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Mayan Ruins of Tulum and the Caribbean Sea (Mexico)
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JBIC

The State of the Digital Divide and JBIC's Support to Bridge the Gap

◆ The Digital Divide

In recent years, personal computers and mobile phones have proliferated and dissemination of the Internet is on a sharp rise in the United States, Europe, and the industrialized Asian countries. This dramatic development in information technology (IT) is bringing about the "IT revolution" that is radically changing politics, business, society, and the way of life. For instance, business-to-business (B2B) and business-to-consumer (B2C) e-commerce and e-government, which makes effective use of IT for such administrative procedures as paper-based applications, are steadily becoming commonplace. It is widely anticipated that the IT revolution will be the greatest driving force behind further economic progress in developed countries in the coming years.

Moreover, IT—as represented by the Internet—also has a vast potential to bolster economic prosperity in developing countries. However, when compared to developed countries, developing countries that are having trouble keeping pace with developments in the field of IT have extremely limited access to the means of communications and opportunities to learn IT skills. There are rising concerns that the digital divide may widen between developing and developed countries as well as within respective developing countries. Figure 1 shows that there is a large disparity between developed and developing countries: 49% of the total Internet users live in the Americas, followed by 27% in Europe, 21% in Asia (including the Middle East), 2% in Oceania, and 1% in Africa. Dissemination of the Internet, the foundation of an information-driven society, is the top priority for all countries. The construction of information communication networks to facilitate easy access is urgently called for.

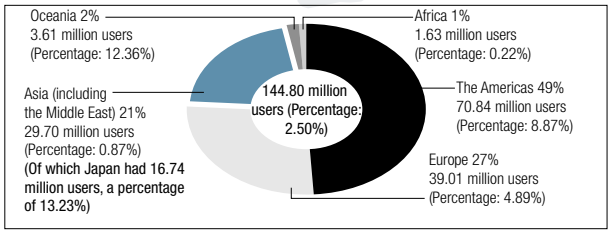
◆ IT Development in Asia Relative to the Rest of the World

Asian countries attracted a great deal of attention in the 1990s as emerging markets. In a bid to promote foreign investment amid a global trend toward privatization and liberalization of the telecommunications sector, they actively improved the telecommunications infrastructure essential for economic development by capitalizing on the new entry of private-sector firms through deregulation. However, the situation changed for the worse in many countries with the eruption of the Asian currency crisis in 1997. Apart from a few exceptions, the gap in the diffusion of access to telecommunications between these countries and developed countries has since been growing. While the IT boom is expanding across the world, there is an undeniable concern over the further widening of the digital divide. Given these circumstances, it is worth considering the telecommunications infrastructure development in Asia in comparison with the rest of the world.

As of the end of 1998, there were 844.03 million active fixed telephone lines around the world. The percentage in world population (the number of telephone lines per 100 people, excluding extensions and the mobile handsets of cordless telephones) was 14.26%. Asia (including the Middle East) had 259.72 million telephone lines, with the corresponding percentage of 7.34%. (Figure 2). For the number of lines and the percentage relative to population in principal Asian countries and regions, see Table 1.

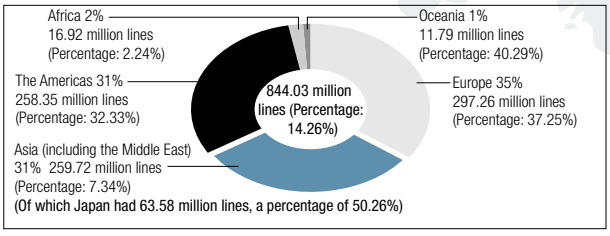
A similar pattern is evident in mobile phones. As of the end of 1998, there were 318.89 million mobile phone subscribers around the world, which amounts to 5.38% of the population. Asia (including the Middle East) accounted for 108 million subscribers, or 3.05%. (Figure 3). Table 2 shows the number of mobile phone subscribers and the percentage relative to population in principal Asian countries and regions.

Figure 1: World Internet Users and Their Percentage in Population (1998)



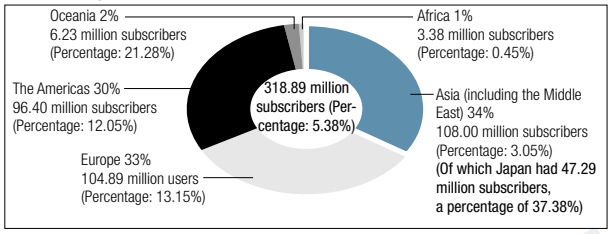
Source: ITU

Figure 2: World Fixed Telephone Lines and Their Percentage in Population (1998)



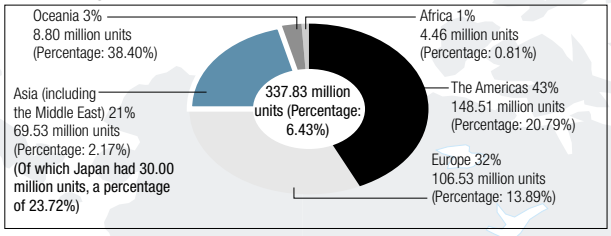
Source: ITU

Figure 3: Mobile Phone Subscribers in the World and Their Percentage in Population (1998)



Source: ITU

Figure 4: Personal Computers in the World and Their Percentage in Population (1998)



Source: ITU

As for the Internet, there were 144.80 million users around the world, which accounts for 2.50% of the world population, as of the end of 1998. Of these users, 29.7 million resided in Asia (including the Middle East), which represents a trivial 0.87% portion of the population. (Figure 1). Table 3 shows the number of Internet users and their percentage relative to population in principal Asian countries and regions in 1998.

As of the end of 1998, 337.83 million personal computers were installed throughout the world, accounting for 6.43% of the population. Asia (including the Middle East) had 69.53 million units, or 2.17%. (Figure 4). Table 4 shows the number of personal computers and their percentage relative to population in principal Asian countries and regions.

These figures highlight the gap between Asian and Western countries regarding telecommunications infrastructure, which is indispensable for promoting the diffusion of IT. Additionally, there is a marked gap between Japan and NIEs, on one hand, and major ASEAN member countries, on the other.

◆ IT in Southeast Asia

The Japan Institute for Overseas Investment (JOI) is well informed about trends in the information and communications business in Southeast Asia. Mr. Kajiwara, Senior Advisor, Business Development Department, observes: "When we talk about IT, we tend to think of invigorating economic activity through the use of the Internet. Actually, the foundations for IT are telecommunications networks of individual nations. There are substantial differences in the extent that such infrastructure has been developed. Asian Tigers—Singapore, Hong Kong, Taiwan, and South Korea—have made greater progress than Japan in this respect. This is because, with the exception of Taiwan, they privatized or liberalized the previously state-run telecommunications operators and eased restrictions on the entry of foreign capital. This resulted in the entry of private-sector and overseas telecommunications operators into the market. They also gained ground due to the relatively small land area, which helped build up infrastructure in a short time frame." Strong government leadership in infrastructure development is another feature commonly seen in these countries—"Singapore One" in Singapore, "Cyberport" in Hong Kong, "National Information Infrastructure" in Taiwan, and "Cyber Korea 21" in South Korea. (Table 5).

Table 1: Fixed Telephone Lines and Their Percentage in Population in Principal Asian Countries and Regions (1998)

Country/ Region	Lines (Millions)	Percentage (%)	Country/ Region	Lines (Millions)	Percentage (%)
Singapore	1.778	56.20	Thailand	5.038	8.35
Hong Kong	3.792	55.77	China	87.421	6.96
Taiwan	11.500	52.44	The Philippines	2.700	3.70
Japan	63.580	50.26	Indonesia	5.572	2.70
South Korea	20.089	43.27	Vietnam	2.000	2.58
Malaysia	4.384	19.76	India	21.594	2.20
Asia Total (including the Middle East) 259.723 million (average) 7.34%					

Note: In Japan, the number of fixed telephone lines has been declining in recent years, falling to 55.66 million (excluding ISDN lines) at the end of March 2000 (NTT estimate). This figure was outnumbered by 58.65 million mobile and PHS (personal handy-phone system) phone subscribers (as reported by their operators).
Source: ITU

Table 2: Mobile Phone Subscribers and Their Percentage in Population in Principal Asian Countries and Regions (1998)

Country/ Region	Subscribers (Millions)	Percentage (%)	Country/ Region	Subscribers (Millions)	Percentage (%)
Hong Kong	3.174	47.47	Thailand	1.957	3.25
Japan	47.285	37.38	The Philippines	1.595	2.19
Singapore	1.095	34.60	China	23.863	1.90
South Korea	14.019	30.19	Indonesia	1.066	0.52
Taiwan	4.727	21.56	Vietnam	0.187	0.24
Malaysia	2.200	9.92	India	1.195	0.12
Asia Total (including the Middle East) 107.999 million (average) 3.05%					

Note: As of the end of June 2000, there were a total of 59.418 million mobile and PHS phone subscribers in Japan, according to figures published by mobile and PHS phone operators, of whom 12.723 million were using such Web-enabled phones as i-mode.
Source: ITU

Table 3: Internet Users and Their Percentage of Population in Principal Asian Countries and Regions (1998)

Country/ Region	Users (Thousands)	Percentage (%)	Country/ Region	Users (Thousands)	Percentage (%)
Singapore	550	17.39	Thailand	200	0.33
Hong Kong	1,000	14.95	The Philippines	150	0.21
Taiwan	3,011	13.73	China	2,100	0.17
Japan	16,740	13.23	Indonesia	300	0.15
South Korea	3,103	6.68	India	500	0.05
Malaysia	800	3.61	Vietnam	10	0.01
Asia Total (including the Middle East) 29.698 million (average) 0.87%					

Source: ITU

Table 4: Personal Computers and Their Percentage in Population in Principal Asian Countries and Regions (1998)

Country/ Region	Units (Millions)	Percentage (%)	Country/ Region	Units (Millions)	Percentage (%)
Singapore	1.450	45.84	Thailand	1.300	2.16
Hong Kong	1.700	25.42	The Philippines	1.100	1.51
Japan	30.000	23.72	China	11.200	0.89
Taiwan	3.478	15.86	Indonesia	1.700	0.82
South Korea	7.282	15.68	Vietnam	0.500	0.64
Malaysia	1.300	5.86	India	2.700	0.27
Asia Total (including the Middle East) 69.532 million (average) 2.17%					

Source: ITU

Mr. Kajiwara continues, "For instance, in Singapore, based on Singapore One, announced in 1993, which aims to turn the country into a global information hub, the government has been building and urging its citizens to use a high-speed domestic network. Singapore's citizens can already use the Internet for passport applications."

On the other hand, countries such as Malaysia, the Philippines, Indonesia, and Vietnam are trailing NIEs in telecommunications infrastructure development. In Malaysia, based on "Vision 2020," advocated by Prime Minister Mahathir Mohamad, the government is actively promoting its Multimedia Super Corridor Initiative that seeks to create IT-related industries in an effort to establish a highly advanced information society. Malaysia, however, has not yet reached the level of the NIEs.

Mr. Kajiwara further continues, "In Thailand, to encourage fixed-line telecommunications infrastructure development, the government allowed private-sector firms—including foreign companies—to enter the telecommunications business by employing such schemes as Build, Transfer, and Operate (BTO).

However, since the Asian currency crisis in 1997, the BTO operators have been saddled with heavy debts and are now unable to make any new investments unless the government takes favorable steps, such as changing revenue sharing." Meanwhile, Thailand has made a commitment to the World Trade Organization (WTO) that it will completely liberalize its telecommunications sector by 2006.

In the Philippines, where there were no government-affiliated public enterprises in the telecommunications sector, the Philippine Long Distance Telephone Company (PLDT) monopolized telecommunications services. Since PLDT's capital investment was concentrated in highly profitable areas, telecommunications infrastructure development was largely neglected in rural areas. A 1993 presidential decree allowed new entries into the sector, and the situation is showing signs of improvement.

Although Indonesia plans to liberalize its telecommunications sector completely in 2011, the percentage of the country's fixed phone lines relative to population is the second lowest after Vietnam, due partly to the Asian currency crisis and the political instability that followed. (Figures 5 and 6).

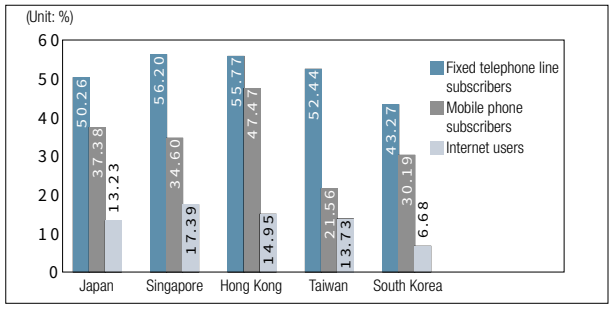
In socialist Vietnam, "Communications network development is considerably delayed because the regulations on foreign financing have yet to be eased in this sector," according to Ms. Matsuki, Economist & Manager, Research & Analysis Department, JOI. There are telephones in the cities, but you hardly see them in such sparsely populated areas as farming villages.

Commenting on useful measures employed in the countries and regions where telecommunications infrastructure development is falling behind, Mr. Kajiwara says: "The installation of fixed telephone lines requires high costs and massive manpower. On the other hand, mobile phones are exceptionally effective. Wireless Local Loop (WLL)—currently known as Fixed Wireless Access (FWA)—which makes use of mobile phone technology, is presently widely used as a handy means of communication in sparsely populated areas. However, in countries with low income levels and low per-capita GDP profiles, call charges and the price of mobile phone handsets pose obstacles to their spread."

Table 5: Information and Telecommunications Infrastructure Plans in Principal Asian Countries and Regions

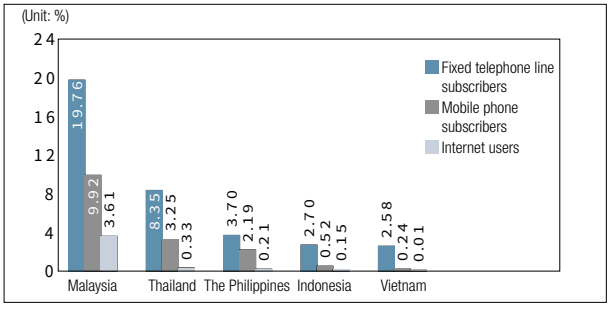
Japan	• Promotion of the laying of a nationwide fiber-optic network (completion target 2005) • Program to reduce telecommunications service disparities • Burying of telecommunications cables, etc.
South Korea	• Korea Telecom has a 3 trillion won capital investment program for 2000, of which 1 trillion won is set aside for the Internet.
Taiwan	• The Taiwan Information Superhighway Plan (NII: 1997-2000): projected investments of NT$40.4 billion
Hong Kong	• Cyberport and Science Park schemes based on Digital 21 • Planned investments of US$2 billion in Cyberport
Singapore	• Singapore One scheme based on IT Masterplan • Government plans to invest S$300 million.
Malaysia	• Multimedia Super Corridor Plan: projected total investment of M$25.4 billion by 2020 • Communications network expansion plan budget (1996-2000): a budget of M$35.3 million
Thailand	• Plan to expand telephone network to sparsely populated areas: projected investment of B46.5 billion between 2001 and 2005 • IT 2000 plan, which aims to construct a nationwide information infrastructure available to all citizens
The Philippines	• Medium-Term Philippines Development Plan (1999-2004): calls for approximately P8.8 billion to be invested in telecommunications-related areas • IT 21 scheme to make the Philippines "Asia's Knowledge Center"
Indonesia	• The sixth five-year plan, Repelita VI: 1994-1999, projected investments of Rp37.8 billion in the transport and telecommunications sectors • Nusantara 21 project extended to finish in 2004 due to the economic crisis
Vietnam	• Telecommunications Development Plan (1998-2010): calls for US$5.7 billion of investment • IT 2000 Plan to construct Wide Area Network (WAN) linking national and regional administrations

Figure 5: Relative Shares of Fixed Telephone Lines, Mobile Phones, and Internet Users in Japan and NIEs (1998)



Source: ITU

Figure 6: Relative Shares of Fixed Telephone Lines, Mobile Phones, and Internet Users in Five ASEAN Countries (1998)



Source: ITU

In non-NIE Southeast Asian countries, not only is infrastructure development sluggish, but the digital divide is widening within the region as well as within individual countries due to the deteriorating financial conditions of the operators as a result of the Asian financial crisis and the delayed liberalization of the telecommunications sector.

◆ JBIC's IT Support

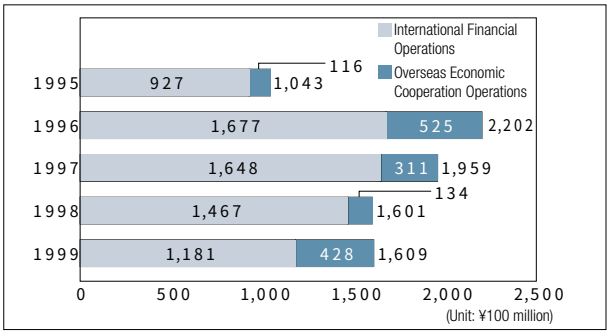
For the past several years, JBIC has assisted telecommunications infrastructure development and the manufacture of IT-related equipment, including personal computer components, to bring a better telecommunications environment to developing countries. The support was provided through its International Financial Operations, which includes export loans, import loans, overseas investment loans, and untied loans, and through Overseas Economic Cooperation Operations (ODA loan operations). Its overall financial assistance has exceeded ¥100 billion annually since 1995. (Figure 7). However, in view of the state of telecommunications infrastructure development in Southeast Asian countries, excluding NIEs, further measures are urgently required. They include: ① drafting a policy and legal framework that takes into account liberalization and the IT revolution; ② human resources development in the area of IT-related technologies; ③ promoting the introduction of information and communications technology from developed countries through strategic tie-ups; and ④ introducing appropriate finance schemes, both from domestic and overseas sources to move forward these measures.

JBIC intends to continue assistance for telecommunications operations in Southeast Asia that are going through privatization as they make efforts to embody IT. To this end, JBIC makes full use of its available facilities. JBIC expects that IT support will contribute to the economic development of Southeast Asian nations.

In July 2000, prior to the Meeting of Heads of State and Government at the Kyushu-Okinawa Summit, the Japanese government announced "Japan's Comprehensive Cooperation Package to Address the International Digital Divide," which consists of providing a total of US$15 billion in financing over the next five years to bridge the digital divide.

Under this package, JBIC is providing support in IT for developing countries in Southeast Asia and elsewhere.

Figure 7: JBIC's Financial Support in the IT Sector



JBIC IT Aid Measures

On July 14, 2000, prior to the Meeting of Heads of State and Government held at the Kyushu-Okinawa Summit, the Japanese government announced the comprehensive cooperation package as outlined in 1. below. It aims at bridging the digital divide and pledges up to US$15 billion over the next five years.

JBIC provides financial support both in its International Financial Operations and Overseas Economic Cooperation Operations. International Financial Operations will center on support for improving information and communications infrastructure and networks (1. (3) below). Specifically, support will be targeted at those projects where Japanese corporations get involved in developing countries in the areas outlined in 2. below.

In its Overseas Economic Cooperation Operations, JBIC will provide support in areas where the market mechanism does not work and consider the needs of the socially disadvantaged and the poor in developing countries. Specifically, JBIC will offer assistance to projects in areas outlined in 3. below in accordance with the objectives set out in 1. (1)–(4) below.

1. Comprehensive Cooperation Package

(1) Knowledge transfer for policy making and institutional building
(2) Human resources development (training and education)
(3) Support for improving information and communications infrastructure and networks
(4) Promotion of IT use in development assistance

2. Principal Target Areas for International Financial Operations

(1) Fixed telephones: installation, maintenance, operation, etc., of trunk and local networks
(2) Mobile phones: network maintenance, installation, maintenance, operation, etc., of relay stations
(3) Satellites: introduction, operation, etc., of satellites and ground facilities
(4) Undersea cables: laying, maintenance, etc., of undersea cables
(5) Manufacture of personal computer- and telecommunications-related products: manufacture, sale, etc., of telephone switching equipment, fiber-optic cables, mobile phone handsets, personal computers, electrical components, etc.
(6) Software, etc.: Internet-related business, IT-related software development business, etc.

3. Principal Target Areas for Overseas Economic Cooperation Operations

(1) Providing advice on developing countries' IT policies and IT-related legal framework, using such consulting services as Special Assistance for Project Formation (SAPROF)
(2) In collaboration with the Japan International Cooperation Agency (JICA), constructing such facilities as IT training centers for human resources development
(3) Areas where the market mechanism does not work, such as developing rural telecommunications infrastructure, building infrastructure that takes into consideration the needs of the poor
(4) Telemedicine, distance education and training

How JBIC Approaches Environmental Conservation

◆ International Developments

At the United Nations Conference on Environment and Development (UNCED), held in June 1992 in Rio de Janeiro, Brazil, the Rio Declaration on Environment and Development and Agenda 21 were adopted, with "sustainable development" as the key phrase behind both documents. Since then, there has been further progress in international conventions. The Convention on Biodiversity and the Framework Convention on Climate Change came into effect in 1993 and 1994, respectively. The Convention to Combat Desertification was adopted in 1994.

At the Third Conference of the Parties to the United Nations Framework Convention on Climate Change (COP3), held in Kyoto, the Kyoto Protocol was adopted, providing a framework for developed countries to legally binding numerical targets to reduce their emissions of greenhouse gases. Also agreed during the conference were such systems as the clean development mechanism (CDM) for implementing emissions reduction projects between developed and developing countries, joint implementation (JI) of such projects among developed countries, and emission trading (ET) between developed countries (Annex 1 Parties[1]). The substance of systems will continue to be negotiated for political agreements at the COP6 resumed session in July 2001.

In 1991, the Global Environment Facility (GEF) was established, and, with the cooperation of the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), and the World Bank, funds and technology have been provided for various projects aimed at preserving the environment in developing countries. These developments are indicative of a strengthened partnership between national governments and multilateral institutions, directed toward their shared objectives of global environmental conservation as well as environmental measures in respective developing countries.

◆ JBIC's Environmental Activities—Present and Future

Before JBIC came into being in October 2000 through the merger of the Export-Import Bank of Japan (JEXIM) and the Overseas Economic Cooperation Fund, Japan (OECF), these two institutions formulated their own respective environmental guidelines and appraised the projects based on them. Since the merger, JBIC has continued to undertake its operations following those guidelines, with the Environment and Social Development Department playing a central role in examining environmental considerations accorded to projects to be financed by JBIC and carrying out environmental appraisal based on the guidelines.

Apart from dealing with individual projects, JBIC is also engaged in the following activities:

- Knowledge transfer in support of institution building to set up mechanisms for environmental consideration in developing countries
- Strengthening partnerships with multilateral institutions and exchanging views and information with relevant domestic government departments, agencies, regional governments, and industry associations
- Holding seminars and training sessions inside JBIC to raise awareness and diffuse expertise and technical knowledge on environmental conservation

Going forward, JBIC will work toward the formulation of integrated environmental guidelines in line with internationally prevailing trends in environmental considerations, while exploring ways to bring out synergies in its International Financial Operations and Overseas Economic Cooperation Operations. JBIC is committed to a policy of providing cooperation for projects with appropriate environmental considerations by drawing on the know-how it has accumulated over the years.

◆ JBIC's Approach in Its Overseas Economic Cooperation Operations

In its Overseas Economic Cooperation Operations, JBIC attaches essential significance to environmental considerations in providing ODA loans. ODA loan projects are considered in accordance with its environmental guidelines at every stage of the project cycle to avoid or reduce adverse impacts on the natural environment, including pollution, or on the social environment, including resettlement.

On another front, JBIC is endeavoring to strengthen and expand its environmental projects or those designed to improve and protect the environment in ODA loan recipient countries. From 1995, interest rates pertaining to loans for environmental projects (standard environmental interest rates) were set below the standard loan rates. In September 1997, even lower interest rates (special environmental interest rates) were introduced for projects that prevent industrial pollution or address global environmental problems, including global warming. Since developing countries are given more preferential terms in undertaking environmental conservation projects, commitments for environmental projects, both in terms of number and value, have increased substantially in recent years.

On such issues having implications across the world as global environmental conservation, JBIC is making use of its credit facilities, including ODA loans, and striving to implement its policies in actual operations by exploiting Japan's comparative advantage in the environmental area, particularly pollution control.

[1] Annex 1 Parties refers to industrialized signatory countries and countries that are making the transition to a market economy.

An Approach to China's Environmental Problems

For many years, Mr. Kazuo Hishida, technical advisor to JBIC, led pollution control efforts in the metropolitan government of Tokyo. He began advising the Chinese authorities on environmental measures in 1981 and, after his retirement in 1984, became the first foreign advisor at the Research Center for Eco-Environmental Sciences under the Chinese Academy of Sciences. He has since been wrestling with the environmental problems of developing countries, focusing in particular on China. He spoke to us about his experience while being involved in coping with environmental problems in China and other developing countries.

Kazuo Hishida, Technical Advisor to JBIC

◆ The Last Survivor

The Japanese word for pollution, *kogai,* was first coined by the Tokyo metropolitan government, for which I worked for 30-odd years. To enforce municipal ordinances, I went around numerous factories offering guidance on pollution control. In 1981, when I was invited to offer advice to the Chinese on environmental measures at the request of the National Environmental Protection Agency (NEPA), I was, in a manner of speaking, the last survivor of my generation of Japan's technical experts in pollution control.

When I went to China, I was shocked. In *Osorubeki Kogai* (Terrifying Pollution), published in 1965 by Iwanami Shoten, the authors, Hikaru Shoji and Kenichi Miyamoto, wrote, "There is no such thing as pollution in socialist states. Pollution is a problem unique to capitalist systems." But what I saw in China in 1982 was by far the most serious kind of pollution. Smoke was billowing up from smokestacks everywhere, and factories were discharging their wastewater untreated. Take, for example, the Suzhou River, which flows through Shanghai. Its biochemical oxygen demand (BOD) was 30ppm, and its dissolved oxygen percentage was 0%. It was in the same condition as Japan's Sumida River when we were unable to hold the Ryogoku fireworks pageant and the traditional rowing-boat race between Waseda and Keio Universities had to be cancelled, all due to effluents of wastewater discharged into the river by the residents of Tokyo. I felt as if I had travelled back through time to a town where highly polluting steel plants and cement factories in Japan of 30 years ago had been concentrated.

I thought to myself, "Well, why not put your experience to good use?" and since then, with that in mind, I have been helping the Chinese people with their environmental measures. At first, I started out entirely as a volunteer.

◆ Measures to Combat China's Acid Rain

In the case of China, the principal cause of acid rain is sulfur dioxide (SO_2). Its annual emissions amounted to about 18 million tons at that time. Now, they reach approximately 23 million tons. Currently, Japan emits about 800,000 tons of SO_2 a year. From the period when the pollution problem was the most severe in Japan up to the present, some 2,300 flue gas desulfurization devices and 56 crude oil desulfurization devices have been installed, thanks to industry efforts. As a result, almost all Japanese cities meet environmental standards today. In other words, Japan has become a model country for the rest of the world. To combat acid rain in China, I thought the administrative authorities had better create a Japan-China regional environment management plan—using the results of joint research by Japan and China. Included in this research was an epidemiological survey studying the effects of pollution on the health of the Chinese population.

My activities were the subject of a Japanese public broadcasting network 1991 TV documentary, *Taking On the Challenges of Border-Crossing Acid Rain,* which provided the impetus for Japan's then Ministry of International Trade and Industry (MITI; the current Ministry of Economy, Trade and Industry) to offer its full support for measures to help solve China's environmental problems. After the program was aired, I was contacted by Mr. Wakasugi, the then chief of the policy division in MITI's Environmental Protection and Industrial Location Bureau. He said, "We want to offer China our cooperation on environmental matters, and I'd like to hear your opinion." I replied, "China is such a vast country. Japan can't get involved in everything. Pollution varies in its type and extent from city to city. It may be better to choose some cities that could become models for others to emulate

Environmental surveys have also been conducted at the Jinan Environmental Preservation Sciences Research Institute.

and concentrate our cooperation efforts there. In particular, pollutants differ from city to city, reflecting different sources of pollution. Pollution caused by power plants, steel works, oil refineries, and chemical plants are all different. How about picking out some cities severely affected by pollution, then we can review the situation by dispatching Japanese experts and consider what areas Japan may offer assistance." It was not long after this encounter that the Green Aid Plan was launched on MITI's initiative in 1993, which provided support not just to China but to Southeast Asia as well, and simple flue gas desulfurization devices were installed as a part of Chinese factories. At a thermal power plant in Taiyuan, Shanxi Province, I was so happy I was in tears when I saw the work being done by Hitachi, Ltd., and Hitachi Plant Engineering & Construction Co., Ltd., as they were installing a simple flue gas desulfurization device that reduces noxious emissions.

◆ Environmental Model Cities in China

Currently, environmental projects are under way in Guiyang (Guizhou Province), Dalian, and Chongqing, supported by JBIC ODA loans for environmental model cities in China. Designating model cities aims to provide examples to be emulated by other municipalities and provinces in controlling pollution. Assistance is given to help factories in these cities purchase pollution-reducing equipment. We are going to replicate there what we did in Tokyo years ago.

In addition to this effort, Japan is also helping to improve the quality of coal. Coal accounts for about 75% of fuel consumed in China. When coal is burned, its sulfur content turns into SO_2, producing a large volume of noxious emissions. In particular, the coal produced in the vicinity of Chongqing has a sulfur content of 3% to 5%. To reduce SO_2 emissions, we must improve the quality of coal. Japan's Ministry of the Environment spent three years developing an excellent way to seal in the sulfur content of coal with the help of the International Good Neighborhood. This is known as the "biobriquette" method. It involves pulverizing the coal, blending it with limestone powder, which neutralizes sulfur, and then making the mixture into a briquette. The compound, however, is not easily made into solid fuel, so it is combined with plant fiber (hence the name, 'bio') and subjected to high pressure. This seals in the SO_2 inside the briquette dust and prevents approximately 70% of sulfur emissions.

Unfortunately, biobriquettes are not being used now in Chongqing because priority has been given to a project that shifts the fuel source from coal to natural gas, which is produced near the city. It is estimated that annual sulfur oxide emissions from Chongqing are approximately 960,000 tons, exceeding the total emissions from all of Japan. According to the findings of epidemiological surveys, some 50% to 70% of the city's population test positive for nasal, laryngeal, or upper respiratory tract infections. If biobriquettes had been widely used—bringing better air quality to a city like Chongqing, where atmospheric pollution has reached an appalling level—the impact on other cities would have been unimaginable. Unless the total amount of sulfur oxide emissions is reduced, acid rain will continue to fall, exerting adverse impacts on forests, rivers, and wetlands. In fact, acid rain has already brought serious damages in the Chongqing area, and affected trees had to be cut down. As a result, the forests in the area are losing their water-retention capacity. Because the city is upstream of the Yangtze river, this has given rise to floods downstream.

◆ Prospect for Environmental Cooperation

Japanese cooperation in the environmental model city project is only halfway through. I sometimes find myself deep in thought: How can we make the most of innovative technology like biobriquettes? If Japan's cooperative efforts are immediately and fully put in place, they would certainly bring significant benefits to the people, forests, rivers, as well as the rest of China's ecosystem.

Japan has superior experience in the field of environmental protection measures in the world. What I would like to see is that we put our cumulative knowledge and technology to good use in developing countries.

Symposium on Environmental Considerations of Export Credit Agencies

JBIC held the Symposium on Environmental Considerations of Export Credit Agencies (ECAs) on April 28, 2000. The event brought together, in addition to ECAs from major developed countries, a wide range of interested domestic and overseas parties, including the OECD, the International Finance Corporation (IFC), private-sector corporations, and non-governmental organizations (NGOs). Discussions were held on the role and procedures of environmental considerations in the activities of ECAs.

There was a frank and open exchange of opinions on various issues, including how to strike a balance between export promotion and environmental considerations, transparency, accountability, and proactive support for the environment. The symposium was significant as the first public forum where ECAs discussed environmental considerations, and the participants were able to deepen their understanding on respective viewpoints.

Yuko Miyoshi, International Finance Policy Department

With growing interest in environmental issues in recent years, JBIC, as the core institution for providing Japan's official external financial assistance, is expected to address these issues more aggressively.

JBIC has traditionally assessed the environmental considerations of projects based on its environmental guidelines. Moreover, it has financed projects that contribute to environmental improvements. JBIC has a variety of financial tools at its disposal. In the area of export credits, the OECD Working Party on Export Credits and Credit Guarantees is currently working to prepare common environmental guidelines for ECAs, following up on the G8 Summit agreement. JBIC is an enthusiastic participant in discussions. Since the way ECAs deal with environmental considerations varies from country to country, they have to increase their awareness of the environment and work out better common guidelines that offer a level playing field for competition.

Moreover, ECAs are not the only parties that have opinions on environmental considerations. Exporters, importers, NGOs, and others may have different views on them, depending on their positions. If ECAs are to practice better environmental consideration, they need to listen to and examine these opinions.

From this perspective, JBIC held the Symposium on Environmental Considerations of Export Credit Agencies on April 28, 2000, inviting as panelists and commentators representatives from major ECAs, the OECD, exporters, the IFC, NGOs, and environmental administrative authorities. Participants in the symposium amounted to more than 200 people, including ambassadors, domestic corporate representatives, academics, NGOs, and the media.

In Session One, titled the Perspective of Export Credit Agencies and Exporters, the participants from the OECD, ECAs of major developed countries, and Mitsubishi Corporation, on behalf of exporters, made presentations. They covered the status of discussions at the OECD Working Party on Export Credits and Credit Guarantees, the current practices of environmental considerations at various institutions, and the ways in which ECAs should address environmental considerations.

Participating ECAs expressed that they were making serious efforts for environmental considerations, and progress was seen in all the areas they work on.

It was reported that discussions at the OECD were proceeding smoothly due to the contributions of participating institutions. The importance of formulating common guidelines for ECAs was pointed out again to level the competitive playing field.

The following points were made with respect to how ECAs should address environmental considerations:

- It is important to strike a balance between export promotion, the mandate of ECAs, and environmental considerations.
- It should be recognized that, as ECAs are not involved in a project from its earliest stages, the influence that they can exercise over environmental considerations is limited.
- The number of projects on which an ECA refuses to offer support for environmental reasons is not likely to be indicative of whether the agency is appropriately addressing environmental considerations. ECAs should look more into how they can improve projects through environmental considerations.
- Public disclosure of environmental guidelines is an essential requirement. It is important for exporters that the preconditions for the implementation of the project are explicitly stated in advance.
- A balance needs to be struck between transparency and the obligations of confidentiality for financial institutions.
- There must be sufficient consultations between ECAs and the people who will be affected by the project as well as NGOs.

In Session Two, IFC staff discussed their practice of environmental considerations as a multilateral institution promoting private-sector investment in developing countries, a role that in some respects overlaps with the operation of ECAs. The principal points they made were as follows:

- Even if the World Bank, the IFC, and ECAs are all official institutions, they all have different mandates and, accordingly, should select their own distinct approaches to environmental considerations.

• ECAs and the IFC, which provide assistance for private-sector activities, should not employ the same environmental guidelines adopted by the World Bank, which provides assistance for the public sector. In consideration of its special characteristic, the IFC has modified the World Bank guidelines in practicing environmental considerations.
• The IFC considers four points important in environmental considerations: (a) the public disclosure of environmental guidelines, (b) the need for expertise in the organization, (c) a balance between information disclosure and confidentiality obligation, and (d) accountability.

In Session Three, representatives from environmental administrative authorities and NGOs expressed their respective views on how ECAs should approach environmental considerations from the point of view of a third party. The principal points they made were as follows:
• It is important that a balance be struck between trade promotion and environmental considerations.
• ECAs must strive to accord the same level of environmental considerations as the World Bank. (Contrary to the view presented by the IFC above.)
• The formulation of common guidelines for ECAs will provide a model for private-sector businesses in their environmental considerations, even for projects that do not receive assistance from ECAs, thus generating synergistic effects.
• The public disclosure of environmental guidelines is necessary.
• In formulating guidelines and in the process of environmental considerations, transparency, accountability, flexibility, and consultation are important factors.
• In addition to undertaking an Environmental Impact Assessment (EIA) before a project, post-project evaluation and monitoring are important. Moreover, the EIA should be made available to the public.
• Proactive environmental assistance should be undertaken by applying favorable terms and conditions to projects that improve the environment.

In the question and answer session that followed, the following exchanges and comments were made:
• Question: "Shouldn't EIAs be made available to the public for all projects?"
Answer (by the IFC and ECAs): "While the release of such project-related information as EIAs to the public is important, care should be taken so that such disclosure does not unnecessarily bring about an adverse impact on the implementation of the project."
• Question: "What should be done to raise the environmental standards of host countries?"
Answer (by the IFC): "Democracy must take hold."
Answer (by the World Resources Institute): "What is needed, if anything, is to strengthen the capacity to execute environmental considerations."
• Comment: "Hydroelectric power projects have their value in terms of environmental preservation as the power generated is clean energy. There are downsides, such as resettlements, but criticisms against such projects should not focus solely on the negative aspects."
• Comment: "Usually, there are pros and cons with regard to the implementation of any project. Accordingly, we should listen not just to the opinions of those opposed but also those in favor, and make broad-based decisions."

After a frank exchange of opinions on various issues, the symposium was adjourned. This symposium had significance in that it provided the first public forum held by ECAs to share views and opinions on the role of environmental considerations and the domestic and overseas participants were able to deepen their understanding of respective viewpoints.

The Symposium on Environmental Considerations of Export Credit Agencies

Moderators Barry Hager, President, Hager Associates (Ex-Staff Director, Committee on Banking and Financial Services, U.S. House of Representatives) Tadashi Maeda, Director, Planning Division, International Finance Policy Department, Japan Bank for International Cooperation
Session One: Perspective of Export Credit Agencies and Exporters: Janet West, Head, Export Credit Division, Trade Directorate, Organization for Economic Cooperation and Development David Herscovitch, Director, Industrial Advisory Services Team, Export Development Corporation, Canada Michael Ebert, Director/Head of Division, Coordination and Loan Management Division, Export and Project Finance Department, Kreditanstalt für Wiederaufbau, Germany James Mahoney, Vice President, Engineering and Environment Division, Export-Import Bank of the United States Robert Crick, Head of International Relations Policy, External Relations Division, Export Credit Guarantee Department, U.K. Tomomi Tamaki, Director, Environment Division 1, Environment and Social Development Department, Japan Bank for International Cooperation Yoichi Kanno, Senior Assistant to CEO, Machinery Group, Mitsubishi Corporation Commentator: Birgitta Nygren, Chairman, Working Party on Export Credits and Credit Guarantees, Organization for Economic Cooperation and Development
Session Two: Perspective of IFC, as a Multilateral Institution Which Promotes Private-Sector Investment in Developing Countries: Andreas Raczynski, Director, Technical and Environment Department, International Finance Corporation Motoko Aizawa, Principal Counsel, Environmental and Social Unit, Legal Department, International Finance Corporation Arthur Fitzgerald, Consultant, Environment Division, Technical and Environment Department, International Finance Corporation
Session Three: Perspective of Third Parties: Steven Tvardek, Director, Office of Trade Finance, U.S. Department of the Treasury Taku Ohmura, Deputy Director, Office of Overseas Environment Cooperation, Global Environment Department, Environment Agency, Japan Ikuko Matsumoto, Coordinator, Public Finance Reform Project, Friends of the Earth Crescencia Maurer, Associate, Institutions and Governance Program, World Resources Institute

Interview with USAID

ODA in the 21st Century

As Counselor for Development Cooperation with the United States Agency for International Development (USAID), attached to the U.S. Embassy in Tokyo, Dr. Constance A. Carrino is responsible for U.S.–Japan dialogue and coordination in humanitarian development assistance. Her 23-year career has focused on development economics and policy, the provision of health, and other development assistance in developing and transition countries. She has worked in all USAID regions and most recently held posts in India, Washington, D.C., and Russia. Here, Dr. Carrino and Mr. Keiichi Tango, Director General, Development Assistance Strategy Department, discuss, among other things, the value of aid, the importance of IT and the environment in ODA programs, and cooperation between the United States and Japan.

◆ Communicating the Value of Aid

Tango: Thank you very much for joining us here at JBIC.

Carrino: It's my pleasure.

Tango: First of all, I'd like to discuss how foreign assistance is valued in the United States and Japan. There are quite a few elements to consider—basic aid concepts, political and diplomatic goals, and budgetary conditions.

Carrino: The rationale for U.S. foreign assistance is twofold. Americans have deeply held moral values that they should help the less fortunate, and foreign assistance furthers U.S. foreign policy and national interests. With such issues as combating the spread of infectious diseases, it is actually possible to address both sets of concerns. In today's increasingly interconnected world, AIDS in Africa or tuberculosis in the former Soviet Union are no longer regionally confined problems, but ones with a greater capacity than ever to affect the health of U.S. citizens.

Tango: There has been much debate over the ODA budget in Japan. In view of the severe conditions prevailing in the Japanese economy, many people argued that the budget as a whole should be more heavily weighted to domestic investment than to foreign assistance. Although some rightly pointed out the long-run importance of ODA for the Japanese economy and Japan's diplomacy, revisionist views almost gained the upper hand. Eventually, after much government deliberation, cuts in the fiscal 2001 ODA budget were minimal. However, if the Japanese economy continues to stagnate, the pressure for further reductions may become insurmountable. How do you see donors such as USAID and JBIC winning the battle for hearts and minds?

Dr. Constance A. Carrino, Counselor for Development Cooperation with USAID

Carrino: We went through similar arguments in communicating the virtues of what we did, and one of the elements that we found sometimes helped, at least in the business community, was to show that our largest trade partner is the developing world. Consequently, we have been successful in persuading business that fostering partner countries' trading abilities is in everyone's interest. In the countries in which USAID has been working, we have been witnessing increases in life expectancy, literacy, income, and the provision of foodstuffs—there are many more countries now in Africa that can meet their food needs than there were 20 years ago. Those are the preconditions for a viable market.

◆ 21st Century Convergence and the Role of IT in Aid

Tango: Since the end of the Cold War, the United States has emerged as the sole superpower, and its views have predominated on the global scene. What we may well witness in the 21st century is an emergence of countries with different ambitions and values. Do you think that the world will become more polarized or more homogenized in the coming hundred years?

Carrino: Well, a lot of the countries in which USAID has a presence are closed societies, often very poor ones, with little interaction with the world outside. From the standpoint of someone involved in development, I think an area Japan is starting to focus on, IT, will help us to understand some of these societies better and, conversely, will help them to open up and become more receptive to new information and

opportunities. Of course, scholars are rightly concerned about homogenization. For example, there are recent forecasts about a decline in the number of languages being spoken. We cannot leave IT planning to the technology experts without ensuring that changes are culturally appropriate. Also, in countries and regions in which I have worked, such as Russia or the Middle East, I have come away convinced that youth—the next generation—is going to make a big difference and have always been impressed by Japan's commitment to intercultural youth exchanges.

Tango: I am sure you are right to indicate that IT will be a key issue in the coming years. Hong Kong is an enormously significant "IT window on the world" for China, and India is becoming famous as the "back office" of the West because of its highly competent engineers and good time positioning. But even though IT sounds like an enormously attractive concept, it is not a panacea. Despite its potential usefulness in development, I think integrating IT perspectives into development policy programming will remain a challenging task. We should realize that IT, for all its value, is a conduit like a pipe—what really matters is what is conveyed through the pipe. Therefore, it is crucial to scrutinize how investment in IT will bring benefits to each developing country at the expense of other investment opportunities for basic infrastructure—what economists call the "opportunity cost" of IT. At the same time, I personally think it is important to make sure that information disseminated through IT to developing countries will be well understood and absorbed by the local residents so that existing traditions, cultures, and wisdom in developing countries are soundly mixed with the influx of different concepts coming in from abroad.

Carrino: Very true, and in fields such as IT, what you said underlines, for me, the need for the perspective of development professionals. I'm not an IT expert, and in coming up with solutions, coordination is all-important. As development experts, we can bring that level of problem-solving expertise to a project. We can ensure that, say, in a Web-based distance learning program in Cambodia, the directors of the program consult with appropriate members of the community and academia to make sure that appropriate information gets disseminated. ODA bureaucracies in Japan and the United States are very different, but our focus on how to solve problems is very similar, I feel. I am pleased that we are beginning to collaborate in the IT field.

Tango: As you may know, at last year's Kyushu-Okinawa Summit Meeting, the Japanese Prime Minister embarked on a plan to support IT improvements in developing countries to mitigate the digital divide problem. I think one of the possible contributions that IT can make, by increasing information distribution efficiencies, is in reducing information costs between the demand and supply sides of markets. For example, the World Bank has programs under way in the villages and towns that surround such major Indian cities as Mumbai—both micro-credit initiatives and schemes to bring market data and information about market movements to tiny enterprises and individual farmers via the Internet. What other factors do you see as having an important role in the interplay between IT and development?

Mr. Keiichi Tango, Director General, Development Assistance Strategy Department

Carrino: Legal frameworks and meeting the needs of the poor are important. In IT in the Philippines, for example, we find that USAID democracy and governance specialists worked on legislation so that a destructive computer virus such as the "Love Bug," which originated in the Philippines, would actually be illegal if it were created again. There was no legal recourse available against the creator of the "Love Bug" virus because he had not contravened any existing law, which is alarming when you think about the potential impact on systems in Japan and the United States. The other IT issue, for people concerned with poverty reduction like us, is that it becomes apparent as you listen to certain governments that their interest in IT does not necessarily extend to the poor. This case includes poor farmers, poor families seeking health care, and poor children. Forthcoming work from the foreign assistance side needs to reach out to the non-commercial side of the digital divide, to those elements of a society who will not be part of the marketing plan of a firm that comes in to wire a country.

◆ Environmental Interdependence

Tango: Just to turn to environmental issues for a moment, our global interconnectedness is being brought into sharp relief not only by such phenomena as the Internet but also by the increasingly transborder nature of many environmental problems, where countries are not immune to exposure to their neighbors' environmental problems. European countries export industrial pollution to each other, and old smokestack industries in China and the former Soviet Union contribute to the deterioration of air and water quality across a wide region.

Carrino: I think you're right, and we will have to work at both a global level and a country-specific level. Global warming is a concern wherever you are in the world. Other issues are dependent on what countries have done in the past, and a country of the former Soviet Union or China may be more at risk than India or Bangladesh in terms of damage that has already been done. A lot of environment-related work in the former Soviet Union is focused on factories that have methods of production that are very polluting and not very efficient. It takes a long time to sift these problems out, but in the development business, we are going to have to do a lot of this sifting—we won't be able to choose to plan for the future before we sift through some of the problems that already exist.

◆ Growing Closer

Tango: Of course, the priorities of JBIC are reflections of the concerns of the government and people of Japan as well as those of recipient countries. The United States provides a substantial volume of aid to the Middle East, and we have set significant sums aside for Asian countries for political and economic reasons. For instance, Japanese companies have many local subsidiaries in Indonesia, and any instability in the country would impact negatively both on Indonesian and Japanese interests. With the end of the Cold War and the progress of globalization, I believe the situation is, to some extent, similar for the United States. We need to build an even more fruitful relationship with the United States in Asia to ensure that regional problems do not spiral out of control.

Carrino: In Asia, Indonesia is a very interesting example of the importance of donor coordination. I have participated here in the meetings of the Consultative Group of Indonesia, and what was pleasing in the conversations I had with the U.S. and Japanese delegations was that the U.S. delegates were listening seriously to the points the Japanese side was making about the importance of Indonesia. When I started

25 years ago in the aid business, donors paid little attention to each other. When the United States came out of the Cold War, where it had this very tangible counterpart, the Soviet Union, it spent a period of time readjusting to life without its old adversary. As we embark on the journey through the 21st century, the tangible issues of our era—the environment, health, democracy, and education—we find that we have little technical disagreement and can do things together. In terms of issues, we need partners, and when I listen to some of the ideas for which Japanese agencies express enthusiasm—the IT initiative and environmental issues—these are the same types of things that the United States can work on. It seems to me that there's just much less competition than I used to sense.

Tango: Although this is a year in which the U.S. administration is to change, and it will change many more times over the course of the century, I hope that we can continue to communicate well irrespective of such transient factors and work together to harmonize world society.

Carrino: Well, I thank you for opening our discussion up beyond the field of foreign assistance to broader issues of human endeavor. It has been a very helpful conversation indeed.

Tango: Thank you very much.

About the United States Agency for International Development (USAID)

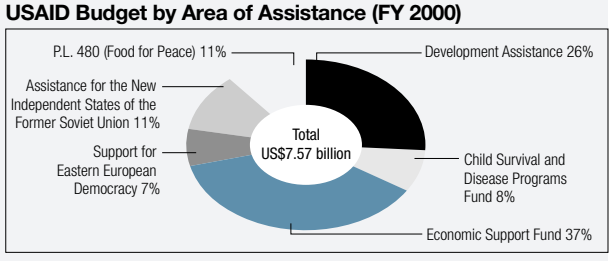
U.S. foreign assistance has the twofold purpose of furthering America's foreign policy interests in expanding democracy and free markets while improving the lives of the citizens of the developing world. Spending US$6 billion to $8 billion annually, USAID works around the world to achieve these goals.

USAID is the principal U.S. agency extending assistance to countries recovering from disaster, trying to escape poverty, and engaging in democratic reforms. The agency works in the following six principal areas:

- Economic growth and agricultural development;
- Population, health, and nutrition;
- Environment;
- Democracy and governance;
- Education and training; and
- Humanitarian assistance.

With headquarters in Washington, D.C., USAID has field offices around the world. It works in close partnership with private voluntary organizations, indigenous organizations, universities, American businesses, international agencies, non-U.S. governments, and other U.S. government agencies. Web address: http://www.usaid.gov/

USAID Budget by Area of Assistance (FY 2000)



Toward a Broader Understanding of Japan's Economic Cooperation

International Coordination Division, Policy Planning and Coordination Department

◆ ODA Loan Seminar

JBIC held the 24th ODA Loan Seminar from September 5 through 23, 2000. Formerly organized by the Overseas Economic Cooperation Fund (OECF), one of the predecessors of JBIC, the ODA Loan Seminar has been held annually by JBIC under cooperation of the Japan International Cooperation Agency (JICA) since 1977. JBIC invites senior officials of the governmental organizations which receive ODA loans, with the aim of deepening their understanding and knowledge of ODA loan operations and Japan's economic conditions.

This was the second seminar held since the establishment of JBIC, and 22 participants representing 22 countries[1] attended, with one country, Azerbaijan, represented for the first time. This brought the cumulative number of countries to 75, with a total of 475 participants.

◆ Sharing Issues in Developing Countries

After JICA gave the participants a basic orientation on Japan's politics, economy, and culture for the initial three days of the program, JBIC provided lectures on ODA loans for over two weeks, including a study tour in Hiroshima halfway through the program. The themes of the program covered various aspects of ODA loans, including Japan's ODA policies, coordination with technical cooperation and grant aid, JBIC's organizational structure and an overview of its Overseas Economic Cooperation Operations and International Financial Operations, the project cycle of ODA loans and their appraisal process, project supervision, and actual loan disbursement steps. Lecturers came not only from JBIC but also from related governmental institutions and private consulting firms, lending the program a diversity of viewpoints and giving participants a comprehensive insight into economic cooperation and development policies. Country report sessions were also held, at which the participants and JBIC staff in charge of these countries exchanged opinions on issues facing developing countries based on reports the participants had prepared.

At the Koyo Purification Plant

The participants were highly motivated, and question-and-answer sessions and debates frequently continued long after the lectures had ended. At the closing plenary session of the seminar, the participants made proposals on how to speed up project cycle procedures and strengthen working partnerships with JBIC and JICA. The seminar allowed both the participants and JBIC staff to highlight and share an understanding on the issues surrounding developing countries and Japan's ODA loans.

◆ Strengthening Global Networks

The program in Hiroshima included visits to the Astram Line, Hiroshima's new transit system, the Koyo Purification Plant, and the Seibu Recycling Plaza. Many participants, thinking of the conditions of similar facilities in their native countries, were interested in introducing the advancements of Japanese technology back home. In their visits to the Hiroshima Peace Memorial Museum and the Peace Memorial Park, it seems they perceived the strong message about Japan's commitment to peace. The interaction between the participants and JBIC and among the participants themselves was, together with furthering understanding of ODA loans, one of the principal objectives of the seminar, and the seminar had formed a new network to promote stronger global ties.

[1] Countries represented in the seminars: Azerbaijan, Bangladesh, Cambodia, China, Colombia, Ecuador, Egypt, Ghana, Indonesia, Kenya, Laos, Malaysia, Mongolia, Morocco, Nepal, Pakistan, Peru, The Philippines, Sri Lanka, Thailand, Tunisia, and Turkey

ODA Loan Seminar—Message from a participant of the seminar

An Enlightening Three Weeks of Experience Sharing

By Mr. Francis Kwabena Andoh
Chief Manager, Treasury Department,
Bank of Ghana
GHANA

For me, the ODA Loan Seminar was extremely valuable as I was able to deepen my own knowledge of the field as well as share experiences with many other people. In particular, it was enlightening to learn about ODA loans and their procedures and hear directly from the JBIC staff responsible for loan administration about loan agreements and the disbursement procedures. The participants in the seminars came from various countries and working backgrounds, and discussions and interactions with them on specific issues in other countries enabled us to look at problems from a broader perspective.

This was my first opportunity to visit Japan, and I was very impressed by the high levels of technology, the warmth of Japan's citizens, and the Japanese people's concept of time and commitment to work. I feel that, in addition to broadening their understanding of ODA loans, all participants could learn something from these Japanese qualities.

My country, Ghana, receives aid from Japan in the form of ODA loans. The assistance from Japan has supported Ghana's balance of payments and also helped infrastructure development, the improvement of production processes, and various poverty-reduction projects. I hope that Japan's assistance will continue and be enhanced, as Ghana is currently attempting to reverse itself from difficult external trade conditions, and I personally want to put to good use what I have learned in the seminar.

ODA Loan Seminar—Message from a participant of the seminar

Participating from Nepal

By Mr. Sundeep Chandra Shah
Section Officer, Ministry of Finance
NEPAL

I think that, on the whole, the seminar went exceptionally well, although true success lies in how the knowledge acquired by the participants in the session is applied in the future. Recent economic growth has widened the income gap between developed and developing countries. As the number of people living in poverty continues to increase, the role of JBIC in the socio-economic development of developing countries will be more important in the future.

In this context, JBIC rightly regards poverty reduction as one of the principal concerns of its Overseas Economic Cooperation Operations. To achieve this, there is a need to establish a compatible balance between economic and social infrastructure development. Additionally, in building a partnership with developing countries, I would like JBIC to come up with ways to reduce the financial burdens on developing countries caused by exchange rate fluctuations. I wonder if there is any means of avoiding this kind of risk. The negative impact of exchange rate fluctuations may appear to be an insignificant problem, but it could drain the savings of recipient countries.

I sincerely hope that JBIC will succeed in addressing the socio-economic development needs of developing countries.

ODA Loan Seminar—Message from a participant of the seminar

An Opportunity to Meet JBIC Staff Responsible for ODA Loan Operations to Peru

By Ms. Liliana Celia Carbajar Vela
Economist, Ministry of Economy and Finance
PERU

I first visited Japan as a participant in a JICA-sponsored training course on direct investment, so this was my second time in Japan. In this ODA loan seminar, I came to understand the importance that JBIC places on poverty alleviation as well as economic and social development in its Overseas Economic Cooperation Operations. I also learned how JBIC has established an Environment and Social Development Department and is actively promoting a participatory approach to development, where poverty groups and the local community are encouraged to participate in each stage of the project. Moreover, JBIC has come up with preferential interest rates on environmental projects as an incentive for developing countries to consider environmental issues in development.

One of the most satisfying aspects of the seminar was the opportunity I had to speak directly to the JBIC staff responsible for ongoing projects in my country. It was extremely productive to be able to exchange opinions in face-to-face meetings both frankly and efficiently on a variety of problems that we faced.

I hope that JBIC will continue to support Peru through ODA loans as it has in the past. At the same time, I hope that in the 21st century JBIC will be able to provide stronger assistance to health improvement and poverty alleviation projects for all developing countries.

Statistics

1. Commitments

(¥ Million)

	November 2000		October 2000		September 2000		August 2000		July 2000		FY2000	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
International Financial Operations												
(1) Loans	8	¥53,601	14	¥27,243	32	¥ 71,317	4	¥16,174	6	¥26,681	111	¥510,128
Export Loans	4	48,848	7	8,302	2	14,345	2	6,918	1	157	32	128,268
Import Loans	0	0	1	7,300	2	1,661	1	8,800	0	0	20	40,642
(Natural Resources Development)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(1)	(428)
(Manufactured Goods)	(0)	(0)	(1)	(7,300)	(2)	(1,661)	(1)	(8,800)	(0)	(0)	(19)	(40,214)
Overseas Investment Loans	4	4,753	5	4,641	27	7,012	1	455	5	26,524	56	280,418
(Natural Resources)	(2)	(4,537)	(2)	(20)	(23)	(2,685)	(0)	(0)	(1)	(3,584)	(34)	(233,270)
(Others)	(2)	(216)	(3)	(4,621)	(4)	(4,327)	(1)	(455)	(4)	(22,940)	(22)	(47,148)
Untied Direct Loans	0	0	1	7,000	1	48,300	0	0	0	0	3	60,800
(2) Guarantees	0	0	1	3,000	1	20,700	0	0	0	0	3	45,700
(3) Equity Participations	0	0	0	0	0	0	0	0	0	0	0	0
Total	8	53,601	15	30,243	33	92,017	4	16,174	6	26,681	114	555,828
Overseas Economic Cooperation Operations												
(1) ODA Loans	0	0	3	24,696	9	140,543	4	40,073	0	0	20	247,231
(2) Private-Sector Investment Finance	0	0	0	0	0	0	0	0	0	0	1	1,200
Total	0	0	3	24,696	9	140,543	4	40,073	0	0	21	248,431
Grand Total	8	¥53,601	18	¥54,939	42	¥232,560	8	¥56,247	6	¥26,681	135	¥804,259

Notes: 1. All figures have been rounded in the process of calculation.
2. Foreign bonds are included.
3. Rescheduling is not included.

2. Disbursements, Collections, Loans Outstanding, and Guarantees

(¥ Million)

	International Financial Operations						Overseas Economic Cooperation Operations					
	November 2000	October 2000	September 2000	August 2000	July 2000	FY2000	November 2000	October 2000	September 2000	August 2000	July 2000	FY2000
Disbursements	¥ 36,296	¥ 52,690	¥ 89,361	¥ 100,479	¥ 48,215	¥ 494,473	¥ 51,525	¥ 52,463	¥ 44,752	¥ 54,533	¥ 45,402	¥360,486
Collections	76,829	96,729	130,947	94,961	96,963	1,166,244	31,170	22,919	25,602	21,871	16,631	194,722
Loans and Equity Participations Outstanding	10,328,333	10,365,808	10,409,098	10,446,069	10,440,552	—	10,642,493	10,621,630	10,591,987	10,557,168	10,524,506	—
Guarantees Outstanding	386,734	377,054	372,044	371,644	365,132	—	—	—	—	—	—	—

	Total					
	November 2000	October 2000	September 2000	August 2000	July 2000	FY2000
Disbursements	¥ 87,820	¥ 105,153	¥ 134,113	¥ 155,012	¥ 93,617	¥ 854,960
Collections	107,999	119,648	156,550	116,833	113,593	1,360,966
Loans and Equity Participations Outstanding	20,970,827	20,987,437	21,001,086	21,003,237	20,965,058	—
Guarantees Outstanding	386,734	377,054	372,044	371,644	365,132	—

Notes: 1. All figures have been rounded in the process of calculation.
2. Foreign bonds are included.
3. Rescheduled amounts are not included as disbursements and repayments but are reflected in the "Outstanding" column.

International Financial Operations Activities

JBIC Provides Buyers Credit for 1st Silicon in Malaysia —Credit to Boost Malaysia's IT Industry

On Aug.15, 2000, JBIC signed a loan agreement totaling US$59.5 million with 1st Silicon (Malaysia) Sdn. Bhd., a Malaysian corporation, for Malaysia's first IT wafer fabrication plant for semiconductors. The loan is cofinanced with The Bank of Tokyo-Mitsubishi, Ltd., The Fuji Bank, Limited, and Standard Chartered Bank (Tokyo branch), with JBIC assuming a 60% share of the total, or US$35.7 million. Bumiputra-Commerce Bank Berhad, a Malaysian commercial bank, is providing a guarantee for the loan.

The proceeds of the loan will be used to purchase materials and equipment from a Japanese exporter, Kanematsu Corporation, by 1st Silicon in Kuching, Sarawak, to build a wafer fabrication plant for semiconductors. It will produce 20,000 to 30,000 CMOS (complementary metal oxide semiconductor) logic chips (integrated circuits[1] etched in silicon wafers[2]) per month. This plant is the first wafer fabrication plant in Malaysia, and the CMOS logic chips to be produced will be used for DSP (digital signal processing) and flash memory chips/components in mobile phones. It will become one of the key plants in the Malaysian IT industry.

The plant will be constructed under "Vision 2020," an initiative by which the Malaysian government aims to create a "fully developed" and "knowledge-rich" society. Therefore, governmental support is expected, including the designation of the project as

eligible for favorable tax treatment. The Sarawak state government has also been actively involved in this project by making an equity investment in 1st Silicon as part of its policy to attract capital-intensive industries that will lead to large-scale investments.

This loan will contribute to the exports of Japanese materials and equipment to Malaysia and serve to boost the IT industry in Malaysia, thereby providing significant support for the country's efforts to promote economic development.

This loan constitutes part of "Japan's Comprehensive Cooperation Package to Address the International Digital Divide," which was announced by the government of Japan prior to the Kyusyu-Okinawa Summit in July 2000. Under this program, it is Japan's intention to provide official cooperation amounting to approximately US$15 billion over the next five years.

[1] A combination of various kinds of semiconductor devices etched in the silicon wafer and connected by aluminum wirings that amplify, retain electronic signals, and conduct other prescribed operations.
[2] Circular polished disks of silicon.

JBIC Signs Untied Loan Agreement with Petróleos de Venezuela, S.A. in Venezuela

JBIC signed an untied loan agreement totaling ¥69 billion (equivalent to US$500 million) with Petróleos de Venezuela, S.A. (PDVSA). The signing took place in Caracas, Venezuela, on September 4, 2000, in the presence of Venezuelan President, the honorable Hugo Chavez. The loan is cofinanced with The Bank of Tokyo-Mitsubishi, Ltd., The Sumitomo Bank, Limited, The Fuji Bank, Limited, The Sanwa Bank, Limited, Nippon Life Insurance Co., The Yasuda Fire & Marine Insurance Co., Ltd., The Zenshinren Bank, and The Nomura Trust and Banking Co., Ltd. JBIC will assume ¥48.3 billion, or 70% of the total amount.

The proceeds of the loan will be used to modernize the Puerto La Cruz Oil Refinery located along the coast of the Caribbean Sea, 320 kilometers east of Caracas, by introducing production facilities for such higher valued products as upgraded gasoline, unleaded gasoline, and low-sulfur light oil. These products will be sold in the domestic markets of Latin America. The government of Venezuela, as part of their environmental policy, aims to convert all of their gasoline to unleaded and gradually reduce the sulfur content of light oil. This is a top priority project for Venezuela if they hope to meet their nation's environmental regulation standards.

Endowed with abundant natural resources, Venezuela boasts the world's fifth-largest crude oil reserves and the world's sixth-largest natural gas reserves. This loan will strengthen cooperative ties with PDVSA, Venezuela's national oil corporation, as well as build closer economic ties between Venezuela and Japan.

Overseas Economic Cooperation Activities

Loan Amount and Conditions (Aug. 2000-Dec. 2000)

Country	Project Name	Amount (¥ Million)	Interest Rate (%, p.a.)		Repayment Period/ Grace Period (Years)		Tying Status	
			Goods & Services	Consulting Services	Goods & Services	Consulting Services	Goods & Services	Consulting Services
Papua New Guinea	Structural Adjustment Program	5,350	2.2	—	30/10	—	General Untied	—
Peru	Sierra—Natural Resources Management and Poverty Alleviation Project III	5,588	1.7	0.75	25/7	40/10	General Untied	Bilateral Tied
	Social Sector Development Project in Sierra Area II (FONCODES III)	6,794	2.2	0.75	25/7	40/10	General Untied	Bilateral Tied
	Provincial Cities Water Supply and Sewerage System Improvement and Expansion Project	7,636	1.7 0.75[1]	0.75	25/7 40/10[1]	40/10	General Untied Bilateral Tied[1]	Bilateral Tied
	Lima Marginal Areas Sanitary Improvement Project	24,854	1.7	0.75	25/7	40/10	General Untied	Bilateral Tied
Thailand	Regional Road Improvement (III)	19,544	2.2	0.75[2]	25/7	40/10	General Untied	Bilateral Tied
	National Metrology System Development (II)	2,202	0.75[3]	0.75[3]	40/10	40/10	Bilateral Tied	Bilateral Tied
	Seventh Bangkok Water Supply Improvement (II)	9,601	1.7[4]	0.75[2]	25/7	40/10	General Untied	Bilateral Tied
	Second Bangkok International Airport Development (IV)	18,506	2.2	0.75[2]	25/7	40/10	General Untied	General Untied
	MRTA Initial System (V)	45,818	0.75[2]	—	40/10	—	General Untied	—
Iran	Masjid-e-Soleiman Hydroelectric Power Project (II)	7,494	2.2	—	25/7	—	General Untied	—
Kazakhstan	Western Kazakhstan Road Network Rehabilitation Project	16,539	2.2	0.75[2]	30/10	40/10	General Tied	Bilateral Tied

Notes: 1. Special environmental project (applied to sewerage system portion)
2. Special environmental project
3. Special human resources development project
4. Standard environmental project
Detailed information on individual projects is available in the News Release corner of JBIC's Web site at http://www.jbic.go.jp/english/

Special Yen (ODA) Loan Amount and Conditions

Country	Project Name	Amount (¥ Million)	Interest Rate (%, p.a.)		Repayment Period/ Grace Period (Years)		Tying Status	
			Goods & Services	Consulting Services	Goods & Services	Consulting Services	Goods & Services	Consulting Services
Philippines	New Iloilo Airport Development Project	14,724	0.95[1]	0.75[2]	40/10	40/10	Tied	Bilateral Tied
	Subic Bay Development Project	16,450	0.95[1]	0.75[2]	40/10	40/10	Tied	Bilateral Tied
	Second Magsaysay Bridge and Butuan City Bypass Road Construction Project	3,549	0.95[1]	0.75[2]	40/10	40/10	Tied	Bilateral Tied
China	Beijing Urban Railway Construction Project	14,111	0.95[1]	—	40/10	—	Tied	—
	Xi'an Xianyang International Airport Terminal Expansion Project	3,091	0.95[1]	—	40/10	—	Tied	—

Notes: 1. Special Yen (ODA) Loan project
2. Special environmental project
Detailed information on individual projects is available in the News Release corner of JBIC's Web site at http://www.jbic.go.jp/english/

Special Assistance Facility

JBIC carries out Special Assistance Facility (SAF) to strengthen ODA loans systems that assist recipient countries—from project formation through completion and ongoing operation—and carry out projects effectively responding to developing countries' diverse needs. SAF is a study carried out by consultants employed and dispatched by JBIC. The funds necessary for SAF are provided by JBIC as grant assistance. SAF comprises four types of facilities.

(1) Special Assistance for Project Formation (SAPROF)
Owing to inadequate financial or technical resources, a project for which assistance is requested that is basically feasible often cannot be adequately prepared by the developing country. For such projects, JBIC performs a supplementary study known as SAPROF.

(2) Special Assistance for Project Implementation (SAPI)
The primary purpose of SAPI is to study and identify problems that may hinder effective implementation of a particular project and propose remedial measures to solve the problems in a timely manner.

(3) Special Assistance for Project Sustainability (SAPS)
The primary purpose of SAPS is to study and identify problems that impede effective operation or maintenance of a particular group of projects and propose remedies.

(4) Special Assistance for Procurement Management
The primary purpose of this study is to ensure smooth, efficient, and transparent procurement implementation. The study assignments are carried out by consultants and experts hired by JBIC.

List of SAF Study Contracts Signed during July 2000

Type of Study	Country	Project Name	Outline of Study	Schedule
Special Assistance for Project Formation (SAPROF)	Vietnam	Phan Ri Phan Thiet Irrigation Project (2nd Phase Study)	The purpose of this project is to develop irrigation infrastructure in the Dong Nai River basin in southern Vietnam and increase farmland and agricultural production to raise the standard of living of the local population. In the wake of the phase one study from March to June this year, which confirmed the validity of the basic project plan (including water management and land utilization), this phase two study will further support project formation by examining, among other things, farmers' organizations and social implications. The study will: work out an irrigation and drainage facility plan; review the settlement and migration program prepared by the Vietnamese government as well as make a supplemental proposal; study farmer-participated water management, facility maintenance, and operation regimes; consider ways of improving project implementation and operations; review the Environmental Impact Assessment; study possible collaboration/coordination with technical assistance by JICA and NGOs; and estimate costs and conduct economic and financial analyses for the project.	July 2000 – Nov. 2000

List of SAF Study Contracts Signed during August 2000

Type of Study	Country	Project Name	Outline of Study	Schedule
Special Assistance for Project Implementation (SAPI)	Ghana	Power Plant Barge Project	The purpose of this project is to permanently anchor a barge (125MW), mounted with a gas turbine, a generator, and transforming facilities, in Effasu, southwestern Ghana, and construct transmission lines and related substations between Effasu and Elubo and between Effasu and Esiama. The study will assist: procurement, the supervision of civil works, and environmental conservation in constructing a barge pond and installing pipelines; and the management/maintenance system of the power plant to ensure that the effect of the project will be sustained.	Aug. 2000 – Mar. 2001
Special Assistance for Project Sustainability (SAPS)	Indonesia	Study on Maintenance System for ODA Loan Project	The purpose of this study is to examine the maintenance (including the system, methodology, and results) of a railroad project in Indonesia, where 10 years have elapsed since its completion. The study will: sort out and analyze the challenges facing the project management agency; assess the current maintenance system, including measures against wear-and-tear damage; and examine steps to improve maintenance ability in an effort to ensure that effective maintenance work will be sustained over a long term.	Aug. 2000 – Dec. 2000

List of SAF Study Contracts Signed during September 2000

Type of Study	Country	Project Name	Outline of Study	Schedule
Special Assistance for Project Formation (SAPROF)	Thailand	Solid Waste Management Project at ON-NUCH (I)	This study is to investigate and confirm the ideal solid waste management method in Bangkok by conducting the following study. The study will cover the following areas. (1) Confirm solid waste management policies and regulation trends in other countries (industrialized nations and neighboring countries), donors, and multilateral organizations (2) Review the Master Plan (M/P) and the Feasibility Study (F/S) (3) Analyze solid waste disposal methods and policies (including analysis from social, economic, and environmental aspects) (4) Investigate the present conditions of local residents, actual conditions of scavengers and recycling businesses at nearby transfer stations, and assist in reaching an agreement through dialogue with local residents (Investigation will be done through collaboration with local NGOs, etc.) (5) Study methods for waste reduction and solid waste disposal and formulate an action plan	Sep. 2000 – Feb. 2001

Type of Study	Country	Project Name	Outline of Study	Schedule
Special Assistance for Project Formation (SAPROF)	Bulgaria	Sofia Metro Extension Project	In the Bulgarian capital of Sofia, traffic congestion has become the norm due to narrow roads and increases in population and automobiles in recent years. This situation has had a serious effect on air pollution. The purpose of this project is to extend the Metro Route One, which currently covers 8.1 km through Station No. 7, to Station No. 9. The extended section will be constructed using the shield method, which is new to Bulgaria, and foreign assistance is sought for both financial and technical areas. The extension to Station No. 9 will secure an access route from the congested eastern and southeastern sections to the central section of the city and is also expected to offer an alternate transportation method for existing transportation means such as trams. The study will include a review of the F/S that mainly investigates technical aspects of the shield method, while studying restructuring plans and management improvement measures for the city's traffic network to promote a sound management by the executing agency.	Sep. 2000 – Feb. 2001

List of SAF Study Contracts Signed during October 2000

Type of Study	Country	Project Name	Outline of Study	Schedule
Special Assistance for Project Implementation (SAPI)	Bangladesh	Haripur Gas Turbine Power Plant Rehabilitation and Expansion Project	The purpose of this project is to update and expand (with an eye toward a combined-cycled plant) the Haripur Gas Turbine Power Plant on the outskirts of Dhaka. It was constructed with the support of the Bank's ODA loan, bolstering power generation efficiency and output and making effective use of natural gas resources in Bangladesh. The study will: verify how much progress was achieved in management efficiency by the Strategic Business Unit reform currently being implemented at the Plant; provide advice and guidance; and evaluate how this Strategic Business Unit reform fits in the context of the power sector reform in Bangladesh as a whole to ensure that a sound and sustainable operational and maintenance (O&M) structure is put in place.	Oct. 2000 – Mar. 2001

List of SAF Study Contracts Signed during November 2000

Type of Study	Country	Project Name	Outline of Study	Schedule
Special Assistance for Project Formation (SAPROF)	Armenia	Yerevan Zvartnots International Airport Development Project	Zvartnots International Airport in Yerevan, the capital of the Republic of Armenia, is the only airfield that effectively functions as an international airport in the country. Its facilities remain substandard because it was originally constructed under the former USSR regime with a mandate to conduct only intraregional transportation. In addition, demand for air transportation declined right after independence and subsidies were reduced, thus squeezing the financial sources for maintenance and rehabilitation. In the absence of satisfactory maintenance work, the airport buildings, and such facilities as runway(s), taxiways, and apron, have undergone severe wear and tear and urgently need rehabilitation. This project is designed to rehabilitate, in the view of safety, such facilities as runway(s), parallel taxiways, apron, lighting equipment, and sewerage arrangements that are badly in need of repair. The study will: conduct F/S review on the scope, method, cost, and implementation schedule of the project; study the medium-term airport development plan, including the rehabilitation of the terminal building, the financial management, and administrative/maintenance system; and make recommendations with an eye toward ensuring sound management by the project executors.	Nov. 2000 – Feb. 2001
Special Assistance for Project Formation (SAPROF)	Brazil	Sustainable Development Program for the Pantanal	The purpose of the project is to ensure sustainable conservation of the environment, including ecological preservation, careful tourism development, and an improved sanitary environment for the residents. This will be done by implementing the following seven components in the Pantanal region, the world's largest marshland: (1) management of the area that contains water resources; (2) management of the river basin; (3) assistance for sustainable economic activities; (4) mapping out and implementing an ecological preservation plan; (5) implementation and rehabilitation of the water supply/treatment and solid waste disposal projects; (6) road improvement project; and (7) environmental development of the residential area for the indigenous people. The project is cofinanced with the Inter-American Development Bank, and JBIC's ODA loan intends to support the two subcomponents: implementation and rehabilitation of the water supply/treatment system and road improvement within the preservation area. The study will conduct a supplementary survey into individual project components, especially into the components covered by the ODA loan, from the perspective of conservation of the natural environment, in an effort to upgrade the project formation and put in place preparation work that befits the ODA loan project.	Nov. 2000 – Feb. 2001
Special Assistance for Project Implementation (SAPI)	Ghana	Economic Reform Support Operation Phase I (ERSO I)	JBIC is providing ODA loans to this economic reform support operation cofinanced with the World Bank. The purpose of the project is to help enhance the financial management system on both the revenue and expenditure fronts, strengthen the administrative functions of the central government, streamline the government agencies, and help promote privatization. The study will: confirm the progress and identify problems in the enhancement measures for expenditure management, one of the major issues concerning the Economic Reform Support Operation; give recommendations on ways to make project implementation more effective; and contribute to the consideration of the second phase (ERSO II), for which a new ODA loan commitment is requested. The results of the study will be also reported at SPA (Strategic Partnership with Africa/Special Program Assistance), a consultation meeting among aid donors to Sub-Saharan African countries.	Nov. 2000 – Dec. 2000

Notification of Address Change for Overseas Representative Office

Our representative offices in Bangkok and Lima have moved. The new contact details are listed below. The current addresses of all JBIC's representative offices are listed on the Bank's Web site at http://www.jbic.go.jp/english/

Representative Office in Bangkok
14th Floor, Nantawan Building,
161 Rajdamri Road, Bangkok 10330,
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Fax:66-2-252-5514, 5515

Representative Office in Lima
Av. Canaval Moreyra Nº 380,
San Isidro, Lima 27,
PERU
Tel: 51-1-442-3031
Fax:51-1-440-9657

JBIC Releases New Publication

Annual Report 2000
JBIC has released its *Annual Report 2000.* This is JBIC's first annual report since its establishment on October 1, 1999, and is a comprehensive explanation of JBIC's activities in fiscal 1999. The annual report is available in full on the JBIC Web site.

ODA Loan Report 2000
ODA Loan Report 2000 explains JBIC's activities in its Overseas Economic Cooperation Operations in fiscal 1999. The report can be viewed on the JBIC Web site.

***JBIC Review* Nos. 2 and 3**
JBIC Review is a record of research and study results from JBIC's Research Institute for Development and Finance (JBIC Institute). Published twice a year, the journal carries reports both on the institute's independent research and on research projects carried out in cooperation with external research organizations and other researchers. The focus is on three fields: overseas direct investment, international finance, and development. Each issue is distributed free of charge to government offices and public agencies, universities, research organizations, corporations, and other institutions both domestically and internationally as well as to interested individuals. Below is a list of articles contained in *JBIC Review* Nos. 2 and 3. For more information on the journal, contact the Planning and Coordination Division of JBIC Institute at +81-3-5218-9720.

	Title	Authors
No. 3	• Economic Effects of Infrastructure —Japan's Experience after World War II	Naoyuki Yoshino Masaki Nakahigashi
	• Dynamic Poverty Problem and the Role of Infrastructure	Yasuyuki Sawada
	• Characteristics and Cost Sharing of Transport Infrastructure	Hirotaka Yamauchi
	• Role of ODA at the Intersection of Urban Environment Improvement and Poverty Alleviation	Tetsuo Kidokoro
	• Japan's Experience in Infrastructure Development and Development Cooperation	Tsuneaki Yoshida
	• IT Revolution and ODA	Takeshi Shinohara
No. 2	• Boom and Bust in East Asia A Stylized Interpretation of the 1997-98 Asian Crises, Based on Results of a Qualitative Questionnaire on Japanese City Banks	Luiz A. Pereira da Silva Masaaki Kuroyanagi
	• Asian Crisis, Financial Reconstruction and Incentive Mechanism	Munehisa Kasuya
	• Private Sector Participation in Water Supply and Sewerage Lessons from Ten Case Studies in Developing and Developed Countries	Naohiro Kitano Kenichi Ariga
	• Post-evaluation for ODA Loan Project—Kingdom of Thailand Overall Impact of East Seaboard Development Program	Kenichi Ariga Shinya Ejima
	• Regional Transport Infrastructure Development in South Africa	Hiroaki Sano Kengo Mizuno
	• Asian Legal Reform and Company Information Disclosure	Koji Suzuki
	• Prospects for Future Business Operations of the Japanese Consumer Electronics Industry in ASEAN	Hidehiko Noda
	• Commentary: Trends of Japanese Foreign Direct Investment (FDI) in Fiscal 1999 (Immediate Report)	Shiro Izuishi

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