

. Project Data:	Date Posted : 08/12/2002			
PROJ ID	: P003473		Appraisal	Actual
Project Name :	Zhejiang Multicities Development Project	Project Costs (US\$M)	231	250.7
Country:	: China	Loan/Credit (US\$M)	110	103.9
Sector(s):	: Board: WS - General water sanitation and flood protection sec (26%), Roads and highways (26%), Power (25%), Sub-national government administration (19%), General industry and trade sector (4%)	Cofinancing (US\$M)		0
L/C Number:	: C2475			
		Board Approval (FY)		93
Partners involved :		Closing Date	06/30/1999	12/31/2001

Prepared by :	Reviewed by :	Group Manager :	Group:			
Kavita Mathur	Patrick G. Grasso	Alain A. Barbu	OEDST			
2. Project Objectives and Components						

a. Objectives

The overall objective of the Project was to assist the Zhejiang provincial government and four of the largest municipalities (Hangzhou, Ningbo, Wenzhou and Shaoxing) to strengthen planning and delivery of urban services and to support their environmental policies and programs. More specifically, the project sought to:

- improve the provision of urban services, in particular water supply and land development, and to establish the appropriate institutional framework needed to enhance the efficiency of the municipalities in the provision of these services;
- assist in the development of long-term environmental policies, strategies and programs in order to avoid environmental pollution;
- introduce new methods in the design and implementation of land development schemes at the city level that will result in improved land use and transport efficiency, as well as cost recovery from beneficiaries;
- improve public transport and traffic management in Hangzhou;
- upgrade overcrowded and poorly serviced areas in the city center of Ningbo, including the provision of sewage interceptors, wastewater treatment, road improvement and substantial upgrading of living conditions; and
- improve the institutional strength of the municipal authorities overseeing urban service delivery and pollution abatement; and to enhance the management and financial performance of the utilities and enterprises directly responsible for the provision of these services.

b. Components

To support the above objectives, the project included the following components:

Water Supply Improvements (\$127.3 million)

- Hangzhou: New water treatment plant for a capacity of 300,000 m3/day, including intake pumping station, treatment plant, clear water transmission main, 8 km tunnel, booster pumping stations and network improvements.
- Ningbo: Intake pumping stations with a capacity of 250,000 m3/d, transmission mains, booster pumping stations and reinforcements of the water distribution network
- Wenzhou: New treatment plant for a capacity of 70,000 m3/d, including a treatment plant, a 2.7 km tunnel, intake and booster pumping stations and network improvements.

Land Development in Shaoxing (\$47.9 million) – Development of 207 ha of formerly agricultural land into a comprehensive economic and residential urban zone. This component included construction of roads and bridges; water supply, sewerage, and drainage facilities; and provision of electricity, public lighting and telecommunications services.

Urban Environmental Management and Protection (\$6.1 million) - (i) Liquid and Solid Waste Management Study (LSWM) to provide the sectoral underpinning for the proposed Zhejiang Urban Environment Project; (ii) support to the Zhejiang Environment Protection Bureau (ZEPB), including the establishment of an Environmental Information Center; and (iii) preparation of the proposed Zhejiang Urban Environment Project.

Technical Assistance Urban Planning Systems, Institutional development, and Traffic Management in Hangzhou (\$7.5 million)

Basic Urban Services Upgrading in Ningbo (\$37.2 million). This component consisted of upgrading of urban services such as water supply, power, gas, and telephone; sewerage reticulation, primary treatment and night soil disposal; realignment and reconstruction of road works; traffic control and management; and landscaping.

Zhejiang Environmental Fund (\$5.0 million). Establishment of a nonprofit, autonomous fund to provide a sustainable mechanism to finance pollution control measures for small- and medium-sized industrial enterprises. **c. Comments on Project Cost, Financing and Dates**

The actual total project cost at closing was US\$250.7 million compared to the appraisal estimate of US\$231 million. This was largely due to some design changes and expansion of the Ningbo urban upgrading component. The final amount of IDA credit was US\$103.9 and US\$ 5.7 was undisbursed. The four project municipalities provided funding in local currency equivalent of US\$146.8 million, or 58.6 percent of the total project costs. The project closed on December 31, 2001, two and a half years behind schedule.

3. Achievement of Relevant Objectives:

The project achieved most of its major objectives.

- The project improved the provision of water supply in Hangzhou, Wenzhou and Ningbo. Water shortages have been eliminated and the water quality has improved with the construction of modern water treatment plants. The ex-post economic rate of return for water supply is 17% compared to the SAR estimate of 15.6%. The overall ex-post ERR for the project is 21% compared to 19% in the SAR.
- About 207 ha of agricultural land in Shoaxing has been developed with construction of 30 km of roads and 49 bridges. Also, houses for 30,000 people with heating, power and water and sewer connections were constructed.
- Urban infrastructure in Ningbo has been successfully upgraded.
- The capacity of municipal authorities overseeing urban service delivery, water utilities and land development companies was enhanced through technical assistance and training.
- There has been substantial improvement in traffic management in Hangzhou.

The objective to develop long-term environmental policies, strategies and programs in order to avoid environmental pollution was partially achieved. After long delays, Zhejiang Urban Environment Project was prepared. However, the project did not strengthen the capacity of Zhejiang Environmental Protection Bureau and did not establish Environmental Information Center.

4. Significant Outcomes/Impacts:

- The project assisted in development 207 ha of formerly agricultural land in Shoaxing into a comprehensive economic and residential urban zone. The development zone has attracted about 180 industrial projects from more than ten foreign countries with an investment commitment of US\$ 1 billion.
- Elimination of water shortages in Hangzhou, Wenzhou and Ningbo.
- Water supply companies are now financially autonomous and their records are prepared in a systematic and accurate fashion.
- Development of tools for urban planning and management, particularly in the areas of land use, construction management and municipal service administration.
- Highly successful conservation program in Ningbo to preserve historic buildings and monuments.
- Improvements in traffic management in Hangzhou through development of detailed traffic planning and management model for central business district in Hangzhou; improvements in several intersections, and adjustment of signal timing and phasing.

5. Significant Shortcomings (including non-compliance with safeguard policies):

• Inadequate training - some of the project management and construction courses came too late in the project cycle, often after their components had virtually been completed, to fully benefit the targeted staff.

- Significant delays in the preparation of Zhejiang Urban Environment Project.
- There were problems with Zhejiang Environmental Fund (ZEF). The organization and management of ZEF was poor. The selection of subprojects and administrative processes were arbitrary and insufficient.

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Satisfactory	
Institutional Dev .:	Substantial	Substantial	
Sustainability :	Highly Likely	Likely	A "Highly Likely" rating implies minimal risks to the future benefit flows. The ICR notes that tariff increases for water utilities are not automatic, but subject to political pressures. The uncertainty regarding future rate adjustments precludes a higher rating.
Bank Performance :	Satisfactory	Satisfactory	
Borrower Perf .:	Satisfactory	Satisfactory	
Quality of ICR :		Satisfactory	

NOTE: ICR rating values flagged with '*' don't comply with OP/BP 13.55, but are listed for completeness.

7. Lessons of Broad Applicability:

Several important lessons are identified by the ICR. Two are repeated here:

- 1. To get the maximum benefits out of training, timing of the training programs and study tours is critical. Some training, such as courses in project management, construction engineering, or procurement methods, need to come early in the project cycle to be fully effective. Bank needs to provide training in a timely manner.
- 2. The experience from this project shows that cultural preservation of historic buildings can be effectively integrated in urban projects.

The ES adds the following lessons:

- It is important to closely monitor the implementation of the resettlement program through the development of key monitoring indicators.
- The location of new water treatment plant in urban areas should consider the future expansion potential. In Wenzhou, the building of the plant in a downtown location with limited space for expansion may cause constraints on possible future expansion.

8. Assessment Recommended? O Yes No

9. Comments on Quality of ICR:

The quality of ICR is satisfactory. It addresses the relevant issues pertaining to project implementation. The main shortcomings are:

- The ICR omits details for estimating the economic rate of return such as the assumptions used, sensitivity analysis, consideration of environmental externalities, etc..
- The ICR does not provide adequate evidence that the involuntary resettlement carried out under the project complied with the Bank's OD 4.30 policy requirements on involuntary resettlement.