



Validation Report

Reference Number: PVR-349
Project Number: 41198
Loan Number: 2441
November 2014

Georgia: Municipal Services Development Project

Independent Evaluation Department
Asian Development Bank

ABBREVIATIONS

ADB	–	Asian Development Bank
DMF	–	design and monitoring framework
EIRR	–	economic internal rate of return
MDF	–	Municipal Development Fund
O&M	–	operation and maintenance
PCR	–	project completion report
PPME	–	project performance monitoring and evaluation
RRP	–	report and recommendation of the President
UWSCG	–	United Water Supply Company of Georgia
W1	–	window 1
W2	–	window 2

NOTE

In this report, “\$” refers to US dollars.

Key Words

adb, asian development bank, financing facility, georgia, independent evaluation department, investment projects, lessons, municipal governments, performance evaluation, sanitation, validation, water supply

The guidelines formally adopted by the Independent Evaluation Department (IED) on avoiding conflict of interest in its independent evaluations were observed in the preparation of this report. To the knowledge of IED management, there were no conflicts of interest of the persons preparing, reviewing, or approving this report.

In preparing any evaluation report, or by making any designation of or reference to a particular territory or geographic area in this document, IED does not intend to make any judgments as to the legal or other status of any territory or area.

PROJECT BASIC DATA

Project Number:	41198	PCR Circulation Date:	Oct 2012	
Loan Number:	2441	PCR Validation Date:	Nov 2014	
Project Name:	Municipal Services Development Project			
Country:	Georgia		Approved (\$ million)	Actual (\$ million)
Sector:	Water and other municipal infrastructure and services	Total Project Costs:	63.25	51.15
ADB Financing: (\$ million)	ADF: 40.00	Loan: (SDR equivalent, million)	40.00	38.26
			24.64	24.15
		Borrower:	23.25	12.89
	OCR: 0.00	Beneficiaries:	0.00	0.00
		Others:	0.00	0.00
Cofinancier:		Total Cofinancing:	0.00	0.00
Approval Date:	12 Sep 2008	Effectiveness Date:	10 Jan 2009	12 Dec 2008
Signing Date:	11 Nov 2008	Closing Date:	30 Jun 2013	27 Feb 2013
Project Officers:	I. H. Keum B. Goalou	Location: ADB headquarters ADB headquarters	From: Sep 2008 Jul 2011	To: Jul 2011 Feb 2013
Validator:	I. Green, Consultant	Peer Reviewer:	T. Ueda, Principal Evaluation Specialist, IED1	
Quality Reviewers:	H. Son, Principal Evaluation Specialist, IED1 E. Gozali, Principal Evaluation Specialist, IED1	Director:	W. Kolkma, IED1	

ADB = Asian Development Bank; ADF = Asian Development Fund; IED1 = Independent Evaluation Department, Division 1; OCR = ordinary capital resources; PCR = project completion report; SDR = special drawing rights.

I. PROJECT DESCRIPTION

A. Rationale

1. The dissolution of the Soviet Union weakened the Government of Georgia and its economy. Municipal services, capital investments in infrastructure, and the operation and maintenance (O&M) of these services were neglected nationwide. As a result, the quality of life deteriorated and private investment and economic growth were constrained. At the time of project preparation, the government recognized this problem and initiated remedial measures, including the establishment of a Municipal Development Fund (MDF). The MDF was intended to provide finance and technical advice to municipal governments. The success of MDF in a limited number of municipalities during the time of project preparation justified the expansion of its support to more municipalities.

2. Given this context, the project design¹ focused on the core problems of deteriorating municipal infrastructure and inadequate coverage and poor levels of service.² These were to be done by improving basic municipal services and through the rehabilitation, repair, and extension of dilapidated urban infrastructure. The project design also included the provision of technical assistance to assist participating municipalities in improving local revenues, financial management, and reporting systems. The project was a necessary intervention, which was appropriately channelled through the public sector.

B. Expected Impact

3. The report and recommendation of the President (RRP) described the expected overall impact of the project as “improved municipal environment and public health in Georgia.” At the impact level, performance indicator and target were described as “population with access to improved water supply and sanitation increases from 96% in 2006 to 100% in 2020.” The indicator and target were modest and could have been extended to reflect improved public health and quality of life, which would have been consistent with the cause-effect analysis in the Urban Sector Problem Analysis shown in Appendix 1 of the RRP. Other possible impacts would be facilitating private sector investment and economic growth.

C. Objectives or Expected Outcome

4. The RRP described the project’s outcome as improved municipal infrastructure and service delivery. At the outcome level, performance indicator and target were described as 100,000 people having access to improved municipal services by 2015. Again, this indicator was too general and the target was modest when compared to actual outcome achievement (para. 14). The outcome indicators could have included reference to improved policy support, effective sector planning, enhanced financing for urban services, and strengthened management and technical capacity of municipal governments.

D. Outputs

5. The project comprised two components: Part A—Investment Projects Financing Facility, and Part B—Project Management and Capacity Development. The intended outputs of Part A component were (i) increased quality, coverage, and reliability of water supply, sanitation, and solid waste management, and (ii) improved roads. The intended outputs of Part B component were (i) improved capacity of municipal governments to prepare and appraise feasibility, engineering design, environmental, social, and other related studies; (ii) improved capacity in project management at municipal level; (iii) strengthened corporate and business planning processes within MDF; (iv) improved capacity through studies and training for MDF, municipal, and utility staff; and (v) improved operational and long-term planning capacity within MDF. Overall, the output indicators and targets did not adequately cover all aspects of the proposed outputs.

6. The project components basically remained unchanged from those identified during appraisal. However, the proportion of subprojects between window 1 (W1) and window 2 (W2) was changed. These changes did not affect the total project cost but resulted in project benefit, such as reaching more people and covering a wider geographical area.

¹ ADB. 2008. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to Georgia for the Municipal Services Development Project*. Manila.

² Please see the Urban Sector Problem Analysis (a Problem Tree analysis) in Appendix 1 of the RRP.

E. Provision of Inputs

7. The total cost of the project, including physical and price contingencies, was estimated at \$63.25 million equivalent, including \$9.30 million in taxes and duties. It was proposed that the Asian Development Bank (ADB) provide a loan in various currencies equivalent to SDR24.64 (\$40.0 million equivalent) from the ADB Special Funds resources. Counterpart funding was planned to come from the central government (\$3.25 million), MDF (\$10.20 million) and participating municipalities (\$9.80 million). At appraisal, the value of consulting services contracts was estimated at \$3.27 million to cover legal and/or technical aspects of project implementation, O&M, planning, and funding, including feasibility studies, detailed designs, and construction supervision.

F. Implementation Arrangements

8. The RRP proposed that MDF, under the overall direction and guidance of its Supervisory Board, would coordinate project implementation through consultants and participating municipal governments that are responsible for the day-to-day project management. These arrangements were largely followed although no project management or implementation units were established and MDF assigned technical, financial, and administrative staff to undertake project implementation. The MDF Supervisory Board was chaired by the President of Georgia and consisted of representatives from the Ministry of Regional Development and Infrastructure and other ministries concerned. The Supervisory Board was authorized to approve subproject feasibility and appraisal reports, the yearly financing plan, and implementation arrangements. The board convened meetings on a monthly basis and as needed.

9. All 43 covenants, as stipulated in the loan agreement and the project agreement, were complied with. Adjustments made during implementation were as follows: (i) the requirements for the financial capacity of municipal governments that are eligible for financing under W1 were changed from 6% to 4% for the total annual debt service payment, from 100% to 150% of forecast resources for total outstanding debt, and from GEL3.04 million to GEL4.56 million for forecast resources; (ii) the total cost threshold for a subproject in W2 was raised from \$1.0 million to \$2.5 million equivalent for two road projects as exceptional cases; and (iii) MDF did not establish a project implementation unit with staff on a full-time basis.

II. EVALUATION OF PERFORMANCE AND RATINGS

A. Relevance of Design and Formulation

10. The project completion report (PCR) rated the project *highly relevant*.³ Although no national sector development plan, strategy, overall urban policy, or long-term investment program were prepared during project preparation, MDF was already established in 1997 and the government had started financing local infrastructure investments and developing the capacity of municipal governments. Support through MDF was appropriate and the project was consistent with the MDF mandate and its operational strategy. Water supply and sanitation development was based on an outline program for the water and sanitation sector prepared by the Organization for Economic Co-operation and Development (OECD) for the Government of Georgia in 2005.⁴ In addition, subproject formulation and design were undertaken through a

³ ADB. 2012. *Completion Report: Municipal Services Development Project in Georgia*. Manila.

⁴ OECD. 2005. *Support to Government of Georgia in Developing and Implementing Financial Strategy for Urban Water Supply and Sanitation in Georgia and Carrying out the Feasibility Analysis*.

community demand-driven approach. The subprojects were prepared based on the findings of a need assessment conducted through municipal governments' meetings with stakeholders, including local communities.

11. In 2010, the State Strategy for Regional Development of Georgia for 2010–2017 was issued through a resolution of the government.⁵ This strategy provides the main principles for Georgia's medium-term regional development policy, focusing on municipal services and infrastructure development, which further verifies the relevance of this project.

12. ADB priorities were stated in the interim operational strategy (IOS) 2008–2009 for Georgia.⁶ The IOS states that the proposed support of ADB for municipal infrastructure is in line with the government's development agenda, which prioritizes poverty reduction, economic growth, and governance and anticorruption. The improved municipal and local infrastructure services fall under the economic growth category.

13. The project took a sector and programmatic approach by channelling funds for cost-recovery-oriented investments through the central government, and then from the MDF to municipal governments. The project supported the government's objectives of decentralization, poverty reduction, and human development by (i) improving urban infrastructure services, and (ii) strengthening the institutional capacity of MDF and participating municipal governments. An increase in the number of subprojects was in line with the government strategy, and this resulted in project benefits reaching more municipal governments in wider geographical areas. However, water tariffs were calculated based on the number of persons per household and using consumption norms, i.e., they were not cost-based and average tariffs in some areas were only just sufficient to cover the unit O&M cost.

14. This validation considers the project's outcome indicator too limited in scope and the target too low (i.e., actual beneficiary reported at 1.7 million persons as compared to appraisal target of only 100,000). Output indicators and targets were rather vague, even for a programmatic approach, and in some cases, were more akin to input indicators. A broader scope of outcome indicators would have helped to focus more attention on monitoring Component B (capacity building) and more precise output indicators could have put more emphasis on O&M requirements, which could have improved the project's primary weakness on sustainability. Although inadequate cost recovery was correctly identified as a risk at appraisal, mitigation actions agreed and implemented were proven inadequate to help sustain the project. This validation rates the project *relevant*.

B. Effectiveness in Achieving Project Outcome and Outputs

15. The project was rated *highly effective* in the PCR and this validation agrees with this rating. The outcome indicator and target were achieved. As noted in the PCR, more than 1.3 million people were estimated to have benefited from the improved municipal roads since project completion in 2012 and an additional 127,884 households (approximately 400,000 people) were benefiting from supply of piped water. The outcome indicator and target was too modest. The outcome indicator could have included references to improved policy support, effective sector planning, enhanced financing for urban services, and strengthened management and technical capacity of municipal governments. Measures of performance of targets set for such indicators would provide a more rounded view of project achievement.

⁵ Resolution No. 172 dated 25 June 2010.

⁶ ADB. 2008. *Interim Operational Strategy: Georgia, 2008–2009*. Manila.

Without these indicators, the relevance of outputs and their indicators is weakened. An assessment of the information available on these possible additional outcome indicators suggests that there is evidence to confirm effectiveness in some, but not for all Component B outputs.⁷

C. Efficiency of Resource Use in Achieving Outcome and Outputs

16. The PCR rated the project *highly efficient* and this validation agrees with this rating. The economic internal rate of return (EIRR) was reevaluated in the PCR for six sample subprojects (four for water supply and sanitation and two for road improvement) and the results suggested a highly efficient project. The estimated EIRR for the W1 water supply subprojects is 21.6%. For W2 subprojects, the EIRR is between 15.6% and 21.3%. The average EIRR is 18.9%. The benefit–cost ratio ranges between 1.23 and 1.62, averaging 1.45. The EIRR for the road subprojects is between 23.6% (W2 sample) and 31.6% (W1 sample), averaging 27.6%. In both sectors, the average EIRR at completion is slightly higher than estimated at appraisal, and all exceed the threshold economic opportunity cost of capital of 12%.

17. The validity of EIRR assessments in the PCR was reviewed and found to be satisfactory. In particular, this validation agrees with the sensitivity analysis that all subprojects remain robust—both at a 20% increase in capital and in O&M costs—with subprojects in both categories more sensitive to O&M costs. A 20% decrease in benefits shows that only the roads subprojects are economically viable. Increasing O&M costs result in a lower EIRR of 13.5% for water supply subprojects, and 22.6% for roads. Decreasing benefits result in an even lower average of 10.3% for water supply, and 16.7% for roads. Overall, the project was implemented without delay and the loan closed ahead of schedule. This is attributed to the ability of MDF and the municipal governments to process the subprojects.

D. Preliminary Assessment of Sustainability

18. The PCR rated the project *less likely sustainable* and this validation agrees with this rating. In particular, flat water tariffs are calculated based on the number of persons per household using consumption norms, i.e., they are not cost-based. The PCR noted that the average tariffs in some areas are just sufficient to cover the unit O&M cost. Although this is intended to appropriately set tariffs based on cost-recovery principles, once the metering program has been implemented fully, this cannot be deemed a project achievement. The project design did not explicitly address this—with appropriate tariff-related indicators and targets in the design and monitoring framework (DMF)—although it is of critical importance.

E. Impact

19. Overall, the PCR rated the project impact *substantial*, but this validation recommends a lower rating of *significant*. The PCR suggested that the impact indicator and target of the proportion of the population with improved water supply and sanitation rising from 96% in 2006 to 100% in 2020 will be achieved. However, utility services may not be sustained and expanded unless adequate funds for O&M and expansion are available, and this remains uncertain. Although the capacity of MDF has been enhanced, the capacity of the municipal governments and United Water Supply Company of Georgia (UWSCG) needs to be strengthened.

⁷ For example, the achievement of a long-term MDF strategy was approved in 2011, MDF budgeting, finance and operations procedures were improved and training was undertaken of MDF staff.

20. The project is environmentally beneficial. The physical component of the subprojects, with simple, appropriate, and low-cost technology, did not pose any adverse environmental consequences. The provision of safe drinking water and proper connection to sewer facilities made a positive impact on the environment. The improved municipal roads reduced noise, dust, and air pollution.

21. The PCR stated that the project has provided the urban population in the project districts with safe water and has also empowered vulnerable communities through the municipal service centers established under the umbrella of UWSCG in all towns outside Tbilisi and Rustavi. However, evidence for these achievements is not apparent. There is no reference to a benefit monitoring and evaluation or to surveys of beneficiaries. The project performance monitoring and evaluation (PPME) indicators used (based on the ADB midterm review mission of September 2010, Aide Memoire) enable very limited assessment of social impact.

22. MDF appraised all subprojects in accordance with the Environmental Assessment and Review Framework (EARF) and government laws. MDF staff visited the proposed subproject sites to carry out environmental impact assessments, including a public hearing and consultations. During construction, MDF also monitored the environmental aspect of all subprojects and visited worksites at least monthly. In addition, environmental monitoring activities were discussed in the semiannual progress reports.

III. OTHER PERFORMANCE ASSESSMENTS

A. Performance of the Borrower and Executing Agency

23. The performance of the borrower and MDF, as the executing agency, was *satisfactory* and this validation agrees with this rating. MDF maintained adequate coordination with ADB, the municipal governments, and contractors and reporting requirements were basically met. However, frequent changes in MDF organization and management and the high turnover of municipal government staff inhibited performance. The UWSCG is now responsible for the O&M of water supply systems, with branch offices at the regional and municipal levels, but its capacity for O&M at the local level appears limited.

B. Performance of the Asian Development Bank

24. The PCR considered ADB performance *satisfactory* and this validation agrees with this rating. During the project's implementation from November 2008 to June 2012, ADB fielded five review missions, in addition to the inception, midterm, and completion review missions. The review missions were effective and instrumental in addressing various issues to achieve the timely completion of the project. ADB approved three requests from MDF for the reallocation of loan proceeds. The ADB Resident Mission in Georgia actively participated in monitoring the project's implementation. ADB review missions frequently visited subproject sites and met with municipal government officials, local MDF staff, and contractors to observe the progress of civil works. The missions also interacted with project beneficiaries and explained the impacts that would affect them during project implementation and upon completion of the project.

IV. OVERALL ASSESSMENT, LESSONS, AND RECOMMENDATIONS

A. Overall Assessment and Ratings

25. Overall, the project was rated *successful* in the PCR and this validation agrees with this rating. Targets in the outputs and outcome indicators exceeded those set out in the original DMF. This success, however, should be qualified by the modesty of the targets, which could have been broader in scope. Considering potential additional indicators and targets, the effectiveness of the project is confirmed, including its relevance and efficiency. However, the project's sustainability is not assured, hence, the capacity of municipal governments and the UWSCG needs to be strengthened and adequate funds for O&M to be made available.

Overall Ratings

Criteria	PCR	IED Review	Reason for Disagreement and/or Comments
Relevance	Highly relevant	Relevant	Although the project was strategically relevant, there were design issues, including (i) an outcome indicator that was too general and the target being too low, suggesting a lack of familiarity with potential beneficiary municipalities, and (ii) a weakness in cost recovery despite mitigation actions (para. 14).
Effectiveness in achieving project outcomes and outputs	Highly effective	Highly effective	
Efficiency in achieving outcome and outputs	Highly efficient	Highly efficient	
Preliminary assessment of sustainability	Less likely sustainable	Less than likely sustainable	
Overall assessment	Successful	Successful	
Impact	Substantial	Significant	Although the PCR suggested that the impact indicator and target in the DMF will be achieved, utility services will not be sustained and expanded unless adequate funds for O&M and expansion are available, and these remain uncertain (paras. 19–22).
Borrower and executing agency	Satisfactory	Satisfactory	
Performance of ADB	Satisfactory	Satisfactory	
Quality of PCR		Satisfactory	Refer to para. 31.

ADB = Asian Development Bank, DMF = design and monitoring framework, IED = Independent Evaluation Department, PCR = project completion report.

Note: From May 2012, IED views the PCR rating terminology of "partly" or "less" as equivalent to "less than" and uses this terminology for its own rating categories to improve clarity.

Source: ADB Independent Evaluation Department.

B. Lessons

26. This validation agrees with the identified lessons learned and emphasizes the importance of the lesson where no consultant was engaged to address issues on the legal and/or technical aspects of O&M planning and funding, measures for cost recovery, tariff collection, and the metering system. This weakened the capacity of the project to support this essential aspect of the project. Another lesson learned is for the problem analysis to be explicitly used to identify outcome and outputs, while outcome and output indicators and targets should reflect the causes of problems identified in the problem analysis. The indicators and targets in the project's DMF and PPME were not comprehensive.

C. Recommendations for Follow-Up

27. **Project-related recommendations.** This validation agrees with the future monitoring recommendations of the PCR, and emphasizes the importance of two of the recommendations, which are (i) for the municipal governments and the UWSCG to strengthen their capacity for O&M, and to ensure adequate budget allocation; and (ii) for UWSCG to monitor the installation of water meters and collection of water tariffs based on consumption in the years to come. Once tariffs have been introduced, these should be reviewed regularly and regulated to ensure financial sustainability based on consumers' affordability. This validation agrees with the recommendations for further actions and follow up, particularly on the following: (i) install water meters and collect water tariffs based on the quantity of water consumed; (ii) undertake a more targeted subsidization of tariffs so that only the poor and deserving benefit; (iii) ensure the enhanced capacity of municipal government staff for O&M monitoring of roads; (iv) ensure the adequate allocation of budget for O&M of municipal roads so that local contractors can be engaged to carry out cleaning and repairs.

28. **General recommendations.** This validation highlights these items as important: (i) ground and spring water is being exploited with minimal control, hence, government regulations to control water sources should be put in place to ensure the sustainability of groundwater production; and (ii) a national urban sector strategy for Georgia is required to provide a vision for the sector, identify objectives, and present an action plan for development. A national urban spatial strategy would form a key part of the strategy, which should address the key issues of (a) investment needs, (b) alignment of government policies and actions, (c) a financing plan, (d) a definition of service standards, and (e) identification of public-private partnership opportunities.

V. OTHER CONSIDERATIONS AND FOLLOW-UP

A. Monitoring and Evaluation Design, Implementation, and Utilization

29. The problem analysis presented in the RRP was of high standard, but its findings were not adequately reflected in the DMF. The indicators and targets should better reflect the findings of the problem analysis and be the core of the PPME.

30. Supported by the UWSCG and municipal administrations, MDF monitored the socio-economic implications of the project during project implementation as part of the project performance monitoring system. However, neither the PCR nor the review mission reports provided evidence that socioeconomic surveys nor a benefit monitoring and evaluation have been undertaken.

B. Comments on Project Completion Report Quality

31. The PCR quality is rated *satisfactory*. The PCR provided adequate evidence and analysis to substantiate ratings and is consistent with PCR guidelines.

C. Data Sources for Validation

32. The sources for validation are the PCR, RRP, and the loan review mission reports.

D. Recommendation for Independent Evaluation Department Follow-Up

33. All civil works and project components were physically completed by the end of June 2012. An additional 2–3 years may be required to allow for an assessment of the long-term socioeconomic benefits of the project. Therefore, the suitable timing for preparing the project performance evaluation report will be in 2015 or 2016.