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| 1. Project Data : | | Date Posted : 07/27/2000 | |
| PROJ ID : P010325 | OEDID : C1987 | Appraisal | Actual |
| Project Name : Second Karachi Water & Sanitation Project | Project Costs (US\$M) | 331.7 | 325.9 |
| Country : Pakistan | Loan/Credit (US\$M) | 216.9 | 225.7 |
| Sector, Major Sect .: Urban Water Supply, Water Supply & Sanitation | Cofinancing (US\$M) | 138.3 | N..A. |
| L/C Number : C1987 | | | |
| | Board Approval (FY) | | 89 |
| Partners involved : Overseas Development Administration (ODA); Asian Development Bank (ADB) | Closing Date | 06/30/1998 | 06/30/1999 |
| | | | |
| Prepared by : | Reviewed by : | Group Manager : | Group: |
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2. Project Objectives and Components

a. Objectives

- (1) To increase potable water supply by about 31% (100 million Imperial gallons per day (lmgd) and reduce water losses;
- (2) To improve the financial viability of the Karachi Water and Sewerage Board (KWSB) through increased revenues, cost reductions, and increased operational efficiency;
- (3) To improve the organization and management of KWSB;
- (4) To improve sanitation in the City of Karachi, including its low-income and coastal areas by increasing sewerage coverage by 232 lmgd and treatment capacity by 94 lmgd.

b. Components

- (1) **Water Supply** : A 30 km canal and a 70 km conduit to bring water from the Indus river to Dhabeji; four major pumping stations; two direct filtration treatment plants; storage reservoirs; 40 km of primary distribution mains; 10 km of steel pumping main; and expansion/rehabilitation of the distribution network;
- (2) **Sanitation** : Three new sewage treatment works with associated trunk sewers; repairs and cleaning of existing sewers; small-bore sewers for low-income neighborhoods; and
- (3) **Institutional Strengthening** : Technical assistance, training and studies for KWSB to enable it to plan and execute large scale projects, improve operations and maintenance, and improve and extend sanitation in the City and coastal areas.

c. Comments on Project Cost, Financing and Dates

The project was approved by the Board on February 28, 1989 and closed on June 30, 1999 with a delay of one year. The ICR reports that the project cost escalated from US\$ 331.7 million to US\$ 753.0 million out of which IDA seems to have financed US\$ 225.7 million. (The ICR mentions that IDA made a supplementary credit that raised total IDA financing from US\$ 125 million to US\$ 217 million but no date or credit number are indicated. Similarly, simple arithmetic (in ICR Annex 2) indicates a final project cost of US\$ 325.9 million and not US\$ 753.0 million as reported elsewhere in the ICR.) There was co-financing of certain components by ODA/DFID (water supply) and by Asian Development Bank (sewerage) but the ICR does not specify the corresponding amounts which is a major flaw .

3. Achievement of Relevant Objectives :

None of the four objectives were fully achieved . Specifically:

- (1) The water supply was increased by 105 lmgd (about 500,000 cubic meters per day) but no loss reduction is documented;
- (2) The financial viability of the KWSB hardly improved and the KWSB survived thanks to Government subsidies throughout the 1990s. KWSB did manage to pay for its operating costs out of operational revenue from FY 96 onwards but it is uncertain to what degree this was possible due to deferred maintenance . The operational efficiency

and the intended reduction in water losses are impossible to gauge since KWSB chose not to meter domestic consumption.

(3) The organization and management of KWSB did not improve in a sustainable fashion although an energetic Managing Director appointed in 1995 was successful in reducing staff from 14,000 to 8,500 (reduction of 40 %) and manage some limited administrative improvements; and

(4) The ICR itself lacks a Bank analysis of the achievements under the ADB-financed sanitation components and instead provides only the Borrower's analysis. According to these data, about 60% of the planned increase in wastewater collection and treatment capacity was provided, but the commensurate benefits were unrealized since the project did not include tertiary sewers.

4. Significant Outcomes /Impacts :

The project's addition to water production of some 500,000 cubic meters per day in the end did not improve the water supply situation in Karachi but did compensate for the drop in water production from the Hub Reservoir of about 400,000 cubic meters due to a persistent drought. All the same, the water supply quantity and quality are probably worse after completion of the project than prior to it because of the rapid population growth in Karachi and especially so among the low-income population.

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

The legal and regulatory framework was never among the objectives under the project. An effort was belatedly made at the behest of the Bank to involve a private operator but in the end these efforts came to nothing.

| 6. Ratings : | ICR | OED Review | Reason for Disagreement /Comments |
|-----------------------------|----------------|----------------|-----------------------------------|
| Outcome : | Unsatisfactory | Unsatisfactory | |
| Institutional Dev. : | Partial | Modest | |
| Sustainability : | Unlikely | Unlikely | |
| Bank Performance : | Deficient | Unsatisfactory | |
| Borrower Perf. : | Deficient | Unsatisfactory | |
| Quality of ICR : | | Unsatisfactory | |

7. Lessons of Broad Applicability :

- (1) Without a fundamental legislative and regulatory reform, including changed incentives and contracting of a private operator, the project was doomed from the start;
- (2) Financial covenants are ineffective if the water supply and sewerage authority is not given the authority and means to comply with them. In the particular case of KWSB, excessive politicization of the tariff settings and of the management added to the difficulties;
- (3) The project design should have incorporated more of community participation and especially so under the sanitation component where Karachi had gained valuable experience from the Orangi sanitation works.

8. Audit Recommended? ☒ Yes ☐ No

Why? The ICR is unclear on the causes for the failure to improve the water supply and sanitation services in Karachi in a sustainable fashion. Much of the database to judge the evolution in service coverage, quality, and disparities between rich and poor consumers' service would be important to create and analyze. A second reason for an audit is to understand why the efforts to introduce a private operator were unsuccessful and what the possibilities for private sector participation (PSP) are in the future. A third reason for an audit is to explain how the project cost could have become more than double appraisal estimates.

9. Comments on Quality of ICR :

It is recognized that the preparation of the ICR has suffered from the serious lack of good data on the project and on the KWSB operations. As a result, the ICR is of poor quality and fails to provide and analyze data to judge the outcome of the project. In particular: (1) The methodology of calculating the economic rate-of-return is erroneous. It assumes that incremental water sales should be valued at 2/3 of the water vendor rates but this is tantamount to assuming no price elasticity. In reality, the high water vendor rates are applicable only to small amounts of water consumption. The value of water and what consumers are willing to pay will drop rapidly with increasing per capita consumption; (2) The Bank ICR authors themselves should have analyzed the sanitation component rather than simply incorporate the borrower's report and opinion; (3) The data on financing, and on the IDA supplementary credit are confusing in part and absent in part; (4) The ICR could stand editing to help bring out and clarify the findings of this important project.

