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Report No. P-5215-CHA

**MEMORANDUM AND RECOMMENDATION**  
**OF THE**  
**PRESIDENT OF THE**  
**INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT**  
**TO THE**  
**EXECUTIVE DIRECTORS**  
**ON A**  
**PROPOSED LOAN**  
**IN AN AMOUNT EQUIVALENT TO \$82.7 MILLION**  
**TO THE**  
**PEOPLE'S REPUBLIC OF CHINA**  
**FOR A**  
**REGIONAL CEMENT INDUSTRY PROJECT**

**FEBRUARY 18, 1992**

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**CURRENCY EQUIVALENTS**

(As of December 31, 1991)

Currency Unit = Yuan (Y)  
1 Yuan = 100 Fen  
\$1.00 = Y 5.36  
Y 1.00 = \$0.187

**WEIGHTS AND MEASURES**

1 metric ton (ton) = 1,000 kilograms (kg)  
= 2,204 pounds

**ABBREVIATIONS AND ACRONYMS**

APG - Anhui Provincial Government  
ATCC - Anhui Tongling Cement Company  
GOC - Government of China  
ICBC - Industrial and Commercial Bank of China  
NBMG - Ningbo Municipal Government  
NCC - Ningbo Cement Company  
NJMG - Nanjing Municipal Government  
SABMI - State Administration of Building Materials Industry  
SER - Shanghai Economic Region  
tpy - tons per year  
ZCC - Zhongguo Cement Company

**FISCAL YEAR**

January 1 - December 31

CHINAREGIONAL CEMENT INDUSTRY PROJECTLoan and Project Summary

**Borrower:** People's Republic of China

**Beneficiaries:** Anhui Tongling Cement Company (ATCC, Anhui Province); Ningbo Cement Company (NCC, Ningbo Municipality); Zhongguo Cement Company (ZCC, Nanjing Municipality); State Administration of Building Materials Industry (SABMI)

**Amount:** \$82.7 million equivalent

**Terms:** 20-year repayment, including five years of grace, at the Bank's standard variable interest rate

**Onlending Terms:** The Government would onlend \$79.1 million equivalent of the loan proceeds through the governments of Anhui Province, Ningbo Municipality, and Nanjing Municipality (APG, NBMG, and NJMG) to the three project companies, at an onlending rate equal to 110 percent of the IBRD variable loan rate, with a repayment period of 15 years, including five years of grace. The commitment charge and foreign exchange risk would be passed on to the companies. The remaining loan amount of \$3.6 million equivalent would be made available, through SABMI, to four cement industry research and design institutes, on terms and conditions satisfactory to the Bank.

**Financing Plan:**

	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
	-----	\$ million	-----
IBRD loan	-	82.7	82.7
Equity provision by five investment companies	59.7	-	59.7
Internal funds	13.7	-	13.7
Nanjing Provincial Government	13.2	-	13.2
China Petrochemical Corporation	7.5	-	7.5
Loans from two investment companies	60.9	-	60.9
ICBC loans	27.4	-	27.4
<b><u>Total</u></b>	<b><u>182.4</u></b>	<b><u>82.7</u></b>	<b><u>265.1</u></b>

**Economic Rate of Return:**

18%

**Staff Appraisal Report:**

Report No. 8260-CHA

**Map:**

IBRD 21152A

MEMORANDUM AND RECOMMENDATION OF THE PRESIDENT  
OF THE INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT  
TO THE EXECUTIVE DIRECTORS ON A PROPOSED LOAN  
TO THE PEOPLE'S REPUBLIC OF CHINA  
FOR A REGIONAL CEMENT INDUSTRY PROJECT

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1. I submit for your approval the following memorandum and recommendation on a proposed loan to the People's Republic of China for the equivalent of \$82.7 million to help finance a Regional Cement Industry Project. The loan would be at the Bank's standard variable interest rate, with a maturity of 20 years, including five years of grace. The Government would onlend \$79.1 million equivalent of the loan proceeds through the governments of Anhui Province, Ningbo Municipality and Nanjing Municipality to the three project companies at an interest rate equal to 110 percent of the Bank variable rate, with a repayment period of 15 years, including five years of grace. The commitment charge and foreign exchange risk on the on-lent proceeds would be borne by the project companies. The balance of the loan proceeds (\$3.6 million equivalent) would be made available to four cement industry research and design institutes, and the State Administration of Building Materials Industry (SABMI), on terms and conditions satisfactory to the Bank.

2. Background. China is the world's largest consumer and producer of cement. During 1970-90, China's cement consumption grew from 25 million tons to 204 million tons, an average annual growth rate of 11.3 percent. During the same period, China's cement production increased from 26 million tons to 210 million tons, against an annual average increase of 11.1 percent. Under the Chinese Government's conservative assumption that future consumption will grow at 3.9 percent per annum, cement consumption would reach about 320 million tons by the year 2000.<sup>1/</sup> During the past decade, the demand for high-grade cement has increased dramatically as China's construction industry shifted toward more sophisticated urban and industrial buildings. As a consequence, China experienced chronic shortages of high-grade cement, except in 1990 when the ongoing three-year economic austerity program resulted in major cutbacks in capital construction. As the suspended construction work is now being resumed and economic activity is returning to normal, the demand for high-grade cement has been growing stronger again in recent months.

3. China is expected to continue facing difficulties in meeting the growing demand for high-grade cement because of several supply constraints. They include: (i) the predominance of medium- and low-grade cement production, which accounts for over 90 percent of total production; (ii) the proliferation of small-scale, inefficient cement plants, which cannot be economically converted to high-grade cement production, and the lack of investment coordination across local jurisdictions; (iii) inadequate design capabilities and the inability of the cement equipment manufacturing industry to produce high-grade cement manufacturing equipment; and (iv) the system of cement price

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<sup>1/</sup> The assumed low growth rate of consumption is based on slower projected economic growth, improvements in product quality, and technology improvements in cement application.

controls, particularly for high-grade products,<sup>2/</sup> which has depressed the financial returns for large-scale plants and reduced the incentives for such investments. Shortages of high-grade cement are expected to be particularly acute in the Shanghai Economic Region (SER),<sup>3/</sup> where industrialization and urbanization have been progressing at a much faster pace than in the rest of China.

4. Lessons Learned from Previous Bank Operations. Since 1982, the Bank has been active in China's industrial sector through some 14 lending operations. These include DFC operations, the fertilizer industry, machine tools, the pharmaceutical sector, light industry development, and development of China's dynamic non-state enterprises. The implementation record generally has been satisfactory, in particular with regard to the physical components, although implementation of some projects was affected by economic austerity measures initiated after 1989. More important has been the Chinese authorities' resolve at improved efficiency in the industrial sector via the adoption of substantial sector reforms. This, concomitant with the pursuit of more market-oriented macroeconomic reform policies, has led to an enhanced emphasis in Bank operations on enterprise reform and subsector-wide restructuring, rationalization of sector development strategies, trade reform, structured technology policies, and creation of an environment conducive for sound financial sector development. The status of the ongoing policy dialogue with the Chinese authorities on enterprise reform is reflected in the design of this proposed project where, among other significant features, two of the three beneficiary enterprises have been officially designated as pilot enterprises for experimentation with the "joint stock" company system, one of the most important elements of the current phase of enterprise reform.

5. Rationale for Bank Involvement. The Bank's main role in the cement industry in China is to support implementation of the Government's strategy for the sector. Its overall strategy during the Seventh and Eighth Five-Year Plans (1986-95) is considered sound and centers on: (i) building large-scale plants which will produce high-grade and special cement, using up-to-date technologies; (ii) modernizing existing medium-scale cement plants via the modern dry process to upgrade their products and improve production efficiency; (iii) gradually transforming the technical capacity of selected small plants; (iv) phasing out most mini plants with capacities below 20,000 tons per year; (v) improving cooperation across jurisdictions to achieve scale economies in production; (vi) improving the capabilities for research, design, and manufacturing of cement-related equipment, processes, and facilities; and (vii) experimenting with further price liberalization of cement. The Bank has already helped the Government in identifying the major issues and constraints

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<sup>2/</sup> In 1989/90, about 74 percent of high-grade cement was sold at controlled prices under the state allocation plan.

<sup>3/</sup> The Shanghai Economic Region consists of Shanghai Municipality and the Provinces of Anhui, Jiangsu, Zhejiang, Fujian, and Jiangxi. The Region accounted for 25 percent of the country's total cement consumption in 1987.

in implementing this strategy for the sector through two studies 4/ carried out at GOC's request in 1984-85. Further Bank assistance is aimed at providing financial and technical resources to implement key aspects of this strategy. The project would provide a model for the design and construction of large-scale plants based on cross-provincial/municipal cooperation and would introduce for the first time in China a system for bulk transport of cement by river. It would also provide a model for upgrading medium-scale manufacturing facilities as well as support for key subsector design and research institutes. In addition, a study to be carried out under the project would investigate possible measures to optimize small cement plants.

6. The project would also be used as a vehicle to help GOC experiment with the "joint stock" ownership system for major Government-sponsored investments, an important step in the GOC's enterprise reform program. Under the ongoing economic reforms, specific enterprise reform measures undertaken by the Chinese government to improve the efficiency of enterprises include a system of contract management responsibility, wage incentives for workers, and higher profit retention by enterprises. While these measures have enabled the state-owned enterprises to expand their scope for making operation-related decisions, their management autonomy is still constrained, largely due to various regulations and interventions by supervisory government agencies, which in turn provide disincentives for these enterprises to improve their efficiency. Main topics on the agenda for further enterprise reforms being considered by the Government include, inter alia, alternative forms of enterprise ownership, and the introduction and implementation of company and bankruptcy legislation. In particular, the Chinese government has been actively investigating theoretical and practical issues relating to adapting a shareholding system to the state enterprises in recent years, and is launching controlled "joint stock" experiments at selected locations. Two of the project companies have been designated officially by the State Reform Commission as pilot enterprises for experimenting with main features of the "joint stock system" for state enterprises, which include a structure of ownership shared by state and local investment companies, establishment of board of directors for major corporate decisions, and sharing of profits in the form of dividends. The project companies would experiment with additional features of the joint stock system, such as issuance and trading of shares to institutional and individual investors in the organized stock exchange, when such activity becomes legally and practically feasible. This approach would, as a result of a more rational capital and management structure, serve to promote greater enterprise autonomy and accountability, and serve as a model for broader application.

7. Project Objectives. Specifically, the project would support the Chinese cement industry through: (i) implementation of a regional cement production and distribution scheme that would include state-of-the-art large-scale cement production facilities, together with the first integrated cross-provincial bulk shipping and distribution network in China; (ii) model rehabilitation of a medium-size plant, designed to improve energy efficiency and product quality; (iii) strengthening of the capabilities of four major cement

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4/ The Regional Cement Sector Study (white cover) and the Cement Machinery Sector Study (Report No. 6551-CHA).

industry institutes for plant design and related research; (iv) a study to examine measures to improve operational efficiency, product quality and pollution control in small plants; and (v) promotion of reform of the cement pricing system through the sale of the entire output of project facilities at market prices.

8. Project Description. The project would consist of three components. (i) The Tongling cement production and distribution component would involve installation of a cement plant with a clinker capacity of 1.2 million tons per year (tpy), a cement grinding capacity to produce 690,000 tpy of high-grade cement at Tongling (Anhui), and a 600,000 tpy clinker grinding capacity (equivalent to 690,000 tpy of cement) at Ningbo (Zhejiang). The river bulk cement transport system, which would include a bulk cement and clinker loading terminal at Tongling and a clinker receiving terminal at Ningbo, both of which would be carried out under the project, would also comprise two bulk cement receiving terminals at Nantong (Jiangsu) and Wenzhou (Zhejiang), respectively, and required bulk carriers to complement the distribution network for Tongling's output. (ii) The Zhongguo cement plant rehabilitation component would support the first phase of rehabilitation of a medium-scale cement plant at Nanjing (Jiangsu), to replace two outdated wet-process production lines by a 640,000 tpy modern dry-process line, to improve production efficiency and product quality. (iii) The technical assistance component would consist of financial and technical support for four national cement industry research and design institutes, and a study to improve the efficiency and pollution control of small-scale cement plants.

9. Project Implementation. The proposed project would be carried out by the beneficiary companies--Anhui Tongling Cement Company (ATCC), Ningbo Cement Company (NCC), and Zhongguo Cement Company (ZCC)--and SABMI. The project cost is estimated at \$244.9 million equivalent, with a foreign exchange component of \$74.0 million (30.2 percent). Imported equipment and materials would be exempt from duties. The total financing required, including interest during construction, is \$265.1 million, of which the Bank would finance \$82.7 million equivalent (100 percent of the foreign exchange and 31.2 percent of the total). To avoid delays in project implementation, the Bank loan would retroactively finance up to \$500,000 of eligible expenditures for international travel for technical surveys incurred between October 31, 1991 and the date of loan signing. A breakdown of costs and the financing plan are shown in Schedule A. Amounts and methods of procurement and of disbursements, and the disbursement schedule are shown in Schedule B. A timetable of key project processing events and the status of Bank Group operations in China are given in Schedules C and D, respectively. A map of China's large and medium cement plants is also attached. The Staff Appraisal Report, No. 8260-CHA, dated February 11, 1992, is being distributed separately.

10. Project Sustainability. The technical design of the project emphasizes scale optimization for the modern large scale plants, and maximum operating efficiency for the smaller plants. Detailed demand analysis and projections as well as confirmed marketing arrangements indicate that the cement produced under the project will be easily absorbed by the marketplace. The promotion of expanded free market based pricing arrangements is a key element, and will further assure the financial viability of the beneficiary enterprises. Under the project, large discretionary powers and autonomy are con-

ferred to enterprise management. The project thus includes a technical assistance and training component in support of this objective. Particular attention has been paid during project preparation to assure environmental sustainability of the project investments.

11. Agreed Actions. The Government has agreed to the following major actions: (i) allow the output of project facilities to be marketed directly by the project companies (ATCC, NCC, and ZCC), based on free market pricing; (ii) ensure that the construction of the two bulk cement receiving terminals at Nantong and Wenzhou and the necessary clinker and bulk carriers, is completed by December 31, 1994; and (iii) maintain a Project Coordination Group during project implementation. The three project companies have agreed to take a set of project-related actions, the more important of which are to: (a) build and operate the project plants with due regard for safety, ecological and environmental factors and in accordance with environmental standards satisfactory to the Bank; (b) maintain long-term debt to equity ratios of 75:25 or better; (c) maintain current ratios of at least 1.2; (d) maintain debt service coverage ratios of at least 1.2; and (e) inform the Bank promptly of any changes in their charters, joint venture agreement, or management structure (ATCC and NCC only). The conditions of loan effectiveness are: (i) signing of contracts for the sale and transport of ATCC's output; and (ii) signing of subsidiary loan agreements between GOC and the Anhui Provincial Government (APG), GOC and Ningbo Municipal Government (NBMG), GOC and Nanjing Municipal Government (NJMG), APG and ATCC, NBMG and NCC, and NJMG and ZCC on terms and conditions satisfactory to the Bank.

12. Environmental Aspects. The significant environmental impacts of the proposed cement plants stem mainly from: (i) the limestone quarries; (ii) construction; and (iii) the operation of the plants. The project addresses comprehensively issues of occupational and environmental safety in the design, location, construction, and operations of the proposed cement plants. Appropriate environmental protection measures for dust, air quality, flue gas emissions and water pollution have been incorporated for each project component. The project will include training of local staff in modern environmental protection skills to ensure the quality of future environmental management. The beneficiaries have agreed to institute environmental management and monitoring programs with standards satisfactory to the Bank. In addition to the environmental issues outlined in the EAs and SAR documentation, such programs will cover, inter alia: ground-water resource management at the quarries; waste water monitoring; health monitoring; and agricultural soils monitoring. The Environmental Assessment Summary, dated January 27, 1992, has been distributed separately.

13. Project Benefits. The quantifiable benefits of the project derive from: (i) the high-grade cement production from the new facilities to be established (the Tongling component); (ii) increased high-grade cement production from the capacity expansion of an existing operation (the Zhongguo component); and (iii) improved economic efficiency of production through the rehabilitation of inefficient facilities (the Zhongguo component). The economic rate of return for the two investment components is estimated at 18 percent. In addition, these components would serve as models for optimizing future subsector investments and promoting interregional cooperation and market integration. The "joint stock" system, apart from the economy-wide benefit

expected in the longer term, would also provide a good example of mobilizing resources across administrative boundaries to support large, optimal investments. Application of strict environmental standards for the new large plants, and environmental improvements for the existing Zhongguo plants, would also be a model for similar investments. The economic benefits from the technical assistance component, although unquantifiable, would be large and would affect the entire sector.

14. Risks. Given the chronic and projected deficit of high-grade cement in the SER and elsewhere in China, shortfalls in future projected demand for project output are not perceived as a risk, even with the current cutbacks in capital construction resulting from the Government's ongoing austerity program. The main technical risk for the Tongling component is the need for cross-provincial coordination of plant construction and operations, and the transport of the project output after start-up. This risk has been minimized by contracts designed to ensure timely installation of production and related facilities, the market diversification of output to several cities, and flexibility at the bulk-handling facilities of the receiving terminals. Further, a delay in the construction of any one bulk cement terminal could be absorbed by consumers within Anhui Province where the cement plant will be located. Another technical risk for both the Tongling and Zhongguo components is the lack of Chinese experience with the plant design associated with these investments. This risk would be reduced by the design of procurement packages, where the contractor will be responsible for process and detailed design, supply of equipment, supervision of erection and overall performance warranties for equipment and process performance.

15. Recommendation. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Bank and recommend that the Executive Directors approve the proposed loan.

Lewis T. Preston  
President

Attachments

Washington, D.C.  
February 18, 1992

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CHINAREGIONAL CEMENT INDUSTRY PROJECTEstimated Costs and Financing Plan  
(\$ million)

	Local	Foreign	Total
<u>Estimated Costs /a /b</u>			
Tongling (ATCC)	88.8	34.3	123.1
Tongling (NCC)	11.1	6.0	17.1
Zhongguo (ZCC)	37.7	17.8	55.5
Technical assistance	0.9	3.0	3.9
Incremental working capital	7.3	-	7.3
<u>Base Cost (06/91)</u>	<u>145.8</u>	<u>61.1</u>	<u>206.9</u>
Physical contingencies	13.0	6.1	19.2
Price contingencies	12.1	6.8	18.9
<u>Total Project Cost /c</u>	<u>170.9</u>	<u>74.0</u>	<u>244.9</u>
Interest during construction	<u>11.5</u>	<u>8.7</u>	<u>20.2</u>
<u>Total Financing Required</u>	<u>182.4</u>	<u>82.7</u>	<u>265.1</u>
<u>Financing Plan</u>			
<u>Equity:</u>			
Anhui Provincial Construction Investment Co.	28.0	-	28.0
State Raw Materials Investment Company	18.9	-	18.9
Tongling City Investment Company	7.4	-	7.4
Ningbo Investment Company	3.8	-	3.8
Beilun District Investment Company	1.7	-	1.7
Nanjing Municipal Government	13.2	-	13.2
China Petrochemical Corporation	7.5	-	7.5
Internal funds	13.7	-	13.7
<u>Loans:</u>			
IBRD	-	82.7	82.7
Anhui Provincial Construction Investment Co.	40.8	-	40.8
State Raw Materials Investment Company	20.1	-	20.1
Industrial & Commercial Bank of China	27.3	-	27.3
<u>Total</u>	<u>182.4</u>	<u>82.7</u>	<u>265.1</u>

/a Including applicable sales taxes on locally manufactured machinery and equipment.

/b The project is exempt from import duties.

/c Assumes a Bank lending rate of 7.73 percent.

CHINA

REGIONAL CEMENT INDUSTRY PROJECT

Procurement Method and Disbursements  
(\$ million)

Procurement Method /a

Project Element	ICB	Other	Total costs
Equipment/materials	68.8 (68.8)	51.0 (3.2)	119.8 (72.0)
Technical services		23.5 (0.6)	23.5 (0.6)
Land, civil works		92.3 (-)	92.3 (-)
Training		2.0 (1.4)	2.0 (1.4)
Other /b		27.5 (8.7)	27.5 (8.7)
<u>Total financing</u>	<u>68.8</u> (68.8)	<u>196.3</u> (13.9)	<u>265.1</u> (82.7)

Disbursements

<u>Category</u>	<u>% to be financed</u>	
Equipment/materials	72.0	100% of foreign expenditures, 100% of local expenditures (ex-factory), and 75% of local expenditures for other items procured locally
Technical services	0.6	100%
Training	1.4	100%
Others /c	8.7	
<u>Total</u>	<u>82.7</u>	

Estimated Disbursement

IBRD Fiscal Year	1992	1993	1994	1995	1996
Annual	0.5/c	10.8	46.9	19.5	5.0
Cumulative	0.5	11.3	58.2	77.7	82.7

/a Figures in parentheses are the respective amounts to be financed by the Bank loan.

/b Including incremental working capital and interest during construction.

/c Interest during construction on the Bank loan.

CHINA

REGIONAL CEMENT INDUSTRY PROJECT

Timetable of Key Project Processing Events

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- (a) Time taken to prepare: 7 years
- (b) Prepared by: Government with Bank assistance
- (c) First Bank mission: June 1985
- (d) Appraisal mission departs: October 1989
- (e) Negotiations: January 1992
- (f) Planned date of effectiveness: June 1992
- (g) List of relevant PCRs and PPARs:

<u>Loan/Credit No.</u>	<u>Project</u>	<u>PCR Date</u>	<u>PPAR No.</u>
2226/1313-CHA	China Investment Bank	June 21, 1990	
2434/1491-CHA	China Investment Bank II	May 21, 1991	9945
2659/1594-CHA	China Investment Bank III	May 21, 1991	9945

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STATUS OF BANK GROUP OPERATIONS IN THE PEOPLE'S REPUBLIC OF CHINA

A. STATEMENT OF BANK LOANS AND IDA CREDITS  
(As of December 31, 1991)

Loan/ Credit Number	FY	Bor- rower	Purpose	Amount (US\$ million) (net of cancellations)		
				Bank	IDA	Undiab. (a)
Fourteen loans and seventeen credits have been fully disbursed.				1320.94	983.9	-
Of which SECAL:						
2967/1932	88	PRC	Rural Sector Adj.	200.0	100.0	-
1411	84	PRC	Polytechnic/TV University	-	85.0	16.3
2382	84	PRC	Lubuge Hydroelectric	141.4	-	1.0
1472	84	PRC	Rural Health & Medical Educ.	-	85.0	2.2
2644/1500	84	PRC	Agricultural Education II	45.3	(23.5)(b)	3.3
1516	85	PRC	Agricultural Research II	-	25.0	1.1
1551	85	PRC	University Development II	-	145.0	12.0
2493	85	PRC	Power II	117.0	-	7.4
2501	85	PRC	Changcun (Luan) Coal Mining	79.5	-	41.0
1578	85	PRC	Rural Water Supply	-	80.0	0.0
2540	85	PRC	Railway II	220.0	-	74.1
1605	85	PRC	Forestry Development	-	47.3	7.1
2579/1606	85	PRC	PiShiNang-Chaohu Area Dev.	17.0	(75.0)(b)	0.8
2580	85	PRC	Wei yuan Gas Field Technical Assistance	25.0	-	4.5
1664	86	PRC	Technical Cooperation Credit II	-	20.0	15.3
1671	86	PRC	Provincial Universities	-	120.0	11.5
2678/1680	86	PRC	Third Railway	160.0	70.0	109.5
2689	86	PRC	Tianjin Port	130.0	-	53.4
1689	86	PRC	Freshwater Fisheries	-	60.6	1.8
2706	86	PRC	Beilungang Thermal Power	225.0	-	38.1
2707	86	PRC	Yantan Hydroelectric	52.0	-	14.5
2723/1713	86	PRC	Rural Health & Preventive Med.	15.0	65.0	43.2
1733	87	PRC	Red Soils	-	40.0	0.8
2775	87	PRC	Shuikou Hydroelectric	140.0	-	39.4
2783/1763	87	PRC	Industrial Credit IV (CIB IV)	250.0	50.0	76.6
2784	87	PRC	Shanghai Machine Tools	100.0	-	30.1
1764	87	PRC	Xinjiang Agricultural Dev.	-	70.0	20.4
2794/1779	87	PRC	Shanghai Sewerage	45.0	100.0	94.9
2811/1792	87	PRC	Beijing-Tianjin-Tanggu Expressway	25.0	125.0	55.1
2812/1793	87	PRC	Gansu Provincial Dev.	20.0	150.5	93.4
1835	87	PRC	Planning Support & Special Studies	-	20.7	14.1
2838	87	PRC	Fertilizer Rationalization	97.4	-	17.4
2852	87	PRC	Wujing Thermal Power	190.0	-	60.4
1871	88	PRC	Rural Credit III	-	170.0	15.3
2877/1845	88	PRC	Huangpu Port	63.0	25.0	66.4
2907/1875	88	PRC	Dalian Port	71.0	25.0	40.3
1885	88	PRC	Northern Irrigation	-	103.0	49.3
2924/1887	88	PRC	Coastal Lands Dev.	40.0	(60.0)(b)	24.1
1908	88	PRC	Teacher Training	-	50.0	11.0
2943	88	PRC	Pharmaceuticals	127.0	-	29.1
2951/1917	88	PRC	Sichuan Highway	75.0	50.0	90.6
2952	88	PRC	Shaanxi Highway	50.0	-	16.7
1918	88	PRC	Daxing An Ling Forestry	-	56.9	23.3
2955	88	PRC	Beilungang II	165.0	-	43.4
2958	88	PRC	Phosphate Dev.	62.7	-	58.8
2968	88	PRC	Railway IV	200.0	-	102.8
1984	89	PRC	Jiangxi Provincial Highway	-	61.0	41.0
1997	89	PRC	Shaanxi Agricultural Dev.	-	106.0	87.5
2006	89	PRC	Textbook Development	-	57.0	4.2
2009	89	PRC	Integrated Reg. Health	-	52.0	43.7
3006	89	PRC	Ningbo & Shanghai Ports	76.4	-	29.1

Loan/ Credit Number	FY	Bor- rower	Purpose	Amount (US\$ million) (net of cancellations)		
				Bank	IDA	Undisb. (a)
3007	89	PRC	Xiamen Port	36.0	-	29.9
3022	89	PRC	Tianjin Light Industry	154.0	-	121.1
3060/2014	89	PRC	Inner Mongolia Railway	70.0	80.0	112.7
2017	89	PRC	Shandong Agriculture Dev.	-	109.0	50.4
3066	89	PRC	Hubei Phosphate	137.0	-	132.5
3073/2025	89	PRC	Shandong Prov. Highway	60.0	50.0	91.1
3075	89	PRC	Fifth Industrial Credit	300.0	-	199.5
2091	90	PRC	N.China Earthquake Reconstr.	-	30.0	3.1
2097	90	PRC	Jiangxi Agric. Dev.	-	60.0	50.7
2114	90	PRC	Vocational & Tech. Educ.	-	50.0	39.1
2145	90	PRC	National Afforestation	-	300.0	270.4
2159	90	PRC	Hebei Agricultural Dev.	-	150.0	118.8
2172	91	PRC	Mid-Yangtze Agricultural Dev.	-	64.0	55.2
3265/2182	91	PRC	Rural Credit IV	75.0	200.0	205.0
3274/2186	91	PRC	Rural Indust Tech (SPARK)	50.0	64.3	111.4
3286/2201	91	PRC	Medium-Sized Cities Dev.	79.4	89.0	154.0
3288	91	PRC	Shanghai Industrial Dev.	150.0	-	148.5
2210	91	PRC	Key Studies Development	-	131.2	122.2
2219	91	PRC	Liaoning Urban Infrastructure	-	77.8	64.2
3316/2226	91	PRC	Jiangsu Provl. Transport	100.0	53.6	136.0
2242	91	PRC	Henan Agricul. Dev.	-	110.0	110.0
3337/2256	91	PRC	Irrig. Agricul. Intensif.	147.1	187.9	305.4
3387	92	PRC	Ertan Hydroelectric	380.0	-	261.7
2294	92	PRC	Tarim Basin (c)	-	125.0	134.1
2296	92	PRC	Shanghai Metro Transport	-	60.0	63.5
3406	92	PRC	Railways V	330.0	-	330.0
3412/2305	92	PRC	Daguangba Multipurpose (c)	30.0	37.0	70.2
2307	92	PRC	Guangdong ADP (c)	-	162.0	174.0
3415/2312	92	PRC	Beijing Environment (c)	45.0	80.0	130.9
2317	92	PRC	Infectious and Endemic Disease Cont.(c)	-	129.6	137.1
Total				6489.1	5498.7	5670.1
of which has been repaid				408.0	0.4	
Total now held by Bank and IDA				6081.2	5498.3	
Amount sold: Of which repaid				-	-	-
Total Undisbursed				3015.1	2654.9	5670.1

(a) As credits are denominated in SDRs (since IDA Replenishment VI), undisbursed SDR credit balances are converted to dollars at the current exchange rate between the dollar and the SDR. In some cases, therefore, the undisbursed balance indicates a dollar amount greater than the original principal credit amount expressed in dollars.

(b) Credit fully disbursed.

(c) Not yet effective.

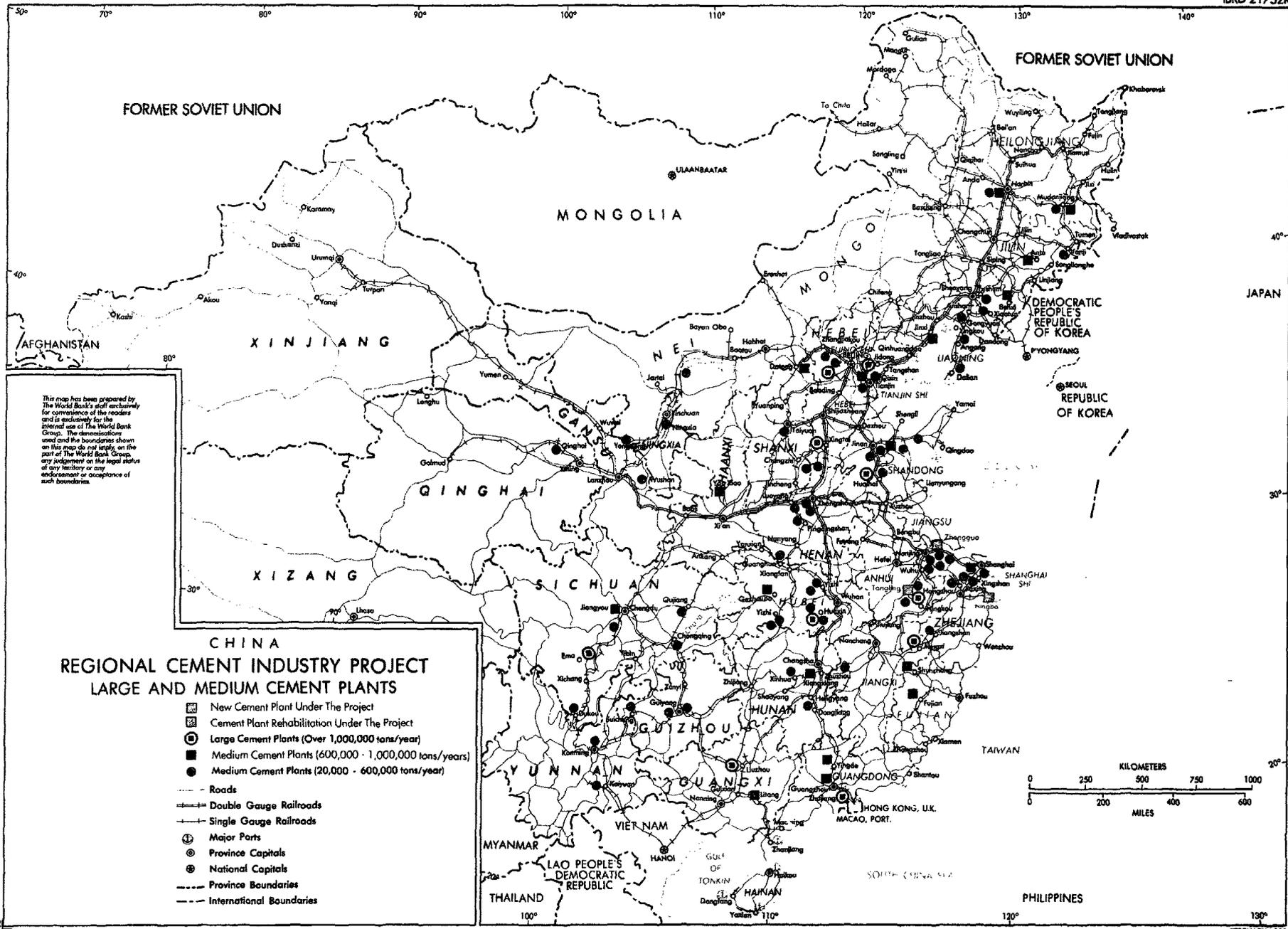
B. STATEMENT OF IFC INVESTMENTS  
(As of December 31, 1991)

Investment No.	FY	Borrower	Type of Business	Loan -----	Equity (US\$ Million)	Total -----
813/2178	85/91	Guangzhou and Peugeot	Automobile	15.0	4.5	19.5
974	87	China Investment Co.	Investment	3.0	0.0	3.0
1020	87	Shenzhen China Bicycles Co. Ltd.	Bicycle Manufacture	5.0	-	5.0
1066	88	Crown Electronics	Electronics	15.0	-	15.0
1119	89	Shenzhen Chronar Solar Energy	Solar (a) Energy	2.0	1.0	3.0
Total Gross Commitments				40.0	5.5	45.5
Less cancellations, terminations repayment and sales				2.0	-	2.0
Total Commitments now Held by IFC				38.0	5.5	43.5
Total Undisbursed				0.0	-	0.0

(a) Loan subsequently cancelled.

01/10/92  
EA2DR/md

**MAP SECTION**



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**CHINA**  
**REGIONAL CEMENT INDUSTRY PROJECT**  
**LARGE AND MEDIUM CEMENT PLANTS**

- New Cement Plant Under The Project
- ◻ Cement Plant Rehabilitation Under The Project
- ⊙ Large Cement Plants (Over 1,000,000 tons/year)
- Medium Cement Plants (600,000 - 1,000,000 tons/years)
- Medium Cement Plants (20,000 - 600,000 tons/year)
- Roads
- ≡≡≡ Double Gauge Railroads
- ≡≡ Single Gauge Railroads
- ⊕ Major Ports
- ⊙ Province Capitals
- ⊙ National Capitals
- Province Boundaries
- - - International Boundaries

