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

development in Bolivia. It has pursued assistance that enables the effective development of natural resources by developing countries, such as aid for building facilities for Mozambique's Nacala harbor, a necessary port for the Nacala Corridor that links the east coast of Africa with the inland. JICA has also worked with countries in the Mekong river basin of Indochina, a promising investment area for Japanese companies, to provide "win-win" assistance. Its projects in this region have included building social infrastructure, promoting regional and economic development, and the nurturing of human resources, such as technicians and skilled workers.

2. International Assistance Trends and Japan

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

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

Case Study **Malawi Project for Establishment of Integrated Geographic Information System (GIS) Database for Mineral Resources**

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

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

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

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

However, mining development requires a broad range of technology. Mining utilizes various technologies for mineral deposit exploration, for extraction and processing, for refining, and for recycling. It also involves environmental protection technologies for mining pollution prevention and other issues. In particular, it is essential to have a sufficient geological information system (GIS) at the initial stage of mine development—mineral deposit exploration. Unfortunately, the Geological Survey Department (GSD) of the Malawi Ministry of Natural Resources, Energy and Environment does not have any electronic data on geological formations with the exception of some digitized old geological maps from the British colony era. Moreover, there is a lack of adequate staff and skills to update and maintain the information.

To fill this gap, in 2012, JICA started providing assistance with the collection, processing, and analysis of geological data using remote sensing; establishment of a GIS, and enhancing the capabilities of GSD. Through information exchanges between the Japan Oil, Gas and Metals National Corporation, JOGMEC's Botswana Remote Sensing Center and other stations, the team built an information base with the goal of sparking greater promotion of investment in the development of the mineral resources of Malawi.

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

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

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

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

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

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

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

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

Growing South-South and Triangular Cooperation

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

JICA assists South-South cooperation because it finds the fact that developing countries are mutually deepening their ties by helping each other achieve independent development highly significant. Further advancing this format, JICA is also collaborating widely in triangular cooperation, where developed countries, international institutions, and developing countries work together to provide development assistance. In ASEAN countries, governments are proceeding with the Initiative for ASEAN Integration to redress intra-regional gaps. JICA is providing assistance to the region by promoting South-South cooperation as a tool for more developed ASEAN countries to offer aid to their less developed neighbors.

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

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

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

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

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

Converting to Green Economies

Global environmental problems are issues common to the entire world.

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

The Framework Convention on Climate Change became effective in 1994. At the third meeting of the Conference of the Parties (COP3) held in 1997 at Kyoto, Japan, participants adopted the Kyoto Protocol, which set greenhouse emissions reduction goals for developed countries. Work also continues on the Convention on Biological Diversity, which was addressed

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

Case Study

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

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

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

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

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

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

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

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

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

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

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

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

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

The same is true of the biodiversity issue.

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

Based on the themes of natural conservation, environmental management, water resources, disaster prevention and management, climate change, and preserving biodiversity, JICA is involved in a wide range of initiatives to achieve sustainable use of natural resources by local people, and to encourage Capacity Development for environmental management.

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

Disaster Prevention As a Common Global Issue

Natural disasters pose a major problem for the world.

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

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

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

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

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

Post 2015, Greater Collaboration with Diverse Partners

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

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

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

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

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

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

Case Study **Thailand Assistance for Post-Flooding Restoration Strategy**

Creating a Master Plan of Flooding and Flood Control Measures

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

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

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

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

As part of its strategic measures for recovery from the flooding, the Thai government formed a Strategic Committee for Water Resources Management. The only foreigner on the committee, JICA's Visiting Senior Advisor Kimio Takeya, assisted with the formation of policies on flooding measures. The government of Thailand revised its flood control plans, formulating an integrated water management plan combining such measures as promoting afforestation and improved operations of dams, controlling man-induced flooding in the middle sections of rivers and constructing flood control channels to protect necessary downstream portions in Bangkok and other areas. In response, JICA jointly provided assistance with the formation of a master plan based on scientific and engineering analyses of flood control measures for the Chao Phraya river basin. Other contributors were the University of Tokyo, the Ministry of Land, Infrastructure, Transport and Tourism, the Ministry of Economy, Trade and Industry, the International Centre for Water Hazard and Risk Management (ICHARM), the Japan Aerospace Exploration Agency (JAXA), and other related organizations. JICA also is assisting with building farms and farming communities that were more disaster resistant and constructing infrastructure with Grant Aid that would also contribute to assisting local Japanese companies.

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

Inspection of levee monitoring at Suvamabhumi

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

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

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

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

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

Case Study **Japan-India African Triangular Cooperation**

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

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

At the Fourth Tokyo International Conference on African Development (TICAD IV), Japan indicated that it was strengthening its assistance efforts in Africa, announcing the doubling its ODA for the continent. India has deep historical, social, and economic ties with East Africa, and has been increasing its presence as an "emerging donor" and has steadily increased its activities in Africa since the 1950s. In 2011 it offered $US5 billion for three year under lines of credit and announced its cooperation in the building and operation of eight Material Testing Laboratories for Highways across the continent.

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

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

Lecture on inspection methods for road structures by Japanese expert

Japanese experts who acted as instructors and trainees from Africa

Practical training