. Panama, Jamaica and the Caribbean's wealthier countries also have relatively stable economies, supported by finance, tourism and other service-oriented industries. On the other hand, many countries have fragile economic structures and are trying to shift

from a dependence on primary agricultural products to a diversified economy based on high added-value exports, but still depend on the export of primary agricultural products and remittances from the United States.

The civil wars which occurred in various countries devastated the region, ruining economies from the late-1970s to early-1990s. Neighboring countries were also affected by an inflow of refugees and weapons. Peace took hold in the 1990s, and with the exception of a few countries, political conditions and economies stabilized on the whole as countries worked to install democracy and make economic reforms. However, disparities within the region and countries remain pronounced, and many countries face serious poverty, public security and environmental issues. This makes the international community's support essential.

In providing assistance to these small countries in Central



America and the Caribbean, which share mutual development issues, it is important to coordinate with organizations involved in regional integration such as SICA and CARICOM, as well as with international organizations such as the Inter-American Development Bank (IDB) and other bilateral donors. Japan and Mexico have built a close relationship since their Economic Partnership Agreement (EPA) came into effect in April 2005. The two countries are also jointly pursuing triangular cooperation for Central and South American countries.

At the Japan-Central America Summit in 2005, guidelines were laid out with the aim of strengthening relationships by, for example,

Priority Issues and Efforts

Supporting Poverty Reduction to Improve Regional Stability

In Central America and the Caribbean, there are many impoverished people who lack access to basic education, healthcare and medical services, and safe drinking water.

JICA focuses its aid on three fundamental issues facing Central America and the Caribbean: (1) regional and domestic disparities; (2) sustainable economic growth; and (3) negative impacts caused by environmental degradation and climate change (particularly natural disasters such as hurricanes and floods, urban environmental problems and the destruction of natural resources). While contributing to solutions to these issues, JICA strengthens its partnerships with countries in Central America and the Caribbean.

In implementing its programs, JICA actively supports the region and the countries' self-help efforts through capacity development, gives consideration to the most vulnerable groups, such as women, children and indigenous peoples living in poverty due to historical circumstances. In all this work, in addition to regional and national level perspectives, JICA takes into account the view of human security focused on the individual. JICA covers all of these perspectives in its support in the areas of education, healthcare and sanitation.

In the education sector, JICA places top priority on cooperation to help improve basic education and implements Technical Cooperation projects, dispatches volunteers and provides training programs to raise the quality of primary education. One example of JICA's efforts is the Project for the Improvement of Teaching Methods in Mathematics that started in Honduras in 2003, which has now grown to reach other countries of the region including Guatemala, El Salvador, Nicaragua and the Dominican Republic.

In the area of healthcare and sanitation, many experts and volunteers dispatched by JICA are working in priority areas such as reduction of infant mortality rates by focusing on mother-child health and reproductive health to improve the physical condition of expecting and nursing mothers, preventing infectious diseases among people living in poverty, improving rural healthcare and medical services by training nurses, supporting people with

enhancing dialogue, cooperating for the establishment of peace and democracy in Central American countries and cooperating in economic aspects, development overall, tourism and disaster prevention, as articulated in the Tokyo Declaration and the Action Plan that followed.

In the Caribbean, JICA cooperates in the areas of disaster prevention, sustainable marine resource management, tourism development and environmental conservation in consideration of the results of the Japan Caribbean Consultation, which is an official-level diplomatic dialogue held each year.

disabilities and supplying safe drinking water.

A good example is the Chagas Disease Control Project that has been implemented in Guatemala, El Salvador, Honduras and Nicaragua. JICA's contributions to interruption of transmission in Guatemala were recognized by the World Health Organization (WHO) in November 2008.

The economies of many countries in the region rely on the manufacture and export of primary goods, mainly in the agricultural and fishing industries. However, a large proportion of the population in these industries still lives in poverty. JICA is therefore working on poverty reduction through cooperation aimed at the development and dissemination of production technologies for income improvement and the promotion of rural development using a participatory rural appraisal.

Supporting Sustainable Economic Growth

Historically, the long-running civil wars in the region delayed basic infrastructure development, impeding economic growth and standing in the way of reconstruction. JICA provides financial cooperation (loans and grants) in cooperation with the IDB and other donors to target the construction and restoration of necessary roads and bridges that are so essential to sustainable economic growth.

The global financial and economic crises that started in late 2008 affected this region, which has close economic ties with the United States. The decline in foreign direct investment and remittances has also slowed economic growth. In this situation, it is even more important to develop infrastructure that can revitalize economic activity in the entire region.

Supporting Environmental Conservation and Climate Change Measures

In countries whose economies are expanding, addressing the waste disposal and water pollution resulting from the concentration of the population and industry in urban areas is an urgent issue. At the same time, the rich natural environment that makes the region

unique must be preserved as a valuable tourist attraction.

JICA helps countries address climate change with support for mitigation measures such as encouraging the use of renewable energy and teaching energy conservation, as well as adaptation measures such as improving water-supply systems in rural areas. For example, in 2009, JICA started a Grant Aid project for the introduction of a solar power generation system in Belize. In 2007, JICA signed an ODA Loan agreement for the Panama City and Panama Bay Sanitation Project, co-financed by the IDB, to help improve living conditions and the public health environment in the metropolitan area of Panama.

Supporting Recovery from Natural Disasters

The massive earthquake in Haiti in January 2010 killed more than 220,000 people and left approximately 3.7 million injured. JICA dispatched the Japan Disaster Relief Team right after the earthquake to take steps to prevent the outbreak of infectious diseases. Subsequently, JICA participated in the Post Disaster Needs Assessment (PDNA) with the United Nations, the World Bank, the IDB and the Haitian government, and in May, JICA launched the Urgent Rehabilitation and Reconstruction Support Project for Haiti to provide support for the formulation of recovery plans for the damaged areas and the restoration of basic infrastructure.

Case Study

Protecting the Natural Environment and Biodiversity

Mexico

Coastal Wetland Conservation in Yucatan Peninsula

The Yucatan Peninsula, which is covered by coastal wetlands, preserves a rich natural environment and ecosystem. However, the negative impacts of economic and tourist development have been pronounced in recent years.

JICA has continued to provide Technical Cooperation to preserve, restore and ensure the sustainable and appropriate use of the wetlands since 2003.

Living Together, Caring for the Ecosystem

In the Ria Celestún Biosphere Reserve, which runs from the state of Yucatan to Campeche, dense mangrove forests cover the coast and approximately 600 species of animals, including flamingoes, live in this paradise. In 2004, the reserve was designated as a Wetlands of International Importance in accordance with the Ramsar Convention.

However, in recent years an alarming number of mangrove forests in the reserve have been drying out, and a survey indicates that this problem affects 4,000ha. The likely causes are a diversion of groundwater caused by the construction of roads and bridges and an increase in the soil's salinity as a result of storm surges triggered by hurricanes. The construction of roads for tourists wanting to experience nature has, ironically, helped to precipitate this crisis.

In addition, garbage thrown out by residents

is causing environmental pollution, and overfishing has provoked a decline in fisheries resources and a crisis in the aquatic ecology.

Accordingly, Mexico's National Commission of Natural Protected Areas and JICA established the Coastal Wetland Conservation in Yucatan Peninsula Project in 2003 with the participation of the Ria Celestún Biosphere Reserve Office, local governments, local NGOs, residents and fishermen. This project is intended to preserve and restore the wetlands, restore the mangrove forests, collect and dispose of waste and provide local environmental education.

Fishermen Launch Ecotourism

One of the focuses of the project is ecotourism conducted by fishermen. The restrictions placed on fishing to protect the aquatic ecosystem have been problematic for the fishermen, and three groups of fishermen receive support from and are involved in this project.

In 2003, a group of 10 fishermen launched "Laguna de Cinitún." One member explained that they had decided to seek stable revenue because fish catches had been declining every year, and they had to go further out to sea for fish, which pushed up fuel costs and also increased the risk of sudden changes in weather. Members that received training in the English language and knowledge of nature to become guides now conduct boat tours in the mangrove forests. Other groups such as "Alamo"

and "Isla Pájaro" also conduct tours to observe the vegetation growing in springs called *peten* and night tours to see jaguars and spider monkeys.

The tour leaders state that they had never thought about the environment as a resource before and that once the project started, they learned how important nature is and realized they could help to protect it. They had assumed that they would not be able to talk to the tourists, but their training had given them confidence and all of the members did their best to become good guides and satisfy their visitors. This group of fishermen also led initiatives to build boardwalks, restore mangrove trees and collect garbage.

A Grassroots View

Jose de la Gala Mendez

Director, Ria Celestún Biosphere Reserve Office
Receiving technical training and working together with JICA experts—who always possess a strong sense of responsibility—not only raised staff members' awareness and improved their skills, but also enabled them to achieve impressive personal growth. JICA's assistance has provided the backbone to all of their activities and has led to marvelous results.

A Grassroots View

Madoka Nakagawa

Fishermen who had previously harmed the environment with illegal fishing now engage in conservation activities, with a passion to leave the environment unharmed to their children and proudly guide tourists to see the restored mangrove trees. The development of our counterparts in Mexico has been the greatest outcome of this project.



Flamingoes flock to the Ria Celestun Biosphere Reserve.



On an eco tour

Case Study

Warning Siren Saved Residents**El Salvador: Project on Capacity Development for Disaster Risk Management in Central America—"Bosai"**

In November 2009, El Salvador was hit by a hurricane, causing a massive disaster involving flooding and avalanches of rocks and earth that killed more than 300 people. Residents of a village in which JICA had installed a disaster warning system were able to evacuate quickly, resulting in no loss of life.

Addressing the Ten-Year Plan for Disaster Prevention in Central America

Much of Central America has volcanic, brittle and precipitous geographical traits, making the region vulnerable to natural disasters such as damage from wind and floods, landslides, earthquakes and volcanic eruptions. This has inhibited development, including efforts to reduce poverty.

Accordingly, six Central American countries established the Center of Coordination for the Prevention of Natural Disaster in Central America (CEPREDENAC) in 1988 with the aim of creating a disaster-resilient society. Under the Central American Five-Year Regional Disaster Reduction Plan (PRRD: 2000-2004) and the Ten-Year PRRD (2006 - 2015) established by CEPREDENAC, the countries worked to set up disaster prevention systems, train human resources in the disaster prevention sector and strengthen the local capacity to prevent disasters. In this process, the Japanese government was asked to provide Technical Cooperation to raise disaster prevention capacity at the community and rural level.

In response, JICA carried out a project formation study in the six Central American countries in 2006, and started the Project on Capacity Development for Disaster Risk Management in Central America—"Bosai"—in May 2007, aimed at providing five years of Technical Cooperation. Several communities in each country were chosen for the pilot program, and experts started to give advice on community disaster prevention and devised

plans, instruction in participatory workshops on measures to combat flooding, earthquakes, landslides, volcanoes and tsunamis. Disaster warning systems and vehicles were also donated.

Prompt Evacuation Thanks to Alarms and Training

On November 7, 2009, while these initiatives were underway, El Salvador was hit by torrential rain from Hurricane Ida, with as much as 350mm of rain recorded in a single day. This major disaster, which caused flooding and landslides, resulted in more than 300 deaths and missing persons nationwide.

However, in Las Hojas, one of the villages chosen for the pilot program, irregularities upstream were reported to the village's disaster prevention committee through the wireless system that JICA had donated, and the early flood warning alarm installed in nine places in the village warned residents at the right moment. This enabled imperiled residents to evacuate quickly, and as a result the village saw no deaths. A subsequent investigation demonstrated that 50% of residents had heard the siren and, using what they had learned in workshops, cooperated with their neighbors to evacuate smoothly. Based on this outcome, JICA will make further efforts to improve the effectiveness of the project.

In response to Hurricane Ida, the government of El Salvador declared a national emergency, and the Japanese government and JICA also responded with emergency aid.

Supporting Construction of Earthquake-Resistant Dwellings

El Salvador also suffers grave damages from earthquakes. About 12% of the dwellings nationwide were destroyed in 2001, and 60% of those were the dwellings of the poor.

Over the five years from 2003, JICA pursued a project to construct and improve technology for seismic resistant dwellings.

JICA supported the construction of seismic resistant dwellings and their popularization by building laboratories for the study of seismic resistant construction technologies, donating equipment, training researchers and proposing ways to improve construction technology standards for dwellings.

In the three-year project (Phase II) that started in 2009, JICA has been reinforcing its past outcomes with a focus on strengthening building administration.

A Grassroots View

Francisco Orellana
Community leader, Community Disaster Prevention Committee

The early warning system functions very effectively, and enabled 120 families to evacuate to safety. There was physical damage to dwellings and other buildings, but the most important thing is that there were no deaths. I am very grateful to God, who gave us this opportunity, and to JICA's "Bosai" project, which gave us the knowledge about the early warning system.

A Grassroots View

Eiji Kawahigashi
Community Disaster Prevention Expert

Of course no one wants natural disasters to occur in the first place, but I think that this early warning system played an extremely important role under the harsh circumstances. The residents are directly hurt by natural disasters, and there is not much that government can do at the instant that a disaster occurs, so I believe that self-initiated preparation and strengthening capacity to respond to disasters is very important.



Installing an early warning system. The early warning siren for floods prevented loss of human life in this village.



Laboratories for the study of earthquake-resistant construction technologies and training in building techniques



Technology transfer workshop

South America

Social Unrest in the Shadow of Prosperity: Efficient Aid Tailored to Each Country's Challenges

South America, gifted with fertile soil and abundant natural and mineral resources, has achieved solid economic growth, and recovered quickly from the global financial crisis in 2008. However, the discontent of the poor, which arises from large income disparities, provokes social unrest in some South American countries. 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 affiliation with private-sector investment and region-wide cooperation, primarily pursuing measures addressing climate change, economic infrastructure development, poverty reduction and income disparity mitigation. JICA also pursues "triangular cooperation" aimed at third-country development in affiliation with newly industrialized countries such as Brazil.

Key Aid Strategies

Strengthening Relationships with Japan by Introducing Climate Change Initiatives, Developing the Economic Foundation for Sustainable Economic Growth and Reducing Poverty and Mitigating Disparities

South America still suffers from large social disparities in the aftermath of colonial rule by Western European countries, as well as military, political and economic influence from the United States. Many nations in the region poorly handled their economies in the 1980s, experiencing a "lost decade" marked by high inflation rates and crippling debt. However, in the 1990s, economic reforms based on neo-liberal policies were introduced under the guidance of the International Monetary Fund (IMF) and the World Bank, and privatization and deregulation ushered in stable economic growth in the region overall, with income levels rising in many countries.

Social unrest lurks in the shadow of this economic growth, however, born of continuing economic disparities within the region and countries. Under such circumstances, in recent years JICA has

been making efforts to mitigate disparities and stabilize regions.

South American economies depend heavily on the production and export of primary products, which has made them extremely vulnerable in the global economy and markets. Building up industry, promoting trade and creating an environment conducive to investment are all vital to sustainable growth. Improving administrative capacity is also essential as a foundation to encourage economic activity in the private sector.

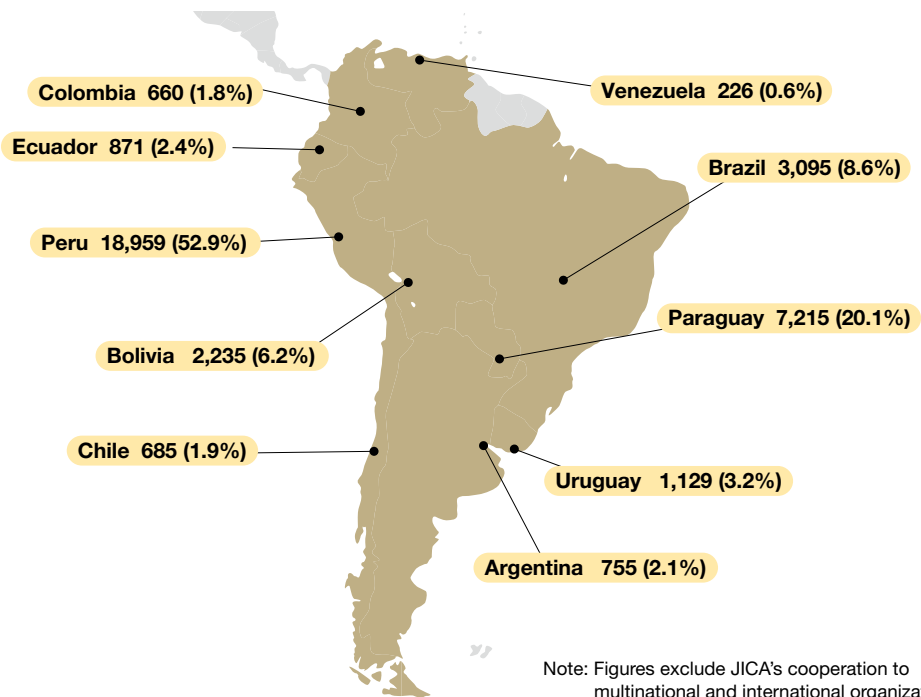
South America is also a key region in addressing the global issue of climate change. The region is home to the Amazon, the world's largest rainforest, and is also important in terms of food security, another global issue. Moreover, as the economy grows, urban environmental problems become more severe and call for urgent

JICA Programs in South America (Fiscal 2009)

The figure shows the total value of JICA programs in each country including Technical Cooperation projects, dispatch of volunteers, other expenditures, 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.

South America
Total: 35,830
 (Unit: millions of yen)



Note: Figures exclude JICA's cooperation to multinational and international organizations.

solutions.

JICA has established the following key aid strategies for the region: (1) initiatives addressing the global issues of climate change; (2) the development of foundations for sustainable economic growth; and (3) poverty reduction and the mitigation of disparities. In addition, considering the importance of strengthening relationships between Japan and South America, and taking into account the characteristics of this region, JICA keeps the next three points in mind when carrying out cooperation programs:

- Existence of disparities both within regions and countries
- Respect for ownership of recipient countries
- Extension of the benefits of growth to the poorest people

JICA will continue to provide newly industrialized countries such as Brazil, Argentina and Chile with Technical Cooperation in the areas of the environment, disaster prevention, human resource development and earthquake preparedness measures, as well as reinforcement of partnerships.

Priority Issues and Efforts

Initiatives Addressing Climate Change

South America is affected by global issues such as climate change, but at the same time it has a significant impact on the resolution of such problems. Accordingly, JICA cooperates in this field with many countries in the region.

Illegal logging and other factors continue to decimate forests in the Amazon region, the world's largest tropical rain forest. The impact that this would have on climate change and ecosystems gives cause for great concern, making preservation of the Amazon region a global issue. For its part, JICA prioritizes cooperation programs aimed at conservation. In Brazil, the Project for Utilization of ALOS Images to Protect Brazilian Amazon and Combat against Environmental Crimes uses satellite images from Japan's Advanced Land Observing Satellite, Daichi. This Japanese technology enables pictures to be taken even through atmospheric cloud cover, thus improving monitoring and oversight of environmental crimes. JICA provides cooperation with satellite image analysis technology and improvements in monitoring capacity.

In addition, the Sustainable Use of Forest Resources in Estuary Tidal Floodplains in Amapa Project carried out in Brazil employs International Training Course for Agroforestry Systems Technology to support both forest conservation and agricultural production, with the goal of sustainable forest management and effective use of legally logged timber. JICA invited researchers from five Amazon region countries for third country training in agroforestry courses and is working to develop and popularize agroforestry technology and processing technology for harvested produce with the aim of balancing forest conservation with agricultural production.

Further, glaciers in the Andes mountain range, home to 99% of the world's tropical-region glacial ice, are rapidly disappearing due to climate change. JICA has begun to work in Peru, Bolivia and Ecuador to collect the information needed to address the impact on water resources and risks of natural disaster facing the Andes highlands due to the loss of tropical glaciers.

In Peru, JICA is implementing a study on the Master Plan for Development of Geothermal Energy in Peru, supporting application of the Clean Development Mechanism (CDM) to the nation's

reusable energy. In Paraguay, JICA is assisting CDM preparation for the ODA Loan-supported Yguazu Hydropower Station Construction Project.

Building Foundation for Sustainable Economic Growth

South America has achieved steady economic growth in recent years, primarily in private-sector investment, thanks to the rich natural resources in the region. Although the region was hurt by the global economic crisis in 2008 and volatile prices for natural resources, the economy recovered in 2010. In such conditions, there exist growing expectations for cooperation designed to improve the investment climate, to develop the economic foundation to stimulate domestic demand and to establish measures for financing small and medium-sized enterprises.

Recognizing correction of domestic income disparities as a major developmental issue, JICA is undertaking the following efforts to reenergize regional economies: (1) preparation of a regional port improvement project in Brazil; (2) preparation and implementation of local road improvement projects in Paraguay; (3) preparation and implementation of a two-step loan in Colombia to finance micro, small and medium-sized enterprises with a view to maintaining and creating employment opportunities.

Reducing Poverty and Mitigating Disparities

Combating poverty and mitigating disparities are challenges to be addressed by all South American countries, and they are given priority by the governments in these countries.

JICA's cooperation focuses on poverty reduction in low-income countries, such as Paraguay and Bolivia. JICA is working to reduce poverty among small-scale farmers in Bolivia through programs such as the Project for Rural Development in Altiplano Central and the Project for Establishment of an Implementation System for Sustainable Rural Development Phase II undertaken from the human security and empowerment perspective. JICA has also formed programs such as the Program of Water Supply in Areas of Poverty, Program for the Quality Improvement of School Education

and Program for Strengthening Community Health Network Focusing on Maternal and Child Health, all of which support access to basic social services.

In Paraguay, JICA is making efforts to form cooperative programs that realize synergies among three aid schemes: Technical Cooperation, Loan Aid and Grant Aid. For example, JICA is studying ways to take full advantage of all three aid schemes in cooperation for the water and sanitation sector, such as ODA Loans for water and sewer infrastructure development requiring large-scale investment in urban areas; Grant Aid for small- and medium-scale infrastructure development centered in agricultural areas; and Technical Cooperation for developing plans, implementing systems and building infrastructure for the water sector as a whole.

In Ecuador, JICA is carrying out projects to support indigenous peoples, refugees from conflicts and other socially vulnerable persons. These include the Project for Reorganization of the Agriculture Supporting Services, Coping with Poverty Alleviation for Rural Peasants in Mountainous Areas, Project for Capacity Development for Promoting the Sustainable Integral Rural Development for Poverty Reduction in Chimborazo Province and

Project for Strengthening of the Occupational Training for the Vulnerable Sector. In Peru, these include a study on the Program of Rural Development for Poor Peasants and Local Capacity Strengthening in the Central Highlands of Peru. In Colombia, these include the Project for the Support of Entrepreneurship and Employment for the Household of Demobilized Ex-Combatants and Recipient Communities in Colombia.

For newly industrialized countries and relatively higher income countries such as Brazil and Peru, JICA employs highly synergistic development assistance that combines ODA Loans with Technical Cooperation. ODA Loan projects in Peru, such as the Iquitos Sewerage Improvement and Expansion Project and the Cajamarca Water Supply and Sewerage Improvement and Expansion Project, are improving access to water and sewer services, and the Electric Frontier Expansion Project (III) is bringing electricity to remote mountain regions.

Strengthening Relationships with Japan

Aid from the governments themselves or foreign countries has a relatively smaller impact on the overall economy in relatively higher

Case Study

Restoring Obsolete Provincial Water Systems

Peru: Improvement and Expansion of Water Supply and Sewage Systems in Provincial Cities

Constructing water supply and sewage systems in provincial cities has become a major issue for Peru as its population increases. The Peruvian government has worked to develop and expand water supply and sewage systems in its cities since the 1990s with aid from the Inter-American Development Bank (IDB) in particular.

JICA provided an ODA Loan to build urban water supply and sewage systems in Iquitos and two other cities from 2000. In 2008, JICA also extended an ODA Loan to a project to build a sewage system in Iquitos.

Building Water Supply and Sewage Systems in Cities Key for Tourism in the Amazon

About 30% of Peru's land mass is mountainous, and the country also has a substantial poor population. JICA supports the country's water resources in various forms, including securing

water for agricultural use in mountainous regions and resolving the chronic water shortages in the capital Lima.

The priority issue for Peru's urban water supply and sewage systems is raising the coverage of water supply systems, improving the water supply and treatment capacity, and reducing the non-revenue water rate. After experiencing an economic crisis in the 1980s, Peru's water supply and sewage utilities were decentralized in 1989, but this decentralization did not result in improvements in the situation of local governments because they were unable to maintain and upgrade obsolete systems.

Accordingly, in the 1990s, the government gradually pursued development plans tailored to the size of the city, and the IDB took the central role in providing policy advice to local water supply and sewage corporations and supporting the development of institutional frameworks.

JICA collaborated with these comprehensive initiatives and provided ODA Loans to support the expansion and repair of water supply and sewage systems of Iquitos in Loreto, one of the biggest cities in the Amazon region in the northeastern part of Peru. Iquitos, with a population of about 400,000, is known as the base for tourism in the Amazon. However, as polluted water is discharged into the Amazon River and the coverage rate of water supply is only about 70%, there are serious concerns

about the impact of sanitary conditions on the population, such as acute diarrhea. JICA started tackling this challenge with ODA Loans in 2000 by improving obsolete water treatment plants and expanding them. The construction of the facilities was completed in 2008, and followed by a trial run, secondary distribution pipes are now being built to raise the penetration rate.

In 2008, JICA started providing ODA Loans to build sewage treatment plants, pump stations and sewage networks. Since half of the population in this province is impoverished, the water supply and sewage company plans to subsidize the connection cost.

A Grassroots View

Katsuya Kamisato Consultant

Although Iquitos, a city of 400,000 people in the Amazon rainforest, is located in an isolated area surrounded by water, ironically, the city finds it difficult to secure a safe supply of water. Contaminated water flows on three sides, and people live on the banks of the polluted and unsanitary surrounding bodies of water. This project aims to help improve the residents' living environment by constructing a water treatment plant to ensure safe drinking water and constructing a disposal station to dispose of contaminated water.



Water treatment plant after improvements

income countries, where private-sector economic activity drives development. Plans for constructing high-speed railways in Brazil and the adoption of terrestrial digital broadcasting based on the ISDB-T standard in the region have recently been in the news.

In the field of science and technology, JICA's cooperation extends to efforts such as the analysis of CO₂ absorption in the Amazon, research on glaciers in the Andes, observing the hole in the ozone layer in the southern region of Patagonia, research on infectious disease and research into earthquake-resistant designs preparing countries for earthquakes. These initiatives are carried out through the Japanese Ministry of Education, Culture, Sports, Science and Technology the Japan Science and Technology Agency and the

Science and Technology Research Partnership for Sustainable Development, and they take advantage of the technology and experience of Japan's universities and research organizations.

In the Project for Capacity Strengthening for Examination of Mine Closure Plans in Peru, JICA provides advice on strengthening education for organizations and people, as well as on the evaluation of mine closure plans and the drafting of mine pollution prevention strategic plans. Peru, which is a supplier of vital metal resources such as copper and zinc to Japan, urgently needs to take measures against pollution caused by inactive or closed mines. JICA's cooperation is expected to foster a closer relationship between the two countries in the resource sector.

Case Study

Protecting People from UV Radiation and Raising Awareness of the Ozone Layer

Southern Patagonia: Strengthening the Capacity to Measure the Ozone Layer and UV Radiation and the Projection toward the Community

The ozone layer in the stratosphere protects living organisms by absorbing harmful UV rays from the sun. However, the ozone layer is being destroyed by chlorofluorocarbons and other harmful chemicals, and the hole in this ozone layer that has developed in the southern part of Patagonia in the southernmost tip of South America (Argentina and Chile) has led to concerns over potential damage to health. JICA cooperates in observing the ozone layer and providing educational warnings to residents.

Supporting Observation and Education in Southern Patagonia

The ozone layer, which has a high concentration of ozone (O₃), is the layer of the stratosphere located about 10–50km above the earth's surface. This layer blocks almost all of the sun's harmful UV rays. However, in recent years, chlorofluorocarbons and other chemicals used in refrigerators, air conditioners and sprays have been discharged into the stratosphere, breaking down the ozone layer. As a result, the amount of UV light has increased, raising fears that this will lead to a higher incidence of cataracts and skin cancer.

In particular, there is a tendency for ozone holes to form in the polar region, where the ozone layer has thinned. The ozone hole was



Observations using ozone radiosonde

widening in southern Patagonia in particular, and this led the governments of Argentina and Chile to request Japan's cooperation in observing the ozone layer and warning and educating residents. JICA began its Technical Cooperation project in 2004. Observing and publicizing information about the ozone layer in this region plays an extremely important role in conserving the environment.

Station Recognized by International Institutions and Shares Information

JICA cooperated with the Project to Intensify Ozone Layer Studies in South America, which uses laser readers, in Argentina over a three-year period from 2004. These methods and monitoring results have attracted attention at international conferences.

Patricia Yamamoto of JICA's Argentina office describes the difficulties that the project initially faced: "In spring and summer, when the ozone hole appears, monitoring equipment in containers was carried to Rio Gallegos at the southern tip of Argentina. However, the temperature dropped to 17 degrees below zero, causing lenses and gas canisters to freeze and break. Thanks to the advice from the Japanese expert to anchor them into fixed positions, instead of carrying the equipment each time, we have been able to provide accurate observational results in Rio Gallegos since then."

The Network for the Detection of Atmospheric Composition Change (NDACC), an international organization made up of research stations for observing the stratosphere, recognized this observation station. The station shares information with the U.S.'s National Aeronautics and Space Administration (NASA), the France Institute for Climate and Atmospheric Science and Brazil's Instituto Nacional de Pesquisas Espaciais (INPE), and is pursuing a four-year plan started in

2007 to reinforce its monitoring facility. A complementary monitoring network was strengthened in Chile as well to share data and carry out joint monitoring activities.

In order to prevent damage to health when the ozone hole expands, JICA has set up signals warning of the radiation level to notify residents of the level of UV radiation in both Argentina and Chile, and also focuses on educational activities such as seminars on measures to counter UV radiation.



Signal installed in streets to warn of UV radiation levels. JICA cooperation helped to install the signals and to monitor UV radiation at elementary schools. A manager at the Rio Gallegos City Environmental Bureau, a project counterpart, visited an elementary school to explain the signal and measure the amount of UV radiation using an experiment kit. The signal can be checked online as well.

A Grassroots View

Ryo Mizuno

Professor, Atmospheric Environment Department, Solar-Terrestrial Environment Laboratory, Nagoya University

We are making observations in Rio Gallegos. When an Argentinean researcher suggested that I participate in this project six years ago, I realized that the environmental conservation group's staff had high expectations for this work, and I resolved to do my best to help. I hope that our observations can help the local residents as well as researchers around the world.

The Pacific

Overcoming Vulnerabilities of Island States

The countries of the Pacific are small islands separated by vast expanses of open sea. This geography brings problems peculiar to the island countries, including increasing solid waste, inadequate social services and infrastructure development, and deterioration of marine resources. The Pacific and its islands nations are also attracting attention as the area most vulnerable to the effects of rising sea levels caused by climate change.

The environment and climate change were the main agenda items at the Fifth Pacific Islands Leaders Meeting (PALM5) held in Hokkaido, Japan, in May 2009. JICA has cooperated in the environment sector for many years now, and is actively involved in efforts to address climate change, for instance, a project aiming to increase the resilience of the small atoll island of Tuvalu.

Key Aid Strategies

Promoting Region-Wide Cooperation

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

Dispersed as they are across a vast expanse of ocean, the vulnerabilities of the island nations of the Pacific mean that they face many difficulties in developing their economies. The domestic market is small, with populations of only 10,000 to 800,000 when excluding Papua New Guinea, and they are isolated from international markets.

In recent years, the countries have faced environmental

problems such as an increase in solid waste that is difficult to treat on the islands, resulting from the influx of the modern economy and culture into traditional self-sufficient lifestyles. Inadequacy of social services caused by small-scale government resources and lack of transportation infrastructure restrict social and economic development and pose challenges to a self-supporting economy.

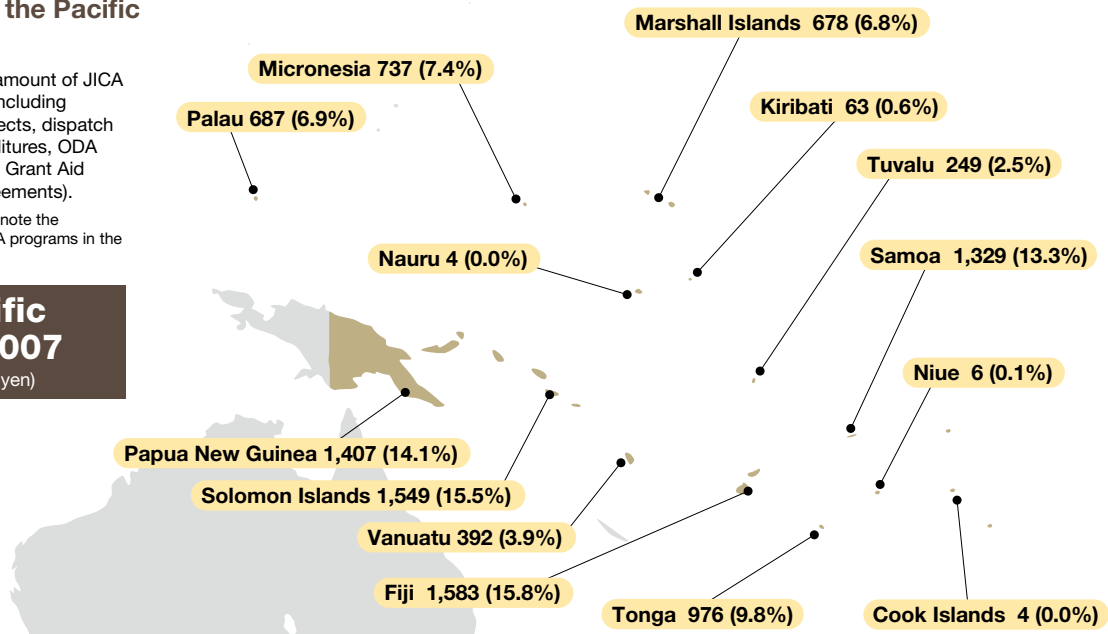
JICA provides support to address issues common to the region such as waste management, infectious disease and education, giving regard to the characteristics of each country. To ensure effective, efficient implementation, JICA promotes regional programs in collaboration with international and regional organizations such as the Secretariat of the Pacific Regional Environment Programme (SPREP), the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF). In such cooperation, JICA's

JICA Programs in the Pacific (Fiscal 2009)

The figure shows the total amount of JICA programs in each country including Technical Cooperation projects, dispatch of volunteers, other expenditures, 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.

The Pacific Total: 10,007
(Unit: millions of yen)



Note: Figures exclude JICA's cooperation to multinational and international organizations.

approach involves the dispatch of experts to countries to play a key role in creating development models and good practices and then disseminating these to other countries in the region.

JICA plans to promote regional cooperation with a stronger focus on addressing the vulnerabilities of island nations, such as

fostering societies with an environmentally sound material cycle and human resource development in health and medical services. JICA also focuses on measures to assist with adaptation to climate change.

Case Study

Expanding Organic Farming with Grassroots Technical Cooperation

Solomon Islands Malaita Province Organic Farming Promotion Project

The waters around the Solomon Islands are fishing grounds for Japan's deep-sea fishing industry, and bonito and tuna caught there are used for dried bonito flakes and canned tuna. The fallout from the civil war lasting from the late 1990s to 2003 and the environmental deterioration caused by logging for lumber exports and excessive slash-and-burn cultivation have become major issues for the Solomon Islands.

JICA provides grassroots Technical Cooperation to support the introduction and establishment of fixed type organic farming, which has a low environmental impact, on Malaita Island, the cause of the dispute.

Working for Self-Supported Economic Development

Malaita Island in the Solomon Islands has little industry, and migrant workers who find work in the Guadalcanal Islands, such as Honiara, the capital of the Solomon Islands, are the main source of cash revenue for the island. However, this has led to tension with the local population on Guadalcanal Island and triggered conflicts. As a result, many people have returned to Malaita Island, but the island has almost no industry to employ these people. At the same time, slash-and-burn cultivation is widely carried out on the island, but excessive land clearing and deforestation are carried out to boost revenue, and this is raising environmental concerns.

Accordingly, JICA is working with the NGO Asia Pacific Sustainable Development (APSD)¹ to foster the island's self-support capacities by promoting fixed type organic farming minimizing impact on the environment, in Auki, Malaita's capital. The project aimed to augment the training facilities known as the APSD Perma Culture Center (PCC)² over a three-year period from 2006, which accepts 30-50 young people every year from the entire Solomon Islands (not just Malaita Province) for training in organic farming. The trainees became leaders for regional development.

Valuing Traditional Lifestyles and Nature

The project aims to create a new culture while respecting traditional lifestyles in the Solomon Islands and the local natural environment, and enhance the natural abundance and quality of life for residents. In line with this goal, facilities such as PCC, Solomon Organic Center (SOC)³ and the Diffusion Center⁴ were established in the northern and eastern regions of Malaita Province. Malaita was the first province to establish legislation to promote organic farming. APSD's organic agriculture was designated as the development model for rural agriculture.

JICA will continue to work with APSD to provide support for distribution and development of markets for agricultural products so that previous cooperation leads to the sustainable development of the region.

1. APSD: An NGO engaged in supporting local development to promote conflict recovery, expand sustainable, fixed type organic farming and improve the lives of the impoverished
2. Perma Culture Center: A human resource development base. APSD accepts 30-50 young men every year from the entire country for a one-year training program in organic agriculture.
3. Solomon Organic Center: SOC works to improve the lives of PCC graduates and local residents through small-scale industrial revitalization by operating an organic restaurant serving food made with farm products, selling organic fertilizer and organic feed and purchasing farm crops produced by PCC graduates.
4. Diffusion Center (northern and eastern regions of Malaita Province): Site for dissemination and popularization of agricultural technology, information and agricultural produce. This center was established to disseminate agricultural technology and related information and serve as a gathering place for farmers.

A Grassroots View

Ruben Mori
Representative, Asia Pacific Sustainable Development, Solomon Islands

Our project targets residents of rural villages. We work to improve their lives by providing appropriate training and market opportunities. The scope of activities that a single NGO can cover is limited, and we believe that cooperation with international aid organizations such as JICA, the Solomon Islands government and other NGOs will be even more important in the future.

Simon Ui
PCC Graduate in 2008

After graduating from PCC, I grew rice and vegetables with my family on a small scale, and the knowledge and techniques I had learned were really helpful. In the future, I would like to carry out projects that engage groups and the community. I will need basic accounting and management skills to do this, so I hope APSD will provide further support in these areas.



Trainees engaged in organic agriculture.

Priority Issues and Efforts

Adaptation to Climate Change

The Pacific Ocean takes up the largest area on the globe, and Japan has a share in its benefits, and thus does its part to assist the countries in the region. Low-lying atoll countries such as Tuvalu are especially vulnerable to climate change and rising sea levels. Strengthening the capacity of those countries to adapt to the phenomena is an urgent issue.

JICA is supporting countries in the Pacific to minimize damage from natural disasters with its efforts to improve weather observation, forecasting and early warnings. In Tuvalu and the Solomon Islands, JICA supported the improvement of radio broadcasting networks, and in Samoa, the improvement of weather observation facilities.

In Tuvalu, JICA also supports the Science and Technology Research Partnership Project for Sustainable Development with an ecological engineering approach to identify the mechanisms by which islands are formed and maintained as sediments are produced by living creatures and sand drifts accumulate. The project also devises long-term measures to prevent soil erosion and considers measures to protect the coastline.

JICA has also provided cooperation for efforts to mitigate the impacts of climate change by providing solar power generators in Micronesia, Palau, the Marshall Islands and Tonga, and has conducted a preparation survey on forest sinks in Papua New Guinea.

Strengthening Environmental Management

Waste management is a common challenge for the small islands in the Pacific. JICA supported Samoa in its efforts to improve waste disposal sites and raise management and operation capacities, from 2000, and subsequently supported efforts in neighboring countries to improve waste management practices. With the help of Shibushi City in Kagoshima Prefecture in Japan, which has had success in reducing waste generation, JICA pursued cooperation programs in Fiji to recycle garbage and reduce volume. JICA is working with the regional international organization the Secretariat of the Pacific Regional Environment Programme (SPREP) to establish a Solid Waste Management Strategy in the small island countries and develop human resources to disseminate these initiatives throughout the Pacific.

In May 2009, JICA hosted the Solid Waste Management Workshop in Japan, inviting officials in charge of waste management from each government in the region to identify their needs and devise a future cooperation framework.

JICA will provide support for the implementation of the Solid Waste Management Strategy, as regional cooperation, with a focus on reducing, reusing and recycling waste. JICA will also expand

its regional cooperation to reduce the impact of human activity on the environment of small islands, such as waste, and create environmentally sound material cycle societies that makes life on the islands sustainable.

Health and Medical Services

Many donor organizations have been supporting the Expanded Programme for Immunization (EPI) in the Pacific. It has achieved great successes, including the eradication of Poliomyelitis from the region. However, many countries in the region are still suffering from insufficient capacity to maintain the cold chain networks necessary for vaccine logistics. To address this, in 2004 the governments in the region adopted a declaration vowing to strengthen vaccination programs. This initiative led to the Pacific Immunization Programme Strengthening (PIPS) framework with development partners such as Japan, Australia, WHO and UNICEF.

JICA has been taking a leading role in PIPS through a five-year Technical Cooperation project since 2005 for 13 countries. PIPS supports the management of vaccination programs, technology dissemination, and human resource training programs for vaccine management and the safe disposal of medical waste. This project is highly regarded in countries because many stakeholders are involved in discussing the project activities.

In recent years, WHO has focused on the lack of health personnel in the island countries. JICA has also joined in this effort through human resource development for community health as well as improvement of medical facilities in order to integrate Technical Cooperation and Grant Aid.

Education

JICA provides assistance to improve the quality of education on remote islands and to support distance learning programs utilizing correspondence education, short-wave radio and satellite communication networks to expand educational opportunities on the islands.

The University of the South Pacific, headquartered in Fiji, is a regional university founded by 12 countries in the region in 1968. With Japanese support, the university was equipped with a satellite communications network, allowing interactive communication between the main campus in Fiji and branch campuses located throughout the region.

In Papua New Guinea, JICA supported the establishment of a national media center where educational programs are produced. JICA also promoted TV-based education for primary and secondary school students. These activities helped to raise awareness among local residents about the importance of education and have improved students' academic standing.

JOCV and JICA Senior Volunteers have been dispatched to work on improving the quality of mathematics in primary education in the Federated States of Micronesia, Marshall Islands and Palau. In Vanuatu, JICA established a cooperation framework in primary mathematics based on volunteer programs to improve teachers' skills. Moreover, a volunteer-led project to improve the capacity of teachers in mathematics and science has been established in Samoa.



Campus of Division of Marine Studies, University of the South Pacific in Fiji
(Photo by Kenshiro Imamura)

Case Study

Conserving Nature and Biodiversity

Independent State of Papua New Guinea Port Moresby Sewerage System Upgrading Project

Environmental pollution has become a serious issue for the island nations of the Pacific as they have modernized. Port Moresby in Papua New Guinea lacks sewage service in the coastal area, and this has led to the pollution of the coastal sea. Concerns have been raised about the negative impact on residents and the coral reefs. JICA has started an ODA Loan project to support the construction of a sewer facility in Port Moresby starting in January 2010.

The Independent State of Papua New Guinea consists of the eastern half of New Guinea Island and several other islands. In the 1970s, three sewage treatment plants were built on the inland side of Port Moresby by Australia. However, since no sewage treatment plants were built in the coastal area, sewage is discharged untreated from the coastal areas offshore and/or into the soil. Pollution of the sea has caused serious health problems among coastal residents. Moreover, concerns have been raised about the negative impacts on the ocean's ecosystems, including coral reefs, due to the pollution of the sea. Under these circumstances, Papua New Guinea's government designated public sanitation services as a priority area for the current medium-term development strategy and launched countermeasures.

In January 2010, JICA commenced an ¥8.3 billion Japanese ODA Loan project to repair and construct sewage treatment plants

in Port Moresby. This project is aligned with the infrastructure development for climate change adaptation announced at the Fifth Pacific Islands Leaders Meeting held in May 2009. This project includes the construction of a sewage treatment plant, sewer facilities in the coastal area, the construction and repair of pumps, and the laying of pipes. This project is expected to help reduce the health impacts from polluted water, conserve the beautiful coral reefs and recover fisheries resources.

A Grassroots View

Lot G Zauya

Project Manager, Port Moresby Water and Sewerage Corporation

I am grateful for the Japanese government's support for this improvement project for Port Moresby's sewerage system. It is also our pleasure to see how advanced Japanese technology can contribute to a better environment for coastal residents.



Improved sanitation and water quality are also expected for the residents living on the water.

Europe



Supporting Accession to the EU and Ethnic Co-existence in the Western Balkans

Europe is a complex region with a long heritage of economic and cultural development. Most countries in the region have already joined the European Union (EU), and the others are pursuing economic and social development with a view to joining in the future. JICA's assistance to the region places an emphasis on infrastructure development, environmental improvement and private sector development. The western Balkan region, in particular, has been marked by ethnic conflicts in the former Yugoslavia during the 1990s and early 2000s, creating the need to build stable social situations in which different ethnicities can co-exist together. JICA has provided assistance to Bosnia and Herzegovina designed to encourage ethnic co-existence. JICA has also initiated bilateral assistance to Kosovo, which declared independence in 2008.

Key Aid Strategies

Supporting Environmental Protection the Private Sector, and Post-Conflict Peacebuilding

JICA operations in Europe originated with support for the former Eastern Bloc countries and newly independent former members of the Soviet Union to assist their pursuit of market economic systems and democratization following the G7 Summit in 1989.

With the establishment of the EU in 1993, Eastern Bloc countries sought to pursue social and economic reforms with assistance from the international community, with the aim of joining the EU. In 2004, the EU was enlarged with the accession of the four Visegrád Group countries—comprising Hungary, Poland, the Czech Republic and Slovakia—together with the three Baltic countries of Estonia, Latvia and Lithuania, and rounded out by Slovenia, Malta and Cyprus. In 2007, Romania and Bulgaria became the EU's newest members. The new EU member states were removed from the DAC list of ODA recipient countries in 2006. Technical Cooperation projects to EU member states were concluded in fiscal 2008, except for continuing

cooperation in the form of Japanese ODA Loan projects and follow-up projects.

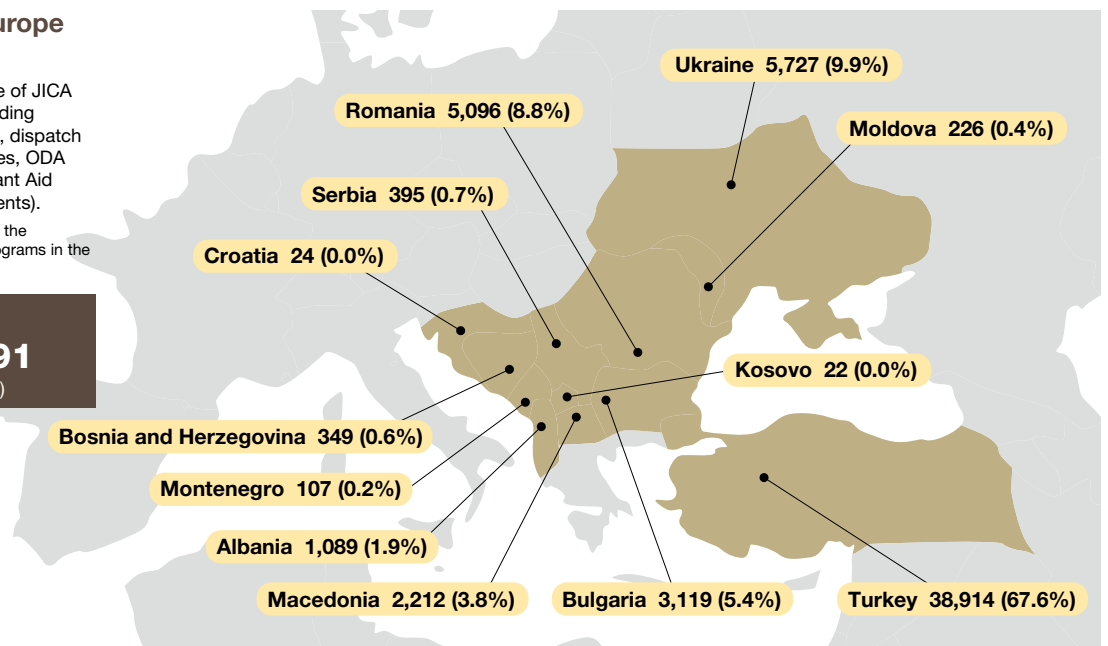
The western Balkans region—comprising the countries of the former Yugoslavia and Albania—has achieved a measure of reconstruction from ethnic conflicts and civil wars that originated with the breakup of the former Yugoslavia in the 1990s. However, the countries in this region face many challenges including high rates of unemployment and simmering ethnic tensions. Further economic development and enhanced governance is needed for these countries to be accepted into the EU. More and more countries in this region have achieved economic development on a par with the newly industrialized economies (NIES), but further effort is needed to build stable social situations in which different ethnicities can coexist together, and pursue environmental measures, which have been a low priority until now. JICA is focusing on the environment

JICA Programs in Europe (Fiscal 2009)

The figure shows the total value of JICA programs in each country including Technical Cooperation projects, dispatch of volunteers, other expenditures, 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.

Europe Total: 57,591
(Unit: millions of yen)



Note: Figures exclude JICA's cooperation to multinational and international organizations.

and assistance for the private sector to support countries in the western Balkan region in their efforts to join the EU and help to address global issues.

Bosnia and Herzegovina continue to be politically and socially marked by ethnic segregation that stems from conflict during the 1990s, motivating JICA to focus its efforts on assistance to encourage ethnic co-existence. Kosovo, which declared independence in 2008, established diplomatic relations with Japan in 2009, and the governments of both nations have confirmed their intentions to engage in future cooperation. Under this framework, JICA initiated bilateral assistance in 2010 by dispatching experts to Kosovo and conducting training in Japan.

Ukraine and Moldova are situated in a geopolitically significant position between Russia and the EU. The two nations continue to strive for economic independence and development. Ukraine was

severely impacted by the global financial and economic crises that began in the late 2008, and needs critical assistance to enhance the nation's basic economic strength by supporting infrastructure development and promoting investment. Moldova is Europe's least developed country with a GNI per capita of US\$1,590 (World Bank, 2009) and is in need of sustained assistance. Turkey has achieved a more developed status, but continues to need assistance to address environmental issues, correct disparities and encourage South-South cooperation as priorities for cooperation.

Priority Issues and Efforts

Maximizing Aid Effectiveness to Foster Graduation from the Need for ODA

JICA currently extends assistance to 12 countries in Europe. Aside from Moldova, Ukraine and Kosovo, JICA has nearly concluded all Grant Aid to countries in the region, with the exception of cultural, grassroots and human security Grant Aid. JICA will pursue cooperation centering on Technical Cooperation and ODA Loans. In Romania and Bulgaria, JICA is extending ODA Loans and implementing follow-up projects, while assistance to Moldova and Kosovo is being pursued through Technical Cooperation and Grant Aid.

JICA's cooperation aims to leverage its own expertise and Japan's strengths, while considering the recipient country's EU ties and potential to graduate from the need for ODA in the future. JICA

is implementing highly focused Technical Cooperation and projects that can be locally pursued through training and follow-up in the recipient nation. There is also a need to implement projects that can produce region-wide results.

Many countries in Europe that are eligible for ODA Loans have equaled the performance of the NIEs. In these countries, ODA Loans focus on environmental improvement as a global issue that demands continued assistance.

JICA is pursuing Technical Cooperation in coordination with ODA Loans and schemes for Grant Aid, while also examining collaboration with other assistance agencies and the private sector. These initiatives are aimed at maximizing the benefits derived from ODA assistance.



Strawberries harvested in Srebrenica, Bosnia and Herzegovina



The IT program at Gymnasium Mostar (Mostar High School) in Bosnia and Herzegovina receives support from Japan. Japan also provided buses to Mostar city through Grant Aid.

Case Study

Rail Tube Linking the Asian and European Continents

Turkey Bosphorus Rail Tube Crossing Project

The city of Istanbul is the center of commercial trade in Turkey, and spreads across both sides of the Bosphorus Strait, which forms part of the boundary between Asia and Europe. Economic development has seen the city's population grow to some 12 million residents in the last few years, which has brought chronic traffic congestion to the two bridges that cross the Bosphorus, together with severe air pollution from exhaust gases.

To address the situation, Turkey is building an underground rail tunnel beneath the Bosphorus, with the help of ¥111.2 billion in Japanese ODA Loans and the cutting-edge civil engineering expertise of Japan. The project will symbolically unite Asia and Europe through an underground rail tunnel built using Japanese engineering expertise.

Underground Tunnel at 60m Depth

The Bosphorus Strait that connects the Black Sea and Mediterranean Sea is just 700m wide at its narrowest point. Two bridges currently span the Bosphorus, connecting Istanbul's city center on the west with suburbs on the east side of the strait. Japan extended ODA Loans to Turkey to construct the Second Bosphorus Bridge, also known as Fatih Sultan Mehmet Bridge, which was completed in 1988.

Population growth in recent years has increased bridge traffic, with the two Bosphorus bridges combined seeing an average of 400,000 vehicles per day, leading to chronic traffic congestion. Ferry crossings are also available but are slow, creating the need for a rail crossing.

A plan was devised to construct an underground rail tunnel beneath the Bosphorus. The construction of the rail tube crossing involves digging a trench across the bottom of the strait, which has an average depth of 60m, then immersing 11 massive tubes and connecting them to form a tunnel. Once completed, the project will be the deepest immersed tunnel of its kind in the world.



Second Bosphorus Bridge in Turkey

Leveraging Japanese Engineering Expertise

Japanese civil engineering companies possess extensive experience with immersed tunnel construction, having been involved in a quarter of all immersed tunnel projects worldwide. Turkey is also prone to frequent earthquakes, much like Japan. The project was awarded to a Japanese company based on its engineering and expertise in the construction of urban tunnels in Japan, which in many cases are built on soft ground. The Japanese company's experience with 7.5 magnitude seismic design and expertise with waterproof engineering were also deciding factors.

The massive tubes used for the project measure 15.3m wide by 8.6m high, and are prefabricated on land. Immersing the tubes proved to be a major technical challenge, given the fast tidal currents in the Bosphorus and their varying direction at different depths. The Bosphorus ecosystem also had to be preserved during the construction.



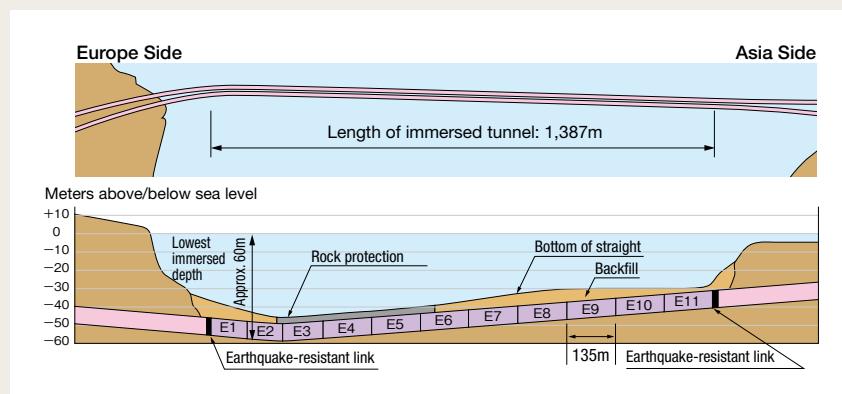
View from inside of one of the massive immersed tubes. Fumio Koyama, immersed tunnel project manager at Taisei Corporation, says, "Engineers from around the world viewed this project as being nearly impossible to accomplish. Turkey has close ties with Japan, and we were determined to show that our Japanese engineers could accomplish this project with our 'never give up' attitude."

A Grassroots View

Dr. Haluk Ibrahim Ozmen
Regional Director, General Directorate of Railways, Harbours, and Airports Construction, Ministry of Transport and Communications, Turkey

Istanbul is the largest city in Turkey. The idea of connecting Europe and Asia has been an ambition for 150 years. The tunnel is being constructed in harmony with the historical and cultural fabric of the city, and will carry one million commuters a day. We will also link this crossing with existing rail to connect distant parts of Europe with Asia.

Tunnel Construction



Case Study

Working Hand in Hand to Build a Future

Bosnia and Herzegovina was the scene of fierce ethnic conflict beginning in 1992, which claimed some 200,000 lives and led to the internal displacement and refugee status for some two million people. To this day, the country remains ethnically segregated some 15 years after the end of hostilities. JICA is providing long-term, post-conflict assistance to Bosnia and Herzegovina to support both reconstruction and ethnic reconciliation in the country.

Facilitating Co-existence of Three Ethnic Groups

Bosnia and Herzegovina was formerly one of the six federal units constituting the Socialist Federal Republic of Yugoslavia. In 1992, armed conflict erupted in the region among the region's three ethnic groups—comprising Bosniaks (Muslims), Serbs and Croats—over disagreements about the country's declaration of independence. After the Bosnian War ended in 1995, Bosnia and Herzegovina was uniquely divided into two political entities comprising the Federation of Bosnia and Herzegovina, which is primarily populated by Bosniaks and Croats, and the Republic of Srpska, which is primarily populated by Serbs. In addition to a central government, the Federation of Bosnia and Herzegovina has 10 cantons, with each entity and canton having different administrative mechanisms reflecting continued ethnic segregation.

From Focusing on Rebuilding to Assisting Ethnic Reconciliation

Stability in Bosnia and Herzegovina is critical to the overall security of Europe. Japan has focused its efforts on extending assistance to the country as a member of the Peace Implementation Council formed by the international community.

During the 1990s, JICA set about to assist the rebuilding of the country through Grant Aid and ODA Loans. For example, JICA provided buses to the capital of Sarajevo through Grant



Buses provided by Japan continue to provide transportation for the residents of Sarajevo.

Aid. These buses continue to operate in the city as symbols of Japan's assistance to the nation. JICA also provided support for the restoration of power utility infrastructure and construction of schools, along with the provision of medical equipment and supplies and the restoration, maintenance and management of roads.

As the nation's refugees and internally displaced began to repatriate in the 2000s, JICA's emphasis shifted to providing Technical Cooperation aimed at building a social situation that enables co-existence between the country's three ethnic groups. JICA is lending support at the community and regional levels and at the government and organization levels, all in support of ethnic reconciliation.

At the community and regional levels, JICA is lending support for interaction among residents or students in regions that are of symbolic significance to past ethnic conflict, helping to build trust at the grassroots level. For example, JICA has dispatched Japanese experts to Srebrenica, which was the scene of a notorious massacre, to revive agricultural production and harvesting of strawberries, mushrooms, herbs and honey, and is helping residents to develop sales channels and restore growing fields. These initiatives are revitalizing villages that were affected by the large-scale exodus of residents. In addition, JICA helped to build an integrated kindergarten for both Serbs and Bosniaks, which has increased the level of exchange between the ethnic groups.

Mostar city is marked by segregation between Bosniaks and Croats. Here, JICA has supplied equipment and materials for IT



Bosniak and Croat students learn side by side in the IT laboratory at Gymnasium Mostar (Mostar High School).

Bosnia and Herzegovina Program for Peace Consolidation

education to a high school through Technical Cooperation with grassroots Grant Aid. JICA has also extended Technical Cooperation to integrate the IT education textbooks and curriculum, helping to build an environment for students of both ethnicities to learn side by side.

At the government and organization levels, JICA is building on successes achieved in model regions to encourage dialogue and collaboration between governments and organizations. For example, the IT education curriculum and textbooks are currently being adopted by pilot schools in various areas, and has grown to encompass exchanges between teachers as well as information exchange.

JICA has implemented a successful ecotourism project in the pilot regions of Bosnia and Herzegovina, which is now being deployed by different entities in the nation. JICA plans to initiate a tourism development project that will encourage further collaboration between government organizations.

A Grassroots View

A Member of the Project on Informatics Curricula Modernization in BiH, JICA

We have managed to build connections between teachers in different entities by conducting teacher workshops in Bosnia and through training in Japan. One of the project's major achievements is having built an environment for teachers to share their problems and work as a team to find solutions, rather than facing the problems individually.