



Validation Report

Reference Number: PCV: IND 2008-69
Project Number: 31588-02
Loan Number: 1720-IND
May 2009

India: Urban and Environmental Infrastructure Facility Project

Independent Evaluation Department

Asian Development Bank

ABBREVIATIONS

ADB	–	Asian Development Bank
FIL	–	financial intermediary loans
HUDCO	–	Housing and Urban Development Corporation
ICICI	–	Industrial Credit and Investment Corporation of India
IED	–	Independent Evaluation Department
PCR	–	project completion report
RRP	–	Report and Recommendation of the President
TA	–	technical assistance
ULB	–	urban local body
WSS	–	water supply and sanitation

Key Words

adb, asian development bank, environmental, ied, independent evaluation department, india, industrial waste, municipality, oed, project completion validation, sanitation, state, urban, water supply

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PROJECT COMPLETION REPORT¹ VALIDATION FORM

A. Basic Project Data		PCR Validation Date:	May 2009	
Project and Loan Number:	31588-02 1720-IND		Approved	Actual
Project Name:	Urban and Environmental Infrastructure Facility Project	Total Project Costs (\$M):	NA	119.5
Country:	India	Loan/Grant (\$M): (SDR equivalent)	80.0	27.4
Sector:	Multisector	Total Cofinancing (\$M):	0.0	0.0
ADB Financing (\$M):	ADF: 0.0	Borrower (\$M):	0.0	0.0
	OCR: 80.0	Beneficiaries (\$M):	0.0	0.0
Cofinanciers:	0.0	Others (\$M):	0.0	0.0
Approval Date:	17 Dec 1999	Effectiveness Date:	17 Aug 2000	22 Sep 2000
Signing Date:	19 May 2000	Closing Date:	22 Sep 2006	29 May 2006
Project Officers:	Name: Xiaoyan Ye Alex Jorgensen Davendra Mittal Cheolsu Kim	Location (HQ or RM): HQ RM RM RM	From 1999 2001 2003 2005	To 2000 2002 2004 2006
Validator:	R. Merrill Consultant	Director:	R. B. Adhikari, IED1	
Quality Control Reviewer/Peer Reviewer:	W. Kolkma Senior Evaluation Specialist, IED1			

ADB = Asian Development Bank, ADF = Asian Development Fund, HQ = headquarter, IED = Independent Evaluation Department, IND = India, M = million, NA = not available, OCR = ordinary capital resources, PCR = project completion report, RM = resident mission, SDR = special drawing right.

<p>B. Project Description (summarized from the Report and Recommendation of the President [RRP])</p> <p>(i) Rationale. Inadequate urban infrastructure and a deteriorating urban environment have been deterring India's social and economic development and adversely affecting quality of life. Although the Government has been trying to increase financial flows to the urban sector through fiscal concessions, the sector's development is constrained by the lack of long-term funds to match the gestation and pay-back periods of urban infrastructure projects; and by legal, institutional, and financial impediments to develop demand-driven projects. The Urban and Environmental Infrastructure Facility Project (the Project) was designed to have a demonstration impact on the sector by selectively financing viable urban and environmental projects in states and municipalities where essential reforms were creating an environment conducive to sector development. To ensure that the benefits of these projects will reach the poor, the Project would also integrate microfinance with urban and environmental infrastructure development.</p> <p>(ii) Impact. The Project aimed to assist the Government in improving urban and environmental infrastructure, and to encourage cost recovery and other municipal financial reforms. Ultimately, India's urban residents would benefit from an improved quality of life. High-priority subprojects included those that addressed basic human needs such as water supply and sanitation (WSS) and slum upgrading.</p>

¹ ADB. 2008. *Project Completion Report on the Urban Environmental Infrastructure Facility Project in India*. Manila.

The urban poor, who constituted 32% of the urban population in 1999, would gain health benefits and employment opportunities.

- (iii) **Objectives or expected outcomes.** The Project had three major objectives: (a) commercialization of urban and environmental infrastructure development, financing, operation and maintenance; (b) decentralization and implementation of the Constitution (Seventy-Fourth Amendment) Act, 1992; and (c) enhanced access of the urban poor to improved urban environments and services.
- (iv) **Components and/or outputs.** The Project consisted of three bank loans: (a) \$90 million to the Housing and Urban Development Corporation, Limited (HUDCO); (b) \$80 million to the Industrial Credit and Investment Corporation of India Limited (ICICI); and (c) \$30 million to the Industrial Development Finance Corporation Ltd. In addition, a technical assistance (TA) grant had three goals: (a) integrating microfinance institutions with urban infrastructure development projects, (b) building capacities of selected microfinance institutions for financing urban infrastructure projects, and (c) various pilot projects.

C. Evaluation of Design and Implementation (PCR assessment and Validation)

- (i) **Relevance of design and formulation.** The PCR had strong reservations regarding project formulation, judging it essentially inadequate. The PCR noted that key constraints identified during the early stages of the project preparatory TA and Fact-Finding Mission were not sufficiently addressed during the subsequent stages of project formulation. These constraints included the lack of urban local bodies' (ULBs) capacity to prepare commercially viable projects and, in turn, to mobilize financial resources. Moreover, besides lines of credit, project components proposed by the project preparatory TA included a risk-sharing facility and TA to launch a project development company, both of which would have enhanced ULBs' capacity. However, these components were dropped during pre-appraisal, which were then upgraded to appraisal. Given the extremely limited outputs of the Project and the fact that only two ULBs ultimately borrowed, the Independent Evaluation Department (IED)² agrees with the PCR that the formulation process was inadequate.
- (ii) **Project outputs.** The RRP³ listed a long pipeline of likely subprojects in the priority subsectors of WSS and slum upgrading. However, since the vast majority of identified subprojects did not materialize (see para. C [iii]), the PCR questioned the viability of this subproject pipeline. The PCR noted that the main reasons for the differences between intended and actual distribution of subprojects were (a) the slow pace of enabling institutional and policy reforms; (b) more attractive funding opportunities in other sectors, such as retail lending, as opposed to more risky urban infrastructure projects for ICICI; and (c) the downward trend of domestic interest rates, which made the interest rates offered under the Project less attractive. The PCR also noted that only two subprojects (utilizing 3% of the original loan amount) contributed to outcomes. Thus, IED agrees with the PCR that the project outputs were only partially achieved.
- (iii) **Project cost, disbursements, borrower contribution, and conformance to schedule** (as relevant to project performance). As noted in the PCR, two major changes in project implementation altered the Project's nature and impact. The first was the decisions by HUDCO and Industrial Development Finance Corporation that the Project's terms and conditions were no longer attractive, given the downward trend in domestic interest rates. These two borrowers subsequently cancelled their participation in July 2001 and September 2002, respectively, with remaining borrower, ICICI, for \$27.4 million, or about 34% of the original \$80.0 million loan. The second was the vastly reduced amount of the loan utilized by the allocation. Further, ICICI applied for and received permission to use the majority of the funds for

² IED was named the Operations Evaluation Department, or OED, until December 2008.

³ ADB. 1999. *Report and Recommendation of the President to the Board of Directors on the Proposed Loans to India for the Housing and Urban Development Corp. Ltd, ICICI, Ltd; and the Urban Infrastructure Development Corp. Ltd. for the Urban Environmental Infrastructure Facility Project and Technical Assistance Grant.* Manila.

industrial waste management subprojects (five subloans or 93%) while only two subloans were utilized for the original purposes—water, sanitation, and solid waste management (7%). Finally, ICICI could not come up with a sufficient number of eligible subprojects before the final commitment date of 22 September 2004. The Government, therefore, withdrew its guarantee for the then-uncommitted balance of \$37.8 million. Subsequently, following cancellation of one committed subloan and prepayment by another, the remaining \$14.8 million was also cancelled, leading to early closure of the loan.

- (iv) **Implementation arrangements, conditions and covenants, related technical assistance, and procurement and consultant performance.** Although ICICI was generally in compliance with the covenants, the PCR observed: (a) a revolving fund mechanism to use surpluses from prepayments of subloans for project purposes as per the Loan Agreement (Section 2.08) was not established; and (b) ICICI delayed demonstrating compliance with safeguard covenants and adopting an environmental and social management system. Regarding the TA grant, in spite of cancellation of the loan by HUDCO, TA was implemented, although it had little, if any, link to ICICI operations under the Project. The PCR rated the TA grant and the respective consultant performance as *successful*, because the consultants successfully achieved the TA grant's stated objectives within the time frame and allotted budget. However, IED rates the TA grant as *unsuccessful*, because it had no links to ICICI operations, which was its original purpose.
- (v) **Performance of the Borrower and Executing Agency.** While the PCR rated the performance of ICICI as *satisfactory*, this is based on a detailed section describing ICICI's growth and outstanding financial performance, especially with respect to financial ratios. However, given the vastly reduced loan amount, project lending accounted for only a small percentage of total ICICI operations. In addition, ICICI loans for industrial waste management subprojects did not contribute to project outcomes in the priority sectors of WSS and slum upgrading. Moreover, although ICICI had a long track record in project finance, the PCR pointed out that the shift in ICICI's lending policies toward commercial opportunities in the retail markets and away from development banking hindered the Project's successful implementation. However, since the PCR did not specifically rate ICICI's performance, IED has also not rated the performance of the Borrower.
- (vi) **Performance of the Asian Development Bank.** The PCR rated the performance of the Asian Development Bank (ADB) during implementation as *satisfactory*. ADB could not, at the time of design, have foreseen the drop in the commercial lending interest rate and the radical shift in ICICI's lending from development to commercial markets. Although ADB acknowledged the lack of bankable subprojects and responded by approving an increase in the share of private industrial waste management subprojects, these were not in the priority sectors of water, sanitation, and solid waste management. The PCR justified this change in scope by stating that industrial waste subprojects also improve the urban environment, which was one of the expected project impacts. However, even with this scope change, only 32% of loan proceeds could be utilized for private industrial waste management subprojects within the time available. ADB undertook timely follow-up actions through review missions and tripartite and bipartite review meetings to maximize loan utilization. In addition, there were regular tripartite review meetings among ADB, the Department of Economic Affairs, and ICICI to review the performance of commitments and disbursements and to suggest steps for improved utilization. IED notes that ICICI considered ADB's responses to be proactive and timely, and that ADB conducted adequate due diligence on covenant compliance, particularly during the latter phase of project implementation. Therefore, IED concurs with the PCR's rating of ADB's performance during implementation as *satisfactory*.

D. Evaluation of Performance (PCR assessment and Validation)

- (i) **Relevance.** The PCR rated the Project as *partly relevant*. The Project's expected outcomes were consistent with the Government's development priorities and ADB's country strategy. The PCR, however, noted that the appraisal had the following inadequacies: (a) insufficient links among outputs, outcome, and impact and insufficient consideration of lessons learned from ongoing urban sector projects in the country; (b) an ambitious and unrealistic subproject pipeline; and (c) inadequate assessment of the urban sector reform process. IED agrees with the rating, especially since most ULBs were not prepared for either commercial borrowing or decentralized project execution. Domestic interest rates decreased during project implementation, making project subloans more expensive than comparable domestic loans.
- (ii) **Effectiveness in achieving outcomes.** The PCR rated the Project as *ineffective*, as two of the three loans were cancelled, and of the remaining loan, the utilization was only 34%, with only 3% of that loan being used for the original purpose. Although the solid waste subproject demonstrated the success of commercialization and the water supply project implemented some reform actions, there were no other public urban infrastructure projects in ICICI's portfolio. Thus, these subprojects had little demonstration effect, and ICICI's PCR indicated that the Project did not influence its credit allocation. IED concurs with the rating of *ineffective*.
- (iii) **Efficiency in achieving outcomes and outputs.** Due largely to the marginal share of the water supply and solid waste subprojects in the loan in the context of the economy; the PCR rated the Project as *less efficient*. Timely repayment of most obligations indicated good subproject repayment performance. The water and solid waste subprojects led to improved service quality, while the industrial subprojects led to reduced operational costs. However, there was neither any demonstration effect nor any effect on the overall economy. IED adds that the preparation and approval of three loans is labor-intensive for all parties concerned, and not very efficient if two loans have to be cancelled fairly soon afterwards. Therefore, IED agrees with the PCR's assessment.
- (iv) **Preliminary assessment of sustainability.** The PCR rated the Project as *less likely to be sustainable* (para. 55). Based on the two criteria of sustainability (para. 51.iv), the PCR stated that the subprojects are financially viable, given their physical and financial performance. However, it noted that ICICI did not recycle the loan funds through a revolving fund because of the lack of eligible subprojects. Thus, the PCR believed that the Project's sustainability "remains highly questionable." Regarding the two criteria, the first subcriteria, i.e., "appropriateness of the policy and institutional environment to maintain the achievement of the Project's outcomes," as stated in the PCR (paras. 42, 58, and 59), the policy and institutional environment to maintain achievement of project outcomes was not in place either during project design or implementation. Moreover, given the low utilization of loan proceeds, the second subcriteria, "conditions and utilization ratio of the facilities funded under the Project, and the financial viability of the subborrowers," seems to be too narrow to judge overall project sustainability. Thus, while the first subcriteria would be appropriate for future PCRs and project performance evaluation reports of financial intermediary loans (FILs), possible additional subcriteria for the sustainability of such projects would be (a) generation of a substantial revolving fund for additional subprojects; (b) the increased use of government and/or private funds to finance subprojects; and (c) the accurate targeting of viable (e.g., WSS and slum upgrading) subprojects in accordance with project design. Hence, based principally on the first subcriteria, IED believes the Project is *not sustainable*.
- (v) **Impact** (both intended and unintended). The PCR found that all subprojects had positive impacts—mainly in the form of improved urban environment or augmented public services. All subprojects were designed to improve the environment through waste recovery, waste management, reduction in pollutant emissions, or, in one case, increased water supply. The PCR concluded that the subprojects contributed to an improved environment, especially since they were implemented per design and on schedule. Thus, in the narrow sense of subproject impact versus overall project impact on the sector and the economy, IED agrees with this conclusion.

E. Overall Assessment, Lessons, and Recommendations (PCR assessment and Validation)

- (i) **Overall assessment.** The PCR rated the Project as *unsuccessful*, giving it a rating of 0.7 on scale from 0 to 3.0. Based on the evaluation of performance in the foregoing section, IED concurs with the rating with the exception of *sustainability*, rating it a 0 instead of a 1.0, resulting in an overall rating of 0.5. This lower rating does not affect the summary rating, which remains *unsuccessful*.
- (ii) **Lessons.** The lessons set out in the PCR were well detailed, and based on the discussion in the text, are fully supported by IED. However, since project implementation, approaches to similar projects have evolved in both ADB and India. In ADB, the sector program approach with accompanying TA has become the general modality; while in India, financing of urban infrastructure through bond issues and general tax revenue has become more widespread. Hence, ADB should consider the lessons learned from the Project not only for future projects in India, but also in other developing member countries where urban institutions are less developed. For example, financing of large infrastructure projects such as roads, bridges, and dams lend themselves to commercialization; while financing of smaller urban service projects such as WSS depend largely on local government capacity, tariff policy, and effective project design. These, in turn, require strengthening local government institutional and financial capacities to structure and implement sustainable projects. IED notes that upfront TA projects, such as those proposed in the project preparatory TA, will result in a greater degree of achievement of project outcomes.
- (iii) **Recommendations.** In the opinion of the PCR, a sector development program loan containing prior feasibility studies might have been a better project design than the FIL model (para. 43). Given the Project's long-term nature, as well as the detailed qualification procedures of the subprojects, IED agrees that the sector program modality could have been more successful for projects of this nature, particularly where local governments are the predominant subborrowers. This modality has been utilized by borrowing governments for several urban integrated development projects, comprising multiple cities and multiple subprojects, in India and other developing member countries.

F. Monitoring and Evaluation Design, Implementation, and Utilization (PCR assessment and validation)

The RRP (footnote 2) called for preparation of baseline monitoring and evaluation information for each subproject to be submitted with application for finance. ICICI did provide a benefit monitoring report toward the end of the project in May 2006. However, it did not compel the subborrowers to establish monitoring and evaluation systems, as required. Therefore, ICICI could not provide accurate responses to specific financial and operational information on the subprojects for the PCR.

G. Other (e.g., safeguards, including governance and anticorruption; fiduciary aspects; government assessment of the Project, as applicable) (PCR assessment and validation)

Except delays regarding ICICI demonstrating compliance with safeguard covenants and adoption of an environmental and social management system, there were no safeguard violations or unintended impacts.

H. Ratings	Project Completion Report	Independent Evaluation Department Review	Reason for Disagreement/Comments
Relevance:	Partly relevant	Partly relevant	
Effectiveness in Achieving Outcome:	Ineffective	Ineffective	
Efficiency in Achieving Outcome and Outputs:	Less efficient	Less efficient	
Preliminary Assessment of Sustainability:	Questionable sustainability	Not sustainable	Small number of subprojects, no revolving fund, no demonstration or spillover effects

Borrower and Executing Agency:	Not rated	Not rated	Industrial waste management subprojects did not contribute to outcomes originally defined.
Performance of the Asian Development Bank:	Satisfactory	Satisfactory	With the exception of ADB's performance during Appraisal, which was not satisfactory
Impact:	Positive	Positive	Of subprojects only
Overall Assessment:	Unsuccessful	Unsuccessful	0.7 vs. 0.5 on scale of 0 to 3, both in the range of unsuccessful
Quality of PCR:		Highly satisfactory	

I. Comments on PCR Quality

IED finds the PCR to be very thorough and detailed, with adequate documentation and data to support its findings and conclusions. IED did not find information in other documentation that changed the PCR findings.

J. Recommendation for IED Follow-Up

In view of the PCR quality and findings, IED does not feel it is necessary to conduct a project performance evaluation in the future.

K. Data Sources for Validation

The primary data sources were the PCR, RRP, Borrower's PCR, final benefit monitoring and evaluation report, periodic progress reports, mission memorandum of understanding, aide-mémoires, and back-to-office reports.

REGIONAL DEPARTMENT'S RESPONSE TO THE PROJECT COMPLETION REPORT VALIDATION REPORT

On 20 October 2008, the Independent Evaluation Department¹ circulated the draft Project Completion Validation Report for interdepartmental comments. Comments were received from the India Resident Mission on 31 October 2008, which were incorporated in the final report. One comment, referring to the report's downgrading of the sustainability rating from *less likely to be sustainable* to *unlikely to be sustainable*, was not accepted.

The resident mission pointed out that the project completion report (PCR) (para. 51) had identified subcriteria with reference to the (i) definition of "sustainability" provided in the *Guidelines for Project Performance Evaluation Report (PPER) for Public Sector Operations*,² or the *Evaluation Guidelines* (p. 9); (ii) determinants of sustainability indicated also in the *Evaluation Guidelines* (pp. 15–16); and (iii) sustainability subcriteria used in PPERs on FILs, e.g., the Rural Enterprise Development Project³ and the Private Sector Infrastructure Facility.⁴ The PCR had given a rating of *less likely*, instead of *unlikely*, considering that (i) conditions and utilization ratio of the facilities funded under the Project were *satisfactory*; (ii) the "subprojects themselves were financially viable" (PCR, para. 55); and (iii) "all of the subprojects had positive impact" (PCR, para. 56), if not the outcomes.

This response to the PCR, however, argues that the first subcriterion, although valid, seems to be misinterpreted, while the second criterion is too narrowly based. Regarding the first subcriterion, i.e., "appropriateness of the policy and institutional environment to maintain the achievement of the Urban and Environmental Infrastructure Facility's (UEIF) outcomes" (PCR, paras. 42, 58, and 59), the main point is that the policy and institutional environment to maintain the achievement of the facility's outcomes was not in place either during the design of the Project or during its implementation.

With respect to the second subcriterion, given that the loan "utilization was poor at 34%, of which only two subprojects contributed significantly to outcomes (3% of total loan funds or 7% of net utilized loan amount)" (para. 53), the "conditions and utilization ratio of the facilities funded under the UEIF and the financial viability of the subborrowers," are insufficient grounds to judge the overall sustainability of the Project. This is especially the case, given that "following cancellation of one committed subloan by one subborrower and prepayment by another, the remaining \$14.8 million was also cancelled, leading to early closure of the loan." In addition, the limited generation of a revolving fund for additional subprojects indicates a lack of overall Project sustainability.

While the first subcriterion would be appropriate to future PCRs and PPERs of FILs, possible additional subcriteria for the sustainability of these projects are (i) the generation of a substantial revolving fund for additional subprojects; (ii) the increased use of government and/or private funds to finance subprojects; and (iii) the accurate targeting of viable (e.g., WSS and slum upgrading) subprojects in accordance with project design. This conclusion has been reflected in the PCR validation report.

¹ The Independent Evaluation Department was named the Operations Evaluation Department, or OED, until December 2008.

² Asian Development Bank (ADB). 2006. *Guidelines for Preparing Performance Evaluation Reports for Public Sector Operations*. Manila.

³ ADB. 2006. *Project Performance Evaluation Report on the Rural Enterprise Development Project in Uzbekistan* (Loan 1504-UZB). Manila.

⁴ ADB. 2006. *Project Performance Evaluation Report on the Private Sector Infrastructure Facility in India* (Loans 1480-IND and 1481-IND). Manila.