

1.1 Qualified Opinion

The audit of the financial statements of the of National Engineering Research and Development Centre of Sri Lanka for the year ended 31 December 2018 comprising the statement of financial position as at 31 December 2018 and the statement of financial performance, statement of changes in equity and cash flow statement for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, 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 provisions of the National Audit Act No. 19 of 2018 and Finance Act, No.38 of 1971. My comments and observations which I consider should be tabled in Parliament appear in this report.

In my opinion, except for the effects of the matters described in Paragraph 1.5 of this report, the financial statements give a true and fair view of the financial position of the Center as at 31 December 2018, and of its financial performance and its cash flows for the year then ended in accordance with Sri Lanka Public Sector Accounting Standards.

1.2 Basis for Qualified Opinion

My opinion is qualified based on the matters described in paragraph 1.5 of this report. I conducted my audit in accordance with Sri Lanka Auditing Standards (SLAS). 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 qualified opinion.

1.3 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 Public Sector 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.

In preparing the financial statements, management is responsible for assessing the Center’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Board or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Center’s financial reporting process.

As per Sub-section 16 (1) of the National Audit Act No. 19 of 2018, the Center is required to maintain proper books and records of all its income, expenditure, assets and liabilities, to enable annual and periodic financial statements to be prepared of the Center.

1.4 Scope of Audit (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 the Center's internal control.
- Conclude on the appropriateness of the management's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Center's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Institute to cease to continue as a going concern.
- 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.

The scope of the audit also extended to examine as far as possible, and as far as necessary the following;

- Whether the organization, systems, procedures, books, records and other documents have been properly and adequately designed from the point of view of the presentation of information to enable a continuous evaluation of the activities of the Center, and whether such systems, procedures, books, records and other documents are in effective operation;
- Whether the Center has complied with applicable written law, or other general or special directions issued by the governing body of the Center;

- Whether the Center has performed according to its powers, functions and duties; and
- Whether the resources of the Center had been procured and utilized economically, efficiently and effectively within the time frames and in compliance with the applicable laws.

1.5 Financial Statements

1.5.1 Non-compliances with Sri Lanka Public Sector Accounting Standards

Non-compliance with Reference to the Relevant Standard	Comment of the Management	Recommendation
-----	-----	-----
a) The expenditure of Rs. 363,706 incurred for patenting the new inventions of the Centre had been brought to accounts as being identified as intangible assets. As only the expenditure incurred on the acquisition of those assets had been brought to accounts when identifying the value of assets for the financial statements, the fair value of such assets had not been revealed in the financial statements. Even though the intangible assets should be amortized in terms of Sri Lanka Public Sector Accounting Standard, 38 the Centre had not done so.	The said assets will be amortized to the profit and loss account within the useful life of intangible assets. Action will be taken to make the relevant adjustments in the accounts of the year 2019.	In case that economic benefits will be gained in the future through the intangible assets in terms of Sri Lanka Public Sector Accounting Standard, 38, those assets should be forecasted and shown in the financial statements to the net present value, and amortized annually.
b) The accounting policies relating to the intangible assets shown in the financial statements, had been incomplete.	Action will be taken to make the relevant adjustments in the accounts for the year 2019.	The policies adhered to in accounting, should be disclosed in the financial statements.

1.6 Accounts Receivable and Payable

1.6.1 Funds Receivable

Audit Observation	Comment of the Management	Recommendation
-----	-----	-----
a) A sum totalling Rs. 11,189,088 receivable from 11 completed projects, had not been recovered even by	Eight projects valued at Rs. 10,828,946 completed in the year 2018 was included in the said 11 projects. Action is being taken to	Action should be taken to recover the monies receivable as soon as a project is completed.

March 2019. recover the monies receivable thereon. Action is taken to recover the sum of Rs. 360,142 receivable from 02 old projects.

- b) The guarantee period of 3 commercial projects that had been handed over after being completed by the Center, had expired, action had not been taken to recover the retention money amounting to Rs. 397,521. Requests have been made to recover the retention monies relating to 02 projects whilst reminders are sent continuously. As for the recovery of retention money relating to the other project, it is necessary to wait until a fault occurred during the project period is rectified. Suitable action should be taken within the specified period to recover the monies retained.

2. Financial Review

2.1 Financial Results

The operating result of the year under review was a surplus of Rs. 11,318,783 as against the deficit of Rs. 6,077,467 in the preceding year thus observing an improvement of Rs. 17,396,250 in the financial result. This improvement had mainly been attributed by the increase in other income and Treasury grants amounting to Rs. 25,446,752 and Rs. 18,580,000 respectively despite the increase in administrative expenses by Rs. 19,853,429.

3. Operating Review

3.1 Management Inefficiencies

Audit Observation -----	Comment of the Management -----	Recommendation -----
a) A period of one month is given for returning the borrowed library books. Forty five books borrowed by 23 officers had not been returned during that period; instead, the books were observed to have been kept without being returned for a period ranging from 15 days to 03 years.	It is the objective of the library of the Center to provide books to be used in regard to researches and other activities. Some of the books are necessary to be used over longer periods with respect to certain researches. In such instances, it is authorized to keep those books over long periods. The period of one months is given when it is not necessary to use them for an extended time. However, action will be taken to formalize the return of borrowed books in due course.	In case of inability to return the borrowed books within the specified time, the date should be extended. A methodology should be prepared in that connection.

- b) Despite being planned to grant 50 licenses during the year for technologies invented by the Centre, only 23 licenses had been granted by earning an income of Rs. 93,355. It was targeted to renew 100 licenses during the year. Although there had been 163 licensees at the beginning of the year, only 40 of them had renewed their licenses during the year. The income received therefrom amounted to Rs. 93,095. The analysis on the pattern of issuance and renewal of licenses at the Center, it was observed that many of the technologies introduced had not been adequately popular in the country.
- Despite being expected to carry out 50 technological assignments, only 23 entrepreneurs had been willing to obtain the technologies, and their response remained poor. As some of the technologies had already become outdated, lack of interest to renew the licenses relating to such technologies was observed.
- The technologies invented by the Center should be improved from time to time whilst taking action to popularize such technologies.
- c) According to the Action Plan, the Center had targeted to introduce 13 new technologies during the year. Nevertheless, only 05 technical instruments and technologies costing Rs. 1,102,892 could be introduced. Even for those technologies, no patents had been requested, no technological assignments had been made, and no licenses had been issued even up to the date of audit.
- Even though it was planned to introduce 13 technologies during the year 2018 as per the Action Plan, only 5 technologies could be introduced as the project relating thereto could not be completed during the year. The research projects do not always come to conclusions successfully on time as planned. Technological assignments relating to the technologies introduced, are expected to be done in due course.
- As new technologies are invented often, it is necessary to efficiently conclude the projects commenced.

3.2 Operating Inefficiencies

Audit Observation	Comment of the Management	Recommendation
<p>a) According to the request made by the Ministry of Industry and Commerce, dated 15 October 2015, the project for inventing a machine for drying tiles had been commenced on 01 February 2016. The project had been scheduled to complete by 31 December 2016. Although a sum of Rs. 2,000,000 had been received in that connection, expenses totalling Rs. 5,668,011 had been incurred. However, the streamlining of the machine had not been completed even up to March 2019.</p>	<p>A proposal as to the measures to be taken for streamlining the machine, had been presented to the Ministry of Industry and Commerce on 2018.12.05 informing that a sum of Rs. 2.7 million would be required in that connection.</p> <p>A discussion had been held with the officers of the Ministry of Industry and Commerce and an observatory tour had also been done on 2019.02.28 in that regard. The consent of the Ministry of Industry and Commerce is expected.</p>	<p>Action should be taken to obtain consent of the relevant institutions prior to incurring expenses.</p>
<p>b) The design & fabrication of a hyperbaric oxygen chamber project had been commenced on 01 January 2014 at an estimated expenditure of Rs. 3,400,000. The project had been scheduled to be complete on 31 August 2015. The total expenditure incurred on the project amounted to Rs. 2,503,177. Project duration had been extended 08 times due to miscellaneous reasons, but only a progress of 70 per cent had been acquired even by January 2019. It was observed that the said project scheduled to be completed within a period of 20 months, had already taken 4 years whilst being further extended up to 30 June 2019.</p>	<p>As it was the objective of this project to introduce a medical instrument to be used on patients, the project period had to be extended 8 times by taking into account the risks and complexity thereof, and the matters relating to creativity. The unexpected issues taken place while the project progressed, also contributed to this scenario. However, irrespective of the difficulty in achieving the results expected, action is still being taken in view of making it a success by taking into account the importance thereof. Accordingly, the project duration was further extended up to 30 June 2019.</p>	<p>When deciding on the project duration, practical issues should be taken into consideration, and the project should be properly monitored so as to achieve the targets.</p>

- c) The project for development and commercialization of the automatic hopper manufacturing machine had been commenced in May 2015, and scheduled to be completed by 31 December 2015. The project duration had been extended up to 31 March 2019 from time to time. The project was not completed so far despite a lapse of 04 years since a sum of Rs. 1,309,652 had been spent on the project.
- During the first phase of this project, the researches of the automatic hopper manufacturing machine had been concluded, 10 such machines had been manufactured, and field tests had also been conducted before concluding the first phase. A duration more than expected had been required for solving the technical issues arisen at the first phase. The activities relating to the large scale hopper manufacturing machine had been concluded in the second phase. An additional time had to be spent for solving the technical glitches occurred from time to time. As such, an extra time had to be spent for conclusion of the entire project.
- When deciding on the project duration, practical issues should be taken into consideration, and the project should be properly monitored so as to achieve the targets.
- d) The manufacture of a semi-automatic and improved string hopper machine had been commenced on 01 January 2016 to address the issues relating to producing string hoppers such as health problems and inefficiency. The expected project duration was one year though, the project remained incomplete even by the date of audit, 28 February. The expenditure incurred on the project so far, amounts to Rs. 286,085.
- It was planned to complete this project within a period of one year after being commenced on 2016.01.01 based on the information received from small scale and medium scale entrepreneurs involved in producing string hoppers and considering the problems existing at present in regard to the produce of string hoppers. According to the tests conducted, it was found necessary that the machine invented during that time, needed further adjustments. In the meantime, the engineer who had spearheaded the project, resigned from the Centre. As such, the project still proceeds with the cooperation of his successor. It is expected that the project will be a success in the near future.
- When deciding on the project duration, practical issues should be taken into consideration, and the project should be properly monitored so as to achieve the targets.

- | | | |
|--|---|---|
| <p>e) Twenty new technologies and instruments had been invented by the Center relating to the period 2014 – 2018, and a cost of Rs. 15,400,882 had been incurred thereon. However, by 31 December of the year under review, technological assignments could be made only for 6 technologies therefrom. None of the other technologies invented had become popularized even up to April 2019.</p> | <p>Of the 20 technologies invented during the period of 2013 – 2017, two technologies had been assigned to entrepreneurs by December 2018. Several instruments had been manufactured by making use of 4 technologies, and sold thus popularizing them. Field tests are being carried out with respect to 5 more technologies. As such, action will be taken in the future for the assignment of those technologies and popularizing them.</p> | <p>Action should be taken to popularize the technologies invented.</p> |
| <p>f) Of the 20 technologies invented during the period 2014 – 2018, patents had been requested only for 02 technologies costing Rs. 1,567,880.</p> | <p>Not every technology can be patented. Requests have been made for patents in regard to 4 technologies at the moment. It is expected to forward applications in respect of more technologies.</p> | <p>Patents should be obtained promptly for the new technologies invented.</p> |

3.3 Transactions of Contentious Nature

Audit Observation	Comment of the Management	Recommendation
<p>A sum of Rs. 359,248 being the clearance charge of Customs for a water purifier received by a private institution as a donation from the Government of Japan, had been incurred by the Center upon being instructed by the Ministry. That sum, despite being brought to accounts as receivables, had not been recovered even up to the end of the year under review.</p>	<p>The payment on the water purifier following instructions of the Ministry of Science, Technology, and Research, was made under the expenses for promoting technologies of the Center. The Ministry was informed in writing on obtaining the said sum.</p>	<p>The sum receivable to the Centre should be recovered.</p>

4. **Accountability and Good Governance**

4.1 **Annual Action Plan**

Audit Observation

According to the Action Plan of the year 2018, the physical progress of 11 projects ranged between 13 per cent and 60 per cent.

Comment of the Management

Unlike the other projects, it is likely for the research projects not to achieve the targets despite being conducted based on expected targets. The factors that determine the progress of researches include : the technical methodology being followed in the research, quality of raw materials selected, knowledge & experience of the participants, and the matters of hypothesis. Despite the lapse of time with no expected results obtained when researches are conducted in accordance with the Action Plan, the physical progress does not change. The matters mentioned above had attributed to the progress of the said projects. Additionally, the issues such as, the engineers in charge of the projects and the technical officers leaving the service, and failure to appoint other engineers to those positions, had a strong impact on the progress of the projects.

Recommendation

When deciding on the project duration, practical issues should be taken into consideration, and the project should be properly monitored so as to achieve the targets.