



Periodic Financing Request Report

Project Number: 45148-008
MFF 0072
November 2015

Democratic Socialist Republic of Sri Lanka: Greater Colombo Water and Wastewater Management Improvement Investment Program (Tranche 3)

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 3 November 2015)

Currency Unit	–	Sri Lanka rupees (SLRs)
SLR1.00	=	\$0.00708
\$1.00	=	SLRs 141.110

ABBREVIATIONS

ADB	Asian Development Bank
ADF	Asian Development Fund
CDTA	Capacity Development Technical Assistance
CMC	Colombo Municipal Council
DMA	district metered areas
EMP	environmental management plan
GAP	gender action plan
GCWMP	Greater Colombo Wastewater Management Project
IEE	initial environmental examination
MCP&WS	Ministry of City Planning and Water Supply
MPC&LG	Ministry of Provincial Councils and Local Government
NWSDB	National Water Supply and Drainage Board
OCR	ordinary capital resources
O&M	operation and maintenance
PAM	Project Administration Manual
PFR	Periodic Financing Request
PMU	Project Management Unit

NOTE

In this report, "\$" refers to US dollars.

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TRANCHE AT A GLANCE

1. Basic Data		Project Number: 45148-008	
Project Name	Greater Colombo Water and Wastewater Management Improvement Investment Program (Tranche 3)	Department /Division	SARD/SAUW
Country Borrower	Sri Lanka Government of Sri Lanka	Executing Agency	Ministry of City Planning and Water Supply, Ministry of Provincial Councils & Local Gov't
2. Sector	Subsector(s)	ADB Financing (\$ million)	
✓ Water and other urban infrastructure and services	Urban sanitation		1.40
	Urban sewerage		88.60
	Urban water supply		38.00
		Total	128.00
3. Strategic Agenda	Subcomponents	Climate Change Information	
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive	Adaptation (\$ million)	9.00
Environmentally sustainable growth (ESG)	Global and regional transboundary environmental concerns	Climate Change impact on the Project	Medium
	Urban environmental improvement		
4. Drivers of Change	Components	Gender Equity and Mainstreaming	
Governance and capacity development (GCD)	Institutional development	Effective gender mainstreaming (EGM)	✓
Knowledge solutions (KNS)	Organizational development		
Partnerships (PAR)	Application and use of new knowledge solutions in key operational areas		
	International finance institutions (IFI)		
Private sector development (PSD)	Official cofinancing		
	Promotion of private sector investment		
5. Poverty Targeting		Location Impact	
Project directly targets poverty	Yes	Rural	Low
MDG-targeting (TI-M)	MDG7	Urban	High
6. Risk Categorization:	Low		
7. Safeguard Categorization	Environment: B Involuntary Resettlement: B Indigenous Peoples: C		
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB		128.00	
Sovereign MFF-Tranche (Loan): Asian Development Fund		5.00	
Sovereign MFF-Tranche (Loan): Ordinary capital resources		123.00	
Cofinancing		50.00	
European Investment Bank		50.00	
Counterpart		50.02	
Government		50.02	
Total		228.02	
9. Effective Development Cooperation			
Use of country procurement systems		Yes	
Use of country public financial management systems		Yes	

TRANCHE AT A GLANCE

Date of Receipt by ADB of PFR: 27 July 2015

Tranche Number: 3

10. Country Operations Business Plan

CPS

<http://www.adb.org/documents/sri-lanka-country-operations-business-plan-2014-2016>

COBP

<http://www.adb.org/documents/sri-lanka-country-operations-business-plan-2014-2016>

11. Tranche Summary

The proposed Tranche 3 will continue investments in water supply with additional financing for Projects 1 and 2, and improve the wastewater system in the south catchment area of Colombo city, including providing support for wastewater service improvements for the Colombo Municipal Council.

Impact and Outcome: The impact will be improved water supply and wastewater service and management in Greater Colombo aligned with the Vision for a New Sri Lanka, 2010-2020. The outcome will be improved system efficiency and financial sustainability of water supply and wastewater services in Colombo.

Outputs: (i)Water supply system rehabilitated and expanded, and NRW reduced in northeast part of Colombo city (including funding the financing gap for Project 1), (ii)Water supply system rehabilitated and expanded, and NRW reduced in southwest part of Colombo city (including funding the financing gap for Project 2), (iii)Wastewater system rehabilitated and expanded in south catchment area of Colombo, (iv)Secondary wastewater treatment plant constructed in south catchment area of Colombo, and (v)Institutional structure and capacity of service providers strengthened.

Implementation Arrangements: Ministry of City Planning and Water Supply and Ministry of Provincial Councils & Local Gov't will be the executing agencies.

Project Readiness: The project management unit has been established and operational. Detailed designs and bidding for one of two major civil works packages (wastewater network expansion to the Kirulapone unserved area) have been prepared and approved by ADB. Bidding documents for the second civil works package (design-build-operation contract for wastewater treatment plant) are expected to be finalized by end of 2015. All safeguards documents have been prepared and endorsed by the government.

12. Significant Developments in the MFF and Previous Tranches

Loan 2947/2948 (Tranche 1) for \$84 million was approved in November 2012 and became effective in September 2013. National Water Supply and Drainage Board established the project management unit for both Tranches 1 and 2, and mobilized 65 staff including a full-time project director and deputy project director. Two major civil works contracts have been awarded and are being implemented. The implementation of institutional reforms for non-physical components is on track. As of 31 July 2015, cumulative contract awards and disbursements amount to \$66.95 million (80%) and \$15.41 million (18.3%), respectively. Of the 24 covenants, 21 have been met and 3 are not yet due.

Loan 3029/3030 (Tranche 2) for \$88 million was approved in September 2013 and became effective in September 2014. Bid evaluations of the two major civil works contracts are ongoing and expected to be awarded in 2015, respectively. Of the 21 covenants, 17 have been met, 2 are being met and 2 are not yet due.

13. Milestones

Estimated Approval

Estimated Effectiveness

Estimated Completion*

7 December 2015

29 April 2016

31 December 2020

14. Linked Documents

	Required Document	Disclosure Date
(i) Environment	IEE - Initial Environment Examination	
Weblink:	http://www.adb.org/projects/documents/gcwwmip-t3-wastewater-improvement-project-tee	10 August 2015
(ii) Involuntary resettlement	RP - Resettlement Plan	
Weblink:	http://www.adb.org/projects/documents/sri-gcwwmip-p3-wastewater-improvement-project-aug-2015-rp	7 August 2015
(iii) Indigenous peoples		
Weblink:		

* For Tranches, this refers to the financial closing date.

I. BACKGROUND

1. On 25 October 2012, the Asian Development Bank (ADB) approved a multitranche financing facility of \$300 million to the Democratic Socialist Republic of Sri Lanka, to be funded from ADB's ordinary capital resources (OCR) and the Special Funds resources (ADF), for the Greater Colombo Water and Wastewater Management Improvement Investment Program (the investment program).¹ The Framework Financing Agreement (FFA) for the investment program was signed on 12 September 2012. Project 1 (\$84 million) was approved by the President on 22 November 2012. Project 2 (\$88 million) was approved by the President on 26 September 2013. Projects 1 and 2 focused on reducing nonrevenue water and improving water service efficiency in Greater Colombo.² The investment program was originally envisaged as comprising two additional tranches, not exceeding \$128 million in loan amount, to support improvements to wastewater management in Greater Colombo.³ However, as Projects 1 and 2 are being enhanced requiring additional funds, it is now proposed that the available funds under the investment program are provided under a single subsequent tranche. The proposed Tranche 3 thus will support: (i) enhancements to Projects 1 and 2; and (ii) improvements to wastewater collection and treatment facilities, as well as wastewater management services in Colombo city.

2. The Government of Sri Lanka's sector targets for 2015 are to increase the proportion of: (i) households with access to safe drinking water to 86%; and (ii) the population with access to improved sanitation to 93%.⁴ Great progress has been made towards achieving these targets. During 2000–2014: (i) households with access to safe drinking water increased from 70% to 87%, surpassing the target; and (ii) population with access to improved sanitation countrywide increased from 69% to 87%. However, the overall coverage of sewerage systems countrywide is only about 3%. Although 60% of the population in Colombo city is served by connections to the sewerage system, the existing sewer networks are affected by frequent damages and blockages, and one-third of the pumping facilities are not working, causing frequent overflows into watercourses. The wastewater is currently discharged without treatment into the sea through two sea outfalls.

3. The investment program responds to the urgent need to rehabilitate and expand water and wastewater facilities in Greater Colombo and to improve the operational efficiency of services and management of water supply and wastewater. The facility will fund about 20% of the \$1.5 billion financing that the government requires for its investment plan for water supply, wastewater, and sanitation in Greater Colombo.

4. The government submitted to ADB a periodic financing request (PFR) for Tranche 3 on 27 July 2015. This was superseded by a revised PFR submitted by the government to ADB on 30 October 2015 that includes reallocation of funds for Projects 1 and 2 (\$38 million OCR)⁵ and, for Project 3 (\$5 million ADF and \$85 million OCR) to improve the wastewater system in the south catchment area of Colombo city, including provision of support for wastewater service

¹ ADB. 2012. *Greater Colombo Water and Wastewater Management Improvement Investment Program*. Manila.

² Greater Colombo comprises 15 local authorities: five municipal councils (Colombo, Dehiwela-Mount Lavinia, and Sri Jayawardenepura-Kotte, Kaduwela, and Moratuwa), five urban councils, and five *pradeshiya sabhas* (smallest political units in periurban or rural areas).

³ Tranches 3 and 4 originally scheduled to be approved in 2015 and 2016, respectively.

⁴ ADB. 2012. *Sri Lanka Water, Sanitation Sector Assessment, Roadmap and Investment Plan 2012–2020*, Manila.

⁵ \$25 million additional funding is for Project 1 and \$13 million additional funding is for Project 2.

ADB. 2014. *Country Operations Business Plan: Sri Lanka, 2015–2017*. Manila.

improvements for Colombo Municipal Council (CMC).⁶ ADB's Country Operations Business Plan for Sri Lanka, 2015–2017 includes a firm provision for Tranche 3 in 2015.

II. ASSESSMENT OF IMPLEMENTATION

5. **Project 1 (Loan 2947/2948).** The loan agreements for Project 1 were signed on 28 June 2013 and Project 1 became effective in September 2013. The National Water Supply and Drainage Board (NWSDB) has established the project management unit (PMU) and mobilized about 65 staff, including a full-time project director. There are two major civil works packages. The first civil works contract was awarded in October 2014. The second civil works contract was awarded in March 2015. The recruitment of the management advisory and supervision consultant is ongoing and two international consultants and one national consultant were recruited to support the PMU in the interim. The initial environmental examination (IEE) and resettlement plan are being revised based on the updated detailed designs,⁷ and an environmental management plan (EMP) has been incorporated into the issued civil works bidding documents. Cumulative contract awards under Project 1 amount to \$65.95 million (80%) and cumulative disbursement under Project 1 is \$15.41 million (18.3%).

6. **Project 2 (Loan 3029/3030).** The loan agreements for Project 2 were signed on 3 June 2014 and Project 2 became effective in September 2014. There are two major civil works packages currently being tendered and expected to be awarded by the end of 2015.⁸ The IEE and the resettlement plan for Project 2 are being revised based on the updated detailed designs,⁹ and an EMP has been incorporated into the issued civil works bidding documents. In addition, Project 2 incorporated \$8 million of loan funds to enable CMC to undertake project preparatory works for wastewater improvements under the proposed Project 3. The contract for design, supervision, and institutional development consultant for wastewater investment has been awarded.

7. **Additional funds to enhance Projects 1 and 2.**¹⁰ These enhancements include: (i) improved design specifications for the pipe material, from polyvinyl chloride to polyethylene, for both projects; (ii) change in pipe laying method from open excavation to trenchless for both projects; (iii) formation of additional district metered areas (DMAs) within the original coverage area for both projects; (iv) expansion of the area engineering office from 800 square meters (m²) to 1,400 m² under Project 1; (v) construction of a new water pump station at the Ellie house site; and (vi) support to NWSDB's project design and readiness capacity under Project 2. Project 1 is on track. There was a startup delay in the procurement of the civil works packages for Project 2, but these have been addressed and Project 2 is now on track.

8. **Compliance with loan and project agreements, and undertakings under the Framework Financing Agreement.** For Project 1, out of a total of 24 covenants in the loan and project agreements, 21 have been complied with, and three are not yet due. For Project 2, out of a total of 21 covenants in the loan and project agreements, 17 have been complied with, two are in the process of being complied with, and two are not yet due. Of the 21 undertakings in the FFA, 15 have been complied with, three are being complied with, and three are not yet due. A detailed compliance review of the covenants and undertakings is presented in Appendix 1 of the PFR.

⁶ The 37 square kilometer area under the Colombo Municipal Council has a population of about 700,000.

⁷ The difference in cost between feasibility study and detailed design for Project 1 will be financed under Tranche 3.

⁸ These include a third civil works package, which is under technical evaluation, and a fourth civil works package, which is under financial evaluation.

⁹ The difference in cost between feasibility study and detailed design for Project 2 will be financed under Tranche 3.

¹⁰ Request for approval of minor changes of multitranche financing facility will be submitted separately for the President's approval.

9. **Institutional Reforms.** As agreed in the FFA, NWSDB will delegate the operation and maintenance (O&M) functions to the Regional Supporting Centre–Western Central. The board of NWSDB endorsed this institutional reform in 2013. This institutional reform is under implementation and most of the O&M functions have been delegated to the Regional Supporting Centre–Western Central. Under Capacity Development Technical Assistance (CDTA) 8562–SRI: Project Management Capacity Development, a consultant was appointed to support this institutional reform,¹¹ and CDTA 8835–SRI: Institutional Development of National Water Supply and Drainage Board¹² will further support its implementation.

10. CMC owns and operates the wastewater infrastructure services in Colombo city, and is the only municipal body handling such a service in the country. The sewerage operation in CMC is not separate from other operations, such as drainage. A key institutional reform under the investment program includes the establishment of a separate wastewater unit under the Drainage Department within CMC to manage the wastewater collection and treatment facilities. CMC has endorsed this institutional reform and agreed to establish a separate unit (cost center) for wastewater operations in 2016.

11. At present, CMC does not separately charge users for wastewater services. Instead, CMC generates revenue through property taxes and allocates part of it to wastewater management. The funds, however, are inadequate to meet the O&M costs of the existing service. With the expansion of the wastewater service area under the investment program, it is essential that CMC levies a wastewater tariff on all customers. In accordance with the FFA, CMC has agreed to introduce wastewater tariff to be charged to all customers within CMC in 2016. An ongoing CDTA is currently supporting the implementation of these institutional and financial reforms.¹³

12. Following the lessons from the ongoing ADB supported loans 2557/2558: Greater Colombo Wastewater Management Project (GCWMP),¹⁴ Project 3 incorporates advance project preparation in order to avoid delays during implementation. With the funds provided under the ongoing GCWMP and Project 2, CMC is currently undertaking advance project preparatory actions prior to effectivity of the loans for Tranche 3.¹⁵ To improve project readiness and development effectiveness, Tranche 3 will also support NWSDB to prepare detailed designs for future projects.

III. PERIODIC FINANCING REQUEST

A. Impact and Outcome

13. The impact of the Tranche 3 will be improved water supply and wastewater service and management in Greater Colombo, aligned with *Vision for a New Sri Lanka, 2010–2020*.¹⁶ The outcome will be improved system efficiency and financial sustainability of water supply and wastewater services in Colombo.

¹¹ ADB. 2013. *Capacity Development Technical Assistance (CDTA) – 8562: Project Management Capacity Development*. Manila.

¹² ADB. 2014. *CDTA – 8835: Institutional Development of National Water Supply and Drainage Board*. Manila.

¹³ ADB. 2014. *CDTA – 8733: Wastewater Management Improvement in Colombo Municipal Council*, Manila.

¹⁴ Under the loan 2557/2558: Greater Colombo Wastewater Management Project, CMC is implementing agency.

¹⁵ Advance project preparation includes the preparation of detailed designs and bidding documents as well as the formulation of proposals for institutional reforms for more efficient delivery of wastewater services.

¹⁶ Design and Monitoring Framework is in Appendix 2.

B. Outputs

14. Tranche 3 outputs are aligned with the investment program outputs:

- (i) **Output 1: Water supply system rehabilitated and expanded and nonrevenue water reduced in the northeast part of Colombo city.** This will include: (a) enhancements to Project 1 for improved design (para. 7), including the formation of seven additional DMAs in the northeast part of Colombo city; and (b) expanding the area engineering office from 800 m² to 1,400 m².
- (ii) **Output 2: Water supply system rehabilitated and expanded and nonrevenue water reduced in the southwest part of Colombo city.** This will include: (a) enhancements to Project 2 for improved design (para. 7), including the formation of seven additional DMAs in the southwest part of Colombo city; (b) enhancement of a training facility; (c) construction of a new water pump station at the Ellie house site under Project 2 (para. 7); and (d) supporting NWSDB's project design and readiness capacity (para. 7).
- (iii) **Output 3: Wastewater system rehabilitated and expanded in the south catchment area of Colombo city.** This will include: (a) laying 29.40 km of sewer network and constructing three wastewater pump stations to cover the currently unserved Kirulapona area; and supplemented by European Investment Bank parallel cofinancing for (b) rehabilitation, replacement, repair and cleaning of 15.61 km sewer reticulation system; and (c) laying 6.22 km of sewer network and the construction of three pump stations to cover two other unserved areas in the south catchment area of Colombo city.¹⁷
- (iv) **Output 4: Secondary wastewater treatment plant constructed in south catchment area of Colombo city.** This will include the construction of a secondary treatment plant with 50,000 cubic meters-per-day (m³/day) capacity at Wellawatta on a design-build-operate basis.
- (v) **Output 5: Institutional structure and capacity of service provider strengthened.** This will include: (a) establishment of a separate wastewater unit within the CMC; (b) establishment of geographic information system (GIS)-based asset management system for wastewater, to be operated by CMC wastewater unit (to be established); (c) strengthening the institutional capacity of CMC staff for increased operational efficiency in wastewater management; (d) promoting awareness of shared responsibility in wastewater management by new sewerage system users in the south catchment area; (e) training and capacity building to improve the operating performance of CMC; and (f) approving and initiating the collection of wastewater tariff in Colombo city.

C. Investment and Financing Plans

15. Tranche 3, including the EIB cofinancing, is estimated to cost \$228.02 million (Table 1).¹⁷ Detailed cost estimates are in the project administration manual (PAM).¹⁸

¹⁷ ADB financing includes part of taxes and duties of about \$35.66 million and this will apply only to ADB-financed expenditures. The amount will be within the reasonable threshold identified during the country partnership strategy preparation process. The financing of the taxes and duties is material and relevant to the success of the project. Any incidental expenditures relating to bank charges, local transport, freight, and insurance are eligible for ADB financing.

¹⁸ Project Administration Manual is in Appendix 3.

Table 1: Proposed Tranche 3 Investment Plan (\$ million)

Item		Amount ^a
A.	Base Cost	
1.	Additional Funding for Project 1	31.76
2.	Additional Funding for Project 2	13.94
3.	Wastewater Network Improvements in Colombo	97.27
4.	Wastewater Treatment Plant	44.37
5.	Institutional Strengthening	8.48
	Subtotal (A)	195.82
B.	Contingencies ^b	23.84
C.	Financing Charges During Implementation ^c	8.36
	Total (A+B+C)	228.02

^a Includes taxes and duties (\$35.66 million) computed at 31% for imported goods and at 11% for domestic goods and services. Taxes and duties are cash contribution from the government and ADB. In June 2015 prices.

^b Physical contingencies are computed at 7.5% for civil works and equipment; price contingencies are computed at 1.4%–1.5% on foreign exchange costs and 6.0% on local currency costs, and include provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^c Includes interest and commitment charges. Interest during construction for OCR has been computed at the 5-year forward London interbank offered rate plus a spread of 0.6%. Commitment charges for OCR are 0.15% per year to be charged on the undisbursed loan amount. Interest of 2% is applied during construction for ADF.

Source: Asian Development Bank estimates.

16. The government submitted the PFR for Tranche 3 in line with the FFA. The government has requested a loan of \$123 million from ADB's OCR and \$5 million equivalent from ADB's Special Funds resources to help finance Tranche 3, including financing the enhancements to Projects 1 and 2. The OCR loan will have a 26-year term, including a grace period of 5 years, an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility,¹⁹ a commitment charge of 0.15% per year, and such other terms and conditions set forth in the draft loan agreement. The loan from ADB's Special Funds resources will have a 25-year term, including a grace period of 5 years, an interest rate of 2.0% per year, and such other terms and conditions set forth in the draft loan agreement.

17. The government requested to use the facility as a platform to leverage cofinancing from the EIB, as a loan of \$50 million, to assist the implementation of the government's investment plan. EIB cofinancing is proposed to finance part of wastewater network in the south catchment area of Colombo city. EIB cofinancing will be parallel cofinancing, and will not be administered by ADB. The coordination arrangements pertaining to the cofinancing are detailed in a letter from ADB to EIB.²⁰

18. The government will contribute \$50.02 million (21.9% of the total cost of Tranche 3), comprising \$40.46 million for the ADB-financed portion and \$9.56 million for the EIB-cofinanced portion, to finance taxes and duties, resettlement costs, part of the civil works, and part of recurrent costs. The government will relend relevant portions of the loan proceeds to NWSDB on a 50% grant and 50% loan with 6% interest rate basis to finance capital investment costs in the water subsector, and to CMC on a 82.5% grant and 17.5% loan with 9.5% interest rate basis to finance capital investment costs in the wastewater subsector, in accordance with established procedures. These arrangements will be described in subsidiary financing agreements, satisfactory to ADB, to be signed and become effective before NWSDB and CMC can receive the loan proceeds and the counterpart funds. The government will assume the foreign exchange risk.

19. The financing plan for the proposed Tranche 3, including the EIB cofinancing, is in Table 2.

¹⁹ The interest includes a maturity premium of 10 basis points. This is based on the above loan terms and the government's choice of repayment option and dates.

²⁰ Letter from ADB to EIB is being prepared and will highlight the understanding between ADB and EIB for this cofinancing.

Table 2: Financing Plan for Tranche 3

Source	Amount (\$ million)	Share of Total (%)
A. Asian Development Bank	128.00	56.13
1. Ordinary Capital Resources	123.00	53.94
2. Special Funds Resources	5.00	2.19
B. European Investment Bank (loan)	50.00	21.93
C. Government of Sri Lanka	50.02	21.94
Total	228.02	100.00

Source: Asian Development Bank estimates.

D. Implementation Arrangements

20. The implementation arrangement for the proposed Tranche 3 will follow the implementation arrangement under Projects 1 and 2, as set out in the Facility Administration Manual (FAM) for the facility. Ministry of City Planning and Water Supply (MCP&WS) and Ministry of Provincial Councils and Local Government (MPC&LG) will be the executing agencies. Investments in water supply under the proposed Tranche 3 will be implemented by NWSDB. Investments in wastewater management under the proposed Tranche 3 will be implemented by CMC. Implementation arrangements are summarized in Table 3 and described in detail in the PAM.

Table 3: Implementation Arrangements

Aspects	Arrangements		
Implementation period	December 2015–June 2020		
Loan closing date	31 December 2020		
Management			
(i) Oversight body	Program Steering Committee Chair: Secretary to the Treasury. Members: Secretary MCP&WS, Secretary MPC&LG, senior officials representing DER, DNP, DPPM, UDA, NWSDB, and CMC		
(ii) Executing agency	MCP&WS and MPC&LG		
(iii) Key implementing agencies	NWSDB and CMC		
(iv) Implementation units	NWSDB – PMU, 142 staff (for Projects 1 and 2) CMC – PMU, 61 staff		
Procurement	International competitive bidding	2 contracts for wastewater investment	\$ 76.25 million
	National competitive bidding	3 contracts	\$ 0.90 million
	Shopping	6 contracts	\$ 0.40 million
Consulting services	QCBS	134 person-months	\$ 0.50 million
	Individual	110 person-months	\$ 0.50 million
Retroactive financing and/or advance contracting ^a	Advance contracting will be allowed for procurement of civil works and equipment packages and engagement of consultants by CMC and NWSDB. Retroactive financing will be allowed for eligible expenditure incurred for civil works, equipment and materials, project management and consulting services up to 12 months before the loan signing date, and not exceeding 20% of the loan amount.		
Disbursement	Loan proceeds will be disbursed in accordance with ADB's <i>Loan Disbursement Handbook</i> (2015, as amended from time to time) and arrangements agreed upon between the government and ADB.		

ADB = Asian Development Bank, CMC = Colombo Municipal Council, DER = Department of External Resources, DNP = Department of National Planning, DPPM = Department of Project Management and Monitoring, MCP&WS = Ministry of City Planning and Water Supply, MPC&LG = Ministry of Provincial Councils and Local Government, NWSDB = National Water Supply and Drainage Board, PMU = Project Management Unit, UDA = Urban Development Authority, QCBS = Quality- and Cost-based Selection.

^a Advance contracting includes (i) priority civil work contracts, and (ii) consultant selection.

Source: Asian Development Bank estimates.

E. Project Readiness

21. The advanced preparatory work accomplished by the CMC for the proposed Project 3 includes: (i) PMU for the proposed Tranche 3 is established and functioning;²¹ (ii) the civil works package for the provision of wastewater network in the Kirulapone unserved area is under tendering, the bidding documents for the design-build-operate package for a wastewater treatment plant are currently being prepared and expected to be completed by the end of 2015; and (iii) resettlement plan²² and IEE²³ and the necessary EMPs for the proposed investments have been prepared.

F. Advance Contracting and Retroactive Financing

22. The government has requested advance contracting to procure services, goods and civil works, and retroactive financing in an amount not exceeding 20% of the loan amount for eligible expenditures incurred prior to loan effectiveness and during the period of 12 months before the signing of the loan agreement. NWSDB and CMC have been advised that ADB's approval of advance contracting and retroactive financing does not constitute a commitment to finance the proposed Tranche 3.

IV. DUE DILIGENCE

A. Technical

23. The proposed Project 3 will focus on wastewater investments in the south catchment area of Colombo city. The investments will comprise an optimal mix of sewer rehabilitation and expansion of sewerage networks in three unserved areas, and the construction of a 50,000 m³/day wastewater treatment plant. The rehabilitation and upsizing of existing sewers are for: (i) improving the condition of the severely deteriorated sewerage network, which requires frequent repairs; (ii) environmental improvements and associated health benefits from the curtailment of wastewater discharges into watercourses and open land; and (iii) increased service needs of the densified central business district as well as new areas being developed by the Urban Development Authority. The sewer network design will be facilitated by hydraulic modelling with the least cost option being selected based on land availability. The treatment process shall also be selected with the least-cost solution. For the additional funding for Projects 1 and 2, the design improvements (para. 7) are all positive enhancements towards the reduction of nonrevenue water.²⁴ Climate risk has been considered and a summary is provided in Supplementary Appendix A.

B. Economic and Financial

24. The financial analysis covers (i) combined water supply investments in Projects 1 and 2, and additional funding under Tranche 3; and (ii) the nonrevenue generating wastewater project in the south catchment area of Colombo city financed by ADB and EIB. The estimated financial

²¹ A PMU was established under ongoing loan 2557/2558: Greater Colombo Wastewater Management Project, and has been working on the project for more than 5 years. The existing PMU has been strengthened to undertake works for Project 3.

²² Resettlement Plan is in Appendix 4.

²³ IEE is in Appendix 5.

²⁴ The change in pipe laying methodology will help to minimize traffic disruptions; the construction of a new pump station at the Ellie house site is a more efficient design option (least-cost) in terms of operation and maintenance; the increase in the number of DMAs within the same geographical area will help to further reduce nonrevenue water.

internal rate of return for the revenue generating component is 5.1% in real terms; the net present value is \$101.5 million at the weighted average cost of capital of 2.06%.²⁵ The financial internal rate of return is higher than the weighted average cost of capital, indicating reasonable financial return. The result, assessed in the sensitivity analysis, is robust against downside risks with (i) capital costs increased by 10%, (ii) O&M costs increased by 10%, (iii) revenue decrease by 10%, and (iv) project implementation delayed by 1 year. For the nonrevenue generating wastewater component, cash-flow analysis conducted confirms that, with reasonable tariff charges, CMC has the financial capacity to meet O&M costs to sustain infrastructure and service delivery.

25. The economic analysis assessed the economic viability of (i) combined current Projects 1 and 2, and the additional funding under Tranche 3; and (ii) the wastewater subprojects under Tranche 3. The estimated economic internal rate of return for each of the water supply and wastewater subprojects (13.6% and 13.4%, respectively) is higher than the economic opportunity cost of capital of 12%, indicating sufficient economic return.²⁶ The results of sensitivity analysis for both projects are satisfactory against downside risks, including (i) capital cost overrun by 10%, (ii) O&M cost overrun by 10%, (iii) benefits reduced by 10%, and (iv) implementation delayed by 1 year.

C. Governance

26. An updated financial management assessment of NWSDB and CMC was conducted for the purpose of the tranche using a governance risk assessment tool. The overall fiduciary risk, although substantial, remains manageable as a result of the additional measures proposed.²⁷ The investment program, including proposed Tranche 3, will use the existing PMUs under CMC and NWSDB to manage the investment planning, construction, and O&M of wastewater operations, as agreed under the FFA for the investment program. Some of the mitigation measures incorporated in the project design include: (i) increasing the number of PMU staff; (ii) establishing a mechanism for regular voluntary disclosure of project-related information to citizens; (iii) developing and updating a project website to enhance transparency during implementation; and (iv) establishing a grievance redress mechanism to ensure quick and effective relief. ADB's Anticorruption Policy (1998, as amended to date) was explained to, and discussed with, the government, MCP&WS, MPC&LG and the implementing agencies.

D. Poverty, Social and Gender Dimensions

27. The proposed Tranche 3 is classified as an effective gender mainstreaming project. A gender action plan²⁸ (GAP) prepared for the proposed Project 3 outlines specific activities, indicators, and targets for mainstreaming gender equity into the project design. Some of the key gender-inclusive actions proposed in the GAP include leadership roles for women in wastewater management groups to be formed under the project, appointment of women as awareness generation workers and as skilled and unskilled workers under the project, accounting positions in O&M and accounting training recipients to comprise women, all of which are expected to empower women and strengthen their position in society. The consultation and participation plan outlines specific outreach activities to raise awareness and ensure the meaningful participation of communities and stakeholders in the project. A nongovernment organization recruited under Tranche 3 will (i) provide guidance to form wastewater management groups; (ii) assist in

²⁵ Financial Analysis is in Appendix 6.

²⁶ Economic Analysis is in Appendix 7.

²⁷ The findings of the financial management assessment and the proposed recommendations for NWSDB and CMC are provided in the PAM.

²⁸ Gender Action Plan is in Appendix 8.

implementing the GAP and consultation and participation plan; and (iii) implement a water, sanitation, and hygiene awareness campaign in the unserved and underserved settlements.

E. Safeguards

28. **Social safeguards.** The proposed Tranche 3 is classified as category B for involuntary resettlement and category C for indigenous peoples in accordance with ADB's Safeguard Policy Statement 2009 (SPS). For outputs 1 and 2, the draft resettlement plans prepared during the project preparatory stage will be updated, incorporating detailed design, and submitted to ADB for review and disclosure prior to commencement of the civil works. For outputs 3 and 4, a resettlement plan for the south catchment area of Colombo city was prepared in consultation with the affected people, submitted by the government, and disclosed in accordance with SPS. The resettlement plan addresses both the permanent impacts and temporary impacts due to the construction of new pumping stations and sewerage network in the unserved areas. A total of 11 affected households (38 affected persons) that reside on government lands will lose their houses and shelter from rented houses. Potential temporary income losses are expected during the pipe laying in unserved areas, including losses due to temporary disruption for approximately 155 mobile vendors and hawkers for less than 7 days in the south catchment area of Colombo city. Full road closure is anticipated only in the residential area with roads less than three meters wide. In such areas, construction will be done at night time to avoid access disturbance. The resettlement plan will be updated upon the final design. CMC is implementing Greater Colombo Wastewater Management Program and is familiar with ADB's safeguard policies. The consultants will support the management and monitoring of resettlement and social issues arising under Tranche 3 activities. The resettlement framework²⁹ prepared for the investment program will be used to guide unanticipated impacts related to social safeguards.³⁰ Considering the urban setting of the proposed project area, no impacts on indigenous peoples are identified. Thus, no indigenous people plan has been prepared.

29. **Environmental safeguards.** The proposed Tranche 3 is classified as category B for environment. For outputs 1 and 2, the draft IEEs prepared during project preparatory stage will be updated, incorporating detailed design, and submitted to ADB for review and disclosure prior to commencement of the civil works. Potential environmental impacts due to additional funding will be site-specific, short-term in duration, not significant and can be avoided and/or mitigated through measures identified in the EMPs. For outputs 3 and 4, a draft IEE has been prepared in accordance with the SPS. The environmental assessment and review framework (EARF) has been prepared under the investment program.³¹ Negative impacts during construction activities are short-term and localized in a relatively small area, which can be minimized with the implementation of the mitigation measures in the EMP. Operations impacts will not be significant and will be mitigated through measures identified in the EMP, and O&M manual to be developed during project implementation. A number of impacts have already been mitigated in terms of their significance by incorporating environmental considerations in the designs. The IEE will be disclosed by PMU in a language and form understandable by stakeholders and affected people. All IEEs will form part of the bidding and contract documents and will be monitored during implementation. Support from the consultants will ensure that the PMU has adequate capacity to manage any environmental impacts during construction. Implementation and monitoring of environmental safeguards will be reported to ADB on a semi-annual basis.

²⁹ The resettlement framework is updated to accommodate impacts identified during the preparation of Tranche 3. The resettlement framework is in Supplementary Appendix B.

³⁰ The Summary Poverty Reduction and Social Strategy is in Appendix 9.

³¹ The Environmental Assessment and Review Framework is updated to accommodate impacts identified during the preparation of Tranche 3. The Environmental Assessment and Review Framework is in Supplementary Appendix C.

F. Risks and Mitigating Measures

30. Major risks and mitigating measures are summarized in Table 4. The integrated benefits and impact of the proposed Project 3 are expected to outweigh the costs.

Table 4: Summary of Risks and Mitigating Measures

Risks	Mitigating Measures
Rehabilitation of wastewater network needs more consideration with respect to routine O&M works.	CCTV footage will strengthen the routine O&M works for the drainage department.
Delays in introducing wastewater tariffs and increasing the water supply tariffs.	The government has made a firm commitment to introduce wastewater tariffs and increase water tariff during implementation of the investment program.
CMC will require more time to prepare detailed designs and bid documents for wastewater investments.	CMC engaged DSIDC under Project 2 and DSC under GCWMP to prepare detailed designs and bid documents.

CCTV = closed-circuit television, CMC = Colombo Municipal Council, DSC = design and supervision consultant, DSIDC = design, supervision, and institutional development consultants, GCWMP = Greater Colombo Wastewater Management Project, O&M = operation and maintenance.

Source: Asian Development Bank.

G. Risk Categorization

31. The risk categorization of Tranche 3 is “low risk” as it fulfills all of the required features as specified in the Operations Manual Section D11/OP.³²

V. ASSURANCES

32. The Government, MCP&WS, MPC&LG, NWSDB and CMC have assured ADB that implementation of the project 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 PAM and loan documents.

33. The Government, MCP&WS, MPC&LG, NWSDB and CMC have agreed with ADB on certain covenants for the project, which are set forth in the loan and project agreements.

VI. RECOMMENDATION

34. On the basis of the approval by ADB’s Board of Directors for the provision of loans under the multitranche financing facility in an aggregate principal amount not exceeding \$300,000,000 to the Democratic Socialist Republic of Sri Lanka for the Greater Colombo Water and Wastewater Management Improvement Investment Program, it is recommended that the President approve the proposed tranche as described in paragraph 16 of this report and the draft loan and project agreements for the proposed tranche substantially in the forms attached to this report.

³² Operations Manual Section D11/OP para. 6 defines the features for a “low risk” project. The features of Tranche 3 include: (i) a loan amount not exceeding \$200 million for projects; (ii) a sound record of ADB’s previous experiences in the sector in Sri Lanka; (iii) reasonable executing agency capacity in terms of externally financed project administration; and (iv) safeguard categorization other than A.

PERIODIC FINANCING REQUEST

Date: 30 October 2015

To: Asian Development Bank
6 ADB Avenue
Mandaluyong City, Metro Manila

ATTENTION: Director General, South Asia Regional Department
Fax No. +63 2 636-2444

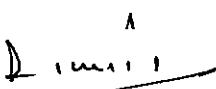
Sir:

Subject: Greater Colombo Water and Wastewater Management Improvement Investment Program: Periodic Financing Request # 3

Please refer to the Framework Financing Agreement (FFA) for the Greater Colombo Water and Wastewater Management Improvement Investment Program dated 12 September 2012 between the Asian Development Bank (ADB) and the Democratic Socialist Republic of Sri Lanka ("Sri Lanka"). Expressions defined in the FFA shall have the same meanings herein.

Pursuant to the provisions of the FFA, Sri Lanka requests ADB to process this Periodic Financing Request 3 (PFR 3) for a tranche, in the form of two loans, one from its Special Funds resources and one from its ordinary capital resources. The proposed financing amounts, terms, conditions, and financing plan are specified in the Attachment hereto. Descriptions of the project for which financing is hereby requested are set out in Attachments 1 to 13 hereto.

By: Democratic Socialist Republic of Sri Lanka



Name:
Title:

Attachments:

1. Design and Monitoring Framework for Project 3;
2. Detailed Project Description for Project 3;
3. Detailed Cost Estimates and Financing Plan for Project 3;
4. Detailed Description of European Investment Bank (EIB) Cofinanced Subprojects;
5. Procurement Plan for Project 3;
6. Outline of the Terms of Reference of NGO for Project 3;
7. Initial Environmental Examinations for Project 3;
8. Resettlement Plans for Project 3;
9. Gender Action Plan for Project 3;
10. Compliance matrixes for Status of compliance with (i) FFA undertakings; (ii) loan covenants for Tranche 1; (iii) loan covenants from tranche 2;
11. Safeguards compliances for Tranche 1 and Tranche 2;
12. Summary of feasibility studies, engineering designs (Detailed Project Reports);
13. Summary of proposed, ongoing and advance actions.

DESCRIPTION OF PROJECT, FINANCING AMOUNTS, TERMS, CONDITIONS, AND FINANCING PLAN

- Project Description** Project 3 under the Greater Colombo Water and Wastewater Management Improvement Investment Program will apply a project lending approach. Subprojects under Project 3 conform to selection criteria approved under the Framework Financing Agreement (FFA), including technical, environmental, social, institutional, economic and financial criteria. Project 3 provides financing gap for the rehabilitation and expansion of the water supply system and reduction in non-revenue water (for both tranche 1 and tranche 2); supports the rehabilitation and expansion in wastewater collection and treatment, and shall strengthen institutional structure and capacity service in Greater Colombo. Project 3 outputs proposed for financing under the requested Periodic Financing Request 3 (PFR 3) are:
- (i) **Output 1: Water Supply System Rehabilitated and Expanded and Nonrevenue Water (NRW) Reduced in the Northeast Part of Colombo City (financing gap for Project 1):** The following additional activities will be included, in order to strengthen Project 1: (a) formation of seven additional district metered areas (DMAs) in the northeast part of Colombo city, and (b) increasing the area engineering office size from 800 m² to 1400 m².
 - (ii) **Output 2: Water Supply System Rehabilitated and Expanded and NRW Reduced in the Southwest Part of Colombo City (financing gap for Project 2):** The following additional activities will be included, in order to strengthen Project 2: (a) formation of seven additional district metered areas in the southwest part of Colombo city; (b) enhancement of training facility; (c) construction of a new pump station at Ellie house, instead of the rehabilitation of five existing pump stations; and (d) support for enhancing project preparation and increasing project readiness.
 - (iii) **Output 3: Wastewater Network Rehabilitated and Expanded in South Catchment Area of Colombo City:** (a) laying 29.40 km of sewer network and constructing three pump stations to cover currently unserved Kirulapona area in the south catchment area of Colombo (ADB financing); (b) rehabilitation, replacement, repair and cleaning of sewer reticulation system of 15.61 km in South catchment area of Colombo to address sewer damages, blockages and siltation problems, under-capacity issues and realignment needs (European Investment Bank [EIB] cofinancing); and (c) laying 6.22 km of sewer network and the construction of three pump stations to cover two other un-served areas in the south catchment area of Colombo (EIB cofinancing).
 - (iv) **Output 4: Secondary Wastewater Treatment Plant constructed in South Catchment Area of Colombo City:** construction of 50,000 cubic meters per day capacity secondary treatment plant at Wellawatta on a Design-Build-Operate basis.
 - (v) **Output 5: Institutional Structure and Capacity of Service Provider Strengthened:** (a) a separate wastewater unit is

established within the Colombo Municipal Council (CMC); (b) establishment of GIS-based asset management system for wastewater system, to strengthen the operation of the wastewater unit; (c) strengthening of CMC's staff and institutional capacity for increased operational efficiency in wastewater management; (d) awareness of shared responsibility in wastewater management by new sewerage users in the south catchment area; (e) training and capability building to improve the operating performance of CMC; and (f) initiating the collection of volumetric sewerage tariff in the CMC area.

The design and monitoring framework for Project 3 is in Attachment [1]. Additional details have been provided in Attachments [2] to [13].

Cost Estimates and Financing Plan

The total cost of Project 3 is estimated at \$228.02 million, inclusive of taxes, duties, and interest and other charges on the loan during construction. The cost estimate for the ADB financed project is estimated at \$168.46 million. The total cost estimate for the EIB co-financed portion is estimated at \$59.56 million. The detailed cost estimates and financing plan for Project 3 are in Attachment [3]. The detailed scope and cost estimates for EIB cofinancing portion are in Attachment [4].

Table A1.1: Project 3 Cost Estimate (US\$ million)

Item	Amount ^{a, b}
A. Base Cost^c	
1. Financing gap for Project 1	31.76
2. Financing gap for Project 2	13.94
3. Wastewater Network Improvements in Colombo	97.27
4. Wastewater Treatment Plant	44.37
5. Implementation support	8.48
Subtotal (A)	195.82
B. Contingencies^d	23.84
C. Financing Charges During Implementation^e	8.36
Total (A+B+C)	228.02

^a Exchange rate of \$1 = LKR130.00 is used.

^b In June 2015 prices.

^c Taxes and duties (\$35.08 million) computed at 31% for imported goods and at 11% for domestic goods and services. Taxes and duties are the cash contribution from the government.

^d Physical contingencies are computed at 7.5% for civil works and equipment; price contingencies are computed at 1.4%-1.5% on foreign exchange costs and 6.0% on local currency costs and include provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^e Includes interest and commitment charges. Interest during construction for OCR has been computed at the 5-year forward London interbank offered rate plus a spread of 0.6%. Commitment charges for OCR are 0.15% per year to be charged on the undisbursed loan amount. In addition, interest during construction for ADF is applied with 2%. EIB loan interest and commitment charges are computed at 1.46% per year based on LIBOR 5 year fixed swap rate and a spread of 0.74% and commitment charges of 0.15%.

Source: ADB estimates.

Table A1.2: Project 3 ADB Financed Project Cost Estimate (\$ million)

Item	Project	ADB Loan (\$ million)
A.	Base Cost	
	Financing gap Project 1	31.76
	Financing gap for Project 2	13.94
	Wastewater Network Improvements in Colombo	47.11
	Wastewater Treatment Plant	44.37
	Implementation support	8.48
	Subtotal (A)	145.66
B.	Contingencies	16.78
C.	Financing Charges During Implementation	6.02
Total (A+B+C)		168.46

Loan Amounts and Terms

The request is for: (i) a loan of \$5.0 million equivalent from ADB's Special Funds resources, with a term of 25 years including a grace period of 5 years, with 2.0% interest charged throughout the loan maturity, and subject to such other terms and conditions set forth in the loan and project agreements; and (ii) a loan of \$123.0 million from ADB's ordinary capital resources, with a term of 26 years including a grace period of 5 years, and following the straight-line repayment option. On the basis of these loan terms and repayment options, the average loan maturity is 15.75 years and the maturity premium payable to ADB is 0.1% per annum.

Period of Loan

Project 3 is expected to be completed by 30 June 2020. The loan closing date is 31 December 2020.

Advance Contracting

Advance contracting is requested for civil works for the rehabilitation of networks in the south catchment area of Colombo city, procurement of equipment, and consulting services for the NGO.

Retroactive Financing

Retroactive financing is requested for civil works, equipment and materials, project management and consulting services, not exceeding 20% of the total loan amount, incurred before loan effectiveness, but not earlier than 12 months before the signing of the loan agreements.

Implementation Arrangements

For water supply investments, the Ministry of City Planning and Water Supply (MCP&WS) will be the executing agency and the National Water Supply and Drainage Board (NWSDB), will be the implementing agency. For wastewater management investments, the Ministry of Provincial Councils and Local Government (MPC&LG) will be the executing agency and CMC will be the implementing agency. A Program Steering Committee (PSC) established under Project 1 will be the PSC for the entire implementation period of Greater Colombo Water and Wastewater Management Improvement Investment Program (the Investment Program). The PSC, chaired by the Secretary of the Ministry of National Policies and Economic Affairs (MNPEA), will oversee project implementation. Other members of the PSC are the Secretary of the MCP&WS, the Secretary of the MPC&LG, and representatives from each of the following: the Department of National Budget, the Department of Treasury Operations, the Department of External

Resources, the Department of National Planning, the Department of Project Management and Monitoring, Urban Development Authority, NWSDB, and the CMC.

The implementation arrangements are described in detail in the Project Administration Manual (PAM) for Project 3.

Procurement and Consulting Services

All goods and services to be financed under Project 3 will be procured in accordance with ADB's Procurement Guidelines (2010, as amended from time to time). The procurement plan for Project 3 is in Attachment [5].

All consulting services to be financed under Project 3 will be recruited in accordance with ADB's Guidelines on the Use of Consultants (2010, as amended from time to time). Outline of terms of reference for the engagement of non-government organization (NGO) for Project 3 are attached as Attachment [6].

Safeguards

Initial Environmental Examination and Resettlement Plans for Project 3 have been prepared and attached as Attachments [7] and [8], respectively.

Gender Action Plan

A Gender Action Plan for Project 3 has been prepared and attached as Attachment [9].

Confirmation of Validity of and Adherence to Provisions of FFA, and the Design and Monitoring Framework

A full report on compliance is attached as Attachments [10] to [11]

Readiness of the Project for Implementation

The executing agency for water supply, MCP&WS, has already established the PMU in NWSDB, and has mobilized all core staff (Project Director, two Deputy Project Directors, one Deputy Team Leader, three Project Managers, four Chief Engineers, one Senior Engineer, one Social Development and Safeguards Officer, one Procurement Specialist, and two Project Coordinators), totaling 65 required for the implementation for Project 1 and Project 2. The executing agency for wastewater, MPC&LG, has already established the PMU in CMC with core staff including Project Director, and one Additional Project Director, 2 Deputy Project Directors, totaling 27 staff required for the preparation of all detailed designs and bidding documents. All safeguards documents have been completed.

Summaries of feasibility studies, engineering designs and economic and financial assessments are attached as Attachment [12].

A summary of [proposed, ongoing] advance actions are in Attachment [13].

ATTACHMENT 1: DESIGN AND MONITORING FRAMEWORK FOR PROJECT 3

Impact the Project is aligned with Water supply and wastewater service and management in Greater Colombo improved (<i>Vision for a New Sri Lanka, 2010–2020^a</i>)			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome System efficiency and financial sustainability of water supply and wastewater services in Colombo improved	a. NRW in Colombo city reduced to 20% (2013 Baseline: 49%). b. Collection of wastewater through sewerage network increased by 9% by 2020 (2015 Baseline: 80%). c. Access to sewage system in south catchment area of Colombo increased to 95% by 2020 including all below poverty line households (female headed households among them) (2012 Baseline: 65%).	a. NWSDB water balance audit b. CMC annual reports c. CMC annual reports	The implementation of wastewater tariff as agreed by the Government is delayed
Outputs 1. Water supply system rehabilitated and expanded, and NRW reduced in northeast part of Colombo city (including funding the financing gap for Project 1) 2. Water supply system rehabilitated and expanded, and NRW reduced in southwest part of Colombo city (including funding the financing gap for Project 2) 3. Wastewater network rehabilitated and expanded in south catchment area of Colombo	In addition to supporting the outputs under DMF for Project 1, 1a. Numbers of DMAs increased to 26 from 19 as conceived under project 1 ^b by 2018. 1b. Area of engineering office increased from 800 m ² to 1400 m ² by 2018 (Baseline: 0). In addition to supporting to the outputs under DMF for Project 2, 2a. Numbers of DMAs increased to 26 from 19 as conceived under project 2 ^c by 2018 2b. One new pump station constructed by 2018. 3a. Length of sewer network in south catchment area of Colombo rehabilitated and expanded by 29.40 km by 2020 (2014 baseline: 146.6 km).	1a. NWSDB annual report 1b. NWSDB annual report 2a. NWSDB annual report 2b. NWSDB annual report 3a. CMC and nongovernment organization annual reports	1. Key project officials changed during the project period. 2. Prices of pipes and construction materials increase beyond projections and/or contingency allocations

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
4. Secondary wastewater treatment plant constructed in south catchment area of Colombo	3b. 18,904 additional households in south catchment area are benefited with sewage facilities by 2020. (Target: 20% of new beneficiaries are from poor households in the unserved areas, of which 50% headed by women) (2013 Baseline: NA).	3b. PPMS	
	3c. Two pump stations rehabilitated in south catchment area of Colombo by 2020 (2015 baseline: NA).	3c. PPMS	
	4a. Secondary wastewater treatment capacity in south catchment area increased by 50,000 cubic meters/day by 2020 (2012 Baseline: 0).	4a. PPMS	
5. Institutional structure and capacity of service providers strengthened	4b. Number of women staff for WWTP to be at least 10% (2013 Baseline: NA).	4b. CMC annual reports	
	5a. GIS-based asset management system for wastewater system established and operated by wastewater unit of CMC by 2020 (Baseline: NA).	5a. CMC annual reports	
	5b. A separate wastewater unit established and fully operational within CMC by 2020 (2015 Baseline: 0).	5b. CMC annual reports	
	5c. Training and capability building provided to 100 CMC staff of which 25% would be female professionals (2015 Baseline: NA).	5c. Survey conducted by the project consultants	
	5d. Outreach activities conducted to reach a target of 80% of population of Colombo city, emphasizing shared responsibility of men and women in wastewater management with: 50% women participation in focus group discussions (2013 Baseline: 20%).	5d. CMC annual reports	
	5e. Volumetric sewerage tariff approved and collection initiated by CMC by 2016 (Baseline: NA).	5e. CMC annual reports	

Key Activities with Milestones

- 1. Water supply system rehabilitated and expanded, and NRW reduced, in northeast part of Colombo city**
 - 1.1. Complete construction designs of civil works contracts by Q4 2015.
 - 1.2. Provide the NRW teams with vehicles, tools, equipment, and training, and mobilize the teams for active leakage control by Q2 2016.
 - 1.3. Establish seven additional DMAs by Q4 2017.
 - 1.4. Replace or upgrade all service connections and meters by Q4 2017.
- 2. Water supply system rehabilitated and expanded, and NRW reduced, in southwest part of Colombo city**
 - 2.1. Complete procurement of civil works contract by Q4 2015.
 - 2.2. Provide the NRW teams with vehicles, tools, equipment, and training, and mobilize the teams for active leakage control by Q2 2016.
 - 2.3. Establish seven additional DMAs by Q4 2018.
 - 2.4. Replace or upgrade all service connections and meters by Q4 2018.
- 3. Wastewater system rehabilitated and expanded in south catchment area of Colombo**
 - 3.1. Issue tender documents for unserved Kirilapona sewage network by Q3 2015.
 - 3.2. Design, Supervision and Institutional Development Consultants mobilized by Q3 2015.
 - 3.3. Issue tender documents for rehabilitation of sewer network and pump stations by Q1 2016.
 - 3.4. Complete procurement of civil works contract for Kirilapona by Q2 2016.
 - 3.5. Complete procurement of civil works contract for rehabilitation of sewer network and pump stations by Q3 2016.
 - 3.6. 100% households in south catchment area (including below poverty line households and female headed households) are connected to new sewer system in 2020 [EGM].
- 4. Wastewater secondary treatment plant constructed**
 - 4.1. Prepare the bidding document for the DBO of the WWTP by Q4 2015.
 - 4.2. Complete the WWTP DBO bidding process by Q4 2016 [private sector development].
 - 4.3. Build the secondary wastewater treatment plant in south catchment by Q2 2019 [private sector development].
- 5. Institutional structure and capacity of service providers strengthened**
 - 5.1. Approve and start the awareness and media campaign, including outreach through television and radio program, and focus group discussion designs by Q4 2015 [EGM].
 - 5.2. Institutionalize reforms to have separated wastewater unit by Q2 2016.
 - 5.3. Complete training of CMC staff (both men and women) on project implementation by Q2 2016 [EGM].
 - 5.4. Approve sustainable tariff system for CMC, together with formulation of implementation strategy/mechanism to include legal and institutional provisions, by Q4 2016.
 - 5.5. Update GIS wastewater system for Colombo by Q4 2018.
 - 5.6. Complete training of CMC staff in managing the operation contract of the DBO contractor by Q1 2019 [EGM].
 - 5.7. Institutional reforms pertaining to Procurement and Project Management Divisions of CMC are implemented for the management of the operation contract for the wastewater treatment plant by Q3 2019.

Inputs

Asian Development Bank: \$128.00 million loan

Government: \$ 47.45 million

Assumptions for Partner Financing

European Investment Bank cofinancing (\$50.00 million) is parallel cofinancing and not administered by Asian Development Bank. Parts of Output 3 being financed by European Investment Bank that are necessary to reach the outcome include: (i) rehabilitation, replacement, repair and cleaning of sewer reticulation system of 15.61 km in south catchment area of Colombo to address sewer damages, blockages and siltation problems, under-capacity issues and realignment needs; and (ii) laying 6.22 km of sewer network and the construction of three pump stations to cover two other un-served areas in the south catchment area of Colombo

CMC = Colombo Municipal Council, DBO = design, build and operate, DMA = District Metered Area, EGM = effective gender mainstreaming, GIS = geographic information system, km = kilometer, m² = square meter, NRW = nonrevenue water, NWSDB = National Water Supply and Drainage Board, PPMS = project performance management system, WWTP = wastewater treatment plant.

^a Government of Sri Lanka. 2010. *Vision for a New Sri Lanka, 2010–2020*, Colombo.

^{b,c} The distribution of network has been realigned to form more DMAs in the same service areas.

Source: Asian Development Bank.

ATTACHMENT 2: DETAILED PROJECT DESCRIPTION FOR PROJECT 3

A. Output 1: Water Supply System Rehabilitated and Expanded and NRW Reduced in the Northeast Part of Colombo City (financing gap for Project 1)

1. In addition to supporting the outputs under Project 1, the additional financing will support the following:

- (i) Formation of seven additional district metered areas (DMAs) in the northeast part of Colombo city; and
- (ii) Increasing the area of the area engineer's office from 800 m² to 1,400 m².

B. Output 2: Water Supply System Rehabilitated and Expanded and NRW Reduced in the Southwest Part of Colombo City (financing gap for Project 2)

2. In addition to supporting the outputs under Project 2, the additional financing will support the following:

- (i) Formation of seven additional district metered areas (DMAs) in the southwest part of Colombo city;
- (ii) Enhancement of training facility
- (iii) Construction of a new pump station at Ellie house instead of rehabilitation of 5 existing pump stations; and
- (iv) Support for enhancing project preparation and increasing project readiness.

C. Output 3: Wastewater System Rehabilitated and Expanded in South Catchment Area of Colombo City (ADB and EIB)

3. To achieve this output, Project 3 will support the following:

- (i) Laying of 7.31 km of sewer lines of diameters ranging from 300mm to 1,200mm to replace problematic sewer lines by using open cut (5.66 km) and trenchless (1.65 km) methods respectively in the south catchment area. Work also includes replacement of 88 manholes by new pre-cast reinforced concrete manholes and cleaning of 1.25 km of sewer lines;
- (ii) Laying of 6.75 km of sewer lines of diameters ranging from 300mm to 750mm to upsize the under-capacity sewer lines in the CBD by using trenchless method in the south catchment area. The work also includes the construction of 108 pre-cast reinforced concrete manholes;
- (iii) Cleaning and repairs of 0.30 km of sewer lines of diameter 300mm to cater to UDA developments in the south catchment area;
- (iv) Cleaning and repairs of three inverted siphons in the south catchment area;
- (v) Construction of the sewerage network in Kirulapona unserved area of 2.36 km² and connecting this to the S8 pump station of the existing Colombo sewerage system. The work will include the laying of 29.4 km of pipe lines of diameters ranging from 225 mm to 1,200 mm using both open cut and trenchless technologies, construction of 756 precast reinforced concrete manholes, construction of two pump stations and two force mains, and the rehabilitation of S8 pump station with the provision of new electro-mechanical equipment and carrying out repairs (civil works);
- (vi) Construction of sewerage networks in Narahenpita unserved area of 0.08 km² and connecting this to a manhole in the existing Colombo sewerage system. The work will include the laying of 1.33 km of pipe lines of diameters ranging from

- 225mm to 300mm using open cut method, construction of 34 precast reinforced concrete manholes and connection to existing CS17 main sewer; and
- (vii) Construction of sewerage networks in Kirula-Narahenpita unserved area of 0.79 km² and connecting this to the existing Colombo sewerage system via a small pump station. The works will include the laying of 4.89 kms of pipe lines with diameters ranging from 225mm to 600mm using open cut method, construction of 72 precast reinforced concrete manholes and the construction of a small pump station connecting to Thibirigasyaya pump station of the existing Colombo sewerage system through a 0.90 km long force main.

D. Output 4: Secondary Wastewater Treatment Plant Constructed in South Catchment Area of Colombo City

- 4. To achieve this output, Project 3 will support the following:
 - (i) Construction of 50,000 cubic meters per day capacity secondary wastewater treatment plant at Wellawatta on a Design-Build-Operate basis. The works will include supply and installation of all electro-mechanical equipment and SCADA system. Dewatered sludge shall be disposed at the municipal landfill.

E. Output 5: Institutional Structure and Capacity of Service Providers Strengthened

- 5. To achieve this output, Project 3 will support the following:
 - (i) Set-up a separate wastewater unit within CMC for the management of the wastewater collection and treatment system;
 - (ii) Establishment of GIS-based asset management system for wastewater system, which shall be established and operated by the wastewater unit;
 - (iii) Strengthening of CMC's staff and institutional capacity for increased operational efficiency in wastewater management;
 - (iv) Awareness of wastewater tariff among citizens and emphasizing shared responsibility of men and women in wastewater management;
 - (v) Training and capability building to improve the operating performance of CMC; and
 - (vi) Starting the collection of volumetric sewerage tariff in the CMC area.

ATTACHMENT 3: DETAILED DESCRIPTION OF EUROPEAN INVESTMENT BANK (EIB) COFINANCED SUBPROJECTS

A. Output 3: Wastewater System Rehabilitated and Expanded in South Catchment Area of Colombo City

1. To achieve this output, EIB co-financing will support the following:
 - (i) Laying of 7.31 km of sewer lines of diameters ranging from 300mm to 1,200mm to replace problematic sewer lines by using open cut (5.66 km) and trenchless (1.65 km) methods respectively in the south catchment area. Work also includes replacement of 88 manholes with new pre-cast reinforced concrete manholes and cleaning of 1.25 km of sewer lines;
 - (ii) Laying of 6.75 km of sewer lines of diameters ranging from 300mm to 750mm to upsize the under-capacity sewer lines in the CBD by using trenchless method in the south catchment area. The work also includes construction of 108 pre-cast reinforced concrete manholes;
 - (iii) Cleaning and repairs to 0.30 km of sewer lines of diameter 300mm to cater to UDA developments in the south catchment area;
 - (iv) Cleaning and repairs to three inverted siphons in the south catchment area;
 - (v) Construction of sewerage networks in Narahenpita unserved area of 0.08 km² and connecting it to a manhole in the existing Colombo sewerage system, laying of 1.33 km of pipe lines of diameters ranging from 225mm to 300mm using open cut method, construction of 34 precast reinforced concrete manholes and connection to the existing CS17 main sewer; and
 - (vi) Construction of sewerage networks in Kirula-Narahenpita unserved area of 0.79 km² and connecting this to the existing Colombo sewerage system via a small pump station, laying of 4.89 km of pipe lines of diameters ranging from 225mm to 600mm using open cut method, construction of 72 precast reinforced concrete manholes, and the construction of a small pump station connecting to Thibirigasyaya pump station of the existing Colombo sewerage system through a force main 0.90 km in length.
2. Leveraging the MFF as a platform to implement the Government's sector investment plan, the Government invited EIB to provide parallel cofinancing for the project. EIB will implement and administer its' own cofinancing. The total cost of the project financed by EIB is estimated at \$59.56 million. EIB cofinancing is envisaged in the range of \$50 million. The collaboration between ADB and EIB will be set out in a MOU on cofinancing.

Table A3.1: Total Cost Estimate for EIB Cofinancing (US\$ million)

Item	Amount ^{a, b}
A. Base Cost^c	
1. Wastewater Network Improvements in Colombo	50.16
Subtotal (A)	50.16
B. Contingencies^d	7.07
C. Financing Charges During Implementation^e	2.34
Total (A+B+C)	59.56

^a Exchange rate of \$1 = LKR130 is used.

^b In June 2015 prices.

^c Taxes and duties (\$9.56 million) computed at 31% for imported goods and at 11% for domestic goods and services. Taxes and duties are the cash contribution from the government.

^d Physical contingencies computed are at 7.5% for civil works and equipment; price contingencies computed are computed at 1.4%-1.5% on foreign exchange costs and

6.0% on local currency costs and include provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

- ^e Includes interest and commitment charges. Interest during construction for EIB loan is estimated at 2.2% per year. Commitment charges and other front-end charges for EIB loan are estimated at 0.15% per year to be charged on the undisbursed loan amount.

Source: ADB estimates.

Table A3.2: Total EIB Cofinancing - Detailed Cost Estimates by Category (US\$ million)

Items		Gross	Net	Tax
A.	Investment Costs			
1	Civil Works	50.16	41.78	8.38
2	Equipment	0	0	0
3	Resettlement	0	0	0
4	Project Management	0	0	0
	Subtotal (A)	50.16	41.78	8.38
B.	Recurrent Costs			
	Incremental Administrative Costs	0	0	0
	Subtotal (B)	0	0	0
	Total Base Cost	50.16	41.78	8.38
C.	Contingencies			
1	Physical Contingencies	5.07	4.18	0.85
2	Price Contingencies	2.00	1.71	0.34
	Subtotal (C)	7.07	5.89	1.18
D.	Financing Charges During Implementation			
1	Interest During Construction	1.96	1.96	0.00
2	Commitment Charges	0.38	0.38	0.00
	Subtotal (D)	2.34	2.34	0.00
	Total Project Cost (A+B+C+D)	59.56	50.00	9.56
	% Total Project Cost	100.0%	83.9%	16.1%

Note: Numbers may not sum precisely because of rounding.

Source: ADB estimates.

ATTACHMENT 4: DETAILED COST ESTIMATES AND FINANCING PLAN FOR PROJECT 3

1. The total cost of Project 3 is estimated at \$228.02 million equivalent, inclusive of taxes, duties, and interest and other charges on the loan during construction.

Table A4.1: Project 3 Cost Estimate (US\$ million)

Item	Amount ^{a, b}
A. Base Cost ^c	
1. Financing gap for Project 1	31.76
2. Financing gap for Project 2	13.94
3. Wastewater Network Improvements in Colombo	97.27
4. Wastewater Treatment Plant	44.37
5. Implementation support	8.48
Subtotal (A)	195.82
B. Contingencies ^d	23.84
C. Financing Charges During Implementation ^e	8.36
Total (A+B+C)	228.06

^a Exchange rate of \$1 = LKR130.00 is used.

^b In June 2015 prices.

^c Taxes and duties (\$35.08 million) computed at 31% for imported goods and at 11% for domestic goods and services. Taxes and duties are the cash contribution from the government.

^d Physical contingencies are computed at 7.5% for civil works and equipment; price contingencies are computed at 1.4%-1.5% on foreign exchange costs and 6.0% on local currency costs and include provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^e Includes interest and commitment charges. Interest during construction for OCR has been computed at the 5-year forward London interbank offered rate plus a spread of 0.6%. Commitment charges for OCR are 0.15% per year to be charged on the undisbursed loan amount. And, interest during construction for ADF is applied with 2%. EIB loan interest and commitment charges are computed at 1.46% per year based on LIBOR 5 year fixed swap rate plus a spread of 0.74% and commitment charges of 0.15%.

Source: ADB estimates.

Table A4.2: Cost Estimate of ADB loan for NWSDB (US\$ million)

Item	Amount
A. Base Cost	
1. Financing gap for Project 1	31.76
2. Financing gap for Project 2	13.94
3. Implementation Support	3.00
Subtotal (A)	48.70
B. Contingencies	4.53
C. Financing Charges During Implementation	2.39
Total (A+B+C)	55.62

Table A4.3: Cost Estimate of ADB loan for CMC (US\$ million)

Item	Amount
A. Base Cost	
1. Wastewater Network Improvements in Colombo	47.11
2. Wastewater Treatment Plant	44.37
3. Implementation Support	5.48
Subtotal (A)	96.96
B. Contingencies	12.24
C. Financing Charges During Implementation	3.63
Total (A+B+C)	112.83

Table A4.4: Project 3: Detailed Cost Estimates by Category (US\$ million)

	Items	Gross	Net	Tax
A.	Investment Costs			
1	Civil Works	187.34	156.19	31.15
	a. Civil Works - NWSDB	45.70	38.16	7.54
	b. Civil Works - CMC	141.64	118.03	23.65
2	Equipment	0.79	0.60	0.19
3	Resettlement	0.53	0.53	0.00
4	Project Management	1.84	1.70	0.14
	a. PMDS – NWSDB	0.00	0.00	0.00
	b. PMDS – CMC	1.34	1.20	0.14
	c. Training and Workshops	0.50	0.50	0.00
	Subtotal (A)	190.50	159.02	31.48
B.	Recurrent Costs			
1	Incremental Administrative Costs	5.32	5.32	0.00
	Subtotal (B)	5.32	5.32	0.00
	Total Base Cost	195.82	164.34	31.48
C.	Contingencies			
1	Physical Contingencies	15.41	12.85	2.57
2	Price Contingencies	8.42	7.39	1.03
	Subtotal (C)	23.84	20.24	3.60
D.	Financing Charges During Implementation			
1	Interest During Construction	7.43	7.43	0.00
2	Commitment Charges	0.93	0.93	0.00
	Subtotal (D)	8.36	8.36	0.00
	Total Project Cost (A+B+C+D)	228.02	192.93	35.08
	% Total Project Cost	100.0%	84.6%	15.4%

Table A4.5: Project 3 – Detailed Cost Estimates by Outputs (US\$, million)

Items	Output 1 NRW P1		Output 2 NRW P2		Output 3 Sewer NW		Output 4 STP		Output 5 Imp		Total Costs
	\$	%	\$	%	\$	%	\$	%	\$	%	
A. Investment Costs											
1 Civil Works	31.76	17.0%	13.94	7.4%	97.26	51.9%	44.37	23.7%	0.00	0.0%	187.34
2 Equipment	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.79	100.0%	0.79
3 Resettlement	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.53	100.0%	0.00	0.0%	0.53
4 Project Management	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.00	0.0%	1.84	100.0%	1.84
a. PMDS Consultancy	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.00	0.0%	1.34	100.0%	1.34
b. Training and Workshops	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.50	100.0%	0.50
Subtotal (A)	31.76	16.7%	13.94	7.3%	97.26	51.1%	44.91	23.6%	2.63	1.4%	190.50
B. Recurrent Costs											
1 Incremental Administrative Costs	0.00	0.0%	3.00	56.4%	0.00	0.0%	0.00	0.0%	2.32	43.6%	5.32
Subtotal (B)	0.00	0.0%	3.00	56.4%	0.00	0.0%	0.00	0.0%	2.32	43.6%	5.32
Total Base Cost	31.76	16.2%	16.94	8.7%	97.26	49.7%	44.91	22.9%	4.95	2.5%	195.82
C. Contingencies											
1 Physical Contingencies	2.38	15.5%	1.05	6.8%	8.60	55.8%	3.33	21.6%	0.06	0.4%	15.41
2 Price Contingencies	0.72	8.6%	0.38	4.5%	4.60	54.6%	2.47	29.3%	0.26	3.0%	8.42
Subtotal (C)	3.10	13.0%	1.43	6.0%	13.20	55.4%	5.80	24.3%	0.32	1.3%	23.84
D. Financing Charges During Implementation											
1 Interest During Construction	1.82	24.5%	0.38	5.2%	3.54	47.6%	1.51	20.3%	0.18	2.4%	7.43
2 Commitment Charges	0.12	13.4%	0.07	7.1%	0.56	60.3%	0.18	19.3%	0.00	0.0%	0.93
Subtotal (D)	1.94	23.2%	0.45	5.4%	4.10	49.1%	1.69	20.2%	0.18	2.4%	8.36
Total Project Cost (A+B+C+D)	36.80	16.1%	18.82	8.3%	114.56	50.2%	52.40	23.0%	5.44	2.4%	228.02

Note: Numbers may not sum precisely because of rounding.

Source: ADB estimates.

ATTACHMENT 5: PROCUREMENT PLAN FOR PROJECT 3¹

Basic Data

Project Name: Greater Colombo Water and Wastewater Management Improvement Investment Program – Project 3	
Project Number: P45148-008	Approval Number:
Country: Sri Lanka	Executing Agency: Ministry of Provincial Councils and Local Government
Project Procurement Classification: B	Implementing Agency: Colombo Municipal Council
Project Procurement Risk: (high, substantial, moderate, low)	
Project Financing Amount: US\$ 112.83	Project Closing Date: 2020
ADB Financing: US\$ 90 million	
Non –ADB (Government) Financing: US\$ 22.83 million	
Date of First Procurement Plan: October 2015	Date of this Procurement Plan: 30 October 2015

A. Methods, Thresholds, Review and 18-Month Procurement Plan

1. Procurement and Consulting Methods and Thresholds

1. Except as the Asian Development Bank (ADB) may otherwise agree, the following process thresholds shall apply to procurement of goods and works

Procurement of Goods, Works and Services

Method	Threshold	Comments
International Competitive Bidding (ICB) for Works	US\$ 15,000,000 and above	Prior review
International Competitive Bidding for Goods	US\$ 2,000,000 and above	Prior review
National Competitive Bidding (NCB) for Works	From US\$ 100,000 to US\$ 14,999,999	The first NCB is subject to prior review, thereafter post review.
National Competitive Bidding for Goods	From US\$ 100,000 to US\$ 1,999,999	The first NCB is subject to prior review, thereafter post review.
Shopping for Works	Below US\$ 100,000	
Shopping for Goods/Services	Below US\$ 100,000	

Consulting Services

Method	Comments
Quality- and Cost-Based Selection for Consulting Firm	Prior review
Quality-Based Selection for Consulting Firm	Prior review
Individual Consultants Selection	Prior review

2. Goods and Works Contracts Estimated to Cost \$1 Million or More

2. The following table lists goods and works contracts for which the procurement activity is either ongoing or expected to commence within the next 18 months.

¹ This procurement plan does not include the additional financing for Project 1 and Project 2. For the procurement plan of additional financing see procurement plans for Project 1 and Project 2 respectively.

Package Number	General Description	Estimated Value	Procurement Method	Review (Prior/ Post)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
CW1	Establishing new sewer network for unserved Kirulapone area including rehabilitation of S8 pumping station	39.29	ICB	Prior	1S2E	Q3/2015	ADB
CW2	Secondary Wastewater Treatment Plant including rehabilitation of Wellawatte pumping station	36.96	ICB	Prior	1S2E	Q1/2016	DBO/ADB

3. Consulting Services Contracts Estimated to Cost \$100,000 or More

3. The following table lists consulting services contracts for which the recruitment activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value	Recruitment Method	Review (Prior/ Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
NA							

4. Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000 (Smaller Value Contracts)

4. The following table lists smaller-value goods, works and consulting services contracts for which the activity is either ongoing or expected to commence within the next 18 months.

Goods and Works

Package Number	General Description	Estimated Value	Number of Contracts	Procurement Method	Review (Prior/ Post)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
GD1	Office Equipment	0.4	6	Shopping	Post		Q3/2017	ADB
GD2	Vehicle for PMU operation	0.2	1	NCB	Prior		Q12016	ADB
BSS1	Business support system for PPP of WWTP	0.7	2	NCB	Prior		Q4/2016	ADB

PMU = project management unit, PPP = private-public partnership, WWTP = wastewater treatment plant.

Consulting Services

Package Number	General Description	Estimated Value	Number of Contracts	Recruitment Method	Review (Prior/ Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
C1	NGO	0.5		QCBS			BTP	ADB
C2	Individual Consultants	0.5					BTP	ADB

BTP = Bio Data Technical Proposal, QCBS = Quality and Cost Based Selection.

B. Indicative List of Packages Required Under the Project

2. The following table provides an indicative list of goods, works and consulting services contracts over the life of the project, other than those mentioned in previous sections (i.e., those expected beyond the current period).

Goods and Works

Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Review (Prior/Post)	Bidding Procedure	Comments
None	None						

Consulting Services

Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Review (Prior/Post)	Type of Proposal	Comments
None	None						

C. List of Awarded and On-going, and Completed Contracts

6. The following tables list the awarded and on-going contracts, and completed contracts.

1. Awarded and On-going Contracts

Goods and Works							
Package Number	General Description	Estimated Value	Awarded Contract Value	Procurement Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Awards ^a	Comments ^b
CW1	Establishing new sewer network for unserved Kirulapone area including rehabilitation of S8 pumping station	39.29		ICB	Q3/2015		

^a Date of ADB Approval of Contract Award is the date of No-Objection letter to the EA/IA.

^b Indicate the Contractor's name and the contract signing date.

Consulting Services							
Package Number	General Description	Estimated Value	Awarded Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Awards ^a	Comments ^b
None							

^a Date of ADB Approval of Contract Award is the date of No-Objection letter to the EA/IA.

^b Indicate the Consulting Firm's name and the contract signing date.

2. Completed Contracts

Goods and Works								
Package Number	General Description	Estimated Value	Contract Value	Procurement Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award ^a	Date of Completion ^b	Comments
None								

^a Date of ADB Approval of Contract Award is the date of No-Objection letter to the EA/IA.

^b The Date of Completion is the physical completion date of the contract.

Consulting Services								
Package Number	General Description	Estimated Value	Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award ^a	Date of Completion ^b	Comments
None								

^a Date of ADB Approval of Contract Award is the date of No-Objection letter to the EA/IA.

^b The Date of Completion is the physical completion date of the contract.

D. Non-ADB Financing

7. The following table lists goods, works and consulting services contracts over the life of the project, financed by Non-ADB sources.

Goods and Works				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Comments
Rehabilitation and upsizing of sewers in problem areas, new developments in CBD area and in UDA sponsored high-rise housing development areas (CW3)	30.78	1	ICB	Administered by EIB, with with publication in the Official Journal of the EU.
Establishing new sewer network in unserved areas of Narahenpita and Kirula-Narahenpita (CW4)	11.00	1	ICB	Administered by EIB, with with publication in the Official Journal of the EU.

Consulting Services				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Comments
None				

E. National Competitive Bidding

1. Regulation and Reference Documents

8. The procedures to be followed for national competitive bidding shall conform to the provisions prescribed in the *Procurement Guidelines 2006 for Goods and Works* issued in January 2006 by the National Procurement Agency, and the specific procedures prescribed by the *Procurement Manual* issued in March 2006, with the clarifications and modifications

described in the following paragraphs required for compliance with the provisions of the ADB Procurement Guidelines.

2. Procurement Procedures

a. Eligibility

9. The eligibility of bidders shall be as defined under Section I of ADB's Procurement Guidelines (2015, as amended from time to time) (the "Guidelines"); accordingly, no bidder or potential bidder should be declared ineligible for reasons other than those provided in Section I of the Guidelines.

b. Registration and Sanctioning

10. Registration is acceptable under the following conditions:

- (i) Bidding shall not be restricted to pre-registered firms under the national registration system of the Construction Industry Development Authority (CIDA), and such registration shall not be a condition for the submission of bids in the bidding process.
- (ii) Where registration is required prior to award of contract, bidders: (i) shall be allowed a reasonable time to complete the CIDA registration process; and (ii) shall not be denied registration for reasons unrelated to their capability and resources to successfully perform the contract, which shall be verified through post-qualification.
- (iii) National sanction lists or blacklists may be applied only with prior approval of ADB.

c. Prequalification

11. Prequalification is discouraged for NCB. When used, particularly for works contracts, an individual prequalification exercise is acceptable for each contract as is the use of a registration system (or approved standing list) of contractors based on criteria such as experience, financial capacity, and technical capacity. Foreign bidders from eligible countries must, however, be allowed to register and to bid without unreasonable cost or additional requirements.

d. Advertising

12. The posting of NCB specific notices for contracts valued at less than \$1 million on ADB's website is not required but is highly recommended.

e. Preferences

13. The following shall be observed:

- (i) The Borrower may grant a margin of preference in the evaluation of bids under international competitive bidding for domestically manufactured Goods..
- (ii) Foreign suppliers and contractors from ADB member countries shall be allowed to bid, without registration, licensing, and other government authorizations, leaving compliance with these requirements for after award and before signing of contract.

f. Participation by Government-Owned Enterprises

14. Government-owned enterprises in the Democratic Socialist Republic of Sri Lanka shall be eligible to participate only if they can establish that they are legally and financially autonomous, operate under commercial law, and are not a dependent agency of the procuring entity, or the Project Executing Agency or Implementing Agency.

g. Rejection of Bids and Rebidding

15. Bids shall not be subjected to a test for unrealistic rates. No lowest evaluated and substantially responsive bid shall be rejected on the basis of comparison to rates, including but not limited to market, historical, or agency established rates, without prior approval of ADB.

16. Bids shall not be rejected and new bids solicited without the ADB's prior concurrence.

h. Price Negotiations

17. Price negotiation shall be allowed only where the price offered by the lowest evaluated and substantially responsive bidder substantially exceeds costs estimates. Approval of ADB is required prior to any negotiation of prices.

3. Bidding Documents

1. Acceptable Bidding Documents

18. Procuring entities shall use standard bidding documents acceptable to ADB for the Procurement of Goods, Works and Consulting Services, based ideally on the standard bidding documents issued by ADB.

2. Bid Security

19. Where required, bid security shall be in the form of a certified check, a letter of credit or a bank guarantee from a reputable bank.

3. ADB Policy Clauses

20. A provision shall be included in all NCB works and goods contracts financed by ADB requiring suppliers and contractors to permit ADB to inspect their accounts and records and other documents relating to the bid submission and the performance of the contract, and to have them audited by auditors appointed by ADB.

21. A provision shall be included in all bidding documents for NCB works and goods contracts financed by ADB stating that the Borrower shall reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question.

22. A provision shall be included in all bidding documents for NCB works and goods contracts financed by ADB stating that ADB will declare a firm or individual ineligible, either indefinitely or for a stated period, to be awarded a contract financed by ADB, if it at any time

determines that the firm or individual has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices or any integrity violation in competing for, or in executing, ADB-financed contract.

ATTACHMENT 6: OUTLINE OF THE TERMS OF REFERENCE OF NGO FOR PROJECT 3

A. Introduction

1. The Greater Colombo Water and Wastewater Management Improvement Investment Program - Project 3 (GCWWMIIP) provides financing gap for the rehabilitation and expansion of the water supply system and supports the reduction in non-revenue water (both tranche 1 and tranche 2); supports the rehabilitation and expansion in wastewater collection and treatment, and strengthening of institutional structure and service capacity in Greater Colombo.

2. The project also intends to recruit one nongovernment organization (NGO) to carry out: (i) socio-economic analysis, social inclusion, gender mainstreaming and assessment of wastewater service delivery; (ii) resettlement assistance; (iii) community awareness and people's participation; and (iv) citizens' education for wastewater service management, health and hygiene education etc.

B. Project Area

3. The NGO activities will be conducted within the South catchment of the Colombo sewerage system. The South catchment covers an area of 22.17 sq.km comprising 52,343 households with residence total population of 236,983 (2012 Census). The housing stock has a mixed development with underserved settlements located in low lying areas and along the eastern boundary of the catchment. The South catchment area is distributed among four drainage districts for administrative purposes, namely, Colombo East, Colombo West, Borella (part of), and Colombo Central B (part of). The south catchment area comes under the purview of the Divisional Secretariat Division of Thimibirigasyaya.

C. Counterpart Agency

4. The selected NGO will work closely in collaboration with Colombo Municipal Council (CMC); NGO will carry out the activities under the supervision of project management unit (PMU) and design, supervision and institutional development consultant (DSIDC) working closely with the social development and safeguards officer of the PMU.

D. Duration of Work

5. Implementation of NGO activities will be take place over 2 years.

E. Scope of the Services

6. The scope of services of NGO will include, but not necessarily be limited to the following:

1. Socio-economic analysis, Social inclusion, Implementation of Gender Action Plan and Assessment of wastewater service delivery

- (i) Establish indicators and baseline data related to gender and poverty in all project activities and CMC wastewater operations; ensure collection of disaggregated data and analysis of the results, especially benefits arising from the project corresponding to these indicators.
- (ii) Develop a socio-economic profile of the Greater Colombo area using appropriate techniques and provide information on social, economic,

health and sanitation status of the target community. Such surveys should focus on the likely improvement in health status of the citizens; likely impact of citizens' education programs to be implemented during the project; level of satisfaction from the current wastewater services being provided by CMC; current and likely changes in consumption pattern of wastewater and sanitation services etc. Such surveys should be carried out on the basis of disaggregated data with regards to gender and poverty, etc.

- (iii) Carry out surveys to understand citizens' perceptions regarding wastewater service – some examples are property tax rates with respect to wastewater services (in CMC area); enhancing acceptability of wastewater tariff; process of taking wastewater connection; fee/tax setting and collection, handling of complaints related to wastewater services being provided by CMC, etc. Based on such analysis, suggest improvements in processes in terms of equity, effectiveness and transparency; and work with relevant stakeholders to operationalize the suggested measures.
- (iv) Provide inputs regarding project objectives related to poverty, gender and social inclusion ensuring inclusion of poor, women and other marginalized and vulnerable groups in the project.
- (v) Develop specific criteria to identify poor households and generate mechanisms to target the poor/low income communities for inclusion in the services to be developed during the project. Work with PMU to develop and implement the gender action plan and consultation and participation strategy to ensure that poor households get the benefits of improved sanitation and wastewater services and the poor are included in the service area.
- (vi) Encourage/facilitate participation of women members of citizens committees in unserved areas and under-served settlements in all important meetings and decisions.
- (vii) Ensure that the project design adequately addresses issues important to women and that the gender issues have adequately been reflected in socio-economic profile, social inclusion plan and community participation plan.
- (viii) Monitor the housing relocation and livelihood rehabilitation of female headed households affected by resettlement impacts of project activities.

2. Community Awareness and People's Participation

- (i) Support PMU and CMC in the formation of citizens' committees (ward level or as deemed appropriate) for institutionalizing people's participation including drafting of self-governing charter/rules of business and document such committees taking into account pro-poor and gender mainstreaming perspective.
- (ii) Identify and prepare, in consultation with PMU and CMC, programs for community awareness and education; and people's participation.
- (iii) Implement such programs in an effective manner to disseminate project information on (a) rights and responsibilities of citizens regarding wastewater services being provided by CMC with aim of raising wastewater tariff acceptability; (b) the need for citizens' contribution in capital costs, O&M costs of the such services; and (c) improvement in

service levels of sanitation and wastewater as a result of project implementation.

- (iv) Involve schools and ward committees in a proper way in the public education campaigns. Form, if appropriate, special focus groups in schools and wards for this purpose.
- (v) In collaboration with PMU and CMC, plan and implement various information, education and communication (IEC) strategies such as use of electronic and print mass media; distribution of leaflets, posters; use of banners, hoardings; organization of street plays; organization of competitions in schools; mass workshops, public meetings; and development of locally relevant audio-visual material and broadcast/telecast on local radio/cable, etc.
- (vi) Disseminate widely information about the project to all important stakeholders to ensure involvement and ownership, such as PMU, CMC, DSIDC, elected representatives, other public representatives, media persons, other NGOs, and citizens at large.
- (vii) Organize special mobilization activities for highly marginalized and vulnerable groups for their participation in the wastewater management issues and other consumer/community based groups; ensure that their voice is heard and acted upon, especially as related to project activities.

3. Citizens' Education for Proper Wastewater Services Management, Health and Hygiene

- (i) Prepare a plan for providing education to citizens of Colombo area in properly managing wastewater assets in their area.
- (ii) Effectively carry out the plan in collaboration with PMU, CMC and other important stakeholders of the subproject.
- (iii) Coordinate/organize with the Health department and health and education units of Government to provide effective health and hygiene education to the citizens/specially women's groups using the IEC material prepared by other such agencies.
- (iv) Coordinate/organize community awareness and people's participation, Capacity Building activities as related to Citizens' Education.

4. General

- (i) Prepare adequate IEC material after approval from PMU to effectively carry out the activities detailed out in the TORs.
- (ii) Carry out any other innovative activities to fulfill the general mandate of the TORs, if required by PMU.
- (iii) Support the PMU and DSIDC for the implementation of project grievance redress mechanism and complaint resolution.

F. Staffing schedule

- (i) Community mobilization expert/Team Leader – 1no.
- (ii) Community development expert cum gender expert – 1no.
- (iii) Public health and sanitation expert – 1no.
- (iv) Field supervisor – 1no.
- (v) Program coordinator cum training coordinator – 1no.

- (vi) Social mobilizers – 8nos. (4 male 4 female)

G. Outputs and Deliverables

- (i) Inception report
- (ii) Survey report
- (iii) Quarterly progress Reports including their activities during the time
- (iv) Final Report summarizing all the activities which is done per contract period outlining problems and lessons learned

H. Ownership of the Products

7. The PMU will be the sole owner of all products including IEC materials, educational film, data and reports, etc.

I. Selection Criteria

8. The qualifications and experience requirements of key NGO personnel are given in Table A6.1.

Table A6.1: Qualifications, Experience and Person-months requirements for NGO

No.	Specialist	Desired requirements	Tasks	Person-Months
1	Community mobilization expert/ Team Leader	A Graduate in Sociology or related field with at least 10 years' experience in PRA techniques, community mobilization, social development work, gender work, especially in the field of water and sanitation. Experience of working on programs for the poor and disadvantaged groups in externally funded projects is also desirable.	The team leader is responsible for planning the activities in the assignment and overall supervision of the staff coordination with implementing agencies and timely submission of the required reports. The community development and Gender Expert is responsible for developing baseline indicators for monitoring and evaluation, conducting socio economic survey and preparing the report, developing specific criteria to identify the poor and generate mechanisms to target the poor for inclusion in the services to be developed during the project. TL shall support the implementation of the program GRM.	36
2	Sanitation/Public Health Expert	A Graduate in Public Health with at least 7 years' experience in health and hygiene education and community development work, preferably with a focus on gender related issues	Coordinate/organize with other agencies in health sector like WHO, UNICEF, Health department and health and education units of Government to provide effective health and hygiene education to the project beneficiaries and general attention to the women's' groups in the project areas using the IEC material prepared by other such agencies.	18
3	Community development cum gender expert	A Graduate in Education or related field with at least 7 years of experience in PRA techniques, gender work, participatory teaching-learning methods, especially for adults on health, hygiene, sanitation,	Involve schools and ward committees in the public education campaigns, Prepare adequate IEC materials, Co-ordinate/organize with community leaders (male and female) for Community Awareness and People's participation;	36

No.	Specialist	Desired requirements	Tasks	Person-Months
		solid waste management and community development work.	Capacity Building activities as related to Citizens' Education (wastewater management, sanitation and hygiene). Support the selection/identification criteria of poor HHs/low income communities as project beneficiaries.	
	Field supervisors	A Graduate in sociology or related field with at least 5 years' experience with community development work	Field supervisor is responsible for supervising all program activities carried out by Social Mobilizers, facilitating awareness sessions at community level and schools, assembling data for monitoring performance of NGO, and submitting monthly report to Team Leader, monitoring and assisting the selection/ identification of targeted poor HHs as project beneficiaries (for house connections), support the implementation of the program GRM, supporting/ assist the PMU to monitor the relocation and livelihood rehabilitation of the relocated families, especially the female headed and vulnerable HHs.	24
4	Community workers	Intermediate level education with 3-5 years' experience in organizing community level meetings, social mobilization, gender issues, implementation of programs for the poor.	Work intensively at community level, identifying community leaders, motivating, raising awareness, assisting all expert's field work, using the selection criteria in consultation with local leaders, identifying poor HHs to be included as project beneficiaries (for house connections), supporting the implementation of the program GRM, supporting/ assisting the PMU to monitor the relocation and livelihood rehabilitation of the relocated families, especially the female headed and vulnerable HHs.	192 (24 person months per community worker)
5	Training cum Program Coordinator	Diploma in Sociology or related field with at least 5 years' experience working as a program coordinator or GCE AL with at least 8 years of experience working as a program coordinator	Training coordinator is responsible for organizing and coordinating the workshops, training programs etc. and assisting the TL	20

Note: All specialists are proposed to be National.

ATTACHMENT 7: INITIAL ENVIRONMENTAL EXAMINATIONS FOR PROJECT 3

(<http://www.adb.org/projects/documents/gcwwmiip-t3-wastewater-improvement-project-iee>)

ATTACHMENT 8: RESETTLEMENT PLANS FOR PROJECT 3

(<http://www.adb.org/projects/documents/sri-gcwwmip-p3-wastewater-improvement-project-aug-2015-rp>)

ATTACHMENT 9: GENDER ACTION PLAN for PROJECT 3

Activity	Targets and Indicators		Responsibility	Duration
Output 1: Rehabilitated and Expanded Water Supply System and Reduced NRW in the Northeast Part of Colombo City (financing gap for Project 1):				
<ul style="list-style-type: none">See GAP in Project 1*Assess the implementation of the GAP of Tranche 1 to identify and act on areas needing improvement.	<ul style="list-style-type: none">See GAP in Project 1.Areas of Tranche 1 GAP implementation that need improvement identified and acted upon.		NWSDB PMU NGO	Throughout the Project
Output 2: Rehabilitated and Expanded Water Supply System and Reduced NRW in the Southwest Part of Colombo City (financing gap for Project 2):				
<ul style="list-style-type: none">See GAP in Project 2**Assess the implementation of the GAP of Tranche 2 to identify and act on areas needing improvement.	<ul style="list-style-type: none">See GAP in Project 2.Areas of Tranche 2 GAP implementation that need improvement identified and acted upon.		NWSDB PMU NGO	Throughout the Project
Output 3: Rehabilitated and Expanded Wastewater Network in South Catchment Area of Colombo City:				
<ul style="list-style-type: none">Use sex-disaggregated socio-economic and health data and data on sanitation practices, needs and preferences of women and men in underserved or low income settlements.Focus Group discussions and key informant interviews with women community leaders to understand the existing issues/problems with regards to wastewater/sewerage disposal in their households/residential areas.Document the possible and desired roles to be played by the women leaders in unserved areas and underserved settlements and general women during the project detailed designs and implementation period.Link all underserved or low income settlements (including all BPL and FHH households) in project areas to the proposed wastewater system.	<ul style="list-style-type: none">Detailed designs based on surveys and/or consultations with underserved or low income communities (including BPL and FHH) to be included in the service areas.List of key women leaders in each section of the road where sewerage pipes are newly installed, identify at least 50% of the leaders in low income communities (Wattas/community gardens).List of problems expressed by women leaders as issues to be solved with regards to their sanitary, wastewater and health concerns.List of roles preferred by women leaders to play during design and implementation period of the project implemented in their localities.Women leaders motivated to establish informal groups to monitor the performance of installed wastewater pipe lines in their residential areas and interact with CMC field/ward level officers to get their problems solved.		CMC PMU DSIDC/NGO	Detailed design/implementation phases
	<ul style="list-style-type: none">Detailed designs include provisions for house service connections and connections to community sanitation facilities in all underserved/low income settlements in project area.Developed and conducted awareness and motivational training sessions in unserved areas for the communities to take interest to connect their sewerage disposal to the common sewerage network established under the project.Identify most critical members who cannot afford to pay the initial capital to get the connections and provide them funding support through existing government programs/subsidies.		CMC PMU DSIDC/NGO	Detailed design /Implementation stages
Output 4: Secondary Wastewater Treatment Plant Constructed in South Catchment Area of Colombo City:				
<ul style="list-style-type: none">Recruitment of female staff for the O&M of wastewater treatment plant.	<ul style="list-style-type: none">At least 10% of the O&M staff in the plant is female and assignments are based on merits/capabilities and preferences rather than on gender stereotyped activities.100 % of the female staff are included in the initial training sessions conducted for the O&M staff of the WWTP (Baseline: NA)		CMC	Immediately after the establishment of the WWTP

Activity	Targets and Indicators	Responsibility	Duration
<ul style="list-style-type: none"> Increased awareness of the key stakeholders /community leaders on the need of secondary treatment. 	<ul style="list-style-type: none"> Use FGDs and other meetings and training sessions conducted for Project 3 activities to highlight the needs of the secondary treatment and its impacts (at least 50% of the gatherings adopted when this principle are attended by women representing key stakeholders). 	CMC, PMU, DSIDC, NGO	Throughout the project period
Output 5: Strengthened institutional structure and capacity of service providers			
<ul style="list-style-type: none"> Training and capacity building of 100 CMC staff for the management of wastewater system. 	<ul style="list-style-type: none"> Women make up 25% of participants in the training for the management of wastewater system (Baseline: 0). 	CMC and PMU	
<ul style="list-style-type: none"> Recruit women engineers and engineering assistants for the PMU for project implementation. 	<ul style="list-style-type: none"> Women make up at least 25% of the PMU professional staff (baseline 2012: Male = 16 and Female = 2 [11%]). 	CMC/DSIDC	Throughout the project
<ul style="list-style-type: none"> Introduce institutional reforms in the wastewater unit and include targets for women in staff recruitment. 	<ul style="list-style-type: none"> Women make up 40% of Wastewater staff (baseline 2012: Total staff = 142; Female = 56 [39%] and Male = 87 [61%]). Women hold 15% of managerial positions (Baseline: 10%). 	CMC Wastewater Unit and PMU	Throughout the project
<ul style="list-style-type: none"> Encourage CMC to recruit women field officers to work in the low income areas. 	<ul style="list-style-type: none"> At least one woman field officer recruited for each unserved area covered by the project (Kirulapone, Narahenpita and Kirula). 	CMC/ CMC PMU and DSIDC	Throughout the project period
<ul style="list-style-type: none"> Design and implement a city-wide awareness campaign, using multiple communication channels. This will include gender analysis of different levels of awareness and acceptance between women and men. 	<ul style="list-style-type: none"> Awareness campaign of wastewater tariff among citizens increased by 80% before and after Project 3 emphasizing shared responsibility of men and women in water management and conservation and in sanitation and health (target: 50% women participation in FGDs) (2013 Baseline: 20%). Scope of assessment will be indicated, e.g. sample survey of project target areas. 	CMC PMU DSIDC	Throughout the project
<ul style="list-style-type: none"> Implement a water sanitation and hygiene (WASH) program in 229 low-income communities in the south part of Colombo city through an NGO. 	<ul style="list-style-type: none"> Both men and women make up at least 50% of participants in WASH-related awareness activities. 	CMC PMU NGO	Throughout the project
<ul style="list-style-type: none"> Assist communities to develop participatory and informal systems for monitoring the performance of small sewerage pipelines and manholes in their localities and interact with CMC district engineer's offices. 	<ul style="list-style-type: none"> Simple and informal participatory system for monitoring the performance of small sewerage pipelines and manholes in their localities and coordinating with CMC district engineer's offices developed (target: 50% of community leaders who designed and manage the monitoring system are women). 	DSIDC/CMC PMU and CMC	Throughout the project period

BPL = below poverty line, CMC = Colombo Municipal Council, DSIDC = Design Supervision and Institutional Development Consultant, FHH = female headed household, NGO = nongovernment organization, NRW = non-revenue water, NWSD = National Water Supply and Drainage Board, O&M = operation and maintenance, PMU = project management unit, USS = under-served settlements, WASH = water, sanitation, and hygiene.

* ** NGO recruitment was delayed due to delays in recruiting supervision consultants and the limited capacity of PMU staff to manage NGO recruitment. NGO recruitment has commenced and is currently under way.

Source: Asian Development Bank.

ATTACHMENT 10: MATRIXES FOR STATUS OF COMPLIANCE WITH (I) FFA UNDERTAKINGS; (II) LOAN COVENANTS FOR TRANCHE 1; AND (III) LOAN COVENANTS FOR TRANCHE 2

Compliance with Undertakings (Schedule 6 of FFA)

Para No.	Description	Status
1	Sri Lanka shall ensure, and shall cause the National Water Supply and Drainage Board (NWSDB) and Colombo Municipal Council (CMC) to ensure, that the program management units (PMUs) to be established for the purposes of the Investment Program employ sufficient staff for the duration of the Investment Program with adequate and relevant expertise in the field of project management, financial management, engineering, construction supervision, procurement, equipment inspection and testing, and environmental and social safeguards implementation.	Complied
2	NWSDB and CMC shall keep the PMUs equipped with the necessary office space, facilities, equipment, support staff, and management information system for the entire duration of the Investment Program.	Complied
3	NWSDB and CMC shall endeavor to assign the same persons to keep positions in the PMUs for the duration of at least 5 consecutive years and to subsequently replace such persons with persons of similar qualifications and experience.	Complied
4	Sri Lanka shall ensure, and shall cause NWSDB and CMC to ensure, that all subprojects are selected and approved in accordance with the selection criteria and approval process set out in Schedule 4 of this FFA and that all documents forming the basis for the screening, selection, and processing of subprojects are made available to the Asian Development Bank (ADB) upon request and are kept available for such purposes for a minimum period of 5 years from the date of the relevant project completion report.	Complied
5	Sri Lanka shall ensure, and shall cause NWSDB and CMC to ensure, that all subprojects under the Investment Program are implemented in accordance with the detailed arrangements set forth in the Facility Administration Manual (FAM) and, if applicable, any Project Administration Manual (PAM) that may be prepared for any portion of the Investment Program and Facility. Any subsequent change in the FAM (or PAM) shall become effective only after approval of such change by Sri Lanka and ADB.	Complied
6	NWSDB and CMC shall provide all counterpart funds, land, and facilities required for the timely and effective implementation of subprojects under the Investment Program, including, without limitation, any funds required to (i) meet any shortfall between cost and revenues for the operation and maintenance (O&M) of the facilities created or to be rehabilitated under the subprojects; (ii) mitigate unforeseen environmental and social impact; and (iii) meet additional costs arising from design changes, price escalation in construction costs, or unforeseen circumstances.	Complied
7	Sri Lanka shall ensure, and shall cause NWSDB and CMC to ensure, that works contracts (i) follow all applicable labor laws of Sri Lanka and that these further include provisions to the effect that contractors (a) carry out HIV/AIDS awareness programs for labor and disseminate information at work sites on the risks of sexually transmitted diseases and HIV/AIDS as part of health and safety measures for those employed during construction; (b) follow and implement all statutory labor provisions (including not employing or using children as labor, equal pay for equal work, and complying with standards for health, safety, welfare, sanitation, and working conditions); and (c) maximize the employment of females and local poor for construction purposes, provided that the requirements for efficiency are adequately met; and (ii) include clauses for termination in case of any breach of the stated provisions by the contractors.	Complied
8	Sri Lanka, NWSDB, and CMC shall ensure that the anticorruption provisions acceptable to ADB, Sri Lanka, NWSDB, and CMC are included in all bidding documents and contracts financed by ADB in connection with the Investment Program, including provisions specifying the right of ADB to review and examine the records and accounts of NWSDB and CMC, the executing agencies, all contractors, suppliers, consultants, and other service providers as they relate to the Investment Program. Sri Lanka, NWSDB, and CMC shall allow and assist ADB's representatives in carrying out random spot checks on the work in progress and utilization of funds for the Investment Program.	Complied

Para No.	Description	Status
9	NWSDB and CMC shall announce the Investment Program and business opportunities associated with the Investment Program on their websites. In addition, the websites shall disclose at least the following information in relation to goods and services procured for the Investment Program: (i) the list of participating bidders; (ii) the name of the winning bidder; (iii) the amounts of the contracts awarded; and (iv) the goods and services procured.	Complied
10	Sri Lanka shall cause NWSDB and CMC, through the PMUs and the Auditor General, to conduct periodic inspections and random spot checks of contractors' activities related to fund withdrawals and settlements.	Complied. (link)
11	Toward the smooth implementation of the Investment Program, Sri Lanka will cause NWSDB and CMC to ensure that stakeholder grievance(s), if any, relating to subproject implementation or use of funds, are addressed effectively and efficiently.	Complied.
12	NWSDB and CMC shall ensure that all water tariffs and wastewater tariffs are established in accordance with applicable MWSD and MPC&LG policies.	NWSDB Complied. CMC in the process of preparation of wastewater tariff
13	NWSDB shall ensure that the water tariff introduced in tenement gardens are progressively increased to a level comparable to that in other residential areas of Colombo city.	In progress. And will be complied.
14	Sri Lanka and NWSDB shall ensure sustainability of the O&M of the water supply network and system through management efficiency improvement, reduction of non-revenue water, and tariff revision. The methodology and the mechanism of tariff revision shall be prepared by NWSDB, and shall be submitted to ADB by 2015 to try meeting full O&M costs by the end of 2020.	Not yet due.
15	Sri Lanka and CMC shall ensure sustainability of the O&M of the wastewater system through management efficiency improvement and introduction of tariff. The methodology and the mechanism of tariff structure shall be prepared by CMC, and shall be submitted to ADB by 2018 to try meeting substantial O&M costs by the end of 2020.	Not yet due
16	Sri Lanka shall ensure that NWSDB and CMC enter into a tariff collection agreement by the end of 2015 under which agreement (i) NWSDB shall collect wastewater tariff on behalf of CMC; (ii) NWSDB shall transfer all of the collected wastewater tariff revenue to CMC; and (iii) CMC shall pay a service fee to NWSDB.	Work in progress. The CDTA engaged for this purpose.
17	Sri Lanka shall ensure that NWSDB and CMC enter into an agreement by the end of 2016 to, among others, share capital investment costs, and coordinate operational responsibilities, for the two wastewater treatment plants.	Not yet due. Work in progress. The CDTA engaged for this purpose.
18	Sri Lanka, NWSDB, and CMC shall keep ADB informed of discussions with other multilateral, bilateral, and national aid agencies that may have implications for the implementation of the Investment Program, including, but not limited to, Japan International Cooperation Agency; shall provide ADB with an opportunity to comment on any resulting policy reform or investment proposals; and shall consider ADB's views before finalizing and implementing any such proposals.	Complied.
19	NWSDB and CMC shall ensure that PMUs shall implement the subprojects under the Investment Program and Facility in compliance with the undertakings and assurances concerning environmental safeguards, involuntary resettlement safeguards, gender policy, and labor standards as set out in Schedule 5 of this FFA.	Complied.
20	Sri Lanka, NWSDB, and CMC shall not award any works contract for a subproject that involves environmental impact until Sri Lanka, through the executing agencies, has incorporated the relevant provisions from the relevant Environmental Management Plan into the relevant works contract.	Complied.
21	Sri Lanka, NWSDB, and CMC shall not award any works contract involving involuntary resettlement impact for a subproject until Sri Lanka has prepared and submitted to ADB the final Resettlement Plan based on the subproject's detailed design, and obtained ADB's clearance of such Resettlement Plan.	Complied.

**Project Specific Covenants- as displayed in Legal agreements (schedule 5) for Tranche 1
(L2947/2948)**

Sl. No.	Description	Compliance
Schedule 5: Implementation Arrangements		
1.	The Borrower, the executing agency (EA) and the implementing agency (IA) shall ensure that the Project is implemented in accordance with the detailed arrangements set forth in the FAM. Any subsequent change to the FAM shall become effective only after approval of such change by the Borrower and ADB. In the event of any discrepancy between the FAM and this Loan Agreement, the provisions of this Loan Agreement shall prevail.	Complied
2.	Towards smooth implementation of the Project, the Borrower shall cause the IA to ensure that grievance(s), if any, from stakeholders, relating to Project implementation or use of funds are addressed effectively and efficiently.	Complied
Schedule 5: Counterpart Support		
3.	The Borrower shall make available, and shall ensure that the IA make available, adequate budgetary allocations of the required counterpart funds in respect of the Project on a timely and regular basis.	Complied
4.	The IA, through the EA, shall make timely submission of annual budgetary appropriation request to MOFP and MOFP shall ensure prompt disbursement of appropriate funds during each year of project implementation.	Complied
Schedule 5: Subproject Implementation		
5.	The EA and the IA shall ensure that all subprojects are evaluated and selected in accordance with the criteria set out in Schedule 4 to the FFA and implemented in accordance with the procedures set out under the FFA and the FAM as the case may be. All documents forming the basis for screening, selection and processing of subprojects shall be made available to ADB upon request and will be kept available for such purposes for a minimum period of 5 years from the date of the Project completion report.	Complied
Schedule 5: Resources		
6.	The Borrower, the EA and the IA shall ensure that the PMU shall be provided with adequate staff, resources, and facilities to implement the Project.	Complied
Schedule 5: Operations and Maintenance		
7.	At the latest by 28 February of each year, National Water Supply and Drainage Board (NWSDB) shall have submitted to ADB: (a) the end of the year income statement for the previous year (inclusive of O&M, debt service, and depreciation); and (b) annual projections (inclusive of O&M, debt service and depreciation) for the coming year. In the event that (b) shows a negative value, NWSDB shall take necessary actions, at the latest by 31 August of the same year, to increase revenue required to secure a positive net income.	complied
8.	The Borrower shall ensure that NWSDB, through PMU, maintain the Project facilities and that proper technical supervision and adequate routine funds for this purpose are provided. The Borrower shall ensure that NWSDB shall provide funds required for the O&M of the Project facilities, as identified in the annual projections. The funds for the O&M shall be allocated annually and released on a timely basis. Furthermore, the Borrower and NWSDB shall ensure that all equipment and spare parts financed under the Project shall be used exclusively for the maintenance and operation of the Project.	Complied
Schedule 5: Safeguards and Social		
Environment		
9.	The Borrower and the IA shall ensure that the preparation, design, construction, implementation, operation and decommissioning of the Project, and all Project facilities comply with (a) all applicable laws and regulations of the Borrower relating to environment, health and safety; (b) the Environmental Safeguards; (c) the EARF; and (d) all measures and requirements set forth in the IEE, the EMP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report.	Complied
Land Acquisition and Involuntary Resettlement		
10.	The Borrower and the IA shall ensure that all land and all rights-of-way required for the Project, and all Project facilities are made available to the Works	Complied

Sl. No.	Description	Compliance
	contractor in accordance with the schedule, agreed under the related Works contract, and all land acquisition and resettlement activities are implemented in compliance with (a) all applicable laws and regulations of the Borrower relating to land acquisition and involuntary resettlement; (b) the Involuntary Resettlement Safeguards; (c) the RF; and (d) all measures and requirements set forth in the respective RP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report.	
11.	Without limiting the application of the Involuntary Resettlement Safeguards, the RF, or the RP, the Borrower shall ensure, or cause the IA to ensure, that no physical or economic displacement takes place in connection with the Project until: <ul style="list-style-type: none"> (a) compensation and other entitlements have been provided to affected people in accordance with the RP; and (b) a comprehensive income and livelihood restoration program has been established in accordance with the RP. 	Complied
SCHEDULE 5: Human and financial resources to implement safeguards requirements		
12.	The Borrower shall make available, or cause the IA to make available, all necessary budgetary and human resources to fully implement the EMP and the RP and as required.	Complied
SCHEDULE 5: Safeguards Related provisions in Bidding documents and Works contracts		
13.	The Borrower shall ensure, or cause NWSDB to ensure, that all bidding documents and contracts for Works contain provisions that require contractors to: <ul style="list-style-type: none"> (a) comply with the measures and requirements relevant to the contractor set forth in the IEE, the EMP and the RP (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set forth in a Safeguards Monitoring Report; (b) make available a budget for all such environmental and social measures; (c) provide the Borrower with a written notice of any unanticipated environmental or resettlement risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP or the RP; (d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and (e) fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction. 	Complied
SCHEDULE 5: Safeguards Monitoring and Reporting		
14.	The Borrower shall do, or cause the IA to do, the following: <ul style="list-style-type: none"> (a) submit semiannual Safeguards Monitoring Reports to ADB for disclosure on ADB's website, and disclose relevant information from such reports to affected persons promptly upon submission; (b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, or the RP, as applicable, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan; and (c) report any actual or potential breach of compliance with the measures and requirements set forth in the EMP or the RP promptly after becoming aware of the breach. 	<ul style="list-style-type: none"> ▪ Complied ▪ Complied ▪ Complied
SCHEDULE 5: Prohibited list of Investments		
15.	The Borrower and the IA shall ensure that no proceeds of the Loan are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the Safeguard Policy Statement.	▪ Complied
SCHEDULE 5: Labor Standards		
16.	The Borrower and the IA shall ensure that all civil works contracts under the	▪ Complied

Sl. No.	Description	Compliance
	Project follow all applicable labor laws of the Borrower, and that these further include provisions to the effect that contractors: (a) carry out HIV/AIDS awareness programs for labor and disseminate information at worksites on risks of sexually transmitted diseases and HIV/AIDS as part of health and safety measures for those employed during construction; and (b) follow and implement all statutory provisions on labor (including not employing or using children as labor, and equal pay for equal work), health, safety, welfare, sanitation, and working conditions. Such contracts will also include clauses for termination in case of any breach of the stated provisions by the contractors.	
SCHEDULE 5: Gender		
17.	The Borrower shall cause the IA to ensure that it implements the GAP in a timely manner over the entire Project period, and that adequate resources are allocated for this purpose. In particular, the Borrower and the IA shall ensure that the targets stated in the GAP are achieved. The Borrower shall ensure that implementation of the GAP is closely monitored, and progress is reported to ADB.	Complied
SCHEDULE 5: Reform Measures		
18.	The Borrower shall ensure that NWSDB implements the reforms activities indicated under Table 2 of Schedule 1 to the FFA ("Policy and Institutional Reform Plan") in a timely manner as indicated in greater detail in the said table towards (a) 24-hour continuous water supply at 100% coverage, and (b) institutional and financial sustainability.	Not yet due. The work is on progress.
19.	The Borrower shall undertake on a timely basis the measures stipulated in Schedule 6 to the FFA, as applicable, with respect to, among others, (a) Project implementation, (b) cost recovery, (c) institutional reform, and (d) sustainability enhancement.	Complied
SCHEDULE 5: Governance and Corruption		
20.	The Borrower, the EA and the IA shall comply with ADB's Anticorruption Policy (1998, as amended to date) and cooperate with any investigation by ADB and extend all necessary assistance, including providing access to all relevant books and records for the satisfactory completion of such investigation.	Complied
21.	The Borrower, through the EA and the IA, shall ensure that the anticorruption provisions acceptable to ADB are included in all bidding documents and contracts, including provisions specifying the right of ADB to audit and examine the records and accounts of the executing and implementing agencies and all contractors, suppliers, consultants, and other service providers as they relate to the Project.	Complied
22.	The Borrower shall announce the Project and business opportunities associated with the Project on its respective website. The website will disclose the following information in relation to goods and services procured for the Project: (a) the list of participating bidders, (b) the name of the winning bidder, (c) the amount of the contracts awarded, and (d) the goods and services procured.	Complied
SCHEDULE 5: Performance Monitoring, Review and Progress Reports		
23.	The Borrower, the EA and the IA shall establish for the Facility as well as for the Project, a project performance monitoring system as required by ADB. The performance reports for the Project will be compiled for preparing Facility level performance reporting.	Not yet due.
24.	In addition to semiannual reviews, a mid-term review shall be carried out 2 years after the loan effectiveness for the Project and the Facility, focusing on all aspects including, but not limited to, the engineering, resettlement, environmental and social aspects, and reviewing the financial status of NWSDB. The review will allow for any necessary midcourse corrections to ensure successful Project implementation and achievement of objectives of the overall Facility and the Investment Program.	Not yet due. To be conducted.

**Project Specific Covenants- as displayed in Legal Agreements (Schedule 5) for Tranche 2
(L3029/3030)**

Sl. No.	Description	Compliance
Schedule 5: Implementation Arrangements		
1.	The Borrower, NWSDB and CMC shall ensure that Project 2 is implemented in accordance with the detailed arrangements and within the time frame set forth in the PAM. Any subsequent change to the PAM shall become effective only after approval of such change by the Borrower and ADB. In the event of any discrepancy between the PAM and the Loan Agreements, the provisions of this Loan Agreement shall prevail	Complied
Schedule 5: Counterpart Support		
2.	The Borrower shall provide all counterpart funds, land and facilities required for timely and effective implementation of Project 2, including without limitation, any funds required (a) to meet any shortfall between cost and revenues for the operation and maintenance of the facilities created or rehabilitated under Project 2; (b) to mitigate any unforeseen environmental and social impacts; and (c) to meet additional costs arising from design changes, price escalation in construction costs and/or unforeseen circumstances. The Borrower shall make the resources thus required available on an annual basis for each fiscal year.	Complied
Schedule 5: Coordination among Borrower's Agencies		
3.	The Borrower, NWSDB and CMC are fully committed to the Investment Program, Projects 1 and 2 and shall ensure that all its ministries, agencies and divisions involved in the implementation of projects, give their full cooperation to ensure smooth implementation of the projects. Specifically, the Borrower shall give full, timely and efficient cooperation in issuing any licenses, permits or approvals required in connection with infrastructure work	Complied
4.	Within 6 months after the effective date, the Borrower and NWSDB shall create a website to disclose information about various matters on the projects under the Investment Program, including procurement. With regard to procurement, the website shall include information on the list of participating bidders, name of the winning bidder, basic details on bidding procedures adopted, amount of contract awarded, and the list of goods/services procured	NWSDB and CMC website used.
Schedule 5: Grievance Redress Mechanism		
5.	The Borrower shall cause NWSDB to have a grievance redress mechanism for the projects under the Investment Program, acceptable to ADB, to receive and resolve complaints/grievances or act upon reports from stakeholders on misuse of funds and other irregularities, including grievances due to resettlement. The Borrower and NWSDB shall (a) make public of the existence of this grievance redress mechanism; (b) review and address grievances of stakeholders of the projects under the Investment Program, in relation to either the projects, any of the service providers, or any person responsible for carrying out any aspect of the Subprojects; and (c) proactively and constructively responding to them.	Complied
Schedule 5: Environment		
6.	The Borrower shall cause NWSDB and CMC to ensure that the preparation, design, construction, implementation, operation and decommissioning of each Subproject and all Subproject facilities shall comply with (a) all applicable laws and regulations of Sri Lanka relating to environment, health and safety; (b) the Environmental Safeguards; and (c) all measures and requirements set forth in the IEEs, the EMPs, and any corrective or preventative actions set forth in a Safeguards Monitoring Report.	Complied
Schedule 5: Involuntary Resettlement		
7.	The Borrower shall cause NWSDB and CMC to ensure that all land and all rights-of-way required for a Subproject are made available to the Works contractor in accordance with the schedule agreed under the related Works contract and all land acquisition and resettlement activities are implemented in compliance with (a) all applicable laws and regulations of the Borrower relating to land acquisition and involuntary resettlement; (b) the Involuntary Resettlement Safeguards; and (c) all measures and requirements set forth in the RP, and any corrective or preventative actions set forth in the Safeguards Monitoring Report	Complied

Sl. No.	Description	Compliance
8.	Without limiting the application of the Involuntary Resettlement Safeguards or the RP, The Borrower shall cause NWSDB and CMC to ensure that no physical or economic displacement takes place in connection with the Subprojects until: <ul style="list-style-type: none"> (a) compensation and other entitlements have been provided to affected people in accordance with the RP; and (b) a comprehensive income and livelihood restoration program has been established in accordance with the RP. 	Complied
9.	The Borrower and NWSDB shall make available necessary budgetary and human resources to fully implement the EMP and the RPs.	Complied
10.	The Borrower and NWSDB shall ensure that all bidding documents and contracts for Works contain provisions that require contractors to: <ul style="list-style-type: none"> (a) comply with the measures relevant to the contractor set forth in the IEEs, the EMP and the RPs (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set forth in a Safeguards Monitoring Report; (b) make available a budget for all such environmental and social measures; (c) provide the Borrower and/or NWSDB with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the IEEs, the EMP, and the RPs; (d) adequately record the condition of roads, land and other infrastructure prior to starting to transport materials and construction; and (e) reinstate pathways, other local infrastructure, and land to at least their pre-project condition upon the completion of construction. 	Complied
11.	The Borrower and NWSDB shall do the following: <ul style="list-style-type: none"> (a) (a) submit semiannually Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission; (b) (b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project (c) that were not considered in the IEEs, the EMP, and the RPs, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan; (d) (c) report any actual or potential breach of compliance with the measures and requirements set forth in the EMP and the RPs promptly after becoming aware of the breach. 	Complied
Schedule 5: Prohibited Investment Activities		
12.	The Borrower and NWSDB shall ensure that no proceeds of the loans are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS.	Complied
Schedule 5: Gender		
13.	The Borrower and NWSDB shall ensure that it adopts and implements the GAP in a timely manner over the entire Investment Program period, and that adequate resources are allocated for this purpose. In particular the Borrower and NWSDB shall ensure that the targets stated in the GAP shall be achieved. NWSDB shall conduct training on GAP implementation for all staff involved in implementation of the Investment Program. NWSDB shall ensure that the implementation of the GAP shall be closely monitored, and the progress shall be reported to ADB.	NGO recruitment is delay and PMU officer work on it.
Schedule 5: Labor		
14.	The Borrower shall cause NWSDB and CMC to ensure that the contractors, comply with all applicable labor, health, and safety laws and regulations of the Borrower and, in particular, (a) do not employ child labor for construction and maintenance activities, and (b) provide appropriate facilities (latrines, etc.) for workers at construction sites. NWSDB shall require contractors not to	Complied

Sl. No.	Description	Compliance
	differentiate wages between men and women for work of equal value. NWSDB shall ensure that specific clauses shall be included in bidding documents to ensure adherence to these provisions, and that compliance shall be strictly monitored during Subproject implementation.	
Schedule 5: Health		
15.	The Borrower and NWSDB shall ensure that the contractors shall disseminate information on the risk of transmission of sexually- transmitted diseases, including HIV/AIDS, in health and safety programs to all construction workers employed under all of the Subprojects. Specific provisions to this effect shall be included in bidding documents and civil works contracts, and compliance shall be monitored by the State and reported to ADB.	Complied
Schedule 5: O&M		
16.	The Borrower shall cause NWSDB and CMC to ensure that it shall maintain the Subproject facilities and that proper technical supervision and adequate routine funds for this purpose are provided. The funds required for the O&M shall be allocated annually and released on a timely basis. NWSDB and/or CMC shall prepare O&M management system prepared throughout the Investment Program period. Furthermore, NWSDB and/or CMC shall ensure that all equipment and spare parts financed under the Subproject shall exclusively be used for the maintenance and operation of the Subproject.	Not yet due.
Schedule 5: Performance Monitoring System		
17.	Within 6 months after the Effective Date, NWSDB shall establish a performance monitoring system for the Investment Program in line with the targets, indicators set in the DMF. The baseline data corresponding to indicators and targets set out in the project status report shall be disaggregated by income levels and sex as required. After the initial baseline survey, NWSDB with support of the consultants shall conduct annual survey and quarterly monitoring of indicators and submit quarterly report to ADB throughout project implementation.	Complied
Schedule 5: Governance and Anticorruption		
18.	The Borrower, the EA and the IA shall comply with ADB's Anticorruption Policy (1998, as amended to date) and cooperate with any investigation by ADB and extend all necessary assistance, including providing access to all relevant books and records for the satisfactory completion of such investigation.	Complied
19.	The Borrower, through the EA and the IA, shall ensure that the anticorruption provisions acceptable to ADB are included in all bidding documents and contracts, including provisions specifying the right of ADB to audit and examine the records and accounts of the executing and implementing agencies and all contractors, suppliers, consultants, and other service providers as they relate to the Project.	Complied
20.	The Borrower shall announce the Project and business opportunities associated with the Project on its respective website. The website will disclose the following information in relation to goods and services procured for the Project: (a) the list of participating bidders, (b) the name of the winning bidder, (c) the amount of the contracts awarded, and (d) the goods and services procured.	Complied
Schedule 5: Policy and Institutional Reform Plan		
21.	The Borrower shall ensure that NWSDB implements the reforms activities indicated under Table 2 of Schedule 1 to the FFA ("Policy and Institutional Reform Plan") in a timely manner as indicated in greater detail in the said table towards (a) 24-hour continuous water supply at 100% coverage, and (b) institutional and financial sustainability.	Not yet due.

ATTACHMENT 11: SAFEGUARDS COMPLIANCES FOR TRANCHE 1 AND TRANCHE 2**Status of Environmental Safeguards Compliance under Tranches 1 by Contract Package**

Sl. No.	Name of the subproject	Package No.	Status	Environmental Safeguards Compliance	Actions
1	System Rehabilitation for NRW Reduction in North of the Colombo City	CWSSIP/ADB/CIVI L/ICB/01	Awarded	IEE and EMP approved by ADB and included in bidding and contract documents. Key observations for improvement: (i) environmental health and safety (use of personal protective equipment [PPE], safety of movement on the construction sites, provisions for first aid, inadequate toileting and bathing facilities for laborers and (ii) compliance with environmental regulatory requirements;	The construction is about start, therefore currently there is no significant non-compliance. However, the EA should ensure close monitoring of EMP implementation, specifically occupational health and safety (wearing PPE, and maintaining accident logs).
2	System Rehabilitation for NRW Reduction in East Part of the Colombo City	CWSSIP/ADB/CIVI L/ICB/02	Awarded	IEE and EMP approved by ADB and included in bidding and contract documents.	Contractor mobilized on June 2015. Therefore no significant issues to be highlighted on compliance of safeguards.

Status of Environmental Safeguards Compliance under Tranche 2 by Contract Package

#	Name of Package	Package No.	Status	Environmental Safeguards Compliance	Actions
1.	System Rehabilitation for NRW Reduction in West Part of the Colombo City	CWSSIP/ADB /CIVIL/ICB/03	Not yet awarded.	IEE and EMP approved by ADB and included in bidding and contract documents.	NA
2.	System Rehabilitation for NRW Reduction in South Part of the Colombo City	CWSSIP/ADB /CIVIL/ICB/04	Not yet awarded.	IEE and EMP approved by ADB and included in bidding and contract documents.	NA

Status of Social Safeguards Compliance under Tranches 1 by Contract Package

Sl. No.	Name of the subproject	Package No.	Status	Social Safeguards Compliance	Actions
1	System Rehabilitation for NRW Reduction in North of the Colombo City	CWSSIP/ADB/ CIVIL/ICB/01	Awarded	Resettlement Plan approved by ADB and handed over to contractor. Key observations for improvements: (i) Establishment of Grievance Redressed Mechanism. (ii) Compensation for all potential income losses for affected person (iii) Conducting awareness campaigns through a media partner and the project NGO (iv) The RP details the process of continuous	Contractor has mobilized to the site and it was agreed to start pipe laying immediately. Therefore currently there is no significant noncompliance. However, the EA should ensure close monitoring of Resettlement Plan implementation. Due to the change of route of Transmission main, RP was updated recently (July 2015). Site visits & Focus Group Discussions were done to finalize RP. No land acquisition under

Sl. No.	Name of the subproject	Package No.	Status	Social Safeguards Compliance	Actions
				monitoring and reporting of resettlement activities.	proposed project.
2	System Rehabilitation for NRW Reduction in East Part of the Colombo City	CWSSIP/ADB/CIVIL/ICB/02	Awarded	Resettlement Plan approved by ADB and handed over to contractor.	Contractor has commenced mobilization to the site on June 2015. Therefore no significant issues to be highlighted on compliance of social safeguards.

Status of Social Safeguards Compliance under Tranche 2 by Contract Package

Sl. No.	Name of Package	Package No.	Status	Social Safeguards Compliance	Actions
1	System Rehabilitation for NRW Reduction in West Part of the Colombo City	CWSSIP/ADB/CIVIL/ICB/03	Not yet awarded.	Resettlement Plan approved by ADB and planned to be handed over to contractor.	NA
2	System Rehabilitation for NRW Reduction in South Part of the Colombo City	CWSSIP/ADB/CIVIL/ICB/04	Not yet awarded.	Resettlement Plan approved by ADB and planned to be handed over to contractor.	NA

ATTACHMENT 12: SUMMARY OF FEASIBILITY STUDIES, ENGINEERING DESIGNS

A. Background

1. The design and supervision consultants of the Greater Colombo Wastewater Management Project (GCWMP) on the request of the Government of Sri Lanka (GoSL) and the Asian Development Bank (ADB) carried out this feasibility study on the Wastewater Investments to be made under the Project 3 of the Greater Colombo Water and Wastewater Management and Improvement Investment Program (GCWMMIIMP).

2. As directed by the GoSL and the ADB the feasibility study covered only the wastewater investment requirements of Southern Catchment of the Colombo City Sewerage System (CSS). These include addressing the sewer under capacity issues as a result of new development activities in the Colombo Central Business District and UDA initiated developments; problematic and critical sewers; expansion of the system to un-sewered areas and wastewater treatment.

3. Feasibility study was preceded by a Pre-Feasibility Study (PFS) on the CSS carried out by the Cities Development Initiative Asia (CDIA) and supported by the ADB. PFS study reviewed the wastewater investment requirements of the entire CSS.

B. Past Colombo City Sewerage System Improvements

4. Colombo City Sewerage System is nearly 100 years old and completed in 1925. Since 1983 there had been some modifications improvements, upsizing, rehabilitation, and expansion to the CSS. These improvements were guided by the Master Plan prepared in 1972. Improvements were financed through loan funding obtained from multilateral and bilateral funding agencies.

5. Most important of the expansion work carried out in the past includes expansion of the system to Kolonnawa Urban Council area and the Dehiwala-Mt.Lavinia Municipal Council area. The other important development work of the CSS was the introduction of two long sea outfalls at Wellawatta (South Catchment) and Mutwal (North Catchment). Through the two outfalls raw sewerage was discharged to sea approximately 2 kilometers away from the beach.

6. In 1998, Department of International Development (UK) supported a study to prepare a sewerage rehabilitation proposal for CSS. This report was termed as Greater Colombo Sewerage Project (GCSP). The rehabilitation and improvement work to CSS carried out since 1999 were based on the rehabilitation priorities established in the GCSP outcome (Report).

7. ADB association with CSS starts in 2004 with the Technical Assistance (TA) grant to prepare Small Scale Technical Assistance (SSTA) to prepare a strategic plan wastewater management in Greater Colombo. This was followed by Project Preparatory Technical Assistance (PPTA) study in 2007 leading to the GCWMP.

C. On-going Work

8. ADB funded GCWMP commenced in August 2010 as a 5 year project. Scope of this project included rehabilitation/improvement of sewer infrastructure and institutional strengthening of the CMC to provide improved wastewater service. This project is now under implementation and expected to complete in June 2017. GCWMP was planned as a

rehabilitation project. Not only that the ongoing project does not cover all the rehabilitation requirements of the CSS but also it does not address the CSS expansion needs.

9. The ongoing GCWMP does not cover the expansion of the CSS to unsewered areas, wastewater treatment, and upsizing of sewers to address the under-capacity problem of the existing system due to new developments. In addition, rehabilitation of problematic and critical sewers was only partially addressed in the ongoing project. Therefore, the need for further investment and engineering intervention to complete the remaining work was always there. Also, the anticipated outcome of the institutional development component of the GCWMP was not fully realized. Therefore, further intervention is also necessary to bring about the required institutional changes in the CMC including that of capacity building.

10. Considering the above, in 2014 ADB supported a PFS to identify the remaining improvement work required for the CSS to provide effective and efficient sewerage service. The PFS was carried out by the CDIA. Their work led to the identification of important and priority rehabilitation and improvement work critical to the proper functioning of the entire system. The estimated cost of implementation of overall scope of physical work identified in the PFS significantly exceeded the funds available under the ADB Multitranchise Funding Facility (MFF). The total amount available for the city wastewater improvement was only 128 million USD. This amount will be available as tranche 3 (US\$ 90 million) and tranche 4 (US\$ 38 million).

11. This amount available for wastewater improvement was further reduced by US\$ 30 million due the additional funding required for water supply improvement work funded through the Tranche 1 and 2 of the MFF.

12. This Feasibility Study is based on the work components identified and prioritized in the PFS. However, considering the funding limitations, it was agreed to confine the next ADB supported CSS rehabilitation/development work to the Southern Catchment of the CSS. It was further agreed to combine the funds available under the tranche 3 and 4 of the MFF together for the south catchment wastewater investment. European Investment Bank agreed to provide additional financing to the value of USD 50 million to supplement the ADB funding to meet the full investment requirement. This new project is termed as "Project 3". It covers the additional funding required for water supply improvement and the wastewater investment requirements of the South Catchment of the CSS for which this feasibility study is prepared.

D. Colombo City Sewerage Assets Ownership and O&M Responsibility

13. The Colombo Municipal Council (CMC) now owns entire sewerage system within the Colombo City, in accordance with the Attorney General's ruling 2 of 25 September 2007. They are also fully responsible for the Operation and Maintenance (O&M) of the system. The Drainage Division of the CMC handles O&M function of the CSS. The assets created by the Project 3 in the CMC area will also be owned and maintained by CMC.

14. Wastewater from KUC and DMMC areas plus few other institutions located outside the Colombo City also discharges their wastewater to CSS. The National Water Supply and Drainage Board (NWSDB) owned and/or operate these outside sewerage systems. A trans-boundary wastewater flow agreement between the CMC and the NWSDB covers the management of wastewater flows from outside areas.

E. Colombo City Sewerage/Wastewater System

15. Colombo city total land area is 37.4 km². Out of the total, nearly 80% of the area has pipe borne wastewater system. Remaining 20% of the area comprises of 11 unsewered areas distributed along the eastern boundary of the Colombo City.

16. Physical assets of the CSS include approximately 254 kilometers of gravity sewer lines, 25 kilometers of force mains, approximately 5000 manholes, 5 inverted siphons, 13 main pump stations, and 6 minor pump stations. Wastewater from the CSS is released untreated to the sea using two long sea outfalls at Wellawatta and Mutwal.

17. Total resident population in Colombo is estimated around 600,000. In general it is assumed that similar number will come to Colombo daily from the outside areas (visitor population) business, shopping and as transit passengers.

F. Colombo South Wastewater Catchment Details

18. South Catchment of CSS is approximately of 17km². This included three unsewered areas, i.e., Kirilapona, Narahenpita and Kirula-Narahenpita. Total area under the three-unsewered areas is 3.2km².

19. Physical assets of the CSS include approximately 133 kilometers of gravity sewer lines, 13 kilometers of force mains, approximately 2100 manholes, 3 inverted siphons, and 7 main pump stations. There are no minor pump stations in this catchment. Wastewater from this catchment is released to the sea using Wellawatta sea outfall.

20. Total resident population in South Catchment is estimated around 220,000.

G. Existing Situation of Colombo Sewerage System

21. **Main Pump Stations:** There are 13 main pump stations in the CSS. Pump Stations at Madampitiya, Wellawatta were recently rebuilt. S8 pump station also rehabilitated with the Madampitiya PS. These pump station have serious operation problems associated with mechanical and electrical equipment and SCADA systems are not functioning. Major rehabilitation/replacement of all mechanical, electrical and instrumentation systems are needed to put them back in correct operation. Other 10 pump stations are also in poor condition and underperforming. These pump stations are included in the Pump Station Rehabilitation Contract under the GCWMP.

22. **Minor Pump Stations:** There are six (6) minor sewerage pump stations within the Colombo City. As assessed in the PFS all these pump stations require rehabilitation of civil structures and repair/replacement of electro-mechanical system.

23. **Force Mains:** CSS include approximately 25 kms of force mains. Two force mains, namely CFM-5 and CFM-9 experience frequent collapses in the recent past. Conditions of the other force mains are also not known. Significant rise in wastewater quantities are expected in the near future with the new developments. All force mains (pumping systems) will become energy inefficient as a result.

24. **Network:** Nearly 80% of the system consists of pipes of diameters less than or equal to 300mm. Recent capacity studies show that the network has capacity problems in many areas.

The network as it is will be unable to meet the increased wastewater loads generated by the new developments. Siltation, sewer blockages and sewer collapses are common. Age of the sewers is cited as major reasons for this. However, poor cleaning and maintenance work is also a major contributory factor. To overcome sewer blockages overflows are provided to storm water drains at numerous locations resulting pollution problems. Due to defects and settlements in the pipes the infiltration seems to be high as indicated by wastewater characteristics. There are serious accessibility problems in some areas which prevent regular or proper maintenance of the network. This is a result of buried manholes, unauthorized constructions over the sewer lines and encroachment of the sewer pathway. All the sewers are not in public roads or with properly establish easements. Under the GCWMP sewer cleaning and condition assessment program is underway covering nearly 50% of the system. Such operation is required for the remaining half of the sewers as well.

25. **Siphons:** There are five inverted siphons in the CSS. Except fort syphon others are still found to have the required capacity. All the syphons are silted and blocked. As a result wastewater leaks to the canal system from upstream. In the downstream canal water could enter the sewer line which will reduce the carrying capacity and increase siltation. This has an adverse effect on receiving pump stations and pumping cost. Fort syphon which is blocked and also under capacity will be replaced under the GCWMP.

26. **Service Coverage:** Sewerage network in Colombo City covers approximately 80% of the city. The balance area of 20% is unsewered. Estimated population in the unsewered areas is 248,000 representing nearly 30% of the city population.

27. **Environmental and Health:** Sanitation situation in unsewered and under-sewered areas are a major threat to the environment, health and wellbeing of those living in these areas. From these areas, wastewater is commonly discharged to the canal system, open drains, and stromwater systems. Pollution from the settlements in un-served areas destroys the canal system, lowers the environmental quality status of the city and is a threat to the health and wellbeing of the city as a whole. As per the available data water borne diseases are still not a major issue. This seems to be due to wide availability of pipe borne water.

28. **Water Pollution:** Quantified values are not available to account the Sewer System Overflows (SSO). However, it can be easily assume that large quantity of dry weather enters the Colombo Canal system. Most pumping stations are under-performing letting wastewater to overflow to the canals. Situations of total failure of pump stations were also observed. Sewage is also diverted to stromwater system from blocked and under-capacity sewers. Wastewater is directly discharge to Colombo canal system from unsewered areas. In addition to number of small and large direct wastewater discharges to near shore areas through canals and stromwater drains, the two outfalls discharge large quantity of untreated sewage to the sea although at a distance.

29. **Capacity Limitations:** Capacity limitations existed in the CSS even before the accelerated development started in Colombo in 2010. Sewers with capacity limitations were determined in the GCSP study in 1999 based on observations and flow assessment. The design and supervision consultant of the GCWMP reassessed capacity-limiting sewers in 2011. However, the issue has become serious concern since 2010, after the GoSL decided to have accelerated developments in Colombo with the Urban Regeneration Project (URP). Full details of the plans under URP emerged only towards 2014. In 2014 GoSL requested the GCWMP to study the capacity problems in the CSS due to proposed developments and prepare designs to address the issue. This work is currently on-going.

H. New Developments in Colombo

30. GoSL has embarked on a major development drive in Colombo City since 2010. Accordingly, around 50 mega developments, which include, shopping malls, major hotels, business centers, entertainment centers, and apartments are expected in the Colombo Central Business District (CBD). This covers the Colombo 1, 2 and 3 areas. The Board of Investments (BOI) of Sri Lanka spearheads these developments.

31. Similarly, new developments are also planned in the other areas of the Colombo City. These developments come under the UDA run Urban Regeneration Project (URP). They include: multi story housing projects for urban poor who are living in unserved/under-served settlements and commercial developments in the lands released by the rehousing program. Nearly 70,000 housing units are planned for construction in the coming years.

32. Provision of sewerage services to these developments will pose a problem due to two reasons. In the case of developments in the sewered area, such as CBD, it is the capacity problem. Other developments are in the unsewered areas. CMC will not in apposition to cater to them until the CSS is expanded to those unsewered areas.

I. Scope of the Project 3 (Sewerage Investments)

33. Project 3 scope includes both physical work as well as institutional development work to improve the management capability and capacity of the CMC and the Drainage Division in particular.

34. Following are the key components of the Project 3.

- (i) Rehabilitation and upsizing of sewers in the South Catchment under following three categories
 - Rehabilitation of approximately 25 km of 225/300mm dia sewers, including the sewer requested by the CMC for rehabilitation
 - Upgrading of approximately 8 km of sewers resulting from new high-rise developments in the CBD
 - Upgrading of sewers resulting from about 20 on-going and proposed new UDA sponsored high-rise housing developments
 - Cleaning and rehabilitation of siphons in south catchment
- (ii) Provision of sewerage to unsewered areas in South Catchment
 - New sewerage system for Kirilapona unsewered area including construction of the network and two pump stations and connecting the system to existing CSS at S8 pump station including rehabilitation of S8 pump station
 - New sewerage systems for Narahenpita and Kirula-Narahenpita unsewered areas including connecting the systems to existing CSS
- (iii) Construction of secondary wastewater treatment plant at Wellawatta to cater to the total wastewater flow from the South catchment including trans-boundary flows.
 - Construction of secondary treatment plant
 - Reconstruction of Wellawatta pump station as head works pump station

- Civil works necessary for directing the treated effluent to existing sea outfalls

J. Planning of Project 3 (Sewerage Investments)

35. **Hydraulic capacity:** Conceptual designs of the Project 3 component is based on flows predicted for 2040 (maximum hydraulic capacity). It was assumed that the population in Colombo will be stabilized around 2040. For the designs, ward based flow model was developed using land-use, floor area, and population and growth projections including that of the contribution from the visitor population as factors. There are 47 wards in Colombo.

36. **Design Criteria:** Conceptual designs were based on the commonly accepted design criteria and standards, such as manhole types, spacing between manholes, pipe material, etc., adopted by the CMC.

37. **Cost Estimation:** Rates for cost calculation were based on recently received bids from the contractors under the GCWMP and the rate book issued by the NWSDB for year 2014.

38. **Least Cost Solution:** In the conceptual designs, several alternatives were considered and compared based on constructability. All the alternatives, which are physically feasible, were compared on cost basis as part of the design process to arrive at least cost solution. In the case of the treatment plant both capital and operating cost of 20 years was considered to arrive at least cost solution.

K. Project 3 Cost

39. Cost of Project 3 components (civil, electro-mechanical, installation work) without VAT and taxes are provided below. Total cost is USD 114.81 million.

- (i) Rehabilitation and upsizing of sewers in the South catchment (include problem sewers, CBD area development, UDA projects, siphons) – USD 27.00 million
- (ii) Network development for unsewered areas
 - Kirilapona network including S8 rehabilitation – USD 39.29 million
 - Narahenpita network – USD 00.73 million
 - Kirula-Narahenpita network – USD 07.82 million
- (iii) Wastewater treatment plant at Wellawatta including Wellawatta pump station modification and all other works – USD 39.96 million

L. Project Implementation

40. Project 3 has links to both water sector and wastewater sector. According ADB funding available to Project 3 is channeled to Colombo Municipal Council for improvement in Colombo City wastewater system as well as to National Water Supply and Drainage Board for improvements in Greater Colombo water supply. Accordingly, two Project Management Units are proposed one under the NWSDB and the other under the CMC.

41. There are considerable benefits of continuation of the existing PMU of GCWMP to Project 3 as well. Thus, it is proposed to retain the same PMU structure with some additional resources to serve both projects better. Key recommendations on PMU and project administration are as follows.

- (i) Director of the existing PMU to serve as the project director for both projects
- (ii) Present Additional Project Director to be solely assign the functional responsibilities of PROJECT 3 under the Project Director
- (iii) Existing staff structure will serve both projects through appropriate functional arrangements
- (iv) One training engineer was proposed as a new post
- (v) Continuation of 8 member Policy Support Group to the PMU
- (vi) Revisit and make workable arrangement for recruitment to PMU staff was proposed consider consistent failure to attract suitable personnel in the past

M. Contract Administration under Project 3

42. Arrangement for contract administration followed in the GCWMP is working satisfactorily. Accordingly, the Deputy Municipal Commissioner (Engineering Services) will act as either the Engineer or the Project Manager for all the Contracts.

N. Project Implementation Organization (CMC)

43. CMC will be the project implementation organization. CMC is independent political body. The governing body of the CMC is the Council whose members are elected by the constituents of Colombo Municipality. The Mayor is the Chief Executive Officer (CEO) of the Council. Chief Administrative Officer of the Council is the Municipal Commissioner who reports to the Mayor. Three Deputy Commissioners assist the Municipal Commissioner. The responsibility for the delivering urban service is delegated to fifteen departmental heads who reports to their respective Deputy Municipal Commissioner.

44. Technical work related to construction contract will be coordinated through the Director Engineering (Drainage). Drainage division comprises of following sub-divisions.

- (i) Planning, Investigations and Designing,
- (ii) Network Operation and Maintenance,
- (iii) Pumping Station Operation and Maintenance and
- (iv) Engineering Management and Customer Services
- (v) Accountant
- (vi) Administration (Human Resources, Personal Management)

45. Drainage Division has to rely on other departments of the CMC in the delivery of sewerage service. This dependency affects the performance of the division. It will not be possible to accomplish complete independence in the near future. Therefore, it is essential that constraints caused by such dependencies be clearly identified and addressed to achieve the performance objectives of the division. To provide the sewerage service satisfactorily close cooperation from several other divisions is necessary. Bottlenecks that hinder such cooperation shall be removed or minimized. During the implementation of the GCWMP following areas were highlighted as impacting areas of the wastewater service provision. These areas will continue to be important during Project 3 implementation as well.

- (i) Financial management
- (ii) Human resource recruitment
- (iii) Procurement management
- (iv) Project management

46. Steps have already been taken to manage financial resources of the drainage division with less control by the center. Further liberation of revenue will be addressed under the proposed wastewater tariff. CMC has already agreed to meet the human resource needs of the division by directly recruiting by revising the existing cadre or to be appointed through outsourcing. The outsourcing will be mainly for the specialized areas, where it will be difficult to retain such personnel within the organization.

47. Operation and maintenance of the newly built infrastructure requires supply of material, spares, etc. in a timely manner to meet the performance and sustainability objectives. A separate department handles the procurement function. Most of the spares and other items required for operation and maintenance (for electro-mechanical equipment) need to be imported. This will be a major challenge to the CMC as the general procurement process of the CMC is time consuming and cumbersome. CMC will also be compelled to maintain sufficient stock of required items for maintenance and repairs. Therefore detailed studies on procurement and stores management are essential to identify the constraints and thereby to address them including building their capacities to ensure the sustainability of the investments.

48. As per the prevailing arrangements within the CMC, the Project Management Division of the CMC will handle outsourcing of operation/maintenance contracts and the DBO contract of proposed wastewater treatment plant. Outsourcing will be necessary in areas where qualified personnel cannot be retained in-house. A review of the capacities of the Project Management Division needs to be carried out and improvements where necessary have to be implemented.

O. Institutional Development of CMC

49. With the investment in wastewater infrastructure, it can be envisaged that the CMC will progressively march towards a situation where they will have nearly new system in the south catchment and partially new system in the north catchment by 2020. The new system will have increases sophistication in technology use. Also the introduction of assets based system management will result in significant changes in the approach to system management, requiring new skills and capabilities and a cultural change. Direction of the institutional development path that should be taken by the sewerage section together with the CMC shall be based on the above outcome and sustainable management of the above outcome.

50. In the feasibility study, three institutional development models have been proposed for the consideration. Feasibility study also provides a SWOT analysis of the CMC drainage division for consideration prior to selection of an institutional model. It is necessary for the CMC to select one of the three options or an alternative institutional model for the sewerage division before preparing the institutional development plan.

P. Consultant

51. Single consultancy team headed by a team leader will provide the design, supervision and institutional development support to the PMU for the Project 3 implementation. Consultants are referred to as DSIDC.

Q. Implementation Schedule

52. Total implementation period of project 3 is 38 months. Arrangement for contract administration followed in the GCWMP is working satisfactorily. Scheduled start is in the third

quarter of 2015. It will be followed by the appointment of the project consultants, DSIDC. Scheduled completion is the 3rd quarter 2019.

R. Procurement and Contract Packages

53. It is proposed to procure the civil works (including electro-mechanical work) under four contract packages.

- (i) Rehabilitation and Upgrading of problematic and under capacity sewers in South Catchment (ICB; SBD Works; Post Qualification of Bidders; Single Stage Two Envelop)
- (ii) Provision of sewers to Kirilapona unsewered area including rehabilitation of S8 pump station (ICB; Ad-measurement with some design build work - SBD Works; Post Qualification of Bidders; Single Stage Two Envelop)
- (iii) Provisions of sewerage services to unsewered areas Narahenpita and Kirual-Narahenpita (ICB Contract; SBD Works; Post Qualification of Bidders; Single Stage Single Envelop)
- (iv) South Wastewater Treatment Plant at Wellawatta including improvements to Wellawatta pump station (ICB Contract; DBO; Pre-Qualification of Bidders; Single Stage Two Envelop procedure)

S. Environmental Aspects

54. FS included an environmental assessment to meet the environmental clearance requirements of the ADB. The IEE has not identified significant negative environmental impacts due to the proposed Project. On the other hand, the proposed project will deliver significant positive impacts on inland surface waters, public health, and overall environmental quality of the project area. Project is classified as Category B.

55. Unsewered area sewerage system development and Wellawatta Treatment Plant sub-projects require environmental clearance from the Central Environmental Authority (CEA) to meet the national environmental regulatory requirements. Sewer rehabilitation and improvements component will not require such environmental clearance as it is only rehabilitation work.

56. An IEE study to meet the national environmental regulations is already underway for the Kirilapona sub-project. ToR for this purpose was issued by the CEA and additional scope sought by the ADB also included into the ToR issued by the CEA with the CEA consent.

57. Similar EIA/IEE studies will be required for sewerage network developments for other two unsewered areas (one for both if combined together) and for the Wastewater Treatment Plant to meet the national environmental clearance requirements.

58. CMC is required to obtain Environmental Protection License (EPL) for the operation of the treatment plant. In addition, consent from the Marine Pollution Authority also will be required to discharge the treated wastewater to the sea using sea outfalls.

59. At present septage is disposed at Thibirigasyaya pumping stations. There are concerns of industrial sludge also being discharge at this location or similarly at other places. Therefore it is necessary for the CMS to develop procedure for screening and controlling the sludge disposal to its wastewater collection system to prevent hazardous waste being discharged.

60. CMC shall also develop a long-term plan for disposal of waste sludge from the treatment plant. Presently, the CMC does not have a sanitary landfill site. CMC indicated their intention to develop such landfill and develop a long-term plan for waste sludge management.

61. An Environmental Management Plan (EMP) was developed as part of this IEE. Similarly sub-project specific EMPs will be developed as part of the separate EIA/IEE studies to meet the national requirements. These EMP will be part of the contract specifications.

62. In each contract there will be an environmental officer as required by the contract from the contractor's side to ensure the implementation of the EMP. Contractors compliance with the EMP requirements will be monitored by the Environmental Officers from the DSIDC and the PMU.

T. Social and Gender Aspects

63. Sri Lanka is an island nation of 62,700 square kilometers in size. Total population is 20.5 million in 2012. Out of that 18% live in urban centers and the balance 82% live in rural and estate sectors. Percentage of women is 51.5% and men are 49.5%. Average annual population growth is 0.9%. Population density is 327 per square kilometer. Per capita income of Sri Lanka is estimated in 2012 at 3280 USD. The same based on the Purchasing Power Parity (PPP) is 6500 dollars. Average annual growth rate is around 6.3%. Poverty incident level is reported as 6.7%. Sri Lanka also reports high Human Development Index of 0.715 compared to other SAARC countries. Labor force is 53% of the population and the unemployment rate is around 4%. Composition of labor force is 74% male and 36% female. Literacy rate among males and females are 93% and 91% respectively. Life expectancy for males is 72 years and that for females is 78 years.

64. Country also has good national coverage for safe drinking water and sanitation. National coverage for safe drinking water is 86% and improved sanitation is 84%. Pipe borne water supply coverage is 44%. Country also has good health care system and free medical care available to all the citizens. Country is generally clean and has good environmental quality standing. However, continued deterioration of water quality in lakes, canals and rivers both in urban and rural areas can be observed. In rural areas major contributing factor for deteriorating water quality is agricultural pollution. In urban areas this is mainly due to wastewater.

65. Colombo is the capital city of Sri Lanka and the main business center. City is 37.3 km² in size. The current density is about 175 people per hectare. This figure indicates the city-wide average. Some Municipal Wards has much higher densities even over 900 people per hectare. The highest population density is in Colombo North, which is predominantly a low-income residential area. The Colombo southern area represents a low-density distribution of population, which is very much close to the city's current average population density.

66. Colombo residential population is 690,000. The annual population growth rate is low and is around 0.5. Colombo is very much a cosmopolitan city. Strength of three main ethnic and religious groups, i.e. Sinhalese (41%), Tamil (31%), and Muslims (26%). As per the statistics about 50% of this population live in slums, shanties, low cost houses and old dilapidated quarters, etc. Area based pipe borne water service coverage is 100% and sewerage coverage is 80%.

67. During the GCWMP implementation, the CMC aims at developing its institutional and operational capacity to deliver pro-poor and gender inclusive sanitation service as one output objective. Continuation of this approach under the GCWWIIMP is also envisaged.

68. Similar to the expectation of the GCWMP, it can be anticipated that the Project 3 will also reduce the negatives impacts of disease, treatment costs, productivity loss, and loss of time for education for school children. Benefits on women will include saving of household income (less medical expenditure), time saving due to reduced household work burden and privacy. Action plan for gender equality and social inclusion is part of the project and will be implemented alongside the other work also with the assistance of NGOs and CBOs.

U. Resettlement

69. Project does not involve large-scale land acquisition or resettlement. In addition, economic displacement because of the project is minimal and limited to possible damages to roadside properties and suspension of economic activity, such as trading due to road closures. Accordingly, the proposed project is classified in to Category B in accordance with ADB's Safeguard Policy Statement (SPS).

70. Resettlement Plan (RP) for the Project was prepared following the guidance given in the ADB safeguards policy statement (2009) and the National Involuntary Resettlement Policy (NIRP) framework of the GoSL. However, the application of the NIRP does not provide necessary guidance on compensation for temporary impacts during construction, which are the largest envisaged impacts due to the proposed Project 3. Therefore, the RP in this case is much guided by the ADB policies on resettlement. ADB's SPS covers both temporary and permanent impacts to both titled and non-titled persons, and includes both physical and economic displacement.

71. **Resettlement Plan:** A Resettlement Plan (RP) was prepared based on the feasibility study and will be updated based on detailed design during project implementation. ADB and CMC will review and clear the revised RP, prior to commencement of works. Altogether USD 0.38 million has been allocated to meet the cost of resettlement. This will mainly go to resettle the 10 families living in government properties as unauthorized residents. Land acquisition is not required. Urban Development Authority (UDA) has agreed to provide houses for those who are losing their residences at a new housing scheme. Cost of the houses will be met by the project. In addition, allocations are provided in the RP to compensate those whose livelihood will be temporarily affected due to construction work.

72. **Institutional Arrangements:** Standard institutional arrangements are provided for effective implementation Grievance Redress Mechanism and Monitoring of the RP implementation. Responsibility of the implementation of the RP will be with the project implementation agency i.e. CMC under the supervision/guidance of the project executing agency (EA). Project EA is Ministry of Provincial Councils and Local Government (MPC&LG). Program Steering Committee (PSC) as part of its role will support the interagency coordination of RP implementation. Institutionally the direct responsibility of RP implementation will rest with PMU. RP implementation will be the key role of the PMU social safeguards officer. PMU will draw the support of the DSIDC, the Contractors, and the NGOs in the implementation work. PMU already has the experience of implementing RP through GCWMP.

V. Financial Details of the Implementing Agency (CMC)

73. The loan proceeds under the Project 3 will follow existing fund flow arrangements for loans 2558 and 26557 under GCWMP. The borrower of the loan is Democratic Socialist Republic of Sri Lanka. GOSL will make the loan proceeds available to CMC, under separate subsidiary financing agreements where 82.5% of the loans will be given as grant to the respective initiation from GOSL, and the balance 17.5% loan. This loan will be given in local currency, have an interest charge of 10% per annum, and a repayment period of 25 years, including a 5-years grace period. GOSL will bear the foreign exchange risk. In accordance with the subsidiary financing agreement, the Government will make a budgetary provision for the Project under the MPC&LG for the CMC.

74. **Financial Management of the Implementing Agency (CMC):** The accounts of CMC are prepared in accordance with the Municipal Councils Ordinance 1987, Sri Lankan Accounting, and Auditing Standards Act (No. 15) 1995. The Council maintains its accounts under a modified accrual basis of accounting. Municipal Treasurer is the chief responsible person for the financial management of the CMC.

75. Financial reporting and monitoring at the CMC is done monthly. Monthly revenue and expenditure report which summarizes the latest cash inflow and outflow is prepared together with a budget comparison. The Mayor of CMC is required to prepare a detailed report of his administration after the closure of financial year.

76. **Audit and Internal Control:** The accounts of the CMC are subject to audit by the officers of the department of Auditor-General (Central Government). After the close of the financial year, the Auditor General submits a monthly report of his audit to the Council and to the Minister. Internal audit is conducted by the Chief Internal Auditor (CIA) office of CMC, who reports to the Municipal Commissioner. CIA office also conducts examination and analysis of fiscal procedures, checking, and verification of accounts and expenditures. Audit findings are sent to the Municipal Commissioner but not to the Municipal Treasurer's Department or to the relevant department head. The CIA office does not produce any periodic audit report of fixed form. In 2014, CMC has set up an Audit Management Committee consisting of Municipal Commissioner, Municipal Treasurer, Chief Internal Auditor, representative of Commissioner of Local Government, and a member of government Audit Department to review the internal audit report and recommend appropriate action. This committee meets once a quarter.

77. **Revenue:** CMCs revenue source comprises of rates and taxes, fees and charges, rent, sales and Interest form fixed deposits and loans given to staff member, which are own sources and government grants and reimbursements. During the period 2010 of 2013, own revenue sources accounted for 64.5% of the revenue. Grants accounted for the balance. During these period rates and taxes, which is the main revenue source, accounted for 50% of the total revenue and has recorded an average annual growth of 6.5%. Rate and taxes is derived from property tax, which is charged from both commercial and residential properties as well as from some government owned institutions. Exemptions are provided for poor and some government institutions. CMC revises the assessment value of one fifth of the properties in each year. As result of this process, the assessment values of all properties are revised in every 5 years. Generally this revision, which is made every 5 years, amounts to revenue increase about 20%-30%. On this basis, the effective annual increase of the assessment value of properties on average is 6%-7%.

78. **Expenditure:** Expenditure constitutes, employees, supplies, establishment and miscellaneous expenses, Capital Asset maintenance and Capital financing cost. The employee's cost has accounted 51% of total expenditure. The annual growth in expenditure of employees cost is around 7%. For the period 2010-2013, CMC's recurrent expenditure has exceeded the revenue except for in 2012.

79. Deficit or surplus is transferred to the Surplus and deficit account. Losses are covered by the CMC's accumulated surplus from prior years. The accumulated surplus and deficit accounts balance as at end Dec 2013 stood at 8,270.5 million. The opening balance as at 31 December 2009 was RS 7,822.7 million. The deficit in Capital Receipts over Capital Expenditure was Rs 1,431.6 million. Thus the total deficit transferred to the Surplus and deficit accounts in 2013 was RS 1,712.5 million. These losses are being covered by the CMC's accumulated surplus from prior years. The accumulated surplus and deficit accounts balance as at end Dec 2013 stood at 8,270.5 million. The opening balance as at 31 December 2009 was RS 7,822.7 million.

80. The income and expenditure related to sewerage section was segregated only in 2013. Prior to that income and expenditure related to sewerage was included in the CMC overall expenditure. Presently the sewerage division earns only a marginal income from reimbursable expenses such as drainage cleaning, interest income from staff loans and other services. In 2013, this income has been Rs 24.8 million, while the income budgeted for 2013 is Rs 38.8 million. Although the direct income of the sewerage division is very nominal, CMC transfers substantial amount to the division to upkeep the system and provide the sewerage services to its citizens. Accordingly, around Rs. 500 million is allocated in 2014 to meet the expenditure of this division.

X. Financial Analysis

81. **Capital Cost Ongoing project (GCWMP):** The total project cost of the ongoing project is USD 138.9 million. At end 2014, USD 73.4 million value of contracts have been awarded leaving a balance contract values of USD 65.5 million to be awarded over 2015 to 2017.

82. **Capital Cost Project 3:** Total cost of project 3 south catchment wastewater improvement will be USD 168.85 million including taxes. Net cost without taxes is USD 150.12 million. The cost will be spent over a period of 4 years starting 3rd quarter 2015 to 3rd quarter 2019.

83. **Revenue Estimates:** The ongoing project is mainly involves rehabilitation work of the network. Therefore, this project will not generate any incremental revenues. There will be additional tax revenue from Project 3. This is because a higher property tax will apply to areas with pipe borne sewer and the approximately 3.2 km² of unsewered area will be brought under sewer service under the project by 2020. The additional revenue in 2020 is estimated at SLR 37.74 million that will increase by 6.5% annually.

84. **O&M Cost:** O&M cost is expected to be reduced after the completion of GCWMP due to installation of new equipment (pumping) and due to improvement in the network. In the unsewered area there will be cost reduction due to reduced demand for gully emptying service, which is currently provide free of charge by the CMC to unsewered areas. Similarly, there will be additional O&M cost due to expanded system and due to treatment. Expected O&M cost considering all these factors in SLR 970 million in 2020.

85. Financial Analysis is performed considering the CMC sewerage division as cost center. Debt repayment of existing loan (GCWMP is not considered in the cash flow plan based on the assumption that will not be forced on the sewerage division but will be paid separately by the CMC. Ongoing GCWMP will not generate new revenue. The financial projections show that the incremental income (from south catchment), which is derived only from increase in property taxes, is insufficient to meet incremental O&M costs. As the cash flow is negative, the project will not yield a positive NPV or FIRR. Thus the project is considered as non-revenue project.

86. According to the financial projections, CMC after implementing both projects (GCWMP and Project 3) will incur net losses until 2025 after which CMC will generate positive net income (before interest) with revenues gradually increasing. The net income after interest will also be positive only in 2018. The net cash flow after debt service (interest and capital repayment), CMC also shows a deficit from 2016 until 2028 after reaching a peak deficit of Rs 1,894 million, in 2021. However, with reduction of interest payments and positive net income CMC will be able to generate a cash surplus only from 2029. Therefore, to be in a position to service the debts until 2028, CMC needs to generate additional revenues or working capital finance.

87. Funding to meet the O&M cost of sewerage service is presently coming from the CMC budgetary allocations. The CMC sewerage division will reach breakeven or start generating a cash surplus only after 2024. For the sustainability of the system, therefore there should be other income to the division until such time. After the Project 3 total number of connections within CMC would be around 122,421. Therefore, a monthly charge of Rs. 1,021.00 is necessary per connection from 2016, to meet the additional funds requirements for project sustenance from 2016 to 2024. This is an average value which allows to accumulate a deficit in the first years and reduces the gap thereafter. This is only an indicative figure and not a proposal for tariff.

88. A sewerage tariff is proposed to collect the necessary funds to support the O&M of sewerage system. Detailed study is necessary to determine the tariff structure. CMC started a tariff study under the GCWMP. It is necessary to continue this further and decide upon suitable tariff structure and collection mechanism.

Y. Economic and Sector Context

89. Since 2009, the Sri Lankan economy is growing faster around 7.0% per annum. Economic growth is boosted by strong growth in the services sector. Agriculture and Industrial performance have been mixed, but the construction has been strong in the recent years. Growth is expected to maintain between 6%- 7% per annum in the coming years. Consistent economic growth, with population growing at only about 1.0% per year, has resulted in rising per capita GDP, which is estimated to have reached US \$2921.74 in 2012. In PPP terms, it is US \$6,500.

90. GoSL has established over all goals on water supply and sanitation as part of its millennium goals. The provision of water supply and sanitation for all have been a central government policy over the past few decades with the priority on rural areas and urban communities with poor water resources and poor sanitation causing high incidence of water borne diseases. Developments and improvements of sewerage disposal systems in urban areas are a major component of the development in the water sector.

Z. Economic Analysis

91. Key Parameters: Key parameters used in the economic analysis are:

- (i) Discount rate used for calculating present value is 12%
- (ii) Project economic life is taken as 25 years
- (iii) Economic evaluation was based on Sri Lanka Rupees
- (iv) Cost/Revenue estimated in US dollars were converted to SLR using the exchange ratio 1 USD = 130 SLR
- (v) Standard conversion Factor of 1.02 (SCF) for Foreign costs and Shadow Wage Rate of 0.78 (SWR) for unskilled labor are applied for converting financial prices to economic prices which are applied for foreign funded projects in Sri Lanka
- (vi) Average increase of land price with the provision of wastewater services is taken as Rs. 250,000.00 per perch

92. **Economic Benefits:** Following economic benefits were studied in the extended benefit cost analysis.

- (i) Environmental benefits (not quantified in the analysis)
- (ii) O&M cost savings (quantified in the analysis)
- (iii) Household cost savings due to availability of wastewater service (quantified in the analysis)
- (iv) Health cost savings (quantified in the analysis)

93. The results of the economic analysis are:

- (i) The EIRR of the proposed project is 19.3%
- (ii) The NPV is 15.067
- (iii) Benefit Cost ratio is 1.21.

94. **Economic Risks:** Political and economic stability of the country and chances of natural disasters are some general risks for the project. The increases in investment costs can be likely, if the implementation is delayed. The EIRR is more sensitive to the expected value increase of properties. Therefore, present development plans for Colombo should be sustained if the economic benefits of the projects to be realized. The effect of reduced lifetime of the installations due to poor O&M is another major threat to economic outcome considering the past O&M performance. Therefore, implementation of proper O&M program closely supervised by the CMC is necessary.

ATTACHMENT 13: SUMMARY OF PROPOSED, ONGOING AND ADVANCE ACTIONS

A. Advance Actions and Project Readiness

1. The preparatory work completed by the Colombo Municipal Council (CMC) for the proposed Project 3 includes: (i) PMUs for the proposed Project 3 are established and functioning; (ii) Detailed designs and bidding documents for one of two major civil works package (wastewater network to the Kirulapone unserved area) has been prepared and approved by ADB; (iii) Bidding documents for the second civil works package (design-build-operate for a wastewater treatment plant) are currently being prepared and expected to be completed by 2015; (iv) RP and IEE and the necessary EMPs for the proposed investment have been prepared; (v) PAM, procurement plan, cost estimate, financing plan, draft project implementation plan, financial management system and auditing arrangements, and consulting services agreed with the government.

2. The preparatory works completed by National Water Supply and Drainage Board (NWSDB) include: (i) the two big civil works packages under tranche 1 have been awarded; (ii) The procurement of two big civil works under tranche 2 under Project 2 is currently ongoing. Contract awards expected to be by end of 2015; (iii) The Express of Interest (EOI) for the recruitment of the NRW management consultant firm for the supervision of works under Tranches 1 and 2 has been issued in July 2015, with bids expected by mid-August 2015.

B. Advance Contracting and Retroactive Financing

3. The government has requested for advance contracting to procure services, goods and civil works, and retroactive financing in an amount not exceeding 20% of the loan amount for eligible expenditures incurred prior to loan effectiveness and during the period of 12 months before the signing of the loan agreement. NWSDB and CMC have been advised that ADB's approval of advance contracting and retroactive financing does not constitute a commitment to finance the proposed Project 3.

C. Ongoing Actions

4. **Institutional Capacity of CMC in Wastewater Management.** CMC has a number of institutional constraints in managing wastewater services, primarily due to limited resources for managing both the wastewater and storm water systems. One drainage division is responsible for the operation and management of both wastewater and storm water. In order to give high and focused priority to wastewater management including wastewater treatment, the fact finding mission agreed with the CMC that the drainage department will establish a separate wastewater operation unit by 2016 and strengthen this during the implementation of Project 3. The approved CDTA will provide technical advice and support for the establishment of the wastewater operation unit.

5. **Wastewater Tariff.** The Operation and Maintenance (O&M) of the expanded wastewater services to be provided by the CMC (under the investment program), which shall include full wastewater coverage and treatment in south catchment is likely to be unsustainable, unless CMC levies a wastewater tariff on all citizens receiving the service. The NWSDB, which is responsible for wastewater services in areas adjacent to Colombo city, has already introduced a sewerage tariff. The CDTA will help CMC to introduce the wastewater tariff by conducting a willingness to pay survey, public awareness campaigns, financial analysis and drafting changes

to the municipal by-laws. In accordance with the agreed Framework Financing Agreement (FFA), CMC agreed to introduce the sewerage tariff policy in 2016.

6. **Design-Build-Operate (DBO) for the Wastewater Treatment Plant (WWTP):** Given the weak capacity of CMC in wastewater management, and the intention to accelerate the rehabilitation of existing sewerage networks and the construction of new WWTPs, the option of private sector participation through public-private partnership for the O&M of WWTPs is being proposed under the project. The DBO for Wellawatta treatment plant in south catchment area will be prepared with completion of bidding documents by 30 November 2015. The CDTA is currently helping CMC to prepare these bidding documents.

7. **Institutional Development for Regional Supporting Center (RSC) West-Central.** The establishment of an autonomous cost center for RSC West-Central has been approved by the NWSDB board and the MCP&WS. The fact finding mission was informed by the Deputy General Manager of RSC West-Central that most of the O&M has been decentralized to the RSC level. RSC West-central is already in charge of functions like installing new house connections; procurement authority threshold increased from LKR5 million to LKR10 million; bill adjustment threshold has been increased from 50,000 to 250,000 per bill. However, RSC western-central doesn't have hiring authority for lower level staff yet.

D. Key Actions and Next Steps

8. The fact finding Mission agreed with NWSDB, CMC and the Government on the following actions to increase the readiness of the proposed Project 3.

No.	Agreed Action	Responsibility	Completion Date	
1.	The bidding documents for Kirulapone Unserved Sewer System to be submitted to ADB	DSC, CMC	30 June 2015	Completed
2.	Recruitment of NRW consultancy firm for supervision of tranche 1 and tranche 2 works- EOI to be advertised.	PMU, NWSDB, ADB	30 June, 2015	Completed
3.	Submission request paper to ERD for the recruiting of persons in the PMU under CMC	DSC, CMC	6 July 2015	PMU has submitted TOR to ADB to recruit 4 consultants as initial solution
4.	Submission of Periodic Financing Request (PFR) for Project 3	ERD, CMC, NWSDB	6 July 2015	Completed
5.	CW3 technical evaluation report to be submitted to ADB (tranche 2)	NWSDB	7 July, 2015	To be submitted in August
6.	Submission of CW4 financial bid evaluation report to ADB for review (tranche 2)	NWSDB	15 July 2015	To be submitted in August
7.	Additional Project Director position to be identified for supporting tranche 3 wastewater projects	CMC, NPD, MPC&LG	20 July, 2015	CMC has found the engineer to be Project director for Project 3 in the future
8.	Gantt chart depicting original time line and revised time schedule to be submitted to ERD	DSC, CMC NWSDB	20 July 2015	Completed
9.	Confirmation of AM / Cabinet approval for the additional finance for Project 1 and Project 2, and Project 3	ERD, NWSDB	20 July 2015	Completed
10.	A solution regarding the land issues	CMC	30 July 2015	CMC mayor agreed the

No.	Agreed Action	Responsibility	Completion Date	
	for the WWTP to be obtained			identified land
11.	DSIDC draft contract to be submitted to ADB for review	DSC, CMC	July 2015	Completed
12.	Wastewater tariff to be introduced	CMC	2016	Work in progress

APPENDIX 2: DESIGN AND MONITORING FRAMEWORK FOR TRANCHE 3**Impact the Project is aligned with**

Water supply and wastewater service and management in Greater Colombo improved (*Vision for a New Sri Lanka, 2010–2020^a*)

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome System efficiency and financial sustainability of water supply and wastewater services in Colombo improved.	a. NRW in Colombo city reduced to 20% by 2020 (2013 Baseline: 49%). b. Collection of wastewater through sewerage network increased by 9% by 2020 (2015 Baseline: 80%). c. Access to sewage system in south catchment area of Colombo increased to 95% by 2020 including all below poverty line households (including female headed households among them) (2012 Baseline: 65%).	a. NWSDB water balance audit b. CMC annual reports c. CMC annual reports	The implementation of wastewater tariff as agreed by the Government is delayed.
Outputs 1. Water supply system rehabilitated and expanded, and NRW reduced in northeast part of Colombo city (including funding the financing gap for Project 1). 2. Water supply system rehabilitated and expanded, and NRW reduced in southwest part of Colombo city (including funding the financing gap for Project 2). 3. Wastewater system rehabilitated and expanded in south catchment area of Colombo.	In addition to supporting the outputs under DMF for Project 1, 1a. Numbers of DMAs increased to 26 from 19 as conceived under project 1 ^b by 2018. 1b. Area of engineering office increased from 800 m ² to 1400 m ² by 2018 (Baseline: 0). In addition to supporting the outputs under DMF for Project 2, 2a. Numbers of DMAs increased to 26 from 19 as conceived under project 2c by 2018. 2b. One new pump station constructed by 2018. 3a. Length of sewer network in south catchment area of Colombo rehabilitated and expanded by 29.4 km by 2020 (2014 baseline: 146.6 km).	1a. NWSDB annual report 1b. NWSDB annual report 2a. NWSDB annual report 2b. NWSDB annual report 3a. CMC and nongovernment organization annual reports	1. Key project officials changed during the project period. 2. Prices of pipes and construction materials increase beyond projections and/or contingency allocations.

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
<p>4. Secondary wastewater treatment plant constructed in south catchment area of Colombo.</p> <p>5. Institutional structure and capacity of service providers strengthened.</p>	3b. 18,904 additional households in south catchment area are benefited with sewage facilities by 2020. (Target: 20% of new beneficiaries are from poor households in the unserved areas, of which 50% headed by women) (2013 Baseline: NA).	3b. PPMS	
	3c. Two pump stations rehabilitated in south catchment area of Colombo by 2020 (2015 baseline: NA).	3c. PPMS	
	4a. Secondary wastewater treatment capacity in south catchment area increased by 50,000 cubic meters/day by 2020 (2012 Baseline: 0).	4a. PPMS	
	4b. At least 10% of WWTP staff are women by 2020 (2013 Baseline: NA).	4b. CMC annual reports	
	5a. GIS-based asset management system for wastewater system established and operated by wastewater unit of CMC by 2020 (Baseline: NA).	5a. CMC annual reports	
	5b. A separate wastewater unit established and fully operational within CMC by 2020 (2015 Baseline: 0).	5b. CMC annual reports	
	5c. Training and capacity building provided to 100 CMC staff of which 25% are female professionals by 2020 (2015 Baseline: NA).	5c. Survey conducted by the project consultants	
	5d. Outreach activities conducted to reach a target of 80% of population of Colombo city, emphasizing shared responsibility of men and women in wastewater management with 50% women participation in focus group discussions by 2020 (2013 Baseline: 20%).	5d. CMC annual reports	
	5e. Volumetric sewerage tariff approved and collection initiated by CMC by 2016 (Baseline: NA).	5e. CMC annual reports	

Key Activities with Milestones

- 1. Water supply system rehabilitated and expanded, and NRW reduced, in northeast part of Colombo city**
 - 1.1. Complete construction designs of civil works contracts by Q4 2015.
 - 1.2. Provide the NRW teams with vehicles, tools, equipment, and training, and mobilize the teams for active leakage control by Q2 2016.
 - 1.3. Establish seven additional DMAs by Q4 2017.
 - 1.4. Replace or upgrade all service connections and meters by Q4 2017.
- 2. Water supply system rehabilitated and expanded, and NRW reduced in southwest part of Colombo city**
 - 2.1. Complete procurement of civil works contract by Q4 2015.
 - 2.2. Provide the NRW teams with vehicles, tools, equipment, and training, and mobilize the teams for active leakage control by Q2 2016.
 - 2.3. Establish seven additional DMAs by Q4 2018.
 - 2.4. Replace or upgrade all service connections and meters by Q4 2018.
- 3. Wastewater system rehabilitated and expanded in south catchment area of Colombo**
 - 3.1. Issue tender documents for unserved Kirilapona sewage network by Q3 2015.
 - 3.2. Design, Supervision and Institutional Development Consultants mobilized by Q3 2015.
 - 3.3. Issue tender documents for rehabilitation of sewer network and pump stations by Q1 2016.
 - 3.4. Complete procurement of civil works contract for Kirilapona by Q2 2016.
 - 3.5. Complete procurement of civil works contract for rehabilitation of sewer network and pump stations by Q3 2016.
 - 3.6. 100% households in south catchment area (including below poverty line households and female headed households) are connected to new sewer system in 2020 [EGM].
- 4. Secondary wastewater secondary treatment plant constructed in south catchment area of Colombo**
 - 4.1. Prepare the bidding document for the DBO of the WWTP by Q4 2015.
 - 4.2. Complete the WWTP DBO bidding process by Q4 2016 [private sector development].
 - 4.3. Build the secondary wastewater treatment plant in south catchment by Q2 2019 [private sector development].
- 5. Institutional structure and capacity of service providers strengthened**
 - 5.1. Approve and start the awareness and media campaign, including outreach through television and radio program, and focus group discussion designs by Q4 2015 [EGM].
 - 5.2. Institutionalize reforms to have separated wastewater unit by Q2 2016.
 - 5.3. Complete training of CMC staff (both men and women) on project implementation by Q2 2016 [EGM].
 - 5.4. Approve sustainable tariff system for CMC, together with formulation of implementation strategy/mechanism to include legal and institutional provisions, by Q4 2016.
 - 5.5. Update GIS wastewater system for Colombo by Q4 2018.
 - 5.6. Complete training of CMC staff in managing the operation contract of the DBO contractor by Q1 2019 [EGM].
 - 5.7. Implement institutional reforms pertaining to Procurement and Project Management Divisions of CMC are implemented for the management of the operation contract for the wastewater treatment plant by Q3 2019.

Inputs

Asian Development Bank: \$128.00 million loan
 Government: \$ 47.45 million

Assumptions for Partner Financing

European Investment Bank cofinancing (\$50.00 million) is providing parallel cofinancing and these funds will not administered by Asian Development Bank. Parts of Output 3 being financed by European Investment Bank that are necessary to reach the outcome include: (i) rehabilitation, replacement, repair and cleaning of sewer reticulation system of 15.61 km in south catchment area of Colombo to address sewer damages, blockages and siltation problems, under-capacity issues and realignment needs; and (ii) laying 6.22 km of sewer network and the construction of three pump stations to cover two other un-served areas in the south catchment area of Colombo.

CMC = Colombo Municipal Council, DBO = design, build and operate, DMA = District Metered Area, EGM = effective gender mainstreaming, GIS = geographic information system, km = kilometer, m² = square meter, NRW = nonrevenue water, NWSDB = National Water Supply and Drainage Board, PPMS = project performance management system, WWTP = wastewater treatment plant.

^a Government of Sri Lanka. 2010. *Vision for a New Sri Lanka, 2010–2020*, Colombo.

Note: The distribution of network has been realigned to form more DMAs in the same service areas.

Source: Asian Development Bank.

Project Administration Manual

Project Number: 45148-008
November 2015

Democratic Socialist Republic of Sri Lanka – Greater
Colombo Water and Wastewater Management
Improvement Investment Program (Tranche 3)

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Project Administration Manual Purpose and Process

1. The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with government and Asian Development Bank (ADB) policies and procedures. The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.
2. The executing and implementing agencies are wholly responsible for the implementation of ADB financed projects, as agreed jointly between the borrower and ADB, and in accordance with government and ADB's policies and procedures. ADB staff is responsible to support implementation including compliance by executing and implementing agencies of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.
3. At Loan Negotiations the borrower and ADB shall agree to the PAM and ensure consistency with the Loan agreement. Such agreement shall be reflected in the minutes of the Loan Negotiations. In the event of any discrepancy or contradiction between the PAM and the Loan Agreement, the provisions of the Loan Agreement shall prevail.
4. After ADB approval, changes in implementation arrangements are subject to agreement and approval pursuant to relevant government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval they will be subsequently incorporated in the PAM.

ABBREVIATIONS

ADB	–	Asian Development Bank
ADF	–	Asian Development Fund
DMA	–	district metered area
DMF	–	Design and monitoring framework
DSIDC	–	Design Supervision and Institutional Development Consultant
EIA	–	Environmental impact assessment
EIB	–	European Investment Bank
EIRR	–	Economic internal rate of return
EMP	–	Environmental management plan
FIRR	–	Financial internal rate of return
FMA	–	Financial management assessment
GAP	–	Gender action plan
GIS	–	Geographical information system
ICB	–	International competitive bidding
IEE	–	Initial environmental examination
MASC	–	Management Advisory and Supervision Consultant
MLD	–	Million liters per day
MCP&WS	–	Ministry of City Planning and Water Supply
MPC&LG	–	Ministry of Provincial Councils and Local Government
NRW	–	Non-revenue water
NPC	–	National Planning Commission
NWSDB	–	National Water Supply and Drainage Board
O&M	–	Operation and maintenance
PAM	–	Project Administration Manual
PMU	–	Project Management Unit
PPP	–	Public-private partnership
QCBS	–	Quality- and cost-based selection
SOE	–	Statement of expenditures
SPRSS	–	Summary poverty reduction and social strategy
SPS	–	Safeguards Policy Statement (of ADB, 2009)
TA	–	Technical assistance
WACC	–	Weighted average cost of capital

I. PROJECT DESCRIPTION

A. Project's Rationale, Location and Beneficiaries

1. **Rationale.** About 95% of Colombo,¹ the capital city and economic and administrative hub of the country, is covered by a piped water supply system. Because the system has low and fluctuating system pressure and intermittent supply, some areas of the city receive water only in off-peak hours and others receive water for an average of only 6–10 hours a day. Many parts of the distribution network were built more than 100 years ago. Though there have been various projects to address the increasing water demand, significant network rehabilitation has not been carried out; nonrevenue water (NRW) remains around 49%.² The National Water Supply and Drainage Board (NWSDB), under the Ministry of City Planning and Water Supply (MCP&WS), supplies piped water to 127,000 metered service connections in Colombo; in the underserved settlements, about 3,200 stand-posts are not metered. The water tariff is below full cost recovery. To enhance water conservation through the stand-posts in underserved settlements, NWSDB has launched various pilot programs across the country and specifically in Colombo. These programs need to be implemented on a larger scale. NWSDB is currently implementing Projects 1 and 2 with the help of Asian Development Bank (ADB) funding support. Since there is financing gap in both Projects 1 and 2, The Project 3 will provide the additional financing for both Projects 1 and 2.

2. The overall coverage of piped wastewater is still very low at about 3% in Sri Lanka. Although about 80% of Colombo is covered by a piped wastewater system, only 60% of the population is served by connections to the sewerage system. The original sewer network, built between 1906 and 1925 has been extended/improved in 1980s. Further improvement has been carried out in 2007. The system comprises about 320 kilometers of sewers, 18 pumping stations in two catchments (north and south) and two sea outfalls. The sewer lines have frequent collapses and blockages, and one-third of the pumping facilities are not working, causing frequent overflow into watercourses. The Colombo Municipal Council (CMC) owns and operates the wastewater infrastructure services in Colombo, and is the only municipal body handling such a service in the country. NWSDB manages wastewater facilities outside the CMC area. NWSDB has introduced a sewerage tariff incorporated in the water bill within its operating jurisdiction and has a dedicated account for sewerage services.³ However, the sewerage operation in CMC is not separate from other operations, e.g., drainage, although, CMC has adopted a separated accounting for its sewerage operations. Aside from property taxes, CMC does not impose a separate wastewater tariff. The approved Capacity Development Technical Assistance (CDTA) will help CMC to establish the wastewater unit and introduce the wastewater tariff in Colombo city. The Project 3 will upgrade and rehabilitate the sewer collection system and build a new wastewater treatment plant in the south catchment area of Colombo city.

3. **Multitranche Financing Facility (MFF).** On 25 October 2012, ADB approved an MFF of \$300 million, envisaged to be funded from ADB's Ordinary Capital Resources (OCR) and Asian Development Fund (ADF), for the Greater Colombo Water and Wastewater Management

¹ The 37 square kilometer area under the Colombo Municipal Council, which has a population of about 700,000.

² The 49% NRW for Colombo, which is twice the national average NRW, comprises 33% physical losses, 5% commercial losses, and 11% free water supplied to low-income informal settlements.

³ The cabinet approved the introduction of a sewerage charge in September 2002. Subsequently, NWSDB approved a sewerage tariff policy and a specific tariff structure, which MCP&WS approved. A new sewerage tariff was gazetted in October 2007 and implemented in March 2008. As part of system computerization at NWSDB, the water bill form was modified and the sewerage charge was incorporated into the water bill.

Improvement Investment Program (the Investment Program). The Framework Financing Agreement (FFA) for the Investment Program was signed on 12 September 2012. Project 1 (\$84 million) under the Investment Program was approved by the President on 22 November 2012. Project 2 (\$88 million) under the Investment Program was approved by the President on 16 September 2013. Projects 1 and 2 focus on reducing NRW and improving water service efficiency in Greater Colombo. The MFF was envisaged to comprise an additional two tranches⁴ not exceeding \$128 million in loan amount in order to support improvements to wastewater management in Greater Colombo. However, Projects 1 and 2 require additional financing assistance, as a result of which the balance available funds under the MFF can only support the inclusion of one subsequent tranche. The proposed Project 3, as the final tranche under the MFF, will support: (i) improvements to water supply and NRW reduction by financing the modifications to Projects 1 and 2; and (ii) improvements to wastewater collection and treatment facilities, as well as wastewater management services in Colombo city.

B. Impact and Outcome

4. The impact of Project 3 will be water supply and wastewater service and management improved in Greater Colombo. The outcome will be system efficiency and financial sustainability of water supply and wastewater services improved in Colombo. A design and monitoring framework for Project 3 is in Appendix 1.

C. Outputs

5. Project 3 includes the following outputs (further details of project descriptions for Project 3 are provided in Appendix 2):

- (i) **Output 1: Rehabilitated and Expanded Water Supply System and Reduced NRW in the Northeast Part of Colombo City (funding the financing gap for Project 1):** The following additional activities will be included, in order to strengthen Project 1: (a) formation of seven additional district metered areas (DMAs) in the northeast part of Colombo city, and (b) increasing the area engineering office from 800 square meters (m²) to 1,400 m².
- (ii) **Output 2: Rehabilitated and Expanded Water Supply System and Reduced NRW in the Southwest Part of Colombo City (funding the financing gap for Project 2):** The following additional activities will be included, in order to strengthen Project 2: (a) formation of seven additional district metered areas (DMAs) in the southwest part of Colombo city; (b) enhancement of training facility; (c) construction of a new pump station at the Ellie house site instead of the rehabilitation of 5 existing pump stations; and (d) support for strengthening project preparation and increasing project readiness.
- (iii) **Output 3: Rehabilitated and Expanded Wastewater Network in South Catchment Area of Colombo City:** (a) laying 29.40 km of sewer network and constructing three pump stations to cover currently unserved Kirulapona area in the south catchment of Colombo (ADB financing); (b) rehabilitation, replacement, repair and cleaning of sewer reticulation system of 15.61 km in South catchment area of Colombo to address sewer damages, blockages and siltation problems, under-capacity issues and realignment needs (EIB cofinancing); and (c) laying 6.22 km of sewer network and the construction of three pump stations to cover two other unserved areas in the south catchment area of Colombo (EIB cofinancing).

⁴ Scheduled to be approved in 2015 and 2016.

- (iv) **Output 4: Secondary Wastewater Treatment Plant constructed in South Catchment Area of Colombo City:** Construction of 50,000 cubic meters per day (m³/day) capacity secondary treatment plant at Wellawatta on a Design-Build-Operate basis.
- (v) **Output 5: Strengthened Institutional Structure and Capacity of Service Provider:** (a) a separate wastewater unit is established within the CMC; (b) establishment of a GIS-based asset management system for wastewater system, to be operated by CMC's wastewater unit; (c) strengthening of CMC's staff and institutional capacity for increased operational efficiency in wastewater management; (d) Awareness of shared responsibility in wastewater management by new sewerage users in the south catchment area; (e) Training and capability building to improve the operating performance of CMC; and (f) Initiating the collection of volumetric sewerage tariff in the CMC area.

6. The Government is seeking parallel cofinancing from European Investment Bank (EIB), which shall be providing cofinancing in an amount equivalent to \$50 million for sewer network rehabilitation and upgrading in the south catchment area of Colombo city to cover part of output 3. This (EIB cofinancing) will cover separate contracts, distinct from components and contracts funded under the ADB administered loan. EIB will administer their financing portion. Implementation of the works will follow procurement procedures agreed between ADB and EIB. The coordination arrangements of this parallel cofinancing will be detailed in a separate letter from ADB to EIB.

II. IMPLEMENTATION PLANS

A. Project Readiness Activities

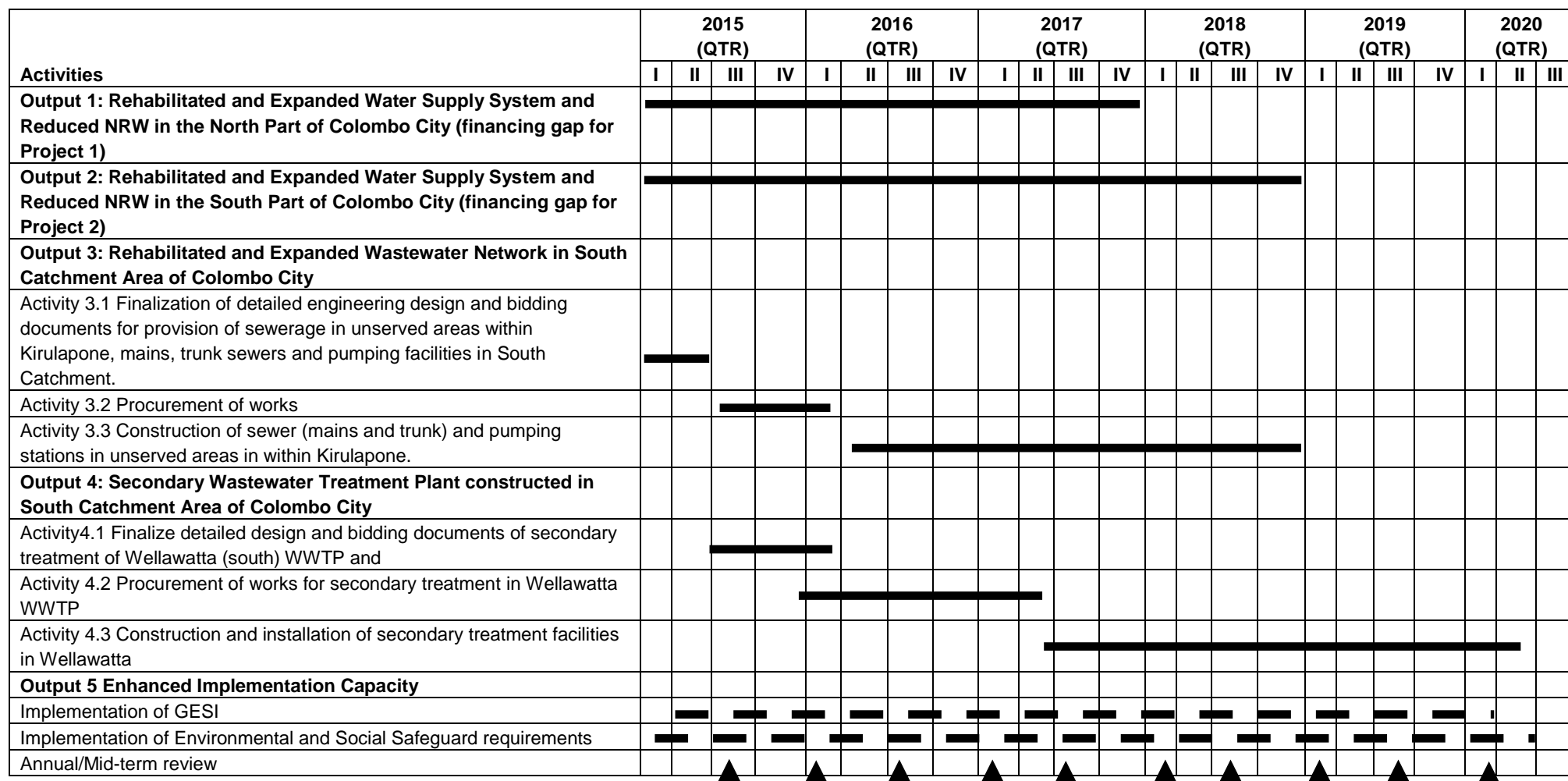
7. Project readiness activities and their expected completion dates are shown in Table 1.

Table 1: Project Readiness for Project 3

Milestones	Responsible Agency	Jun 15	Jul 15	Aug 15	Sep 15	Oct 15	Nov 15	Dec 15	Mar 16
ADB loan appraisal mission	ADB	√							
Negotiation with DSIDC completed	CMC		√						
Tendering of civil works for Kirulapone unserved area started	CMC		√						
Loan negotiations	ADB and Government				√				
ADB Management approval	ADB						√		
Government legal opinion provided	AGO							√	
Loan signing	ADB and Government								√
Government budget inclusion	MCP&WS, MPC&LG								√
Loan effectiveness	ERD								√

ADB= Asian Development Bank, CMC = Colombo Municipal Council, DSIDC= design, supervision and institution development consultant, NWSDB= National Water Supply and Drainage Board, MCP&WS = Ministry of City Planning and Water Supply, MPC&LG = Ministry of Provincial Councils and Local Government..

Figure 1: Overall Project Implementation Plan



III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations –Roles and Responsibilities

9. The Program Steering Committee (PSC), the highest oversight committee set up under Project 1, will monitor, guide and ensure that all projects under the Investment Program, including Project 3, are managed, implemented and completed as agreed and on time. The PSC is chaired by the Secretary to Ministry of National Policies and Economic Affairs (MNPEA), with members including senior officials from the Ministry of Finance, MNPEA, Secretary of MCP&WS, Secretary of Ministry of Provincial Councils and Local Government (MPC&LG), the Chairman of Urban Development Authority, the Chairman of the Board of NWSDB and Municipal Commissioner of the CMC, and the Project Directors. To provide ministerial-level oversight and guidance, there are two Ministerial Project Committees (MPCs) at the MCP&WS and the MPC&LG, each chaired by their respective Secretaries. Additionally, to provide more frequent guidance and operational coordination on implementation, there are Operational Coordination Committees that sit below in the respective ministries, chaired by the Additional Secretaries of the MCP&WS and MPC&LG, and provide guidance on a more frequent basis on operational matters.

10. Like Project 2, MCP&WS will be the executing agency and NWSDB will be the implementing agency for additional financing for water supply investments under Project 3. The project management unit (PMU) established in NWSDB to manage Projects 1 and 2 will also be responsible for managing and implementing water supply investments under the proposed Project 3. The PMU will have one full-time Project Director with overall responsibility for project coordination and management and for financial matters. There will be two Deputy Project Directors. The Project Director has delegated all powers relating to project implementation to the respective Deputy Project Directors, to facilitate smooth and effective project implementation. The PMU has already mobilized 65 staff (including one Project Director, one Deputy Project Director, four Chief Engineers, four Senior Engineers, one Social Development and Safeguards Officer, one Procurement Specialist, two Project Coordinators and support staff, etc.). Staffing in the PMU will be increased to suit requirements as the pace of implementation accelerates, and is expected to reach about 142.

11. MPC&LG will be executing agency and CMC will be implementing agency for wastewater investments under Project 3. The PMU established in CMC, will be responsible for wastewater investments. The PMU has about 27 staff, including the Project Director and other staff. Staffing in the PMU will be increased to suit requirements as the pace of implementation accelerates, and is expected to reach about 53 (detailed list of staff in PMU under CMC is in Appendix 9). In addition, 8 members (coordination, legal, assessment, technical) of policy support group will provide advisory support.

12. The PMUs will have full responsibility for all aspects of day-to-day project management, project implementation, and cost recovery. The PMUs, headed by a full-time project director, will be responsible for (i) preparing and implementing the project; (ii) reporting; (iii) managing consultants; (iv) managing disbursement of funds and recovering loan repayments; and (v) conducting overall project monitoring and evaluation, including preparation of necessary project reports, with the help of consultants.

13. Roles and responsibilities of key project stakeholders are described in Table 2.

Table 2: Roles and Responsibilities of key Project Stakeholders

Project Implementation Organizations	Management Roles and Responsibilities
Program Steering Committee (PSC)	Chaired by Secretary of MNPEA <ul style="list-style-type: none"> ➤ Meets every 6 months. ➤ Reviews implementation progress of the MFF. ➤ Facilitates internal approval procedures. ➤ Resolves high-level structural impediments to help smooth implementation.
Ministerial Project Committees (MPCs)	Ministerial Project Committee for Water Supply (Chaired by Secretary, MCP&WS) <ul style="list-style-type: none"> ➤ Meets at least once every three months, and as required, to provide information on the project to the members, resolve project-related issues pertaining to other departments and make policy recommendations Ministerial Project Committee for Wastewater (Chaired by Secretary, MPC&LG) <ul style="list-style-type: none"> ➤ Meets at least once every three months, and as required, to provide information on the project to the members, resolve project-related issues pertaining to other departments and make policy recommendations
Operational Coordination Committee	Chaired Jointly by Additional Secretaries of the Ministry of City Planning, and Water Supply, and the Ministry of Provincial Councils and Local Government <ul style="list-style-type: none"> ➤ Meets every month or as necessary ➤ Resolves problems arising during construction including road crossings, and permissions from traffic police, utilities, etc.,
Executing Agencies	MCP&WS and MPC&LG <ul style="list-style-type: none"> ➤ Provide overall strategic planning, guidance and management support to the project ➤ Coordinate with other ministries on matters under their jurisdictions on project issues ➤ Ensure availability of adequate counterpart funding ➤ Support the overall project implementation ➤ Coordinate with the NWSDB/CMC to ensure smooth project implementation ➤ Chair the Project Steering Committees (PSCs) and makes key policy level decisions to facilitate project implementation ➤ Responsible for administration of the imprest accounts, retention of supporting documents, and any reporting requirements, including, the annual audit report and financial statements.
Implementing Agency, NWSDB	Through its PMU: <ul style="list-style-type: none"> ➤ Is the main point of contact with ADB and MCP&WS on all project implementation matters ➤ Facilitates decentralization of functions to WC-RSC ➤ Provides overall management support to the WC-RSC to facilitate project implementation ➤ Functions as conduit for counterpart funds flowing from Ministry of Finance to WC-RSC ➤ Plans, manages and implements all project activities on a day-to-day basis ➤ Engages management advisory and supervision consultant (MASC) and other consultants for water supply ➤ Implements NRW reduction in Colombo city ➤ Leads, oversees and manages the design and bidding process for civil works contracts, signs and administers the contracts, and supervises the civil works ➤ Implements GAP with consultants' support ➤ Ensures and monitors compliance of loan covenants, including safeguards ➤ Responsible for the imprest sub-accounts management

Project Implementation Organizations	Management Roles and Responsibilities
	<ul style="list-style-type: none"> ➤ Submits progress and monitoring reports, withdrawal applications, statement of expenditure and other reports in a timely manner to ADB and the Government.
Implementing Agency, CMC	<p>Through its PMU</p> <ul style="list-style-type: none"> ➤ Is the point of contact with ADB and MPC&LG on all project implementation matters ➤ Facilitates to establish the wastewater management unit under CMC ➤ Provides the overall management support to establish the wastewater tariff ➤ Provides overall management support to the CMC to facilitate project implementation ➤ Plans, manages and implements all project activities on a day-to-day basis. ➤ Engages DSC and DSIDC consultants to prepare the detailed designs and bidding documents ➤ Leads, oversees and manages the design and bidding process for civil works contracts, signs and administers the contracts, and supervises the civil works ➤ Ensures and monitors compliance of loan covenants, including safeguards ➤ Implements GAP with consultants' support ➤ Submits progress reports, monitoring reports, withdrawal applications, statements of expenditure and other related information in a timely manner to the ADB and Government ➤ Responsible for the imprest sub-accounts management.

ADB = Asian Development Bank, CMC = Colombo Municipal Council, GAP= Gender Action Plan, MCP&WS = Ministry of City Planning and Water Supply, MPC&LG = Ministry of Provincial Councils and Local Government, MNPEA = Ministry of National Policies and Economic Affairs, NWSDB= National Water Supply and Drainage Board, PMU = Project Management Unit. RSC-WC = West Central Regional Support Center,

B. Key Persons Involved in Implementation

Executing Agency

Ministry of City Planning and Water Supply

Mr. B M U D Basnayake, Secretary

Position: Chairman of Ministerial Project Committee for Water Supply Telephone: +94 11 2177212

Email address: secretary@watermin.gov.lk

Office Address: Ministry of City Planning and Water Supply
Lakdiya Medura
35, Parliament Road,
Kotte

Ministry of Provincial Councils and Local Government

Mr. H.T. Kamal Pathmasiri, Secretary

Position: Chairman of Ministerial Project Committee for Wastewater

Telephone: +94 11 2674115

Email address: secretary@pclg.gov.lk,

Office Address: Ministry of Provincial Councils and Local Government

Union Place, Colombo 02, Sri Lanka

Implementing Agency (Water Supply)**National Water Supply and Drainage Board (NWSDB)**

Mr. B.W.R. Balasuriya, General Manager
 Telephone: +94 11 2636449
 E-mail: gm@waterboard.lk
 Office Address: National Water Supply & Drainage Board
 Ratmalana

West Central Regional Support Center (RSC - WC) of NWSDB

Mr. M. K. Hapuarachchi
 Deputy General Manager
 Regional Support Center (West Central)
 Telephone: +94 11 2812671
 E-mail: dgmwc@waterboard.lk
 Office Address: 175/A Nawala Road
 Nugegoda

Project Management Unit

Mr. S. A. Rasheed
 Project Director, PMU
 Telephone: +94 11 2363705
 Email address: cwssiadb@yahoo.com
 Office Address: No. 65, St. Lawrence Road,
 Colombo 06.

Implementing Agency (Wastewater)**Colombo Municipal Council (CMC)**

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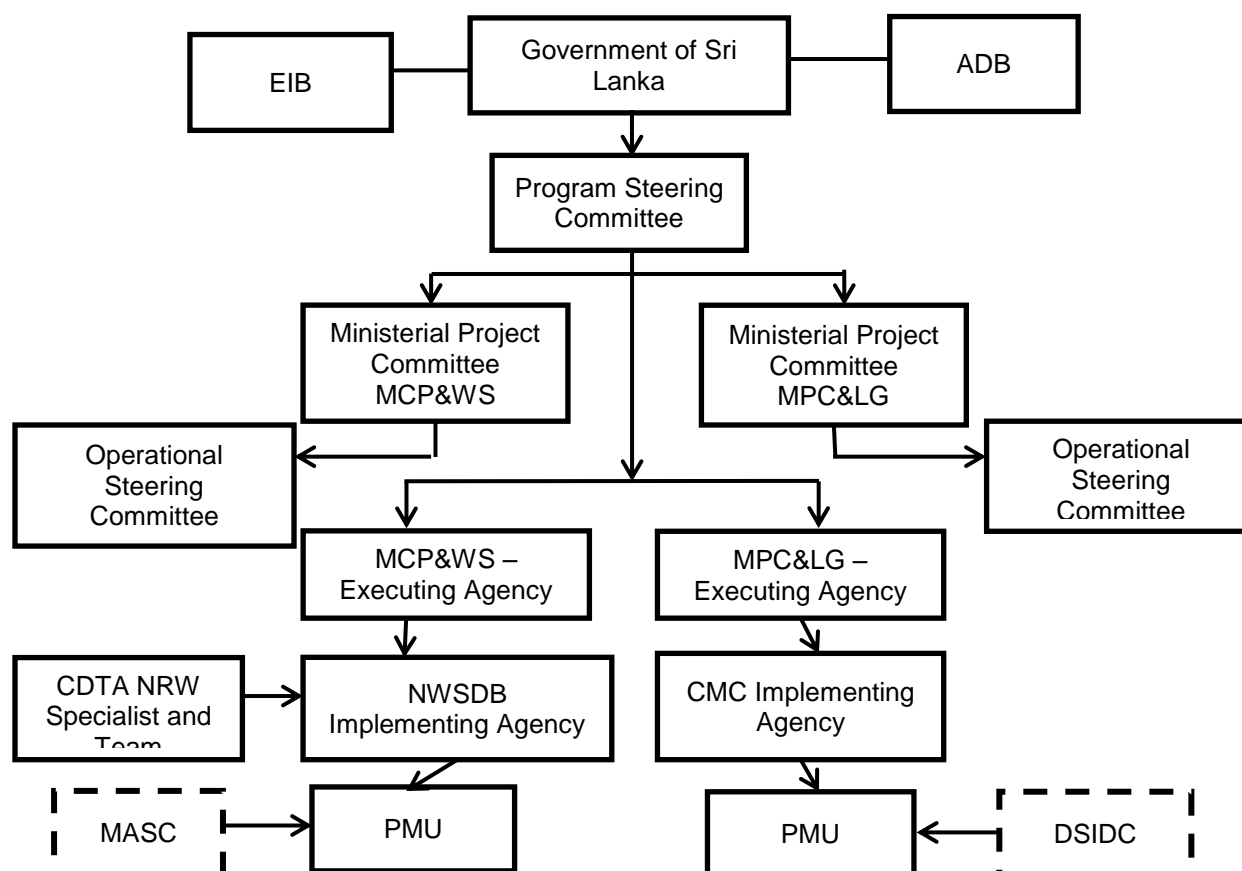
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C. Project Organization Structure

14. Project implementation arrangements and organizational structure, for Projects 3 are shown in Figure 2.

Figure 2: Organizational Chart



ADB = Asian Development Bank; CDTA = capacity development technical assistance; CMC = Colombo Municipal Council; DSIDC = design, supervision, and institutional development consultant; MASC = management advisory and supervision consultant; MCP&WS = Ministry of City Planning and Water Supply; MPC&LG = Ministry of Provincial Councils and Local Government; NRW = non-revenue water, NWSDB = National Water Supply and Drainage Board; PMU = program management unit.

IV. COSTS AND FINANCING

A. Project 3 and EIB Cofinancing Subprojects Investment and Financing Plans

15. Project 3 cost estimates are shown in Table 3, 4, and 5.

Table 3: Proposed Cost Estimate for Project 3 (\$ million)

Item	Amount ^a
A. Base Cost^b	
1. Financing gap for Project 1	31.76
2. Financing gap for Project 2	13.94
3. Wastewater Network Improvements in Colombo	97.27
4. Wastewater Treatment Plant	44.37
5. Implementation Support	8.48
Subtotal (A)	195.82
B. Contingencies^c	23.84
C. Financing Charges During Implementation^d	8.36
Total (A+B+C)	228.02

^a Includes Taxes and duties (\$35.66 million) computed at 31% for imported goods and at 11% for domestic goods and services. Taxes and duties are cash contribution from the government and ADB.

^b In June 2015 prices.

^c Physical contingencies are computed at 7.5% for civil works and equipment; price contingencies computed are computed at 1.4%-1.5% on foreign exchange costs and 6.0% on local currency costs and include provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges. Interest during construction for OCR has been computed at the 5-year forward London interbank offered rate plus a spread of 0.6%. Commitment charges for OCR are 0.15% per year to be charged on the undisbursed loan amount. And, interest during construction for ADF is applied with 2%.

Source: Asian Development Bank estimates.

Table 4: Proposed funding for NWSDB (\$ million)

Item	Amount
A. Base Cost^a	
1. Financing gap for Project 1	31.76
2. Financing gap for Project 2	13.94
3. Implementation Support	3.00
Subtotal (A)	48.70
B. Contingencies	4.53
C. Financing Charges During Implementation	2.39
Total (A+B+C)	55.62

Table 5: Proposed funding for CMC (\$ million)

Item	Amount
A. Base Cost^a	
1. Wastewater Network Improvements in Colombo	47.11
2. Wastewater Treatment Plant	44.37
3. Implementation Support	5.48
Subtotal (A)	96.96
B. Contingencies	12.24
C. Financing Charges During Implementation	3.63
Total (A+B+C)	112.83

16. Leveraging the MFF as a platform to implement the Government's sector investment plan, the Government invited the European Investment Bank (EIB) to provide parallel contractual co-financing to bridge the investment gap of the Investment Program. The total cost of the project financed with EIB is shown in Table 6.

Table 6: Cost Estimate with EIB Cofinancing (US\$ million)

Item	Amount ^a
A. Base Cost ^b	
1. Wastewater Network Improvements in Colombo	50.16
Subtotal (A)	50.16
B. Contingencies ^c	7.07
C. Financing Charges During Implementation ^d	2.34
Total (A+B+C)	59.56

^a Exchange rate of \$1 = LKR130 is used. In June 2015 prices.

^b Taxes and duties (\$9.56 million) computed at 31% for imported goods and at 11% for domestic goods and services. Taxes and duties are the cash contribution from the government.

^c Physical contingencies computed are at 7.5% for civil works and equipment; price contingencies computed are computed at 1.4%-1.5% on foreign exchange costs and 6.0% on local currency costs and include provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges. Interests during construction for EIB loan is estimated at 2.2% per year. Commitment charges and other front-end charges for EIB loan are estimated at 0.15% per year to be charged on the undisbursed loan amount.

Source: ADB estimates.

17. The Government has submitted the third periodic financing request (PFR)⁵ in line with the signed FFA. The Government has requested a loan of \$123 million from ADB's OCR and \$5 million equivalent from the Asian Development Fund (ADF) to finance part of the cost of Project 3. The OCR loan will have a 26-year term, including a grace period of 5 years, an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility, a commitment charge of 0.15% per year (the interest and other charges during construction to be capitalized in the loan), and such other terms and conditions set forth in the draft loan and project agreements. The Government has opted for a straight-line repayment option, the average loan maturity is 15.75 years and the maturity premium payable to ADB is 0.1% per annum. The ADF loan will have a 25-year term, including a grace period of 5 years, an interest rate of 2.0% per annum charged throughout the loan maturity, and such other terms and conditions set forth in the draft loan and project agreements.

18. The Government will contribute \$50.02 million, or 21.9% of the total Project 3 cost to finance taxes and duties, resettlement costs, and part of the civil works and part of the recurrent costs. It will relend relevant portions of the loan proceeds to CMC on acceptable terms to the Ministry of Finance in the wastewater subsector, in accordance with established procedures. These arrangements will be described in subsidiary financing agreements, satisfactory to ADB, to be signed and made effective by loan effectiveness. The Government will assume the foreign exchange risk.

⁵ Periodic Financing Request for Project 3 is in Appendix 1.

B. Project 3 Detailed Cost Estimates by Expenditure Category**Table 7: Project 3 - Detailed Cost Estimates by Category for ADB Loan (US\$ million)**

	Items	Gross	Net	Tax
A.	Investment Costs			
1	Civil Works	137.18	114.41	22.77
	a. Civil Works - NWSDB	45.70	38.16	7.54
	b. Civil Works - CMC	91.48	76.25	15.23
2	Equipment	0.79	0.60	0.19
3	Resettlement	0.53	0.53	0.00
4	Project Management	1.84	1.70	0.14
	a. PMDS – NWSDB	0.00	0.00	0.00
	b. PMDS – CMC	1.34	1.20	0.14
	c. Training and Workshops – CMC	0.50	0.45	0.05
	Subtotal (A)	140.34	117.19	23.15
B.	Recurrent Costs			
1	Incremental Administrative Costs	5.32	4.79	0.53
	Subtotal (B)	5.32	4.79	0.53
	Total Base Cost	145.66	121.98	23.68
C.	Contingencies			
1	Physical Contingencies	10.35	8.62	1.73
2	Price Contingencies	6.42	5.72	0.70
	Subtotal (C)	16.78	14.34	2.43
D.	Financing Charges During Implementation			
1	Interest During Construction	5.46	5.46	0.00
2	Commitment Charges	0.56	0.56	0.00
	Subtotal (D)	6.02	6.02	0.00
	Total Project Cost (A+B+C+D)	168.46	142.34	26.12
	% Total Project Cost	100.0%	84.5%	15.5%

ADB = Asian Development Bank, CMC = Colombo Municipal Council, NWSDB = National Water Supply and Drainage Board.

Note: Numbers may not sum precisely because of rounding.

Source: ADB estimates.

Table 8: EIB Cofinancing - Detailed Cost Estimates by Category (US\$ million)

	Items	Gross	Net	Tax
A.	Investment Costs			
1	Civil Works	50.16	41.78	8.38
2	Equipment	0.00	0.00	0.00
3	Resettlement	0.00	0.00	0.00
4	Project Management	0.00	0.00	0.00
	Subtotal (A)	50.16	41.78	8.38
B.	Recurrent Costs			
1	Incremental Administrative Costs	0.00	0.00	0.00
	Subtotal (B)	0.00	0.00	0.00
	Total Base Cost	50.16	41.78	8.38
C.	Contingencies			
1	Physical Contingencies	5.07	4.18	0.85
2	Price Contingencies	2.00	1.71	0.34
	Subtotal (C)	7.07	5.89	1.18
D.	Financing Charges During Implementation			
1	Interest During Construction	1.96	1.96	0.00
2	Commitment Charges	0.38	0.38	0.00
	Subtotal (D)	2.34	2.34	0.00
	Total Project Cost (A+B+C+D)	59.56	50.00	9.56
	% Total Project Cost	100.0%	83.9%	16.1%

Note: Numbers may not sum precisely because of rounding.

Source: ADB estimates.

C. Allocation and Withdrawal of Loan Proceeds

19. The allocation of loan proceeds for Project 3 is given in Table 9 and Table 10.

Table 9: Allocation and Withdrawal of ADB OCR Loan Proceeds

Category					ADB
Number	Item	Amount Allocated \$			Percentage and Basis for Withdrawal
		Category	Sub-category		
1	Civil Works	104,405,000			
1a	Additional financing for Project 1 ^a		23,219,000	73.1%	of total expenditure claimed
1b	Additional financing for Project 2 ^a		9,389,000	67.3%	of total expenditure claimed
1c	Civil Works – CMC ^b		71,797,000	78.5%	of total expenditure claimed
2	Incremental Administrative Costs - NWSDB ^a	3,000,000		100.0%	of total expenditure claimed
3	Interests and Commitment charges	5,846,000		100.0%	Of amount due
4	Unallocated	9,749,000			
	Total	123,000,000			

ADB = Asian Development Bank, CMC = Colombo Municipal Council, NWSDB = National Water Supply and Drainage Board.

^a Subject to the condition for withdrawal as described in paragraph 28.

^b Subject to the condition for withdrawal as described in paragraph 29.

Table 10: Allocation and Withdrawal of ADB ADF Loan Proceeds

Category					ADB
Number	Item	Amount Allocated \$			Percentage and Basis for Withdrawal
		Category	Sub-category		
1	Equipment - CMC ^a	600,000		75.6%	of total expenditure claimed
2	Project Management	1,700,000			
2a	Project Management – CMC ^a		1,200,000	100.0%	of total expenditure claimed ^b
2b	Training and Workshops – CMC ^a		500,000	100.0%	of total expenditure claimed
3	Incremental Administrative Costs – CMC ^a	2,320,000		100.0%	of total expenditure claimed
4	Interests	180,000		100.0%	of amount due
5	Unallocated	200,000			
	Total	5,000,000			

ADB = Asian Development Bank, CMC = Colombo Municipal Council.

^a Subject to the condition for withdrawal as described in paragraph 29.

^b Exclusive of taxes and duties imposed in the Borrower's territory.

D. Detailed Cost Estimates by Financier

Table 11: Project 3 - Detailed Cost Estimates by Financier for ADB Loan (US\$, million)

		OCR		ADF		Government				Total Costs
Item		\$	%	\$	%	Non-Tax	Tax	Total	%	
A.	Investment Costs									
1	Civil Works	104.40	76.1%	0.00	0.0%	10.01	22.77	32.77	23.9%	137.18
	a Additional financing for Project 1	23.22	73.1%	0.00	0.0%	3.31	5.23	8.54	26.9%	31.76
	B Additional financing for Project 2	9.39	67.3%	0.00	0.0%	2.25	2.31	4.55	32.7%	13.94
	c. Civil Works - CMC	71.80	78.5%	0.00	0.0%	4.45	15.23	19.68	21.5%	91.48
2	Equipment – CMC	0.00	0.0%	0.60	75.6%	0.00	0.19	0.19	24.4%	0.79
3	Resettlement – CMC	0.00	0.0%	0.00	0.0%	0.53	0.00	0.53	100.0%	0.53
4	Project Management	0.00	0.0%	1.70	92.6%	0.00	0.14	0.14	7.4%	1.84
	a. Project Management - CMC	0.00	0.0%	1.20	89.8%	0.00	0.14	0.14	10.2%	1.34
	b. Training and Workshops – CMC	0.00	0.0%	0.50	100.0%	0.00	0.00	0.00	0.0%	0.50
	Subtotal (A)	104.40	74.4%	2.30	1.6%	10.54	23.10	33.64	24.0%	140.34
B.	Recurrent Costs									
1	Incremental Administrative Costs ^a	3.00	56.4%	2.32	43.6%	0.00	0.00	0.00	0.0%	5.32
	a. Incremental Costs – NSWDB	3.00	100.0%	0.00	0.0%	0.00	0.00	0.00	0.0%	3.00
	b. Incremental Costs - CMC	0.00	0.0%	2.32	100.0%	0.00	0.00	0.00	0.0%	2.32
	Subtotal (B)	3.00	56.4%	2.32	43.6%	0.00	0.00	0.00	0.0%	5.32
	Total Base Cost	107.40	73.7%	4.62	3.2%	10.54	23.10	33.64	23.1%	145.66
C.	Contingencies									
1	Physical Contingencies	5.38	52.0%	0.05	0.4%	3.20	1.72	4.92	47.6%	10.35
2	Price Contingencies	4.36	68.0%	0.16	2.5%	1.20	0.70	1.90	29.6%	6.42
	Subtotal (C)	9.74	58.1%	0.20	1.2%	4.40	2.42	6.82	40.7%	16.78
D.	Financing Charges During Implementation									
1	Interest During Construction	5.29	96.8%	0.18	3.2%	0.00	0.00	0.00	0.0%	5.46
2	Commitment Charges	0.56	100.0%	0.00	0.0%	0.00	0.00	0.00	0.0%	0.56
	Subtotal (D)	5.85	97.1%	0.18	2.9%	0.00	0.00	0.00	0.0%	6.02
	Total Project Cost (A+B+C+D)	123.00	73.6%	5.00	3.0%	14.94	25.52	40.46	23.4%	168.46
	% Total Project Cost		73.6%		3.0%				24.4%	100%

^a Includes items such as salary of PMU staff and consumables for project administration.

Note: Taxes and duties are the cash contribution from the government and ADB. Numbers may not sum precisely because of rounding.

Source: ADB estimates.

Table 12: EIB Cofinancing – Detailed Cost Estimates by Financier (US\$, million)

Item	EIB		Government				Total Costs
	\$	%	Non-Tax	Tax	Total	%	
A. Investment Costs							
1 Civil Works	41.78	83.3%	0.00	8.38	8.38	16.7%	50.16
2 Equipment	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00
3 Land Acquisition and Resettlement	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00
4 Project Management	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00
Subtotal (A)	41.78	83.3%	0.00	8.38	8.38	16.7%	50.16
B. Recurrent Costs							
Incremental Administrative Costs	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00
Subtotal (B)	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00
Total Base Cost	41.78	83.3%	0.00	8.38	8.38	16.7%	50.16
C. Contingencies							
1 Physical Contingencies	4.22	83.3%	0.00	0.85	0.85	16.7%	5.07
2 Price Contingencies	1.67	83.3%	0.00	0.34	0.34	16.7%	2.00
Subtotal (C)	5.89	83.3%	0.00	1.18	1.18	16.7%	7.07
D. Financing Charges During Implementation							
Interest	1.96	100.0%	0.00	0.00	0.00	0.0%	1.96
Commitment Charges	0.38	100.0%	0.00	0.00	0.00	0.0%	0.38
Subtotal (D)	2.34	100.0%	0.00	0.00	0.00	0.0%	2.34
Total Project Cost (A+B+C+D)	50.00	83.9%	0.00	9.56	9.56	16.1%	59.56
% Total Project Cost		83.9%				16.1%	100%

Note: Taxes and duties are the cash contribution from the government.

Numbers may not sum precisely because of rounding.

Source: ADB estimates.

Table 13: Project 3 and EIB Cofinancing Combined – Detailed Cost Estimates by Financier (US\$, million)

		OCR		ADF		EIB		Government				Total
Item		\$	%	\$	%	\$	%	Non-Tax	Tax	Total	%	Costs
A.	Investment Costs											
1	Civil Works	104.40	55.7%	0.00	0.0%	41.78	22.3%	10.01	31.15	41.16	22.0%	187.34
	a. Civil Works - NWSDB	32.61	71.4%	0.00	0.0%	0.00	0.0%	5.55	7.54	13.09	28.6%	45.70
	b. Civil Works - CMC ^a	71.80	50.7%	0.00	0.0%	41.78	29.5%	4.46	23.61	28.07	19.8%	141.64
2	Equipment	0.00	0.0%	0.60	75.6%	0.00	0.0%	0.00	0.19	0.19	24.4%	0.79
3	Resettlement	0.00	0.0%	0.00	0.00%	0.00	0.0%	0.53	0.00	0.53	100.0%	0.53
4	Project Management	0.00	0.0%	1.70	92.6%	0.00	0.0%	0.00	0.14	0.14	7.4%	1.84
	a. PMDS – NWSDB	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.00	0.00	0.00	0.0%	0.00
	b. PMDS – CMC	0.00	0.0%	1.20	89.8%	0.00	0.0%	0.00	0.14	0.14	10.2%	1.34
	c. Training and Workshops	0.00	0.0%	0.50	100.0%	0.00	0.0%	0.00	0.00	0.00	0.0%	0.50
	Subtotal (A)	104.40	54.8%	2.30	1.2%	41.78	21.9%	10.54	31.48	42.02	22.1%	190.50
B.	Recurrent Costs											
	Incremental Administrative											
1	Costs	3.00	56.4%	2.32	43.6%	0.00	0.0%	0.00	0.00	0.00	0.0%	5.32
	Subtotal (B)	3.00	56.4%	2.32	43.6%	0.00	0.0%	0.00	0.00	0.00	0.0%	5.32
	Total Base Cost	107.40	54.8%	4.62	2.4%	41.78	21.3%	10.54	31.48	42.02	21.5%	195.82
C.	Contingencies											
1	Physical Contingencies	5.38	34.9%	0.05	0.3%	4.22	27.4%	3.20	2.57	5.77	37.4%	15.41
2	Price Contingencies	4.36	51.8%	0.16	1.9%	1.67	19.8%	1.20	1.03	2.23	26.5%	8.42
	Subtotal (C)	9.75	40.9%	0.20	0.9%	5.89	27.7%	4.40	3.60	8.00	33.6%	23.84
D.	Financing Charges During Implementation											
1	Interest During Construction	5.29	71.2%	0.18	2.4%	1.96	26.4%	0.00	0.00	0.00	0.0%	7.43
2	Commitment Charges	0.56	59.8%	0.00	0.0%	0.38	40.2%	0.00	0.00	0.00	0.0%	0.93
	Subtotal (D)	5.85	69.9%	0.18	2.1%	2.34	28.0%	0.00	0.00	0.00	0.0%	8.36
	Total Project Cost (A+B+C+D)	123.0	53.9%	5.00	2.2%	50.00	21.9%	14.94	35.08	50.02	21.9%	228.02
	% Total Project Cost		53.9%		2.2%		21.9%				21.9%	100.0%

^a EIB financing will cover separate contracts, distinct from components and contracts funded under the ADB loan.

Note: Taxes and duties are the cash contribution from the government and ADB.

Numbers may not sum precisely because of rounding.

Audit costs are included under item 4.

Source: ADB estimates.

E. Detailed Cost Estimates by Outputs/Components

Table 14: Project 3 and EIB Cofinancing Combined – Detailed Cost Estimates by Outputs (US\$, million)

Table 1.1: Project 1 and 2B Commanding Combined Detailed Cost Estimates by Outputs (USD, million)												
		Output 1		Output 2		Output 3		Output 4		Output 5		Total
		NRW Project 1		NRW Project 2		Sewer Network		STP		Implementation Support		
Items		\$	%	\$	%	\$	%	\$	%	\$	%	Costs
A. Investment Costs												
1	Civil Works	31.76	17.0%	13.94	7.4%	97.26	51.9%	44.37	23.7%	0.00	0.0%	187.34
2	Equipment	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.79	100.0%	0.79
3	Resettlement	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.53	100.0%	0.00	0.0%	0.53
4	Project Management	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.00	0.0%	1.84	100.0%	1.84
	a. PMDS Consultancy	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.00	0.0%	1.34	100.0%	1.34
	b. Training and Workshops	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.00	0.0%	0.50	100.0%	0.50
	Subtotal (A)	31.76	16.7%	13.94	7.3%	97.26	51.1%	44.91	23.6%	2.63	1.4%	190.50
B. Recurrent Costs												
1	Incremental Administrative Costs	0.00	0.0%	3.00	56.4%	0.00	0.0%	0.00	0.0%	2.32	43.6%	5.32
	Subtotal (B)	0.00	0.0%	3.00	56.4%	0.00	0.0%	0.00	0.0%	2.32	43.6%	5.32
	Total Base Cost	31.76	16.2%	16.94	8.7%	97.26	49.7%	44.91	22.9%	4.95	2.5%	195.82
C. Contingencies												
1	Physical Contingencies	2.38	15.5%	1.05	6.8%	8.60	55.8%	3.33	21.6%	0.06	0.4%	15.41
2	Price Contingencies	0.72	8.6%	0.38	4.5%	4.60	54.6%	2.47	29.3%	0.26	3.0%	8.42
	Subtotal (C)	3.10	13.0%	1.43	6.0%	13.20	55.4%	5.80	24.3%	0.32	1.3%	23.84
D. Financing Charges During Implementation												
1	Interest During Construction	1.82	24.5%	0.38	5.2%	3.54	47.6%	1.51	20.3%	0.18	2.4%	7.43
2	Commitment Charges	0.12	13.4%	0.07	7.1%	0.56	60.3%	0.18	19.3%	0.00	0.0%	0.93
	Subtotal (D)	1.94	23.2%	0.45	5.4%	4.10	49.1%	1.69	20.2%	0.18	2.4%	8.36
	Total Project Cost (A+B+C+D)	36.80	16.1%	18.82	8.3%	114.56	50.2%	52.40	23.0%	5.44	2.4%	228.02
	% Total Project Cost	16.1%		8.3%		50.2%		23.0%		2.4%		100.0%

Note: Numbers may not sum precisely because of rounding.

Source: ADB estimates.

F. Detailed Cost Estimates by Year

Table 15: Project 3 and EIB Cofinancing Combined – Detailed Cost Estimates by Year (US\$, million)

Item		Total	2015	2016	2017	2018	2019	2020
A.	Investment Costs							
1	Civil Works	187.34	5.66	30.02	57.46	56.83	32.46	4.90
2	Equipment	0.79	0.00	0.00	0.00	0.40	0.40	0.00
3	Resettlement	0.53	0.00	0.27	0.27	0.00	0.00	0.00
4	Project Management	1.84	0.00	0.46	0.61	0.61	0.15	0.00
	a. Project Management and Design Supervision	1.34	0.00	0.33	0.45	0.45	0.11	0.00
	b. Training and Workshops	0.50	0.00	0.13	0.17	0.17	0.04	0.00
	Subtotal (A)	190.50	5.66	30.74	58.34	57.84	33.01	4.90
B.	Recurrent Costs							
	Incremental Administrative Costs	5.32	0.00	1.21	1.21	1.21	1.21	0.46
	Subtotal (B)	5.32	0.00	1.21	1.21	1.21	1.21	0.46
	Total Base Cost	195.82	5.66	31.95	59.55	59.05	34.23	5.37
C.	Contingencies							
1	Physical Contingencies	15.41	0.42	2.33	4.74	4.73	2.82	0.37
2	Price Contingencies	8.42	0.13	1.19	2.50	2.66	1.65	0.29
	Subtotal (C)	23.84	0.55	3.52	7.25	7.39	4.47	0.66
D.	Financing Charges							
1	Interest During Implementation	7.43	0.07	0.51	1.39	2.39	3.07	0.00
2	Commitment Charges	0.93	0.13	0.24	0.21	0.18	0.17	0.00
	Subtotal (D)	8.36	0.20	0.75	1.60	2.57	3.24	0.00
	Total Project Cost (A+B+C+D)	228.02	6.41	36.22	68.40	69.01	41.94	6.03
	% Total Project Cost	100.0%	2.8%	15.9%	30.0%	30.3%	18.4%	2.6%

Note: Numbers may not sum precisely because of rounding.

Source: ADB estimates.

G. Contract and Disbursement S-Curve

20. Figures 3, 4 5 and 6 show contract awards and disbursements for the OCR loan for NWSDB and CMC, and the ADF loan for CMC for Project 3, as well as EIB contract awards and disbursements, in terms of percentages for Project 3, based on the likely cumulative contract awards and disbursements.

Figure 3: S-Curve for OCR Loan of \$38 Million to NWSDB

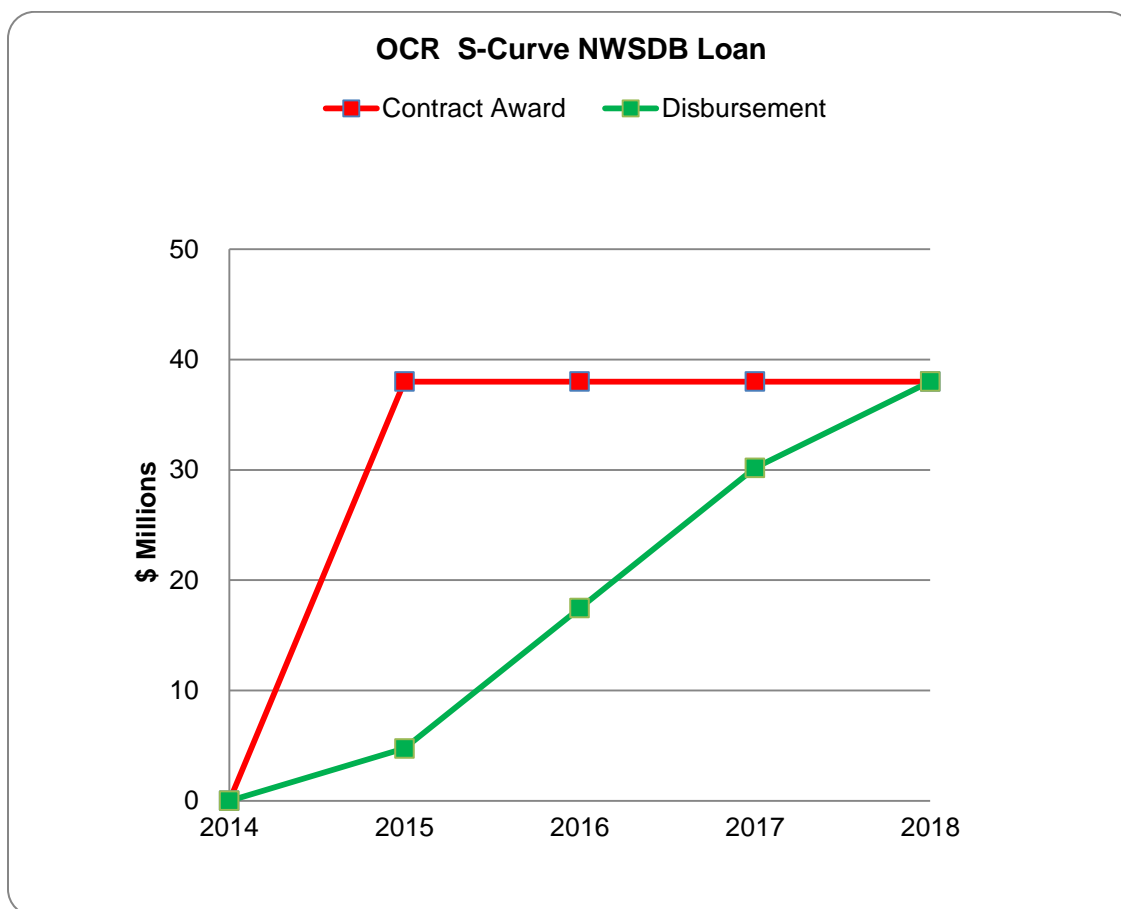


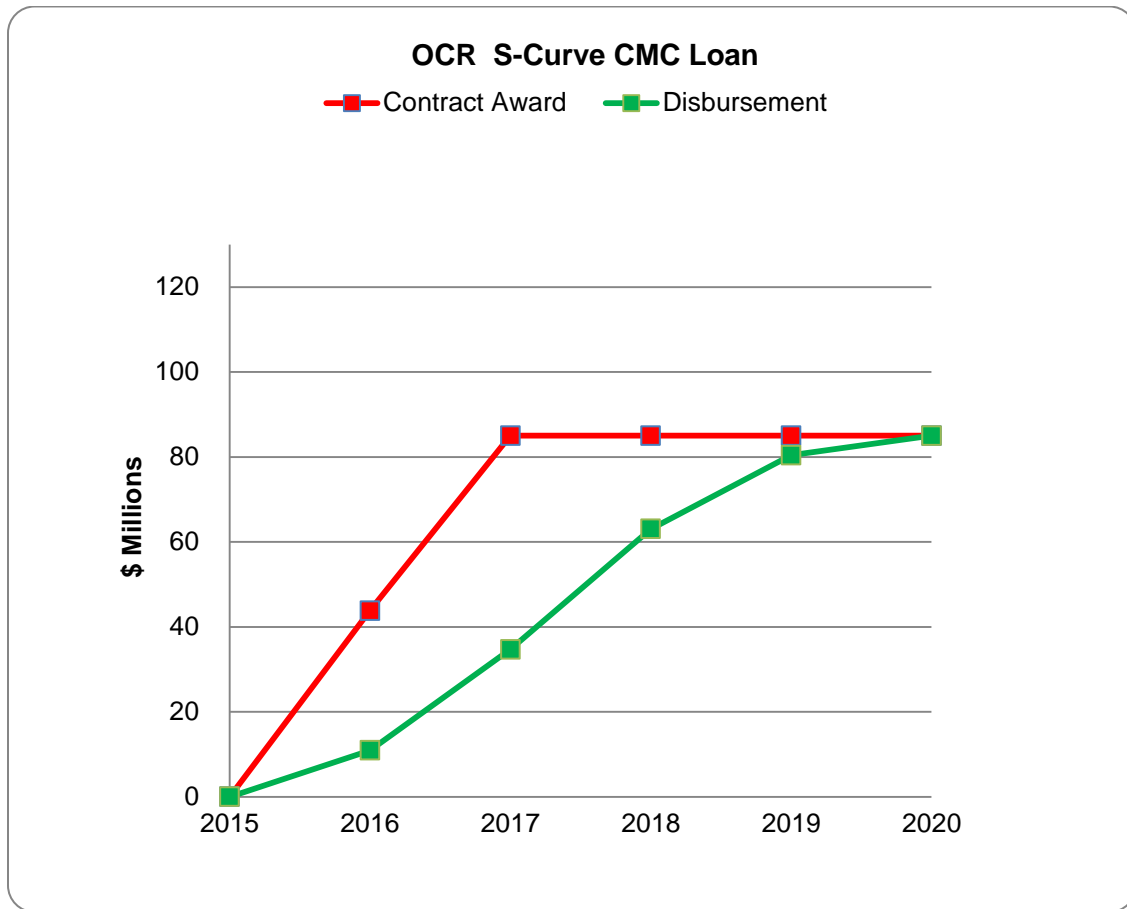
Figure 4: S-curve for OCR Loan of \$85 Million to CMC

Figure 5: S-curve for ADF loan of \$5 Million to CMC

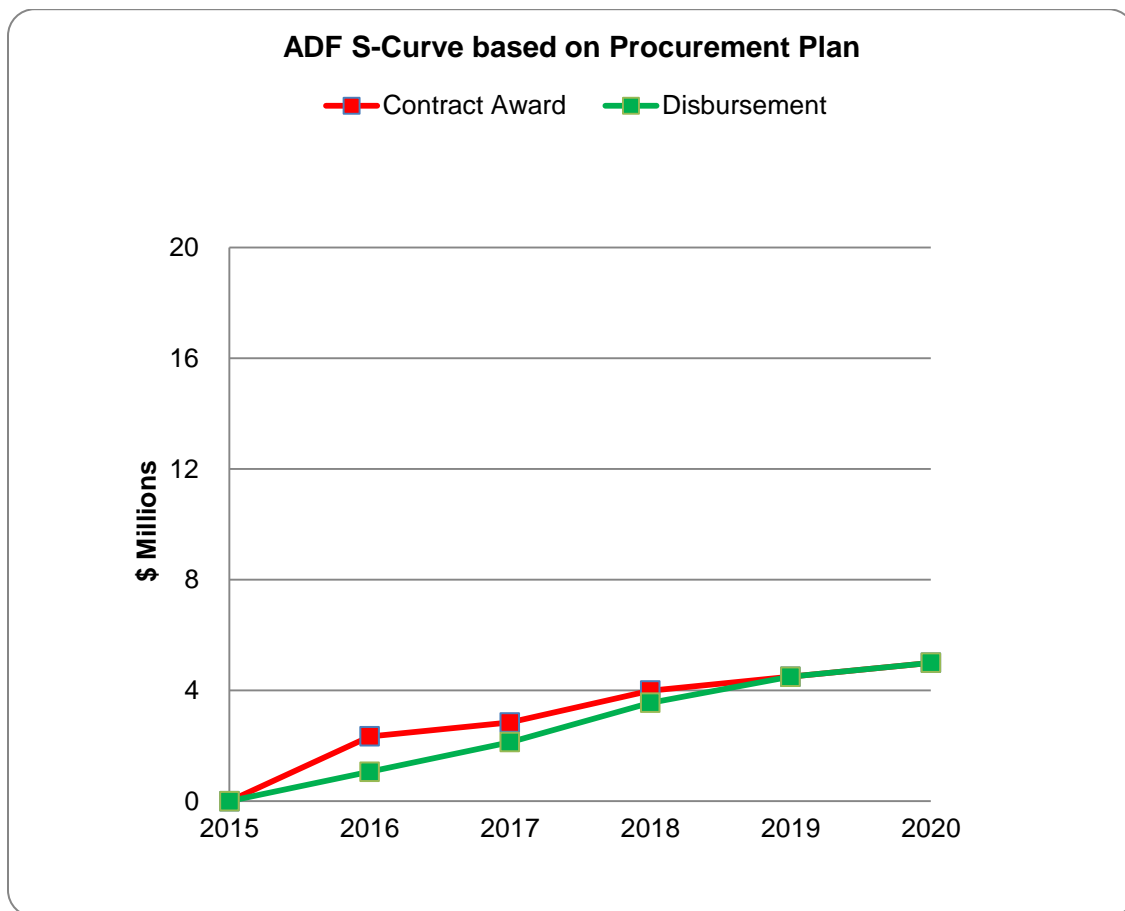


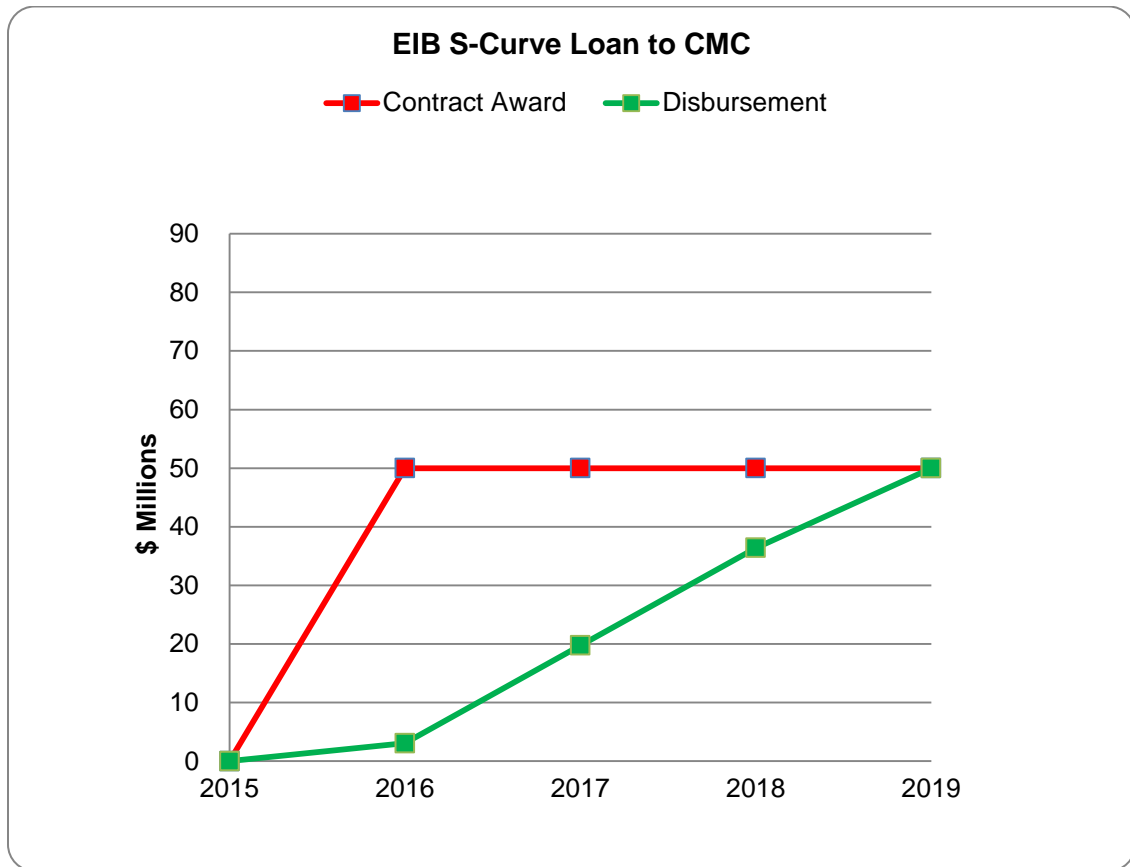
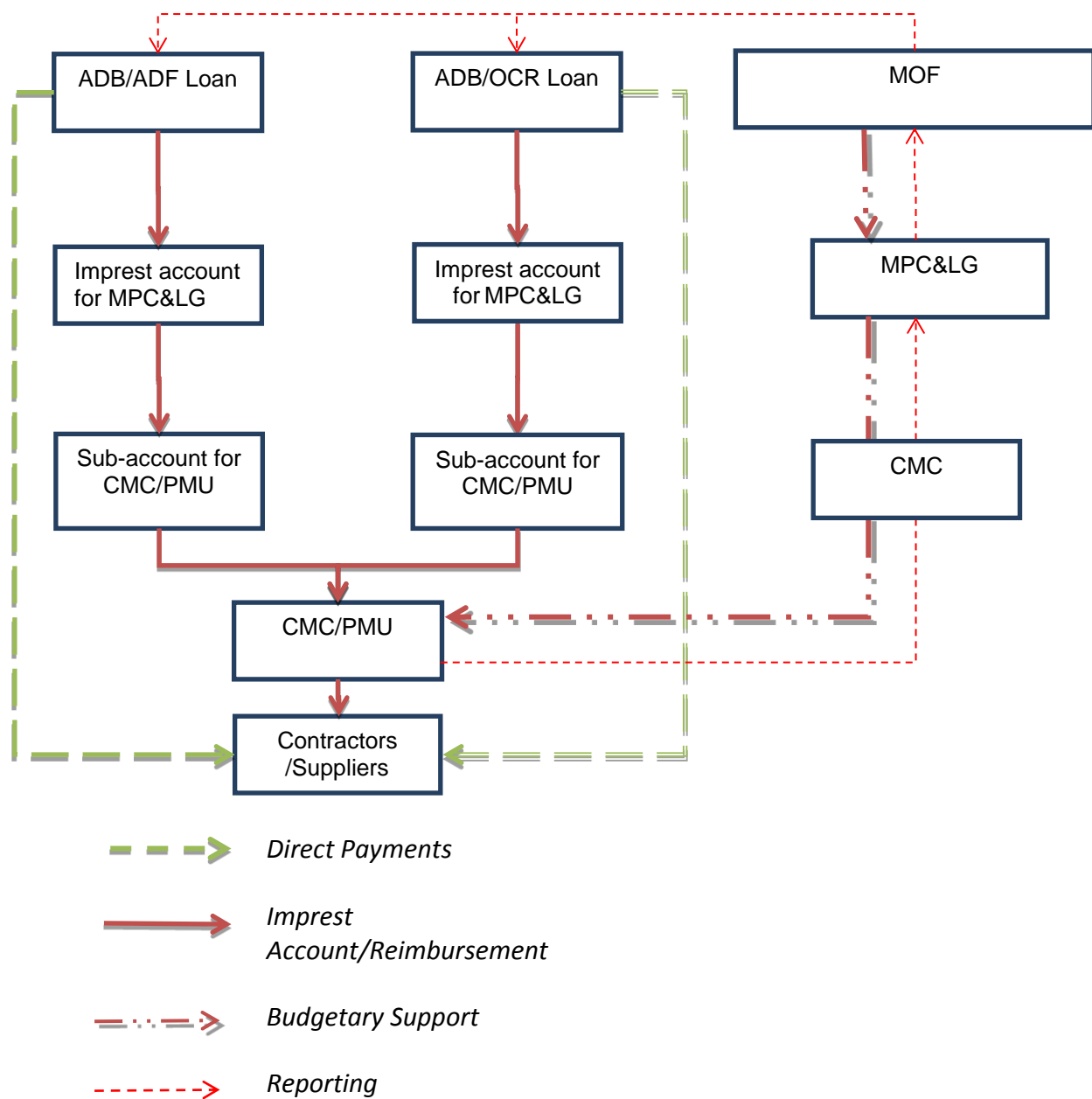
Figure 6: S-curve for EIB Loan of \$50 Million to CMC

Figure 8: Fund Flow from ADB to CMC

ADB = Asian Development Bank, ADF = Asian Development Fund, CMC = Colombo Municipal Council, MPC&LG = Ministry of Provincial Councils and Local Government, MOF = Ministry of Finance, OCR = Ordinary Capital Resources, PMU = program management unit.

V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

21. The financial management assessment (FMA) was conducted during the preparation for the Investment Program⁶ and updated during the preparation of Project 3 on the respective implementing agencies and their PMUs for the water supply service improvement project and the wastewater improvement project. A summary of the salient findings of the FMA and the progress by NWSDB and CMC, and proposed recommendations are summarized below.⁷ Although the overall financial management risk is rated as “Substantial”, due primarily to delays in availability of audited financial statements and control weaknesses indicated in the Audit Report, the implementing agencies have sufficient experience to manage externally-aid projects. Key risk areas include (i) delay by the Auditor General in completing annual audit of the project financial statements due under Project 1 for the fiscal year 2014, (ii) delays in the finalization and approval of the NWSDB financial statements for the fiscal year 2013 due to the change of financial reporting framework from a cash to accrual basis of accounting, (iii) control weaknesses identified by the auditor in the audit of the Audited Project Financial Statement for Project 1 for the FY 2013 NWSDB, and Audited Financial Statement of CMC for the FY 2013. Existing staff strength of PMU of both NWSDB and CMC finance and accounts section needs to be augmented for Project 3, and steps taken to resolve the audit observations and expedite completion and submission of the APFS and AFS. In addition, to enhance bill collection efficiency ratios, assessment of metering efficiency can be explored in the related CDTA.

Table 16: Findings of the FMA and the Proposed Recommendations for NWSDB and CMC

Risk Type	Risk Description	Risk Assessment	Proposed Mitigation Measures
1. Executing Entity	<ul style="list-style-type: none"> PMU's Finance Sections will be responsible for project FM, accounting and reporting. PMUs will continue to follow project FM and accounting systems. PMUs staff has donor project management experience –including ADB. 	Low	Not applicable
2. Funds Flow	<ul style="list-style-type: none"> NWSDB: Delays in allocation and release of funds by Treasury to PMU. Now the system has undergone a change for ongoing projects with Treasury issuing Project specific bonds of Rs. 60 million each to NWSDB Head Office which in turn will release funds for Project expenditure to PMU. CMC: No delays in release of funds for project to PMU. 	<p>Substantial</p> <p>Low</p>	<ul style="list-style-type: none"> Governments assurance to release the counterpart parts on timely basis PMU will manage overall project funds Direct Payment mechanism to be used as well
3. Staffing	<ul style="list-style-type: none"> NWSDB: PMU's Finance Section is adequately staffed with competent and experienced personnel. However for the implementation of Project 2 PMU has requested from NWSDB head office two additional staff, one 	Moderate	NWSDB head office to ensure induction of additional requested staff on timely basis.

⁶ ADB. 2012. *Report and Recommendation of the President on a Proposed Multitranchise Financing Facility to the Democratic Socialist Republic of Sri Lanka for the Greater Colombo Water and Wastewater Improvement Investment Program*. Facility Administration Manual. Manila.

⁷ Detailed financial management assessment report is available upon request.

Risk Type	Risk Description	Risk Assessment	Proposed Mitigation Measures
	accounts assistant and one accounts clerk. <ul style="list-style-type: none"> • CMC: Adequately staffed for the ongoing projects under implementation. However, the PMU has sought additional staff from CMC for the implementation of the Project 3. 	Moderate	CMC to ensure induction of additional requested staff on timely basis.
4. Accounting Policies and Procedures	<ul style="list-style-type: none"> • Policies and procedures are well documented. PMU use Government accounting standards. 	Low	Not applicable
5. Internal Audit	<ul style="list-style-type: none"> • Both the PMUs at NWSDB and CMC have in-house internal audit cell, although external auditors have highlighted lack of effectiveness 	Moderate	Not applicable.
6. External Audit (project level)	<ul style="list-style-type: none"> • CAG has the constitutional mandate to conduct external audits of donor funded projects. • Annual project audit reports were delayed by almost one year for the FY 2013 and are currently overdue by 3 months for the FY 2014. • Compliance reports are prepared and submitted in response to audit findings (paras) for disposal of the same. 	Moderate	APFS under Project 1 are already under audit, and are expected to be received by September 2015
7. External Audit (entity level)	<ul style="list-style-type: none"> • CAG conducts the audit of both PMUs at NWSDB and CMC. • Audit for FY 2013 and FY 2014 yet to be completed in case of NWSDB and FY 2014 in case of CMC. • Audit issues to be resolved within the agreed time frame. 	Substantial	NWSDB and CMC to ensure timely submission of APFS and redress of audit issues by the end of 2015 as per agreed time frame
8. Reporting and Monitoring	<ul style="list-style-type: none"> • Reporting systems are in place. • Routine reports are produced from the Accounting System • Shift from a cash to accrual basis of accounting has caused a delay in the finalization of the AFS for the FY 2013 	Moderate	Not applicable
9. Information Systems	<ul style="list-style-type: none"> • NWSDB PMU accounts are prepared on excel and not computerized. PMU send its financial figures to NWSDB head office where accounting system is fully computerized. • CMC PMU accounts are maintained manually and not computerized. PMU send its financial figures to CMC where accounting system is fully computerized. 	Moderate Moderate	Computerisation of NWSDB PMU accounts to be initiated and completed by the end of 2017. Computerisation of CMC PMU accounts to be initiated and completed by the end of 2018.
Overall Control Risk		Substantial	

ADB = Asian Development Bank, APFS = Audited Project Financial Statement, CMC = Colombo Municipal Council, FY = Fiscal Year, NWSDB = National Water Supply and Drainage Board, PMU = project management unit.

B. Disbursement

22. The loan proceeds will be disbursed in accordance with *ADB's Loan Disbursement Handbook* (2015, as amended from time to time), and detailed arrangements agreed upon between the Government and ADB. NWSDB and CMC will be responsible for: (i) preparing annual contract award and disbursement projections; (ii) requesting budgetary allocations for counterpart funds; (iii) collecting supporting documents; and (iv) preparing and sending withdrawal applications to ADB through Treasury, Ministry of Finance.

23. Project 3 will adopt the same disbursement procedures as Projects 1 and 2, i.e.: (i) direct payment, (ii) reimbursement, and (iii) and separate imprest accounts for disbursing OCR and ADF funds under Project 3. The following fund flow procedures have been agreed for NWSDB:

- (i) MCP&WS will establish and maintain separate imprest accounts for the OCR loan at the Central Bank of Sri Lanka. NWSDB will establish and maintain the corresponding sub-account for the respective OCR loan.
- (ii) NWSDB prepares and submits withdrawal applications to ADB through Treasury, MOF based on eligible project expenditures, on a monthly basis.

24. The following fund flow procedures have been agreed for CMC:

- (i) MPC&LG will establish and maintain separate imprest accounts for the ADF and OCR loans at the Central Bank of Sri Lanka. CMC will establish and maintain two corresponding sub-accounts for the ADF and OCR loans.
- (ii) CMC prepares and submits withdrawal applications to ADB through Treasury, MOF based on eligible project expenditures, on a monthly basis.
- (iii) Government provides 82.5% of ADB loan proceeds as grant and 17.5% of ADB loan proceeds to CMC at on-lending terms in accordance with relevant policies and consistent with the ADB loans.
- (iv) Government provides counterpart funds through budgetary support.

25. Separate imprest accounts shall be established, maintained and managed for each funding source. The currency of the imprest accounts is US dollars which shall be subsequently converted to Sri Lankan rupees when transferred to the sub-accounts. The executing agency who established the imprest account in its name is accountable and responsible for proper use of advances to the imprest account. The total outstanding advance to the imprest accounts should not exceed the estimate of ADB's share of expenditures to be paid through the imprest accounts for the forthcoming 6 months. The executing agency may request for initial and additional advances to the imprest accounts based on an Estimate of Expenditure Sheet⁸ setting out the estimated expenditures for the forthcoming 6 months. Supporting documents should be submitted to ADB or retained by the borrower/executing agency/implementing agency in accordance with *ADB's Loan Disbursement Handbook* (2015, as amended from time to time) when liquidating and replenishing the imprest accounts.

26. Statement of expenditures (SOE) procedure⁹ will be used for reimbursement of eligible expenditures or, liquidation of advances to, the imprest accounts. Supporting documents and records for the expenditures claimed under the SOE should be maintained and made readily available for review by ADB's disbursement and review mission, upon ADB's request for

⁸ Available in Appendix 10B of *ADB's Loan Disbursement Handbook*.

⁹ SOE forms are available in Appendix 9B of *ADB's Loan Disbursement Handbook*

submission of supporting documents on a sampling basis, and for independent audit. Salaries shall be claimed by the government through reimbursement.

27. Before the submission of the first withdrawal application, the borrower should submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the borrower, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is \$100,000 equivalent. Individual payments below this amount should be paid by the executing agency/implementing agency and subsequently claimed from ADB (i) through reimbursement; or (ii) from the imprest/sub-account, unless otherwise accepted by ADB.

28. Notwithstanding any other provision of the Loan Agreement, no withdrawals shall be made from OCR Loan Account by NWSDB until the NWSDB Subsidiary Financing Agreement, in form and substance satisfactory to ADB, shall have been duly executed and delivered on behalf of the Borrower and NWSDB, and shall have become legally binding upon the parties in accordance with its terms.

29. Notwithstanding any other provision of the Loan Agreement, no withdrawals shall be made from OCR and ADF Loan Accounts by CMC until the CMC Subsidiary Financing Agreement, in form and substance satisfactory to ADB, shall have been duly executed and delivered on behalf of the Borrower and CMC, and shall have become legally binding upon the parties in accordance with its terms.

C. Accounting

30. The implementing agencies will maintain separate project accounts and records by funding source for all expenditures incurred under each of the loans under the Investment Program. Each project's financial statements will adhere to generally accepted accounting principles followed in Sri Lanka and the accounting standards followed by the Government, NWSDB, and CMC.

D. Auditing

31. The implementing agencies will cause each of the project's annual financial statements, under the Project 3, to be audited in accordance with the standards prescribed by the Auditor General's Department of Sri Lanka, and those applicable to the Project 3, by Auditor General, whose qualifications, experience and terms of reference are acceptable to ADB. The audited financial statements, together with the auditors' report and management letter, will be submitted in the English language to ADB within 6 months following the end of the fiscal year of the implementing agencies for Project 3. Since the Project 3 has two same PMUs with Projects 1 and 2, and the implementation is overlapping, the combined project statement will be explored.

32. The annual audit report will include a separate opinion on (i) the use of the loan proceeds for the intended purpose of the project, (ii) the use of the imprest accounts and sub-accounts and the SOE procedures, and (iii) the compliance with all financial covenants of the Loan Agreement. The audit reports should include an assessment of the adequacy of the accounting and internal control systems, the ability to maintain proper and adequate records and documents in support of transactions, and the eligibility of incurred expenditure for ADB financing. ADB retains the right to: (i) review and examine any account; and (ii) verify the validity of the certification issued by the executing agency for each withdrawal application.

33. The audited project financial statements will be disclosed on ADB's website within 30 days of their receipt in accordance with ADB's Public Communications Policy (2011).

34. The government and the implementing agencies have been made aware of ADB's policy on delayed submission, and the requirements for satisfactory and acceptable quality of the audited accounts.¹⁰ ADB reserves the right to verify the projects' financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures. Further, any critical audit observations on the projects under the Project 3 should be reported to ADB and action taken also be monitored. ADB also requires submission of audited financial statements of the implementing agencies when they become available.

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting and Retroactive Financing

35. All advance contracting and retroactive financing will be undertaken in conformity with ADB's Procurement Guidelines (2015, as amended from time to time)¹¹ and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).¹² The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB's approval. The Government and executing agencies have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the project.

36. **Advance contracting.** Under Project 3, advance contracting of: (i) civil works, (ii) equipment and materials, and (iii) recruitment of nongovernment organization (NGO) consultants may be requested subject to these being eligible according to the agreed procedures and guidelines. Advance contracting would include: (i) tendering, and bid evaluation for civil works packages; (ii) preparation of tender documents for the procurement of materials and equipment; (iii) evaluation of bids; and (iv) recruitment of NGO consultants. The advance action for the consulting services, goods and works under Project 3 is listed in Table 17.

Table 17: Advance Actions for Consulting Services, Goods and Works under Project 2

Description of Consulting Services, Goods, Works	Advance Action To Be Taken
Consulting services (NGO and individuals)	Prepare and obtain approval for EOI and RFP document Request for EOI Evaluate EOIs Prepare and approve short list of consulting firms Issue RFP
Sewer rehabilitation and wastewater treatment plant in south catchment area of Colombo city (four civil works packages)	Prepare and approve bidding documents Conduct the bidding process
Equipment (office equipment and vehicles)	Conduct the bidding process

EOI= expression of interest, NGO = nongovernment organization, RFP= request for proposals.

37. **Retroactive financing.** Except as otherwise agreed with ADB, expenditures incurred for civil works, equipment and materials, project management and consulting services eligible for advance contracting will be eligible for retroactive financing of up to 20% of the proposed

¹⁰ Delay in submission of audited financial statements by 6 months will result in delay in processing of requests for new contract awards and disbursements. Delay in submission by 12 months will result in suspension of the loan.

¹¹ Available at: <http://www.adb.org/Documents/Guidelines/Procurement/Guidelines-Procurement.pdf>.

¹² Available at: <http://www.adb.org/Documents/Guidelines/Consulting/Guidelines-Consultants.pdf>.

amount of the loans incurred before the effectiveness of each loan, but not earlier than 12 months before the signing of the loan agreements.

B. Procurement of Goods, Works and Consulting Services

38. All procurement of goods and works will be undertaken in accordance with ADB's Procurement Guidelines (2015, as amended from time to time). The executing agencies and implementing agencies will prepare the bid documents for Project 3 with assistance from consultants. An NGO and individual consultants will be engaged for assessing the community needs related to wastewater services and conducting public educational campaign. The Design, Supervision and Institutional Development Consultants (DSIDC) for wastewater management recruited under Project 2 will work for the Project 3.¹³ All consultants will be recruited according to ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). It is estimated that the total consulting inputs under Project 3 as outlined above will be 1131 person months (5 international, and 1126 national).

C. Procurement Plan

39. The procurement plan provides: (i) a list of civil works, goods, and consulting services contract packages that will be processed under Project 3, with milestone dates for activities; (ii) the proposed methods of procurement of such contracts that are permitted under the respective loan agreements; and (iii) the related ADB review procedures. The contract packages in the procurement plan will be updated by the PMUs for approval by ADB. The procurement plan should be updated annually or more frequently if necessary. A delay in loan effectiveness, other start-up delays, and delays during implementation will require an unscheduled procurement plan update. ADB will review each updated procurement plan before its publication. When appropriate, this activity may be undertaken in the field by ADB missions working with the executing and implementing agencies. The procurement plan for Project 3 is in Appendix 3.

D. Consultant's Terms of Reference

40. The outline terms of reference (TOR) for NGO under Project 3 are in Appendix 4.

VII. SAFEGUARDS

A. Key Safeguard Documents

41. Pursuant to ADB's Safeguard Policy Statement (2009) (SPS), ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the SPS.

42. The following safeguard documents were prepared for the Investment Program in accordance with ADB's Safeguards Policy Statement (SPS, 2009) and government rules:

- (i) An environmental assessment and review framework (EARF), and
- (ii) A resettlement framework.

43. Consistent with the safeguards frameworks, Initial Environmental Examination (IEE) and Resettlement Plan were prepared for the wastewater investments under Project 3.

¹³ The consultancy work time will be within program implementation period.

B. Implementation Arrangements

44. **NWSDB PMU.** For water supply investments, the NWSDB will be responsible for ensuring the implementation of environmental and social safeguards. The PMU will consist of a social development officer and an environmental officer. These persons will be supported by one environmental specialist and one resettlement specialist in the consultant's package, to ensure compliance with all safeguard requirements. Detailed tasks are given below.

45. **CMC PMU.** For wastewater improvements in the CMC area, the PMU in CMC will be responsible for ensuring the implementation of environmental and social safeguards. The PMU will consist of a sociologist and an environmental officer. These persons will be supported by environmental and resettlement specialists from the DSIDC to be recruited for the wastewater components and will ensure compliance with all safeguard requirements. Detailed tasks are given below.

46. The executing agency will provide all the necessary logistic support (vehicle, computers, support staff, etc.) to the PMUs in the activities related to environmental and social safeguard implementation and monitoring. The implementing agencies will ensure that bidding and contract documents include specific provisions requiring contractors to comply with all (i) applicable labor laws and core labor standards on (a) prohibition of child labor as defined in national legislation for construction and maintenance activities, on (b) equal pay for equal work of equal value regardless of gender, ethnicity, or caste, and on (c) elimination of forced labor; and (ii) the requirement to disseminate information on sexually transmitted diseases including HIV/AIDS to employees and local communities surrounding the project sites.

C. Environmental Safeguards

47. In accordance to the EARF,¹⁴ an IEE has been prepared for Outputs 3 and 4 based on preliminary design and will be updated during detailed design stage. The environmental management plan (EMP) in the IEE includes (i) mitigation measures for environmental impacts during implementation; (ii) an environmental monitoring program, and the responsible entities for mitigating, monitoring, and reporting; (iii) public consultation and information disclosure; and (iv) a grievance redressal mechanism (GRM). The IEE will be disclosed in a language and form understandable by stakeholders and affected people. Consultations with stakeholders and affected people will be undertaken to ensure their views/issues are addressed throughout project implementation. The EMP will be implemented and monitored during construction, commissioning, defects liability period and for design-build operate (DBO) contract, including operation stage. Semi-annual environmental monitoring reports will be sent to ADB for review and disclosure on ADB's website. The EARF will guide the preparation of environmental safeguard documents of components identified after ADB approval.

48. **PMU.** The PMU will be responsible for implementing and monitoring safeguards compliance activities, public relations activities, gender mainstreaming activities, and community participation activities and will have an environmental officer who will be responsible for safeguards functions. The environmental officer will be responsible for:

- (i) confirming that the IEE is included in the bidding and contract documents;
- (ii) confirming that the IEE and the EMP/s are updated by the consultants during detailed design;

¹⁴ An Environmental Assessment and Review Framework (EARF) was prepared during the preparation of the Investment Program to guide the environmental assessment, implementation and monitoring of future tranches.

- (iii) providing oversight on environmental management aspects of project and ensuring that the EMPs are supervised by consultants and implemented by contractors;
- (iv) facilitating and confirming overall compliance with all government rules and regulations regarding site and environmental clearances as well as any other environmental requirements, as relevant;
- (v) supervising and providing guidance to the design and supervision consultants and contractors for the proper implementation of the EMP;
- (vi) reviewing, monitoring and evaluating all indicators in the EMPs, assessing the effectiveness with which the EMPs are implemented, and recommending necessary corrective actions;
- (vii) reviewing and consolidating the monthly environmental monitoring reports from the consultants and contractors;
- (viii) submitting semiannual monitoring reports to ADB in the agreed format;
- (ix) ensuring the timely disclosure of the final IEE/s and EMP/s and contact information in locations and in a form accessible to the public;
- (x) establishing a grievance redressal mechanism as outlined in the IEEs and addressing grievances in a timely manner;
- (xi) conducting environmental awareness programs and consultations ensuring views and issues of stakeholders and affected people are addressed; and
- (xii) before the designs of wastewater treatment plants are commenced, carry out the environmental and archaeological impact assessments as required by government rules and regulations.

49. **Civil Works Contracts.** The IEE will be included in bidding and contract documents. Contractors will carry out all environmental mitigation and monitoring measures outlined in their contract. Consultants will support the PMU in monitoring the contractor's activities.

D. Involuntary Resettlement

50. For the CMC wastewater investments, a draft resettlement plan of Project 3 has been prepared for south catchment area of Colombo city. The resettlement plan will be finalized and updated following the completion of the final detailed design. The cost related to resettlement/rehabilitation and livelihood restoration will be borne by the Government. The PMUs will ensure that any physically or economically affected persons are compensated prior to displacement in sections ready for construction. The following are institutional roles and responsibilities to ensure resettlement plan is implemented during design and construction stages.

51. The social development & safeguards officers in the PMUs will:

- (i) ensure that the resettlement framework provisions are adhered to and the Resettlement Plan for South Catchment of Colombo city is updated based on detailed designs;
- (ii) engage in ongoing meaningful consultations with stakeholders and affected persons particularly through implementation of the consultation and participation plan;
- (iii) review, approve, implement and monitor the resettlement plans with support from the consultants;
- (iv) provide timely relocation, rehabilitation assistance and payments to affected persons before displacement occurs in sections and project sites ready for construction;

- (v) ensure all grievances are addressed and when necessary activate the Grievance Redressal Committee;
- (vi) in the event of unanticipated impacts occurring during construction take corrective actions where necessary, inform ADB and prepare corrective action plans for ADB review and approval,
- (vii) conduct monitoring of the resettlement process to ensure smooth implementation, and
- (viii) consolidate monthly reports by resettlement specialists in DSIDC and submit semi-annual monitoring reports to ADB. The monitoring reports should record the progress of resettlement activities and any compliance issues, grievances, corrective actions taken, follow-up actions required and status of compliance with relevant loan covenants.¹⁵

52. The implementing agencies will provide all the necessary logistic support (vehicle, computers, support staff etc.) to the PMUs' social development and safeguard officers in carrying out the related activities for environmental and social safeguard implementation and monitoring.

53. **Project Grievance Redressal Mechanism.** The PMUs' social development and safeguards officers will establish the GRM, assisted by DSIDC for the Project 3, including for the safeguards, and disclose it to the affected communities and households prior the mobilization of contractors in any subproject areas. The PMUs' social development and safeguards officers, supported by the project NGO, will be responsible for timely grievance redressal on environmental and social safeguards issues and responsible for registration of grievances, related disclosure and communication with the aggrieved party. Contact details, procedures and complaint mechanisms will be disclosed to the project affected communities at accessible locations and through various media (i.e. leaflets, newspapers, etc.). Appendices 6, 7 and 8 provide samples of a draft project leaflet, Grievance Registration Form (GRF) and monitoring template.

54. **Capacity Building.** PMUs' social development and safeguards officers will be further trained by DSIDC's Resettlement Specialist on safeguards issues of the Project 3. The targeted participants of safeguards briefings by the consultants would be CMC PMU staff, as well as the project NGOs. Briefings on safeguards will also be provided to contractors upon their mobilization by DSIDC.

55. **Civil Works Contracts.** The CMC will ensure that bidding and contract documents include specific provisions requiring contractors to comply with all (i) applicable labor laws and core labor standards on (ii) prohibition of child labor as defined in national legislation for construction and maintenance activities, on (iii) equal pay for equal work of equal value regardless of gender, ethnicity or caste, on (iv) elimination of forced labor, and (v) the requirement to disseminate information on sexually transmitted diseases including HIV/AIDS to employees and local communities surrounding the Project sites. The gender action plan (GAP) with the contractors' responsibilities highlighted, will be included in the bidding and contract documents, verified by the PMUs. Contractors will carry out all environmental and social mitigation and monitoring measures outlined in their contract. DSIDC will assist the PMU in monitoring contractor's compliance activities.

¹⁵ Outline of semiannual monitoring report is in Appendix 10 of the PAM.

VIII. GENDER AND SOCIAL DIMENSIONS

56. Project 3 including EIB cofinancing subprojects is classified as Effective Gender Mainstreaming (EGM). A GAP has been prepared for Project 3 to ensure that gender equality measures are put in place while implementing project activities. The gender and social dimensions of the project will be overseen by the social development and safeguards officer in the PMUs and implemented with the support of the project NGOs. There will be one NGO, covering Project 3 wastewater activities. The NGO will provide implementation support as outlined in its respective TOR, primarily in the following: (i) implementation of the GAP for Project 3, (ii) leading community outreach and health and sanitation awareness efforts; formation of wastewater user groups within low-income communities in Colombo city for monitoring and maintenance of operation at the community level; (iii) mobilization of existing community wastewater groups in Colombo city for wastewater user charge collection and operation and maintenance of community level facilities, if any; (iv) implementing WASH campaign in south catchment area of Colombo city, and (iv) providing overall capacity support to CMC. The PMUs' budget includes operational budget for consultation and outreach meetings, including grievance redressal, in addition to awareness building, which includes organizing workshops, training programs etc. related to gender sensitization and social dimensions of the project. The PMUs will work closely with and coordinate the activities of the DSIDC and the NGO to ensure effective implementation of social and gender dimensions of the project. The consultation and participation plan (see Appendix 5) will be implemented by the PMUs, NGO, DSIDC. The TOR of the NGO is in Appendix 4.

GENDER ACTION PLAN for PROJECT 3

Activity	Targets and Indicators	Responsibility	Duration
Output 1: Rehabilitated and Expanded Water Supply System and Reduced NRW in the Northeast Part of Colombo City (financing gap for Project 1):			
<ul style="list-style-type: none"> • See GAP in Project 1* • Assess the implementation of the GAP of Project 1 to identify and act on areas needing improvement 	<ul style="list-style-type: none"> • See GAP in Project 1 • Areas of Project 1 GAP implementation that need improvement identified and acted upon 	NWSDB PMU NGO	Throughout the Project
Output 2: Rehabilitated and Expanded Water Supply System and Reduced NRW in the Southwest Part of Colombo City (financing gap for Project 2):			
<ul style="list-style-type: none"> • See GAP in Project 2** • Assess the implementation of the GAP of Project 2 to identify and act on areas needing improvement 	<ul style="list-style-type: none"> • See GAP in Project 2 • Areas of Project 2 GAP implementation that need improvement identified and acted upon 	NWSDB PMU NGO	Throughout the Project
Output 3: Rehabilitated and Expanded Wastewater Network in South Catchment Area of Colombo City:			
<ul style="list-style-type: none"> • Use sex-disaggregated socio-economic and health data and data on sanitation practices, needs and preferences of women and men in underserved or low income settlements • Focus Group discussions and key informant interviews with women community leaders to understand the existing issues/problems with regards to wastewater/sewerage disposal in their households/residential areas. • Document the possible and desired roles to be played by the women leaders in unserved areas and underserved settlements and general women during the project detailed designs and implementation period 	<ul style="list-style-type: none"> • Detailed designs based on surveys and/or consultations with underserved or low income communities (including BPL and FHH) to be included in the service areas • List of key women leaders in each section of the road where sewerage pipes are newly installed, identify at least 50% of the leaders in low income communities (Wattas/community gardens) • List of problems expressed by women leaders as issues to be solved with regards to their sanitary, wastewater and health concerns. • List of roles preferred by women leaders to play during design and implementation period of the project implemented in their localities • Women leaders motivated to establish informal groups to monitor the performance of installed wastewater pipe lines in their residential areas and interact with CMC field/ward level officers to get their problems solved. 	CMC PMU DSIDC/NGO	Detailed design/implementation phases
<ul style="list-style-type: none"> • Link all underserved or low income settlements (including all BPL and FHH households) in project areas to the proposed wastewater system 	<ul style="list-style-type: none"> • Detailed designs include provisions for house service connections and connections to community sanitation facilities in all underserved/low income settlements in project area • Developed and conducted awareness and motivational training sessions in unserved areas for the communities to take interest to connect their sewerage disposal to the common sewerage network established under the project. • Identify most critical members who cannot afford to pay the initial capital to get the connections and provide them funding support through existing government programs/subsidies. 	CMC PMU DSIDC/NGO	Detailed design /Implementation stages
Output 4: Secondary Wastewater Treatment Plant Constructed in South Catchment Area of Colombo City:			
<ul style="list-style-type: none"> • Recruitment of female staff for the O&M of wastewater treatment plant 	<ul style="list-style-type: none"> • At least 10% of the O&M staff in the plant is female and assignments are based on merits/capabilities and preferences rather than on gender stereotyped activities. • 100 % of the female staff are included in the initial training sessions conducted for the O&M staff of the WWTP (Baseline: NA) 	CMC	Immediately after the establishment of the WWTP

Activity	Targets and Indicators	Responsibility	Duration
<ul style="list-style-type: none"> Increased awareness of the key stakeholders /community leaders on the need of secondary treatment 	<ul style="list-style-type: none"> Use FGDs and other meetings and training sessions conducted for Project 3 activities to highlight the needs of the secondary treatment and its impacts (at least 50% of the gatherings adopted when this principle are attended by women representing key stakeholders) 	CMC, PMU, DSIDC, NGO	Throughout the project period
Output 5: Strengthened institutional structure and capacity of service providers			
<ul style="list-style-type: none"> Training and capacity building of 100 CMC staff for the management of wastewater system 	<ul style="list-style-type: none"> Women make up 25% of participants in the training for the management of wastewater system (Baseline: 0) 	CMC and PMU	
<ul style="list-style-type: none"> Recruit women engineers and engineering assistants for the PMU for project implementation 	<ul style="list-style-type: none"> Women make up at least 25% of the PMU professional staff (baseline 2012: Male =16 and Female 2 (11%)) 	CMC/DSIDC	Throughout the project
<ul style="list-style-type: none"> Introduce institutional reforms in the wastewater unit and include targets for women in staff recruitment 	<ul style="list-style-type: none"> Women make up 40% of Wastewater staff (baseline 2012: Total staff=142; Female=56 (39%) and Male=87 (61%)) Women hold 15% of managerial positions (Baseline: 10%) 	CMC Wastewater Unite and PMU	Throughout the project
<ul style="list-style-type: none"> Encourage CMC to recruit women field officers to work in the low income areas 	<ul style="list-style-type: none"> At least 1 woman field officer recruited for each unserved area covered by the project (Kirulapone, Narahenpita and Kirula) 	CMC/ CMC PMU and DSIDC	Throughout the project period
<ul style="list-style-type: none"> Design and implement a city-wide awareness campaign, using multiple communication channels. This will include gender analysis of different levels of awareness and acceptance between women and men 	<ul style="list-style-type: none"> Awareness campaign of wastewater tariff among citizens increased by 80% before and after Project 3 emphasizing shared responsibility of men and women in water management and conservation and in sanitation and health (target: 50% women participation in FGDs) (2013 Baseline: 20%) Scope of assessment will be indicated, e.g. sample survey of project target areas 	CMC PMU DSIDC	Throughout the project
<ul style="list-style-type: none"> Implement a water sanitation and hygiene (WASH) program in 229 low-income communities in the south part of Colombo city through an NGO 	<ul style="list-style-type: none"> Both men and women make up at least 50% of participants in WASH-related awareness activities 	CMC PMU NGO	Throughout the project
<ul style="list-style-type: none"> Assist communities to develop participatory and informal systems for monitoring the performance of small sewerage pipelines and manholes in their localities and interact with CMC district engineer's offices 	<ul style="list-style-type: none"> Simple and informal participatory system for monitoring the performance of small sewerage pipelines and manholes in their localities and coordinating with CMC district engineer's offices developed (target: 50% of community leaders who designed and manage the monitoring system are women) 	DSIDC/CMC PMU and CMC	Throughout the project period

BPL= below poverty line, CMC = Colombo Municipal Council, DSIDC = Design Supervision and Institutional Development Consultant, FHH= female headed household, NGO = nongovernment organization, NRW = nonrevenue water, NWSDB = National Water Supply and Drainage Board, O&M = operation and maintenance, PMU = project management unit, USS= under-served settlements (USS); WASH = water, sanitation, and hygiene; water user groups (WUGs).

*, ** NGO recruitment was delayed due to delays in recruiting supervision consultants and the limited capacity of PMU staff to manage NGO recruitment. NGO recruitment has commenced and is currently under way.

Source: Asian Development Bank.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

A. Project Design and Monitoring Framework

57. The design and monitoring framework (DMF) for Project 3 is in Appendix 1.

B. Monitoring

58. The Program steering committee will be the highest authority responsible for monitoring and providing policy directions on: (i) critical implementation issues and interdepartmental coordination; (ii) implementation of the institutional reform agenda; (iii) compliance with the FFA and the loan covenants; and (iv) compliance with social and environmental safeguards. The PMUs will establish a program performance monitoring system (PPMS) for water supply and wastewater investments, which will cover:

- (i) Project performance monitoring;
- (ii) Compliance monitoring; and
- (iii) Safeguards, gender and social dimension monitoring.

59. **Project performance monitoring.** Disaggregated baseline data for impact, outcome, and output indicators, in accordance with the DMF for the Project 3, will be established by the executing or implementing agency within 6 months from the date the loan under the MFF takes effect, for water supply and wastewater services, and will be updated by the executing and implementing agencies. Roles and responsibilities for monitoring project performance will also be defined when the PPMS is established and agreed with ADB. Similarly, the executing and implementing agencies will define the structure and responsibilities of the compliance monitoring team and submit these for ADB's no objection at the time of setting the PPMS, in accordance with the covenants in the FFA and the loan and project agreements.

60. **Safeguards, gender, and social dimension monitoring.** The structure and responsibilities of the safeguards, gender and social dimension monitoring team are summarized in Table 18. Safeguards monitoring requirements and the report formats are included in the safeguard plans and frameworks. The PMUs and NGO will be involved in the regular monitoring of the GAP and the consultation and participation strategy and report at least semi-annually to ADB on the progress of GAP implementation.

Table 18: Safeguards, Gender and Social Dimension Monitoring

Task Team	Responsibility
Project directors, PMUs (NWSDB and CMC)	Oversee project implementation and ensure smooth implementation of activities related to social development and safeguards.
Social development, PMU (NWSDB)	Manage overall day-to-day social development, gender monitoring and safeguard -related activities in NWSDB components.
Environment Officer, PMU (NWSDB)	Manage overall day-to-day environmental safeguard activities in NWSDB components.
Environment officer, PMU (CMC)	Manage overall day-to-day environmental safeguard activities in CMC components.
Resettlement officer, PMU (CMC)	Manage overall day-to-day social development, gender monitoring and social safeguard activities in CMC components.
Public relations officer, PMU (NWSDB and CMC)	Manage awareness generation and consultation and participation activities.

Task Team	Responsibility
NGO for assessing of community needs related to wastewater services and conducting public education Campaign	Implement key activities in TOR related to social development, community participation, and outreach.

CMC= Colombo Municipal Council, PMU = program management unit, NGO= nongovernment organization, NWSDB = National Water Supply and Drainage Board, TOR= terms of reference.

61. **Safeguards monitoring.** The PMUs will submit separate semiannual safeguard monitoring reports (SMR) on environment and social safeguards to ADB, which will be disclosed on ADB's website. The SMRs will be prepared by the PMUs safeguards officers, with inputs from the DSIDC and consultant specialists and the project NGO. The status of safeguards implementation, issues, and corrective actions are to be clearly reported to ADB. The status of safeguards implementation will also be discussed at each ADB review mission and with necessary issues and agreed actions recorded in Aide Memoires.

C. Evaluation

62. **Regular review.** The PPMS will be aimed at detecting any deficiency or discrepancy between the plan and the execution of the Project 3 in order to ensure that timely corrections can be made in Project 3. DSIDC will assist the PMU in monitoring and evaluating the project, which involves evaluating the causes of deficiency or discrepancy between the planned and the execution, aligning by the PPMS, proposing corrective measures, and seeking policy guidance from the PSC if the matter is still unresolved. Evaluation will take place at four different levels at different intervals:

- (i) Implementing agencies through the PMUs (monthly);
- (ii) Executing agencies through the PMUs (quarterly);
- (iii) Program Steering Committee (semi-annually); and
- (iv) ADB (annually).

63. **Mid-term reviews.** In addition, a mid-term review of Project 3 will be undertaken during the implementation period of Project 3. The mid-term review will evaluate in detail the scope of the Project 3, implementation arrangements, and any outstanding issues (environment and resettlement, as well as safeguards issues), achievement of scheduled targets, contract management progress, and other issues as appropriate, and generate agreement on any changes that may be needed.

D. Reporting

64. The PMUs will provide ADB, MCP&WS and/or MPC&LG and NWSDB and/or CMC with (i) quarterly progress reports in a format consistent with ADB's project performance reporting system; (ii) consolidated semi-annual monitoring reports (for resettlement, environment and gender monitoring);¹⁶ (iii) consolidated annual reports including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions; (c) updated procurement plan; and (d) updated implementation plan for next 12 months at the end of every calendar year; and (iv) a project completion report within 6 months of physical completion of the project. To ensure that the project continues to be both viable and sustainable, project accounts and the audited financial statements of the executing agencies, together with the associated auditor's reports, should be adequately reviewed.

¹⁶ A project gender action plan (GAP) implementation matrix (which updates the status of progress in the GAP table format) should be included in the semi-annual reports from executing agency to ADB. GAP reports should be included in the regular semi-annual reports submitted to ADB.

E. Stakeholder Communication Strategy

65. The objective of the communication strategy is to: (i) promote awareness on water supply and wastewater projects during implementation; (ii) secure participation of the community in all stages of project planning and implementation; (iii) establish a two-way flow of information and dialogue with directly involved stakeholders to integrate their concerns and increase support and involvement in the project; and (iv) secure participation of stakeholders including quality professionals and contractors in project implementation. The Communication Strategy includes a media-based awareness campaign, web disclosures and direct communication through meetings and consultations. The Consultation and Participation Plan (CPP), included in Appendix 5 of the PAM, also identifies consultation and disclosure activities to be undertaken and the institutions responsible for the same. Budget for implementing the Communication Strategy and CPP are incorporated into the project budget.

X. ANTICORRUPTION POLICY

66. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the project.¹⁷ All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all the project contractors, suppliers, consultants and other service providers. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the project.¹⁸

67. To support these efforts, relevant provisions are included in the loan agreement, project agreement and the bidding documents for the project. In particular, all contracts financed by ADB in connection with the project will include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all contractors, suppliers, consultants, and other service providers as they relate to the project.

XI. ACCOUNTABILITY MECHANISM

68. People who are, or may in the future be, adversely affected by the project may address complaints to ADB, or request the review of ADB's compliance under the Accountability Mechanism.¹⁹ The project, with assistance from DSIDC, will establish a GRM and a project website,²⁰ for the Project 3, to ensure greater accountability. Within 12 months of loan effectiveness, PMUs will prepare a Grievance Redress Mechanism, acceptable to ADB, and establish a special committee to receive and resolve complaints/grievances or act upon reports from stakeholders on misuse of funds and other irregularities, including grievances due to resettlement. The special committee will (i) make public the existence of this Grievance Redress Mechanism; (ii) review and address grievances of project stakeholders, in relation to either the project, any of the service providers, or any person responsible for carrying out any aspect of the project; and (iii) proactively and constructively responding to them.

¹⁷ Available at: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>.

¹⁸ ADB's Integrity Office web site is available at: <http://www.adb.org/integrity/unit.asp>.

¹⁹ For further information see: <http://compliance.adb.org/>.

²⁰ CMC with the help of DSIDC will prepare the project website.

XII. RECORD OF PAM CHANGES

69. The first draft of PAM was prepared and agreed upon at the loan fact-finding mission. The current draft is as agreed at the time of consideration by the ADB management.

APPENDIX 1: DESIGN AND MONITORING FRAMEWORK FOR PROJECT 3**Impact the Project is aligned with**

Water supply and wastewater service and management in Greater Colombo improved (*Vision for a New Sri Lanka, 2010–2020⁹*)

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome System efficiency and financial sustainability of water supply and wastewater services in Colombo improved.	a. NRW in Colombo city reduced to 20% (2013 Baseline: 49%). b. Collection of wastewater through sewerage network increased by 9% by 2020 (2015 Baseline: 80%). c. Access to sewage system in south catchment area of Colombo increased to 95% by 2020 including all below poverty line households (including female headed households among them) (2012 Baseline: 65%).	a. NWSDB water balance audit b. CMC annual reports c. CMC annual reports	The implementation of wastewater tariff as agreed by the Government is delayed
Outputs 1. Water supply system rehabilitated and expanded, and NRW reduced in northeast part of Colombo city (including funding the financing gap for Project 1). 2. Water supply system rehabilitated and expanded, and NRW reduced in southwest part of Colombo city (including funding the financing gap for Project 2). 3. Wastewater system rehabilitated and expanded in south catchment area of Colombo.	In addition to supporting the outputs under DMF for Project 1, 1a. Numbers of DMAs increased to 26 from 19 as conceived under project 1 ^b by 2018. 1b. Area of engineering office increased from 800 m ² to 1400 m ² by 2018 (Baseline: 0). In addition to supporting the outputs under DMF for Project 2, 2a. Numbers of DMAs increased to 26 from 19 as conceived under project 2c by 2018 2b. One new pump station constructed by 2018. 3a. Length of sewer network in south catchment area of Colombo rehabilitated and expanded by 29.4 km by 2020 (2014 baseline: 146.6 km).	1a. NWSDB annual report 1b. NWSDB annual report 2a. NWSDB annual report 2b. NWSDB annual report 3a. CMC and nongovernment organization annual reports	1. Key project officials changed during the project period. 2. Prices of pipes and construction materials increase beyond projections and/or contingency allocations

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
4. Secondary wastewater treatment plant constructed in south catchment area of Colombo.	3b. 18,904 additional households in south catchment area are benefited with sewage facilities by 2020. (Target: 20% of new beneficiaries are from poor households in the unserved areas, of which 50% headed by women) (2013 Baseline: NA).	3b. PPMS	
	3c. Two pump stations rehabilitated in south catchment area of Colombo by 2020 (2015 baseline: NA).	3c. PPMS	
	4a. Secondary wastewater treatment capacity in south catchment area increased by 50,000 cubic meters/day by 2020 (2012 Baseline: 0).	4a. PPMS	
	4b. At least 10% of WWTP staff are women (2013 Baseline: NA).	4b. CMC annual reports	
5. Institutional structure and capacity of service providers strengthened.	5a. GIS-based asset management system for wastewater system established and operated by wastewater unit of CMC by 2020 (Baseline: NA).	5a. CMC annual reports	
	5b. A separate wastewater unit established and fully operational within CMC by 2020 (2015 Baseline: 0).	5b. CMC annual reports	
	5c. Training and capacity building provided to 100 CMC staff of which 25% are female professionals (2015 Baseline: NA).	5c. Survey conducted by the project consultants	
	5d. Outreach activities conducted to reach a target of 80% of population of Colombo city, emphasizing shared responsibility of men and women in wastewater management with 50% women participation in focus group discussions (2013 Baseline: 20%).	5d. CMC annual reports	
	5e. Volumetric sewerage tariff approved and collection initiated by CMC by 2016 (Baseline: NA).	5e. CMC annual reports	

Key Activities with Milestones

- 1. Water supply system rehabilitated and expanded, and NRW reduced, in northeast part of Colombo city**
 - 1.1. Complete construction designs of civil works contracts by Q4 2015.
 - 1.2. Provide the NRW teams with vehicles, tools, equipment, and training, and mobilize the teams for active leakage control by Q2 2016.
 - 1.3. Establish seven additional DMAs by Q4 2017.
 - 1.4. Replace or upgrade all service connections and meters by Q4 2017.
- 2. Water supply system rehabilitated and expanded, and NRW reduced in southwest part of Colombo city**
 - 2.1. Complete procurement of civil works contract by Q4 2015.
 - 2.2. Provide the NRW teams with vehicles, tools, equipment, and training, and mobilize the teams for active leakage control by Q2 2016.
 - 2.3. Establish seven additional DMAs by Q4 2018.
 - 2.4. Replace or upgrade all service connections and meters by Q4 2018.
- 3. Wastewater system rehabilitated and expanded in south catchment area of Colombo**
 - 3.1. Issue tender documents for unserved Kirilapona sewage network by Q3 2015.
 - 3.2. Design, Supervision and Institutional Development Consultants mobilized by Q3 2015.
 - 3.3. Issue tender documents for rehabilitation of sewer network and pump stations by Q1 2016.
 - 3.4. Complete procurement of civil works contract for Kirilapona by Q2 2016.
 - 3.5. Complete procurement of civil works contract for rehabilitation of sewer network and pump stations by Q3 2016.
 - 3.6. 100% households in south catchment area (including below poverty line households and female headed households) are connected to new sewer system in 2020 [EGM].
- 4. Secondary wastewater secondary treatment plant constructed in south catchment area of Colombo**
 - 4.1. Prepare the bidding document for the DBO of the WWTP by Q4 2015.
 - 4.2. Complete the WWTP DBO bidding process by Q4 2016 [private sector development].
 - 4.3. Build the secondary wastewater treatment plant in south catchment by Q2 2019 [private sector development].
- 5. Institutional structure and capacity of service providers strengthened**
 - 5.1. Approve and start the awareness and media campaign, including outreach through television and radio program, and focus group discussion designs by Q4 2015 [EGM].
 - 5.2. Institutionalize reforms to have separated wastewater unit by Q2 2016.
 - 5.3. Complete training of CMC staff (both men and women) on project implementation by Q2 2016 [EGM].
 - 5.4. Approve sustainable tariff system for CMC, together with formulation of implementation strategy/mechanism to include legal and institutional provisions, by Q4 2016.
 - 5.5. Update GIS wastewater system for Colombo by Q4 2018.
 - 5.6. Complete training of CMC staff in managing the operation contract of the DBO contractor by Q1 2019 [EGM].
 - 5.7. Institutional reforms pertaining to Procurement and Project Management Divisions of CMC are implemented for the management of the operation contract for the wastewater treatment plant by Q3 2019.

Inputs

Asian Development Bank: \$128.00 million loan
 Government: \$ 47.45 million

Assumptions for Partner Financing

European Investment Bank cofinancing (\$50.00 million) is providing parallel cofinancing and these funds will not administered by Asian Development Bank. Parts of Output 3 being financed by European Investment Bank that are necessary to reach the outcome include: (i) rehabilitation, replacement, repair and cleaning of sewer reticulation system of 15.61 km in south catchment area of Colombo to address sewer damages, blockages and siltation problems, under-capacity issues and realignment needs; and (ii) laying 6.22 km of sewer network and the construction of three pump stations to cover two other un-served areas in the south catchment area of Colombo

CMC = Colombo Municipal Council, DBO = design, build and operate, DMA = District Metered Area, EGM = effective gender mainstreaming, GIS = geographic information system, km = kilometer, m² = square meter, NRW = nonrevenue water, NWSDB = National Water Supply and Drainage Board, PPMS = project performance management system, WWTP = wastewater treatment plant.

^a Government of Sri Lanka. 2010. *Vision for a New Sri Lanka, 2010–2020*, Colombo.

Note: The distribution of network has been realigned to form more DMAs in the same service areas.

Source: Asian Development Bank.

Impact the Project is aligned with

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Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
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Outputs 1. Water supply system rehabilitated and expanded, and NRW reduced in northeast part of Colombo city (including funding the financing gap for Project 1). 2. Water supply system rehabilitated and expanded, and NRW reduced in southwest part of Colombo city (including funding the financing gap for Project 2). 3. Wastewater system rehabilitated and expanded in south catchment area of Colombo.	In addition to supporting the outputs under DMF for Project 1, 1a. Numbers of DMAs increased to 26 from 19 as conceived under project 1 ^b by 2018. 1b. Area of engineering office increased from 800 m ² to 1400 m ² by 2018 (Baseline: 0). In addition to supporting the outputs under DMF for Project 2, 2a. Numbers of DMAs increased to 26 from 19 as conceived under project 2c by 2018 2b. One new pump station constructed by 2018. 3a. Length of sewer network in south catchment area of Colombo rehabilitated and expanded by 29.4 km by 2020 (2014 baseline: 146.6 km).	1a. NWSDB annual report 1b. NWSDB annual report 2a. NWSDB annual report 2b. NWSDB annual report 3a. CMC and nongovernment organization annual reports	1. Key project officials changed during the project period. 2. Prices of pipes and construction materials increase beyond projections and/or contingency allocations

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
4. Secondary wastewater treatment plant constructed in south catchment area of Colombo.	3b. 18,904 additional households in south catchment area are benefited with sewage facilities by 2020. (Target: 20% of new beneficiaries are from poor households in the unserved areas, of which 50% headed by women) (2013 Baseline: NA).	3b. PPMS	
	3c. Two pump stations rehabilitated in south catchment area of Colombo by 2020 (2015 baseline: NA).	3c. PPMS	
	4a. Secondary wastewater treatment capacity in south catchment area increased by 50,000 cubic meters/day by 2020 (2012 Baseline: 0).	4a. PPMS	
	4b. At least 10% of WWTP staff are women (2013 Baseline: NA).	4b. CMC annual reports	
5. Institutional structure and capacity of service providers strengthened.	5a. GIS-based asset management system for wastewater system established and operated by wastewater unit of CMC by 2020 (Baseline: NA).	5a. CMC annual reports	
	5b. A separate wastewater unit established and fully operational within CMC by 2020 (2015 Baseline: 0).	5b. CMC annual reports	
	5c. Training and capacity building provided to 100 CMC staff of which 25% are female professionals (2015 Baseline: NA).	5c. Survey conducted by the project consultants	
	5d. Outreach activities conducted to reach a target of 80% of population of Colombo city, emphasizing shared responsibility of men and women in wastewater management with 50% women participation in focus group discussions (2013 Baseline: 20%).	5d. CMC annual reports	
	5e. Volumetric sewerage tariff approved and collection initiated by CMC by 2016 (Baseline: NA).	5e. CMC annual reports	

Key Activities with Milestones**1. Water supply system rehabilitated and expanded, and NRW reduced, in northeast part of Colombo city**

- 1.5. Complete construction designs of civil works contracts by Q4 2015.
- 1.6. Provide the NRW teams with vehicles, tools, equipment, and training, and mobilize the teams for active leakage control by Q2 2016.
- 1.7. Establish seven additional DMAs by Q4 2017.
- 1.8. Replace or upgrade all service connections and meters by Q4 2017.

2. Water supply system rehabilitated and expanded, and NRW reduced in southwest part of Colombo city

- 2.5. Complete procurement of civil works contract by Q4 2015.
- 2.6. Provide the NRW teams with vehicles, tools, equipment, and training, and mobilize the teams for active leakage control by Q2 2016.
- 2.7. Establish seven additional DMAs by Q4 2018.
- 2.8. Replace or upgrade all service connections and meters by Q4 2018.

3. Wastewater system rehabilitated and expanded in south catchment area of Colombo

- 3.1. Issue tender documents for unserved Kirilapona sewage network by Q3 2015.
- 3.2. Design, Supervision and Institutional Development Consultants mobilized by Q3 2015.
- 3.3. Issue tender documents for rehabilitation of sewer network and pump stations by Q1 2016.
- 3.4. Complete procurement of civil works contract for Kirilapona by Q2 2016.
- 3.5. Complete procurement of civil works contract for rehabilitation of sewer network and pump stations by Q3 2016.
- 3.6. 100% households in south catchment area (including below poverty line households and female headed households) are connected to new sewer system in 2020 [EGM].

4. Secondary wastewater secondary treatment plant constructed in south catchment area of Colombo

- 4.1. Prepare the bidding document for the DBO of the WWTP by Q4 2015.
- 4.2. Complete the WWTP DBO bidding process by Q4 2016 [private sector development].
- 4.3. Build the secondary wastewater treatment plant in south catchment by Q2 2019 [private sector development].

5. Institutional structure and capacity of service providers strengthened

- 5.1. Approve and start the awareness and media campaign, including outreach through television and radio program, and focus group discussion designs by Q4 2015 [EGM].
- 5.2. Institutionalize reforms to have separated wastewater unit by Q2 2016.
- 5.3. Complete training of CMC staff (both men and women) on project implementation by Q2 2016 [EGM].
- 5.4. Approve sustainable tariff system for CMC, together with formulation of implementation strategy/mechanism to include legal and institutional provisions, by Q4 2016.
- 5.5. Update GIS wastewater system for Colombo by Q4 2018.
- 5.6. Complete training of CMC staff in managing the operation contract of the DBO contractor by Q1 2019 [EGM].
- 5.7. Institutional reforms pertaining to Procurement and Project Management Divisions of CMC are implemented for the management of the operation contract for the wastewater treatment plant by Q3 2019.

Inputs

Asian Development Bank: \$128.00 million loan
Government: \$ 47.45 million

Assumptions for Partner Financing

European Investment Bank cofinancing (\$50.00 million) is providing parallel cofinancing and these funds will not administered by Asian Development Bank. Parts of Output 3 being financed by European Investment Bank that are necessary to reach the outcome include: (i) rehabilitation, replacement, repair and cleaning of sewer reticulation system of 15.61 km in south catchment area of Colombo to address sewer damages, blockages and siltation problems, under-capacity issues and realignment needs; and (ii) laying 6.22 km of sewer network and the construction of three pump stations to cover two other un-served areas in the south catchment area of Colombo

CMC = Colombo Municipal Council, DBO = design, build and operate, DMA = District Metered Area, EGM = effective gender mainstreaming, GIS = geographic information system, km = kilometer, m² = square meter, NRW = nonrevenue water, NWSDB = National Water Supply and Drainage Board, PPMS = project performance management system, WWTP = wastewater treatment plant.

^a Government of Sri Lanka. 2010. *Vision for a New Sri Lanka, 2010–2020*, Colombo.

Note: The distribution of network has been realigned to form more DMAs in the same service areas.

Source: Asian Development Bank.

APPENDIX 2: DETAILED PROJECT DESCRIPTION FOR PROJECT 3 INCLUDING EUROPEAN INVESTMENT BANK COFINANCING SUBPROJECTS

A. Output 1: Rehabilitated and Expanded Water Supply System and Reduced NRW in the Northeast Part of Colombo City (financing gap for Project 1):

1. In addition to supporting the outputs under Project 1, the additional financing will support the following:

- (i) Formation of 7 additional district metered areas (DMAs) in the northeast part of Colombo city; and
- (ii) Increasing the area of the area engineer's office from 800 m² to 1,400 m².

B. Output 2: Rehabilitated and Expanded Water Supply System and Reduced NRW in the Southwest Part of Colombo City (financing gap for Project 2):

2. In addition to supporting the outputs under Project 2, the additional financing will support the following:

- (i) Formation of 7 additional district metered areas (DMAs) in the southwest part of Colombo city;
- (ii) Enhancement of training facility
- (iii) Construction of a new pump station at Ellie house instead of rehabilitation of 5 existing pump stations; and
- (iv) Support for enhancing project preparation and increasing project readiness.

C. Output 3: Rehabilitated and Expanded Wastewater System in South Catchment Area of Colombo City (ADB and EIB):

3. To achieve this output, Project 3 will support the following:

- (i) Laying of 7.31 km of sewer lines of diameters ranging from 300 mm to 1,200 mm to replace problematic sewer lines by using open cut (5.66 km) and trenchless (1.65 km) methods respectively in the south catchment area. Work also includes replacement of 88 manholes by new pre-cast reinforced concrete manholes and cleaning of 1.25 km of sewer lines;
- (ii) Laying of 6.75 km of sewer lines of diameters ranging from 300mm to 750mm to upsize the under-capacity sewer lines in the CBD by using trenchless method in the south catchment area. The work also includes the construction of 108 pre-cast reinforced concrete manholes;
- (iii) Cleaning and repairs of 0.30 km of sewer lines of diameter 300mm to cater to UDA developments in the south catchment area;
- (iv) Cleaning and repairs of three inverted siphons in the south catchment area;
- (v) Construction of the sewerage network in Kirulapona unserved area of 2.36 km² and connecting it to the S8 pump station of the existing Colombo Sewerage System. The work will include the laying of 29.4 km of pipe lines of diameters ranging from 225 mm to 1,200 mm using both open cut and trenchless technologies, construction of 756 precast reinforced concrete manholes, construction of two pump stations and two force mains, and the rehabilitation of S8 pump station with the provision of new electro-mechanical equipment and carrying out repairs (civil works);
- (vi) Construction of sewerage networks in Narahenpita unserved area of 0.08 km² and connecting this to a manhole in the existing Colombo Sewerage System.

- The work will include the laying of 1.33 km of pipe lines of diameters ranging from 225 mm to 300 mm using open cut method, construction of 34 precast reinforced concrete manholes and connection to existing CS17 main sewer; and
- (vii) Construction of sewerage networks in Kirula-Narahenpita unserved area of 0.79 km² and connecting this to the existing Colombo Sewerage System via a small pump station. The works will include the laying of 4.89 kms of pipe lines with diameters ranging from 225 mm to 600 mm using open cut method, construction of 72 precast reinforced concrete manholes and the construction of a small pump station connecting to Thibirigasyaya pump station of the existing Colombo Sewerage Network through a 0.90 km long force main.

D. Output 4: Constructed Secondary Wastewater Treatment Plant in South Catchment Area of Colombo City:

- (i) Construction of 50,000 m³/day capacity secondary wastewater treatment plant at Wellawatta on a Design-Build-Operate basis. The works will include supply and installation of all Electro-Mechanical equipment and SCADA system. Dewatered sludge shall be disposed at the municipal landfill.

E. Output 5: Strengthened Institutional Structure and Capacity of Service Providers

4. To achieve this output, Project 3 will support the following:
- (i) Set-up a separate wastewater unit within CMC for the management of the wastewater collection and treatment system;
 - (ii) Establishment of GIS-based asset management system for wastewater system, which shall be established and operated by the wastewater unit;
 - (iii) Strengthening of CMC's staff and institutional capacity for increased operational efficiency in wastewater management;
 - (iv) Awareness of wastewater tariff among citizens and emphasizing shared responsibility of men and women in wastewater management;
 - (v) Training and capability building to improve the operating performance of CMC; and
 - (vi) Starting the collection of volumetric sewerage tariff in the CMC area.

APPENDIX 3: PROCUREMENT PLAN FOR PROJECT 3¹

Basic Data

Project Name: Greater Colombo Water and Wastewater Management Improvement Investment Program – Project 3	
Project Number:	Approval Number:
Country: Sri Lanka	Executing Agency: Ministry of Provincial Councils and Local Government
Project Procurement Classification: B	Implementing Agency: Colombo Municipal Council
Project Procurement Risk: (high, substantial, moderate, low)	
Project Financing Amount: US\$ 112.83	Project Closing Date: 2020
ADB Financing: US\$ 90 million	
Non –ADB (Government) Financing: US\$ 22.83 million	
Date of First Procurement Plan: October 2015	Date of this Procurement Plan: 30 October 2015

A. Methods, Thresholds, Review and 18-Month Procurement Plan

1. Procurement and Consulting Methods and Thresholds

1. Except as the Asian Development Bank (ADB) may otherwise agree, the following process thresholds shall apply to procurement of goods and works

Procurement of Goods, Works and Services

Method	Threshold	Comments
International Competitive Bidding (ICB) for Works	US\$ 15,000,000 and above	Prior review
International Competitive Bidding for Goods	US\$ 2,000,000 and above	Prior review
National Competitive Bidding (NCB) for Works	From US\$ 100,000 to US\$ 14,999,999	The first NCB is subject to prior review, thereafter post review.
National Competitive Bidding for Goods	From US\$ 100,000 to US\$ 1,999,999	The first NCB is subject to prior review, thereafter post review.
Shopping for Works	Below US\$ 100,000	
Shopping for Goods/Services	Below US\$ 100,000	

Consulting Services

Method	Comments
Quality- and Cost-Based Selection for Consulting Firm	Prior review
Quality-Based Selection for Consulting Firm	Prior review
Individual Consultants Selection	Prior review

2. Goods and Works Contracts Estimated to Cost \$1 Million or More

2. The following table lists goods and works contracts for which the procurement activity is either ongoing or expected to commence within the next 18 months.

¹ This procurement plan does not include the additional financing for Project 1 and Project 2. The procurement plan for additional financing see procurement plans for Project 1 and Project 2 respectively.

Package Number	General Description	Estimated Value	Procurement Method	Review (Prior/ Post)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
CW1	Establishing new sewer network for unserved Kirulapone area including rehabilitation of S8 pumping station	39.29	ICB	Prior	1S2E	Q3/2015	ADB
CW2	Secondary Wastewater Treatment Plant including rehabilitation of Wellawatte pumping station	36.96	ICB	Prior	1S2E	Q1/2016	DBO/ADB

3. Consulting Services Contracts Estimated to Cost \$100,000 or More

3. The following table lists consulting services contracts for which the recruitment activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value	Recruitment Method	Review (Prior/ Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
NA							

4. Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000 (Smaller Value Contracts)

4. The following table lists smaller-value goods, works and consulting services contracts for which the activity is either ongoing or expected to commence within the next 18 months.

Goods and Works

Package Number	General Description	Estimated Value	Number of Contracts	Procurement Method	Review (Prior/ Post)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
GD1	Office Equipment	0.4	6	Shopping	Post		Q3/2017	ADB
GD2	Vehicle for PMU operation	0.2	1	NCB	Prior		Q1/2016	ADB
BSS1	Business support system for PPP of WWTP	0.7	2	NCB	Prior		Q4/2016	ADB

Consulting Services

Package Number	General Description	Estimated Value	Number of Contracts	Recruitment Method	Review (Prior/ Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
C1	NGO	0.5		QCBS			BTP	ADB
C2	Individual Consultants	0.5					BTP	ADB

QCBS – Quality and Cost Based Selection BTP – Bio Data Technical Proposal

B. Indicative List of Packages Required Under the Project

5. The following table provides an indicative list of goods, works and consulting services contracts over the life of the project, other than those mentioned in previous sections (i.e., those expected beyond the current period).

Goods and Works

Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Review (Prior/Post)	Bidding Procedure	Comments
None	None						

Consulting Services

Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Review (Prior/Post)	Type of Proposal	Comments
None	None						

ICB = International competitive bidding, NCB = National Competitive bidding, QCBS = Quality and cost based /selection, 1S – 2E = single stage two envelope, 1S – 1E = single stage one envelope, PMU = project management unit,

C. List of Awarded and On-going, and Completed Contracts

6. The following tables list the awarded and on-going contracts, and completed contracts.

1. Awarded and On-going Contracts

Goods and Works							
Package Number	General Description	Estimated Value	Awarded Contract Value	Procurement Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award ^a	Comments ^b
CW1	Establishing new sewer network for unserved Kirulapone area including rehabilitation of S8 pumping station	39.29		ICB	Q3/2015		

^a Date of ADB Approval of Contract Award is the date of No-Objection letter to the executing agency/implementing agency.

^b Indicate the Contractor's name and the contract signing date.

Consulting Services							
Package Number	General Description	Estimated Value	Awarded Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award ^a	Comments ^b
None							

^a Date of ADB Approval of Contract Award is the date of No-Objection letter to the executing agency/implementing agency.

^b Indicate the Consulting Firm's name and the contract signing date.

2. Completed Contracts

Goods and Works									
Package	General	Estimated	Contract	Procurement	Advertise	Date of	Date of		Comments

Number	Description	Value	Value	Method	ment Date (quarter/ year)	ADB Approval of Contract Award ^a	Completion ^b	
None								

^a Date of ADB Approval of Contract Award is the date of No-Objection letter to the executing agency/implementing agency

^b The Date of Completion is the physical completion date of the contract.

Consulting Services								
Package Number	General Description	Estimated Value	Contract Value	Recruitment Method	Advertisement Date (quarter/ year)	Date of ADB Approval of Contract Award ^a	Date of Completion ^b	Comments
None								

^a Date of ADB Approval of Contract Award is the date of No-Objection letter to the executing agency/implementing agency

^b The Date of Completion is the physical completion date of the contract.

D. Non-ADB Financing

7. The following table lists goods, works and consulting services contracts over the life of the project, financed by Non-ADB sources.

Goods and Works				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Comments
Rehabilitation and upsizing of sewers in problem areas, new developments in CBD area and in UDA sponsored high-rise housing development areas (CW3)	30.78	1	ICB	Administered by EIB, with with publication in the Official Journal of the EU.
Establishing new sewer network in unserved areas of Narahenpita and Kirula-Narahenpita (CW4)	11.00	1	ICB	Administered by EIB, with with publication in the Official Journal of the EU.

Consulting Services				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Comments
None				

E. National Competitive Bidding

1. Regulation and Reference Documents

8. The procedures to be followed for national competitive bidding shall conform to the provisions prescribed in the *Procurement Guidelines 2006 for Goods and Works* issued in January 2006 by the National Procurement Agency, and the specific procedures prescribed by

the *Procurement Manual* issued in March 2006, with the clarifications and modifications described in the following paragraphs required for compliance with the provisions of the ADB Procurement Guidelines.

2. Procurement Procedures

a. Eligibility

9. The eligibility of bidders shall be as defined under Section I of ADB's Procurement Guidelines (2015, as amended from time to time) (the "Guidelines"); accordingly, no bidder or potential bidder should be declared ineligible for reasons other than those provided in Section I of the Guidelines.

b. Registration and Sanctioning

10. Registration is acceptable under the following conditions:

- (i) Bidding shall not be restricted to pre-registered firms under the national registration system of the Construction Industry Development Authority (CIDA), and such registration shall not be a condition for the submission of bids in the bidding process.
- (ii) Where registration is required prior to award of contract, bidders: (i) shall be allowed a reasonable time to complete the CIDA registration process; and (ii) shall not be denied registration for reasons unrelated to their capability and resources to successfully perform the contract, which shall be verified through post-qualification.
- (iii) National sanction lists or blacklists may be applied only with prior approval of ADB.

c. Prequalification

11. Prequalification is discouraged for NCB. When used, particularly for works contracts, an individual prequalification exercise is acceptable for each contract as is the use of a registration system (or approved standing list) of contractors based on criteria such as experience, financial capacity, and technical capacity. Foreign bidders from eligible countries must, however, be allowed to register and to bid without unreasonable cost or additional requirements.

d. Advertising

12. The posting of NCB specific notices for contracts valued at less than \$1 million on ADB's website is not required but is highly recommended.

e. Preferences

13. The following shall be observed:

- (i) The Borrower may grant a margin of preference in the evaluation of bids under international competitive bidding for domestically manufactured Goods.
- (ii) .
- (iii) Foreign suppliers and contractors from ADB member countries shall be allowed to bid, without registration, licensing, and other government authorizations,

leaving compliance with these requirements for after award and before signing of contract.

f. Participation by Government-Owned Enterprises

14. Government-owned enterprises in the Democratic Socialist Republic of Sri Lanka shall be eligible to participate only if they can establish that they are legally and financially autonomous, operate under commercial law, and are not a dependent agency of the procuring entity, or the Project Executing Agency or Implementing Agency.

g. Rejection of Bids and Rebidding

15. Bids shall not be subjected to a test for unrealistic rates. No lowest evaluated and substantially responsive bid shall be rejected on the basis of comparison to rates, including but not limited to market, historical, or agency established rates, without prior approval of ADB.

16. Bids shall not be rejected and new bids solicited without the ADB's prior concurrence.

h. Price Negotiations

17. Price negotiation shall be allowed only where the price offered by the lowest evaluated and substantially responsive bidder substantially exceeds costs estimates. Approval of ADB is required prior to any negotiation of prices.

3. Bidding Documents

a. Acceptable Bidding Documents

18. Procuring entities shall use standard bidding documents acceptable to ADB for the Procurement of Goods, Works and Consulting Services, based ideally on the standard bidding documents issued by ADB.

b. Bid Security

19. Where required, bid security shall be in the form of a certified check, a letter of credit or a bank guarantee from a reputable bank.

c. ADB Policy Clauses

20. A provision shall be included in all NCB works and goods contracts financed by ADB requiring suppliers and contractors to permit ADB to inspect their accounts and records and other documents relating to the bid submission and the performance of the contract, and to have them audited by auditors appointed by ADB.

21. A provision shall be included in all bidding documents for NCB works and goods contracts financed by ADB stating that the Borrower shall reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question.

22. A provision shall be included in all bidding documents for NCB works and goods contracts financed by ADB stating that ADB will declare a firm or individual ineligible, either indefinitely or for a stated period, to be awarded a contract financed by ADB, if it at any time determines that the firm or individual has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices or any integrity violation in competing for, or in executing, ADB-financed contract.

APPENDIX 4: OUTLINE OF THE TERMS OF REFERENCE OF NONGOVERNMENT ORGANIZATION FOR PROJECT 3 AND EUROPEAN INVESTMENT BANK CONTRACTUAL COFINANCING

A. Introduction

1. The Greater Colombo Water and Wastewater Management Improvement Investment Program - Project 3 (GCWWMIP) provides financing gap for the rehabilitation and expansion of the water supply system and supports the reduction in nonrevenue water (both tranche 1 and tranche 2); supports the rehabilitation and expansion in wastewater collection and treatment, and strengthening of institutional structure and service capacity in Greater Colombo.

2. The project also intends to recruit one nongovernment organization (NGO) to carry out: (i) socio-economic analysis, social inclusion, gender mainstreaming and assessment of wastewater service delivery; (ii) resettlement assistance; (iii) community awareness and people's participation; (iv) citizens' education for wastewater service management, health and hygiene education etc.

B. Project Area

3. The NGO activities will be conducted within the South catchment of the Colombo sewerage system. The South catchment covers an area of 22.17 sq.km comprising 52,343 households with residence total population of 236,983 (2012 Census). The housing stock has a mixed development with underserved settlements located in low lying areas and along the eastern boundary of the catchment. The South catchment area is distributed among 4 drainage districts for administrative purposes, namely, Colombo East, Colombo West, Borella (part of), and Colombo Central B (part of). The south catchment area comes under the purview of the Divisional Secretariat Division of Thimibirigasyaya.

C. Counterpart Agency

4. The selected NGO will work closely in collaboration with CMC; NGO will carry out the activities under the supervision of Project Management Unit (PMU) and Design Supervision and Institutional Development Consultant (DSIDC) working closely with the social development and safeguards officer of the PMU.

D. Duration of Work

5. Implementation of NGO activities will be take place over two years

E. Scope of the Services

6. The Scope of services of NGO will include, but not necessarily be limited to the following:

1. Socio-economic analysis, Social inclusion, Implementation of Gender Action Plan and Assessment of wastewater service delivery

- (i) Establish indicators and baseline data related to gender and poverty in all project activities and CMC wastewater operations; ensure collection of disaggregated data and analysis of the results, especially benefits arising from the project corresponding to these indicators.

- (ii) Develop a socio-economic profile of the Greater Colombo area using appropriate techniques and provide information on social, economic, health and sanitation status of the target community. Such surveys should focus on the likely improvement in health status of the citizens; likely impact of citizens' education programs to be implemented during the project; level of satisfaction from the current wastewater services being provided by CMC; current and likely changes in consumption pattern of wastewater and sanitation services etc. Such surveys should be carried out on the basis of disaggregated data with regards to gender and poverty etc.
- (iii) Carry out surveys to understand citizens' perceptions regarding wastewater service – some examples are property tax rates with respect to wastewater services (in CMC area); enhancing acceptability of wastewater tariff; process of taking wastewater connection; fee/tax setting and collection, handling of complaints related to wastewater services being provided by CMC etc. Based on such analysis, suggest improvements in processes in terms of equity, effectiveness and transparency; and work with relevant stakeholders to operationalize the suggested measures.
- (iv) Provide inputs regarding project objectives related to poverty, gender and social inclusion ensuring inclusion of poor, women and other marginalized and vulnerable groups in the project.
- (v) Develop specific criteria to identify poor households and generate mechanisms to target the poor and/or low income communities for inclusion in the services to be developed during the project. Work with PMU to develop and implement the GAP and Consultation and Participation Strategy to ensure that poor households get the benefits of improved sanitation and wastewater services and the poor are included in the service area.
- (vi) Encourage and/or facilitate participation of women members of citizens committees in unserved areas and under-served settlements in all important meetings and decisions.
- (vii) Ensure that the project design adequately addresses issues important to women and that the gender issues have adequately been reflected in socio-economic profile, social inclusion plan and community participation plan.
- (viii) Monitor the housing relocation and livelihood rehabilitation of female headed households affected by resettlement impacts of project activities.

2. Community Awareness and People's Participation

- (i) Support PMU and CMC in the formation of citizens' committees (ward level or as deemed appropriate) for institutionalizing people's participation including drafting of self-governing charter/rules of business and document such committees taking into account pro-poor and gender mainstreaming perspective.
- (ii) Identify and prepare, in consultation with PMU and CMC, programs for community awareness and education; and people's participation.
- (iii) Implement such programs in an effective manner to disseminate project information on (a) rights and responsibilities of citizens regarding wastewater services being provided by CMC with aim of raising

- wastewater tariff acceptability; (b) the need for citizens' contribution in capital costs, O&M costs of the such services; (c) improvement in service levels of sanitation and wastewater as a result of project implementation;
- (iv) Involve schools and ward committees in a proper way in the public education campaigns. Form, if appropriate special focus groups in schools and wards for this purpose.
- (v) In collaboration with PMU and CMC, plan and implement various Information, Education and Communication (IEC) strategies such as use of electronic and print mass media; distribution of leaflets, posters; use of banners, hoardings; organization of street plays; organization of competitions in schools; mass workshops, public meetings; development of locally relevant audio-visual material and broadcast/telecast on local radio/cable etc.
- (vi) Disseminate widely information about the project to all important stakeholders to ensure involvement and ownership- such as PMU, CMC, DSIDC, elected representatives, other public representatives, media persons, other NGOs, and citizens at large.
- (vii) Organize special mobilization activities for highly marginalized and vulnerable groups for their participation in the wastewater management issues and other consumer/community based groups; ensure that their voice is heard and acted upon, especially as related to project activities.

3. Citizens' Education for Proper Wastewater Services Management, Health and Hygiene

- (i) Prepare a plan for providing education to citizens of Colombo area in properly managing wastewater assets in their area.
- (ii) Carry out the plan in collaboration with PMU, CMC and other important stakeholders of the subproject.
- (iii) Coordinate/organize with the Health department and health and education units of Government to provide effective health and hygiene education to the citizens /specially womens' groups using the IEC material prepared by other such agencies.
- (iv) Coordinate/organize community awareness and people's participation; Capacity Building activities as related to Citizens' Education.

4. General

- (i) Prepare adequate IEC material after approval from PMU to effectively carry out the activities detailed out in the TORs.
- (ii) Carry out any other innovative activities to fulfill the general mandate of the TORs, if required by PMU.
- (iii) Support the PMU and DSIDC for the implementation of project GRM and complaint resolution.

F. Staffing schedule

- (i) Community mobilization expert/ Team Leader – 1no.
- (ii) Community development expert cum gender expert – 1no.
- (iii) Public health and sanitation expert – 1no.
- (iv) Field supervisor – 1no.

- (v) Program coordinator cum training coordinator – 1no.
- (vi) Social mobilizers – 8nos. (4 male 4 female)

G. Outputs and Deliverables

- (i) Inception report
- (ii) Survey report
- (iii) Quarterly progress Reports including their activities during the time
- (iv) Final Report summarizing all the activities which is done per contract period outlining problems and lessons learned

H. Ownership of the Products

7. The PMU will be the sole owner of all products including IEC materials, educational film, data and reports etc.

I. Selection Criteria

8. The qualifications and experience requirements of key NGO personnel are given in Table A7.1.

Table A7.1: Qualifications, Experience and Person-months requirements for NGO

No.	Specialist	Desired requirements	Tasks	Person-Months
1	Community mobilization expert/Team Leader	A Graduate in Sociology or related field with at least 10 years' experience in PRA techniques, community mobilization, social development work, gender work, especially in the field of water and sanitation. Experience of working on programs for the poor and disadvantaged groups in externally funded projects is also desirable.	The team leader is responsible for planning the activities in the assignment and overall supervision of the staff coordination with implementing agencies and timely submission of the required reports. The community development and Gender Expert is responsible for developing baseline indicators for monitoring and evaluation, conducting socio economic survey and preparing the report, developing specific criteria to identify the poor and generate mechanisms to target the poor for inclusion in the services to be developed during the project. team leader shall support the implementation of the program GRM.	36
2	Sanitation/Public Health Expert	A Graduate in Public Health with at least 7 years' experience in health and hygiene education and community development work, preferably with a focus on gender related issues	Coordinate/organize with other agencies in health sector like WHO, UNICEF, Health department and health and education units of Government to provide effective health and hygiene education to the project beneficiaries and general attention to the women's' groups in the project areas using the IEC material prepared by other such agencies.	18

No.	Specialist	Desired requirements	Tasks	Person-Months
3	Community development cum gender expert	A Graduate in Education or related field with at least 7 years of experience in PRA techniques, gender work, participatory teaching-learning methods, especially for adults on health, hygiene, sanitation, solid waste management and community development work.	Involve schools and ward committees in the public education campaigns, Prepare adequate IEC materials, Co-ordinate/organize with community leaders (male and female) for Community Awareness and People's participation; Capacity Building activities as related to Citizens' Education (wastewater management, sanitation and hygiene). Support the selection/identification criteria of poor households/low income communities as project beneficiaries.	36
	Field supervisors	A Graduate in sociology or related field with at least 5 years' experience with community development work	Field supervisor is responsible for supervising all program activities carried out by Social Mobilizers, facilitating awareness sessions at community level and schools, assembling data for monitoring performance of NGO, and submitting monthly report to Team Leader, monitoring and assisting the selection/ identification of targeted poor households as project beneficiaries (for house connections), support the implementation of the program GRM, supporting/ assist the PMU to monitor the relocation and livelihood rehabilitation of the relocated families, especially the female headed and vulnerable households .	24
4	Community workers	Intermediate level education with 3-5 years' experience in organizing community level meetings, social mobilization, gender issues, implementation of programs for the poor.	Work intensively at community level, identifying community leaders, motivating, raising awareness, assisting all expert's field work, using the selection criteria in consultation with local leaders, identifying poor households to be included as project beneficiaries (for house connections), supporting the implementation of the program GRM, supporting/ assisting the PMU to monitor the relocation and livelihood rehabilitation of the relocated families, especially the female headed and vulnerable households .	192 (24 person months per community worker)
5	Training cum Program Coordinator	Diploma in Sociology or related field with at least 5 years' experience working as a program coordinator or General Certification of Education – Advanced Level with at least 8 years of experience working as a program coordinator	Training coordinator is responsible for organizing and coordinating the workshops, training programs etc. and assisting the team leader	20

GRM = grievance redress mechanism; IEC = information, education, communication; NGO = nongovernment organization; PMU = project management unit; PRA = Participatory Rural Appraisal; UNICEF = United Nations Children's Fund; WHO = World Health Organization,

Note: All specialists are proposed to be National.

APPENDIX 5: CONSULTATION AND PARTICIPATION STRATEGY (PROJECT 3)

C&P Activity	Target Stakeholders	Type of Participation	Objectives of the C&P Activity	Responsible Unit/Persons	Time Frame	Cost Estimate
Project orientation workshop for government officials, officers, and staff on the project 3 of GCWWMIIP (1 whole day)	75-100 Government officials and staff consisting of representatives from DSIDC, MOLG&PC, MPC&LG, CMC/NWS&DB PMUs, NWSDB, External Resources Department of MOFP, UDA, CEA, CMC, MLD, RDA, PRDA, Police, project NGO, and contractor(s)	-Information sharing -Consultation -Shared responsibility -Shared decision making	Introduce the project Demonstrate the link between improved waste water /sewerage management infrastructure and good health, Economic development in Colombo city , women's empowerment, and environmental conservation Present safeguards and social and environmental management plans and disclosure requirements Discuss roles and accountabilities of various government units Discuss issues related to use of existing ROWs of public roads for the project, and environmental and social risks and their mitigation	ADB project team, MOLG&DG, CMC PMU	Year 1: 1 project orientation workshop	\$1,000 x 1 = \$1,000
Strategic and action planning workshop (1 whole day) CMC PMU/DSIDC monitoring meetings (half day) PSC meetings (half day)	PMU, members of the project steering committee, DSIDC, private contractor(s), and project NGO	-Information sharing -Shared responsibility -Shared decision making -Control	Develop strategic and action plans in accordance with the project road map Review compliance with social safeguards, environment, and gender frameworks and plans Discuss progress in implementation, including problems encountered and means of mitigating or addressing them Regularly report on the progress of implementation	CMC- PMU, DSIDC, ADB project team	Planning workshop: Annual PMU, CMC monitoring meetings: Quarterly PSC meetings: Quarterly	Planning workshop: \$750 x 4 years = \$3,000 PMU/DSI DC monitoring meetings: \$300 x 4 x 4 years = \$4,800 PSC meetings: \$300 x 4 x 4 years = \$4,800
Orientation workshop for contractors and laborers	All project-related staff and laborers in contractor(s)'s teams	Information sharing	Manage construction Provide quality assurance Enforce core labor standards, HIV/AIDS Enforce environmental and social safeguards and mitigation measures Provide assistance to affected persons during construction Conduct gender sensitization, needed behavior of contractors and other supervisory	CMC PMU, DSIDC, contractors	One workshop for each contract package	\$750 x 4 workshop = \$3000

C&P Activity	Target Stakeholders	Type of Participation	Objectives of the C&P Activity	Responsible Unit/Persons	Time Frame	Cost Estimate
			staff to maintain harmony in the project area			
<p>4 project orientation seminars (POS) for community members (end users) from the project area on the GCWWMIP and the project 3 (half day)</p> <p>2 project orientation seminars for women only, on the GCWWMIP and Project 3 (half day)</p>	<p>100 community members, with at least 30 women participating per project orientation seminar</p> <p>At least 50 women community members per project orientation seminar</p>	<p>-Information sharing</p> <p>-Consultation</p> <p>-Shared decision making</p>	<p>Introduce the project, highlighting its importance and benefits to the community</p> <p>Demonstrate the link between improved waste water/ sewerage management infrastructure and good health, Economic Development, women's empowerment, and environmental conservation</p> <p>Present safeguards and social frameworks and plans, benefits for poor and vulnerable</p> <p>Gather concerns and views related to waste water/ sewerage (present level of service)</p> <p>Gather initial recommendations for project design and safeguards</p>	PMU, DSIDC in cooperation with project NGO	Year 1	<p>\$ 1,000 x 4 POS for community members = \$4,000</p> <p>\$ 500 x 4 POS for women only = \$2,000</p> <p>Total: \$6,000</p>
<p>12 focus group discussions with affected persons on resettlement, entitlement, compensation issues, special protection measures for the vulnerable (1–2 hours each)</p> <p>1 consultation workshop (half day) with temporarily affected persons</p> <p>Additional consultations with affected persons as needed</p>	<p>Affected persons: titled and non-titled affected persons, 10–12 per FGD</p> <p>50 hawkers or vendors, small shopkeepers, parking attendants affected, and representatives of traders' associations</p>	<p>Information sharing</p> <p>Consultation</p>	<p>Introduce the project</p> <p>Demonstrate the link between improved waste water/sewerage management infrastructure and good health, women's empowerment, and environmental conservation; show possible livelihood and business opportunities and special protection measures for vulnerable</p> <p>Solicit the views of affected persons on resettlement and compensation; mitigate potential conflict</p> <p>Agree on resettlement processes and compensation</p> <p>Inform affected persons about grievance redressal mechanisms and contacts</p> <p>Discuss potential disruptions and assistance available for shifting to nearby locations</p> <p>Mitigate potential</p>	<p>CMC PMU, DSIDC, contractors, in cooperation with project NGO</p> <p>CMC PMU, DSIDC, in cooperation with contractors</p> <p>CMC PMU, DSIDC</p>	<p>Years 1–2: 6 FGDs in critical area; at least 2 in under-served settlement</p> <p>Years 3–4: 6 FGDs in critical area; at least 2 in under-served settlement</p> <p>Year 1: 1 consultation workshop</p>	<p>\$ 300 x 12 FGDs = \$3,600</p> <p>\$ 750 x 1 = \$750</p> <p>\$ 1,200</p> <p>Total: \$5,550</p>

C&P Activity	Target Stakeholders	Type of Participation	Objectives of the C&P Activity	Responsible Unit/Persons	Time Frame	Cost Estimate
			resistance to the project Gather recommendations Agree on mitigation measures			
C&P Activity	Target Stakeholders	Type of Participation	Objectives of the C&P Activity	Responsible Unit/Persons	Time Frame	Cost Estimate
1 consultation workshop with under-served settlements communities (end users and affected persons) from the project area (<i>half day</i>)	Representatives of under-served settlements	Information sharing Consultation	Introduce the project, highlighting its importance and benefits Discuss importance of participation in waste water management groups in underserved and un-served areas, maintenance of facilities, opportunities for participation in project Mitigate potential conflict	PMU, DSIDC, in cooperation with project NGO, and contractors	Year 1	Consultation workshop = \$750
8 public consultation workshops (<i>half day</i>) with communities (end users), including school and college students, teachers, academicians, community groups, NGOs, on the plans, design, location, management, etc., of waste water/sewerage management infrastructure, environmental and social mitigation measures Workshops to be followed by debates, quizzes, and painting competitions for schools and colleges	50 representatives from the community (at least 30% women and vulnerable households), academia, students, NGOs, per consultation workshop 8 schools and colleges in Colombo City	Information sharing Consultation	Introduce the project Inform community members of the draft plans, design, location, management of waste water/sewerage infrastructure and services, as well as envisaged benefits of the project including environmental conservation benefits, benefits for poor and vulnerable, and costs involved in improved service provision Gather recommendations on mitigation measures and other aspects Generate awareness of project and waste water management issues; conduct community outreach campaign through schools and colleges	CMC- PMU, DSIDC, in cooperation with project NGO	Year 1	\$ 500 x 8/ consultation workshops = \$4,000
Participatory review meetings (<i>half day</i>)	20 representatives (50% women) from the community and civil society (representatives of CBOs, residents' and	Information sharing Shared responsibility	Elicit issues and concerns during project implementation Discuss and recommend measures to mitigate or address the problems Monitor progress of project implementation	CMC PMU, DSIDC, contractors, and project NGO	Participatory monitoring meetings: Semiannual	\$300 x 4 meetings x 3 years = \$3,600

C&P Activity	Target Stakeholders	Type of Participation	Objectives of the C&P Activity	Responsible Unit/Persons	Time Frame	Cost Estimate
	traders' associations, poor and under-served settlement communities, private sector)					
Total Cost of Consultation and Participation						\$36,500

ADB = Asian Development Bank, AP = affected person, CEA=Central Environmental Authority, CMC=Colombo Municipal Council, C&P = consultation and participation, CBO = community-based organization, FGD = focus group discussion, GCWWMIP = Greater Colombo Water and Wastewater Management Improvement Investment Program, DSIDC= Design Supervision and Institutional Development Consultants, MLD = Ministry of Land Development, MOFP = Ministry of Finance and Planning, MPC&LG = Ministry of Provincial Councils and Local Government, MWSD = Ministry of Water Supply and Drainage, NGO = nongovernment organization, NWSDB = National Water Supply and Drainage Board, PMU = project management unit, POS = project orientation seminar, PRDA = Provincial Road Development Authority, PSC = program steering committee, RDA = Road Development Authority, UDA = Urban Development Authority, WS = water supply.

APPENDIX 6: DRAFT LEAFLET FOR PROJECT INFORMATION DISCLOSURE

A. Background

1. The Greater Colombo Water and Wastewater Management Improvement Investment Program (GCWWMIIP) aims to improve the efficiency and financial sustainability of water supply and wastewater management services in Greater Colombo. This leaflet presents information on project 3. The project 3 will involve physical network rehabilitation, institutional and management capacity enhancement for wastewater services and management of Colombo city. The Colombo Municipal Council (CMC) owns and operates the wastewater infrastructure services in Colombo, and is the only municipal body handling such a service in the country.

B. Project description

2. The Project 3 will upgrade and rehabilitate the sewer collection system and build a new wastewater treatment plant in the south catchment area of Colombo city. The physical works planned under Project 3 are: (i) rehabilitation, replacement, repair and cleaning of sewer reticulation system of 15.61 km in south catchment area of Colombo to address sewer damages, blockages and siltation problems, under-capacity issues and realignment needs (EIB cofinancing); (ii) laying 29.40 km of sewer network and constructing three pump stations to cover currently unserved Kirulapona area in the south catchment area of Colombo (ADB financing); (iii) laying 6.22 km of sewer network and the construction of three pump stations to cover two other un-served areas in the south catchment area of Colombo (EIB cofinancing); and (iv) construction of 50,000 m³/day capacity secondary treatment plant at Wellawatta on a Design-Build-Operate basis.

C. Resettlement Plan: Policy and Principles

3. A resettlement plan has been prepared for project 3 – wastewater management in south catchment area of Colombo city, based on ADB's Safeguard Policy Statement 2009, and Government of Sri Lanka's National Involuntary Resettlement Policy 2001.

D. Involuntary Resettlement impact

4. There is no private land acquisition under project 3. However, 10 families and one family of tenants [35 affected persons] who are currently residing on government lands will have to be relocated from their houses, workshops or shelter. Involuntary resettlement impacts are in forms of (i) loss of housings and rental house, (ii) loss of business places, (iii) loss of income, and (iv) temporary disruption to income and access may occur during linear pipe laying for sewerage networks. Most of the impacts will be avoided and/or minimized by construction during non-business hours and careful alignment selection. Impacts of sewer network improvement/rehabilitation and constructions of network in unserved area are limited to: (i) temporary disruption of on-street parking affecting 53 three wheel parking slots and business activities (display of wares on ROW), and (ii) temporary shifting of 146 vendors and hawkers during construction, for a period of less than 7 days each. Full closure of roads in commercial areas is not anticipated. affected persons will be provided 30 days' advance notice to ensure none or minimal disruption in livelihood, followed by reminders 7 days in advance and 24 hours in advance of execution of works.

E. Entitlement

5. The project provides for compensation of all potential losses including potential income losses for vendors at replacement value. Hawkers and vendors having temporary loss of income during the construction period will be compensated for income loss prior to displacement. Compensation for income loss of hawkers and vendors will be as per Government of Sri Lanka's prescribed minimum wage rate for Colombo for the applicable worker category. Vulnerable affected persons (BPL/IP/female-headed/disabled/elderly) shall be provided additional compensation of 25%. The date of the census survey will serve as the cut-off date for identification of entitled persons. A budgetary provision of \$0.38 million for resettlement plan implementation is made, including provisional sums of \$0.36 million for compensation of affected structures, lost income and \$0.02 million for additional assistance to relocated households, business owners and vulnerable affected persons.

F. Institutional Arrangement

6. Like Project 2, Municipal of City Planning and Water Supply will be the executing agency and National Water Supply and Drainage Board will be the implementing agency for additional financing for water supply investments under Projects 1 and 2 and the CMC will be the implementing agency for Project 3 for wastewater improvement and enhancement service. Two implementing consultant teams (MASC and DSIDC) will support the PMUs for the implementation of Project 3.

7. The project nongovernment organization will assist affected persons/vulnerable groups to update the IR impacts upon detailed design and put forth grievances and access information on opportunities for employment in project related activities, rights and entitlements and the grievance redressal process, and make informed choices.

G. Grievance Redressal Mechanism (GRM)

8. To resolve all project related grievances and complaints a common social and environmental grievance redressal mechanism will be in place. Common and simple grievances will be sorted out at project site level by the contractor's resettlement supervisor, supervision staff of PMU and project NGO within 7 days. More serious complaints will be sent to the SDSO, PMU to be resolved in 15 days. Any unresolved grievances will be forwarded to the Grievance Redressal Committee GRC. Complaints and grievances which are not addressed by the GRC within 30 days will be sent to the Program Steering Committee (PSC) to be resolved within 7 days. Despite the project GRM, an aggrieved person shall have access to the country's legal system at any stage.

H. Contact detail for inquiry:

Name : Designation : Project Implementation Unit Telephone No: E-mail: Address:	Name Designation Regional Project Management Unit Telephone No: E-mail: Address:
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APPENDIX 7: SAMPLE GRIEVANCE REDRESSAL FORM

(To be made available in Sinhala, Tamil and English)

The _____ Project welcomes complaints, suggestions, queries and comments regarding project implementation. We encourage persons with grievances to provide their name and contact information to enable us to get in touch with you for clarification and feedback. Should you choose to include your personal details but want that information to remain confidential, please inform us by writing/typing ***(CONFIDENTIAL)*** above your name. Thank you.

Date		Place of registration			
Contact Information/Personal Details					
Name		Gender	* Male * Female	Age	
Home Address					
Place					
Phone no.					
E-mail					
Complaint/Suggestion/Comment/Question Please provide the details (who, what, where and how) of your grievance below:					
If included as attachment/note/letter, please tick here:					
How do you want us to reach you for feedback or update on your comment/grievance?					

FOR OFFICIAL USE ONLY

Registered by: (Name of Official registering grievance)	
Mode of communication: Note/Letter E-mail Verbal/Telephonic	
Reviewed by: (Names/Positions of Official(s) reviewing grievance)	
Action Taken:	
Whether Action Taken Disclosed:	Yes No
Means of Disclosure:	

APPENDIX 8: SAMPLE MONITORING TEMPLATE

1. A semi-annual monitoring report shall be prepared on Resettlement Plan implementation and submitted to ADB by the project management unit (PMU). It will include: (i) **the list of affected persons**, with compensation, if any due to each and details of compensation paid with signed receipts annexed to the report, socio-economic status and satisfaction levels of affected persons with the resettlement plan implementation process, compensation and mitigation measures; (ii) **the list of vulnerable affected persons** and additional compensation/special protection measures planned/implemented for them; socio-economic status and satisfaction levels of vulnerable affected persons with the resettlement plan implementation process, compensation and mitigation measures; (iii) **list of common facilities** affected, plans to restore access and/or actions taken to restore access to the same or facilities of equal quality elsewhere; (iv) **list of roads for closure** and actions planned / taken to minimize disturbance; (v) **details of consultations held with affected persons** (with number of participants by gender, issues raised, conclusion/agreement reached, actions required/taken); (vi) **details of grievances** registered, redressed, outstanding complaints, minutes of Grievance Redress Mechanism meetings held; (vii) **details of information disclosure** and awareness generation activities, levels of awareness among target population and behavior change, if any; and (viii) **any other relevant information** showing resettlement plan implementation progress. The following checklist may be used for overall monitoring of resettlement plan implementation.

S. N.	Resettlement Plan Activities	Completed Y/N	Remarks
A. Pre-Construction Activities and Resettlement Plan Activities			
1	Approval of final Resettlement Plan by ADB prior to contract award		
2	Disclosure of final Resettlement Plan on ADB and executing agency's websites		
3	Circulation of summary resettlement plan in the three local languages to all stakeholders		
I. Resettlement Plan Implementation			
1	Grievance Redressal Committee and telephone hotlines established		
2	Entitlements and grievance redressal procedure disclosed		
3	Finalization of list of affected persons, vulnerable affected persons and compensation/assistance/allowances due		
4	Finalization of list of affected common facilities and roads for closure; mitigation measures proposed		
5	Affected persons received entitlements as per amounts and program specified in resettlement plan		
6	Payment of compensation, allowances and assistance (No. of affected persons)		
7	Additional assistance for vulnerable households given (No. of vulnerable affected persons)		
8	Livelihood arrangements provided to vulnerable affected persons		
9	Reinstallation of affected common facilities		
10	Grievances No. of grievances registered No. of grievances redressed Outstanding complaints Disclosure of grievance redress statistics		
11	Consultation, participation and disclosure as per Plan		
C. Monitoring			
1	Survey on socio-economic status of affected persons (including vulnerable affected persons) completed and compared with baseline survey results		
2	Survey on satisfaction levels of affected persons with resettlement plan implementation completed		
D. Labor			
1	Implementation of all statutory provisions on labor like health, safety, welfare, sanitation, and working conditions by Contractors		

S. N.	Resettlement Plan Activities	Completed Y/N	Remarks
2	Equal pay for equal work (of equal value) for men and women		

Note: Where applicable, the information provided in the table should be supported by detailed explanatory report, receipts and other details.

**APPENDIX 9: DETAILED LIST OF PROJECT MANAGEMENT UNIT STAFFING UNDER
COLOMBO MUNICIPAL CORPORATION**

Staff	Ongoing GCWMP Available at present	Project 3		Total
		Available from ongoing	Recruited as new	
Project Director	1	Yes	-	1
Additional Project Director (part time)	1	Yes	-	1
Project Director for Project 3 (full time)	-	No	1	1
Deputy Project Director - Engineering	1	Yes	-	1
Deputy Project Director institutional development	1	Yes	-	1
Deputy Project Director – Monitoring and Evaluation	-	No	1	1
Finance Manager	1	Yes	1	2
Accountant	1	Yes	1	2
Assistant Accountants	1	Yes	1	2
Management Assistants	4	Yes	1	5
Social and grievances redressing officer	1	Yes	-	1
Project Officer - Environment	1	Yes	-	1
Project Officer - Monitoring and Evaluation	1	Yes	-	1
Project Engineer – Network Modelling	-	No	-	-
Engineer - Training	-	No	1	1
Project Engineer - Procurement	1	Yes	-	1
Construction Managers	1	Yes	2	3
Project Engineers	3	Yes	7	10
Assistant Project Engineers	3	Yes	7	10
Data Entry Operators	1	Yes	-	1
Secretary	1	Yes	1	2
Office Helper	1	Yes	1	2
Drivers	2	Yes	2	4
Policy Support Group Members	6	Yes	2	8
Total	33			61

APPENDIX 10: OUTLINE OF SOCIAL SAFEGUARDS MONITORING REPORT DURING PROJECT IMPLEMENTATION PERIOD

1. Following requirements of the ADB Safeguard Policy Statement (2009) and the *Operations Manual* section on safeguard policy (OM F1), borrowers/clients are required to establish and maintain procedures to monitor the status of implementation of safeguard plans and ensure progress is made toward the desired outcomes. For projects categorized as A or B in Involuntary Resettlement and/or Indigenous People, the Borrowers/clients are required to submit semiannual monitoring reports for ADB review. The level of detail and comprehensiveness of a monitoring report is commensurate with the complexity and significance of social safeguards impacts (involuntary resettlement and indigenous people) and with the current status of project implementation phase.

2. This outline can be used for periodic monitoring report (semiannual) and resettlement plan/IPP completion report to start the civil works in the impacted areas. A safeguard monitoring report may include the following elements:

A. Executive Summary

3. This section provides a concise statement of project scope and impacts, key findings and recommended actions.

B. Background of the Report and Project Description

4. This section provides a general description of the project, including:

- (i) Background/context of the monitoring report which includes the information on the project, project components, safeguards categorizations and general scope of the social safeguards impacts.
- (ii) Information on the implementation progress of the project activities, scope of monitoring report and requirements, reporting period, including frequency of submission and changes in project scope and adjusted safeguard measures, if applicable
- (iii) Summary table of identified impacts and the mitigation actions.

C. Scope of Impacts

5. This section outlines the details of

- (i) Scale and scopes of the project's safeguards impacts,
- (ii) Vulnerability status of the affected people/communities,
- (iii) Entitlements matrix and other rehabilitation measures, as applicable, as described in the approved final resettlement plan(s) /IPP(s).

D. Compensation and Rehabilitation¹

6. This section describes the process and progress of the implementation of the safeguards plan and other required activities as determined in the plan. This includes:

¹ Depending on the status of the final detail design during the submission of the report this activity might not be started yet. Provide the information on the expected date the activity shall be conducted instead.

- (i) Payment of the affected assets compensation, allowances, loss of incomes, etc. to the entitled persons;
- (ii) Provisions of other types of entitlement as described in the matrix and implementation of livelihood rehabilitation activities as determined in the plan.

7. Quantitative as well as qualitative results of the monitoring parameters, as agreed in the plan, should be provided.

E. Public participation and consultation

8. This section describes public participation and consultations activities during the project implementation as agreed in the plan. This includes final consultations with affected persons during resettlement plan finalization after the completion of detail design; the numbers of activities conducted; issues raised during consultations and responses provided by the project team, implementing NGOs, project supervision consultants, contractors, etc.

F. Grievance Redressal Mechanism (GRM)

9. This section describes the implementation of project GRM as designed in the approved resettlement plan/IPP. This includes evaluations of its effectiveness, procedures, complaints received, and timeliness in resolving issues / complaints and resources provided to solve the complaints. Special attention should be given if there are complaints received from the affected people or communities.

G. Institutional Arrangement

10. This section describes the actual implementation or any adjustment made to the institutional arrangement for managing the social safeguards issues in the projects. This includes the establishment of (i) safeguards unit/ team and appointment of staff in the executing agency/implementing agency; (ii) implementation of the GRM and its committee; and (iii) supervision and coordination between institutions involved in the management and monitoring of safeguards issues, the roles of NGO and women's groups in the monitoring and implementation of the plan, if any.

F. Monitoring Results - Findings

11. This section describes the summary and key findings of the monitoring activities. The results are compared against previously established benchmarks and compliance status (e.g., adequacy of involuntary resettlement compensation rates and timeliness of payments, adequacy and timeliness of IR rehabilitation measures including serviced housing sites, house reconstruction, livelihood support measures, and training; budget for implementing EMP, resettlement plan, or IPP, timeliness and adequacy of capacity building, etc.). It also compared against the objectives of safeguards or desired outcomes documented (e.g. involuntary resettlement impacts avoided or minimized; livelihood restored or enhanced; IP's identity, human rights, livelihood systems and cultural uniqueness fully respected; indigenous people not suffering adverse impacts, environmental impacts avoided or minimized, etc.). For Financial Intermediary projects this includes the effectiveness of the Environmental and Social Management System (ESMS) managed by the FI and its participating institutions². If

² Specific for the FI projects, external agency may be required to conduct an audit of the project ESMS.

noncompliance or any major gaps are identified, these should be included in the recommendations of the corrective action plan (CAP).

G. Compliance Status

12. This section will summarize the compliance status of the project activities with the loan covenants, ADB SPS (2009) on SR 2 and the approved final resettlement plan(s).

H. Follow up Actions, Recommendation and Disclosure

13. This section describes recommendations and further actions or items to focus on for the remaining monitoring period. It also includes lesson learned for improvement for future safeguards monitoring activities. Disclosure dates of the monitoring report to the affected communities should also be included. A time-bound summary table for required actions should be included.

Appendix 1

- (i) List of Affected Persons and Entitlements
- (ii) Summary of resettlement plan/IPP with entitlement matrix

Appendix 2

- (i) Copies of AP's certification of payment (signed by the affected persons)
- (ii) Summary of minutes of meetings during public consultations
- (iii) Summary of complaints received and solution status

APPENDIX 4: RESETTLEMENT PLAN

Resettlement Plan for Wastewater Improvement Project

(<http://www.adb.org/projects/documents/sri-gcwwmip-p3-wastewater-improvement-project-aug-2015-rp>)

APPENDIX 5: INITIAL ENVIRONMENTAL EXAMINATION

Initial Environmental Examination for Wastewater Improvement Project
(<http://www.adb.org/projects/documents/gcwwmiip-t3-wastewater-improvement-project-iee>)

FINANCIAL ANALYSIS

I. INTRODUCTION AND METHODOLOGY

A. Introduction

1. The financial analysis covers two components: (i) the revenue generating water supply service improvement project (Project 1, Project 2 and additional financing under Project 3 combined); and (ii) the non-revenue generating wastewater project in south catchment area of Colombo city also financed by Asian Development Bank (ADB) and European Investment Bank (EIB). The financial analysis of the two components was carried out in accordance with ADB's *Financial Management and Analysis of Projects*.¹

B. Methodology

2. A discounted cash flow analysis was conducted in real terms to calculate the financial internal rate of return (FIRR) and the financial net present value for the revenue generating project. The financial analysis examined whether FIRR of the project can meet the hurdle rate of return calculated based on the cost of capital from different sources. The project's financial viability is then ascertained if FIRR exceeds the weighted average cost of capital (WACC) for the project. A sensitivity analysis was then conducted to assess the tolerance of FIRR and financial net present value to adverse movements in the underlying parameters, including increases in capital expenditure and operation and maintenance (O&M) costs and reduction in revenues.

3. For the non-revenue generating project, the financial analysis focuses on financial sustainability of the entity and whether sufficient resources will be made available at the entity level to support the O&M of the assets established and repay associated loans. The financial analysis included: (i) a review of the historical financial performance of the entity, as well as (ii) a financial forecast to determine the financial strength of the entity to continue to maintain and operate the assets which do not directly generate revenues.

II. REVENUE GENERATING PROJECT

A. Performance of National Water Supply and Drainage Board (NWSDB)

4. The NWSDB is the implementing agency for water supply projects and the asset owner and operator. NWSDB has a mandate to develop, operate and control water supply systems and distribute water for public, domestic and industrial purposes. NWSDB provides pipe borne water supply to 6,900,000 people in the country and is the sole water supply service provider for Greater Colombo. However, due to the aging pipes, nonrevenue water (NRW) in Colombo City is 49% and the physical loss alone stands at 33%. The water supply service improvement project will improve the asset operational efficiency in Colombo city by reducing NRW from 49% to 20%. The Multitranches Financing Facility (MFF) also includes capacity building components that will assist NWSDB staff to improve NRW management, revenue collection and system O&M.

5. The financial performance of NWSDB improved significantly from 2011 to 2014. Sales revenue from water increased by a compounded annual growth rate (CAGR) of 14% per annum

¹ ADB. 2005. *Financial Management and Analysis of Projects*. Manila.

whilst direct operating expenses, excluding administrative overhead, increased by only 13% CAGR. Net income before taxes improved from LKR1,549 million in 2011 to LKR2,508 million in 2014 and cash flow from operations² decreased by 25% CAGR. Continued revenue growth is anticipated as a result of the proposed real tariff increase at 3% on average for all users once in every 3 years starting from 2016. Increase in tariff will help NWSDB in recouping its accumulated losses which stood at \$83.2 million as on 31st December 2014. In view of the sufficient efforts in improving top-line performance, the main challenges for NWSDB now are: (i) O&M costs control, in particular, control and management of personnel costs; (ii) management of new assets upon construction completion; and (iii) debt management.

Table A6.1: Comparison of Key Financial Performance Indicators

Parameters	NWSDB				Industry Best Practice, ^a SEA (2010)
	2014	2013	2012	2011	
Total Sales (\$, million) ^b	142.7	130.7	113.0	104.0	245
Gross Margin %	39.5	41.3	38.5	36.0	55
Net Margin %	13.4	10.9	8.4	3.1	37
Depreciation to Sales Revenue %	10.9	11.7	11.8	15.0	13
Working Ratio %	86.6	89.1	91.6	78.0	31
Current Ratio %	178.0	119.0	120.0	137.0	109
Debt/Equity Ratio %	17.4	17.3	17.4	28.0	143
Accumulated losses (\$ million)	(83.2)	(94.2)	(118.6)	(97.9)	
Collection Efficiency	82.2	81.6	79.2	80.4	

NWSDB = National Water Supply and Drainage Board, SEA = Southeast Asia.

^a See footnote 3. Except for the current ratio and the debt/equity ratio which are computed at the corporate level, all other numbers are based on segment operating results.

^b Converted based on year-end exchange rates.

Source: Estimated based on NWSDB 2013 Annual Report and Manila Water 2013 Annual Report.

B. Tariff and Cost Recovery

6. The tariff policy for urban water supply is to recover O&M costs and depreciation, and gradually recover full costs including interests and a reasonable rate of return.³ NWSDB follows the national tariff policy. Before 2009, water tariffs were set at a low level and O&M cost recovery was not achieved. With tariff adjustments effective from 2009, NWSDB was able to achieve full O&M cost recovery and gradually improve its working ratio to 86.6% in 2014. However, revenues were not sufficient to fully recover depreciation expenses and interest payments in 2009 and 2010. Following the tariff adjustment in 2009, new tariff increases by an average of 20% were approved in 2012. With the tariff increases, financial performance of NWSDB was improved in the years of 2013 and 2014.

C. Affordability Analysis

7. An affordability analysis was conducted and included in the financial analysis of Project 1.⁴ The affordable water tariff is considered to be no more than 5% of the household income (footnote 3). With the new tariff increase of 20% in 2012, the monthly water charges are estimated to be 2.45% of the monthly income of the low income group, leaving sufficient room to

² Net earnings are adjusted for depreciation expenses, taxes and interests as well as changes in net working capital to arrive at the operating cash flows.

³ The National Policy on Drinking Water (2002).

⁴ ADB. Appendix 7 of the *Report and Recommendation of the President to the Board of Directors for the Multitranchise Financing Facility for Greater Colombo Water and Wastewater Management Improvement Program* to the Democratic Socialist Republic of Sri Lanka. 2012.

introduce sewerage tariffs before reaching the 5% of affordability threshold. Therefore, the proposed water tariffs are considered affordable for all income groups.

Table A6.2: Water Charges, Usage and Average Household Income

Item	LIG Monthly Income	Monthly Usage cu. m ^a	Water Charges	% to Monthly Income
National	10,445	13.16	223	2.13%
Colombo City	14,670	17.22	360	2.45%

LIG = low income group.

^a Based on NWSDB Key Statistics.

D. Financial Analysis

8. The FIRR of the revenue generating water service improvement project is estimated to be 5.1%. The project generates FIRR higher than WACC and there is sufficient external funding and budgetary support. The general assumptions to calculate FIRR of the revenue generating water service improvement project are as follows.

- (i) The analysis is conducted from 2015 to 2044, including 5 years of construction. Assets established are assumed to have a life of 30 years upon completion of construction.
- (ii) All costs are in June 2015 price and converted at an exchange rate of \$1 = LKR130.
- (iii) WACC is estimated to be 2.06% based on the cost of financing and the percentage of debt versus equity capital in the project, adjusted for debt tax shield.⁵
- (iv) Inflation is assumed to be 6.0% and corporate income tax rate is assumed to be 28%.
- (v) Capital costs included base cost, physical contingencies, but excluded price contingencies and financing costs.
- (vi) O&M costs include personnel, periodic maintenance, administrative, chemicals, power, and establishment costs and exclude depreciate expenditure which is a non-cash item.
- (vii) Tariff adjustment is assumed to be 3% in real terms every 3 years, starting from 2016.

9. The FIRR of the revenue generating water service improvement project is higher than WACC, indicating sufficient financial returns for the project. The results from the sensitivity analysis, ranging from 2.6% to 3.6% for the project, are satisfactory against all downside risks, including: (i) capital costs overrun by 10%; (ii) O&M costs overrun by 10%; (iii) revenue decrease by 10%; and (iv) 1 year delay.

Table A6.3: Sensitivity Analysis

Sensitivity Parameter	FIRR (%)	NPV (\$ million.)	SV (%)
Base case	5.1	101.5	
Capital cost (+10%)	4.3	78.3	51
O&M cost (+10%)	4.9	94.1	261
Revenues (-10%)	4.0	60.8	35.0
One Year Delay	4.9	91.4	

⁵ On-lending rate from the government to NWSDB is assumed to be 6% and nominal cost of government's grant is assumed to be 9.5% (Source: Central Bank of Sri Lanka – Statistics Department).

Sensitivity Parameter	FIRR (%)	NPV (\$ million.)	SV (%)
Worst case (combined)	2.7	21.2	

FIRR = Financial Internal Rate of Return, NPV = net present value, O&M = operation and maintenance
SV = switching value.

Source: Asian Development Bank estimate.

III. NON-REVENUE GENERATING PROJECT

A. Performance of Colombo Municipal Council (CMC)

10. CMC is responsible for the O&M of the sewerage system in Colombo city. At present, no tariff or user charges is levied for sewer services. There is no cost recovery for existing O&M expenses. Even if the assumed allocation of 10% of property tax towards sewerage operations is applied, the cost recovery is only 56%. The existing financial performance of CMC and the growth rate over the last five years have been studied in developing the financial projections for CMC. Financial projections for the CMC along with required sewerage project O&M (both ongoing and proposed) reveal that there is revenue shortfall. Hence, there is a need to levy tariff for sewerage services. Financial performance of CMC is given in Table A7.4.

Table A6.4: Financial Performance of CMC (\$ million)

Particulars	2010	Actual			CAGR %
		2011	2012	2013	
Revenue					
Rates and taxes	17.13	18.81	20.17	21.22	7.4%
Other Fees & Charges	4.28	4.67	5.28	6.67	15.9%
Government grants	11.98	13.86	15.48	14.55	6.7%
Total Revenue	33.39	37.34	40.93	42.44	8.3%
Expenditure					
Employees	19.46	20.84	21.68	22.69	5.2%
Supplies	4.79	5.06	6.37	7.23	14.8%
Establishment & Misc.	4.98	5.09	5.78	6.83	11.1%
Finance Charges and Allocations	0.05	0.04	0.06	0.08	21.0%
Grants and Contributions	0.87	1.10	1.15	1.29	14.0%
Capital Assets Maintenance	4.21	6.45	5.53	6.48	15.4%
Total Revenue Expenditure	34.36	38.59	40.58	44.60	9.1%
Revenue Surplus/Deficit	(0.96)	(1.25)	0.35	(2.16)	

CAGR = compounded annual growth rate.

Source: CMC accounts and design and supervision consultant.

B. Tariff and Cost Recovery

11. At present, there is no sewerage tariff or charges levied by CMC. Presently, the sewerage division earns only a marginal income from reimbursable expenses such as drainage cleaning, interest income from staff loans and other services. In 2013, this income has been Rs.24.8 million, while the income budgeted for 2013 is Rs.38.8 million. Although the direct income of the sewerage division is very nominal, CMC transfers substantial amount to the division to upkeep the system and provide the sewerage services to its citizens.

12. Financial projections show that the minimum fee/charge per month per household required to bridge the revenue gap to meet the full O&M costs will be about SLRs450 (\$3.5) in 2017 and SLRs540 (\$4.2) in 2020, at 80% of collection efficiency, showing declining trend after 2020. The minimum fee/charge per month per household required to bridge the revenue gap to cover the O&M and debt servicing obligations, of both ongoing and proposed project, was about Rs.1,000 (\$11.9) in 2017 and SLRs1,200 (\$14.3) in 2020, at 80% of collection efficiency, showing declining trend after 2020. In the absence of levy and collection of wastewater tariffs,

CMC will be dependent on support from National Government, in the form of subsidy or grant, for meeting the revenue gap.

C. Financial Projections of CMC

13. The key assumptions for the financial forecast of CMC are as follows:

- (i) Project cost – Includes both ongoing and proposed projects cost. Cost estimates are based on information provided in the feasibility report. Construction will be carried out over 5 years according to the implementation plan.
- (ii) Revenue estimates – At present, the Kirilapona, Kirula and Narahenpita areas of the south catchment area are unserved. Once the project is completed, all the properties of this area will get sewerage facilities. This will enable CMC to discontinue the current practice of granting a discount of 10% of property in this area.
- (iii) O&M costs – At present, in the areas covered under the project, it is envisaged that there will be a reduction in the O&M cost once the GCWMP ongoing project is completed. According to the engineering estimates, this reduction will be about 10% of the overall O&M costs of CMC's south catchment area of Colombo city.
- (iv) The revenue and expense items of CMC have been projected by taking into consideration the historical growth rates and the proposed budget for 2014 on a realistic basis.

Table A6.5: CMC – Financial Projections

CMC Financial Projections	Projections (in \$ million)						
	Actual 2013	2016	2020	2025	2030	2035	2039
1. CMC without sewerage							
Revenue	42.3	55.1	78.6	122.3	190.5	296.5	422.5
O&M	41.5	54.2	77.4	120.5	187.3	290.5	412.1
Net Income /deficit	0.8	0.9	1.2	1.8	3.2	6.0	10.4
2. Sewerage Division							
Revenue							
- Existing	0.2	0.2	0.3	0.4	0.5	0.7	0.9
- On-going & South Project	0.0	0.0	0.4	0.5	0.7	0.9	1.2
O&M							
- Existing	3.1	3.5	4.2	4.9	5.7	6.5	7.1
- On-going & South Project	0.0	(0.4)	3.0	3.8	4.8	6.1	7.5
Net Income/deficit	(2.9)	(2.9)	(6.5)	(7.8)	(9.3)	(11.0)	(12.5)
(1) + (2) Total Surplus/deficit	(2.2)	(2.0)	(5.3)	(6.0)	(6.2)	(5.0)	(2.1)
Total Beneficiaries with Project + Existing			129,004	129,004	129,004	129,004	129,004
Required Tariff (per household/month)			4.2	5.0	5.0	5.0	5.0
Revenue from tariff & other charges			6.4	7.7	7.7	7.7	7.7
80% collection efficiency			5.1	6.2	6.2	6.2	6.2
Net surplus/Deficit	(2.2)	(2.0)	(0.1)	0.2	(0.0)	1.2	4.1
3. Debt Service							
Interest	0.0	0.0	5.1	3.9	2.5	1.1	0.2
Capital repayment	0.0	0.0	1.2	2.7	2.7	2.7	1.5
Total	0.0	0.0	6.3	6.6	5.2	3.9	1.7
Surplus Deficit after Debt	(2.2)	(2.0)	(11.6)	(12.6)	(11.4)	(8.8)	(3.8)
Total Beneficiaries with Project + Existing			129,004	129,004	129,004	129,004	129,004
Required Tariff (per household/month)			9.2	11.1	11.1	11.1	11.1
Revenue from tariff & other charges			14.3	17.1	17.1	17.1	17.1
80% collection efficiency			11.4	13.7	13.7	13.7	13.7
Net surplus/Deficit	(2.2)	(2.0)	(0.1)	1.1	2.3	4.9	9.9

CMC = Colombo Municipal Council, O&M = operation and maintenance.

ECONOMIC ANALYSIS

A. Introduction and Macroeconomic Context

1. Following 2 consecutive years of robust economic growth, Sri Lanka's pace slowed in 2012 to 6.3%, which somewhat improved to 7.3% in 2013, due to global macroeconomic factors as well as regional structural and policy impediments. In view of the region's average growth of 5.4% for 2012, Sri Lanka's gross domestic product fared better, taking advantage of stronger contributions from the industry and the agriculture sectors. Though growth in the service sector was hampered by weak global demand, growth in industry and agriculture remained strong at 10.3% and 5.8%, respectively. The country will maintain its pace in the short-term and inflation is expected to be contained through strict policies. Improvement in external demand will bring down current account deficit whilst investment in infrastructure projects continues to expand.

2. The Greater Colombo Water and Wastewater Management Improvement Investment Program (the Investment Program) was approved in 2012 in response to the continued demand for improved water and wastewater infrastructures and public services for water supply and wastewater. This economic analysis provides: (i) an updated combined assessment of the economic viability of Project 1, Project 2¹ and additional financing for these projects under Project 3 based on the updated cost estimate for Project 1 and Project 2; and (ii) an evaluation of the wastewater project in south catchment area under Project 3 to be financed by Asian Development Bank (ADB) with parallel cofinancing from the European Investment Bank (EIB).

B. Project in Sector Context

3. The government endorsed a sector investment plan of \$1,430 million to improve water supply and wastewater services for Greater Colombo and has developed a clear sector roadmap to gradually improve service levels following the investment plan. The current available funding from the government, ADB and other donors amounts to approximately \$530 million, including \$400 million from the investment program and \$130 million from other ongoing projects. Leveraging ADB's Investment Program as a platform to scale up investment, the government will further bridge the remaining investment need of \$900 million by inviting Agence Française de Développement to finance the energy saving project at Ambathale (Ambathale project) and EIB to invest partly in the wastewater rehabilitation project.

4. Project 1, Project 2 and additional financing under Project 3 focus on improving operational efficiency through network rehabilitation and nonrevenue water (NRW) reduction. The rationale to synchronize ADB's investment in the wastewater project of rehabilitation and expansion in south catchment area with financing of EIB is sound. The wastewater project will focus on rehabilitation of existing sewer network, expansion of sewerage networks to three unserved localities, rehabilitation of pumping station in Wellawatta and construction of 50,000 cubic meters per day (m³/day) capacity secondary wastewater treatment plant in Wellawatta in the south catchment area of Colombo city.

5. The objective of the water supply improvement project is to achieve water supply coverage at 100% in Colombo city project area at a minimum of 112 liters per capita per day

¹ ADB. 2012. *Periodic Financing Request Report for the Greater Colombo Water and Wastewater Management Improvement Investment Program, Tranche 1*. Manila.

ADB. 2013. *Period Financing Request Report for the Greater Colombo Water and Wastewater Management Improvement Investment Program, Tranche 2*. Manila.

(lpcd), 24 hours a day and 7 days a week. The objective of the wastewater improvement and expansion project in the south catchment area of Colombo city is to strengthen the existing sewer system, bring additional areas under the sewer system and treat the effluent of the entire south catchment area of Colombo city before discharge to the sea.

C. Demand Analysis

6. The total population in Colombo city area was estimated to be close to 0.7 million in 2012. By 2030, the population not connected with pipe borne water will increase to over 512,000 in greater Colombo. At the minimum target consumption of 112 lpcd, demand from the un-connected population will increase to over 57 million liters per day (MLD) by 2030. Demand from these areas can be satisfied through NRW savings. As NRW is reduced from 49% to 20% in Colombo city, more than 80 MLD of water, including 60 MLD from physical loss savings, can be made available to satisfy demand from un-connected populations in greater Colombo area. With respect to wastewater, only 80% of the city's area is currently connected to the wastewater system. The balance area of 20% is unserved comprising of 11 unserved areas distributed along the eastern boundary of Colombo city. Estimated population in the unserved areas is 248,000 representing nearly 30% of the city population of which 150,000 reside in the south catchment area of the city. Furthermore, the current sewer system suffers from many technical deficiencies and the proposed projects will: (i) significantly improve the sewers which are currently in a poor condition, underutilized experiencing collapses and serious blockages; (ii) remove numerous cross connections between the sewerage system and the storm water drainage system; (iii) stop considerable ingress of solid waste into the sewerage system; (iv) improve operational efficiency of pumping stations; and (v) treat the wastewater of entire south catchment area of Colombo city.

7. In addition, the ongoing and the proposed project will have significant economic benefits due to improved health, improved environmental conditions, and cost saving on sewerage disposal, and land value increase. Such direct and indirect benefits often make projects of this nature economically justifiable despite meager revenue generation.

D. Least Cost Option Analysis

8. Cost of each project has been carefully prepared after arriving at the least cost option. Least cost options for each subproject were selected by comparing alternative solutions. In the case of water supply and NRW reduction, considering the options included the numbers of district metered areas analysis and increased from 38 to 52, changed pipe materials from polyvinyl chloride to polyethylene, and construction methods (open cut vs trenchless). In the case of sewer rehabilitation, considered options included construction methods (open cut vs trenchless): alternative routes, etc. In the case of Kirulapona network design, five alternative network arrangements were considered in the evaluation. The lowest cost solution for treatment was arrived at by considering present value of the combined cost of capital investment plus operation and maintenance (O&M) over a 25-year period. Three wastewater treatment process technologies were considered. Land cost is considered only where land requirement exceeds 2.0 hectare (ha). Approximately 2.0 ha of public land are considered as available free of charge for the treatment plant. Proposed technology is moving bed biofilm reactor which was found to be the optimal cost solutions considering the land, capital and O&M cost.

E. Economic Analysis of Projects

9. Economic analysis has been updated for the combines water supply projects under Project 1, Project 2, including the additional financing for these projects under Project 3 and for the wastewater project in south catchment area of Colombo city in accordance with ADB's Guidelines, including *Guidelines for the Economic Analysis of the Projects* and *Guidelines (1997) for the Economic Analysis of Water Supply Projects (1998)*.

10. The economic analysis assessed the economic viability of water supply projects under Project 1, Project 2 and additional financing for these projects under Project 3, and the proposed wastewater project in the south catchment area of Colombo. The economic analysis then calculated the economic internal rate of return (EIRR) for water supply and wastewater projects separately. For Project 1, Project 2 and additional financing for these projects under Project 3 that improve the water supply services in Colombo City, economic benefits included resource cost savings² and time savings³ to domestic users as well as value of incremental water⁴ supplied to domestic and non-domestic users. For the wastewater project, economic benefits included saved health expenditure,⁵ increase in income/ productivity due to saved sickness days,⁶ saved disposal costs⁷ as well as other O&M cost savings.⁸ Other economic benefits including avoidance of water-borne diseases, decelerated water resource depletion, gains on business, gains on productivity, tourism related benefits, reduction in pollution and related environmental benefits have not been quantified.

11. The EIRR for the combined water supply projects under Project 1, Project 2 including the additional financing under Project 3 is calculated at 13.6%, and the EIRR for wastewater project has been calculated to be 13.4%, based on the following assumptions:

- (i) The analysis is conducted up to year 2044 for all projects, i.e. 30 years including construction period. The implementation period for Project 1, Project 2 and additional financing under Project 3 is 5 years and the implementation period for the wastewater project is 5 years. Assets established are assumed to have a useful life of 30 years upon completion of construction. Residual values are assumed at the end of the analysis period for the balance life.

² Resource cost savings include (i) savings from the economic costs of acquiring and maintaining the water storage facilities, (ii) economic costs of treating water by boiling - treatment of 5 litres per day is assumed to be done by all, and (iii) economic costs of procuring bottled water - Only 10% of the population has been assumed to procure bottled mineral water to the extent of 12 litres per day.

³ Time savings include avoidance of time spent in collecting water from other sources than piped water supply.

⁴ Value from incremental water includes economic value of the incremental water consumed as a result of the 24x7 water supply availability occurring due to the Project. Incremental water has been quantified by applying: in case of domestic consumers the average of willingness to pay and projected average domestic tariff to the incremental domestic consumption and applying the projected average non-domestic tariff to the incremental non-domestic water consumption.

⁵ Opinion survey conducted by design and supervisions consultant (DSC) and according to Ministry of Health published statistics revealed that SLRs. 546 is average expenditure per month per household on the health expenditure due to inadequate sewerage. This benefit will be available to all the households in the project area.

⁶ As per the opinion survey conducted by the DSC, an average of 8 days per household per year is lost due to sickness on account of inadequate sewerage. This benefit will be available to all the households in the project area. 22% of health expenditure related specifically to water borne diseases has been assumed to result from poor sanitation.

⁷ As per the opinion survey conducted by the DSC and Colombo Municipal Council (CMC) sources, an average of SLRs. 5,000 per household per year is spent on the sewage disposal.

⁸ As per the assessment of DSC, a savings of 10% in the existing operation and maintenance expenses will be there in the project scenario.

- (ii) All costs are in June 2015 prices and are converted at an exchange rate of \$ 1 = LKR130.
- (iii) Without the projects, only 81% of households are currently connected to pipe borne water supply in Colombo City. With the projects, household connection to pipe borne water supply will increase to 100% for Colombo City, at a minimum consumption of 112 lpcd.
- (iv) NRW is estimated to be reduced from the current 49% to 20% in year 2020. As a result, an annual increase of 30,000,000 m³, including 22,000,000 m³ from reduction in physical losses, will be made available.
- (v) The project will benefit 12417 additional domestic households and 17401 non-domestic connections in the south catchment area of Colombo with sewage facilities, by the year 2020.
- (vi) Total project costs are estimated at \$275 million in financial pricing and at \$208 million in economic price for the combined Project 1, Project 2 including the additional financing under Project 3.
- (vii) Project costs of the wastewater project are estimated at \$169 million in financial pricing and \$127 million in economic price.
- (viii) The project costs for economic analysis include base costs, physical contingency and exclude price contingency, financing charges, taxes and duties. Economic costs are apportioned on the basis of tradable and non-tradable goods and further adjusted for skilled and unskilled labour costs. Conversion factors are used when necessary and appropriate.⁹
- (ix) Annual O&M costs included establishment costs, electricity, chemical, repairs and maintenance and others.

12. Comparative analysis of water supply projects with and without additional financing is presented in the following Table:

Table A7.1: Comparative Analysis of Projects 1 and 2 (combined) and Project 1 & 2 + Project 3 additional financing (AF)

Parameters		Scenario 1 – Project 1 and 2 Combined	Scenario 2 – Project 1,2 plus AF (No change in Scope)
Population covered	2015	728,928	728,928
	2020	771,435	771,435
Water Available (million m ³)	2015	71.0	71.0
	2020	90.8	90.8
NRW (%)	2015	49%	49%
	2020	20%	20%
Economic Capital Cost NPV (\$ million)		122.5	153.9
Economic Benefits NPV (\$ million)		186.4	183.4
EIRR Base (%)		15.9	13.6

⁹ Border prices at a shadow exchange rate factor of 1.02 were used for all imported goods and shadow wage rate of 0.78 was used for unskilled labor.

13. The EIRRs of the water supply Project 1, Project 2 and additional financing under Project 3, and the wastewater project in south catchment area of Colombo city under Project 3 are higher than the economic opportunity cost of capital of 12%. A sensitivity analysis was conducted for all projects. The results are acceptable against downside risks, including 10% increase in capital expenditure, 10% increase in O&M costs, 10% decrease in benefits and 1 year delay except the worst case scenario wherein the EIRR is below 12%.

14. For water supply, Project 1, Project 2 and additional financing under Project 3 (all three combined), the EIRR is the most sensitive to the decrease in benefits. The risk of reduced benefits is assessed to be low as population at Greater Colombo continues to expand due to natural growth as well as internal migration. Being the largest urban centre of the country, Greater Colombo will continue to experience robust demand for improved water supply and sanitation services. For the wastewater project, EIRR is also the most sensitive to the decrease in benefits. For purposes of this analysis, the cost estimate is based on market price and sufficient physical contingency has been provided. As such, significant capital costs overrun are considered unlikely. Though in the worst case for the water and wastewater projects, when capital expenditures increase by 10%, O&M costs increase by 10%, the benefits decrease by 10%, and with a one year delay the EIRR is lower than 12%. The EIRR did not capture other economic benefits including reduction in pollution, environmental improvements and due to reduced energy consumption that are not quantified in the analysis.

Table A7.2: Summary of EIRR and Sensitivity Analysis

The Project	EIRR (%)	NPV (\$ million)	SV (%)
Water Supply Project 1, Project 2 and Project 3			
EIRR (base case)	13.6	16.9	
EIRR (10% CAPEX overrun)	12.3	3.1	12.0
EIRR (10% OPEX overrun)	13.5	16.0	190.7
EIRR (10% decrease in benefits)	12.0	0.5	10.3
EIRR (One year delay)	13.3	12.8	
Worst Case Scenario	11.4	(7.1)	
%Wastewater Project			
EIRR (base case)	13.4	11.2	
EIRR (10% CAPEX overrun)	12.3	2.4	12.5
EIRR (10% OPEX overrun)	13.3	10.3	135.0
EIRR (10% decrease in benefits)	12.1	0.4	10.4
EIRR (One year delay)	13.2	9.5	
Worst Case Scenario	10.7	(10.9)	

EIRR = economic internal rate of return, NPV = net present value, SV = switching value.

Source: Asian Development Bank estimate.

GENDER ACTION PLAN FOR TRANCHE 3

Activity	Targets and Indicators	Responsibility	Duration
Output 1: Rehabilitated and Expanded Water Supply System and Reduced NRW in the Northeast Part of Colombo City (financing gap for Project 1):			
<ul style="list-style-type: none"> • See GAP in Project 1.^a • Assess the implementation of the GAP of Project 1 to identify and act on areas needing improvement. 	<ul style="list-style-type: none"> • See GAP in Project 1. • Areas of Project 1 GAP implementation that need improvement identified and acted upon. 	NWSDB PMU NGO	Throughout the Project
Output 2: Rehabilitated and Expanded Water Supply System and Reduced NRW in the Southwest Part of Colombo City (financing gap for Project 2):			
<ul style="list-style-type: none"> • See GAP in Project 2.^b • Assess the implementation of the GAP of Project 2 to identify and act on areas needing improvement. 	<ul style="list-style-type: none"> • See GAP in Project 2. • Areas of Project 2 GAP implementation that need improvement identified and acted upon. 	NWSDB PMU NGO	Throughout the Project
Output 3: Rehabilitated and Expanded Wastewater Network in South Catchment Area of Colombo City:			
<ul style="list-style-type: none"> • Use sex-disaggregated socio-economic and health data and data on sanitation practices, needs and preferences of women and men in underserved or low income settlements. • Focus Group discussions and key informant interviews with women community leaders to understand the existing issues/problems with regards to wastewater/sewerage disposal in their households/residential areas. • Document the possible and desired roles to be played by the women leaders in unserved areas and underserved settlements and general women during the project detailed designs and implementation period. 	<ul style="list-style-type: none"> • Detailed designs based on surveys and/or consultations with underserved or low income communities (including BPL and FHH) to be included in the service areas. • List of key women leaders in each section of the road where sewerage pipes are newly installed, identify at least 50% of the leaders in low income communities (Wattas/community gardens). • List of problems expressed by women leaders as issues to be solved with regards to their sanitary, wastewater and health concerns. • List of roles preferred by women leaders to play during design and implementation period of the project implemented in their localities. • Women leaders motivated to establish informal groups to monitor the performance of installed wastewater pipe lines in their residential areas and interact with CMC field/ward level officers to get their problems solved. 	CMC PMU DSIDC/NGO	Detailed design/implementation phases
<ul style="list-style-type: none"> • Link all underserved or low income settlements (including all BPL and FHH households) in project areas to the proposed wastewater system. 	<ul style="list-style-type: none"> • Detailed designs include provisions for house service connections and connections to community sanitation facilities in all underserved/low income settlements in project area. • Developed and conducted awareness and motivational training sessions in unserved areas for the communities to take interest to connect their sewerage disposal to the common sewerage network established under the project. • Identify most critical members who cannot afford to pay the initial capital to get the connections and provide them funding support through existing government programs/ subsidies. 	CMC PMU DSIDC/NGO	Detailed design /Implementation stages
Output 4: Secondary Wastewater Treatment Plant Constructed in South Catchment Area of Colombo City:			
<ul style="list-style-type: none"> • Recruitment of female staff for the O&M of wastewater treatment plant. 	<ul style="list-style-type: none"> • At least 10% of the O&M staff in the plant is female and assignments are based on merits/capabilities and preferences rather than on gender stereotyped activities. • 100 % of the female staff are included in the initial training sessions conducted for the O&M staff of the WWTP (Baseline: NA). 	CMC	Immediately after the establishment of the WWTP

Activity	Targets and Indicators	Responsibility	Duration
<ul style="list-style-type: none"> Increased awareness of the key stakeholders /community leaders on the need of secondary treatment. 	<ul style="list-style-type: none"> Use FGDs and other meetings and training sessions conducted for Project 3 activities to highlight the needs of the secondary treatment and its impacts (at least 50% of the gatherings adopted when this principle are attended by women representing key stakeholders). 	CMC, PMU, DSIDC, NGO	Throughout the project period
Output 5: Strengthened institutional structure and capacity of service providers			
<ul style="list-style-type: none"> Training and capacity building of 100 CMC staff for the management of wastewater system. 	<ul style="list-style-type: none"> Women make up 25% of participants in the training for the management of wastewater system (Baseline: 0). 	CMC and PMU	
<ul style="list-style-type: none"> Recruit women engineers and engineering assistants for the PMU for project implementation. 	<ul style="list-style-type: none"> Women make up at least 25% of the PMU professional staff (baseline 2012: Male =16 and Female 2 [11%]). 	CMC/DSIDC	Throughout the project
<ul style="list-style-type: none"> Introduce institutional reforms in the wastewater unit and include targets for women in staff recruitment. 	<ul style="list-style-type: none"> Women make up 40% of Wastewater staff (baseline 2012: Total staff = 142; Female = 56 (39%) and Male = 87 (61%). Women hold 15% of managerial positions (Baseline: 10%). 	CMC Wastewater Unite and PMU	Throughout the project
<ul style="list-style-type: none"> Encourage CMC to recruit women field officers to work in the low income areas. 	<ul style="list-style-type: none"> At least 1 woman field officer recruited for each unserved area covered by the project (Kirulapone, Narahenpita and Kirula). 	CMC/ CMC PMU and DSIDC	Throughout the project period
<ul style="list-style-type: none"> Design and implement a city-wide awareness campaign, using multiple communication channels. This will include gender analysis of different levels of awareness and acceptance between women and men. 	<ul style="list-style-type: none"> Awareness campaign of wastewater tariff among citizens increased by 80% before and after Project 3 emphasizing shared responsibility of men and women in water management and conservation and in sanitation and health (target: 50% women participation in FGDs) (2013 Baseline: 20%). Scope of assessment will be indicated, e.g. sample survey of project target areas. 	CMC PMU DSIDC	Throughout the project
<ul style="list-style-type: none"> Implement a water sanitation and hygiene program in 229 low-income communities in the south part of Colombo city through an NGO. 	<ul style="list-style-type: none"> Both men and women make up at least 50% of participants in WASH-related awareness activities. 	CMC PMU NGO	Throughout the project
<ul style="list-style-type: none"> Assist communities to develop participatory and informal systems for monitoring the performance of small sewerage pipelines and manholes in their localities and interact with CMC district engineer's offices. 	<ul style="list-style-type: none"> Simple and informal participatory system for monitoring the performance of small sewerage pipelines and manholes in their localities and coordinating with CMC district engineer's offices developed (target: 50% of community leaders who designed and manage the monitoring system are women). 	DSIDC/CMC PMU and CMC	Throughout the project period

BPL= below poverty line, CMC = Colombo Municipal Council, DSIDC = Design Supervision and Institutional Development Consultant, FGD = focus group discussion, FHH = female headed household, NGO = nongovernment organization, NRW = non-revenue water, NWSDB = National Water Supply and Drainage Board, O&M = operation and maintenance, PMU = project management unit, USS= under-served settlements (USS), WWTP = wastewater treatment plant.

^{a b} NGO recruitment was delayed due to delays in recruiting supervision consultants and the limited capacity of PMU staff to manage NGO recruitment. NGO recruitment has commenced and is currently under way.

Source: Asian Development Bank.

SUMMARY POVERTY REDUCTION AND SOCIAL STRATEGY

Country:	Sri Lanka	Project Title:	Greater Colombo Water Supply and Wastewater Management Improvement Investment Program (Tranche 3)
Lending/Financing Modality:	Multitranche Financing Facility	Department/ Division:	South Asia Department Urban Development and Water Division

I. POVERTY AND SOCIAL ANALYSIS AND STRATEGY

Targeting classification: TI-MDGs

A. Links to the National Poverty Reduction and Inclusive Growth Strategy and Country Partnership Strategy

The National Poverty Reduction strategies as explained in the vision for Sri Lanka (2010) focus on achieving more equitable development through accelerated rural development, accelerating growth through increased investment in infrastructure and strengthening public service delivery. Providing equal access to wastewater management (sewerage) facilities to the people, especially urban communities is one of the key premises in the national development strategy. The Greater Colombo Water and Wastewater Management Improvement Investment Program (the investment program) aims at establishing an improved wastewater (sewerage) management system in Colombo city by creating effective infrastructure facilities. The Project 3 will involve rehabilitation and new construction of sewerage network and wastewater treatment plant in south catchment area of Colombo city. It will also provide support for institutional strengthening program to manage the project sustainably in its' post project period.

Rehabilitation of dilapidated old sewer lines, improvements to the problematic pumping stations and most significantly the installation of new sewer lines in unserved areas, especially the low income communities will create significant impacts on urban communities and specifically poor communities in Colombo city. With the proposed improvements, the poor will be able to receive effective services to manage their sewerage with no social and other sanitary related issues. Establishment of Colombo Municipal Council (CMC) managed sewerage networks in tenement gardens, popularly known as Wattas in the local language, will be the most significant impact of the proposed development project. There will be possibility to motivate the service receiving communities to share certain responsibilities for the operation and maintenance (O&M) of the system. Project 3 is closely aligned with the Asian Development Bank's (ADB's) water and sanitation sector strategy aiming at improving service coverage and enhancing cost recovery. The Project 3 will target women to ensure their participation in all possible activities of the project. The loan extended by ADB will promote environmentally sustainable urban development and greater efficiency in service delivery. This is aligned with ADB's Country Assistance Strategy, ADB's Water Operational Framework 2011-2020 as well as ADB's Urban Operational Framework 2012-2020. Wastewater management will directly contribute to achieving the Millennium Development Goal 7.

B. Results from the Poverty and Social Analysis during PPTA or Due Diligence

1. Key poverty and social issues. About 7% households in Project 3 areas of Colombo city receive special assistance for poor from the government (Samurdhi benefits). A little more than 35% of the population in the city lacks access to sewerage facilities. About 11% of households do not have household water connections and obtain water from stand posts and other alternative water supply sources. The communities are dissatisfied with water quality and adequacy of supply, especially in the dry season. The households with no sewerage facilities depend on own systems established at home gardens/households. However, sewerage pits in most of the households over flow frequently and the users are compelled to empty filled pits very often by incurring costs (paid to CMC or private parties). In such situation, the people in the unserved areas experience the burden of spending additional time and cost for the sewerage management in their households.

2. Beneficiaries. The beneficiary population in Project 3 areas is 220,626 (52,437 families). Nearly 40% of the total population in Project 3 areas lives in underserved settlements. More than income poverty, the poor lack access to basic services, house ownership and access to quality housing, as the majority live in tenement gardens and low cost flats. Project 3 anticipates that households shall be connected to the common sewerage system, especially the households in tenement gardens. The Project 3 implementing areas too fall under the highly populated commercial areas of Colombo city and the issues in the existing sewerage systems will be addressed in such areas creating effective sewerage/wastewater management systems to facilitate other development projects/programs. The 2012 baseline survey reveals the presence of 0.4% very poor households with monthly per capita income below Rs.3,797 (official poverty line, 2012/13); and 10.2% poor households with monthly per capita income below Rs.15,000. Most of these families are residing in tenement gardens (known as Wattas in the local language). The baseline surveys reveal high unemployment and underemployment in Project 3 unserved areas. Unemployed people from the project area will be given preference in project-related employment. In the Project 3 area in Colombo city, about 7% of households in unserved areas are headed by women, 7% in the project area receive Samurdhi benefits and 0.4% comprises households with a stated monthly per capita expenditure below the official poverty line of Rs.3,797. A majority of the chief wage earners in the unserved areas of Project 3 are engaged in casual jobs, both in the government and the private sector, and have no productive assets. People with high economic status are reported to reside in the served areas of Project 3.

3. Impact channels: The low income communities in tenement gardens will have opportunities to connect their household sewer systems to CMC established mains network. The time and cost spent by households in managing their present sanitation can be fully reduced and the householders in such areas will be free to use their time for more productive purposes. Hygiene and sanitation facilities of the poor will be improved, thereby reducing water and vector borne disease incidents, which will have a positive impact on household sustenance by reducing household expenditure on health. The CMC expenditure on O&M in problematic sewer areas, including Colombo Business District will be reduced significantly in the post-project situation.

4. Other social and poverty issues: Lack of access to land and housing is a critical issue, dealt by the Urban Development Authority in the Colombo city area. Lack of access to adequate drinking water facilities is also a problem for the poor. The National Water Supply and Drainage Board (NWSDB) is responsible for providing drinking water facilities in the city, and the situation will be improved with the implementation of the water supply (Projects 1 and 2) of the investment program.

5. Design features: Project 3 will rehabilitate the existing dilapidated sewer pipe lines in sewered areas; it will also install new sewerage networks in three unserved areas of Colombo city. The problematic pumping stations will be rehabilitated and a new water treatment plant will be established. The institutional and operational capacity of CMC will be strengthened to provide better service to the users of sewer systems. A comprehensive public awareness campaign on sewerage/wastewater management systems will be implemented by using multiple communication channels.

II. PARTICIPATION AND EMPOWERING THE POOR

1. Participatory approaches and project activities. Community Wastewater Management Groups will be organized and mobilized to participate in grassroots level management activities carried out by CMC for the O&M of sewer systems. Effective interactions will be established between CMC O&M staff and the community, especially those residing in tenement gardens. Training will be provided to user groups to support CMC in repairing of wastewater leaks in small pipe lines, monitoring the manholes in the localities, checking on the functions of the sewer pipe lines in the local areas and making complaints to the District Engineers of CMC. Awareness programs will be organized through community-based organizations, on the value of sewerage/wastewater management systems, contribution and involvement of users for O&M of newly improved/established sewer network in their areas, social obligation of individuals towards society; and the linkages between wastewater/sewerage, sanitation, health and hygiene. During construction and operation, project benefits will be shared by giving preference to the community for any project-related employment, skilled or unskilled.

2. If civil society has a specific role in the project, summarize the actions taken to ensure their participation: A nongovernment organization (NGO) with prior experience in forming community organizations in the urban context will be entrusted the task of forming Wastewater/sewerage User Groups, awareness-raising on significance of main sewer systems in Colombo and training Wastewater User Groups to be involved in all possible ways to contribute towards the effective O&M of the system in Project 3 area in Colombo city; The terms of reference and budget for the NGO have been prepared. The Consultation and Participation Plan (CPP) and Gender Action Plan (GAP) define the roles of the NGO in specific project-related participatory activities.

3. Civil society organizations. Public consultations with communities through NGOs and community-based organizations and with community leaders will be made to discuss plans, designs, locations and management of wastewater/sewerage infrastructure, as well as environmental and social mitigation measures. The views of the affected persons on resettlement and compensation, mitigation measures and grievance redressal mechanisms will be obtained.

4. The following forms of civil society organization participation are envisaged during project implementation, rated as high (H), medium (M), low (L), or not applicable (NA)

☒ (M) Information gathering and sharing ☒ (M) Consultation ☐ (L) Collaboration ☐ (L) Partnership

5. Participation plan.

☒ Yes. ☐ No. Explain why

CPP prepared for the project includes participatory activities that will result in giving a voice to consumers and the poor. NGO facilitation is expected to help in establishing consumer societies with participation of low income groups, especially women.

III. GENDER AND DEVELOPMENT

Gender mainstreaming category: Effective Gender Mainstreaming (EGM)

A. Key Gender issues. Women's close relationship to wastewater/sewerage management in unserved areas (especially in tenement gardens) – in terms of providing undisturbed sewerage disposal facilities for the family and household activities, in ensuring sanitation options for the family and in maintaining family health is not acknowledged sufficiently. Women's knowledge on wastewater management is not taken into account in providing solutions for water, wastewater and sanitation problems in low income areas. Women's participation in decision-making positions in the community is limited, they lack knowledge on technical matters related to wastewater management, hygiene and sanitation. The poorest groups of women spend more time in seeking the service of gully suckers to empty their

frequently spilling sewerage pits, which reduces their time available for economically productive and remunerative activities.

B. Key actions. ☒ Gender action plan ☐ Other actions or measures ☐ No action or measure

Women are envisaged to play a key role in wastewater user groups. The GAP provides for women's participation in CMC managed sewerage network in Tenement gardens; provision of technical know-how on repair of wastewater leaks in small pipelines, monitoring of manholes in the residential areas, in filing complaints related to O&M problems with the district engineers of CMC; awareness raising on sanitation and hygiene. Women are also expected to be recruited as labor for construction work. The project will provide advocacy training for women and men to take up wastewater issues; and training on environmental protection in tenement gardens. Wastewater User Groups will comprise more than 50% women, both as members and leaders (this will be specifically relevant to tenement gardens). Women are expected to comprise more than half of the participants in awareness programs and to take the lead in disseminating hygiene and sanitation messages. The project management unit (PMU) is expected to recruit qualified female staff with at least 25% of officers in the PMU to be female. Gender training will be given to staff of the PMU and relevant officers in the implementing agency.

IV. ADDRESSING SOCIAL SAFEGUARD ISSUES

A. Involuntary Resettlement

Safeguard Category: ☐ A ☒ B ☐ C ☐ FI

1. Key impacts. In Kirulapone project area 10 affected families (35 people) will lose their houses and will be resettled in Urban Development Authority established high-rise housing schemes. Four affected business activities will have to be rehabilitated. One renter family will lose his/her lease to the rented house. In other areas temporary impacts are identified in congested areas due to construction/lying of pipelines. Potential loss of income for vendors, of which certain percentages are vulnerable, is estimated. Full closure of roads is not anticipated in commercial areas. Roads with $\leq 3m$ are all in predominantly residential areas. Public consultations have been conducted in all localities in Project 3 areas of Colombo city during the feasibility study stage and it will be increased significantly in the next phase of the project.

2. Strategy to address the impacts: Draft resettlement plan to mitigate all involuntary resettlement impacts on affected families was prepared in consultation with the affected families. The draft resettlement plan will be updated and finalized during the detailed design stage. In other commercial areas of Project 3, the temporary impacts are anticipated, for which: (i) cash assistance for loss of income at maximum daily income/profit for the hawkers/vendors; (ii) shifting assistance for the vulnerable, provision of parking in specified locations with security arrangement during period of disruption; and (iii) information sharing on project schedules is proposed. Capacity development training programs on ADB safeguards policy requirements are proposed for PMU, CMC, NGO, and contractors' personnel. A Grievance redressal mechanism for the CMC project component is proposed, and project information disclosure schedule has been prepared and enclosed in the prepared resettlement framework and resettlement plan.

3. Plan or other Actions.

- ☒ Resettlement plan
☒ Resettlement framework

B. Indigenous Peoples

Safeguard Category: ☐ A ☐ B ☒ C ☐ FI

1. Key impacts. The project is located in Colombo city areas. No indigenous communities reside in the project area. Is broad community support triggered? ☐ Yes ☒ No Not applicable

2. Strategy to address the impacts. Not applicable

3. Plan or other actions. Not applicable ☒ No action

V. ADDRESSING OTHER SOCIAL RISKS

A. Risks in the Labor Market

1. Relevance of the project for the country's or region's or sector's labor market. Indicate the impact as high (H), medium (M), and low or not significant (L).

☐ (L) unemployment ☐ (L) underemployment ☐ (L) retrenchment ☒ (H) core labor standards

2. Labor market impact. Contract' agreements will have clauses on adherence to core labor standards and preference in project-related construction work (skilled and unskilled labor) to people from the community, especially the affected persons and poor and vulnerable. New employment opportunities will be generated as a result of the project for O&M of the facilities created. In low income areas, residents/local people, particularly women, shall be given preference in employment for O&M of project facilities and opportunities for training in O&M.

B. Affordability

The householders in unserved areas can be motivated to get connected to main sewer network. They will explore all their possibilities to afford the sewerage connection cost. In other areas too, wastewater O&M cost can be introduced and charged through indirect means (attached to monthly drinking water bills or attached to annual property tax). Specific action/planning will be prepared during implementation to ensure that there is incentive for the lower income HH/ slum communities to connect with the sewer network.

C. Communicable Diseases and Other Social Risks

1. Indicate the respective risks, if any, and rate the impact as high (H), medium (M), low (L), or not applicable (NA): ☒ (L) Communicable diseases ☐ (NA) Human trafficking

2. Describe the related risks of the project on people in project area.

Construction workers will be made aware on communicable diseases such as HIV/AIDS risks. PMU in collaboration with the NGO shall raise awareness amongst contractors.

VI. MONITORING AND EVALUATION

1. Targets and indicators: See the Design and Monitoring Framework, the GAP and CPP for the key target and indicators

2. Required human resources: Project Director and PMU staff will be responsible for overseeing project implementation and ensuring the smooth implementation of activities related to social development and safeguards. They will be assisted by the social development and safeguards officer at the PMU (CMC), design, supervision and institutional development consultants and NGO engaged under the project.

3. Information in PAM: Template for social safeguards monitoring, terms of reference for NGO, GAP, CPP, samples of project leaflet, and grievance and redressal form are in the PAM.

4. Monitoring tools: Baseline data (disaggregated by sex, ethnicity, social and economic status) for output and outcome indicators will be updated and reported on a monthly basis in a format consistent with ADB's project performance reporting system. Activities under the GAP will be implemented by an NGO partner with assistance and monitoring and regular reporting by the Social Development Officer placed within the PMU. The PMU will be responsible for submitting periodic (semi-annual) progress reports on the GAP and CPP. The PMU, with assistance from design, supervision and institutional development safeguard specialist, will be responsible for preparing compliance and safeguards monitoring reports on a semiannual basis. A midterm review of the Project 3 will be undertaken during the implementation period of Project 3. The midterm review will evaluate in detail the scope of the Project 3, implementation arrangements, and any outstanding issues (environment and resettlement, as well as safeguards issues), achievement of scheduled targets, contract management progress, and other issues as appropriate, and generate agreement on any changes that may be needed. An evaluation will be undertaken one year after the closure of the project; and findings of the completion report will be shared publicly and disseminated within ADB and to key government officials at the national and state level.

Source: Social economic impact assessment, ADB FS study 2015.

CONTRIBUTION TO THE ADB RESULTS FRAMEWORK

Indicators in the Result Framework	Target	Method and Comments
Households with new or improved water supply (number)	25,000	Total amount of nonrevenue water about 130,000 m ³ /day, can be used either to put in new connections or to reduce the production; existing consumers can get better service.
Waste water treatment capacity added (m ³ /day)	50,000	Under a proposed Public-Private-Participation (Design-Build-Operate) modality.
Households with new or improved sanitation (number)	18,900	Number varies as the total anticipated new housing stock being developed by the Urban Development Authority will increase based on their plans and budget allocations.

km = kilometer, m³ = cubic meter.

Source: Asian Development Bank.