Greater Colombo Water and Wastewater Management Improvement Investment Programme – Project 02 (Ambathale Water Supply System Improvement and Energy Saving Project) - 2022

The audit of the financial statements of the Greater Colombo Water and Wastewater Management Improvement Investment Programme - Project 02 (Ambathale Water Supply System Improvement and Energy Saving Project) for the year ended 31 December 2022 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 3.4.2 (h) of the Credit Facility Agreement No. CLK 1008-01 P dated 29 September 2014 entered in to between the Democratic Socialist Republic of Sri Lanka and the Agence Francaise De Development. 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

According to the Credit Facility Agreement of the Project, then Ministry of Water Supply and Drainage, presently the Ministry of Water Supply and Estate Infrastructure Development is the Executing Agency and the National Water Supply and Drainage Board is the Implementing Agency of the Project. The objectives of the Project are to aims at extending water supply access and fostering the water system sustainability for Greater Colombo. As per the Credit Facility Agreement, the estimated total cost of the Project was US \$ 100 million equivalents to Rs. 13,000 million and out of that, US \$ 70 million equivalents to Rs.9,100 million was agreed to be financed by the Agence Francaise De Development. The balance amount of US\$ 30 million equivalents to Rs. 3,900 million is expected to be contributed by the Government of Sri Lanka. The Project had commenced its activities on 29 September 2014 and scheduled to be completed by 31 December 2019. However, the date of completion of the Project had been extended two times up to 30 June 2023.

1.3 Qualified Opinion

In my opinion, except for the effects of the matters described in the 2:1 of this Report the accompanying financial statements give a true and fair view of the financial position of the Project as at 31 December 2022 and its cash flows for the year then ended in accordance with Sri Lanka Accounting Standards.

1.4 Basis for Qualified Opinion

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

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

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 skepticism 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 Project.
- 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

No Accounting Deficiencies / Audit Rs. Responses of t Management million	the Auditor's Recommend ation
a Total amount of Rs. 10 million 16.28 10 million valued assets	will Assets should
valued Computers, Office be accounted under the	PPE be accounted
Furniture and office equipment, during the year 2023.	under the
purchased for the use of	correct
consultancy service office and the Office furnitu	category
Project office had been accounted equipment and compute	
under the consultancy service equipment utilizes by P	
expenditure. In addition, the will be accounted und	der

computers and office furniture purchased at Rs.6.28 million for the Project implementation unit had been accounted under the work in progress instead of being shown those assets as PPE.

PPE after the final payment to the ICB/04 contractor finalized.

b The balances of year-end mobilization advances and retention money relevant to the contractors had been foreign revalued using selling rate of Dollar instead of using the spot rate in accordance with para 08 of Sri Lanka Accounting Standards 21.

The Project will adopt the guidelines of LKAS 21 and will be used "Spot Rate" for revaluation of mobilization advance and retention money from the year 2023 onwards.

35.6

1010

Need to be followed the LKAS

c Cumulative Loan Interest and commitment charges amounting to Rs.620 million and Rs.390 million respectively had not been accounted as borrowing costs according to the instructions given in the State Account Circular No: 230/2013 and as per the LKAS 23.

The loan interest and the commitment charges of AFD loan are being paid by the General Treasury. There is no allocation in the original loan amount agreed by the AFD and GOSL for the interest and the commitment charges paid during the project period. Therefore, according to the written Instructions given by Finance division the NWSDB, the loan interest and the commitment charges were not accounted in the Project books

Make sure to show the correct project cost adhering with the State Account circular

3. Physical performance

3.1 Physical progress

The Project had commenced its activities on 29 September 2014 and scheduled to be completed by 31 December 2019. However, the period of the Project had been extended two times up to 30 June 2023 due to the failure of the achievement of target within the scheduled Project period. As per the progress report, the overall physical and financial progress of the project as at 31 December 2022 were 70.13 percent and 57.11 percent respectively even after a lapse of 08 years from the commencement of the Project. However, it was observed that the Project had only achieved 13.3 percent physical progress even during the year under review and components wise progress is as follows.

		As at 31 December 2022				Auditor's
No.	Activity	Expected targets (%)	Target achieved (%)	Audit Issues	Responses of the Management	Recommendatio n
(a)	Construction of Gothatuwa 15000 m3 reservoir, Booster Pump Station at Moragasmulla with Supply and Laying of 5 Km, 1200mm DI pipes (1CB-03)	100	54.98	Possibility of extending the contract period and it may adversely affect the Project completion.	The ICB 03 Contract was delayed due to poor performance of contractors, changes of project location, government restrictions for opening LC, unavailability of construction materials, impact of pandemic, Suspension of fund disbursement by AFD. Accordingly the Contractor has requested EOT up to the end of December 2023.	Remedial actions should be taken to overcome the existing issues and complete the project without been further delay.
(b)	Supply and Laying of 9 km Ductile Iron Pipes (1200mm Dia) and Accessories from Ambatale to Ellie House Reservoir (ICB-04)	100	95.70	Possibility of extending the contract period and it may adversely affect the Project completion.	The ICB 04 Contract was delayed due to suspension of fund disbursement by AFD, unavailability of funds from other sources, poor performance of contractors, barriers from related	Make sure to complete the project with in the expected time period by managing the unexpected situation.

institutions,

pandemic issues,

Based on the above delays the next EOT has been forwarded for approval up to 01 June 2023. The contract was partially taken over on 31 May 2023.

(c) Reliability enhancement and energy saving of Ambatale production facilities for saving energy through installation of efficient pumps with appropriate capacities, reducing transmission losses through reduced friction and enhancement of other production facilities (ICB-05)

Delays in the achievement of reducing transmission losses and energy savings as planned adversely can affect the completion of the Project before the due date.

53.41

95.60

The ICB 05 Contract was delayed due to **Bidding** process took more time than expected, because of complexity of the work and nonavailability of historical data for design. the Significant delays in equipment and material supply, The

poor

Contractors'

performance, change of design arising from unforeseen ground conditions, delay on appointing subcontractors, Poor management and coordination of the Sub-Contractors, extension of contract period due to unavailability of materials, Suspension of fund disbursement by AFD,

Construction
works should be
closely supervise
by the
management and
action should be
taken to expedite
the works in
order to reduce
losses.

(d) Design Review and 98.30 97 construction supervision

consultancy services

Successful of overall project basically depend with the efficient

The DRCSC contract needed to be extended with all other contract

Consultant should take necessary actions to expedite and

(DRCSC)

service of the consultant. However. this project has lagging by day day consuming time money and showing without expected the outcome.

packages have been extended due to the reasons stated in Item 4.1.1, 4.1.2 and 4.1.3.

closely monitored the activities of the project in order to complete within the time frame

3.2 Contract Administration

No Audit Issues

(a) Contract for Consultancy Service of the Project was awarded at a cost of Rs.495 million on 01 December 2015 to complete within 36 months. However, international and local key experts had not been mobilized as per the original schedule due to long delays, inefficiency of the awarding of contracts and poor performance of the contractors. As a result, period of the consultancy has to be extended three times up to 31 January 2023, Hence, overall cost of consultancy service of the project has been increased by Rs.215 million comparing with the initial estimated consultancy cost.

(b) The ICB 04 contract was awarded for 672 days from 01 July 2016 which the commencement date of the activities and subsequently it had been extended up to 05 January 2023. Accordingly, the contractor had been taken 1891 days instead of 903 days by 05 January 2023 (Excluding the suspension period). As per the progress report of the project, only 95.70 percent of overall physical progress had been achieved at 31 December as 2022.

Responses of the Management

The Contract package delays given in clause 4.1.1, 4.1.2 and 4.1.3 cause to delay, mobilize the consultant key experts to avoid the necessary payments to key experts. However, with the progress of contract packages the consultancy service had extended from the saving of non-mobilizing the key experts previously.

The overall cost increase of the consultancy service when comparing with the initial estimated cost was only Rs. 113.91Mn.

Reasons caused for delay is given under 4.1.2. Partial taking over was done on 31 May 2023. The main remaining parts are disinfection and cleaning. Disinfection was delayed because Elli house pump station is still under construction and having a problem with getting required amount of water for disinfection. As a solution for this, the newly laid line was connected to existing line very recently.

Auditor's Recommendations

Consultant should take necessary actions to expedite and closely monitored the activities of the project in order to complete within the time frame and reduce further losses.

Actions should be taken to expedite the works and closely monitor the contract to avoid further delays.

Nevertheless, the contractor had failed to complete the contract even up to the date of audit 26 June 2023.

(c) The contract for the construction of Gothatuwa 15,000m3 reservoir and booster pump station with supply and laying of 05 km DI pipes (ICB 03) was scheduled to be completed by 06 June 2022. Subsequently, it had been extended up to 12 February 2023 and the overall physical progress was 69.48 percent even as at 31 May 2023. However the project had given more time up to December 2023 to complete works without taking any action to delay even though the consultants of the project had informed that the weaknesses of contractor had impacted to long delay in completing the contract.

The Contractor has requested the EOT up to end of December 2023, but the employer has not granted the approval for this request until they submit substantial documentary evidence.

The Contractor has increased the number of resources (labour and material) with the Employers instructions to increase the progress.

Contractor's works should be closely supervised to avoid further delays.

Contract for reliability enhancement (d) and energy saving of Ambathale production facilities for saving energy through installation efficient pumps with appropriate capacities (IC 05) was planned to be completed by December Subsequently, the contract period had been extended three times up to 23 February 2023. Even though this contract represents 45.60 percent of weightage from the whole Project activities, the overall physical progress and overall financial progress had shown as 53.41 percent and 36.84 percent respectively as at 31 December 2022.

The contract was delay due to items given in 4.1.3. The delay has been caused a continues effect to the Contract. The Sludge Treatment System and Backwash recovery system construction and M&E work are remaining; other civil work can be completed. It is not possible to complete before December 2023. The Contractor has requested another EOT due to above delays. Already forwarded for the cabinet approval for the next project extension and loan extension (up to 31 June 2024).

Contractor's works should be closely supervised to avoid further delays

3.3 Observation made on site visits No Audit Issue

(a) According to the physical audit test carried out regarding the pipe laying works of ICB-04 contract on 26 June 2023, the permanent road reinstatements of 150 meters out of total pipe laying works of 9200 meters had not been done. Further, only 6,627 meters of road section out of pipe laid area under the contract had been handed over to the RDA. addition, pipe ioints Nagalamweediya bridge crossing had not been covered by using mastic materials.

Contract for construction of ICB 03 (b) Gothatuwa 15,000m³ reservoir, supply and laying of 5 km 1200 mm DI pipes, Moragasmulla booster pump house and Ambathale high lift pumphouse was expected to be completed by 06 June 2022. However, the pipe laying works of 3.2 km out of total pipe laying works of 5 km of the contract had only been completed to up to 30 June 2023. As per the work plan of the construction of high lift pump house and Moragasmulla pump house was planned to be fully completed by 17 February 2023 and 2 June 2022 respectively and only basement concreting works of the high lift pump house had been completed by 26 June 2023, Further, Major civil works except sound proofing works, all electrical and mechanical works, landscaping works had been completed in Moragasmulla pump house. Also, Kinda canal pipe bridge

Responses of the Management

There is a water leak even after repairing several times near the new Kelani bridge in the existing transmission lines. The permanent reinstatement of balance 150 m is delayed due to the above issue.

In the total pipe length, pradeshiyasaba owns 1000m. Then 8200m is only owned by RDA and from that length, 6627 m has been handed over to RDA. The balance RDA handing over part was temporarily hold until completing the permanent reinstatement in the above 150m. If leak repairing further delayed, necessary action will be taken to handover other section.

The reasons for the delay in construction activities of ICB 03 package is given in 4.1.1 section. And some other reasons are Arising the necessity of soil improvement, collapsing sheet piles during the excavation, pipe line, large amount of utility lines and water connection lines are passing through the narrow sections section.

In Kinda canal and Madinnagoda pipe bridge crossing bored piling has been completed and only truss has to be placed but in precast pile testing remaining.

The procurement of pumps for the high lift pump house is not under the scope of ICB 03 Contract and it is done under ICB 05 Contract.

Due to above reasons the Contractor has requested EOT up to December 2023.

Auditor's Recommendation

Immediate actions should be taken to overcome existing issues to achieve the expected outcome

Prompt attention should be paid to complete the project with in the allocated time period with overcoming the existing issues. crossing and Madinnagoda pipe bridge crossing were still in pile testing stage at the time of physical inspection. Procurement of pumps for the high lift pump house had not been finalized even up to 26 June 2023. As a result, completion of the above-mentioned contracts within the scheduled period was in highly-risk situation and no expedite programme was observed to complete the said activities in the audit.

(c) As per the amended work plan of the construction of Back wash recovery was scheduled to system commenced on 15 December 2018 and completed by 21 January 2022. However, at the time of physical audit test on 26 June 2023, 164 Nos of piles had only been completed. it was observed completion of backwash recovery with mechanical system and electrical works before end of the year 2023 is in doubt. Further, construction of 8,000 m³ capacity of ground reservoir at Ambathale premises was planned to be completed by 02 September 2022. However, only wall concreting and reinforcement works were progress by the date of inspection. 16 no of pumps, SCADA system had not yet been installed even up to 26 June 2023. And also, it was noted that entire progress of the above sites was in far behind the amended work plan.

ICB 05 delaying factors are given in item 4.1.3. And accordingly Board Approval to continue the project in slow progress. To manage the funds, employer did not request to expedite the construction activities.

Due to reservoir construction limited space was available for Backwash and Sludge Treatment System. This resulted to delay the construction work in Backwash area.

The contractor' has requested EOT for physical completion up to 30 April 2024.

Prompt attention of the management should be paid to complete the project with in the allocated time period overcoming the existing issues

3.4 Matters in Contentious Nature

No. Audit Issues

(a) For the purpose of reduce high energy consumption of the Ambathale water treatment plant (WTP) due to the existing pumps at pumping stations being over 30 years old and energy consumption to operate the pumps too high, the NWSDB had planned to rehabilitate and replace efficient pumps with appropriate capacities and the construction of ground reservoirs and laying of transmission mains with larger diameter to reduce friction losses etc. and made an agreement to this project in September 2014. Accordingly it was planned to replace 17 No of new pumps at Dehiwala, New intake, Maligakanda, Gothatuwa and Elli house pump stations respectively. However, 13 No of pumps out of 17 had been purchased and only 01 pump had been installed by the date of inspection on 26 June 2023. Even though project activities had been commenced from 2016, no any main contracts under the project had been completed even up to 31 December 2022. However the project is being dragged by the PMU incurring large amount of money as administration, consultancy, maintenance etc. and the Government expenditure such as loan installment, commitment charges, interest increased without having any benefits to the economy in addition, without having achieved the expected objective of reducing high energy consumption the NWSDBs cost for water supply is increased.

(b) Monthly average electricity charges of the water treatment plant at Ambathale had remained at Rs. 131 million by the end of the year 2022 and it has further

Responses of the Management

Reasons for delays are given in item 4.1.3. Then the Contractor was unable to perform work according to the approve work program.

Pump installation was delayed due to practical difficulties in connecting with old Ambatale Water Treatment Plant such as valves are not functioning, Therefore. the Contract packages could not completed as per the schedule data. This situation is beyond the control of the Contractor and Employer. Accordingly, the project was to achieve unable designed object of energy saving as planned.

Auditor's Recommendations

Issues which are mentioned in the management response should have identified at the planning stage in feasibility study. Further the management has failed to select a suitable contractor. Therefor special attention need to be paid to complete the project within existing the extended period.

Reasons for the delays in three construction packages are given in item 4.1, 4.2 and 4.3. As a solution for not Action should be taken to manage the unexpected situations and expedite the works to achieve the main increased up to Rs. 203 million by May 2023 due to current huge tariff for the electricity. If the main objective of this project was succeeded by completing the project with in the scheduled period this kind of expenditure would not have occurred. Further, contractors poor planning, poor performance and also poor contract supervision by project management had adversely affected to achieve the expected objectives of the Project.

AFD having funds recommend to go for prefinancing until they disburse funds. Since there was no other option, project had to slowdown the progress and with continued utilizing payment all three packages are continuous. But the available balance in the project bank account is only sufficient for the end of July 2023 and Board approval was received to continue the project in slow progress from June 2022 to December 2022.

objectives of the project.

3.5 Idle/ Unutilized/ Underutilized resources

Audit Issue

According to the credit facility agreement of the project, out of the total allocation of USD 70 million Rs.9.100 equivalent million representing 70 percent made by the lending agency, only a sum of USD 42.53 million equivalent to Rs. 9,942 million representing 60 percent of the allocation had been utilized as at 31 December 2022 after lapse of 8 years and 3 months from the commencement date of the activities of the Project. As result. commitment charges aggregating to USD 2.2 million equivalents to Rs. 390.4 million had to be paid by the government on behalf of the undisbursed balance up to 31 December 2022.

Responses of the Management

The project was unable to disburse the funds to the Contractors as per the planned forecast due to reasons given in 4.1.1, 4.1.2 and 4.1.3. Therefore, the government had to pay commitment charges according to the conditions of loan agreement. However, the project has been taken maximum effort to mitigate the effect of this additional work within the provisions available in the Contract.

Auditor's Recommendations

Action should be taken to manage the unexpected situations and expedite the works to achieve the main objectives of the project.

3.6 System and Controls

No Audit Issues

- USD 2.1 million equivalents to Rs. (a) 397.7 million had been paid as an advance payment under the foreign component of ICB 03 contract on 23 December 2020. According to the contract agreement total amount of advance payment should be recovered before paying the 90 percent of contract value. However, Project had recovered only 9 percent of above advance when the physical progress and financial progress were 55 percent. at Accordingly, **USD** 1.9 million equivalents to Rs. 692 million had to be recovered from the contractor by the end of the year under review. Further, it was observed that a very slow advance recovery process had been maintained by the project management in favor of the contractor.
- (b) Transaction of the Project had not been subject to the Internal Audit of the Water Supply and Drainage Board, as required by the Circular No. 05 of 26 July 2010 of the Department of Management Audit.

Responses of the Management

The advance payment should be recovered from both currencies of Rs. and USD. Due to the current economic crisis high price escalation has occurred. During payments, work done + price escalation will be paid. The price escalation will be only added to local component part (LKR) and foreign component (USD) remain same. In ICB 03 Advance payment, is remaining to be recovered only from foreign component. If the Advance cannot be recovered at the end of this year, then the percentage of recovery will be increased.

Auditor's Recommendations

Advance payment should be covered according to the contract agreement and price escalation and other need to be consider separately.

Internal Audit Division of NWSDB has conducted a Financial Statement Audit for the year 2021. And it is required to do performance audit as well for the year under review.

It is required to conduct audit covering the performance of the Project.