

Supporting Environmental Conservation and Human Resource Development in China

--Fiscal 2005 ODA Loan Package for China--

1. Japan Bank for International Cooperation (JBIC; Governor; Kyosuke Shinozawa) signed loan agreements with the Government of the People's Republic of China on June 23 which constitute the fiscal 2005 ODA loan package for China. The package totals 74.798 billion yen and focuses on environmental conservation and human resources development as priority areas.
2. The highlights of this ODA loan package are as follows:
 - (1) Supporting Environmental Conservation
Of the 10 ODA loans in this package, 7 are for environmental conservation projects and account for 80% of the total amount.
 - i) Conservation of Water Quality
Through the Yunnan Province Kunming City Water Environment Improvement Project (I), the Heilongjiang Province Harbin City Water Environment Improvement Project, and the Guangxi Zhuang Autonomous Region Yulin City Water Environment Improvement Project, water supply and sanitation systems will be developed.
 - ii) Conservation of Air Quality
Through the Inner Mongolia Autonomous Region Hohhot City Atmospheric Environment Improvement Project, centralized heat supply systems will be introduced to replace the existing small coal-fired boilers that act as a source of air pollution.
 - iii) Comprehensive Environmental Measures
Through the Guizhou Province Environment Improvement and Education Project, foresting activities will take place, water supply and sanitation systems will be developed, public health conditions will be improved, and waste disposal facilities will be developed. In the Jilin Province Jilin City Comprehensive Environment Improvement Project centralized heat supply facilities and sanitation facilities will be developed.
 - iv) Afforestation
Through the Henan Province Afforestation Project, soil erosion will be contained and flood damage will be mitigated through foresting activities to cope with forest degradation and increasingly serious natural disasters such as floods caused by soil erosion.
 - (2) Supporting Human Resources Development
There are three loans for human resources development projects in the package which account for 20% of the total amount. In China there is an urgent need for human resources development in the provinces to reduce regional disparities. This is particularly true in the areas of finance, accounting, and law in order to support the strengthening of market rules after China's accession to the World Trade Organization (WTO). Furthermore, the prevalence of primary and secondary education has increased demand for higher (university-level) education. Thus, the Higher Education Project (Regional Vitalization, Market Economy Reform Support, and Environmental Conservation) aims at promoting higher education in universities in the Liaoning, Hebei, and Hainan Provinces. The project also includes a plan to provide training for the faculties of the targeted Chinese universities in Japanese universities and research institutes, which will contribute to the promotion of mutual understanding between Japan and China.
3. In this ODA loan package, JBIC collaborated with Japanese local governments and universities from the project formation stage on in order to draw on Japanese experience and knowledge and thereby provide aid with a distinct Japanese profile in China. In the environmental projects, Yamagata City, Miyagi Prefecture, Niigata Prefecture, Okazaki City, Fujisawa City, Osaka City, Kitakyushu City, Shinshu University, and Yamaguchi University among others will plan to provide their knowledge and experience as well as make proposals based on cooperation agreements and affiliation agreements.
In the human resource development projects, Toyama University, Tottori University, Hyogo University of Teacher Education, and others have expressed interest in accepting trainees based on cooperation agreements signed between universities.
JBIC has sought increased participation by civil society in these projects by following the ODA Charter approved in the cabinet decision of August 2003 that calls for broader public participation in ODA activities.

(Click here for details.)

Reference

1. Loan Amount and Terms

Project Name	Amount (Mil. Yen)	Interest Rate (% per annum)	Repayment Period/ Grace Period(Years)	Procurement	
Guizhou Province Environment Improvement and Education Project	9,173	1.5 (flood control, community road, school and hospital) 0.75* (training etc.)	30/10 (flood control, community road, school and hospital) 40/10 (training etc.)	General Untied	
Inner Mongolia Autonomous Region Hohhot City Atmospheric Environment Improvement Project	7,400	0.75*	40/10	General Untied	
Yunnan Province Kunming City Water Environment Improvement Project (I)	12,700	0.75*	40/10	General Untied	
Higher Education Project (Regional Vitalization, Market Economy Reform Support, and Environmental Conservation)	Liaoning Province	5,775	1.5 (school building, facilities, etc.) 0.75* (training)	30/10 (school building, facilities, etc.) 40/10 (training)	General Untied
	Hebei Province	5,775	1.5 (school building, facilities, etc.) 0.75* (training)	30/10 (school building, facilities, etc.) 40/10 (training)	General Untied
	Hainan Province	3,150	1.5 (school building, facilities, etc.) 0.75* (training)	30/10 (school building, facilities, etc.) 40/10 (training)	General Untied
Henan Province Afforestation Project	7,434	0.75*	40/10	General Untied	
Jilin Province Jilin City Comprehensive Environment Improvement Project	9,711	0.75*	40/10	General Untied	
Heilongjiang Province Harbin City Water Environment Improvement Project	7,398	0.75*	40/10	General Untied	
Guangxi Zhuang Autonomous Region Yulin City Water Environment Improvement Project	6,282	1.5 (water supply) 0.75* (sewerage and training)	30/10 (water supply) 40/10 (sewerage and training)	General Untied	
Total	74,798				

*JBIC actively supports developing countries' efforts to address environmental issues and human resource development by applying lower-than-ordinary interest rates to environmental conservation and human resource development (components) projects.

(1) Guizhou Province Environment Improvement and Education Project

(a) Project Background and Necessity

Guizhou Province (population: 39.04 million; area: 176 thousand km²) where the Project is undertaken has the lowest per capita income among China's 31 provinces. The 12 prefectures targeted by the Project have been designated poor prefectures based on the national criteria by the central government.

In their rural areas, excessive logging to acquire wood fuel, combined with particular soil conditions in the province, has reduced the land's water retention capacity and brought serious soil erosion, thus causing increasingly extensive damage from flood disasters.

These rural areas have underdeveloped sanitation facilities and their hygiene conditions deteriorate once community roads are flooded during the rainy season. These factors have increased the incidence of communicable diseases transmitted by such vectors as mosquito and fly. In addition, as facilities for supplying drinking water are also underdeveloped, there is a high incidence of communicable diseases transmitted through polluted groundwater. Once affected by such disease, patients are virtually unable to receive proper medical service because of aging and obsolete prefectural medical facilities.

Furthermore, in these rural areas, the proportion of students advancing to senior high schools remains a low 37% (as opposed to the national average of 63%), which is due to the inadequate capacity of accommodating students in senior high schools. There is thus a need to improve senior high school facilities in order to turn out human resources who are capable of advancing sustainable development of local communities in harmony with the environment.

(b) Project Purpose and Description

The Project aims to improve inferior environmental and hygiene conditions and develop human resources in the targeted rural and urban areas in the 12 prefectures of Guizhou Province, thereby serving to ensure sustainable development of local communities in harmony with the environment. The Project consists of (1) environmental measures, such as development of methane gas utilization facilities and waste disposal facilities, and afforestation; (2) public health measures, including improvement, construction or expansion of community roads, drinking water supply facilities, healthcare facilities; (3) improving senior high school facilities. Training will also be provided for the staff of the project executing agency in collaboration with Japanese universities and NGOs to ensure sustainability of project effect. The staff of the executing agency and teachers in senior high schools will receive training in Japan.

The Project addresses "environmental conservation/global issues" and "human resource development," which are priority areas designated by the Japanese government's Economic Cooperation Program for China and JBIC's Medium-Term Strategy for Overseas Economic Cooperation Operations.

The proceeds of the loan will be used for civil works and procurement of equipment and materials pertaining to improvement of the above facilities, as well as the training program.

Guizhou Provincial People's Government

Address: Foreign Capital Project Management Center of Poverty Reduction and Development Office No.5 Building, 242 North Zhonghua Road, Gui Yang, Guizhou Province The People's Republic of China P.O. Code 550004

TEL: 86-851-6825190 FAX: 86-851-6832615

(2) Inner Mongolia Autonomous Region Hohhot City Atmospheric Environment Improvement Project

(a) Project Background and Necessity

Hohhot City (population: 2.13 million; area: 17 thousand km²), the capital city of the Inner Mongolia Autonomous Region, which is in the northern frontier of China, is located in the central part of the Region. In its urban areas, rapid urbanization and industrialization as well as population growth have sharply increased emissions from industry and households as well as household sewage. However, lagging development of environmental infrastructure has deteriorated air pollution.

In the eastern area of Hohhot City, small coal-burning boilers are used for heating in winter. Since these boilers are low in energy efficiency and not equipped with dust separators and desulfurizers, the quality of air in the city falls short of the standard laid down by the Chinese government. In addition, since the city area has been expanding, there are concerns that pollution will spread with additional installation of small coal-burning boilers.

(b) Project Purpose and Description

The Project aims to curb air pollution with reduction in small-scale pollution sources by constructing low-pollution and energy-efficient centralized heat supply facilities, thereby serving to improve the living environment in the city. The targeted area is the eastern Hohhot City (beneficiaries: 580 thousand; area covered: 19 km²). The Project consists of (1) procurement of materials and equipment for constructing centralized heat supply facilities; and (2) training the staff of the project executing agency to ensure sustainability of project effect. The staff of the project executing agency will receive training in Japan, which will be provided in collaboration with Japanese prefectural and municipal governments.

The Project addresses "environmental conservation/global issues," one of the priority areas designated by the Japanese government's Economic Cooperation Program for China and JBIC's Medium-Term Strategy for Overseas Economic Cooperation Operations.

The proceeds of the loan will be used for procurement of equipment and materials pertaining to construction of the above facilities and the training program conducted in Japan.

Inner Mongolia Autonomous Region People's Government

Address: Finance Department of Foreign Affairs Division No.63 Xinhua Street, Hohhot, Inner Mongolia Autonomous Region, The People's Republic of China P.O.CODE 010050
TEL:86-471-6944398 FAX:86-471-6944502

(3) Yunnan Province Kunming City Water Environment Improvement Project (1)

(a) Project Background and Necessity

Kunming City is the capital of Yunnan Province (population: 5 million; area: 20,000 km²), located in southwestern China, and the center of economic activity, transport network and trade in the province. In the south of the city lies Dianchi Lake, a freshwater lake, (surface area: 300 km²) in the Yangtze River system. Since the 1980s, economic development in the Kunming City area has increased untreated wastewater discharged into the lake over the years. Thus, the quality of lake water deteriorated to the level unsuitable for agricultural use in the 1990s.

While the Kunming Municipal People's Government has constructed sewage treatment facilities to improve its water quality, the total volume of sewage (688 thousand m³/day) in the city today far exceeds its sewage treatment capacity (464 thousand m³/day). As a result, untreated wastewater continues to flow into the lake. In addition, as the total volume of sewage in the city is projected to increase to 900 thousand m³ per day by 2015, there are concerns over further deterioration in the quality of lake water.

(b) Project Purpose and Description

The project aims to increase sewage treatment capacity in the Kunming City area by further developing a sewer system in its urban areas. This will reduce polluted wastewater discharged into the lake and serve to improve the living environment for city residents. Specifically, the Project consists of (1) construction, expansion, and renovation of sewage treatment plants; (2) development of sewer pipe networks (beneficiaries from (1) and (2): 1 million people); and (3) training the staff of the project executing agency to ensure sustainability of project effect. The staff of the project executing agency will receive training in Japan, which will be provided in collaboration with Japanese local governments. The Project addresses "environmental conservation/global issues," one of the priority areas designated by the Japanese government's Economic Cooperation Program for China and JBIC's Medium-Term Strategy for Overseas Economic Cooperation Operations.

The proceeds of the loan will be used for civil works and procurement of equipment and materials pertaining to construction/development of the above facilities, as well as the training program.

Kunming Municipal People's Government

Address: KUNMING MUNICIPAL CONSTRUCTION AND MANAGEMENT BUREAU FOR NORTH BANK WATER ENVIRONMENTAL TREATMENT PROJECT OF DIANCHI LAKE No. 636, Dianchi Rd, The building of Dianchi Lake Protection Bureau of KM, Kunming City, Yunnan Province, The People's Republic of China P.O.CODE 650228
TEL:86-871-4618290 FAX:86-871-4615348

(4) Higher Education Project (Regional Vitalization, Market Economy Reform Support, and Environmental Conservation) (Liaoning, Hebei, and Hainan Provinces)

(a) Project Background and Necessity

Compulsory education is prevalent in China, with the net primary school enrollment rate of 98.7%^[1] and the gross enrollment rate of 97.9%^[2] in lower secondary schools (equivalent to junior high school in Japan). This has given rise to a need for quantitative expansion of higher education. There is also a pressing need to develop human resources capable of addressing such development challenges as the transition to a market economy, environmental conservation and boosting regional economic activity in order to make further steps forward in the transition to a market economy, address increasingly serious environmental problems and redress regional as well as urban-rural disparities. The Chinese government is therefore seeking to improve higher education quantitatively and qualitatively by keeping its sights on raising the gross enrollment rate in higher education (including universities and graduate schools) to 15% in 2005 in the Tenth Five Year Plan.

(b) Project Purpose and Description

The Project aims to make quantitative and qualitative improvement in higher education by supporting the targeted 33 universities of the 3 provinces in terms of hardware (constructing school buildings and installing educational equipment) and software (training the teaching staff). Support in software (training the teaching staff) is expected to promote mutual understanding between China and Japan (through the training of the teaching staff of the targeted universities in Japanese institutions accepting the trainees, joint research and studies they engage in Japanese institutions).

The Project addresses "human resource development," one of the priority areas designated by the Japanese government's Economic Cooperation Program for China and JBIC's Medium-Term Strategy for Overseas Economic Cooperation Operations. In this Medium-Term Strategy, JBIC placed a focus on boosting regional economic activity as well as interaction, strengthening market rule and environmental conservation as the areas where there is a need to support human resource development. This Project is thus expected to develop human resources who will serve in these areas.

The proceeds of the loan will be used for procurement pertaining to construction of school buildings and educational equipment, and training the Chinese teaching staff in Japan. The Project constitutes part of a series of human resource development projects undertaken in China since fiscal 2001.^[3]

1) Liaoning Provincial People's Government

Address: Department of Finance, Debt and Finance Division 103 North Nanjing Street, Heping District, Shenyang, Liaoning Province The People's Republic of China P.O.CODE 110002
TEL:86-242-270-9256 FAX:86-242-283-4167

2) Hebei Provincial People's Government

Address: Education Department 112 North Zhonghua St., Shijiazhuang, Hebei Province The People's Republic of China P.O.CODE 050061
TEL:86-311-8704-2063 FAX: 86-311-8783-2270

3) Hainan Provincial People's Government

Address: Finance Bureau 109 Binhai Aenue, Haikou City Hainan Province The People's Republic of China P.O.CODE 570105
TEL:86-898-6535-9699 FAX:86-898-6535-9699

(5) Henan Province Afforestation Project

(a) Project Background and Necessity

Forest cover in Henan Province (population: 97.17 million; area: 166 thousand km²) is 16.2%, which falls short of the national average of 18.2% and ranks Henan Province as 21st among China's 31 provinces. This is attributable to excessive logging to meet growing demand for timber and expand cultivated land. Soil erosion from mountain slopes stripped bare by reckless logging has brought sedimentation in river beds and dam reservoirs, undermining the function of levees and dams and increasing damage from flood disasters. (A total of 140 million tons of soil is lost annually in the 71 prefectures targeted by the Project.) Apart from this development, in the plain, as a result of extensive patches of land left bare, sand storms have buried roads and cropland; and inadequate protection of forests against strong winds has caused soil erosion in cultivated land. Economic loss from natural disasters has reached 26.6 billion RMB (about 350 billion yen) annually in the targeted 71 prefectures whose population (51.76 million) and land area (96 thousand km²) are equivalent to those of Korea. In 2003, floods caused by a series of heavy rainfalls affected 35.87 million people, with 73 people killed and 420 thousand houses destroyed. The resulting economic loss totaled 18.2 billion RMB(250 billion yen).

(b) Project Purpose and Description

The Project aims to control soil erosion in mountainous areas and reduce strong winds in the plain through afforestation in the 71 prefectures of Henan Province, thereby reducing damage from natural disasters, such as floods and sand storms, and serving to improve the living environment. The Project consists of foresting, procurement of relevant equipment and materials and training the staff of the project executing agency to ensure sustainability of project effect. The training will take place in Japan in collaboration with Japanese universities.

The project addresses "environmental conservation/global issues," one of the priority areas designated by the Japanese government's Economic Cooperation Program for China and JBIC's Medium-Term Strategy for Overseas Economic Cooperation Operations.

The proceeds of the loan will be used for procurement of equipment and materials pertaining to afforestation and the training program.

Henan Provincial People's Government

Address: Finance Bureau No.40 Weiwu Street, Zhengzhou, Henan The People's Republic of China P.O.CODE 450003

TEL:86-371-65962378 FAX:86-371-65955200

(6) Jilin Province Jilin City Comprehensive Environment Improvement Project

(a) Project Background and Necessity

Jilin City (population: 4.32 million; area: 27 thousand km²) in Jilin Province, northeastern China, is the second largest city in the province. Its urban area (3,600 km², equivalent to Nara Prefecture; population: 1.8 million) straddles the middle stream of the Songhua River, one of the 7 major rivers in China. Its rapid industrialization, urbanization and population growth have sharply increased emissions and wastewater from industry and households. Meanwhile, there is lagging development of environmental infrastructure. This has deteriorated the quality of air and river water.

In Jilin City, small coal-burning boilers are used for heating in winter. As these boilers are low in energy efficiency and not equipped with dust separators and desulfurizers, the quality of air in the city falls short of the standards laid down by the Chinese government.

In addition, although recent rapid industrialization and urbanization have increased sewage in the city, the sewage treatment facilities do not have an adequate capacity to meet such increase. As a result, a large volume of untreated wastewater is discharged into the Songhua River, which constitutes one of the causes of deterioration in the quality of its water.

(b) Project Purpose and Description

The Project aims to curb air and water pollution by constructing centralized heat supply facilities and developing sewer pipe networks, thereby serving to improve the living environment of city residents. The Project consists of (1) procurement of materials and equipment for constructing centralized heat supply facilities (beneficiaries: 1.3 million people; area covered: 27.5 km²) and developing sewer pipe networks (beneficiaries: 150 thousand people); and (2) training the staff of the project executing agency to ensure sustainability of project effect. The staff of the project executing agency will receive training in Japan, which will be provided in collaboration with Japanese prefectural and municipal governments.

The project addresses "environmental conservation/global issues," one of the priority areas designated by the Japanese government's Economic Cooperation Program for China and JBIC's Medium-Term Strategy for Overseas Economic Cooperation Operations.

The proceeds of the loan will be used for procurement of equipment and materials pertaining to construction of the above facilities and the training program conducted in Japan.

Jilin Municipal People's Government

Address: Jilin City Municipal Administration and Public Facilities No.65 Mid-Songjiang Road, Jilin City, Jilin Province, The People's Republic of China P.O.CODE 132011

TEL:86-432-2048402 FAX:86-432-2048793

(7) Heilongjiang Province Harbin City Water Environmental Improvement Project

(a) Project Background and Necessity

Harbin City (population: 9.5 million; area: 53 thousand km²) is the capital of Heilongjiang Province, located in northeastern China. The city, which straddles the middle stream of the Songhua River, one of 7 major rivers in the country, is thriving as the center of the province's economic activity, transport network and trade. Recent rapid industrialization and urbanization as well as population growth have sharply increased wastewater discharged from its industry and households (1.1 million m³ per day in 2004). By contrast, since the existing 2 sewage treatment plants have a combined capacity of treating only 650 thousand m³ of sewage per day, or about 60% of the total municipal sewage, a large volume of untreated wastewater is discharged into the river. As a result, the quality of water in the Songhua River and its tributaries flowing in the city has deteriorated to the level unsuitable as a source for drinking water.

(b) Project Purpose and Description

The Project aims to reduce the discharge of effluents into the rivers in Harbin City where there is significant deterioration in the quality of water by developing sewage treatment facilities in the city's urban areas and increasing municipal sewage treatment capacity, thereby serving to improve the living environment of city residents.

The Project consists of (1) constructing new sewage treatment facilities and developing sewer pipe networks (beneficiaries: 600 thousand people); and (2) training the staff of the project executing agency to ensure sustainability of project effect. The training, to be provided in collaboration with Japanese prefectural and municipal governments, will be held in Japan.

The Project addresses "environmental conservation/global issues," one of the priority areas designated by the Japanese government's Economic Cooperation Program for China and JBIC's Medium-Term Strategy for Overseas Economic Cooperation Operations.

The proceeds of the loan will be used for civil works pertaining to construction and development of the above facilities, procurement of equipment and materials, and the training program.

Harbin Municipal People's Government

Address: Harbin Inland River Comprehensive Improvement Management Office No.468 Hongqi Main St, Harbin, The People's Republic of China P.O.CODE 150056

TEL:86-451-57696135 FAX:86-451-57696135

(8) Guangxi Zhuang Autonomous Region Yulin City Water Environment Improvement Project

(a) Project Background and Necessity

Yulin City (population: 5.9 million; area: 12.8 thousand km²) is located in the southeastern part of Guangxi Zhuang Autonomous Region. In the city's central Yulin City Proper (population: 400 thousand; area: 40 km²), lagging construction of sewage treatment facilities has left untreated household sewage and industrial wastewater being discharged into Nanliu River, one of the city's water sources. The quality of water in Nanliu River has thus deteriorated to the level no longer suitable for agricultural use. In addition, among all the primarily water sources for Yulin City, especially the Yulin City Proper, that comprise Nanliu River, groundwater, and dam reservoirs in the neighboring area, there is increasing water pollution in Nanliu River and pumping groundwater runs the risk of causing subsidence in the surrounding area. Thus, it is difficult to continue to rely on these water sources. Meanwhile, demand for water in the city is foreseen to increase further with its growing population.

(b) Project Purpose and Description

The Project aims to reduce the discharge of effluents into the Nanliu River flowing in Yulin City where there is significant deterioration in the quality of water and realize a stable supply of safe drinking water by developing sewage treatment and water supply facilities in the city, thereby serving to improve the living environment of its residents.

The Project consists of (1) constructing new sewage treatment facilities and developing sewer pipe networks (beneficiaries: 400 thousand people); (2) constructing new water purification facilities and the network of aqueducts and distribution pipes (beneficiaries: 600 thousand people); and (3) training the staff of the project executing agency to ensure sustainability of project effect. The training, to be provided in collaboration with Japanese prefectural and municipal governments, will be held in Japan.

The Project addresses "environmental conservation/global issues," one of the priority areas designated by the Japanese government's Economic Cooperation Program for China and JBIC's Medium-Term Strategy for Overseas Economic Cooperation Operations.

The proceeds of the loan will be used for civil works pertaining to construction and development of the above facilities, procurement of equipment and materials, and the training program.

Yulin Municipal People's Government

Address: Yulin Municipal Commission of Development and Reform, 449, Renmin Dong Road, Yulin City, Guangxi Zhuang Autonomous Region, The People's Republic of China, P.O. Code 537000

TEL:86-775-2822830 FAX:86-775-2815050

[1] Net enrollment rate: Number of students enrolled (students of relevant age) / school age population.

[2] Gross enrollment rate: Number of students enrolled (including students not in the grade-level age group) / School age population.

[3] Fiscal 2001: 6 projects (ODA loan financing: \30.722 billion); Fiscal 2002: 6 projects (ODA loan financing: \27.504 billion); Fiscal 2003: 6 projects (ODA loan financing: \25.482 billion); Fiscal 2004: 1 project (ODA loan financing: \5.073 billion)