



Report Number : ICRR0021246

1. Project Data

Project ID

P107998

Project Name

SOLID WASTE MGT 2

Country

Bosnia and Herzegovina

Practice Area(Lead)
Social, Urban, Rural and Resilience
Global Practice
Additional Financing

P143973

L/C/TF Number(s)
IBRD-76290,IDA-45400,TF-
11456,TF-15881
Closing Date (Original)

28-Feb-2014

Total Project Cost (USD)

49,500,000.00

Bank Approval Date

25-Nov-2008

Closing Date (Actual)

31-Oct-2017

IBRD/IDA (USD)
Grants (USD)

Original Commitment

40,000,000.00

11,278,978.34

Revised Commitment

21,120,569.84

9,482,853.76

Actual

18,590,116.49

9,568,186.59

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IEGSD (Unit 4)

Project ID

P144111

Project Name
SOLID WASTE MGMT 2 - EC IPA
(AF) (P144111)
L/C/TF Number(s)
Closing Date (Original)
Total Project Cost (USD)



6,000,000.00

Bank Approval Date
18-Dec-2012

Closing Date (Actual)

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	0.00	0.00
Revised Commitment	0.00	0.00
Actual	0.00	0.00

2. Project Objectives and Components

a. Objectives

According to the Project Appraisal Document (PAD) (p. 4) the objective of the project was “to improve the availability, quality, environmental soundness, and financial viability of solid waste management services in participating utilities/regions.”

The objective as stated in the International Development Agency (IDA) Financing Agreement (p.6) and the International Bank of Reconstruction and Development (IBRD) Loan Agreement (p.7) of June 25, 2009 was almost identical “to improve the availability, quality, environmental soundness and financial viability of solid waste management services in Participating Utilities.” The ICR (p. 9) clarifies that utilities/regions are treated as interchangeable because utilities are made up of multiple municipalities (i.e. regions).

b. Were the project objectives/key associated outcome targets revised during implementation?

No

c. Will a split evaluation be undertaken?

No

d. Components

The project included three components:

Component A: Waste Management (appraisal estimate US\$39.5 million, actual US\$26.76 million):

This component was to finance the rehabilitation of existing disposal sites, closing wild dumps, improving collection infrastructure, equipment purchases, and to a limited extent, converting existing small dump sites to transfer stations. At more advanced regional landfills the component was also to support upgrading processes such as sorting, recycling, and gas capturing; and prior treatment of waste. It was also to cover operational cost of regional Project Implementation Teams (PITS). During the second restructuring the financing of this component was reduced to US\$35.86 million since Republika Srpska (RS) was unable to



proceed with signing additional subsidiary agreements with interested utilities.

Component B: Capacity Building: (appraisal estimate US\$ 2.0 million, actual US\$1.11 million): This component was to finance technical assistance and engineering services to participating regions and institutional strengthening and capacity-building activities benefiting the entity-level institutions involved in solid waste management. The component was also to support the preparation of feasibility studies, financial, environmental and social assessments of landfill sites. In addition, the component was to finance a Public Communication Program and Environmental Monitoring.

Component C: Project Management and Operating Cost (appraisal estimate US\$2.0 million, actual cost US\$0.58 million): This component was to support the Project Management Unit (PMU) operation in both entities and assist with project implementation in participating regions, provide guidance and support to local project entities and ensure that the Bank procurement guidelines were being observed.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project Cost: The project was estimated to cost US\$43.5 million. Actual cost was US\$28.16 million due to the cancellation of IBRD and IDA financing (see below for more details).

Financing: The project was financed by a US\$25 million IBRD loan and a US\$15 million IDA credit, with the actual amount disbursed at US\$10.18 million and US\$8.4 million, respectively. During implementation, the project received two EU Pre-Accession Assistance trust fund grants of US\$6.5 million and US\$4.7 million with the actual disbursement of US\$6.42 million and US\$3.14 million.

Borrower Contribution: The Borrower was to contribute US\$3.5 million. Actual contribution was US\$1.34 million by the Federation of Bosnia and Herzegovina (FBiH), and US\$1.57 million by the Republika Srpska (RS).

Dates: The project was approved on November 25, 2008 and became effective on October 23, 2009. The project closing date was extended twice for a total of 3.5 years and restructured five times, in particular:

- **On November 4, 2013** the project was restructured to extend the closing date from February 28, 2014 to February 28, 2016 due to delays in completion of activities, resulting from an 11 months delay in effectiveness due to delays in signing Subsidiary Credit Agreements and adopting revised Operations Manual, slow implementation and coordination challenges, and delays resulting from the 2011 parliamentary elections.
- **On December 18, 2014** the project was restructured to: i) revise the indicators and targets in the Results Framework to reflect the reduced project scope. It included a reduction of the number of (a) established inter-municipal solid waste districts; (b) the number of the rehabilitated sanitary landfills that become operational and (c) Implementation of cost recovery plans in solid waste management utilities; ii) cancellation of EUR 2,578,318.00 million from IBRD, and SDR 304,129.00 from IDA since Republika Srpska was unable to sign new additional subsidiary agreements with interested utilities; and iii) reallocate funds from the unallocated category to the works and goods categories to finance the implementation of civil works for the proposed landfills;
- **On February 23, 2016** the project was restructured to: i) extend the closing date from February 28, 2016 until October 31, 2017 to compensate for implementation delays resulting from protracted municipal



negotiations and/or failures to reach inter-municipal agreements which were necessary for regional landfills construction and long delays for receiving construction, urban and environmental permits for landfills.

- **On June 29, 2016** the project was restructured to suspend the financing of US\$5.9 million in IBRD and US\$2.7 million in IDA financing due to implementation delays resulting from delays in receiving environmental, building and urban permits and failures in meeting agreed established targets. The financing was related to three sub-projects (Gornji, Bakuf, Bihac, and Zivinice), which were not implemented.
- **On April 19, 2017** the project was restructured to reallocate funds between disbursement categories.

3. Relevance of Objectives

Rationale

Bosnia and Herzegovina has made significant progress in improving its solid waste management system. Supported by the European Union (EU), the country developed and has been implementing a three-phase national solid waste management (SWM) strategy. Rehabilitation of regional landfills in Bosnia and Herzegovina (BiH) has been underway since 2002, with assistance from the World Bank, the European Commission (EC) and bilateral donors (including Sweden). Despite the efforts, at the time of project appraisal in 2008, the municipalities were struggling with a rapidly growing volume of solid waste. Waste collection and disposal capacities remained low to match the country's waste production and the extension of service coverage was necessary to match the closure and rehabilitation of existing open dumps. There were still an estimated 1200 wild dumpsites in BiH and illegal dump sites were common in many municipalities. Even though an exact number of landfills required was unknown, the 2000 National Solid Waste Strategy prepared by the EU estimated a need for about 16 regional landfills. In addition, only a few utilities implemented commercial principles or practices to improve efficiency, lower costs, and eventually, achieve full cost-recovery (PAD, pages 1-3, 23).

The project's objective supported the country's Waste Management Strategy for 2008-18 as part of the Framework Entity Environmental Strategy, in line with the Entity Environmental Law. The strategy was to strengthen the regional landfill concept and tackle issues critical to infrastructure for a sound integrated waste management system. The project's objective remains aligned with the World Bank's most recent Country Partnership Framework (CPF FY16-20), which emphasizes the importance of the SWM for Bosnia and Herzegovina. The CPF's main objectives focus on improving delivery of public services, including waste management, and preventing the degradation of natural resources. It recognizes that solid waste collection and disposal is still substandard in a number of cities and regions, causing degradation of natural resources due to illegal dumping and untreated leachate, to urban floods due to accumulation of solid waste in drainages and canals/rivers, and to low levels of recycling and land-fill gas capturing (CPF, Annex 1-Results Monitoring Matrix).

Rating



High

4. Achievement of Objectives (Efficacy)

Objective 1

Objective

To improve the availability, quality, environmental soundness and financial viability of solid waste management services in participating utilities.

Rationale

The project's theory of change linked an improvement in solid waste management through establishing new sanitary regional landfills and recycling, gas capturing and sorting facilities, expanding/upgrading existing sanitary regional landfills, closing wild dumps, and conducting feasibility studies, financial, environmental and social assessments of landfill sites as the basis for improving availability of formal SWM system to population, as well as quality, environmental soundness and financial viability of SWM services.

Objective 1: Improve the availability of solid waste management services in participating utilities.

Outputs

- Six regional sanitary landfills (3 in Rs, and 3 in FbiH) were operationalized by project closure (ICR, Annex 1-Results Framework and Key Outputs). This was significantly lower than the original target of 12 anticipated at appraisal (PAD, Annex 3) and below the revised target of 8 (Project Restructuring Paper, 2014). The completed works on each of the landfills are described in the ICR's Annex 7. The focus largely shifted from *new* regional sanitary landfills to increasing the capacity of existing landfills. The Livno landfill was expected to be operational after project closure in 2018. There were delays as the community reacted negatively to the site location, forcing the landfill to be located 500m away in a different municipality; as a result, all conceptual designs needed to be re-done.

Outcomes

- The percentage of households in the targeted area that is not being served by the formal waste management system decreased from 75% in 2008 to 34% in 2017, surpassing the target of 37.5% of households not being served (the outcome target was to reduce the number of unserved households by half). There is however inconsistency how this number was measured. The PAD did not differentiate on the availability of the formal SWM system to the rural population versus urban population. The ICR interprets the baseline based on urban population *not* served, i.e., 75% of urban population or 1 million people and reports that 1,500,000 in urban areas have access to regular solid waste collection, in line with the target. I. The ICR claims that originally targeted landfills would have reached municipalities with 40% urbanized population serving 550,000 urban residents and "the project took on a more urban bias as it evolved" serving a group of municipalities that had an urbanization rate of over 50%, and over 900, 000 urban residents, and (page 17). IEG finds the measurement of this outcome indicator inconsistent.

Rating

Substantial



Objective 2

Objective

Improve the quality of solid waste management services in participating utilities.

Rationale

Outputs:

- The number of utilities with sorting, recycling, and/or gas capturing facilities increased from two utilities in 2008 to eight facilities in 2017, surpassing the target of six facilities.
- Consultations were carried out with local communities regarding all landfill rehabilitations. In particular as part of the execution of each of the projects, each utility was exposed to the requirements, procedures and rationale used for citizen engagement in the solid waste management sector.
- The disposal of hazardous waste was raised as a concern during project preparation. In the Republika Srpska consultations on the National Waste Management Strategy took place and these consultations included hazardous waste. However, in Bosnia and Herzegovina no consultations took place. Overall, the target of the indicator on intensified policy debate on hazardous waste management strategy as indicated by increased media coverage was not achieved.

Outcomes:

- The number of dumps closed increased from 145 closures in 2008 to 283 dumps closed in 2017, not achieving the target of 300 closures. The ICR notes that using the number of wild dumps closed is not the most effective indicator to use to measure quality, and the size or volume associated with these wild dumps would be a better measure.
- The share of collected solid waste disposed in regional sanitary landfills increased from 28% in 2010 to 78% in all of Bosnia Herzegovina, surpassing the target of 60%.

Rating

Substantial

Objective 3

Objective

Improve the environmental soundness of solid waste management services in participating utilities.

Rationale

Outputs:

- While in 2008 two operational landfills were monitored for leachate and dump-site surface coverage, this



number increased to 10 sites in 2017, surpassing the target of nine sites.

- While in 2010 only four utilities (25%) were monitored for their compliance with national standards this number increased to all regional landfills in the Republica Srpska and two out of three utilities in Bosnia and Herzegovina (66%) by 2017, surpassing the target of 60%.

Outcomes:

- 71% of sites have leachate discharge that meets the minimum level of leachate quality, surpassing the target of 66% of sites. The issue that remained unsolved at the time of project closure was the release of untreated leachate and landfill gas at Sarajevo landfill. The leachate treatment plant (LTP) in Sarajevo is not working. The construction of this LTP was not included in the project, however, its functioning impacts the indicator. Sarajevo accounts for 40% of sanitary landfill capacity in Bosnia and Herzegovina and 22% of the country's total SWM capacity. The indicator measures only the absolute number of operational sites instead of the volume of waste that does not meet national standards. The ICR (p.18) reports that Sarajevo will be implementing partial treatment of its leachate in the short term to mitigate the environmental impact.

Rating
Modest

Objective 4

Objective

Improve the financial viability of solid waste management services in participating utilities.

Rationale

Outputs:

- Seven cost recovery plans in solid waste management utilities were implemented, achieving the revised target of seven plans (the original target was nine plans). The project team informed that the project was structured so that only utilities who could bear the cost of debt related to the World Bank loan repayment would be eligible for investment funds. To do so, conditions were put into the Subsidiary Credit Agreements that required realistic financial forecasts (of revenue and expenses) that demonstrated that they could meet their financial obligations. If they could not, they needed to demonstrate how they could be met (for example by increasing the rate they bill clients, better billing and collection procedures or decreasing other costs). This ensured that utilities were conscious of their spending, and took the necessary mitigating steps to ensure their financial viability (e-mail to IEG 30 May 2018) .
- 13 inter-municipal districts were established, achieving the revised target of 13 districts (the original target was 16 districts). These districts included all the municipalities participating in (using) the regional



landfill and sharing the operational and capital costs. The multi-municipal approach aimed to pool resources and reduce the costs due to the increase in waste volume received. The Bank team stated that this was a very important achievement of the project as it completely reformed how services are being delivered and aligned them with international practice and the EU guidance for the sector.

Outcomes:

- Five out of six participating utilities cover operational costs, achieving the target of “1/2 participating utilities covering operational costs”. Bijeljina does not cover its operational costs. According to the ICR (p. 19) utilities face the constraint of lacking borrowing capacity to expand or increase operations. While current operations are sustainable in the short- and medium-term, there will be issues in the long-term due to the constraint of capital expansion and maintenance. The ICR (p. 20), however, notes that the number of utilities implementing cost recovery plans did not fully measure how the cost recovery rate was increasing but only if operational costs were covered. The indicator does not provide a guide to the sector’s financial viability. The ICR (p. 19) notes that collection rates vary widely. For a new landfill (such as Zvornik) the collection rates may be extremely low at 26% while at well-established landfills (such as Prijedor and Banja Luka) collection could be between 67% and 100%. Expansion and maintenance are severely constrained.

Rating
Modest

Rationale

The objectives related to the availability and quality were assessed as substantially achieved. While the indicators for the objectives related to environmental soundness and financial viability were achieved, these were insufficient to comprehensively measure the development objectives, and rated modest. On balance, IEG rates the overall efficacy as substantial.

Overall Efficacy Rating
Substantial

5. Efficiency

Economic and Financial Analysis:

The PAD did not conduct a traditional economic analysis and stated the environmental and public health



benefits the project would yield through the reduction of uncontrolled dumping, increased sorting and classification of waste, and proper disposal in sanitary landfill facilities are difficult to quantify. The PAD estimated the Economic Rate of Return (ERR) of the Banja Luka landfill at 4%.

The ICR conducted an ex-post financial and economic analysis to assess the financial and economic performance of each individual regional landfill operator from FBiH and RS. The ICR added the costs and benefits of individual sites to estimate the ERR and Financial Rate of Return (FRR) and used a discount rate of 5%. Benefits included the prevented costs of polluted soil and ground water and air pollution by increasing environmental standards. Out of eight landfills, three had a negative NPV (Projedor, Sarajevo, and Zvornik) and one had a negative ERR (Sarajevo). The project's overall FRR was estimated at 11.9% and the ERR 25.5%.

Operational Efficiency:

The project experienced several implementation delays. Due to the late inclusion of the Zvornik and Livno landfills, it was not possible to increase their operation to full capacity. Also, due to an inefficient process for selecting sites and obtaining permits, the investments in the Neum and Zivinice landfills had to be cancelled.

Efficiency Rating

Modest

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 <input type="checkbox"/> Not Applicable
ICR Estimate		0	0 <input type="checkbox"/> Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

The relevance of objective is rated high given the challenges the SWM sector in Bosnia and Herzegovina is facing. The overall efficacy is assessed as substantial for improving the availability, quality, environmental soundness, and financial viability of solid waste management services in participating utilities. Efficiency is rated modest due to the variability between results from different landfills, and the negative NPVs for some landfills, as well as operational inefficiencies. The overall outcome is Moderately Satisfactory.

a. Outcome Rating

Moderately Satisfactory



7. Risk to Development Outcome

The sustainability of achieved project outcomes will depend on the financial viability of the utilities and the overall SWM sector. At the moment, tariffs as set by the municipalities, are too low, threatening the sustainability of the utilities. The ICR (p. 28) stated that a balanced approach to improve the structuring of the tariffs without putting too much burden on the citizen is necessary to allow for progress in the sector. Also, funding from the national government will be critical for financing investments in advanced infrastructure and to increasing coverage. At the moment, municipalities like Zenica have reached their debt ceilings and cannot make any new investments to maintain their progress and ensure long-term sustainability for investments already made.

8. Assessment of Bank Performance

a. Quality-at-Entry

The project built on the experience of the First Solid Waste Management Project (SWMP 1) and took its lessons into account. Based on the experience of the SWMP 1, the Bank developed the eligibility criteria for sub-projects further. The Bank team identified relevant risk factors. In particular, several risks were identified as substantial such as the unwillingness to pay for waste services, limited institutional capacity, especially in the PMU of RS, financial viability and sustainability of the utilities, financial management risk at the country level due to high perceived corruption in the country and weak compliance with internal controls and weak capacity at the State Audit Institution. The team implemented mitigation measures, however, some of them were inadequate. The project experienced implementation delays due to lengthy processes to obtain permits due to limited capacity, an increasingly complex regulatory environment and resistance by the community that led to changes in design and reduction of project scope. Sector maturity and complexity appear to have been inadequately catered for in design. Also, the SWMP-1 overlapped with the SWMP-2 by almost 1 year, the capacity at the PMU was insufficient to implement the SWMP 1 and SWMP 2 at the same time, which resulted in delays in effectiveness. There were several shortcomings in M&E (see section 9a for more details).

Quality-at-Entry Rating

Moderately Unsatisfactory

b. Quality of supervision

The ICR (p. 28) stated that the Bank conducted 14 supervision missions and that implementation issues were raised in Implementation Status Reports, Aid-Memoires and management letters. The Bank team had the necessary technical and policy experience in the sector, and supplemented the team with consultants with more narrow landfill design expertise when needed. The Bank team restructured the project several times to extend the closing date due to implementation delays, cancel financing and revise the Results Framework to reflect the project's reduced scope.

The project, however, experienced several changes in Task Team Leaders, which resulted in some gaps in institutional knowledge (ICR, page 25). The ICR further states that even though the PAD identified the



need for conducting awareness campaigns, they were insufficient to get the public on board in critical areas such as recycling and tariffs. The ICR (p. 28) stated that the Bank team did not conduct sufficient field-level supervision missions to identify implementation challenges sooner and provide assistance to the PMUs.

Quality of Supervision Rating

Moderately Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The objective of the project was clearly specified. The theory of change and how project activities and outputs would contribute to the desired outcomes were sound and well reflected in the Results Framework. Also, the PDO indicators encompassed all the objectives, however, some of them were output- oriented. The environmental soundness and financial viability indicators were insufficient to comprehensively measure the development objectives that the project was aiming to achieve. PDO indicator 2 used the number of wild dumps closed rather than the size or volume associated with these wild dumps and financial viability could have been better measured by cost recovery rates. Three out of four outcome indicators included baselines. Some of the baselines stated the opposite of the indicator's target. For example, the baseline for the indicator on "increased share of collected solid waste disposed in regional sanitary landfills" stated "72% of collected waste is not disposed in sanitary landfills" The PMUs, assisted by regional PITs were responsible for carrying out M&E activities such as reviewing and monitoring project performance.

b. M&E Implementation

Even though the implementation risk was rated as high during appraisal and periodic monitoring of progress towards the PDO was identified as a mitigation measure, the ICR (p. 26) stated that data was not collected on a timely basis. For example, data on system availability and dump closure was not updated often, and/or updated based on estimates. PDO 1,2, and 5 were only measured at project closing. The Bank team stated that local authorities in FBiH and RS strictly required regular monitoring and reporting from permitted facilities and applied penalties when requirements set in the permits were not closely implemented. However, implementation of M&E was limited due to limited capacity of the established unit within these institutions. Therefore, the results were not monitored comprehensively and consistently. Independent third parties (such as laboratories) with required licenses were hired to carry out monitoring event.



c. M&E Utilization

According to the ICR (p. 26) the Medium-Term Review and Implementation Status Reports were useful and candid and provided insights about progress towards the achievement of the PDO and provided the Bank with useful information for restructuring the project, and cancelling or suspending funds.

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

The project was classified as category B and triggered the Bank's safeguard policy OP/BP 4.01 (Environmental Assessment). The development of Environmental Impact Assessments and Environmental Management Plans for individual landfills was a requirement in order to receive funding. Also, the project developed an Environmental Framework tool to ensure compliance of future landfill investments. However, in the third quarter of 2016 the project experienced delays in receiving environmental monitoring and compliance documents for several sites resulting in a downgrade of the safeguard rating from Satisfactory to Moderately Satisfactory. The ICR (p. 27) stated that the project complied with the safeguard policy. At the same time, it reports that the Sarajevo landfill did not comply with the requirements of the Environmental Management Framework and emission standards regarding its leachate and landfill gas management (LFG) since the LFG system was disconnected due to an investigation by the prosecutor's office into alleged mass graves on the site. Furthermore, the landfill discharges untreated effluent directly into the environment due to an inoperative LTP. The ICR stated that the Sarajevo Cantonal government is trying to solve this issue and in the short term will still partially treat the leachate until the LTP's functionality is restored.

b. Fiduciary Compliance

Financial Management:

According to the ICR (p. 26) the project's Financial Management was rated Satisfactory throughout project implementation. A Financial Management Specialist was based in the Bank's country office and supported the project on a continuous basis by reviewing accounting and reporting arrangements, internal control procedures, planning and budgeting, counterpart funding, flow of funds and disbursement, and staffing. Interim unaudited financial reports were submitted to the Bank on a quarterly basis and did not show any inconsistencies. An external auditor, Deloitte, audited the accounts of Republica Srpska and Federation of Bosnia and Herzegovina. The external auditor's opinion was not qualified.

Procurement:

The ICR (p. 27) stated that procurement was Satisfactory throughout project implementation. Mitigation measures to address the procurement risk, which was rated high at appraisal, were adequate and included



software upgrades, and revisions to the operations and financial manuals.

c. Unintended impacts (Positive or Negative)

NA

d. Other

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	---
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---
Quality of M&E	Substantial	Modest	Weaknesses in M&E design and implementation, i.e., outcome indicators were insufficient to comprehensively measure the development objectives, shortcomings in the baselines, and issues in implementation.
Quality of ICR		Substantial	---

12. Lessons

IEG selected three lessons from the ICR, with some adaptation:

- **Sustainability of the SWM sector investments may be at risk if a tailored institutional and capacity building program is not implemented.** This was a second-generation project in SWM that focused on infrastructure development that however did not include substantial policy dialogue and institutional strengthening, and lacked sustained public awareness initiatives. Implementation of the reform agenda in SWM requires significant human and financial resources, public awareness initiatives as well as capacity building in managerial and technical areas such as landfill optimization, revenue collection and management.
- **In order to ensure long-term sustainability of a certain sector, it is critical to bring sector financing to the top of the policy dialogue agenda and identify reasonable responsibilities of entities at different levels.** In this project, while the central government expects the municipalities to finance the extension of coverage, maintain equipment, and advance the sector to meet the Waste Directive by the European Union, the municipalities already face financial constraints. Going forward it will be critical to identify realistic



responsibilities by the municipalities and the central government to ensure the sustainability of the sector.

- **When designing a results framework it is critical that the selected indicators capture the whole picture of the progress that is being made.** In this project, PDO indicator 2 measured the number of sites being environmentally compliant by measuring leachate quality. However, the indicator did not take into account that one landfill was responsible for 40% of the country's solid waste. Defining the indicator by volume rather than number of sites would have provided more accurate information.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR is concise and appropriately critical. It provides a good overview of project preparation and issues in implementation. Its analysis of the results framework and inadequacy of several outcome indicators to demonstrate the achievement of the objectives is notable. Annex 4 provides rich detail of the project economic and financial analyses. Lessons are based on the experience.

The ICR, however, does not clearly describe what was planned against what was achieved in terms of project activities and outputs. It would have benefited from comparing the situation before the project and after completion of project activities. It is difficult to see the linkages and progress from the first SWM project, financed by the World Bank. Institutional and sector context is almost absent.

a. Quality of ICR Rating

Substantial