



1. Project Data:		Date Posted : 07/30/2001	
PROJ ID: P039002		Appraisal	Actual
Project Name: Istria Water Supply	Project Costs (US\$M)	141.2	123.0
Country: Croatia	Loan/Credit (US\$M)	27.8	22.5
Sector(s): Board: WS - Water supply (100%)	Cofinancing (US\$M)	0	0
L/C Number: L3069			
	Board Approval (FY)		89
Partners involved :	Closing Date	12/31/1995	12/31/2000

Prepared by :	Reviewed by :	Group Manager :	Group:
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2. Project Objectives and Components

a. Objectives

- (1) Eliminate water shortages in the project area;
- (2) Provide additional water supply capacity needed for the expansion of the tourism industry and growth in domestic and industrial/commercial demand in the project area;
- (3) Reduce unaccounted water in the Pula Water Works (PWW) distribution network;
- (4) Protect existing water sources and coastal tourist areas from pollution; and
- (5) Increase efficiency in the delivery of water supply and sewerage services in the project area .

b. Components

Water Supply and Treatment :

- (1) A protective zone for the Butoniga reservoir; and (2) the Butoniga water treatment plant (WTP) with an initial capacity of 1,000 l/sec, including a new raw water pumping station and a treated water pumping station .

Water Transmission and Storage :

- (3) A 0.8 km raw water transmission line from the Butoniga reservoir to the Butoniga WTP and a 11.2 km treated water transmission line from the WTP to Beram; (4) A 46 km treated water transmission line from Beram to Lobarika with 32.7 km of branching trunk main connecting the communities of Rovinij, Pazin and Pula; (5) Distribution storage totalling 19,000 m3; and (6) Telemetering and controls for system operation .

Institutional Strengthening of the Butoniga, Istrian and Pula Water Works (BWW,IWW,PWW, respectively) :

- (6) Technical assistance to PWW to reduce unaccounted water; (7) A study of the feasibility of combining IWW and PWW, and the operation of the Butoniga water supply system; (8) A study of IWW's and PWW's tariff structures; (9) A sewerage master plan for Central Istria; (10) Operational and maintenance equipment for the Butoniga water supply system, and instrumentation for water loss control in the Pula water distribution system; and (11) Training courses and materials for the staff of IWW, PWW and BWW .

Sewerage:

- (12) Construction of sewers, collectors, pumping station rehabilitation and replacement, and rehabilitation/construction of wastewater treatment plants in six communities in Croatia .

c. Comments on Project Cost, Financing and Dates

The breakup of the Former Socialist Republic of Yugoslavia and the associated war from 1991-1995 delayed project closing by five years and delayed the completion of important components . Compared to the appraisal estimate of US\$ 141.2 million the latest estimate of total project costs is US\$ 126.6 million, of which the Bank financed 20% and the national and local governments 80% .

3. Achievement of Relevant Objectives:

- (1) Water shortages in the area were eliminated but most of all because of the collapse of demand that was 55% of appraisal estimates for the year 2000;
- (2) Water supply capacity has not yet been added since the Butoniga water supply system is not expected to be completed until December 2001 at the earliest;
- (3) The percentage unaccounted water in the PWW was not reduced but rose slightly to 32% compared to 29% in 1989;

(4) Judging by the results of water sampling the project achieved its objective of protecting existing water sources and tourist areas from pollution; and
 (5) Judging by the percentage of unaccounted water the efficiency of delivery of water supply and sewerage services did not improve in the project area .

4. Significant Outcomes/Impacts:

No noteworthy positive outcomes although the breakup of the FSRY, the war, and the highly negative impact of the local communities are all extenuating circumstances .

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

The Butoniga WTP is still not completed due to serious disagreements with the turn -key contractor whose contract was signed in 1995 to ensure a speedy completion of the WTP .

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
Outcome:	Satisfactory	Unsatisfactory	Three of five objectives were not achieved.. The recalculated economic rate-of-return is only 2% compared to the appraisal estimate of 16%, due to the sharp drop in consumption and added capacity remaining idle .
Institutional Dev .:	Modest	Modest	
Sustainability:	Likely	Likely	
Bank Performance:	Satisfactory	Satisfactory	The "unsatisfactory" outcome rating should not be blamed on either the Bank, or the Borrower since neither could have been foreseen the breakup of FSRY, the depth of the economic recession and particularly the war which made project implementation very difficult.
Borrower Perf .:	Satisfactory	Satisfactory	The "unsatisfactory" outcome rating should not be blamed on either the Bank, or the Borrower since neither could have been foreseen the breakup of FSRY, the depth of the economic recession and particularly the war which made project implementation very difficult.
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:

- (1) Turnkey contracts are complicated to design and supervise . In this case, the contract went seriously wrong;
- (2) Demand projections and project design always need to incorporate flexibility, and particularly for transition economies; and
- (3) For the Bank to be able to influence the implementation of a given component, it should finance a share of costs, sufficient to provide leverage. In this case, the Bank financed nil of the sewerage and treatment works, yet these had been included in the project.

8. Assessment Recommended? Yes No

- Why?**
- (1) To learn what went wrong with the turnkey contract of the Butoniga water treatment plant;
 - (2) To learn if demand projections, project design and implementation could have incorporated more flexibility; and
 - (3) To learn how the Bank could possibly influence the implementation of components (such as the sewerage works under this particular project) which it does not finance itself.

9. Comments on Quality of ICR:

The ICR provides a wealth of data and candid analysis which could facilitate further analysis .