

## The 25th Anniversary of the Normalization of the Diplomatic Relations between Japan and China -Yen loans : Contribution to Environmental Protection of China-

The OECF (The Overseas Economic Cooperation Fund of Japan; President, Chairman of the Board: Mr. Nishigaki Akira) decided to provide the People's Republic of China with loans amounting to 202.9 billion yen for Shanghai Pudong International Airport Construction Project, Huai River Henan Water Pollution Control Project and 12 other projects. The Loan Agreements were signed by Mr. Nagase Youseki, Senior Vice President, Deputy Chairman of the Board of OECF and Mr. An Min, Assistant Minister, the Ministry of Foreign Trade and Economic Cooperation of the People's Republic of China, today in Tokyo.

As a result, the cumulative total of OECF loans to China stands at 2,054.3 billion yen (224 commitments).

This year is the second year of the fourth batch of OECF loans to China, which has begun in fiscal 1996.

The loans provided this year attach as much importance to environmental protection and economic development in interior regions as the loans in 1996. Out of 14 projects, 6 projects are for environmental protection, and region-wise 10 projects are for economic development in interior regions. These projects are expected to contribute to promotion of welfare and health of the targeted regions.

### 1. Characteristics of OECF loans to China

#### (1) Further Consideration for Environmental Protection

Compared with the projects under the first batch to the third batch of loans which mainly consist of economic infrastructure projects such as transportation, electric power and telecommunications, the fourth batch of loans gives higher priority to environmental projects.

"Shaanxi Hancheng No.2 Thermal Power Plant Construction Project", for example, is the first thermal power plant project which will introduce a desulphurization device in order to reduce the emission of SO<sub>2</sub> among the projects using OECF loan in China. This project is expected to be a good model of similar projects in the future.

Regarding "Sanjiang Plain Agricultural Development Program (II)", OECF has cooperated with the Chinese counterparts for the implementation of the environmental protection measures since the first loan provided in 1996. This program is expected to be a model case of coexistence of agricultural development and conservation of natural environment.

Environmental protection is now regarded as one of the most important areas to be supported for the loans to China.

#### (2) History of OECF loans to China

OECF loans to China, which began in fiscal 1979, are divided into four batches:

The first batch of loans was committed from fiscal 1979 to fiscal 1983 for 7 projects. The total commitment amount was 330.9 billion yen. All first-batch projects were completed the result of which was almost satisfactory.

The second batch of loans (fiscal 1984-1989) included 16 projects and totaled 470 billion yen. In fiscal 1988, an additional loan of 70 billion yen was also committed for the Export Industries Promotion Program, as part of Japan's Financial Recycling Scheme.

The third batch of loans amounting to 810 billion yen (including 40 billion yen based on the Financial Recycling Scheme) for 52 projects was committed from fiscal 1990 to fiscal 1995.

In December 1994, the governments of Japan and China agreed with the outline for a total of 580 billion yen OECF loans to 40 projects over the three-year period from 1996 to 1998 as the first half of the fourth batch of loans. In December 1996, 170.5 billion yen for 22 projects was committed as the first year of the fourth batch.

#### (3) Size of Loans

The amount of the loans to China in this year first reached 200 billion yen and consequently the aggregated commitment amount has exceeded 2,000 billion yen. These account for 13.4% of the total OECF loans in 1996 and 11.7% of the aggregated OECF loans from 1966 to 1996.

The amount of the loans and the number of commitments to China in the recent five years is as follows:

(Unit : billion JPY)

F/Y	1993	1994	1995	1996	1997
Amount	138.7	140.3	141.4	170.5	202.9
(Growth rate)	(1.0%)	(1.1%)	(0.8%)	(20.5%)	(19.0%)
Number	18	15	11	22	14

### 2. Loan Amount and Conditions

Project Name	Amount (Million Yen)	Interest rate (%)	Repayment period/ grace period (years)	Tying Status
Sanjiang Plain Agricultural Development Program(II)	2,792	2.3	30(10)	General-Untied
Shuoxian-Huanghua Railway Construction Project(III)	20,460	2.3	30(10)	General-Untied
Xi'an-Ankang Railway Construction Project(III)	12,685	2.3	30(10)	General-Untied
Guiyang-Loudi Railway Construction Project(II)	17,028	2.3	30(10)	General-Untied
Hohhot and Baotou Environmental Improvement Project(II)	5,629	2.1*	30(10)	General-Untied
Liuzhou Environmental Improvement Project(II)	3,679	2.1*	30(10)	General-Untied
Shanghai Pudong International Airport Construction Project	40,000	2.3	30(10)	General-Untied
Huanghua Port Construction Project	15,400	2.3	30(10)	General-Untied
Shaanxi Hancheng No.2 Thermal Power Plant Construction Project	35,000	2.3	30(10)	General-Untied
Shanxi Wangqu Thermal Power Plant Construction Project	30,000	2.3	30(10)	General-Untied
Benxi Environmental Improvement Project	4,110	2.1*	30(10)	General-Untied
Huai River Henan Water Pollution Control Project	4,945	2.1*	30(10)	General-Untied
Xiang River Basin Hunan Environmental Improvement Project	5,678	2.1*	30(10)	General-Untied
Dalian Water Supply System Rehabilitation Project	5,500	2.1*	30(10)	General-Untied
Total 14 Commitments	202,906	---	-----	-----

\*Preferential Interest Rates on Environmental Projects

### 3. Outline of the Projects

#### (1) Sanjiang Plain Agricultural Development Program(II)

State farms in Sanjiang Plain, which produce a third of the total agricultural production of whole the state farms in China, are playing a main role in the Chinese state farms. The foundation for agricultural production, however, is still vulnerable to natural disasters such as drought, flood and cold weather. It is indispensable to improve the structure of agricultural production in order to strengthen the agricultural production and to stabilize food supply. Therefore, Bureau of State Farms of Heilongjiang Province is carrying out the plan to increase commercialized crop up to 5 million tons by the end of 2000, improving the agricultural foundation.

The program is to improve low productive land, reclaim arable land and improve food processing factories in state farms in Heilongjiang Province in order to increase food production and promote economic development in the region. This program is expected to enable the annual agricultural production to increase by 700 thousand tons through sub-projects.

Another loan of 14.91 billion yen has been already committed in December, 1996 for a part of this program. This year's loan is the second commitment for this program.

The loan is to be used for the finance of long-term loans for the implementation of the eligible sub-projects through The Export-Import Bank of China.

A part of the Feasibility Study (F/S) of this program was carried out by JICA (Japan International Cooperation Agency).

The executing agency is The Export-Import Bank of China (Address: 75 Chong Nei Street, Beijing, China, P.O.Code 100005 / Tel: \*86-10-65132288 / FAX: \*86-10-65236641). A study to conserve natural environment was carried out under the **Special Assistance for Project Formation (SAPROF\*\*)** because careful consideration for the environment, especially for the protection of wildlife is necessary under this program.

#### (2) Shuoxian - Huanghua Railway Construction Project (III)

In China, 75% of energy consumption has relied on coal, which is consumed mainly in the coastal area but production area is located in interior regions such as Shanxi Province. Therefore, the insufficient transport capacity of coal has been always the problem and has become a bottleneck for the economy of China.

The project is to construct an electrified double-track railway line between Shuoxian (Shanxi Province) and Huanghua Port (Hebei Province) in order to transport coal from the Shenfu-Dongsheng coal mine (Shanxi Province) to the coastal area. (159 km out of 599 km of the whole railway line is single-tracked.)

Two loans, 27.715 yen billion in November, 1995 and 12.245 billion yen in December, 1996, have been committed for a part of this project. This year's loan is the last commitment for this project.

The loan is to be used for the procurement of rail, cement, steel, etc..

The executing agency is Shenhua Group Corporation (Address: 26 Beiwalu, Beijing, China, P.O.Code 100081 / Tel: \*86-10-68484957 / FAX: \*86-10-68483928).

#### (3) Xi'an - Ankang Railway Construction Project (III)

Freight traffic by railway has an important role for transportation in Sichuan Province, which is the most populated province with 110 million people (about 10% of whole population of China) and located in the interior area of China. However, capacity of the freight traffic has a limitation and there has been a difficulty to realize smooth transportation of goods. The freight traffic by railway in Sichuan Province is limited especially because the Province is estranged from northern provinces by Qinling Mountains. At present, coal has been transported by making a detour around Qinling Mountains.

The project is to construct a 246.7 km electrified single-track railway line between Xi'an (Shaanxi Province) and Ankang (Shaanxi Province) in order to reinforce transportation capability for coal produced in Shanxi Province to Sichuan Province.

Two loans, 19.789 billion yen in November, 1995 and 2.526 billion yen in December, 1996, have been committed for a part of this project. This year's loan is the last commitment for this project.

The loan is to be used for the procurement of cement, steel, etc..

The executing agency is the Ministry of Railways of the P.R.C. (Address: 10 Fuxing Road, Beijing, China, P.O.Code 100844 / Tel: \*86-10-63244150 / FAX: \*86-10-63242150).

#### (4) Guiyang - Loudi Railway Construction Project (II)

In China, railway has played a major role for transportation of goods and passengers.

According to the recent economic development, the railway transport capacity can no more meet its demand.

The project is to construct an electrified double-track railway line of 807 km between Guiyang (Guizhou Province) and Loudi (Hunan Province) in order to transport coal and phosphate rock in the southern areas. Another loan of 12.932 billion yen has been committed in December, 1996 for a part of this project. This year's loan is the last commitment for this project.

The loan is to be used for the procurement of rail, cement, steel, etc..

The executing agency is the Ministry of Railways of the P.R.C. (Address: 10 Fuxing Road, Beijing, China, P.O.Code 100844 / Tel: \*86-10-63244150 / FAX: \*86-10-63242150).

#### (5) Hohhot and Baotou Environmental Improvement Project (II)

Chinese economy is growing rapidly but environmental protection can not catch up with its speed. Air and water pollution is getting worse and worse in major industrial areas.

Hohhot and Baotou are the most populated and industrialized cities in the Inner Mongolia Autonomous Region, where air and water are heavily polluted, caused by a lot of usage of coal and industrial waste water. Both cities recognized the necessity for taking measures to improve the environment.

This project is to construct gas and heat supply facilities and sewage treatment plants and to furnish factories with pollution control equipment, in order to improve the air and water quality in Hohhot and Baotou. Another loan of 10 billion yen has been already committed in December, 1996 for a part of this project. This year's loan is the second commitment in this region.

The loan is to be used for equipment and materials of gas and heat supply facilities, sewage treatment plants, pollution control equipment in factories and environmental monitoring equipment.

The executing agency is the People's Government of Inner Mongolia Autonomous Region (Address : 6 Yi Shu Ting South Street, Hohhot, Inner Mongolia, China, P.O.Code 010010 / Tel: \*86-471-6939941 / Fax: \*86-471-6961772).

#### (6) Liuzhou Environment Improvement Project

Liuzhou is an industrialized city in Guangxi Zhuangzu Autonomous Region located in south-west part of China. In Liuzhou, both factories and households use huge amount of coal, calorie of which is low. Also, the coal contains much sulfur and ash. The annual mean SO<sub>2</sub> concentration at ground level in 1993 was 0.217mg/Nm<sup>3</sup>. It is 3.6 times the national standard (0.060mg/Nm<sup>3</sup>). The annual mean pH of acid rain in Liuzhou is about 4.5. The frequency of acid rain reaches about 95%.

This project is to expand gas supply system, construct a garbage fill-cover up yard and furnish factories with pollution control equipment in order to improve the environment in Liuzhou. Another loan of 2.3 billion yen has been already committed in December, 1996 for a part of this project. This year's loan is the second commitment in this region.

The proceeds of the loan will be used for equipment and materials of gas supply utilities, pollution control equipment in factories and equipment and material for a garbage fill-cover up yard.

The executing agency is Liuzhou Municipal People's Government (Address : 70 Sanzhong Road, Liuzhou, Guangxi, China, P.O.Code 545001 / Tel: \*86-772-2859846 / Fax: \*86-772-2817799).

#### (7) Shanghai Pudong International Airport Construction Project

Since the launch of economic reform in late 1978, China has recorded impressive growth in aerial transportation. Between 1980 and 1990 the average annual growth rate of aerial passengers is 18% and that of aerial cargo is 15%. Regarding the aerial transportation in 2000, the number of aerial passengers is anticipated 100 million and the volume

of aerial cargo is anticipated 2 million tons.

Shanghai City is the center of Chinese aerial transportation. In 1995 the number of aerial passengers traveling to and from Shanghai is 11.08 million (the third biggest in China) and the volume of aerial cargo is 0.37 million tons (the second biggest in China). In recent years, Pudong New District where Pudong International Airport is located has shown remarkable economic growth. In 2005 the number of aerial passengers through Shanghai is forecasted to reach 33 million and the volume of aerial cargo will be 1.2 million tons.

The current Hongqiao International Airport can no more expand its handling capacity nor expand airfield.

The project is to construct a new international airport in Pudong New District of Shanghai City in order to meet the increasing demand of international and domestic aerial transportation.

The loan is to be used for the procurement of machinery and equipment related to the project.

The Feasibility Study (F/S) of this project was carried out by JICA (Japan International Cooperation Agency).

The executing agency is Shanghai Municipal People's Government, Shanghai Pudong International Airport Construction Headquarters (Address: 100 Weiyi Road, Jiangzhen, Pudong New Area, Shanghai, China, P.O.Code 201202 / Tel: \*86-21-58378622 / FAX:\*86-21-58379661 )

#### (8) Huanghua Port Construction Project

The Shenfu-Dongsheng coal mine (Shanxi Province) produces high-quality and low sulfur coal which has large demand in the coastal area.

There are two railway lines of "Shenmu-Baotou-Datong-Qinhuangdao line" and "Shenmu-Shuoxian-Datong-Qinhuangdao line" to transport Shenfu-Dongsheng coal to the handling ports at present. However, it is anticipated that the coal handling demand for these two lines and also coal handling ports will exceed the handling capacity. The Shuoxian-Huanghua Railway, which is also using the OECF loan has been already started to construct. The Huanghua Port is the handling port which receives the Shenfu-Dongsheng coal transported by the Shuoxian-Huanghua Railway. The project is to construct an exclusive port with coal handling capacity of 30 million tons per year at Huanghua city in Hebei Province in order to smooth coal transfer to the south coastal area.

The loan is to be used for the procurement of coal handling equipment and materials such as cement, steel, timber, etc. related to the project.

The executing agency is Shenhua Group Corporation (Address: 26 Beiwalu, Beijing, China, P.O.Code 100081 / Tel: \*86-10-68484957 / FAX: \*86-10-68483928).

#### (9) Shaanxi Hancheng No.2 Thermal Power Plant Construction Project

China has developed electric power supply of more than 100 million kw for the last decade to promote the high economic growth. In 1994 the total installed capacity of power supply reached 197 million kw and the total electricity of 928.1 billion kwh was produced. The increasing demand for electricity, however, has not been met and 120 million people in rural areas live in the condition without electricity.

Shaanxi Province is abundant in coal and it is estimated that the amount of coal deposit in Hancheng City is 12.05 billion tons. Region around Hancheng City, called "Black Belt," is one of the important areas in Shaanxi for its mining of coal.

Shaanxi Province owns approximately 40% of the total power generating capacity of the Northwest Power Grid, which is the seventh largest power grid, and stands at the center of the Grid since Shaanxi Province is the center of the economy of the northwest China and abundant in energy resources.

Shaanxi Province is constantly suffering from the shortage of electricity because the development of electric sources in the province is still insufficient in spite of its ample resources.

This project is to construct a thermal power plant with the capacity of 600MW $\times$ 2 in Hancheng City of Shaanxi Province in order to meet the increasing demand of electric power in Shaanxi Province and the Northwest Power Grid.

The loan is to be used for the procurement of boilers, turbines, generators and so on.

The executing agency is The Ministry of Electric Power of the P.R.C. (Address: 137 Fuyou Street, Beijing, China, P.O.Code 100031 / Tel: \*86-10-6054131 / FAX: \*86-10-6016077).

#### (10) Shanxi Wangqu Thermal Power Plant Construction Project

While many coal mines in China are located in the northern and central regions, its consuming areas exist mainly in the eastern and southern coastal regions. Because of the limited transportation capacity from the interior regions to the coastal regions, it is getting more important to construct power plants with larger capacity adjacent to mines together with high voltage transmission lines in order to strengthen supply capacity of electricity in an environmental friendly way.

Shanxi Province owns the most coals in China and supplies about 80% of coals for industrial use in the whole China and also exports electricity to Beijing and Tianjin, and to Shandong Province in particular where the shortage of electricity is crucial.

The project is to construct a thermal power plant with the capacity of 600MW $\times$ 2 in Lucheng City of Shanxi Province in order to supply electric power to Shandong Province and accelerate the economic development in both Shandong Province and Shanxi Province.

The loan is to be used for the procurement of boilers, turbines, generators and so on.

The executing agency is The Ministry of Electric Power of the P.R.C. (Address: 137 Fuyou Street, Beijing, China, P.O.Code 100031 / Tel: \*86-10-6054131 / FAX: \*86-10-6016077).

#### (11) Benxi Environmental Improvement Project

Benxi is an industrialized city located in south-east mountainous part of Liaoning Province and plays an important role in material production in China.

Because Benxi is surrounded by mountains and has limited space, the residential area and many large factories such as steel plants, cement plants, etc. are located close to each other. Besides, in recent years economy in Benxi has grown rapidly and the population has increased continuously. Combined with these factors, the air and water in Benxi are heavily polluted.

This project is to construct gas, heat and electricity and water supply facilities and to furnish factories with pollution control equipment, in order to improve the environment in Benxi.

The loan is to be used for facilities of gas, heat and electricity and water supply, pollution control equipment in factories and environmental monitoring equipment.

The executing agency is Benxi Municipal People's Government (Address : 57 Jiefang North Road, Mingshan District, Benxi, Liaoning, China, P.O.Code 117000 / Tel: \*86-414-3891200 / Fax: \*86-414-3860288).

#### (12) Huai River Henan Water Pollution Control Project

Huai River, with total length of 1,000 km, is located midway between Yellow River and Yangze River, running through Henan, Anhui, Jiangsu and Shandong Provinces. While the basin, including important agricultural areas and industrial areas, has been developed rapidly, the water has been more and more polluted by increasing sewage. Since Henan Province is on the most upper reaches of Huai River, water pollution of the river in Henan Province would also have adverse effects on other three provinces of the lower reaches.

The project is to construct sewage treatment plants and sewage pipeline networks in the major cities on the basin and to install waste water treatment equipment in the plants discharging pollutants above the environmental standards in order to improve the water quality and reduce the pollution of Huai River in Henan Province. The loan is to be used for the procurement of machinery and equipment needed for the construction of sewerage and factory waste water treatment plants.

The executing agency is Henan Provincial People's Government (Address: 1 Shunhe Road, Zhengzhou, Henan, China, P.O.Code 450004 / Tel: \*86-371-6322701 / FAX: \*86-371-6320521).

#### (13) Xiang River Basin Hunan Environmental Improvement Project

Xiang River, with total length of 865 km, originates from Guangxi and flows into Yangze River, which is the biggest river in China. The basin of the river includes paddy fields suitable for raising two crops of rice yearly and industrial areas which are famous for their nonferrous metals and building materials. On the other hand, Xiang River has been more and more polluted by increasing sewage from these areas and contamination of drinking water has been getting crucial. Therefore, it is necessary to construct sewerage and implement countermeasures against pollution caused by industrial waste water in the major cities on the river.

Air pollution in this area is also serious. In 1995, the frequency of acid rain reached 100% in Changsha City, the capital city of Hunan Province. Further, sanitary disposal facilities for garbage are not sufficient while garbage is increasing. Therefore it is indispensable to carry out such projects as expansion of city gas facilities and construction of garbage disposal plants.

The project is to construct sewage treatment plants and sewage pipeline networks in the major cities on the river in order to reduce pollution load. Also this project is to expand city gas supply in order to prevent air pollution and mitigate the effect of acid rain in the basin. Moreover garbage disposal facilities are to be constructed in order to prevent pollution caused by penetration of water from the garbage in the cities on the river basin.

The loan is to be used for the procurement of machinery and equipment needed for the construction of sewerage, waste water treatment plants, garbage disposal plants and so on.

The executing agency is Hunan Provincial People's Government (Address: 69 Wuyizhong Road, Changsha, Hunan, China, P.O.Code 410011 / Tel: \*86-731-2214177 / FAX: \*86-731-4439890).

#### (14) Dalian Water Supply System Rehabilitation Project

The water demand in China has been increasing and exceeded the water supply capacity because of the improvement of standard of living and the acceleration of economic development.

In Dalian city of Liaoning Province, more than a hundred years have already elapsed since the start of the water supply service in 1879, which causes various problems, i.e., water leaks from the corroded pipeline; water transmission ability declines by the rusted pipeline; old-fashioned pumps consume energy ineffectively; the water treatment facilities located in the central city cause noise pollution.

Dalian City has a special economic development zone established as a result of the open-door policy by the central government, and the municipal government is aiming to develop the whole city as a coastal open city, following the lead of the economic zone.

Thus the water demand in 2000 is supposed to exceed 150 thousand m<sup>3</sup>/day, therefore it is urgent to rehabilitate the water supply system and expand the water supply capacity for providing the stable water supply in Dalian City.

The project is to construct pumping stations, water transmission facilities, water treatment plants in Dalian City in order to increase the water supply capacity.

The loan is to be used for the procurement of steel pipes, pumps and so on.

The executing agency is The Ministry of Construction of the P.R.C. (Address: Bai Wan Zhuang, Beijing, China, P.O.Code 100835 / Tel: \*86-10-68393281 / FAX: \*86-10-68393303).

\*\*SAPROF (Special Assistance for Project Formation) Development projects must be studied from various viewpoints, which require expertise in different fields. However, owing to a lack of financial, technical or other resources, project planning cannot always be carried out by the developing countries themselves, even for very important projects. In such case, when a country requests or indicates the intention to request an ODA loan, OECF can carry out a supplementary "SAPROF" study, in this way assisting the developing country to prepare the project. ( back )