



Report and Recommendation of the President to the Board of Directors

Project Number: 43405
March 2011

Proposed Multitranche Financing Facility Georgia: Urban Services Improvement Investment Program

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 29 January 2010)

Currency Unit	–	lari (GEL)
GEL1.00	=	\$0.5636
\$1.00	=	GEL1.7743

ABBREVIATIONS

ADB	–	Asian Development Bank
ADF	–	Asian Development Fund
BWC	–	Batumi Water Company
FAM	–	facility administration manual
FDI	–	foreign direct investment
GNEWSRC	–	Georgia National Energy and Water Supply Regulatory Commission
GWPC	–	Georgia Water and Power Company
IEE	–	initial environmental examination
KWC	–	Kobuleti Water Company
km	–	kilometer
MA	–	Ministry of Agriculture
MEPNR	–	Ministry of Environmental Protection and Natural Resources
MFF	–	multitranches financing facility
MLD	–	million liters per day
MRDI	–	Ministry of Regional Development and Infrastructure
OCR	–	ordinary capital resources
PPMS	–	project performance management system
QCBS	–	quality- and cost-based selection
SDP	–	sector development plan
UWSCG	–	United Water Supply Company of Georgia Limited Liability Company
VGf	–	viability gap funding
WSS	–	water supply and sanitation

NOTES

- (i) The fiscal year (FY) of the Government of Georgia and its agencies ends on 31 December.
- (ii) In this report, "\$" refers to US dollars.

Vice-President	X. Zhao, Operations 1
Director General	J. Miranda, Central and West Asia Department (CWRD)
Director	R. Subramaniam, Urban Development and Water Division, CWRD
Team leader	V. Padmanabhan, Urban Development Specialist, CWRD
Team members	L. Blanchetti-Revelli, Senior Social Development Specialist, CWRD
	J. Chenoweth, Counsel, Office of the General Counsel
	I. Chkonia, Project Implementation Officer, CWRD
	G. Kiziria, Senior Country Coordination Officer, CWRD
	D. Kucan, Senior Urban Development Specialist, CWRD
	M. Kunzer, Senior Environment Specialist, CWRD
	C. Llorens, Water Supply and Sanitation Specialist, CWRD
	C. Png, Counsel, Office of the General Counsel
	S. Roth, Social Development and Gender Specialist, CWRD
	C. Soliman, Associate Operations Analyst, CWRD
	M. Vargas, Operations Assistant, CWRD
Peer reviewer	A. Chiplunkar, Principal Water Supply and Sanitation Specialist, Regional and Sustainable Development Department

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PROJECT AT A GLANCE

1. Project Name: MFF - Urban Services Improvement Investment Program - Facility Concept		2. Project Number: 43405-013	
3. Country: Georgia		4. Department/Division: Central and West Asia Department/Urban Development and Water Division	
5. Sector Classification:			
		Sectors	Primary
		Water supply and other municipal infrastructure and services	√
		Subsectors	
		Water supply and sanitation	
6. Thematic Classification:			
		Themes	Primary
		Social development	
		Environmental sustainability	√
		Private sector development	
		Capacity development	
		Subthemes	
		Human development	
		Urban environmental improvement	
		Public-private partnerships	
		Institutional development	
6a. Climate Change Impact No Climate Change Indicator available.		6b. Gender Mainstreaming	
		Effective gender mainstreaming (EGM)	√
		Gender equity theme (GEN)	
		No gender elements (NGE)	
		Some gender benefits (SGB)	
7. Targeting Classification:		8. Location Impact:	
General Intervention	Targeted Intervention		
	Geographic dimensions of inclusive growth	Millennium development goals	Income poverty at household level
		√ MDG7	
		National	Low
		Regional	High
		Rural	Low
		Urban	High
9. Project Risk Categorization: Complex			
10. Safeguards Categorization: No Safeguards Categorization available.			
11. ADB Financing:			
	Sovereign/Nonsovereign	Modality	Source
	Sovereign	MFF-Facility (Loan)	Asian Development Fund
	Sovereign	MFF-Facility (Loan)	Ordinary capital resources
	Total		500.0
12. Cofinancing: No Cofinancing available.			
13. Counterpart Financing:			
	Source	Amount (\$ Million)	
	Government	125.0	
	Total	125.0	
14. Aid Effectiveness:			
	Parallel project implementation unit	No	
	Program-based approach	No	

I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed multitranche financing facility (MFF) to Georgia for the Urban Services Improvement Investment Program.¹

2. The proposed investment program will improve water supply and sanitation (WSS) services in six secondary towns of Georgia. It will (i) improve infrastructure by rehabilitating, reconstructing, and expanding WSS services; (ii) strengthen institutional effectiveness by (a) improving the technical and management capacities of the key WSS service provider, the United Water Supply Company of Georgia Limited Liability Company (UWSCG), by procuring the services of an internationally reputed water operator to act as a management contractor, enabling it to provide efficient WSS services; and (b) developing the capacity of sector regulators to regulate tariffs, services standards, environmental protection, and drinking water quality in the long term; and (iii) support the investment program implementation.²

II. THE INVESTMENT PROGRAM

A. Rationale

1. Socioeconomic Context

3. Georgia has a population of 4.43 million and serves as an important nodal point for interregional trade flows connecting the South Caucasus and landlocked Central Asia with the Black Sea and Mediterranean basins. The country's current gross domestic product is \$10.5 billion, with annual growth of 5.9% in 2004–2009. With global recovery taking hold, Georgia's gross domestic product grew by 6.6% in the first half of 2010 on account of high growth in manufacturing, trade, and transportation.

4. Foreign direct investment (FDI) in Georgia is one of the principal drivers of economic growth over the last 5 years and is a major balancing factor for a sizeable trade deficit. While FDI declined sharply in 2008-2009 due to global financial crisis, it was counterbalanced by growing remittances and current account surpluses in 2010. The service sector accounted consistently for a predominant share of total FDI, averaging nearly 60%, and continues to create employment in urban centers and secondary towns. Based on third quarter 2010 figures, the government expects FDI to reach 2009 levels and improve over time. By creating employment in secondary towns, the government will reduce poverty and complement its targeted social assistance program to improve living standards for the poor.³

5. New employment opportunities will bring further rural-to-urban migration and burden infrastructure and municipal service provision, such as WSS, in cities and secondary towns, with growing environmental impact and concomitant public health implications.⁴ Improved municipal services, and specifically WSS, are therefore a key government priority. This is highlighted in the context of major urban centers, such as Kutaisi, Poti, Rustavi, Tbilisi, and Zugdidi where larger populations increase demand for municipal services and apply greater pressure on service delivery. Urban centers in traditional tourist destinations such as Kobuleti, Batumi, and,

¹ The design and monitoring framework is in Appendix 1.

² ADB. 2010. *Technical Assistance to Georgia for Preparing a Multitranche Financing Facility for the Urban Services Improvement Investment Program*. Manila (TA 7487-GEO, for \$493,500, approved on 5 January).

³ Around 21% of the country's population live in poverty, including 8.8% in extreme poverty.

⁴ About 2.34 million people, or 53% of total population, reside in urban centers.

most recently, Mestia serve as important magnets for tourists and are expected to witness similar pressures on municipal service delivery in the medium term.

2. Sector Problems and Constraints

6. **Institutional arrangements.** The State Commission on Water Supply and Energy directs WSS policy, and the Ministry of Regional Development and Infrastructure (MRDI) is responsible for developing infrastructure, guiding investment, and administering line agencies. Sector regulatory bodies include the Georgia National Energy and Water Supply Regulatory Commission (GNEWSRC) for service standard and economic regulation, the Ministry of Environmental Protection and Natural Resources (MEPNR) for environmental monitoring, and the Ministry of Agriculture (MA) for monitoring drinking water quality.

7. **Service providers.** Following reforms and consolidation during 2008–2010,⁵ WSS services across Georgia are now provided by (i) Georgia Water and Power Company (GWPC) serving Tbilisi and Rustavi,⁶ (ii) Batumi Water Company (BWC) and Kobuleti Water Company (KWC) serving the Adjara Autonomous Republic,⁷ and (iii) UWSCG⁸ serving the rest of the country. Improving WSS services delivered by UWSCG is central to the government's assessment of investment needs in the sector because (i) UWSCG covers 90% of the country's geographic area and 60% of its population, especially in the economically strategic urban centers, and (ii) WSS services provided by GWPC and the Adjara water companies are separately governed. The services provided by the privatized GWPC are governed through a contract with the government, and services provided by the Adjara organizations are governed by the Adjara Autonomous Region.

8. **Technical sustainability and environmental protection.** While 88% of the country's urban population has access to piped water, only 70% of the urban population in the region served by UWSCG has piped water supply. Only 15% of the urban population in that region has access to a reticulated sewage disposal system. The absence of sewage treatment plants and nonfunctional sewage treatment plants in certain towns and cities harm the environment by polluting rivers and streams.

9. **Financial sustainability.** UWSCG is a fledgling organization and currently refining its business processes with assistance from development partners. UWSCG's revenue budget for 2010 was \$19.5 million. Its financial management requires significant improvement, as revenue collection stood at 72% (49% domestic and 94% other) in the first half of 2010, during which revenue was \$3.62 million and expenditure \$6.65 million, thus requiring a 50% government subsidy.⁹ The average domestic WSS tariff set by GNEWSRC since 2010 is \$0.15 per cubic meter, against a cost recovery tariff of \$0.21 per cubic meter as estimated by UWSCG. With poor collection efficiency, the operating ratio (expenditures to revenue) is expected to increase over time if adequate revenue enhancement measures are not expeditiously pursued.

⁵ Reforms included amalgamating 66 local water companies across the country.

⁶ GWPC manages the Gardabani, Mskheta, Rustavi, and Tbilisi water companies, which were privatized in 2008.

⁷ WSS improvement in the Adjara Autonomous Republic is financed by German development cooperation through KfW. BWC and KWC report to the Adjara Autonomous Region.

⁸ UWSCG is a public limited liability company established in 2010 and wholly owned by the government. While it has its own day-to-day management team, it is controlled by and reports to MRDI. Following reform and restructuring, UWSCG owns and operates a range of WSS sector assets located in the areas it services, many of which were formerly owned by local governments and water companies. Sector Assessment (Summary): Water Supply and Sanitation (accessible from the list of linked documents in Appendix 2).

⁹ Revenue collection from domestic consumers is poor because consumers resist paying for poor service.

3. Sector Policy, Strategy, and Road Map

10. Improved urban WSS service is a key priority of the government, as it is essential to improving the quality of life, attracting investment, and raising productivity and competitiveness. Recognizing the need to overcome current problems and constraints, the government's urban WSS sector development plan (SDP) for 2011–2020, approved on 31 January 2011, aims to ensure continuous and reliable water supply and safe sanitation services to all urban residents by 2020. The SDP's policy and institutional reform framework has a strong focus on technical sustainability of WSS services, environmental and natural resource protection, public-private partnerships, tariff rationalization, prudent financial management, and improved sector regulation through an enabling legislative and regulatory frameworks for WSS services.

11. The long-term investment plan (2011–2020) under the SDP is estimated at \$1.65 billion, comprising physical¹⁰ and nonphysical investments to address medium-term (2011–2015) and long-term (2016–2020) needs (Table 1).

Table 1: Urban Water Supply and Sanitation Investment Plan Estimates
(\$ million)

Item	2011–2015	2016–2020	Total	Share of Total (%)
Infrastructure improvement	1,285.00	285.00	1,570.00	95.44
Institutional effectiveness	15.00	5.00	20.00	1.22
Project management	45.00	10.00	55.00	3.34
Total	1,345.00	300.00	1,645.00	100.00

Source: Ministry of Regional Development and Infrastructure estimates.

12. The SDP objectives are fully consistent with the approach agreed between Georgia and the Asian Development Bank (ADB) for the purposes of ADB's assistance program in the country¹¹ and in line with the principal elements of ADB's water policy¹² and ADB's proposed water operational framework 2020.

4. Development Partner Coordination

13. Development partner coordination has in the past provided the government with opportunities to synergize interventions and capitalize on available best practices. The World Bank and ADB have provided a significant portion of the funds invested in improving the country's WSS infrastructure.¹³ Lessons are that physical investment requirements exceed the financing available from any individual institution and should be combined with significant reforms in the sector to improve the quality of WSS services. Regular consultations were held with the European Investment Bank and the European Bank for Reconstruction and Development to coordinate interventions, identify synergies and cooperation opportunities, and exclude overlap and duplication. ADB will consider joint and parallel cofinancing partnerships during subsequent tranches of the MFF and during investment program implementation.

¹⁰ Physical investments are identified for UWSCG alone, as GWPC, BWC, KWC, and Adjara local self-governments have or will develop their own investment plans, given their autonomous management structures.

¹¹ ADB. 2007. *Interim Operational Strategy 2008–2009*. Manila. The country partnership strategy is being prepared.

¹² ADB. 2005. *Water for All: The Water Policy of the Asian Development Bank*. Manila.

¹³ ADB. 2008. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to Georgia for the Municipal Services Development Project*. Manila (Loan 2441-GEO, for \$40 million, approved on 12 September); ADB. 2009. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to Georgia for the Municipal Services Development Project – Phase 2*. Manila (Loan 2534-GEO, for \$30 million, approved on 28 July).

B. Impact and Outcome

14. The investment program will improve the health of residents in the secondary towns of Anaklia, Kutaisi, Marneuli, Mestia, Poti, and Zugdidi. The outcome of the investment program is improved WSS services in these secondary towns.

C. Outputs

1. Component 1: Infrastructure Improvement

15. The first component will support infrastructure investments to rehabilitate, improve, and expand WSS facilities in six secondary towns and benefit approximately 335,000 residents, or 38% of urban residents in the region served by UWSCG (about 7.6% and 14.3% of the total and urban population, respectively, in Georgia).¹⁴ This includes system optimization and resource rationalization to improve service efficiency. It will provide vehicles and equipment for system operation and maintenance and for assessing system performance in these towns. It will also help Georgia reduce its carbon footprint by reducing greenhouse gas emissions and installing energy efficient systems.

2. Component 2: Institutional Effectiveness

16. The second component will develop capacity in MRDI, MEPNR, MA, and GNEWSRC to support more effective regulation of WSS services. It will finance the services of an internationally reputed water operator as a management contractor, to improve UWSCG's technical, management, and financial performance, all fundamental for efficient WSS delivery. Through these improvements, UWSCG will boost its revenues and creditworthiness. Over a 3-year period, the management contractor will assist UWSCG in managing its operations and improving the delivery of WSS services. By substituting for top and key management staff in the UWSCG head office and regional branches, the management contractor will undertake long-term capital planning and asset strengthening, procurement, the supervision of capital improvement works, system operation and maintenance, and improved financial management, including improved revenue collection efficiency and expenditure management. The management contractor's fees will have fixed and variable components, with the latter linked to performance indicators and targets. An outline scope of work is detailed in the facility administration manual (FAM).¹⁵

3. Component 3: Project Implementation Support

17. The third component will support project implementation with focus on detailed engineering; construction supervision; procurement; safeguards compliance; preparation of the subsequent tranches of the investment program; and a public awareness program on health, hygiene, sanitation, and water conservation. Consumer feedback through knowledge, attitude, and practice surveys will inform the design of the capacity-building programs.

D. Investment and Financing Plans

18. Georgia has requested a MFF in an amount up to \$500 million from ADB's ordinary capital resources (OCR) and Special Funds resources (Asian Development Fund (ADF)) to help

¹⁴ Kutaisi and Poti are being developed as special economic or free industrial zones, Marneuli and Zugdidi have agro-processing industries, and Mestia and Anaklia are being developed as tourist centers.

¹⁵ Facility Administration Manual (accessible from the list of linked documents in Appendix 2).

finance the investment program, which will support in turn a slice of the SDP's medium-term investment requirement. The investment plan is summarized in Table 2.

Table 2: Investment Plan
(\$ million)

Item	Investment Program	Project 1 ^a
A. Base Cost^b		
1. Component 1: Infrastructure improvement	463.83	62.50
2. Component 2: Institutional effectiveness	13.50	13.50
3. Component 3: Project implementation support	13.77	12.30
Subtotal (A)	491.10	88.03
B. Contingencies^c	117.95	14.54
C. Financing Charges During Implementation^d	15.95	2.16
Total (A+B+C)	625.00	105.00

^a Includes taxes and duties of \$15.7 million.

^b In mid-2010 prices.

^c Physical contingencies are computed at 10% and price contingencies at 5%.

^d Includes interest and commitment and bank charges. Interest during construction for Asian Development Bank loan(s) has been computed at the 5-year forward London interbank offered rate plus a spread of 0.4%. Commitment charges for an Asian Development Bank loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates.

19. Georgia's WSS SDP fits ADB's approach to infrastructure development in the country and allows ADB to enter into a long-term commitment with the government and development partners, ensuring a comprehensive approach to WSS service delivery. On account of its flexibility and ability to finance investments sequentially as each tranche becomes ready for implementation, the MFF allows Georgia to focus on implementation and strengthen the institutional and regulatory framework. By phasing investments over time, the MFF approach would help Georgia manage its development financing more efficiently. With the certainty that the basic investments will be covered, the MFF will also help Georgia focus on attracting greater private sector participation. For instance, the government is working with ADB to structure construction and management of sewage treatment plants on a design-build-operate basis.

20. The MFF is anticipated to consist of four tranches, subject to the government's submission of related periodic financing requests, execution of the related loan and project agreements for each tranche, and fulfillment of terms and conditions and undertakings set forth in the framework financing agreement. The OCR financing will follow the ordinary operations loan regulations applicable to London interbank offered rate (LIBOR)-based loans, subject to possible modifications under individual loan agreements. The ADF financing will follow the special operations loan regulations, subject to possible modifications under individual loan agreements.

21. The first tranche, for \$80 million equivalent, will be financed by the ADF and have a 32-year term, including a grace period of 8 years, an annual interest rate of 1% per annum during the grace period and 1.5% per annum thereafter, and such other terms and conditions set forth in the loan and project agreements for tranche 1. Interest during construction will be capitalized in the loan. For the first tranche, the government will relend part of the loan to UWSCG under the same terms and conditions, and in dollars. Foreign exchange risk will be borne by UWSCG. The remainder of the loan will be made available to MRDI. The government critically needs ADF resources to immediately invest in much-needed infrastructure and limit the financial burden on UWSCG. Since the investments are accompanied by reforms, ADF resources will provide UWSCG the flexibility it requires to initially improve its financial management with limited debt burden and position it to absorb OCR resources in the later years.

22. The government has specifically requested flexibility in the use of ADF resources for subsequent tranches. It is understood that the provision of any such additional ADF financing will entail a corresponding reduction in OCR financing available, so that total financing provided by ADB under the MFF will not exceed the aggregate principal amount of \$500 million equivalent. Any additional ADF allocation will be subject to (i) the general availability of ADF resources from time to time, (ii) Georgia's access to such resources pursuant to ADB's then applicable Graduation Policy¹⁶ and the requirements of ADF donors, and (iii) the availability of such resources to Georgia pursuant to ADB's then applicable policy on the performance-based allocation of ADF resources.¹⁷ The financing plan is summarized in Table 3.

Table 3: Financing Plan

Source	Government's Investment Plan (\$ million)	Share of Total (%)	Investment Program (\$ million)	Share of Total (%)	Project 1 (\$ million)	Share of Total (%)
Asian Development Bank	500.00	30.40	500.00	80.00	80.00	76.19
Cofinanciers ^a	300.00	18.24
Government	845.00	51.36	125.00	20.00	25.00	23.81
Total	1,645.00	100.00	625.00	100.00	105.00	100.00

... = not available.

^a Under discussion.

Source: Asian Development Bank estimates.

E. Implementation Arrangements

23. MRDI will be the investment program's executing agency and the implementing agency for component 2; UWSCG will be the implementing agency for components 1 and 3. Through the investment program, MRDI will play an important role in implementing the nonphysical investments identified in the SDP and address its policy and institutional reform agenda. MRDI will oversee the management contractor's role in improving UWSCG's performance. The government will follow ADB's policies, including its Procurement Guidelines (2010, as amended from time to time), *Loan Disbursement Handbook* (2007, as amended from time to time), and Guidelines on the Use of Consultants (2010, as amended from time to time). The implementation arrangements are summarized in Table 4.

Table 4: Implementation Arrangements

Aspects	Arrangements		
Implementation period	April 2011–March 2019		
Estimated completion date	31 March 2019		
Management			
(i) Oversight body	State Commission on Water Supply and Energy		
(ii) Executing agency	Ministry of Regional Development and Infrastructure		
(iii) Implementing agencies	Components 1 and 3: United Water Supply Company of Georgia; component 2: Ministry of Regional Development and Infrastructure		
(iv) Implementation unit	Investment Program Management Office in United Water Supply Company of Georgia		
Procurement	International competitive bidding for civil works	18 contracts	[This information was deemed confidential according to exception # 10 of paragraph 126 of ADB's Public Communications Policy (2005)]
	International competitive bidding for goods	5 contracts	
Consulting services	Detailed engineering design consultants (firm)	149 person-months; quality- and cost-based	[This information was deemed confidential according to

¹⁶ Currently: ADB. 2008. *Review of the 1998 Graduation Policy of the Asian Development Bank*. Manila.

¹⁷ Currently: ADB. 2004. *Review of the Asian Development Bank's Policy on the Performance-Based Allocation of Asian Development Fund Resources*. Manila; and ADB. 2008. *Refining the Performance-Based Allocation of Asian Development Fund Resources*. Manila.

Aspects	Arrangements		
		selection (QCBS)	exception # 10 of paragraph 126 of ADB's Public Communications Policy (2005)]
	Construction supervision consultants (firm)	780 person-months (QCBS)	
	Individual consultants	62 person-months (individual)	
	Management contractor (firm) ^a	1,404 person-months (QCBS)	
Retroactive financing and / or advance contracting	Retroactive financing is available for up to 20% of the loan amount of advance contracts for eligible expenditures that will include civil works, goods, and consulting services. ^b		
Disbursement	Loan proceeds will be disbursed in accordance with the <i>Loan Disbursement Handbook</i> (2007, as amended from time to time) of the Asian Development Bank (ADB) and detailed arrangements agreed upon between the government and ADB.		

^a An ADB staff member or staff consultant may participate as an observer in the selection committee.

^b To facilitate project readiness and expedite project implementation, ADB approved advance contracting and retroactive financing for (i) detailed engineering design consultants on 11 March 2010 and (ii) vehicle and maintenance equipment on 9 August 2010. ADB may approve advance contracting and retroactive financing for subsequent tranches.

Source: ADB estimates.

24. The completion of engineering designs, safeguard compliance, and procurement documents will trigger the preparation of subsequent tranches. Project 1 has three components:

- (i) **Component 1: Infrastructure improvement.** (a) Water treatment and supply facilities and water transmission systems constructed in Anaklia, Marneuli, Mestia, and Zugdidi; and (b) vehicles and system performance assessment and maintenance equipment for WSS operation and maintenance procured in six investment program towns.
- (ii) **Component 2: Institutional effectiveness.** (a) Management contractor support through an international water operator provided to UWSCG, and (b) capacity developed in MRDI, MEPNR, MA, and GNEWSRC on regulatory functions. This component will run through the period of project 1 and overlap with subsequent projects. The outcomes of the management contract will provide the government a basis and scope for enhancing and extending private sector participation in the sector.
- (iii) **Component 3: Project implementation support.** Support provided to UWSCG for detailed engineering; construction supervision; procurement; safeguards compliance; preparing subsequent projects of the investment program; and a public awareness program on health, hygiene, sanitation, and water conservation.

25. An ongoing ADB technical assistance to develop a geospatial WSS utility management system¹⁸ and consultants appointed for developing detailed engineering designs under advance contracting actions will provide designs and cost estimates for WSS network rehabilitation or reconstruction, and parameters for constructing treatment plants on a design-build-operate basis. Construction of WSS networks in all six investment program towns will be distributed across subsequent projects planned over the next three years. Investments will be packaged into distinct contracts based on hydraulic zones in each town and will include simultaneous construction of WSS systems. Sewage treatment plant construction will be staggered based on WSS network completion plans. Civil works contracts will combine construction and extended defect-liability periods to ensure contractors maintain and remain accountable for system performance for 3 years after the completion and commissioning of the system. The MFF is designed to include system operation and maintenance cost over the immediate 3-year period beyond the completion and commissioning of infrastructure to provide funds for service sustainability.

¹⁸ ADB. 2010. *Technical Assistance to Georgia for Developing a Geospatial Urban Water Supply and Sanitation Utility Management System*. Manila (TA 7551-GEO, for \$800,000, approved on 23 June).

III. DUE DILIGENCE

A. Financial and Economic

26. **Financial analysis.** Project 1 is financially viable, as the average financial internal rate of return in the base case is 7.6%, which exceeds the weighted average cost of capital, estimated at 2.2%. Sensitivity analysis indicates that subprojects' financial internal rate of return is viable under stressed conditions, except for Zugdidi under a 20% increase in capital costs, illustrating the need to efficiently estimate market rates for construction items to reduce substantial variance in capital costs, efficiently implement the project, and rapidly achieve physical and financial targets. To achieve an operating ratio of less than unity, project 1 will ensure (i) progressive tariff increases based on the principles of cost recovery and consumer affordability, and (ii) the availability of viability gap funding for service sustainability, including counterpart funds and subventions for operation and maintenance and total debt service.¹⁹

27. **Economic analysis.** Economic analysis was based on the results of a socioeconomic survey covering 1,600 randomly sampled households in six secondary towns and available national statistics, especially from the Department of Statistics. Focus group discussions provided further substantiation on service perception and demand for services. Project 1 is economically viable, as the average economic internal rate of return in the base case is 19.5%, which exceeds the economic opportunity cost of capital, assumed at 12%. Sensitivity analysis found economic viability stressed under various conditions, especially increased capital costs.²⁰

B. Governance

28. Public financial management reform is a priority for the government, and the Budget Code adopted in 2009 streamlined the budgeting process. The basic data and directions document became binding with the legislation, and government agencies' budgeting and expenditure management now follows the basic data and directions. A financial management assessment of UWSCG indicated that significant work is required to improve its financial management, accounting, and auditing, which the proposed management contractor under component 2 will be tasked to improve. A procurement assessment indicated the need to build UWSCG staff capacity in ADB procurement procedures. Recognizing the requirement early in project preparation, ADB supported UWSCG's procuring consulting services and goods through advance actions, thereby providing on-the-job training. Civil works will be procured with assistance from consulting firms. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government, MRDI, and UWSCG. Specific policy requirements and supplementary measures are described in the FAM.

C. Poverty and Social

29. Project 1 will directly benefit 100,000 urban residents (4.3% of the country's urban population) and improve living conditions and the economic and urban environment of Anaklia, Marneuli, Mestia, and Zugdidi. Tourists in Anaklia and Mestia will benefit from improved water supply. Specifically, beneficiaries will include (i) households affected when members become ill because of insufficient water or its poor quality and (ii) the poor, internally displaced, and households headed by women.²⁰ The poverty and social assessment indicates that women strongly support the investment program. Women perceive that it will improve their living

¹⁹ Analysis and Cash Flow Statements (accessible from the list of linked documents in Appendix 2).

²⁰ Summary Poverty Reduction and Social Strategy (accessible from the list of linked documents in Appendix 2).

environment, create employment, and reduce the incidence of waterborne illness. Gender features are integrated into the gender action plan that will include women in consultation and surveys for developing a marketing campaign; women-focused customer care services; and awareness programs on health, hygiene, and consumer rights.²¹

D. Safeguards

30. **Environment.** Based on three initial environmental examinations (IEEs), the environmental classification for project 1 is B, as it will not have significant irreversible environmental impacts during or after construction.²² Consultation was undertaken with stakeholders, and the IEE documents were translated in Georgian and displayed in each town. UWSCG will require the contractor to refine and implement the environmental management plan prepared in the IEEs, which will also form an integral part of construction contracts. The government adopted an environmental assessment and review framework on 17 December 2010, and environmental safeguards compliance for subsequent projects will be based on it.²³ UWSCG does not meet certain legal requirements for environmental protection, as it discharges into water bodies domestic sewage that does not meet environmental standards. Due to recent sector restructuring, it is not currently licensed to abstract water as required. Through the investment program, UWSCG will construct sewage treatment plants and secure licenses for all water abstraction sites in the six investment program towns, thereby ensuring environmental and natural resource protection.

31. **Involuntary resettlement.** Project 1 currently includes a resettlement plan for the Mestia water intake and transmission facilities, with impact limited to temporary disturbance to land and lost hay within the pipeline corridor.²⁴ As UWSCG will ensure that affected people are compensated in line with detailed engineering design estimates confirming pipeline alignment, and prior to civil works commencement, project 1 is classified B. The government adopted on 17 December 2010 a resettlement framework upon which social safeguards compliance for subsequent projects will be based.²⁵

32. **Indigenous peoples.** The investment program area does not include communities that may be defined as indigenous peoples under ADB's Safeguard Policy Statement (2009). The indigenous peoples' impact classification for all projects is C.

E. Risks and Mitigating Measures

33. Major risks and mitigating measures are summarized in Table 5.

Table 5: Summary of Risks and Mitigating Measures

Risks	Mitigating Measures
Government's inability to protect the environment and natural resources from unregulated water abstraction and the discharge of untreated sewage into water bodies	The investment program in the six towns will support the United Water Supply Company of Georgia Limited Liability Company (UWSCG) in securing licenses for water abstraction and in constructing sewage treatment plants to meet sewage discharge standards compliant with national legislation.
Weak capacity in UWSCG to improve access to and the delivery of WSS services or undertake business planning, tariff setting, or	The management contractor will support UWSCG in long-term capital planning and asset strengthening, procurement, supervising capital improvement works, operation and

²¹ Gender Action Plan (accessible from the list of linked documents in Appendix 2).

²² Initial Environmental Examinations (accessible from the list of linked documents in Appendix 2).

²³ Environmental Assessment and Review Framework (accessible from the list of linked documents in Appendix 2).

²⁴ Resettlement Plan (accessible from the list of linked documents in Appendix 2).

²⁵ Resettlement Framework (accessible from the list of linked documents in Appendix 2).

Risks	Mitigating Measures
asset strengthening and management	maintenance, and financial management.
Lack of skilled technical and managerial staff in the country to deliver WSS services efficiently	The investment program will finance a WSS management program with technical assistance from Georgian universities and develop the skills of UWSCG staff.
Insufficient viability gap funding (VGF) for financially sustainable service delivery from the government to UWSCG early in the investment program	In addition to determining VGF requirements during detailed engineering design and estimate preparation, UWSCG's prudent financial management practices and revenue surplus generation plans will be programmed in the business plan to ensure that any VGF shortfalls are adequately managed.

Source: Asian Development Bank.

IV. ASSURANCES AND CONDITIONS

34. The government and UWSCG have assured ADB that implementation of the investment program shall conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the FAM and loan documents.

35. The government and UWSCG have given ADB certain undertakings for the MFF, which are set forth in the framework financing agreement. Specific covenants agreed by the government and UWSCG with respect to individual tranches under the MFF are set forth in the loan agreement and project agreement for the respective tranches.

36. No withdrawal will be made under the first tranche of the MFF until an agreement on implementation of components 1 and 3, in form and substance satisfactory to ADB, has been entered into by the government and UWSCG.

V. RECOMMENDATION

37. I am satisfied that the proposed multitranche financing facility would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the provision of loans under the multitranche financing facility in an aggregate principal amount not exceeding \$500,000,000 to Georgia for the Urban Services Improvement Investment Program comprising:

- (i) loans from ADB's Special Funds resources, with interest and other terms to be determined in accordance with ADB's then applicable policies relating to Special Funds resources, subject to conditions set forth in paragraphs 20–22 of this report; and
- (ii) loans from ADB's ordinary capital resources, with interest and other terms to be determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility,

and such other terms and conditions as are substantially in accordance with those set forth in the framework financing agreement presented to the Board.

Haruhiko Kuroda
President

Date

DESIGN AND MONITORING FRAMEWORK FOR THE INVESTMENT PROGRAM

Design Summary	Performance Targets and/or Indicators	Data Sources and/or Reporting Mechanisms	Assumptions and Risks
<p>Impact Improved health of residents in the urban centers of Anaklia, Marneuli, Mestia, Kutaisi, Poti, and Zugdidi</p>	<p>By the end of the investment program plus 3 years (2022):^a</p> <ul style="list-style-type: none"> (i) Prevalence of waterborne illness in households reduced by at least 75% from current the incidence of 4% of households per annum^b (ii) Productive days lost to waterborne illness reduced by at least 75% from the current 8 days per person per annum (iii) Average annual expenditure to treat waterborne illness reduced by at least 75% from the current \$74 per household per annum 	<p>Sex-disaggregated baseline survey conducted at investment program inception (2011), completion (2019), and in 2022</p> <p>Surveys conducted as a part of the PPMS and by UWSCG</p>	<p>Assumption The government continues to provide support for an enabling investment climate.</p>
<p>Outcome Improved water supply and sanitation services in the urban centers Anaklia, Marneuli, Mestia, Kutaisi, Poti, and Zugdidi</p>	<p>By the end of the investment program in 2019:</p> <ul style="list-style-type: none"> (i) Residents' access to safe sanitation^c increased from 25% in 2011 to 88% by 2019 (ii) Residents' access to 24-hour potable water supply increased from 74% in 2011 to 95% by 2019 <p>100% households headed by women in the region covered</p>	<p>Annual sex-disaggregated socioeconomic surveys undertaken as part of the PPMS to determine public satisfaction with the quality of water supply and sanitation</p> <p>National statistics on water supply quality and effluent discharge from MEPNR, MA, and UWSCG</p>	<p>Assumption The government ensures water company staff and the management contractor efficiently deliver services.</p> <p>Risk Political systems interfere with the enforcement of legislative and regulatory control.</p>
<p>Outputs Component 1: Infrastructure Improvement</p> <p>Water supply system efficiency improved through rehabilitation and replacement, and coverage expanded</p>	<p>By 2019:</p> <ul style="list-style-type: none"> (i) 60,000 cubic meter reservoirs, 110 km of water transmission mains, and 350 km of distribution networks rehabilitated, reconstructed, or newly constructed (ii) 36 MLD capacity water treatment plants constructed (iii) Nonrevenue water progressively reduced from 60% to 30% (baseline and target to be established at investment program tranche inception) (iv) Energy savings achieved through efficient pumping systems (baseline and target to be established at investment program tranche 1 inception) 	<p>Semiannual progress reports prepared by UWSCG</p> <p>Disbursement and reimbursement records maintained by UWSCG</p> <p>PPMS reports prepared by UWSCG</p> <p>UWSCG annual work plans</p> <p>As-built drawings developed by contractors</p> <p>Project component</p>	<p>Assumption Ongoing internationally financed projects are efficiently implemented.</p> <p>Risk The cost of construction materials suddenly increases.</p>

Design Summary	Performance Targets and/or Indicators	Data Sources and/or Reporting Mechanisms	Assumptions and Risks
	(v) Residual chlorine at tail ends of water supply system maintained at 0.2–0.4 parts per million	completion and commissioning certificates provided by investment program construction supervision consultant	
Sewerage and sanitation system efficiency improved through rehabilitation and reconstruction, and coverage expanded	(i) Access to sewerage network increased from 83,000 people in 2011 to 305,000 in 2019 (ii) Sewer-cleaning vehicles procured and made operational by 2011 (iii) Sewage pumps operating daily and discharging sewage to treatment plants (iv) Sewage treatment plants rehabilitated or constructed to treat and safely discharge sewage ^d		
<p>Component 2: Institutional Effectiveness</p> <p>Business plans developed and implemented</p> <p>Financial management improved; management information system and accounting system developed</p> <p>Geospatial WSS utility management systems operationalized</p> <p>Management capacity of UWSCG enhanced</p>	<p>By 2019:</p> <p>UWSCG develops long-term capital improvement plans, asset strengthening plans, resource mobilization, and expenditure management plans</p> <p>(i) UWSCG operating ratio improved from 1.8 in 2010 to 1 by 2019, indicating improved financial management</p> <p>(ii) UWSCG revenue collection efficiency improved from 49% in 2010 to 95% by 2019</p> <p>(iii) Sex-disaggregated consumer database created for UWSCG to develop targeted marketing campaigns for households headed by women</p> <p>Calibrated network models developed for water and sewerage networks based on geographic information system maps</p> <p>(i) WSS management program with Georgian universities operationalized</p> <p>(ii) Women in 30% of key management staff positions in UWSCG</p> <p>(iii) UWSCG staff trained in financial management and accounting (30% of them women)</p> <p>(iv) Sex-disaggregated data base for human resource management in</p>	<p>Semiannual progress reports prepared by UWSCG</p> <p>UWSCG annual work plans</p>	<p>Risk</p> <p>Enrollment in the WSS management program is low.</p>

Design Summary	Performance Targets and/or Indicators	Data Sources and/or Reporting Mechanisms	Assumptions and Risks
Sector regulatory capacity of GNEWSRC, MEPNR, and MA developed	place (v) MEPNR confirming treated sewage meets discharge standards (i) GNEWSRC staff approve tariff and monitor WSS service delivery (ii) MEPNR staff undertake monitoring of treatment facility performance and effluent discharge standards (iii) MA staff undertake monitoring of drinking water quality standards		
Component 3: Project Implementation Support Public awareness program effectively implemented, materials on hygiene and sanitation disseminated, and women developed as hygiene and sanitation advocates	By 2019: (i) Each investment program service center having a customer care unit at least 30% staffed by women that informs, educates, and communicates on water, hygiene, and sanitation (ii) Public awareness program targeting women as household managers rolled out in all investment program towns	Semiannual progress reports prepared by UWSCG PPMS reports prepared by UWSCG UWSCG annual work plans	Assumption Nongovernment organizations are actively involved in educating beneficiaries on project benefits.

Activities and Milestones:	Inputs
1. Component 1: Infrastructure Improvement 1.1 Water intake, treatment, and transmission mains constructed (January 2014) 1.2 Equipment for system performance monitoring and improvement procured (July 2011) 1.3 Water supply, sewerage network, sanitation systems, and sewage treatment plants constructed or rehabilitated (January 2019) 2. Component 2: Institutional Effectiveness 2.1 Management contractor appointed (January 2012) 2.2 Sex-disaggregated consumer database created (January 2012) 2.3 Management information system and revenue enhancement plans rolled out (January 2013) 3. Component 3: Investment Project Implementation 3.1 sex-disaggregated baseline surveys conducted (October 2011) 3.2 Design engineers appointed (October 2010) 3.3 Supervision engineers appointed (July 2011) 3.4 Gender action plan targets confirmed (December 2013)	ADB: \$500 million from ADF and OCR Government: \$125 million Total: \$625 million

ADB = Asian Development Bank, ADF = Asian Development Fund, GNEWSRC = Georgia National Energy and Water Supply Regulatory Commission, km = kilometer, MA = Ministry of Agriculture, MEPNR = Ministry of Environmental Protection and Natural Resources, MLD = million liters per day, OCR = ordinary capital resources, PPMS = project performance management system, UWSCG = United Water Supply Company of Georgia Limited Liability Company; WSS = water supply and sanitation.

^a The baseline will be re-established during socioeconomic surveys conducted as a part of the project performance management system and will include knowledge, attitude, and practice surveys.

^b Waterborne diseases cause diarrhea and will be confirmed during baseline surveys.

^c Includes pour-flush latrines with reticulated sewerage networks.

^d Capacity to be determined during implementation.

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/RRPs/?id=43405-01-3>

1. Loan Agreement
2. Project Agreement
3. Framework Financing Agreement and Periodic Financing Request for Project 1
4. Sector Assessment (Summary): Water Supply and Sanitation
5. Facility Administration Manual
6. Contribution to the ADB Results Framework
7. Development Coordination
8. Financial Analysis
9. Economic Analysis
10. Country Economic Indicators
11. Summary Poverty Reduction and Social Strategy
12. Gender Action Plan
13. Initial Environmental Examinations
14. Environmental Assessment and Review Framework
15. Resettlement Plan
16. Resettlement Framework
17. Risk Assessment and Risk Management Plan

Supplementary Documents

18. Sector Development Plan
19. Cash Flow Statements