

## **Greater Colombo Water and Wastewater Management Improvement Investment Programme – Project 01 - 2021**

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The audit of financial statements of the Greater Colombo Water and Wastewater Management Improvement Investment Programme - Project 01 for the year ended 31 December 2021 was carried out under my direction in pursuance of provisions in Article 154(1) of the Constitution of the Democratic Socialist Republic of Sri Lanka read in conjunction with Section 2.10 (a) of Article II of the Project Agreement No.2947-SRI and 2948-SRI (SF) dated 28 June 2013 entered in to between the National Water Supply and Drainage Board and the Asian Development Bank. My comments and observations which I consider should be reported to Parliament appear in this report.

### **1.2 Implementation, Objectives, Funding and Duration of the Project**

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According to the Project and Loan Agreements of the Programme - Project 01, then Ministry of Water Supply and Drainage, presently the Ministry of Water Supply is the Executing Agency and the National Water Supply and Drainage Board is the Implementing Agency of the Programme - Project 1. The objectives of the Programme-Project 1 are to improve urban environment and quality of life for the residents of Greater Colombo area and expected to (a) rehabilitate and expand water supply system and reduced Non-Revenue Water in the City of Colombo (b) improve wastewater service in the Greater Colombo area (c) strengthen institutional structure and capacity of the service providers and (d) manage and implement investment projects. As per the Loan Agreements, the estimated total cost of the Programme-Project 1 amounted to US\$ 112 million equivalent to Rs. 14,784 million and out of that US\$ 84 million equivalent to Rs. 11,088 million or 75 per cent was agreed to be financed by the Asian Development Bank. The balance amount of US\$ 28 million equivalent to Rs. 3,696 million or 25 per cent is expected to be contributed by the Government of Sri Lanka. The Programme commenced its activities on 25 September 2013 and scheduled to be completed by 31 December 2016. Subsequently, the period of the Programme had been extended three times up to 30 June 2021.

### **1.3 Opinion**

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In my opinion, the accompanying financial statements give a true and fair view of the financial position of the Programme- Project 1 as at 31 December 2021 and its cash flows for the year then ended in accordance with Sri Lanka Accounting Standards.

### **1.4 Basis for Opinion**

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I conducted my audit in accordance with Sri Lanka Auditing Standards (SLAuSs). My responsibilities, under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of my report. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

### **1.5 Responsibilities of Management and Those Charged with Governance for the Financial Statements**

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Management is responsible for the preparation of financial statements that give a true and fair view in accordance with Sri Lanka Accounting Standards, and for such internal control as management determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Those charged with governance are responsible for overseeing the Project's financial reporting process.

## **1.6 Auditor's Responsibilities for the audit of the Financial Statements**

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My objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Sri Lanka Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Sri Lanka Auditing Standards, I exercise professional judgment and maintain professional scepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of internal control of the Programme –Project 1.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the management.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with those charged with governance regarding, among other matters, significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

## 2. Comments on Financial Statements

### 2.1 Accounting Deficiencies

	Accounting Deficiencies	Amount Rs. Million	Responses of the Management	Auditor's Recommendations
(a)	Even though the mobilization advance had been fully recovered from ICB-2 contractor by interim payment certificate No.28 in year 2021. However, out of that mobilization advance amounting to Rs. 71.76 million had not been accounted as recovered in the financial statements	71.76	Correction entry has been made subsequently	Action should be taken to rectify the issue.
(b)	Advance liquidation value of Rs.54.92 million equivalent to USD 290,450 had been liquidated under the initial advance of the Loan No.2947. However, it had not been transferred to the respective loan account after liquidation.	54.92	Correction entry has been posted subsequently	Action should be taken to rectify the issue.

## 3. Physical performance

### 3.1 Physical progress

As per the progress report of the Programme –Project 1, the overall physical progress of the Project as at 31 December 2021 was 95.73 percent. However, Project had achieved only 12.29 percent of progress during the year under review was observed. Cumulative performance of the each component of the project was as follows.

	<b>Activities</b>	<b>Units</b>	<b>Expected target</b>	<b>Target achieved as at 31 December 2021</b>	<b>Audit Issue</b>	<b>Response of the Management</b>	<b>Auditor's Recommendations</b>
(a)	<p>System Rehabilitation for NRW reduction in Northern part of the Colombo City <b>(ICB-1)</b></p> <ul style="list-style-type: none"> <li>- Pipe laying works</li> <li>- Connection transfers (Fully completed)</li> <li>- Fully Completed DMA'S handed over to NWSDB</li> <li>- Overall progress of the contract</li> </ul>	<p>Meters</p> <p>house holders</p> <p>Nos</p> <p>Percentage</p>	<p>212,654</p> <p>35,176</p> <p>16</p> <p>100</p>	<p>212,654</p> <p>35,106</p> <p>12</p> <p>99.51</p>	<p>Delaying the completion of system rehabilitation works for None Revenue Water reduction within the scheduled contract period. As a result, it may adversely affect to reach the expected target of the 18 percent of non-revenue water reduction in Colombo city</p>	<p>Due to unavoidable circumstances, the contract period had to extend considering reasonable reasons. However, the expected target of NRW has been reached now.</p>	<p>Corrective measures should be taken to avoid delays</p>
(b)	<p>System Rehabilitation for NRW Reduction in Eastern part of the Colombo City <b>-(ICB-2)</b></p> <ul style="list-style-type: none"> <li>- Pipe laying (Including feeder main)</li> </ul>	<p>Meters</p>	<p>252,556</p>	<p>252,256</p>	<p>Delaying the completion of system rehabilitation works for None Revenue Water reduction within the</p>	<p>Due to unavoidable circumstances, the contract period had</p>	<p>Corrective measures should be taken to avoid delays</p>

	<ul style="list-style-type: none"> <li>- Connection transfers (Fully completed)</li> <li>- Fully completed DMAS &amp; handed over to the NWSDB</li> <li>- Overall progress of the contract</li> </ul>	<p>House holders</p> <p>Nos</p> <p>Percentage</p>	<p>27,314</p> <p>20</p> <p>98.04</p>	<p>24,722</p> <p>08</p> <p>92.41</p>	<p>scheduled contract period. As a result, it may adversely affect to reach the expected target of the 18 percent of Non-revenue water reduction in Colombo city.</p>	<p>to extend considering reasonable reasons. However, the expected target of NRW has been reached now.</p>	
(c)	Construction of NRW building at Maligakanda.	Percentage	100	99.02	Adversely affect the completion of the Project	The Building was handed over on 3 <sup>rd</sup> January 2022	Immediate actions should be taken to complete the balance works as per the para 3.5 (b) of this report

### 3.2 Contract Administration

	<b>Audit Issues</b> -----	<b>Responses of the Management</b> -----	<b>Auditor's Recommendations</b> -----
(a)	Contract for System Rehabilitation for Non-Revenue Water Reduction in Northern Part of the Colombo City (ICB-1) was scheduled to be completed within 42 months by July 2018. Subsequently, the contract period had been extended in five times up to 21 October 2021 and the pipe laying works of 212,654 meters with pressure testing and 35,106 numbers of house connection transfers had been fully completed as at 31 December 2021. However, after lapse of 83 months from the date of commencement of the activities of the contract, only 12 district metering areas out of 16 had been fully completed and	Due to unavoidable circumstances, the contract period had to extend considering reasonable reasons. The total No. of DMAs (16) had been fully completed and handed over to the O & M division.	Contract should be fully completed before the Project period of 30 June 2022.

	handed over to the NWSDB as at 31 December 2021. As a result, period of the contract had been extended again up to 15 March 2022, beyond the loan winding up date of the Project on 31 January 2022.		
(b)	<p>Contract for System Rehabilitation for Non-Revenue Water Reduction in Eastern Part of the Colombo City (ICB-2) was scheduled to be completed within 48 months by July 2019. Subsequently, the contract period had been extended three times up to 21 January 2022. The expected targets of the contract was 252,556 meters of pipe laying works and provide 27,314 numbers of connection transfers in 20 district metering areas under the rehabilitation and expand the water supply system and reduce non-revenue water below 18 percent of the Eastern part of the Colombo city. Even though the 252,256 meters of pipe laying works and 24,722 numbers of contraction transfers had been completed as at 31 Deceber2021 after lapse of 77 months from the date of commencement of the activities of the contract, only 8 DMAS out of 20 had been fully completed and handed over to the NWSDB after achieving the expected target of NRW reduction. However ,it was observed that the contract works have been carried out beyond the loan winding <i>up</i> date of the project on 31 January 2022 without obtaining the proper time extension</p>	<p>Due to unavoidable circumstances, the contract period had to extend considering reasonable reasons. 19 Nos. of DMAs had been fully completed and handed over to the O &amp; M division. Extension of Time was granted up to 21<sup>st</sup> May 2022.</p>	<p>Contract should be fully completed before the Project period of 30 June 2022.</p>

**3.3 Observations made on site visits**

	<b>Audit Issue</b> -----	<b>Response of the Management</b> -----	<b>Auditor's Recommendation</b> -----
(a)	<p>Project had planned to install new bulk meters, repair the existing bulk meters and repair the ground sumps etc. in addition to the pipe laying works and connection transfers of the condominium schemes to reduce NRW. Even though the individual meter readings consider for income generation to NWSDB, bulk meter reading of the each condominium scheme is considering for NRW calculation instead of individual meter readings. Therefore differences might be observed between the bulk meter count and individual meter count due to leakage from ground sumps, leakage from overhead tanks and illegal connections etc. However, it was observed that proper Mechanism had not been implemented to identify deference and charge from the individual customers up to 31 December 2021. Further at the time of the field inspection, bulk meter of Aluthmawatha housing scheme is not functioning and bulk meter of the katawalamulla housing scheme is also unable to read due to covering by road reinstatement works Further, one of the samagipura housing scheme consisted with 16 individual householders had not been given their permission for connection transfers was observed.</p>	<p>As a sustainable remedial action, we have sent a request to the DGM of RSC(WC) to introduce the Master Child methodology for condominiums in the future.</p> <p>Regarding the J block in Samapura, house to house awareness program was carried out by the PMU &amp; PIU officials on 20<sup>th</sup> January 2022. In addition to that, a letter has sent to Households by the area Engineer Maligakanda on 24<sup>th</sup> February 2022.</p> <p>Actions have been taken to the replacement of defective bulk meters.</p>	<p>Action should be taken to rectify the defects and complete the balance work after awareness programme.</p>
(b)	<p>Pipe Joints of the Duct tile iron pipes should be fully covered by using mastic materials to prevent the corrosion. As per the Physical inspection carried out in respect of the pipe laying works at Harbor premises under the ICB-01 contract on 11 March 2022, it was observed that, only top of the Nut and</p>	<p>The contractor was instructed to rectify the works with mastic materials. Decommissioning work is in progress and the contractor was instructed to expedite the decommissioning work immediately.</p>	<p>Action should be taken to closely monitor the decommissioning works in order to complete within revised time frame.</p>

	<p>Bolts had been covered by using mastic of the 1000 mm D<sub>ia</sub> pipe joints instead of fully covering them , In addition to that ,instances of leakage of water after decommissioning works, breaking off ABC layer and asphalt tar due to poor road reinstatement and maintenance have been observed at the time of physical inspection.</p>		
(c)	<p>Project had completed pipe laying works of 3.3 km and 1,194 numbers of house connection transfers at Kimbulla ela area under the ICB-01 contract. According to the Physical inspection carried out regarding pipe laying works at Kimbulla ela area on 24 January 2022, it was observed that, reinstatement works had not been done properly. As a result, instances of pot halls, breaking off ABC layer and cracks appearing on road layers had been observed. In addition to that, instances were observed that the pipe joints relating culvert crossings had not been covered by using mastic materials even after lapse of significant period from the constructions.</p>	<p>All the defects were observed. The contractor was instructed to rectify the defects. After rectifying the defects the roads were handed over to CMC.</p>	<p>Action should be taken to avoid such an errors in future.</p>
(d)	<p>Construction contract for NRW building at Maligakanda was scheduled to be completed within 18 months by 23 October 2018. Subsequently, period of the construction had been extended 7 times up to 15 March 2022. Even though the contractor had already been spent 56 months instead of 18 months, Physical progress of the construction was only 99.02 as at 31 December 2021. According to the Physical inspection carried out in relation to the construction works on 27 January 2022, electrical works, Installation of LED light &amp; fittings, Aluminium windows and door works, A/C works, bath room fitting works, water supply to the laboratory, tile rectification works, ceiling works, and some cladding works etc. was to be</p>	<p>The progress of the project has been significantly affected due to various reasons such as poor turnout of the employees to the site due to existed pandemic situation during the said period, scarcity of construction materials in the market (cement, sand, metal, cladding sheets, sanitary fittings, aluminum materials for windows, doors and office partitions &amp;, etc) &amp; delay in importing foreign materials such as LED Light fittings, AC Units &amp; associated refrigerant (Copper) pipes due to</p>	<p>Immediate actions should be taken to fully complete the balance works.</p>



	<p>completed. In addition to that, significant balance works of the ground floor was to be completed by the date on 27 January 2022. Further , it was observed that the those works had not been fully completed even up to seventh extension date on 15 March 2022.</p>	<p>lack of dollar reserves in the country. However, it was able to conduct the opening ceremony of the Call Centre for operation after completing the sixth floor on 3<sup>rd</sup> January 2022.</p>	
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### 3.4 Matters in Contentious Nature

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<b>No</b>	<b>Audit Issue</b> -----	<b>Response of the Management</b> -----	<b>Auditor's Recommendation</b> -----
(a)	<p>Value of Rs.133.53 million of 03 subcontracts relating the landscaping works had been awarded under the variation orders of ICB-02 contract and paid Rs.31.18 million up to 31 December 2021. Out of that, value of Rs.132.47 million of subcontracts had been awarded only for the landscaping works for the Maligakanda reservoir and Elli house reservoir which had been completed by another water supply Project was observed. According to that, requirement of the landscaping for old reservoirs and a huge amount of cost estimation for landscaping works and paid amounting to Rs.30.27 million was questionable to the audit. In addition to that ,Rs. 3.11 million of profit and overheads equivalent to 10 percent of the above payments had been charged by the main contractor without participating in any work.</p>	<p>The scope of this project is to remove 100 years old pipes and lay new PE pipes. Maligakanda and Elli House reservoirs are situated in the heart of Colombo city. Further, it is intended to make the environment of the reservoir premises look pleasant and beautiful. As per the Green concept of NWSDB, the landscaping should be followed in this regard. Also, these premises will be a visiting destination, especially for school children. Therefore, this will be very vital for upcoming projects in the future.</p>	<p>Such works should be done through the direct labor of the NWSDB without utilizing the loan funds.</p>

### 3.5 Delays in commencement / Implementation / Completion of activities of the Project

No.	Audit Issues -----	Management Responses -----	Auditor's Recommendations -----
(a)	<p>The Greater Colombo water and waste water management improvement investment program aims at delivering better water supply services in an effective and efficient manner by reducing the non-revenue water in Colombo city from 49 percent to below 18 percent by year 2020. According to that program Project – 01 had involved to pipe laying works of 450,508.26 meters and provide connection transfers to 60,413 house holders in 36 district metering areas (DMAS) and reduce NRW under the rehabilitation and expand water supply system of Northern and Eastern part of Colombo city. Even though the pipe laying works and house connection transfers had been significantly completed as at 31 December 2021 after lapse of 08 years from the date of commencement of the activities of the Project, only 20 DMAS out of 36 had been fully completed and handed over to the water board as at 31 December 2021 after achieving the expected target of NRW. However, as per the final extension, Project works and loans winding up period of the programme project 01 had been expired on 30 June 2021 and 31 January 2022 respectively. Hence, balance works of the Project will be done under the programme Project – 03 which additional financing Project of the programme. However, NRW percentage of the Colombo city is remained at 34.75 percent as at 31 December 2021. Accordingly, expected target of the reduction of NRW percentage of Colombo city could not be achieved even up to year 2021.</p>	<p>Due to unavoidable circumstances, the contract period had to extend considering reasonable reasons. The NRW teams are continuously monitoring the DMA figures on daily basis and with continuous ALC (Active Leakage Control) work, taking necessary actions to reduce the NRW figures. The current NRW value of the Colombo city is now below than 25%.</p>	<p>Corrective measures should be taken to complete the Project without further delays</p>

(b)	<p>NRW Building is consisted with 06 floors. However, after commencement of the interior works, initial floor plans in respect of the laboratory, auditorium and call center had been changed. As a result of changing the floor plans, the partition works, designing of air-conditioning works, placement of pantry cupboard, tiling works and generator capacity etc. are also had been changed accordingly. Out of that, estimated variation for partition work and cost of the pantry cupboard placement were Rs.7.42 million and Rs. 2.69 million respectively and paid 90 Percent up to 29 Interim Payment Certificate. In addition, to that, Project had paid a sum of Rs.8.52 million for external painting works of whole Building. Subsequently, the Project had estimated a sum of Rs.24.7 million for cladding work for the front side of the building which covered the painted area. Therefore, it was observed that some expenses out of painted works could have been saved if initially decided the cladding works of the building and further audit observed that the internal and external design changes had also been significantly affected to the delay of the completion of building other than the additional expenses of design changed.</p>	<p>As per the tender stage drawing, the office partition setup was depicted for only four floors (GF/1F/2F/3F) with the parking facilities &amp; test bench establishment on the Ground floor &amp; remaining (4F/5F/6F) with blank floors, whereas the BOQ itemized with nominal provisions to the blank floors. According to the NWSDB request &amp; submitted layout plan for the office setup, had subsequently led to the changes in the total ELV system, AC System, Fire System &amp;, etc. Further, during a visit by higher management in June 2021, it has been instructed to enhance the interior &amp; exterior aesthetical view of the building as this building would turn to be the prominent hub in the Island to monitor &amp; control NRW from now onward.</p>	<p>Designing of buildings should be done in accordance to the purpose of usage and action should be taken to minimize the changes after awarding the contract and construction stage.</p>
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### 3.6 System and Controls

No.	Audit Issues -----	Management Responses -----	Auditor's Recommendation -----
(a)	<p>Un-recovered security deposits as at 31 December 2021 were Rs.109.83 million. The security deposits pertaining to the roads handed over to the CMC was Rs 66.08 million and the defect liability period of them had been expired. However, no any amount had been recovered from CMC during the year under review.</p>	<p>CMC requested the soft copies of the As-Built drawings after forwarding all the documents. We have forwarded them &amp; CMC agreed to reimburse the refundable deposits after receiving As-Built drawings.</p>	<p>Actions should be taken to recovered the security deposit without delaying.</p>

(b)	According to the physical inspection carried out on 24 January 2022 in relation to the pipe yards premises at Alakanda and Makola under the ICB-1 and ICB-2 contracts, it was observed that, PE and DI pipes had not been stored standards method and PE pipes had not been covered by security net to preventing the ultraviolet rays.	The contractor was already instructed to follow the correct procedures for storing the materials. Accordingly, contractor had done the work.	The contractors stores should be monitored closely whether they follow the standards methods for storing the materials
(c)	The provision for the payment of all bonds and Guarantees was Rs.17 million. However, the actual payment as at 25 March 2021 was Rs.131.68 million. Out of that Rs.70.23 million had been paid without obtaining the required approval.	The committee appointed by the General Manager (Engineer for the contract) reviewed all related facts in detail and decided to make this payment under the Provisional Sum BOQ Item 2.01. The payment was made to avoid paying the delay charges to the contractor.	A mechanism should be introduced to payments are made after obtaining the relevant approvals
(d)	According to Management Circular No.05 of 26 July 2010, the activities of the programme Project-1 had not been audited by the Internal Audit section of the National Water Supply and Drainage Board.	It had not been done in year 2022	Actions should be taken to implement an internal audit