The Medium-Term Strategy for Overseas Economic Cooperation Operations (April 2002–March 2005) set forth 7 priority areas. This chapter will highlight representative examples of the projects to which JBIC made ODA loan commitments in FY2004.

1 Strengthening Support for Poverty Reduction
2 Developing Infrastructure for Economic Growth
3 Supporting Environmental Improvement and Anti-pollution Measures
4 Addressing Global Issues
5 Supporting Human Resource Development
6 Supporting the Dissemination of Information Technology in Developing Countries
7 Supporting Provincial Development

Strengthening Support for Poverty Reduction
Third Poverty Reduction Support Credit for Viet Nam

Supporting Policy and Institutional Reforms for Economic Growth and Poverty Reduction in Line with the Comprehensive Poverty Reduction and Growth Strategy Drafted by the Vietnamese Government

Since the adoption of the Doi Moi (renovation) policy, the Vietnamese economy has continued to register high growth in the transition to a market-oriented economy. As a result, poverty incidence decreased from 58% in 1993 to 29% in 2002. Still, a large number of people are living at the near-poverty level. As the majority of them depend on unstable income from farming, they are vulnerable to natural disasters and unfavorable weather. Thus even those not classified as the poor could easily slip below the poverty line. In addition, there are increasingly serious economic disparities between rural and urban areas.

To further reduce poverty, the Vietnamese government drew up the Comprehensive Poverty Reduction and Growth Strategy (CPRGS), an action plan focusing on poverty reduction, in May 2002. JBIC actively participated alongside the Japanese Government in preparations of the CPRGS from the drafting stage. The CPRGS thus reflected the experience of JBIC in its ODA loan operations: economic growth brought about by infrastructure development serves to reduce poverty.

Currently, the Vietnamese government is moving forward reforms on a broad front, including state-owned enterprise reform, private sector development, financial sector reform, marketization and integration into the world economy through trade liberalization, policy improvement and institutional strengthening in the education, health and other social sectors, and enhancing governance in administration.

JBIC provided an ODA loan totaling ¥2 billion for the Third Poverty Reduction Support Credit in collaboration with the World Bank, Asian Development Bank (ADB) and other donors to support various reforms undertaken under the framework of the CPRGS. Among the reforms supported by this loan were measures to improve the investment climate set out in the Japan-Viet Nam Joint Initiative, which was agreed upon by the two governments in December 2003. Financial assistance for reforms, including improvements in the country’s business environment, is expected to address issues on the policy agenda cited in the CPRGS, thereby contributing to economic growth and poverty reduction in Viet Nam.

The share of the poor in the total population was an indicator jointly developed by the Vietnamese statistical department and the World Bank. The poor are defined to be the people living under the poverty line. The poverty line refers to the income level corresponding to the consumption of 2,100 kilocalories of food per day plus the costs of non-food items.
Supporting Improvement in Living Conditions of the Poor for Reconstruction and Development

Since the Sri Lankan government and the Liberation Tigers of Tamil Elam (LTTE) reached agreement on an indefinite cease-fire in February 2002, a number of peace-building, reconstruction and development efforts have been underway in Sri Lanka. The Japanese Government has been playing an active role in efforts to consolidate peace, including the hosting of the Tokyo Conference on Reconstruction and Development of Sri Lanka in June 2003. Since poverty is widespread across the nation rather than being concentrated in the conflict-affected regions, it is important for consolidating peace that “peace dividends” be shared by broad sections of the population.

As of 1995, about 30% of the population lived below the poverty line in Sri Lanka. Since 70% of the population inhabits in rural areas, poverty reduction in farming villages is the country’s major challenge. In addition, social infrastructure such as schools and medical facilities is underdeveloped in rural areas. Thus, the highest priority is placed on improving living conditions of the poor through development of such infrastructure as education and healthcare that is directly linked to human resource development. As it is, the 20-year internal conflict has left northern and eastern regions lagging behind in basic infrastructure development.

Considering these conditions, JBIC provided an ODA loan totaling ¥11.78 billion for the Small-scale Infrastructure Rehabilitation and Upgrading Project (II), following similar assistance for the Small-scale Infrastructure Rehabilitation and Upgrading Project in FY2002.

The project has the following components: (1) construction and rehabilitation of school buildings; (2) rehabilitation of medical facilities and procurement of medical equipment and materials; and (3) development of market facilities aimed at raising farmers’ income. The project supports reduction in disparities among regions and ethnic groups, an increase in poor people’s access to education and healthcare services and improvement in their living standards by rehabilitating and upgrading small-scale infrastructure facilities for education, healthcare and rural development in the regions where poverty is prevalent all over the country.

Since the loan will finance the rehabilitation/development of basic infrastructure destroyed during the civil conflict in northern and eastern regions, preferential terms of conditions for peace building, instituted by the Japanese government in FY2004, will be applied for the first time.

In addition to the rehabilitation and upgrading of small-scale infrastructure, as part of efforts to increase project effectiveness, capacity building activities for teachers and activities for raising public health awareness in local communities will be carried out in the project-targeted areas in partnership with local NGOs and JICA during the project implementation stage.
Efforts to Achieve Millennium Development Goals (MDGs)

— What Are MDGs?
The Millennium Development Goals (MDGs) were set out based on the Millennium Declaration adopted at the UN Millennium Summit in 2000. MDGs consist of goals in 8 areas for the international community in the 21st century, as it aims to reduce poverty by 2015.

— JBIC’s Efforts to Achieve MDGs
The Medium-Term Strategy for Overseas Economic Cooperation Operations set forth that “meeting MDGs” is one of the factors defining the significance of ODA loans. Thus JBIC has been seeking to reduce poverty through economic growth with the focus placed on supporting infrastructure development. Specific efforts made in FY2004 toward 8 goals were as follows:

- **MDG 1: Eradicate Extreme Poverty and Hunger**
  It was confirmed in the thematic ex-post evaluation report, “Contribution of Infrastructure to Economic Growth and Poverty Reduction,” that economic growth and poverty reduction have been accelerated in the Metro Cebu region, the second largest urban area in the Philippines, through infrastructure development in such sectors as airports, power and roads. Since the 1970s, ODA loans in the aggregate amount of ¥100 billion have financed projects undertaken in this region.

- **MDG 2: Achieve Universal Primary Education**
  MDG2 listed the enrollment rate and the survival rate as indicators. But it is important to consider the quality of education as much as the completion of a full course of schooling. The Inland Higher Education Project (Inner Mongolia Autonomous Region) in China (loan amount: ¥5.1 billion) will support the training of teachers in teacher’s colleges, thereby improving the quality of primary education.

- **MDG 3: Promote Gender Equality and Empower Women**
  Many women in developing countries are living in poverty and have limited educational and employment opportunities. It is thus important to consider gender equality and make efforts to empower women. In the Bangalore Water Supply and Sewerage Project (II-1) (loan amount: ¥42 billion), women living in slums have become members of the water supply and sewerage management committee and plan to conduct operation and maintenance of the facilities with the support of NGOs.

- **MDG 4/5: Reduce Child Mortality/Improve Maternal Health**
  To achieve these goals, it is effective to improve access to healthcare facilities by developing transport infrastructure such as roads, in addition to providing medical facilities and health services. The report of thematic evaluation, “The Impact of Road Development on the Health of Pregnant and Parturient Women,” found that road development played a significant role in raising the proportion of pregnant women receiving prenatal care.

- **MDG 6: Combat HIV/AIDS, Malaria and Other Diseases**
  It is important to incorporate public health activities into non-health sectors such as infrastructure, in addition to improving public health facilities and services. In the Sihanoukville Port Urgent Rehabilitation Project (loan amount: ¥4.1 billion), HIV/AIDS prevention activities were conducted to educate and raise awareness of construction workers at the project site in partnership with the local NGO and the Red Cross.

- **MDG 7: Ensure Environmental Sustainability**
  Addressing global warming, pollution and environmental protection, including nature conservation, is an urgent challenge. In the Sanitation Improvement Project for the Baixada Santista Metropolitan Region (loan amount: ¥21.3 billion), sewerage facilities will be improved and expanded and the environment monitoring system will be developed to improve living conditions in local communities.

- **MDG 8: Develop a Global Partnership for Development**
  Trade is a driving force behind growth and poverty reduction. For developing countries, increasing access to markets in developed countries is also important. In particular, it is crucial for a landlocked country to develop transport infrastructure for shipping export products. In the Tashguzar-Kumkurgan New Railway Construction Project (loan amount: ¥16.4 billion), strengthening trade routes with surrounding regions will promote growth and poverty reduction in the double landlocked country (a landlocked country surrounded by landlocked countries).
The Republic of Uzbekistan is one of the 5 Central Asian countries that achieved independence from the former Soviet Union in 1991. It is the most populous country in Central Asia. The country is located at a strategically important intersection of east-west and north-south transport routes. In the ancient times, the Silk Road passed through it. In addition, railway transport plays an extremely important role in Uzbekistan, as it is a double landlocked country. The railway network in Uzbekistan was constructed in the former Soviet era, with Moscow serving as its hub. Thus some of the country’s trunk lines connecting various domestic locations have to pass through neighboring countries such as Turkmenistan on their routes. For example, rail travel in southern Uzbekistan requires going across the border to Turkmenistan and then back to Uzbekistan. This has caused problems in transport service, as delays have almost become a routine due to time-consuming customs procedures and change of locomotives at the frontier stations.

To improve this situation, JBIC provided an ODA loan totaling ¥16.36 billion for Tashguzar-Kumkurgan New Railway Construction Project. Under the project, a new rail route (222 kilometers) that connects Tashguzar and Kumkurgan in the shortest distance will be constructed and the existing route (31 kilometers) will be rehabilitated. The construction of a new route will enable movements within the country as well as to and from neighboring countries without passing through Turkmenistan. The project is expected to reduce transport costs, cut short transport distance and time, increase transport capacity and ensure reliable rail service. In addition, STEP (see p. 10) is applied to this loan, since Japan’s advanced technology and know-how will be provided for constructing the bridges.

The railway sector is an important economic infrastructure for industrial development in Uzbekistan for making the transition to a market economy after independence from the former Soviet Union. In recent years, progress in reconstruction in the neighboring Afghanistan has brought a sharp increase in cargo-handling volume. As the Afghan situation becomes more stable, the importance of the north-south route is expected to grow further. Supporting the development of railway network, the country’s important economic infrastructure, is expected to contribute to stable economic and social development in Uzbekistan.

1 A double landlocked country is a country bordering with other land-locked countries. Thus, it requires two crossings of borders to reach the open sea.
Developing Infrastructure for Economic Growth

Bosphorus Rail Tube Crossing Project (II) in Turkey

Supporting the Construction of a Subway Linking Asia and Europe by Utilizing Japanese State-of-the-art Technology

Istanbul has a strategically important location, linking Asia and Europe on the transport route. It is a major city with a population of 10 million and the center of commerce and trade in Turkey. While the city has a range of transport modalities, including roads, railways and ferries, it is roads that carry 92% of the total traffic volume. Rising motor vehicles on the roads in recent years have caused chronic congestion in the center of the city. Vehicle emissions during congestion are also responsible for increasingly severe air pollution.

Istanbul is divided by the Bosphorus Straits into the commercial district on the European side and the residential areas on the Asian side. The means of transport that crosses the Bosphorus thus has an important role. Currently, the volume of traffic passing through the First and the Second Bosphorus Bridges across the straits exceed 390,000 vehicles per day (well above their total designed capacity of 270,000 vehicles per day). Thus there is the need for a new means of transport.

Under these conditions, JBIC provided an ODA loan totaling ¥98.73 billion for the second phase of the Bosphorus Rail Tube Crossing Project to alleviate congestion and air pollution in the center of Istanbul, following the assistance for the first phase of the project in FY1999.

The project consists of constructing a subway line that crosses the Bosphorus and connects the eastern and western parts of Istanbul. Japan’s state-of-the-art technology and know-how have been utilized for building the section crossing the Bosphorus. This included designing the structural strength to withstand an earthquake of magnitude 7.5 on the Richter scale and minimizing water pollution in the straits during the construction work. When completed, this will set a record as the world’s deepest (maximum depth of 56 meters) immersed tube tunnel (see p. 16).

Another aspect of the project that needs to be addressed is the World Heritage Sites dotted around the construction site. To protect these cultural assets, JBIC worked in partnership with the UNESCO World Heritage Center from the project planning stage by conducting studies on how to protect historical monuments near the construction sites and on how to respond when historical or archeological ruins are uncovered during digging. The recommendations on necessary measures were transmitted to the Turkish government.
Supporting Environmental Improvement and Anti-pollution Measures

Eco-environmental Construction and General Treatment Project of the Yangtze Upper Reaches in Sichuan Province in China

Mobilizing Japanese Prefectural Government’s Know-how to Support Efforts to Prevent Disasters Caused by Degrading Forests

Situated on the upper reaches of the Yangtze River, Sichuan Province used to have abundant forest resources. However, excessive logging in the process of rapid economic development and population growth in recent years have increased demand for timber and led to deforestation and forest degradation. Although the forest cover ratio (the proportion of forest areas in the total land) in the province is about 20%, which is higher than the national average of about 18%, the functions of forests, such as preventing soil erosion and alleviating floods, have been lost due to negligence of appropriate forest management. As a result, the total area affected by soil erosion is as large as one half of the province, with 600 million tons of soil flowing into the Yangtze River each year. This has been responsible for increasing floods and other serious natural disasters.

Under these circumstances, the Sichuan provincial government prepared the Tenth Five Year Plan for Sichuan Province (2001–2005), and has been striving to restore the multiple functions of forests by foresting 1.3 million hectares and planting shrubs on 1.15 million hectares to date.

JBIC provided an ODA loan totaling ¥6.5 billion for the Eco-environmental Construction and General Treatment Project of the Yangtze Upper Reaches in Sichuan Province. The project consists of afforestation (70,000 hectares), planting shrubs (20,000 hectares) in 12 county-level administrative units of Sichuan Province. In addition, to prevent farmers from logging firewood, methane gas production facilities will be built to supply alternative fuel. The project aims to increase forest areas and reduce soil erosion, thereby serving to improve the natural environment.

Afforestation will be carried out with farmers’ voluntary participation. In addition, to increase project effectiveness, experts from the Hiroshima prefectural government joined JBIC’s field mission and made a presentation on their know-how to Chinese officials involved in the project at the preparation stage of the project. It is also planned that during the implementation stage, the Chinese staff in the executing agency will receive training in Hiroshima. As the Hiroshima prefectural government has friendship ties with Sichuan Province, it has carried out afforestation activities there since 1992, including development of the Friendship Forest, creation of experimental forests in arid mountainous areas and provision of technical assistance on afforestation. The accumulation of such cooperative efforts is expected to lead to an extensive utilization of Japanese know-how and experience.

1 Methane gas production facilities ferment feces of domestic cattle such as pigs and humans to produce methane gas as an alternative fuel to firewood.
In Romania, thermal power plants constitute a major source of electric power, accounting for 60% of the total power output. However, 30% of them are 30 years or older, and their antiquated facilities have caused shortfalls in output and air pollution.

With its sights set on gaining accession to the EU in 2007, the Romanian government has been implementing stricter environment regulations based on the EU standard. Thus reducing air pollution is a challenge that has to be addressed. Since a major part of sulfur dioxide (SO₂) emissions in Romania come from coal-fired thermal power plants, there is an urgent need for taking environmental measures in these facilities. In 2003, the government decided to strengthen the SO₂ emission standard to 400 mg/Nm³, the same level as the EU standard, and shut down operations in the plants that cannot meet this standard by the end of 2011.

JBIC provided an ODA loan totaling ¥28.75 billion for the Turceni Thermal Power Plant Pollution Abatement Project. The loan supports the project for meeting environmental standards required in the EU with installation of the country’s first flue gas desulfurization system at the Turceni Thermal Power Plant. The project will help reduce air pollution and provide stable power supply, thereby contributing to Romania’s accession to the EU and economic development.

The Turceni Thermal Power Plant is the largest coal-fired thermal power plant in Romania, accounting for 11% of the country’s total power capacity. It is therefore an indispensable source of stable power supply in this country. However, as its facilities were installed in the 1970s and 1980s, they are dilapidated with aging; no environmental measures have been taken; and their SO₂ emissions far exceed the national standards. Should the plant halt operations, it could deal a serious blow to the domestic power supply. Thus, to ensure stable power supply, there is an urgent need to reduce SO₂ emissions.

The Turceni Thermal Power Plant where the flue gas desulfurization system will be installed
Environmental Education Workshop in Thailand: Sharing Know-how on Environmental Education and Enhancing Partnerships

◆ Experiences Gained in Minamata City and Imari City Draw Attention

JBIC and the Department of Environmental Quality Promotion, Ministry of Natural Resources and Environment of Thailand, jointly held a 3-day environmental workshop in Bangkok from August 25, 2004. It was titled “Environmental Education for Sustainable Development-Partnership among Local Community, Public Administration and Schools with Emphasis on Solid Waste Management.” Its objective was to enhance partnership on environmental education by presenting examples of Japanese environmental education in Thailand, where there is high interest in this subject.

Approximately 130 people participated in the workshop. Participants from Thailand included representatives from central and local governments, community groups, schools, NGOs and the local Japanese school. Participants from Japan included representatives from the Ministry of Environment, officials of Minamata City and Imari City, the two municipalities that have been dealing with their own environmental problems, the staff of the Japan International Cooperation Agency (JICA) and NPOs.

At the beginning of the 3-day workshop, the (then) Senior Vice Minister of the Environment in Japan, Shuichi Kato, and Deputy Permanent-secretary of the Ministry of Natural Resources and Environment of Thailand, Mr. Chalermsak Wanichsombat, delivered speeches, emphasizing the importance of the environment as a subject in the 21st century; the need for “Education for Sustainable Development” and for “the Earth Charter” advocated during the World Summit on Sustainable Development (WSSD) in Johannesburg; and, in particular, the usefulness of environmental education.

This was followed by presentations on environmental efforts by the participants from the respective countries. Presentations on initiatives of the 2 Japanese cities, Minamata City and Imari City, aroused significant interest among the participants. In particular, Thai participants showed strong interest in the Imari Hachigame Plan. They asked a number of specific questions, including “what are the factors that led to success?” and “to what extent did the administrative authorities get involved?” The presentation by citizens of Imari City was accurate, based on the actual experience, and become valuable information.

The workshop was subsequently divided into 3 sessions based on the following themes: “Drawing Lessons from Solid Waste Management in Japan and Thailand,” “Strengthening Partnerships to Improve Environmental Education,” and “Practicing Environmental Education at School.” In these sessions, the participants made presentations and exchanged questions and answers, thereby increasing understanding of environmental education.

◆ Toward Achieving a Sustainable Society

Prior to the workshop, the Japanese participants made a site visit. The places they visited included Na Klaue Post Office Community, a local community actively engaging in environmental conservation activities on its own initiative; Muang Pataya Seven School, where a “Garbage Bank” was set up to enable students to learn how to properly recycle and manage waste; and Siam Bayview Hotel, where employees are educated based on the motto of “Love Bayview, Love Environment.”

JBIC is engaging in environmental education, defining it as a very broad concept that includes school education, activities for raising the awareness of citizens; and corporate activities. As Thai and Japanese participants respectively reported their activities and shared know-how, the workshop provided an opportunity for promoting increased understanding of environmental education.

1 The Imari Hachigame Plan is an initiative to turn organic waste produced in Imari City into fertilizer.
2 The Garbage Bank is a recycling movement underway in many parts of Thailand. Students earn points by helping to recycle waste, and they can use the saved points to purchase stationery.
## Addressing Global Issues

### Tamil Nadu Afforestation Project II in India

Conserving the Environment and Improving the Living Standard of the Poor through Participatory Afforestation

- **Growing Seriousness of Deforestation**
  While 40% of the land in India was forest at the beginning of the 20th century, forest cover has diminished in recent years to 23% (in 2001), short of the world average of 30% (in 2000). Large numbers of people living in forest areas depend on forest resources, as they make their living by logging firewood and engaging in livestock farming. However, degrading and shrinking forests have reduced supplies of fuels, feeds and fruits, thus further deteriorating their living standards.

  The southern state of Tamil Nadu is also plagued by ongoing forest degradation. The forestland of about 700,000 hectares has become so degraded that urgent remedial action is called for. To help rejuvenate degraded forests, JBIC provided an ODA loan for the first phase of the Tamil Nadu Afforestation Project in FY1997. Although forest cover increased from 13% in 1999 to 17% in 2001 in Tamil Nadu as a result of this project, it still remains much less than the national average in India.

- **Drawing Lessons from Phase I**
  To improve the situation, JBIC provided an ODA loan totaling ¥9.82 billion for the Tamil Nadu Afforestation Project II. Like Phase I, Phase II aims to plant trees in 180,000 hectares (equivalent to about 80% of the Tokyo metropolitan area) with Joint Forest Management (JFM), an arrangement in which community inhabitants and Tamil Nadu Forest Department jointly conduct afforestation and forest management activities.

  Also under the project, the Geographical Information System (GiS), which uses satellite images, will be adopted to effectively carry out the selection of foresting areas and forest management. In addition, training will be provided

1 Joint Forest Management is an arrangement under which the Forest Department and community inhabitants mutually cooperate in afforestation and forest management to recover vegetation and raise living standards of the people living in poverty.
for government staff, local inhabitants, members of NGOs and others on foresting skills and forest management techniques for sustainable foresting activities. Based on findings of the impact assessment study for Phase I conducted by SOMNEED, a Japanese NGO, Phase II will provide extended extensive training and a re-education course for the staff of the Forest Department.

— Making Considerations for Gender Issue

To prevent local inhabitants, who have relied on forest resources for living, from logging forested land because of poverty, Phase II provides vocational training programs and microfinance (small-scale financial services including lending to the poor and low-income people), which are intended to raise income levels of community residents. The project also includes the component of developing small-scale infrastructure (wells and community halls) to meet the needs of the community.

Local inhabitants organize the Village Forest Committee (VFC) to carry out afforestation and forest management. One male and one female member from each household participate in this VFC. From the gender-oriented perspective, a Self-Help-Group (SHG) for women is organized and activities such as selling milk are carried out to improve their livelihoods.

Mangrove Reduced Tsunami Damage

The Tamil Nadu Afforestation Project Phase I was completed in March 2004 after foresting a total area of 430,000 hectares, twice as large as the Tokyo metropolitan area. Among the newly planted trees were mangrove groves in 1,226 hectares on the shorelines of the Bay of Bengal and an erosion control forest stretching 488 kilometers.

According to the JBIC study conducted after the earthquake off the coast of Sumatra and the tsunami, more than 50% of houses were damaged in the non-forested areas. In contrast, less than 10% of houses were damaged in the area where afforestation activities had been carried out under this project. Although this project was not undertaken for the specific purpose of reducing tsunami damage, mangroves planted along the coastlines largely served to reduce damage caused by the tsunami. JBIC will draw on this finding in formulating afforestation projects in the coming years.
Supporting a Geothermal Plant to Meet Power Demand in Sumatra: Looking Forward to the Utilization of the Kyoto Mechanisms

Indonesia has registered robust economic growth, with its real GDP growing 5.1% in FY2004. As a result, the country has to meet increasing power demand induced by the growing economy. Whereas the installed capacity in the South Sumatra power system is 1,607 MW as of 2003, peak demand is expected to reach 2,429 MW by 2013, with an average annual growth of about 7.9%. As part of the existing facilities is expected to suffer from operational disruptions due to aging, actual supply capacity will fall short of demand, and it will be difficult to achieve a stable power supply after 2008.

Indonesia is endowed with abundant geothermal resources, and the potential exploitation of geothermal resources is estimated to generate a total of 10,000 MW electricity nationwide. Of this total, Sumatra accounts for 5,400 MW or more than half. The Indonesian government has adopted a policy that gives priority to harnessing renewable energy and domestic energy sources in power source development in the coming years.

JBIC provided an ODA loan totaling ¥20.29 billion for the Ulubelu Geothermal Power Plant Project to relieve tight supply in the South Sumatra System. The project aims to meet power demand by constructing a geothermal power plant with a capacity of 110 MW in Ulubelu, South Sumatra Province. A stable power supply will also contribute to economic development in southern Sumatra.

Harnessing geothermal heat, a renewable energy source, enables the geothermal power plant to produce less carbon dioxide emissions than a thermal power plant of similar capacity. Since this project leads to reduction in greenhouse gas (GHG) emissions, the Indonesian government hopes the project will become eligible for the Clean Development Mechanism (CDM), one of the Kyoto Mechanisms. JBIC is currently moving forward the procedures for applying the CDM to this project and the Lahendong Geothermal Power Plant Project for which an ODA loan was provided in FY2003, while having consultations with the Indonesian government.
Supporting Human Resource Development

Inland Higher Education Project in China

Supporting Higher Education in the Inner Mongolia Autonomous Region: An Exchange Program with Japanese Universities

As education in primary and lower secondary schools has become prevalent in China, there is growing demand for higher (university-level) education. In particular, it is indispensable for reducing regional disparities to develop high-quality human resources in inland regions. These regions also have to address themselves on a broader front to further marketization and environmental conservation. This may include human resource development in the area of information, finance, public finance, trade, law, business administration and environment, as well as research on environmental conservation.

The Inner Mongolia Autonomous Region, which is located inland, has almost achieved universal primary education, with enrollment in primary schools and in the lower secondary schools respectively reaching 99% and 99% in 2003. However, students moving on to higher education remain 16.5%, which is slightly lower than the national average of 17%.

To make quantitative and qualitative improvements in higher education in the Inner Mongolia Autonomous Region, JBIC provided an ODA loan totaling ¥5.07 billion for the Inland Higher Education Project (Inner Mongolia Autonomous Region). The project consists of providing support in hardware (buildings and equipment, etc.) and in software (training the teaching staff, etc.) for 8 universities in the region.

In this project, JBIC supports human resource development from 3 perspectives. First is “invigorating the regional economy and personnel exchange.” Financial support is provided for producing highly skilled human resources in the priority areas in Inner Mongolia under the Tenth Five Year Plan, including petrochemicals and metal processing. Second is “strengthening the market rule.” JBIC provides support for promoting the understanding of a market economy and the global standards and rules, including WTO agreements, and strengthened governance (which comprises improving the legal framework, adherence to law and increasing the transparency and efficiency of administration), thereby serving to advance marketization in inland regions. Third is “environmental conservation.” JBIC supports human resource development for resolving environmental problems through research on environmental conservation and the implementation of measures to fight communicable diseases to address diverse environmental issues, including air pollution, a deteriorating water environment and the epidemic of communicable diseases.

In training university staff, Toyama Medical and Pharmaceutical University, which has a cooperation agreement with a medical school in Inner Mongolia, joined a study conducted by JBIC and provided cooperation in drawing up the training program in Japan at the project preparation stage. It is also considered that at the project implementation stage, in addition to Toyama Medical and Pharmaceutical University, other universities having similar cooperation agreements with their counterparts in Inner Mongolia, including Okayama University and Mie University, will accept the staff of Chinese universities for training. In this way, software support is expected to promote mutual understanding between China and Japan through cooperation in training and joint research between the higher educational institutions in Inner Mongolia and the Japanese institutions accepting the trainees.
Supporting Human Resource Development to Produce Doctors Engaging in Rural Medicine

Health indicators in Indonesia have been generally improving, with the infant mortality rate falling from 104 deaths per thousand in 1970 to 33 deaths per thousand in 2001, and average life expectancy at birth rising from 49.2 years in 1975 to 66.8 years in 2001. However, the number of doctors per 100,000 people was only 13 in 2001, which is lower than comparable figures in the neighboring countries. In addition, there are substantial regional disparities in medical infrastructure between urban and rural areas, and the medical service delivery system is both underdeveloped and underutilized. In particular, there is an urgent need to train medical human resources who will practice rural medicine.

Under these circumstances, JBIC provided an ODA loan totaling ¥2.98 billion for the Development of the Faculty of Medicine and Health Sciences of Syarif Hidayatullah State Islamic University (UIN).

The project consists of development of the Faculty of Medicine and Health Sciences at the UIN. The university, located in the province of Banten, adjoining western Jakarta, was established in 1963. In 2004, it created the program of public health and pharmacology and became the first medical program in the Islamic university under the jurisdiction of the Ministry of Religious Affairs. The UIN envisions “to contribute to improvement of the quality of social life” as its philosophy and places emphasis on serving regional and rural communities. For this reason, the university traditionally has strong ties with rural areas and the poor. It has a well-developed scholarship program for the students coming from madrasa, Islamic religious schools where relatively poor people are enrolled.

The project supports the Faculty of Medicine and Health Sciences both in hardware (including the construction of buildings) and in software (including the fellowship program). The UIN has accepted many of its students from rural and regional areas and poor households to date. This project is expected to provide a broader opportunity for such students to receive higher medical education. The university intends to actively encourage graduates from the Faculty of Medicine and Health Sciences to work in rural and regional healthcare facilities. It is currently considering a new fellowship program under which fellowship students are required to engage in rural medicine for a certain period after graduation. It is expected that support for the university will help train personnel who will work in regional and rural healthcare facilities, thereby serving to improve basic health and medical services in rural areas.
Supporting Telecommunications Network Development to Improve the Investment Climate in the Greater Mekong Subregion

Substantial economic disparities remain between Cambodia, one of the countries located in the Mekong River basin, and the original ASEAN member countries such as Thailand and Malaysia. Thus, the development of the entire Greater Mekong Subregion (GMS) as an integral economic unit is a challenge for the region. In particular, as major facilities in its telecommunications network were destroyed in the civil war, the fixed-line telephone network is underdeveloped. Telephone subscribers per 100 people (including fixed and mobile phones) amount to 3 (2002) in Cambodia, which is much lower than in neighboring countries (55 in Malaysia, 35.91 in Thailand and 9 in Viet Nam). While Cambodia formally entered the WTO in October 2004, its underdeveloped telecommunications network is posing a major bottleneck to industrial development to be brought about by attracting foreign companies. There is thus an urgent need for drastic reforms in the telecommunications sector. The Cambodian government drew up the Long-Term Development Plan in the Telecommunications Sector 2001–2005 in 2000 and has a plan to develop the main telecommunications network that links all the provincial capitals with optical fiber cables or microwave. The central region in Cambodia, which is called the Growth Corridor, is the center of economic activity, with its economy growing 15% annually. As demand for telecommunications services is projected to increase sharply in this region, the development of main telecommunications network is urgently called for.

Under these circumstances, JBIC provided an ODA loan totaling ¥3.03 billion for the Greater Mekong Telecommunication Backbone Network Project (Cambodia Growth Corridor). The project aims to increase telecommunications capacity and improve the reliability of telecommunications facilities in the Growth Corridor, which encompasses Sihanoukville, Phnom Penh and Kampong Cham in Cambodia, by laying down optical fiber cables in the total length of 400 kilometers and installing related facilities such as switchboards and access cables. Since the optical fiber cables installed under this project will be linked to the existing cable connecting Viet Nam and Thailand, it will lead to building the backbone telecommunications network in the Mekong region, thereby contributing to economic and social development in the GMS.

The Government of Cambodia and JBIC have agreed on the implementation plan of telecommunications sector reforms with a view to efficient development and operation of telecommunications infrastructure. JBIC is supporting the development of telecommunications infrastructure in partnership with the Asian Development Bank (ADB), which has provided technical assistance for developing policy and legal guidelines for this sector.

In Sihanoukville Port, port facilities are being expanded, while HIV/AIDS education and awareness activities are carried out for the construction workers.
Supporting Regional Development by Improving Tourism Infrastructure for Buddhist Pilgrimage Sites by Introducing the MICHI-NO-EKI (Roadside Station) System

India has 26 world heritage sites and is well endowed with diverse tourism resources, including nature and cultural as well as religious monuments. However, the tourism industry is not well developed. India receives only 2.4 million international visitors annually (2002), ranking just 53rd in the world in terms of the number of foreign visitors.

The northern Indian state of Uttar Pradesh has 4 out of the 8 major Buddhist ruins that are closely associated with the life of the Buddha.1 These Buddhist sites have come to form part of a tourism and pilgrimage route known as the Buddhist Circuit.

The project consists of developing basic infrastructure, including roads and drainage systems, and building visitor centers where tourism information is provided, local products are sold, and tourists can take rest. In addition to the construction of facilities, programs will be implemented to increase the local awareness of tourism and the preservation of heritage sites and to enable local communities to participate in the planning and implementation of local tourism development.

In partnership with Nara Prefecture, which has world-class Buddhist tourism sites, and the National Research Institute for Cultural Properties in Tokyo, JBIC made presentations to community residents on how the MICHI-NO-EKI (roadside station), owned and operated by the local community, came into being and its experience.2 As a result, Japan’s MICHI-NO-EKI system is to be incorporated into the visitor centers. In the project implementation stage, Japanese experts will be sent to India to offer advice on boosting development in villages and on MICHI-NO-EKI.

In this way, JBIC is supporting basic tourism infrastructure development, protection of Buddhism ruins and implementation of the tourism promotion program, thereby serving to invigorate regional economy and reduce poverty.

JBIC provided an ODA loan for the Tourism Development Project in FY1988. As a result, while an increasing number of tourists have been visiting the targeted southern part of the Circuit, its northern part has been left behind in development. Uttar Pradesh is one of the poorest states in India, and developing non-agricultural industries has become a major issue on the development agenda for this region. Considering this need, JBIC provided an ODA loan totaling ¥9.5 billion for the Uttar Pradesh Buddhist Circuit Development Project to develop tourism-related infrastructure and enhance the capacity to promote tourism.

1 The state contains Sarnath where the Buddha preached his first sermon; Kushinagar, where the Buddha entered Nirvana; and Shravasti, the site of the famed Jetavana Monastery.
2 The roadside station is a facility that serves road travelers with three functions: a comfortable stop; an information dissemination center for road travelers and community residents; and the hub of regional collaboration providing linkage to various communities.

Buddhist ruins at Sarnath were developed into a park in the Tourism Development Project.

The stationmaster of a roadside station in Nara Prefecture converses with Buddhist monks from India.

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Supporting Provincial Development

Uttar Pradesh Buddhist Circuit Development Project in India
The Greater Mekong Subregion (GMS), the region in the Indochina Peninsula and its hinterland where the Mekong River runs through from north to south, extends 2.3 million square kilometers (about 6 times as large as Japan) and embraces 250 million people. The GMS, which comprises Cambodia, Laos, Myanmar, Viet Nam, Thailand and the province of Yunnan, China, forms an integral economic zone. The Japanese Government recognized the importance of developing this subregion and offered US$1.5 billion assistance for its development at the ASEAN-Japan Commemorative Summit in December 2003. Subsequently, Prime Minister Koizumi expressed to the leaders of Cambodia and Laos Japan's intention to provide ODA loans for the GMS during the ASEAN + 3 Summit in November 2004. Based on this government policy, JBIC provided ODA loans for improving the investment climate in GMS countries.

Cambodia has been taking steady steps forward to return to the international community, achieving formal accession to the WTO in 2004. JBIC provided an ODA loan totaling ¥3.03 billion for the Greater Mekong Telecommunication Backbone Network Project (Cambodia Growth Corridor) to develop telecommunications infrastructure in the so-called growth corridor in central Cambodia (see p. 31).

In south central Laos, there are high expectations for industrial development, as the Mekong East-West Economic Corridor, which bisects Indochina east to west from Viet Nam to Myanmar, passes through this area. To meet growing power demand in south central Laos as well as to help build a power transmission network in GMS, JBIC provided an ODA loan totaling ¥3.3 billion for the Greater Mekong Power Network Development Project (Lao PDR).

While Viet Nam is also pursuing accession to the WTO, improving the investment climate remains on its agenda. JBIC provided an ODA loan totaling ¥36.4 billion for the Cai Mep-Thi Vai International Port Construction Project to meet growing freight handling volume in southern Viet Nam including Ho Chi Minh City.

As Japan’s advanced technology and know-how are utilized for construction of the terminals, and sea lane dredging, Special Terms for Economic Partnership (STEP) (see p. 10) were applied to the loan. JBIC will also support improvements in the port operation system to ensure efficient operation and maintenance of port facilities after completion of construction work in cooperation with JICA.

Furthermore, HIV/AIDS prevention activities will be carried out for the construction workers and the neighboring communities in large infrastructure projects such as the Phnom Penh Port Urgent Expansion Project, the Cai Mep-Thi Vai International Port Construction Project and the Saigon East-West Highway Construction Project (IV), all of which were provided ODA loan in FY2004.

Vigorous Support for GMS Development: Improving the Investment Climate in Cambodia, Laos and Viet Nam