



1. Project Data:		Date Posted : 06/29/2004	
PROJ ID: P006522		Appraisal	Actual
Project Name: Br Esp.santo Water	Project Costs (US\$M)	308	182.9
Country: Brazil	Loan/Credit (US\$M)	154	112.5
Sector(s): Board: WS - Sewerage (67%), Water supply (30%), Sub-national government administration (3%)	Cofinancing (US\$M)		
L/C Number: L3767			
	Board Approval (FY)		94
Partners involved :	Closing Date	12/31/1999	06/30/2003
Prepared by :	Reviewed by :	Group Manager :	Group:
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2. Project Objectives and Components

a. Objectives

The overall objective of the project was to improve the quality of life of about 1.2 million urban residents of the State of Espirito Santo through reduction of the incidence of oral -faecal diseases through improvements in the quality and supply of water for human consumption, and reducing pollution of river, estuarine and coastal waters . Three main objectives were identified:

1. Improving the efficiency of Espirito Santo State Water and Sanitation Company's (CESAN) water supply and sewerage systems through commercialization and financial self -sufficiency;
2. Increasing CESAN's service coverage water supply and sanitation services in the major urban areas of the Santa Maria and Jucu river basins; and
3. Providing water and sanitation services to low income urban areas of Grande Vitoria and Guarapari .

b. Components

Improve efficiency in the delivery of water supply and sanitation services through: (i) supporting CESAN's transition to a financially self-sufficient commercial company and reduced reliance on State support; (ii) improving investment planning, costs analysis and pricing reinforced through a Contract -Plan with the State government; and (iii) promoting CESAN's corporate autonomy and institutional capacity -building. Planned US\$10.1 million, actual US\$6.7 million (66% of planned).

- **Increase CESAN's service coverage and performance** through capital investment in water supply and sanitation and enhancement of the quality of service delivery and improve targeting of State grants for water and sanitation in low-income areas of Grande Vitoria and Guarapari through appropriate technical solutions . Planned US\$236.9 million, actual US\$156.7 million (66% of planned).
- **Restore and protect the quality of water in rivers and coastal waters** through: (i) implementing water quality norms and standards compatible with land use and water development in the State; (ii) developing and consolidating a State-wide water resources management system; (iii) helping the State Secretariat for the Environment (SEAMA) to improve its managerial capacity; (iv) reviewing the adequacy of CESAN's tariff structures and levels to support operation and management of water pollution control facilities; and (v) assisting SEAMA in preparing proposals for the collection and disposal of solid waste . Planned US\$15.9 million, actual US\$3.0 million (19% of planned).
- **Project management and supervision** - Planned US\$5.6 million, actual US\$8.9 million (160% of planned).

c. Comments on Project Cost, Financing and Dates

Total project costs at appraisal were estimated at US\$ 308 million including US\$30.1 contingency costs. Although the loan was approved in October 1994, work did not start until September 1996 and the project completion date was extended by 42 months to June 2003. In December 1999, IBRD cancelled 30% of the loan and restructured the project in line with available counterpart funding . The SEAMA components were cancelled and other physical components scaled-back.

3. Achievement of Relevant Objectives:

Objective 1 was not achieved . Commercialization and financial self-sufficiency of the CESAN was not achieved even through there were some modest efficiency improvements . Based on an analysis of CESAN's finances though 2002, the ICR concludes that "the company is still far away from profitability and self-sufficiency" (the region subsequently indicated that "CESAN returned to profitability in 2003 after 3 years of losses").

Objective 2 was partially achieved . Water supply and sewerage coverage was increased to about half the target levels.

Objective 3 was substantially achieved but on a smaller scale . It was estimated that 60% to 70 % of the beneficiaries from water investments were poor . Furthermore, the project maintained its poverty focus, even though the percentage of poor among CESAN's clients dropped from 57% (appraisal) to 47% (closing date).

4. Significant Outcomes/Impacts:

- There were efficiency improvements in CESAN . The number of employees was reduced from 1,500 pre-project to 1,047 post-project. As a result, efficiency increased from 222 connections per employees to 503, beating the appraisal target of 324, and the ratio of personnel to operating costs declined from 70% to 42%.
- Household metering increased from 69% to 85%.
- There were 59,144 new water connections reaching an estimated 289,000 people.
- Improved water supplies either eliminated or reduced rationing for 98,000 people.
- There were 47,400 new sewerage connections, about 20% remain to be completed by 2005, but when completed they are expected to benefit 320,000 people.
- Water and sewerage tariffs were restructured, increased in real terms 20% and 54% respectively.
- Sewage treatment plants increased their efficiency from 57% to 83% in terms of the reduction in the organic load in discharged wastewater .
- CESAN modernized its auditing practice and computerized accounting and successfully completed an asset revaluation.
- A number of safeguard issues were addressed by the project . All four of the new sewage treatment plants received their initial, installation and operating licenses after meeting State environmental emissions standards . Thus the Bank's Environmental and Natural Habitat Safeguard Policies were satisfied . Mitigation of land acquisition affecting a local artisan pottery community (the *Paneleiras*) and its resources successfully met the Bank's Cultural Heritage Safeguard . Potential Involuntary Resettlement was avoided through careful site selection and design of new works .
- The ICR estimates the economic rate of return to be 25% based on willingness to pay surveys and full completion of proposed project infrastructure .

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

- The project was over-sized compared with State financial resources and counterpart funding did not materialize until 2001 because the state government in power during 1995-99 had very different priorities and poorly managed public finances. This severely undercut the achievement of institutional, environmental, infrastructure and service-provision objectives .
- The Bank approved the State's partnership with EIB to raise US\$ 44 million to assist it in providing counterpart funds. However, as the State failed to meet federal financial liquidity standards, the required Federal Guarantee was not granted and EIB's offer expired in January 1997 .
- CESAN staff were clearly not involved in proposals re concession contracts with municipalities after proposed state sale of its share of the company, and staff opposed privatization even challenging it through the courts .
- The project was too complex and far beyond the proven capability of CESAN to implement .
- CESAN failed to improve its commercial viability because of weak management, failure to fully restructure, and reliance on periodic State bailouts . Specifically:
 - Unaccounted-for-water improved only marginally (from 39% to 36.2%) despite substantial improvements in conveyance systems and metering .
 - Retrofitting existing sewage treatment plants to meet environmental standards was only modestly achieved and only a third (50 of 158) had their operating licenses renewed .
 - CESAN's accounts receivables increased from 109 to 118 days.
 - CESAN's rate of return on assets improved only modestly from -0.1% to +0.7%.
- Capacity-building efforts, institutional reform studies and planning led to negligible improvements in management and planning .
- Environmental planning to strengthen institutions, and monitoring to measure project impacts, was not done . This was due to the ineffectiveness of the State Secretariat for Environment leadership and coordination that led to the cancellation of this component .

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Moderately Satisfactory	[the ICR's 4-point scale does not provide for a "moderately sat." rating]. The text of the ICR also assesses outcome as "moderately sat." . While the physical

			achievements were commensurate with the restructured/reduced project, the key objective to commercialize CESAN and insure its financial self-sufficiency was not achieved.
Institutional Dev .:	Negligible	Negligible	
Sustainability :	Likely	Likely	On balance, based on supplemental information provided by the region regarding recent improvements in CESAN's finances and the recently-elected state government's commitment to reform.
Bank Performance :	Satisfactory	Satisfactory	While some aspects of quality at entry were strong (e.g. technical and economic appraisals), others (e.g. assessment of financial and political risks, and realism of implementation plans) were not. However, after an initially slow response, the Bank took a flexible and proactive approach to supervision and formally restructured the project to respond to a radically changed political environment at the state level. This ensured that some momentum was kept in implementing essential works and helped preserve a useful role for the Bank in the evolving dialogue on sector reform.
Borrower Perf .:	Unsatisfactory	Unsatisfactory	
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:

- Reform of the water and sanitation sector is difficult and requires determination, flexibility and creativity on the part of the Bank, particularly in politically unstable environments. When political changes warrant a reformulation of project objectives, proactive Bank supervision and judicious project restructuring can pay off in terms of ultimate development impact.
- Risks of capacity limitations and financial support should be thoroughly investigated during appraisal. And if such risks are found they may be mitigated and managed through small-scale phased investment backed up, as appropriate, through capacity building and technical assistance.
- It is important to involve all major stakeholders in the institutional reform process in an even-handed manner and ensure that conflict resolution mechanisms are established. Failure to do risks that key partners (in this case CESAN) will oppose reform if threats to their interests are not balanced by mitigating measures.

8. Assessment Recommended? Yes No

Why? Most of the outcomes of the investment will not be apparent until 2005 onwards or even later and the ERR assumptions need validation. The political economy of the reform process and its longer-term impact on commercialization/privatization of key state utilities will probably yield valuable lessons, as will an in-depth analysis of the Bank's supervision performance in a difficult and unpredictable political environment.

9. Comments on Quality of ICR:

The ICR (issued in April 2004) could have included critical information on CESAN's 2003 preliminary financial results (which the region subsequently reported as significantly improved)