



Completion Report

Project Number: 47255-001
Technical Assistance Number: 8733
August 2017

Sri Lanka: Wastewater Management Improvement in Colombo Municipal Council

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TA Number, Country, and Name: TA 8733-SRI: Wastewater Management Improvement in Colombo Municipal Council			Amount Approved: \$500,000 Revised Amount: Not Applicable	
Executing Agency: Ministry of Provincial Councils and Local Government		Source of Funding: TASF-V	Amount Undisbursed: \$80,155	Amount Utilized: \$419,845
TA Approval Date: 03 Oct 2014	TA Signing Date: 10 Dec 2014	Fielding of First Consultants: 28 April 2015	TA Completion Date Original: 30 Sep 2016 Account Closing Date Original: 30 Sep 2016	Actual: 30 Nov 2016 Actual: 31 Dec 2016

Description

The Colombo Municipal Council (CMC) is responsible for the provision of a wide range of municipal services, including wastewater management services in Colombo. CMC has continued to rely on budget allocation through general revenue as funding source for municipal services such as flood control, drainage, and wastewater management. Wastewater management services under CMC have suffered from lack of adequate funding support for operations and maintenance because of competing needs for budget resources. CMC receives continued support to improve and expand the sewer network, and build two new wastewater treatment plants (WWTPs) to achieve full coverage of wastewater collection and discontinue its practice of discharging untreated wastewater into the sea. While the WWTPs will have significant impacts on improving wastewater management services in Colombo, this also presented major operational and management challenges to CMC because of its lack of knowledge, experience, expertise, and institutional capability in this field. Given these constraints, CMC needed to explore private sector involvement, through a public-private partnership (PPP) arrangement, to deal with challenges in design, construction, and/or operations and maintenance of the plants. This also required a wastewater tariff as a dedicated funding source to strengthen operational sustainability and project viability. Against this background, the technical assistance (TA) was designed to focus support on: (i) institutional reforms and financial sustainability of CMC; (ii) capacity enhancement in CMC to manage wastewater services; (iii) PPP in wastewater provision; and (iv) improved sustainability of its wastewater services.

Expected Impact, Outcome, and Outputs

The impact was improved financial sustainability and operations of wastewater services in Colombo City, demonstrated by recovery of operation and maintenance costs through revenues from wastewater services, and mandatory wastewater discharge standards met by the two WWTPs. The outcome was improved capacity to operate and maintain wastewater services in Colombo city through approval of a CMC resolution to implement a wastewater tariff scheme, and initiation of PPP contracts for the two WWTPs. The outputs of the project were (i) preparation of a wastewater tariff scheme, (ii) identification and preparation of a PPP modality, and (iii) implementation of an information campaign and training program.

Delivery of Inputs and Conduct of Activities

The TA activities were carried out by consultants engaged through individual contracts in accordance with ADB's Guidelines on the Use of Consultants. The team was mobilized in April 2015 and completed in November 2016. Experts were engaged for a total of 15 person-months of international inputs (team leader, wastewater tariff, and PPP experts); and 15 person-months of national inputs (wastewater engineer, legal, and communications experts).

Under the TA, the following activities were successfully conducted by the consultants: (i) conduct of willingness-to-pay survey; (ii) tariff structure, formulation, and modeling; (iii) billing, collection, and enforcement; (iv) PPP for Wellawatta WWTP (southern catchment) and Madampitiya WWTP (northern catchment); and (v) capacity building and training. First, the consultants conducted a willingness-to-pay and affordability survey of 1,000 households and 50 institutions in the CMC area, to serve as a basis for tariff setting. Second, the consultants undertook tariff structure, formulation, and modeling for sewerage in Colombo using two approaches: direct volumetric (wastewater tariff linked to volume of water used); and indirect (wastewater tariff based on number of toilets, as proxy for volume of water used). As a result of the TA, indirect tariffs were implemented for nondomestic consumers in July 2017. A billing and collection system was designed by the consultants, and based on consultations and assessment, CMC indicated that it would directly manage this function, not the National Water Supply and Drainage Board (NWSDB) nor through outsourcing. NWSDB will provide information on billing (e.g. water consumption by customer types) to CMC which will be used as basis for billing wastewater services. Third, the consultants reviewed bidding documents for one WWTP under design-build-operate (DBO) arrangement under PPP. DBO bidding documents for Wellawatta WWTP was finalized in March 2016. Fourth, the consultants designed and implemented a communication plan, which included awareness raising campaign, workshops, and media briefings, to inform and educate citizens on the need for and benefits of wastewater tariffs. Fifth, the consultants provided stakeholder workshops and training programs for 169 participants consisting of CMC members and officers, NWSDB officials, Central Environment Authority staff, nongovernment organizations, religious leaders, selected industrial and commercial members, and community members in the following key areas: (i) tariff methodology and framework, (ii) wastewater management,

(iii) change awareness and DBO concept, and (iv) information campaign. Overall, the performance of the consultants was satisfactory.

The performance of ADB and the executing agency was satisfactory. ADB participated in the inception mission, conducted a TA implementation review in conjunction with missions for ongoing projects, and provided comments and suggestions on draft reports. Implementation issues were immediately resolved through regular discussions with the executing agency and consultants. The executing agency provided guidance and support for the consultants, and was satisfied with the inputs provided by all consultants. Overall, the consultants delivered satisfactory outputs with the full cooperation of CMC officers and staff. To deliver the project's outcome, the consultants conducted meetings, consultations, and field visits; and identified issues related to tariffs and PPP of two WWTPs.

Evaluation of Outputs and Achievement of Outcome

All envisaged outputs in the TA's design and monitoring framework were achieved. For output 1, wastewater tariff scheme prepared and implemented through a phased approach, tariff setting entailed preparation of a tariff model that simulated capital and operating expenses, as well as cost recovery and ensuring sustainability. In output 2, PPP modality was identified and prepared by TA consultants and bid document preparation and finalization with help of the consultants too. All technical, financial, management and legal inputs were incorporated into critical bidding documents. For output 3, information campaign and training program implementation, stakeholder consultation and dissemination workshops were undertaken for 139 participants covering tariffs and PPP. By introducing the required tariffs, preparing the PPP documents, and conducting information campaign workshops and training for CMC through these outputs, the outcome of the TA was achieved. Based on responses from workshop participants, 90% had positive views of the workshops. The TA was successful in transferring knowledge to CMC staff.

The TA developed a wastewater tariff structure and assisted the CMC in entering into a PPP for two new WWTPs to be constructed.¹ The TA enhanced the introduction of tariffs in the CMC area and supported the PPP target set by the ongoing Multitranchise Financing Facility (MFF) for Greater Colombo Water and Wastewater Management Improvement Investment Program.²

Overall Assessment and Rating

The TA is rated *successful*, based on the ratings of relevant, effective, efficient, and likely sustainable. The TA was *relevant* to the goals and strategies in the urban sector of the government and ADB. The TA was *effective* as it achieved the outcome and outputs of wastewater tariff setting, PPP, and capacity building of CMC staff on strategies to successfully implement WWTPs. The TA was *efficient* since it utilized 84% of the TA funds with minimal delay in implementation. The TA is *likely sustainable*. CMC's capacity building in the areas of tariff setting, information campaign, wastewater management, and bid preparation will ensure sustainable implementation of the TA reforms. CMC will implement the proposed agreed tariffs, the DBO schemes for the two WWTPs, and information campaign measures during the program implementation, and operating stage.

Major Lessons

The TA enabled CMC and NWSDB to work closely toward implementing an appropriate wastewater tariff methodology through effective institutional arrangements.³ The timely implementation of an information, education and communications strategy for wastewater tariffs and PPP is essential to the sector sustainability.

Recommendations and Follow-Up Actions

Although the TA was successfully completed, the following remaining areas for the capacity development of CMC on wastewater tariff setting needs to be undertaken: (i) fully implement the tariffs proposed under the TA for all consumer types to ensure DBO's financial sustainability; (ii) further develop CMC's in-house staff capacity on wastewater management; (iii) implement the DBO scheme for the two WWTPs; and (iv) implement the communication plan on tariffs and sewerage improvement in Colombo. In the planned DBO contract for the WWTPs, a robust set of key performance indicators should be developed. Such key performance indicators can be benchmarked to those of other DBOs in the world. The support of a PPP expert should be provided during bid evaluation of treatment plant. CMC needs to ensure adequate and qualified staff to implement above actions.

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¹ The MFF will finance one WWTP and another WWTP is proposed to be under additional financing for the Greater Colombo Wastewater Management Project still to be prepared.

² ADB. 2012. *Report and Recommendation of the President to the Board of Directors: Proposed Multitranchise Financing Facility for Democratic Socialist Republic of Sri Lanka for the Greater Colombo Water and Wastewater Management Improvement Investment Program*. Manila (MFF 0072-SRI, approved on 25 October 2012).

³ NSWDB will provide data to CMC on water consumption and customers to implement the volumetric tariffs.