

## JBIC Extends 161,366 Million Yen in ODA Loans to China --To Support Environment Protection and Human Resources and Regional Development--

1. Japan Bank for International Cooperation (JBIC; Governor: Kyosuke Shinozawa) signed an agreement today to provide the People's Republic of China with a total of 161,366 million yen in ODA loans for 15 projects in fiscal 2001.
2. ODA loans to China were extended based on a "round" system whereby commitments were made for a multiple-year period in line with the China's five-year economic plans. With the completion of the 4th round (FY1996 - FY2000), however, this system was replaced by a single-year system in an effort to ensure higher flexibility reflecting policy needs in ODA loan commitments for China. The new system was introduced this fiscal year, and projects to be financed are agreed to on an annual basis. In addition, taking into consideration the call to reviewing ODA for China, the Japanese government announced the "Economic Cooperation Program for China" in October 2001, which will place more emphasis on "areas such as the conservation of the environment and eco-systems, the improvement of living standards and social development in inland regions, human resources development, institutional buildup, and technological transfer." Incorporating these changes, JBIC's ODA loan commitments to China for this fiscal year mark the first year of the post 4th round (FY1996 - FY2000) period.
3. The following are highlights of this year's ODA loan commitments.
  - (1) Support for environmental protection: Of the 15 ODA loan commitments, seven projects or 54% of the total loan amount are for the environmental protection. The "Xi'an Environmental Improvement Project" as well as six other projects are categorized as "anti-pollution measures", which aim to reduce water pollution through drainage development, as well as to reduce air pollution through development of cogeneration systems that make use of clean energy (natural gas). At the same time, the "Ningxia Afforestation and Vegetation Cover Project" is a "natural environment preservation" project. It is designed to expand the vegetation coverage by planting trees and plants in China, where forest resources have been badly damaged and desertification has been progressing as a result of reckless logging and disorderly reclamation brought about by rapid economic growth in recent years.
  - (2) Support for human resources development: Of the 15 ODA loan commitments, six projects or 19% of the total loan amount are for the higher education projects. In order to continue support for the reform and open policy after accession to WTO, China is urgently required to foster human resources in such areas as information, financing, accounting and law. At the same time, China is also pressed to nurture human resources in the inland region to narrow the regional income gap by boosting local economies. In addition, with the current prevalence of primary and secondary education, quantitative demand for tertiary education (university education) is growing. Against the backdrop of these challenges, six ODA loan commitments for higher education projects will contribute to the promotion of university education in the inland region. Since these projects include training programs where Chinese teachers from the targeted universities of the project study at Japanese universities and research institutes, it is also expected that the projects help promote mutual understanding between Japan and China.
  - (3) Support for regional development (poverty reduction): Of the 15 ODA loan commitments, two projects or 27% of the total loan amount are for the regional development projects. Both of these projects aim to construct roads in the inland region where there is a relatively low income level (Hunan Province and Gansu Province), and are expected to contribute to better living conditions of residents and poverty reduction through the improvement of access to markets and the promotion of regional development. Of the 15 ODA loan commitments, 13 projects or 85% of the total loan amount are for inland region assistance projects and will thus help narrow the income gap between the coastal and inland regions in a comprehensive way.

### Loan Amount and Conditions

Project Name	Amount (Mil. Yen)	Interest Rate (%/Year)		Repayment Period/ Grace Period (Year)		Tying Status	
		Goods & Services	Consulting Services	Goods & Services	Consulting Services	Goods & Services	Consulting Services
Xi'an Environmental Improvement Project	9,764	0.75**, 1.7* (for drainage pipes)	--	40/10, 30/10 (for drainage pipes)	--	Bilateral Tied, General Untied (for drainage pipes)	--
Anshan Environmental Improvement Project	14,525	0.75**, 1.7* (for water supply system)	--	40/10, 30/10 (for water supply system)	--	Bilateral Tied, General Untied (for water supply system)	--
Taiyuan Environmental Improvement Project	14,144	0.75**	0.75**	40/10	40/10	General Untied	Bilateral Tied
Chongqing Environmental Improvement Project	9,017	0.75**	0.75**	40/10	40/10	Bilateral Tied	Bilateral Tied
Beijing Environmental Improvement Project	8,963	0.75**	0.75**	40/10	40/10	General Untied	Bilateral Tied
Ningxia Afforestation and Vegetation Cover Project	7,977	0.75**	--	40/10	--	Bilateral Tied	--
Shanxi Xilongchi Pumped Storage Power Station Project	6,021	0.75**	--	40/10	--	Bilateral Tied	--
Shaanxi Higher Education Project	4,665	0.75**	--	40/10	--	Bilateral Tied	--
Gansu Higher Education Project	6,131	0.75**	--	40/10	--	Bilateral Tied	--
Chongqing Higher Education Project	4,683	0.75**	--	40/10	--	Bilateral Tied	--
Yunnan Higher Education Project	4,540	0.75**	--	40/10	--	Bilateral Tied	--
Hunan Higher Education Project	4,682	0.75**	--	40/10	--	Bilateral Tied	--

Gansu Province Road Construction Project	20,013	2.2	0.75**	30/10	30/10	General Untied	Bilateral Tied
Hunan Province Road Construction Project	23,000	2.2	0.75**	30/10	30/10	General Untied	Bilateral Tied

\*Interest for Special Environmental Project,

\*\*\*Special Interest for Higher Education Project

(See Appendix for details.)

## (1) Xi'an Environmental Improvement Project

## (a) Project Background and Necessity

Xi'an is an ancient Chinese city known worldwide for its numerous historic sites. As the capital of Shaanxi Province, Xi'an is comprised of eight districts and five counties and has a population of 6,750,000 (3,830,000 in its urban districts in 1999). Xi'an functions as Shaanxi's administrative, commercial, and academic center. As a tourist destination, the city has made vigorous efforts to protect the environment, though it lags behind in the area of water pollution.

Xi'an's urban districts have a wastewater treatment rate of only 23%. The Wei River, a major river in Shaanxi Province, flows through Xi'an. The river is extremely polluted, exceeding Level V (worst ranking) of the national water quality environmental standard in 2001. Untreated water is discharged directly into the river because cities including Xi'an along the river have inadequate wastewater treatment capacity.

Shaanxi Province's 10th five-year plan includes additional construction of wastewater treatment facilities in five cities (including Xi'an) and one development district. The five-year plan targets a wastewater treatment rate in Xi'an of over 50% by 2005.

Although the plan calls for the installation of sewage systems in Xi'an's five districts (central and north, northeast, west, east, and south), only two wastewater treatment plants have been built to date (west: No. 1 Wastewater Treatment Plant; south: No. 2 Wastewater Treatment Plant). This yen loan project will help improve water quality in the Wei River and raise living standards in Xi'an by supporting sewage installation plans through the construction of wastewater treatment plants to service east, central and north Xi'an (east: No. 3 Wastewater Treatment Plant; central and north: No. 4 Wastewater Treatment Plant; (northeast: expected to be covered in future development plans)) and through the expansion of sewage networks.

## (b) Project Objectives and Description

This project is designed to improve the water quality of rivers in Xi'an and promote sustainable urban development by building sewage facilities within the city.

This project will build the No. 3. Wastewater Treatment Plant (treatment capacity of 100,000 m<sup>3</sup> per day), the No. 4 Wastewater Treatment Plant (treatment capacity of 250,000 m<sup>3</sup> per day), and expand sewage networks.

This environmental improvement project is consistent with the Japanese government's Economic Cooperation Program for China and the focus area of "environmental protection" in the Medium-Term Strategy for Overseas Economic Cooperation Operation of JBIC.

Loans will be used to purchase the equipment and materials needed to build wastewater treatment plants (e.g., pumping equipment, primary settling basins, bioreaction basins, secondary settling basins, filters, sludge treatment equipment, and sewage pipes) and to expand the sewage network.

The executing agency is the Xi'an Municipal People's Government (Address: Xi'an Municipal Construction Commission, No. 51 Hou Zaimen, Xi'an, P.O. Code 710003; Phone: 86-29-7264122, Fax:86-29-7234665).

## (2) Anshan Environmental Improvement Project

## (a) Project Background and Necessity

Anshan, Liaoning Province (population: approx. 1,330,000) is located in the Liao River Basin. Anshan is one of China's leading steel towns and home to Anshan Iron & Steel Complex, China's number two producer of crude steel. Air pollution is growing worse as a result of industrialization, aging plant facilities, heat supply through numerous small boilers fired by high sulfur content coal, and increasing car traffic. Atmospheric SO<sub>2</sub> concentration is high, falling short of Level 2 of the national air environmental quality standard applied to residential areas. Anshan's composite value (includes SO<sub>2</sub>, NO<sub>x</sub>, etc.) was the eighth worst in China in 1999, and the city requires prompt air quality improvement measures.

Moreover, Anshan's urban districts have a wastewater treatment rate of only 6.1%. Untreated wastewater is discharged directly into city waterways, whose water quality exceeds Level V (worst ranking) of the national water quality environmental standard. Measures to improve water quality are urgently needed as this is a key source of water pollution in the Liao River Basin, a target area in China's 10th five-year national environmental protection plan. Consequently, the 9th five-year Liao River Basin water pollution prevention plan and the year 2010 plan also seek improvement in wastewater treatment rates through the construction of wastewater treatment plants in the cities including Anshan of the Liao River Basin.

Despite previous efforts financed by yen loans to expand Anshan's water supply ("Tri-city water supply construction project" in fiscal 1990), per capita water supply in the city stood at 171 liters per day in 2000, below the national average of 220 liters per day for cities. Anshan is forced to restrict water supply to 70% in urban districts, with water supplied 15 hours per day during normal times and only 6-8 hours per day in dry seasons. This threatens the daily lives of Anshan residents.

To cope with the foregoing environmental problems, the Anshan Municipal People's Government's 9th five-year plan contained over 100 antipollution projects with an emphasis on factory emissions and drainage measures. The plan has been a success, with 80% of the projects completed. Anshan's 10th five-year plan from 2001 strengthens environmental protection measures to reduce air pollution, improve water quality and enhance living standards through the construction of an environmental infrastructure including heat supply, public transportation, water supply and sewage, etc.

## (b) Project Objectives and Description

This project is designed to promote sustainable development in Anshan by strengthening environmental protection measures to reduce air pollution, improve water quality and enhance living standards through the construction of an environmental infrastructure including heat supply, public transportation, water supply and sewage, etc.

The overall project involves: (1) Centralized Heating System Improvement Project; (2) Urban Railway System Improvement Project; (3) Water Supply System Improvement Project; and (4) Western No. 2 Wastewater Treatment Plant Construction Project.

This environmental improvement project is consistent with the Japanese government's Economic Cooperation Program for China and the focus area of "environmental protection" in the Medium-Term Strategy for Overseas Economic Cooperation Operation of JBIC.

Loans will be used to purchase: (1) civil engineering equipment and materials and a bio-briquette manufacturing plant for Centralized Heating System Improvement Project; (2) rail cars and communications and signaling systems for Urban Railway System Improvement Project; (3) building materials and piping for Water Supply System Improvement Project; and (4) civil engineering materials and mechanical equipment for Western No. 2 Wastewater Treatment Plant Construction Project.

The executing agency is the Anshan Municipal People's Government (Address: Anshan Urban & Rural Construction Committee, No. 36 South Shengli Road, Tiedong District, Anshan, P.O. Code 114001; Phone: 86-412-5560703; Fax: 86-412-5539124).

## (3) Taiyuan Environmental Improvement Project

## (a) Project Background and Necessity

Taiyuan is a heavy industrial city and capital of Shanxi Province. Aging facilities are aggravating environmental pollution. As evidence, Taiyuan's composite air pollution value (includes SO<sub>2</sub>, NO<sub>x</sub>, TSP, etc.) is the worst of China's 91 cities. Taiyuan's water quality is deteriorating, with 76 of the 104 monitoring stations (equivalent to 73.1%) for the 26 rivers in Shanxi Province exceeding Level V (worst ranking) of the national surface water quality environmental standard in 2000.

Taiyuan is home to Taiyuan Steel, China's largest producer of stainless steel. As a massive state-owned enterprise with 72,000 employees, Taiyuan Steel is a major force in the local community and economy. However, it is also a primary source of air and water pollution in the city. To cope with the pollution problem, the Taiyuan Municipal People's Government is looking to aggressively implement Cleaner Production (CP) in order to minimize pollutant generation and conserve energy. The municipal government enacted the Taiyuan CP Ordinance in 2000, which obliges Taiyuan Steel to devise a CP program and report on the status of its implementation.

## (b) Project Objectives and Description

This project is designed to help improve the environment of Taiyuan, which is confronted with air pollution, water pollution and other environmental problems, through the introduction of CP technologies and pollutant treatment facilities and through efficient energy use at Taiyuan Steel. This project is consistent with the Japanese government's Economic Cooperation Program for China and the focus area of "environmental protection" in the Medium-Term Strategy for Overseas Economic Cooperation Operation of JBIC.

Loans will be used to purchase desulfurization equipment, boilers, power generators, electric furnace, dust collectors, consulting services, etc.

The executing agency is the Shanxi Provincial People's Government (Address: Shanxi Provincial Finance Bureau, No. 345 Yingze Street, Taiyuan City, Shanxi Province, P.O. Code 030001; Phone: 86-351-404-3381; Fax: 86-351-404-3381).

#### (4) Chongqing Environmental Improvement Project

##### (a) Project Background and Necessity

Chongqing is a municipality directly under the central government. The city covers an area of 82,000 km<sup>2</sup> and has a population of approximately 30 million. Chongqing is the center of economic, transportation, and trade activity in the upper Yangtze River region, and it is positioned as a development base in the Western Region Development Strategy.

Central Chongqing (175 km<sup>2</sup>; population: 2.4 million) suffers from air pollution, water pollution and other serious environmental problems stemming from rapid industrialization and urbanization in recent years.

Water pollution is especially serious. The volume of industrial and domestic wastewater has risen dramatically to 856,000 m<sup>3</sup> per day in 2001 due to the development of the manufacturing industry and to the expansion of city limits with population growth. In stark contrast, Chongqing has only one wastewater treatment plant (Tangjiaqiao Wastewater Treatment Plant; completed in 1997; treatment capacity: 48,000 m<sup>3</sup> per day), resulting in an extremely low wastewater treatment rate of 6%.

Consequently, untreated wastewater is discharged directly into the city's rivers, and water quality in the Jialing River fails to reach Level III of the national water quality environmental standard (level for use as a source for drinking water).

In light of these circumstances, the Chongqing Municipal People's Government in its 10th five-year plan established measures to address water pollution and set the numerical target of raising the wastewater treatment rate in urban districts to over 60% by 2005. Chongqing's master plan for sewage construction includes plans to construct interceptors (World Bank loans) and wastewater treatment plants, including two plants associated with this project (World Bank loans and yen loans).

##### (b) Project Objectives and Description

This project is designed to improve the water quality of Chongqing's rivers and promote sustainable urban development through the construction of sewage facilities.

This project will consist of the construction of the Tangjiatuo Wastewater Treatment Plant (treatment capacity: 300,000 m<sup>3</sup> per day) and the Jiguanshi Wastewater Treatment Plant (treatment capacity: 600,000 m<sup>3</sup> per day). Though construction has already started on primary treatment facilities (e.g., suspended solid elimination) at both treatment plants using World Bank loans, this project will continue these efforts with the construction of secondary treatment facilities (e.g. sedimentation and biologic tank).

This project is consistent with the Japanese government's Economic Cooperation Program for China and the focus area of "environmental protection" in the Medium-Term Strategy for Overseas Economic Cooperation Operation of JBIC.

Loans will be used to purchase construction materials, sludge treatment equipment, pumps, etc.

The executing agency is the Chongqing Municipal People's Government (Address: Chongqing Municipal Finance Bureau, No.15 Renhe Street, Yuzhong District, Chongqing, P.O. Code 400015; Phone:86-23-63896094; FAX: 86-23-63857325).

#### (5) Beijing Environmental Improvement Project

##### (a) Project Background and Necessity

As China's capital city, Beijing is the political and economic center of the country. Beijing's population totaled 12.8 million in 2000 (8 million in urban districts). The city has seen rapid economic growth, but industrialization and urbanization since the 1980s has aggravated environmental pollution. Air pollution has grown especially severe due to sulfur dioxide (SO<sub>2</sub>) emissions from coal burning, total suspended particle (TSP) emissions, and nitrogen oxide (NO<sub>x</sub>) emissions from cars. Carbon dioxide (CO<sub>2</sub>) emissions, the cause of global warming, are also increasing. Despite some improvement in the 1990s, air pollution remains a serious problem. As evidence, atmospheric SO<sub>2</sub> concentration is high, falling short of Level 2 of the national air environmental quality standard applied to residential areas. According to 1999 statistics, Beijing's composite value (includes SO<sub>2</sub>, NO<sub>x</sub>, etc.) was the fourth worst in China.

In an effort to improve air quality, the Beijing Municipal People's Government in its 10th five-year plan (2001-2005) seeks to change the energy consumption structure and cut emissions by strengthening regulations for car emissions, limiting the use of raw coal, expanding the use of natural gas, and improving local heat supply systems. As a specific target, the plan aims to reduce air pollution to the extent that Beijing qualifies for Level 2 of the national air environmental quality standard by 2005.

Beijing Electronic Zone is an industrial and residential district in the city's northeast that was established 40 years ago by the Beijing Municipal People's Government. Due partly to economic development resulting from China's policy of openness and reform, Beijing Electronic Zone is home to a growing number of domestic and foreign-owned factories and companies. However, infrastructure development lags behind, and many factories and companies use small coal-burning boilers not equipped with desulfurization equipment. Currently, annual coal consumption in Beijing Electronic Zone totals 400,000 tons, with annual soot emissions of 2,200 tons and SO<sub>2</sub> emissions of 2,160 tons, representing a major source of air pollution in Beijing.

##### (b) Project Objectives and Description

This project is designed to cut emissions of SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, etc., by substituting the small coal-burning boilers used in Beijing Electronic Zone, which the Beijing Municipal People's Government is prohibiting, with cogeneration equipment that uses natural gas. The government plans to ban 102 of the 128 small coal-burning boilers currently in operation, resulting in an estimated reduction in coal consumption of 300,000 tons annually.

This project represents the first full-scale implementation of natural gas cogeneration in Beijing, and it is positioned as a model to encourage the future spread of similar cogeneration facilities from the standpoint of environmental protection and energy conservation. This project is consistent with the Japanese government's Economic Cooperation Program for China and the focus area of "environmental protection" in the Medium-Term Strategy for Overseas Economic Cooperation Operation of JBIC.

Loans will be used to purchase major equipment (gas turbines, exhaust heat recovery boilers, etc.), gas-burning boilers, gas pipelines, consulting services (procurement assistance and project management), etc.

The executing agency is the Beijing Municipal People's Government (Address: No. 15 Fucheng Road, Haidian District, Beijing, P.O. Code 100037; Phone: 86-10-68455800; Fax: 86-10-68414204).

#### (6) Ningxia Afforestation and Vegetation Cover Project

##### (a) Project Background and Necessity

The northern part of the Ningxia Hui Autonomous Region has among the lowest level of precipitation in all China. Adding to the harsh natural environment, human factors such as deforestation, overgrazing, and over-reclamation are taking their toll. Northern Ningxia's rate of forest cover is less than 8%, roughly half the national average. With a significant lack of vegetation cover including forests and grasslands, the desert is threatening the livelihood of nearby families and irrigated districts. Desertification was most pronounced in Ningxia's northern region, but in the 1980s the desert spread to the central region and reached a size of 1.65 million hectares, now accounting for over one quarter of Ningxia's total land area. Moreover, dust storms are occurring with increasing frequency.

Responding to these circumstances, the Ningxia Hui Autonomous Region implemented vigorous anti-desertification measures from the 1950s in an effort to recover a total of 450,000 hectares of vegetation cover lost to desertification. As a result of these efforts, while the area of desertified land had been increasing 2,777 hectares annually prior to 1960, it has been decreasing by 1,745 hectares annually between 1961-2000. Nevertheless, sustained efforts to prevent desertification are still required. The National Ecological Construction Plan (announced in 1998), China's comprehensive environmental protection plan, identifies anti-desertification in Ningxia as one of the focus points through 2010.

##### (b) Project Objectives and Description

This project is designed to increase the amount of vegetation cover by planting trees and grass in the northern part of the Ningxia Hui Autonomous Region, thereby preventing desertification and improving the living standards and the natural environment, and to raise incomes of farm families by planting wolfberry, licorice, etc. This project is consistent with the Japanese government's Economic Cooperation Program for China and the focus area of "environmental protection" in the Medium-Term Strategy for Overseas Economic Cooperation Operation of JBIC.

Loans will be used to purchase seedlings, seeds, fertilizer, vehicles, etc.

The executing agency is the Ningxia Hui Autonomous Regional People's Government (Address: Ningxia Hui Autonomous Regional Finance Bureau, No. 162 Jiefang West Road, Yinchuan City, Ningxia Hui Autonomous Region, P.O. Code 750001; Phone: 86-951-504-4779; Fax: 86-951-504-4779).

#### (7) Shanxi Xilongchi Pumped Storage Power Station Project

##### (a) Project Background and Necessity

China's government has prioritized the development of electric power resources as a driving force behind high economic growth. During the ten-year period between 1991-2000, the country boosted its power generation capacity by 2.3 times, and power generated by 2.1 times. However, China relies on coal-fired power generation—which significantly impacts the environment—to meet approximately 70% of its power generation needs. There are also regional imbalances in power supply and demand due to an inadequate national transmission network and other factors. At the local level, the range of daily power demand from minimum to maximum load is growing wider, and this issue requires an urgent response.

Shanxi has relatively low income levels, and the province's electric power network is almost entirely dependent (approx. 90%) on coal-fired power generation facilities. Shanxi adjusts power output between maximum and minimum loads through daily start and stop (DSS) and power adjustment operations at coal-fired power plants. These methods place a greater burden on the environment by increasing emissions when starting and stopping power generation. The methods also lower power generation efficiency, shorten the lives of power generation facilities, and increase costs. Shanxi's major cities suffer from serious air pollution caused by coal-fired power plants. According to 1999 statistics, Shanxi's capital Taiyuan had the worst composite value (includes SO<sub>2</sub>, NO<sub>x</sub>, etc.) in China. Datong, a mining and manufacturing city in northern Shanxi, ranked third.

With expectations of growing power demand as a result of further economic development, Shanxi is looking to improve its power source composition by building hydroelectric power plants that place a relatively low burden on the environment, by building pumped storage power plants that increase the power storage capacity of the electric power network, and by abolishing the use of low-efficiency small-scale thermal power plants.

##### (b) Project Objectives and Description

This project will construct a pumped storage power plant (approx. 700m drop; four 300MW stations) and related facilities in Wutai County, Xinzhou City as a replacement for coal-fired power plants that place a heavy burden on the environment. The new plant is intended to enhance peak demand response capabilities, improve operational stability of the electric power network, prevent air pollution by cutting SO<sub>2</sub> and NO<sub>x</sub> emissions, and limit greenhouse gas emissions by reducing CO<sub>2</sub>. This project should also promote economic development in response to peak power demand in Shanxi Province and help raise income levels of province residents. This project is consistent with the Japanese government's Economic Cooperation Program for China and the focus area of "environmental protection" in the Medium-Term Strategy for Overseas Economic Cooperation Operation of JBIC.

Loans will be used to purchase major equipment (power generation equipment, etc.), steel structures, construction machinery, monitoring instruments, consulting services (procurement assistance and project management assistance), etc.

The executing agency is the State Power Corporation of China (Address: No. 86 West Changan Road, Xicheng District, Beijing, P.O. Code 100031; Phone: 86-10-66598580; Fax: 86-10-66087958).

#### (8) Shaanxi Higher Education Project

##### (a) Project Background and Necessity

Advancing China's policy of openness and reform requires further development of a market economy. The country needs to train human resources in a variety of areas including information, finance, accounting, and law. From the standpoint of reducing regional disparities, promoting regional economic development through human resource development in inland regions has become an important issue. Other urgent tasks include improving the daily lives of rural residents by promoting education and responding to changes in the industrial structure by providing technical training to persons unemployed as a result of reforms to state-owned enterprises on the basis of WTO affiliation. Moreover, the spread of elementary and secondary education (elementary school enrollment: 99%; middle school advancement: 94.4%; high school advancement: 50.0%; 1999) is leading to growing demand for higher education.

Under these circumstances, the central government's 10th five-year plan (2001-2005) includes measures to expand higher education in terms of both quantity and quality. From the standpoint of reducing regional disparities, the plan seeks to improve higher education institutions in inland regions through the Western Region Development Strategy and other means. Shaanxi's 10th five-year plan seeks GDP growth of 10% and additional changes to the industrial structure. The plan promotes the development of a market economy and further economic growth. Shaanxi needs to expand higher education to achieve these goals, and by 2005, the provincial government plans to raise the total number of students enrolled at higher education institutions to approximately 700,000 (430,000 in 2000) and the number of students enrolled at conventional higher education institutions to approximately 400,000 (240,000 in 2000). Shaanxi is also emphasizing the construction and improvement of higher education institutions with the objectives of reducing urban poverty through job training for workers laid off from state-owned enterprises, and of promoting education in rural areas by training teachers to work in these communities.

##### (b) Project Objectives and Description

This project is designed to improve higher education institutions in Shaanxi Province in terms of both quantity and quality. This will be achieved by providing both "hard support" (i.e. construction of school buildings, facilities, etc.) and "soft support" (i.e. conduct training, etc.) to 16 universities that play an important role in Shaanxi's efforts to reduce the disparity with coastal regions, promote rural development, and reform state-owned enterprises through market reforms and economic growth. In turn, this contributes to the development of a market economy and reduction of regional disparities throughout all China. This project is consistent with the focus area of "human resource development" in the Japanese government's Economic Cooperation Program for China and the focus area of "reducing regional disparities by emphasizing inland regions" in the Medium-Term Strategy for Overseas Economic Cooperation Operation of JBIC.

Loans will be used to purchase materials to build school buildings and educational facilities and to cover expenses for a Japan training program.

The executing agency is the Shaanxi Provincial People's Government (Address: Shaanxi Provincial Education Commission, No. 119 Yaowangdong, Xi'an City, Shaanxi Province, P.O. Code: 710003; Phone: 86-29-7323074; Fax: 86-29-7317394).

#### (9) Gansu Higher Education Project

##### (a) Project Background and Necessity

Advancing China's policy of openness and reform requires further development of a market economy. The country needs to train human resources in a variety of areas including information, finance, accounting, and law. From the standpoint of reducing regional disparities, promoting regional economic development through human resource development in inland regions has become an important issue. Other urgent tasks include improving the daily lives of rural residents by promoting education and responding to changes in the industrial structure by providing technical training to persons unemployed as a result of reforms to state-owned enterprises on the basis of WTO affiliation. Moreover, the spread of elementary and secondary education (elementary school enrollment: 99%; middle school advancement: 94.4%; high school advancement: 50.0%; 1999) is leading to growing demand for higher education.

Under these circumstances, the central government's 10th five-year plan (2001-2005) includes measures to expand higher education in terms of both quantity and quality. From the standpoint of reducing regional disparities, the plan seeks to improve higher education institutions in inland regions through the Western Region Development Strategy and other means. Gansu's 10th five-year plan seeks GDP growth of 8% or higher and additional changes to the industrial structure. The plan promotes the development of a market economy and further economic growth. Gansu needs to expand higher education to achieve these goals, and by 2005, the provincial government plans to raise the total number of students enrolled at higher education institutions to approximately 210,000 (130,000 in 2000) and the number of students enrolled at conventional higher education institutions to approximately 140,000 (80,000 in 2000). Gansu is also emphasizing the construction and improvement of higher education institutions with the objectives of reducing urban poverty through job training for workers laid off from state-owned enterprises, and of promoting education in rural areas by training teachers to work in these communities.

##### (b) Project Objectives and Description

This project is designed to improve higher education institutions in Gansu Province in terms of both quantity and quality. This will be achieved by providing both "hard support" (i.e. construction of school buildings, facilities, etc.) and "soft support" (i.e. conduct training, etc.) to eight universities that play an important role in Gansu's efforts to reduce the disparity with coastal regions, promote rural development, and reform state-owned enterprises through market reforms and economic growth. In turn, this contributes to the development of a market economy and reduction of regional disparities throughout all China. This project is consistent with the focus area of "human resource development" in the Japanese government's Economic Cooperation Program for China and the focus area of "reducing regional disparities by emphasizing inland regions" in the Medium-Term Strategy for Overseas Economic Cooperation Operation of JBIC.

Loans will be used to purchase materials to build educational facilities and to cover expenses for a Japan training program.

The executing agency is the Gansu Provincial People's Government (Address: Gansu Provincial Education Commission, No. 425 Binhe East Road, Lanzhou City, Gansu Province, P.O. Code 730030; Phone: 86-931-8850276; Fax: 86-931-8820006).

#### (10) Sichuan Higher Education Project

##### (a) Project Background and Necessity

Advancing China's policy of openness and reform requires further development of a market economy. The country needs to train human resources in a variety of areas including information, finance, accounting, and law. From the standpoint of reducing regional disparities, promoting regional economic development through human resource development in inland regions has become an important issue. Other urgent tasks include improving the daily lives of rural residents by promoting education and responding to changes in the industrial structure by providing technical training to persons unemployed as a result of reforms to state-owned enterprises on the basis of WTO affiliation. Moreover, the spread of elementary and secondary education (elementary school enrollment: 99%; middle school advancement: 94.4%; high school advancement: 50.0%; 1999) is leading to growing demand for higher education.

Under these circumstances, the central government's 10th five-year plan (2001-2005) includes measures to expand higher education in terms of both quantity and quality. From the standpoint of reducing regional disparities, the plan seeks to improve higher education institutions in inland regions through the Western Region Development Strategy and other means. Sichuan's 10th five-year plan seeks GDP growth of 8% or higher and additional changes to the industrial structure. The plan promotes the development of a market economy and further economic growth. Sichuan needs to expand higher education to achieve these goals, and by 2005, the provincial government plans to raise the total number of students enrolled at higher education institutions to approximately 840,000 (550,000 in 2000) and the number of students enrolled at conventional higher education institutions to approximately 530,000 (240,000 in 2000). Sichuan is also emphasizing the construction and improvement of higher education institutions with the objectives of reducing urban poverty through job training for workers laid off from state-owned enterprises, and of promoting education in rural areas by training teachers to work in these communities.

##### (b) Project Objectives and Description

This project is designed to improve higher education institutions in Sichuan Province in terms of both quantity and quality. This will be achieved by providing both "hard support" (i.e. construction of school buildings, facilities, etc.) and "soft support" (i.e. conduct training, etc.) to eight universities that play an important role in Sichuan's efforts to reduce the disparity with coastal regions, promote rural development, and reform state-owned enterprises through market reforms and economic growth. In turn, this contributes to the development of a market economy and reduction of regional disparities throughout all China. This project is consistent with the focus area of "human resource development" in the Japanese government's Economic Cooperation Program for China and the focus area of "reducing regional disparities by emphasizing inland regions" in the Medium-Term Strategy for Overseas Economic Cooperation Operation of JBIC.

Loans will be used to purchase materials to build school buildings and educational facilities and to cover expenses for a Japan training program.

The executing agency is the Sichuan Provincial People's Government (Address: Sichuan Provincial Education Commission, No. 26 Xiaxi Street, Chengdu City, Sichuan Province, P.O. Code 610041; Phone: 86-28-6110911; Fax: 86-28-6114807).

#### (11) Chongqing Higher Education Project

##### (a) Project Background and Necessity

Advancing China's policy of openness and reform requires further development of a market economy. The country needs to train human resources in a variety of areas including information, finance, accounting, and law. From the standpoint of reducing regional disparities, promoting regional economic development through human resource development in inland regions has become an important issue. Other urgent tasks include improving the daily lives of rural residents by promoting education and responding to changes in the industrial structure by providing technical training to persons unemployed as a result of reforms to state-owned enterprises on the basis of WTO affiliation. Moreover, the spread of elementary and secondary education (elementary school enrollment: 99%; middle school advancement: 94.4%; high school advancement: 50.0%; 1999) is leading to growing demand for higher education.

Under these circumstances, the central government's 10th five-year plan (2001-2005) includes measures to expand higher education in terms of both quantity and quality. From the standpoint of reducing regional disparities, the plan seeks to improve higher education institutions in inland regions through the Western Region Development Strategy and other means. Chongqing's 10th five-year plan seeks GDP growth of 9% or higher and additional changes to the industrial structure. The plan promotes the development of a market economy and further economic growth. Chongqing needs to expand higher education to achieve these goals, and by 2005, the municipal government plans to raise the total number of students enrolled at higher education institutions to approximately 360,000 (260,000 in 2000) and the number of students enrolled at conventional higher education institutions to approximately 240,000 (130,000 in 2000). Chongqing is also emphasizing the construction and improvement of higher education institutions with the objectives of reducing urban poverty through job training for workers laid off from state-owned enterprises, and of promoting education in rural areas by training teachers to work in these communities.

##### (b) Project Objectives and Description

This project is designed to improve higher education institutions in Chongqing in terms of both quantity and quality. This will be achieved by providing both "hard support" (i.e. construction of school buildings, facilities, etc.) and "soft support" (i.e. conduct training, etc.) to 10 universities that play an important role in Chongqing's efforts to reduce the disparity with coastal regions, promote rural development, and reform state-owned enterprises through market reforms and economic growth. In turn, this contributes to the development of a market economy and reduction of regional disparities throughout all China. This project is consistent with the focus area of "human resource development" in the Japanese government's Economic Cooperation Program for China and the focus area of "reducing regional disparities by emphasizing inland regions" in the Medium-Term Strategy for Overseas Economic Cooperation Operation of JBIC.

Loans will be used to purchase materials to build school buildings and educational facilities and to cover expenses for a Japan training program.

The executing agency is the Chongqing Municipal People's Government (Address: Chongqing Municipal Finance Bureau, No. 234 Renmin Road, Chongqing, P.O. Code 400015; Phone: 86-23-63855867; Fax: 86-23-63855867).

#### (12) Yunnan Higher Education Project

##### (a) Project Background and Necessity

Advancing China's policy of openness and reform requires further development of a market economy. The country needs to train human resources in a variety of areas including information, finance, accounting, and law. From the standpoint of reducing regional disparities, promoting regional economic development through human resource development in inland regions has become an important issue. Other urgent tasks include improving the daily lives of rural residents by promoting education and responding to changes in the industrial structure by providing technical training to persons unemployed as a result of reforms to state-owned enterprises on the basis of WTO affiliation. Moreover, the spread of elementary and secondary education (elementary school enrollment: 99%; middle school advancement: 94.4%; high school advancement: 50.0%; 1999) is leading to growing demand for higher education.

Under these circumstances, the central government's 10th five-year plan (2001-2005) includes measures to expand higher education in terms of both quantity and quality. From the standpoint of reducing regional disparities, the plan seeks to improve higher education institutions in inland regions through the Western Region Development Strategy and other means. Yunnan's 10th five-year plan seeks GDP growth of 8% or higher and additional changes to the industrial structure. The plan promotes the development of a market economy and further economic growth. Yunnan needs to expand higher education to achieve these goals, and by 2005, the provincial government plans to raise the total number of students enrolled at higher education institutions to approximately 320,000 (190,000 in 2000) and the number of students enrolled at conventional higher education institutions to approximately 150,000 (90,000 in 2000). Yunnan is also emphasizing the construction and improvement of higher education institutions with the objectives of reducing urban poverty through job training for workers laid off from state-owned enterprises, and of promoting education in rural areas by training teachers to work in these communities.

##### (b) Project Objectives and Description

This project is designed to improve higher education institutions in Yunnan in terms of both quantity and quality. This will be achieved by providing both "hard support" (i.e. construction of school buildings, facilities, etc.) and "soft support" (i.e. conduct training, etc.) to 11 universities that play an important role in Yunnan's efforts to reduce the disparity with coastal regions, promote rural development, and reform state-owned enterprises through market reforms and economic growth. In turn, this contributes to the development of a market economy and reduction of regional disparities throughout all China. This project is consistent with the focus area of "human resource development" in the Japanese government's Economic Cooperation Program for China and the focus area of "reducing regional disparities by emphasizing inland regions" in the Medium-Term Strategy for Overseas Economic Cooperation Operation of JBIC.

Loans will be used to purchase materials to build school buildings and educational facilities and to cover expenses for a Japan training program.

The executing agency is the Yunnan Provincial People's Government (Address: Yunnan Provincial Finance Agency, Wuhuashan, Kunming City, Yunnan Province, P.O. Code 650021; Phone: 86-871-3627508; Fax: 86-871-3627430).

#### (13) Hunan Higher Education Project

##### (a) Project Background and Necessity

Advancing China's policy of openness and reform requires further development of a market economy. The country needs to train human resources in a variety of areas including information, finance, accounting, and law. From the standpoint of reducing regional disparities, promoting regional economic development through human resource development in inland regions has become an important issue. Other urgent tasks include improving the daily lives of rural residents by promoting education and responding to changes in the industrial structure by providing technical training to persons unemployed as a result of reforms to state-owned enterprises on the basis of WTO affiliation. Moreover, the spread of elementary and secondary education (elementary school enrollment: 99%; middle school advancement: 94.4%; high school advancement: 50.0%; 1999) is leading to growing demand for higher education.

Under these circumstances, the central government's 10th five-year plan (2001-2005) includes measures to expand higher education in terms of both quantity and quality. From the standpoint of reducing regional disparities, the plan seeks to improve higher education institutions in inland regions through the Western Region Development Strategy and other means. Hunan's 10th five-year plan seeks GDP growth of 9% or higher and additional changes to the industrial structure. The plan promotes the development of a market economy and further economic growth. Hunan needs to expand higher education to achieve these goals, and by 2005, the provincial government plans to raise the total number of students enrolled at higher education institutions to approximately 850,000 (450,000 in 2000) and the number of students enrolled at conventional higher education institutions to approximately 420,000 (250,000 in 2000). Hunan is also emphasizing the construction and improvement of higher education institutions with the objectives of reducing urban poverty through job training for workers laid off from state-owned enterprises, and of promoting education in rural areas by training teachers to work in these communities.

##### (b) Project Objectives and Description

This project is designed to improve higher education institutions in Hunan in terms of both quantity and quality. This will be achieved by providing both "hard support" (i.e. construction of school buildings, facilities, etc.) and "soft support" (i.e. conduct training, etc.) to 11 universities that play an important role in Hunan's efforts to reduce the disparity with coastal regions, promote rural development, and reform state-owned enterprises through market reforms and economic growth. In turn, this contributes to the development of a market economy and reduction of regional disparities throughout all China. This project is consistent with the focus area of "human resource development" in the Japanese government's Economic Cooperation Program for China and the focus area of "reducing regional disparities by emphasizing inland regions" in the Medium-Term Strategy for Overseas Economic Cooperation Operation of JBIC.

Loans will be used to purchase materials to build school buildings and educational facilities and to cover the expenses for a Japan training program.

The executing agency is the Hunan Provincial People's Government (Address: Hunan Provincial Finance Agency, No. 1 Chengnan West Road, Changsha City, Hunan Province, P.O. Code 410015; Phone: 86-731-5165180; Fax: 86-731-5165184).

#### (14) Gansu Province Road Construction Project

##### (a) Project Background and Necessity

Since the advent of the policy of openness and reform in the 1980s, China's central government has promoted road construction as part of its overall emphasis on transportation infrastructure (e.g., railways, ports and harbors, roads, etc.), which can become a bottleneck to economic growth. Advances in road construction and motorization have led to rapid growth in road transport. Nevertheless, there are marked regional disparities in road infrastructure. Though inland regions account for approximately 90% of China's total land area, road density is roughly 25% of coastal regions. In terms of road quality as well, only 10% (2000) of roads in inland regions are of a fixed standard or higher, as opposed to 21% in coastal regions. These conditions restrict market access and lower transport efficiency. In light of these circumstances, the central government's 10th five-year plan includes measures to improve the country's road network, especially major national highways.

Gansu Province had a per capita GDP of 3,836 yuan in 2000, roughly 54% of the national average of 7,078 yuan, and 30th of China's 31 provinces, municipalities, and autonomous regions. A lagging transportation infrastructure has become a bottleneck for Gansu's overall economic development. Consequently, Gansu's 10th five-year plan targets the construction of 12 major highways within the province. Gansu is also working to build local and rural roadways that benefit impoverished regions. This project is positioned as a focus project in Gansu's five-year plan.

Gansu's northeast region, the area affected by this project, is a yellow soiled and hot, dry region challenged by harsh natural conditions. The investment environment in this region (e.g., undeveloped infrastructure) is quite tenuous, and as a result, income levels remain low.

##### (b) Project Objectives and Description

In light of these circumstances, this project will build roads in Gansu Province in an effort to raise living standards and help alleviate poverty in inland regions by improving access to markets and promoting regional development. This project will build the highway (110km) between Liuzhaikou, Jingyuan County and Baiyun District in Baiyun City and make improvements to the provincial road (100km) between Jingtai County, Baiyun City and Xicao, Yongdeng County, Lanzhou City. The project will also build service areas similar to Japan's "road stations" along the highway as well as the provincial road in an effort to promote exchange among roadway users and invigorate the local economy. This project is consistent with the Japanese government's Economic Cooperation Program for China and the focus area of "improving living standards and alleviating poverty in inland regions" in the Medium-Term Strategy for Overseas Economic Cooperation Operation of JBIC.

Loans will be used for civil engineering services for road construction, for building auxiliary facilities such as tollbooths, for construction and maintenance management, and for consulting services (assistance with construction management, environmental policies, and road management).

The executing agency is the Gansu Provincial People's Government (Address: Gansu Provincial Communications Department, No. 45 Cuiyingmen, Lanzhou City, Gansu Province, P.O. Code 730030; Phone: 86-931-8480728; Fax: 86-931-8464035).

#### (15) Hunan Province Road Construction Project

##### (a) Project Background and Necessity

Since the advent of the policy of openness and reform in the 1980s, China's central government has promoted road construction as part of its overall emphasis on transportation infrastructure (e.g., railways, ports and harbors, roads, etc.), which can become a bottleneck to economic growth. Advances in road construction and motorization have led to rapid growth in road transport. Nevertheless, there are marked regional disparities in road infrastructure. Though inland regions account for approximately 90% of China's total land area, road density is roughly 25% of coastal regions. In terms of road quality as well, only 10% (2000) of roads in inland regions are of a fixed standard or higher, as opposed to 21% in coastal regions. These conditions restrict market access and lower transport efficiency. In light of these circumstances, the central government's 10th five-year plan includes measures to improve the country's road network, especially major national highways.

Hunan Province had a per capita GDP of 5,639 yuan in 2000, roughly 80% of the national average of 7,078 yuan. A lagging transportation infrastructure in Hunan's midwestern region has become a bottleneck for the province's overall economic development. Consequently, Hunan's 10th five-year plan targets the construction of five major highways within the province. Hunan is also working to build local and rural roadways that benefit impoverished regions. This project is positioned as a focus project in Hunan's five-year plan.

Hunan's midwestern region, the area affected by this project, is a hilly and mountainous region. The investment environment in this region (e.g., undeveloped infrastructure) is quite tenuous, and as a result, income levels remain low.

##### (b) Project Objectives and Description

In light of these circumstances, this project will build roads in Hunan Province in an effort to raise living standards and help alleviate poverty in inland regions by improving access to markets and promoting regional development. This project will build the highway (160km; National Highway #320) between Shaoyang City and Huaihua City and will make improvements to the provincial (100km; Provincial road #1865 and town-ship roads) between Zhushi, Dongkou County and Chengbu County in Shaoyang City. The project will also build service areas similar to Japan's "road stations" along the highway as well as the provincial road in an effort to promote exchange among roadway users and invigorate the local economy. This project is consistent with the Japanese government's Economic Cooperation Program for China and the focus area of "improving living standards and alleviating poverty in inland regions" in the Medium-Term Strategy for Overseas Economic Cooperation Operation of JBIC.

Loans will be used for civil engineering services for road construction and for consulting services (assistance with environmental policies and road management).

The executing agency is the Hunan Provincial People's Government (Address: Hunan Provincial Communications Department, No. 649 Yuandayi Road, Changsha City, Hunan Province, P.O. Code 410001; Phone: 86-731