2021

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வருடாந்த அறிக்கை
ANNUAL REPORT

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இலங்கைத் தேசிய பொறியியல் ஆராய்ச்சி மற்றும் அபிவிருத்தி நிலையம்
NATIONAL ENGINEERING RESEARCH & DEVELOPMENT CENTRE OF SRI LANKA

අධ්‍යාපන අමාත්‍යාංශය
கல்வி அமைச்ச
Ministry of Education

CONTENT

1.

ACTS, LEGISLATIONS AND CORPORATE INFORMATION

The Sri Lanka National Engineering Research and Development Centre (NERD) was established in the year 1974 under the provisions of the Estate Industrial Corporation Act No. 49 of 1957. NERD Centre established in Ja-Ela, Ekala, Industrial Estate as a premier institute established for the development and advancement of the local engineering industry and technology, research sector. This Centre was functioning in the 2021 under the State Ministry of Skills Development, Vocational Education, Research & Innovation.

OFFICIAL ADDRESS

2P/17 B, Industrial Estate
Ekala, Ja-Ela
Sri Lanka

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+ 94-011-2236384
+ 94-011-2236307
+ 94-011-5354597

+ 94-011-2233153

nerdcentre@nerdc.lk

BANKERS

- Bank of Ceylon, Ja-Ela
- Bank of Ceylon, Corporate Branch

AUDITORS

Auditor General
Auditor General's Department

2. VISION, MISSION, OBJECTIVES AND CORPORATE VALUES

Vision

"To be a
Centre of Excellence,
in Engineering Research
and Development
in the
South Asia Region"

MISSION

"Engage in Research
and Development activities
to develop, acquire, adapt
& transfer Engineering Technologies
that would have a direct impact on the
Socio Economic Development
of Sri Lanka,
while creating a culture within
the organization to harness innovation
and creativity of
employee sand stakeholders"

PURPOSE

"To provide
Engineering Intervention
for
Socio Economic
Development
in Sri Lanka"

OBJECTIVES

The National Engineering Research and Development Center of Sri Lanka was established on 14th August 1974 under the Sri Lanka State Industrial Corporation Act No. 49 of 1957. As per the Act, the following purposes for which the industrial undertaking is constituted shall be;

1. To provide for the institutional mechanism needed for the progressive development of indigenous technology by encouraging, recognizing and developing innovative and creative talent in Sri Lanka.

2. To provide facilities to co-ordinate the technological, engineering and research capabilities of various public and private sector industries and institutions in a productive manner through co-operative endeavour.

3. To ensure by adoption and adaptation the choice of technologies that would be consistent with the country's resource endowments and national planning objectives.

4. To examine direct and indirect mechanism of technology transfer and offer counsel to appropriate government and private institutions in Sri Lanka, when required to do so.

5. To promote the optimal exploitation of the country's human and material resources, particularly labour and raw material resources by promoting the growth of suitable technology.

6. To design, manufacture, and test prototype machinery, pilot plants as demanded by Industrial, commercial and other end users in an economical manner.

7. To provide for continuous monitoring of technological data and documentation relating to engineering designs and research through the co-operation of international and national agencies.

8. To offer sustained consultancy services to public and private sector enterprise and undertake research and promote training activities to broaden the base of the country's engineering and industrial design and research capabilities.

9. To make provision for purpose connected with engineering, research and development related to matters aforesaid.

COOPERATE VALUES

We as NERDC team are dedicated to the delivery of quality products, technologies and services for contributing to the wellbeing of our nation. We believe that high ethical standards are essential to achieve our individual and corporate goals. As such, a high performance culture necessitate to achieve excellence in Engineering Research and Development, the core values of NERDC commitment to our team, customers, other stakeholders and community are;

Our Customers

- Quality and timeliness products, technologies & services
- Enduring strong relationships by regular interaction.
- Excessive respect, courtesy and fairness

Stakeholders and Community

- Sustainable development
- Corporate social responsibility
- Dedicate to create value addition

Our Staff

- Be adventurous, creative, innovative and open minded
- Pursue continuous learning and growth and professional achievements
- Positive teamwork
- High performance and learning culture
- Fostering the values of professionalism, openness,
- Integrity, responsible for social morale

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BOARD OF DIRECTORS AND ORGANIZATION STRUCTURE

CHAIRMAN

Prof. Leelananda Rajapaksha

PhD, MEng, BScEng., E Eng, FIMechE, MASHRAE, MIIAR, MIESL

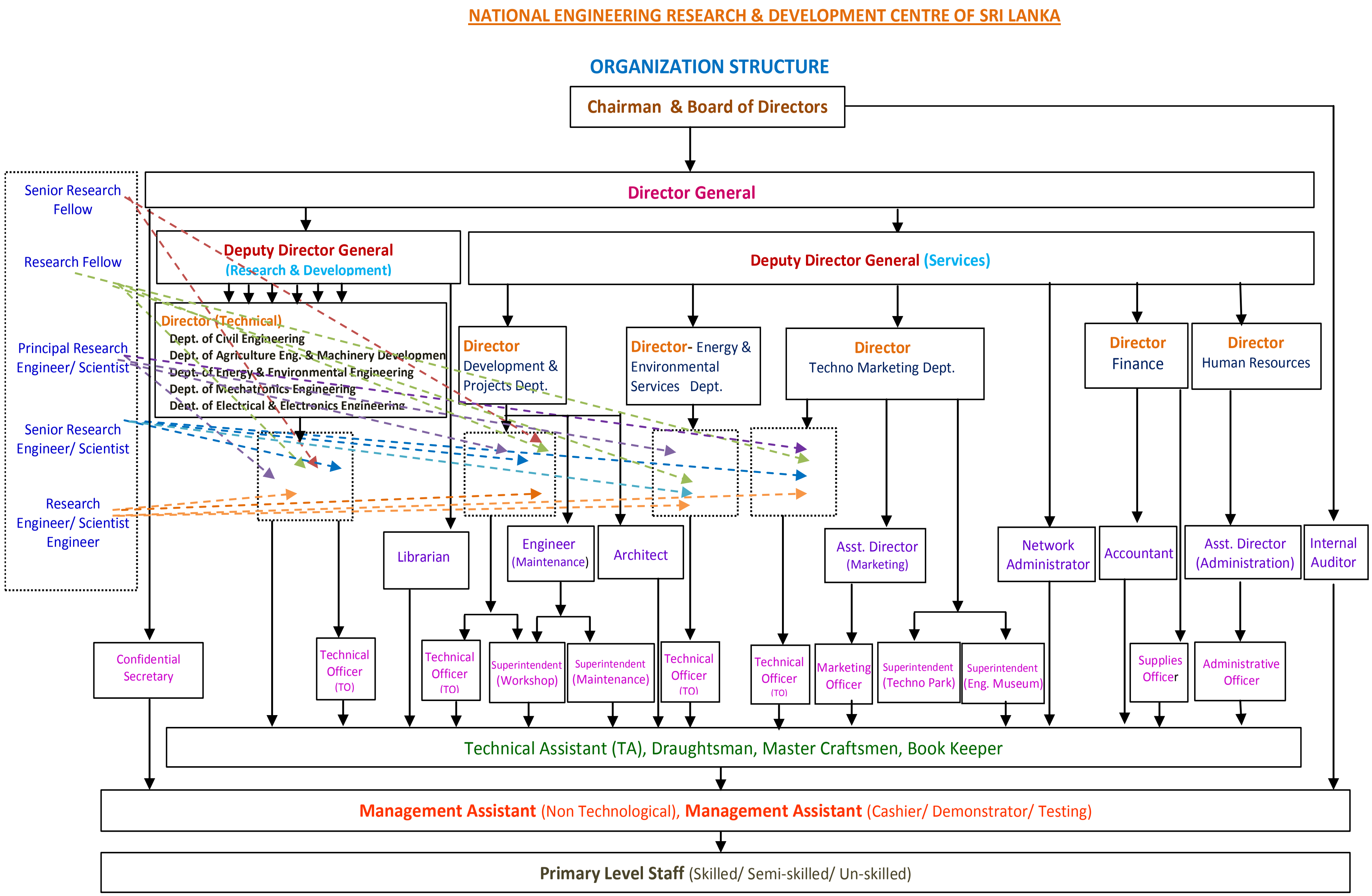
MEMBERS OF THE BOARD

Prof. Rahula Attalage
PhD, MEng., Degree of Profound Studies (DEA)
BScEng. (Hons)

Mr. K A S S K Perera
MBA, PGDip, BA(Hons)

Eng. Kapila Dodamgoda
MA Economics, FCMA, Fellow CMA (Aus.),
CGMA, BScEng., AMIE(SL), MCIM, MSLIM

Mr. Rizmin Razik
MBA, BSc., FCMA(UK)


NATIONAL ENGINEERING RESEARCH & DEVELOPMENT CENTRE OF SRI LANKA
ORGANIZATION STRUCTURE
Chairman & Board of Directors
Director General
Deputy Director General (Research & Development)
Deputy Director General (Services)
Director (Technical)
Dept. of Civil Engineering
Dept. of Agriculture Eng. & Machinery Developmen
Dept. of Energy & Environmental Engineering
Dept. of Mechatronics Engineering
Dept. of Electrical & Electronics Engineering
Director Development & Projects Dept.
Director- Energy & Environmental Services Dept.
Director Techno Marketing Dept.
Director Finance
Director Human Resources
Senior Research Fellow
Research Fellow
Principal Research Engineer/ Scientist
Senior Research Engineer/ Scientist
Research Engineer/ Scientist Engineer
Librarian
Engineer (Maintenance)
Architect
Asst. Director (Marketing)
Network Administrator
Accountant
Asst. Director (Administration)
Internal Auditor
Confidential Secretary
Technical Officer (TO)
Technical Officer (TO)
Superintendent (Workshop)
Superintendent (Maintenance)
Technical Officer (TO)
Technical Officer (TO)
Marketing Officer
Superintendent (Techno Park)
Superintendent (Eng. Museum)
Supplies Officer
Administrative Officer
Technical Assistant (TA), Draughtsman, Master Craftsmen, Book Keeper
Management Assistant (Non Technological), Management Assistant (Cashier/ Demonstrator/ Testing)
Primary Level Staff (Skilled/ Semi-skilled/ Un-skilled)

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DIRECTOR GENERAL'S MESSAGE

It is a great pleasure to me to present the performance of the national Engineering Research and Development Centre of Sri Lanka for the year 2021.

As the premier engineering research and development in the country, the NERDC continued to serve the nation in the year 2021 as well through various R&D projects, Pilot projects, Technical and Engineering services to the industries, Projects implementations with NERDC developed technologies and Technology transfer, commercialization and popularization activities.

Some of the R&D projects completed satisfactorily during the year 2021 are development of an Oxygen concentrator for COVID persons, Face recognized attendance registering system, Machineries for compost manufacturing and processing. NERDC made several Collaborations with external organizations to conduct nationally important R&D projects and some of them are development of a refrigeration system to multiday fishing boats and cold storage for vegetables.

It would not have been possible to successfully implemented all the activities carried out in the year 2021, if not the support and assistance extended by entire staff of the NERDC , specially from Deputy Director Generals and Directors of the NERDC.

I also take this opportunity to express my gratitude to the Board of the Directors of the Centre and officials of the Line Ministry.

Eng. D D Ananda Namal
Director General

5 TOP MANAGEMENT AND EXECUTIVE STAFF

DIRECTOR GENERAL

Eng. D D Ananda Namal
MEng. (Energy Technology), BSc Eng. (Hon), CEng., MIE (SL)

DEPUTY DIRECTOR GENERAL (RESEARCH AND DEVELOPMENT)

Eng. J A A D Jayasuriya
MEng., BScEng., MIE(SL)

DEPUTY DIRECTOR GENERAL (SERVICES)

Eng. A A S P Jayasinghe
MBA, BScEng.(Hons), CEng., MIE(SL)

RESEARCH FELLOW

Eng.(Ms.) N G D Wijesiriwardhana
MEng., CEng., FIE(SL)

Eng. W K R Peiris
MA (Buddhist Stud), BScEng., CEng. MIE(SL)

Eng. E A N K Edirisinghe
MPhil, BScEng., MIE (SL)

Eng. K T Jayasinghe
MEng., BScEng., C Eng., MIE(SL)

ENGINEERING AND EXECUTIVE STAFF IN THE DEPARTMENTS OF NERDC

Civil Engineering Department (CED)

Director (Technical)
Eng. J A C Chrishanthi
MEng., BSc Eng.,C Eng., MIE (SL)

Research Engineer
Eng. I P Batuvita
MEng, BSc Eng., AMIE(SL)

Eng. A N S Amaradasa
BSc Eng., C Eng., MIE (SL)

Eng. H C Egodagamage
BSc Eng., AMIE(SL) (up to 01.03.2021)

Engineer
Ms. K S S Weerasinghe
Special Apprentice (Civil Eng.), IESL (Part I)

Agriculture Engineering and Machine Development Department (AE&MD)

Director (Technical)
Eng. K Y H D Shantha
MScEng., BSc Eng., AMIE(SL)

Principal Research Engineer

Eng. A J G S Dahanayake
BSc Eng., C Eng., MIE(SL)

Dr. A P D Liyanage
PhD, MSc, BSc

Principal Research Scientist

Dr. D M C C Gunathilake
PhD, MSc, BSc (up to 05.04.2021)

Senior Research Engineer
Dr. T N Fernando
PhD, B.Tech, AMIE (SL)

Research Engineer
Eng. K Sivesudhan
BSc Eng., AMIE (SL)

Energy and Environmental Engineering Department (ENED)

Acting. Head of Department
Principal Research Engineer
Eng. N S M D K Nanayakkara
MEng., PG Dip, BScEng, AMI(SL)

Principal Research Engineer
Eng. H M L U Herath
BScEng., AMIE(SL)

Senior Research Engineer
Dr. S M Pathirana
PhD, MSc, BSc, AMIE(SL)

Research Engineer
Eng. P F S Perera
BSc Eng., M Eng., AMIE(SL)

Engineer
Mr. W A L S Karunawardhana
HNDE

Electrical and Electronic Engineering Department (ELED)

Senior Research Engineer/ Head of Department
Mr. N S K Samarasinghe
MSc, BSc Eng., AMIE (SL)

Principal Research Engineer
Eng. U C Botheju
BScEng. CEng., MIE (SL)

Senior Research Engineer
Mr. D A M S K Hemasiri
MSc. BScEng.

Research Engineer
Eng. (Ms) D R S K Wimalaratne
B Tech. (Hon), AMIE(SL)

Eng. Y S P Weerasinghe
B Tech. AMIE (SL)

Eng. H K I S Lakmal
BScEng., AMIE(SL)

Mechatronics Engineering Department (MED)

Principal Research Scientist/ Head of Dept.
Dr. T A Suranga Anuruddha
PhD, MSc. BSc(IT)

Principal Research Engineer
Eng. H P H Kumara
MSc Eng., EC(UK) PART I & II, AMIE(SL)

Eng. W M S P K Wanasinghe
BTech., AMIE (SL)

Eng. I D M H Jayantha
BSc Eng., AMIE (SL)

SPTF Project

Principal Research Engineer
Eng. A R C Salgado
BScEng., AMIE(SL)

Research Engineer
Eng. Suresh P Perera
CEng(UK), MIMechE(UK), NDT, AMIE (SL)

Research Engineer
Eng. S M S S Senaratne
MScEng.,B Tech, AMIS(SL)

Energy and Environmental Services Department

Research Engineer/ Head of Department
Eng. T K Geeganage
M Sc, BSc Eng., AMIE (SL)

Senior Research Engineer
Eng. (Ms.) N P T Perera
MSc, BScEng.(Hons.), AMIE(SL)

Eng. (Ms.) A G M T Siriwardhana
MSc, MEng., BScEng., AMIE(SL)

Research Engineer
Eng. M D Sahardeen
BSc Eng., AMIE(SL)

Eng. K P D D Jayasekera
BSc Eng.(Hons), AMIE(SL)

Eng. (Ms) G S R Costha
MEng, BScEng., AMIE (SL)

Eng. H A K Hapuarachchi
BScEng., AMIE(SL)

Engineer
Ms. H D C Hettiarachchi
NDT

Development and Project Department (DPD)

Director (Technical)
Eng. K L Meedeniya
MSc Eng., BSc Eng., C Eng., MIE(SL)

Principal Research Engineer
Eng. W W P K Perera
M Eng., BSc Eng. (Hons), C Eng., MIE (SL)

Eng. S D S P Solangaarachchi
MSc, BSc

Senior Research Engineer
Eng. D M Eknaligoda (up to 08.04.2021)
BSc, AMIESL

Eng. M A D S Premadasa
MBA, BSc, AMIESL

Senior Research Scientist (Architecture)
Ms. B D R Chamika
MSc, BSc. Chartered Architect AIA (SL)

Engineer
Ms. D M A K Digala
Special Apprentice (Civil Eng.), IESL(Part 1)

Mr. P A U W K Paranagampola
NDES

Techno Marketing Department (TMD)

Senior Research Engineer/ Head of Department
Eng. P M Y S Pathiraja
MSc Eng. BSc Eng., AMIE (SL)

Research Engineer
Eng. (Ms) J K I P Jayasiri
BSc Eng., AMIE(SL)

Research Scientist
Ms. B D P S Ranaweera
M Sc, BSc

Asst. Director – Marketing
Ms. P N D Pathirana
BSc (Hons) Sp. MCIM (UK), MSLIM (SL)

Technology Incubator

Senior Research Engineer
Eng. S A P Shalinda Silva
BSc Eng., MEng., CEng., MIE (SL)

Research Engineer
Eng. S M V P D Senanayake
BSc Eng., AMIE(SL)

Maintenance Unit and Central Workshop	Technology Park and Engineering Museum
Engineer Mr. N A D D J Prasanna NDT	**Superintendent – Technology Park** Mr. W K C P Walpola BSc **Superintendent – Engineering Museum** Ms. D K Jayaweera BSc (Hons)
Human Resources Department (HRD)	**Finance Department (FD)**
Director (Human Resources) Ms. D A M Munasinghe MBA (HRM), BSc (HRM), AM (CIPM)	**Director (Finance)** Mr. J M R S Jayasinghe MBA, BBA Sp. , CPFA, ICASL – Prof. Part I
Assistant Director (Administration) Mr. R Gamage MA in Sociology, MLRHRM, BA (Social Sc.) Sp.	
Information Technology Unit	
Network Administrator Mr. B P Wickramasooriya MSc, BSc (Computing & Information Systems)	**Librarian** Ms. D M T P K Devagiri MMSc , B A (Library Science) Sp., ASLLA
Internal Audit Unit	**Procurement Unit**
Internal Auditor Mr. B P S Kumara MPM, HNDA	**Supplies Officer** Mr. R H A Jeewananda BSc (Physical Science)

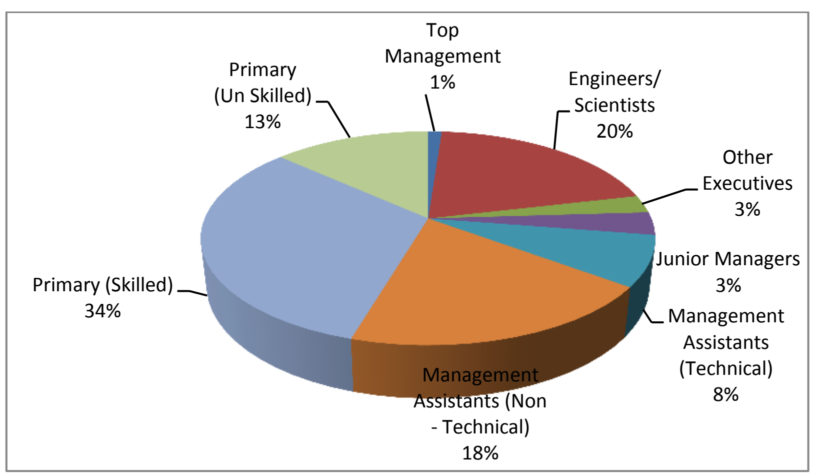
6
HUMAN RESOURCES MANAGEMENT

Human resource is a vital element of any organization in accomplishing its goals and objectives. The major problem identified in Human Resource Management (HRM) of the Centre is the recruitment and retaining of competent researchers/ scientists. (This is a common issue in research organizations in Sri Lankan State sector). A comprehensive integrated strategy is required to address this issue, such as national policy on researchers/scientists programming, research application for national development and recruitment, incentives, rewards, recognitions, capacity development of researchers/scientists etc.

Within the capacity and limitations of the Centre has undertaken all the measures to recruit and retain research/scientific staff through the strategy like providing capacity development opportunities (Eg: Higher studies, training & development, international exposures, etc.), creating facilitating environment, assisting carrier development etc.

Summary Information on Staff Strength - As at 31.12.2021

SERVICE CATEGORY	APPROVED CADRE	ACTUAL CADRE
Top Management	3	3
Engineers/ Scientists	68	53
Other Executives	10	7
Junior Managers	14	9
Management Assistants (Technical)	25	20
Management Assistants (Non - Technical)	52	51
Primary (Skilled)	104	84
Primary (Semi-Skilled)	3	0
Primary (Un Skilled)	65	35
TOTAL	**344**	**262**



6.1 Cadre Management

- **No recruitment has been done in 2021 due to government instructions.**
- **Retirement and Resignations in year 2021**

	Name	Designation	Category	Date
Resignations				
01	Mr. I T Madurangana Silva	Labourer	PL-I	20/01/2021
02	Dr.(Ms.) S M Pathirana	Senior Research Engineer	AR -2	31/01/2021
03	Ms. A T D Rodrigo	Book Keeper	MA 2-2	13/02/2021
04	Mr. N M I D Nawarathne	Technical Assistant	MA 2-2	25/02/2021
05	Mr. J M H Udaya Bandara	Technical Assistant	MA 2-2	26/02/2021
06	Eng. H C Egodagamage	Research Engineer	AR -1	01/03/2021
07	Mr. K A S S Weerasinghe	Electrician	PL-3	08/03/2021
08	Mr. R Gamage	Asst. Director (Administration)	MM 1-1	15/03/2021
09	Dr. D M C C Gunathilake	Principal Research Scientist	HM I-3	05/04/2021
10	Eng. D M Eknaligoda	Senior Research Engineer	AR-1	08/04/2021
11	Mr. H M M G A K B Madawalage	Draughtsman	MA 2-2	01/04/2021
12	Mr. J M A U Jayasekera	Electrician	PL-3	10/08/2021
13	Mr. W A R M Perera	Welder	PL-3	10/09/2021
14	Mr. W W Kaluarachchi	Technical Assistant	MA 2-2	31/10/2021
15	Eng. K Sivasudhan	Research Engineer	AR -1	31/12/2021
Retirements				
01	Mr. J K Priyantha Perera	Driver	PL-3	01/01/2021
02	Mr. M L A Peiris	Master Craftsman	MA 2-2	07/01/2021
03	Mr. P Ranjith Perera	Vehicle Attendant	PL-3	22/01/2021
04	Mr. R I P Peiris	Labourer	PL-3	27/01/2021
05	Mr. S D Premajayantha	Weder/Fitter	PL-3	01/03/2021
06	Mr. K K A Somaratne	Labourer	PL-3	21/04/2021
07	Mr. W Upali Senarathne	Welder	PL-3	31/05/2021
08	Mr. E M S Edirisooriya	Labourer	PL-3	13/06/2021
09	Mr. M S J Fernando	Machinist	PL-3	24/08/2021
10	Mrs. B J A Mendis	Management Assistant	MA 1-2	30/11/2021
11	Mr. W A C Fernando	Labourer	PL-3	05/12/2021
12	Mr. W C A S Perera	Labourer	PL-3	31/12/2021

6.2 Training and Continuous Professional Development

Since the fundamental responsibility of the NERDC is execution of engineering researches and developments, where, constant concern is tendered in developing human resources capacity in the Centre. Accordingly, all steps are taken by the Management to enhance knowledge, skills and competencies with correct attitudes in all categories of the staff having purposes of obtaining efficient and effective service to the Centre and career development of the staff.

The COVID 19 pandemic situation was adversely affected for fully functioning of the training and development in 2021. However, some capacity building programmes and Training programmes have been organized and directed via online platforms.

6.2.1 Providing facilities for fulfillment of postgraduate/ Professional Qualifications

Higher Studies ongoing in 2021				
No	**Name**	**Designation**	**Program**	**Institution**
1	Mr. K P D D Jayasekera	Research Engineer	MEng./PG Diploma in Environmental Eng. & Mgt.	University of Moratuwa
2	Eng. (Ms) A G M T Siriwardhane	Senior Res. Engineer	PhD Studies of Engineering and Computer Sciences	Australian National University
3	Eng. U C Botheju	Principal Res. Engineer	MSc Eng (Control & Instrumentation)	University of Peradeniya
4	Eng. I D M H Jayantha	Research Engineer	MSc./PG Diploma Course in Electrical Installation	University of Moratuwa
5	Eng. W M S P K Wanasinghe	Research Engineer	MSc./PG Diploma Course in Electrical Installation	University of Colombo

6.2.2 Participation for Foreign Training / Workshop / Seminars / Symposiums

Participation for Foreign Scholarships/ Seminars/ Training in 2021				
No.	**Name & Designation**	**Programme Participated**	**Country**	**Period**
1	Dr. T N Fernando	International Conference on Material TECH 2021"	India	09.01.2021
2	Mr. Y S P Weerasinghe	Training of Trainers Programme on Data Stewardship for Open Science 2021	China	16.03.2021 to 16.04.2021
3	Mr. W A L S Karunawardena	International Workshop on Groundwater Conversation and Management by Leveraging Science, Technology and Innovation Workshop"	Kenya - Virtual Mode	27.01.2021 to 28.01.2021
4	Eng. H K I S Lakmal	Online programme on Increasing the competitive advantage of a Nation Malaysia	Malaysia - virtual mode	27.05.2021 to 28.05.2021
5	Eng. N S K Samarasinghe	Online Course on Deep Learning (Artificial Intelligence)	India- Virtual mode	28.06.2021 (7 weeks)
6	Eng. U C Botheju	Online Course on Deep Learning (Artificial Intelligence)	India- Virtual mode	28.06.2021 (7 weeks)
7	Eng. N K I S Lakmal	Online Course on Deep Learning (Artificial Intelligence)	India- Virtual mode	28.06.2021 (7 weeks)
8	Mr. D A M S K Hemasiri	online course on Deep Learning (Artificial Intelligence)	India- Virtual mode	28.06.2021 (7 weeks)
9	Eng. N K I S Lakmal	Hydro Energy online training - Indian Institute of Technology Roorkee - SAARC	Pakistan- Virtual mode	13.09.2021 to 17.09.2021
10	Dr. A D P Liyanage	Hydro Energy online training - Indian Institute of Technology Roorkee - SAARC	Pakistan- Virtual mode	13.09.2021 to 17.09.2021
11	Eng. I D M H Jayantha	Hydro Energy online training - Indian Institute of Technology Roorkee - SAARC	Pakistan- Virtual mode	13.09.2021 to 17.09.2021
12	Ms. P N D Pathirana	Regional Workshop on Innovative Strategies for Research Commercialization and Technology Transfer, Tashkent, Uzbekistan	Uzbekistan	24.11.2021

6.2.3 In House Training Programs Organized

No	Program Name	Period	For whom	No of Participants
1	Workshop on Use of Email	26.11.2021	Engineers, Executives, Mgt. Asst. (Tech) & Mgt. Asst. (Non Tech)	50
2	Internal Auditing and Laboratory Management System	25.10.2021 & 26 .10.2021	Engineers, Scientists, Management Assistants	10
3	Mathematical Workshop	22.11.2021 to 24.11.2021 & 13.12.2021 to 16.12.2021	Management Assistant (Demonstrator)	04
4	Workshop on Use of Email	26.11.2021	Engineers, Executives, Mgt. Asst. (Tech) & Mgt. Asst. (Non Tech)	50

6.2.4 Participation for Local Training Programs / Workshop / Seminars / Symposiums

No.	Name & Designation	Programme Participated	Conducted by	Period	No of Participants
1	Ms. N P T Perera Senior Research Engineer	Training Programme on Consultant Development in Water Auditing and Water Foot print Assessment.	National Cleaner Production Centre (NCPC)	09.02.2021 to 11.02.2021	01
2	Mr. M D Sahardeen Research Engineer				01
3	Mr. K P D D Jayasekera Research Engineer				01
4	Mr. I P Batuwita Research Engineer	CPD on Finance for Engineers	Chartered Institute of Personnel Management Sri Lanka	06.02.2021	01
5	Ms. N P T Perera Senior Research Engineer	CPD on Plumbing Engineering Part 1	IESL	13.03.2021	01
6	Mr. H A K Hapuarchchi Research Engineer	Training Programme on Consultant Development in ISO 50001:2018 - Energy Management System	National Cleaner Production Centre (NCPC)	29.03.2021 to 01.04.2021	02
7	Mr. S R Hendriks Technical Assistant	Aluminium Fabrication Training	IDB Training Centre	27.04.2021 to 29.04.2021	05
8	Mr. W K D Sampath Technical Assistant				
9	Mr. K N Ariyarathne Welder/Fitter				
10	Mr. W G U N Karunarathne Welder/Fitter				
11	Mr. H G S Indrawansha Welder				
12	Mr. K R N Perera Welder				

No.	Name & Designation	Programme Participated	Conducted by	Period	No of Participants
13	Eng. D D A Namal Director General	Capacity Building Training on Conducting Life Cycle Assessment (LCA)	National Cleaner Production Centre (NCPC)	06.07.2021 to 09.07.2021	04
14	Mrs. S G M W Silva Management Assistant	Basic Rules and Ethics to be followed when using email for official process	NIPM	29.07.2021	02
15	Ms. K B H V Leitan Management Assistant				
16	Mr. K P D D Jayasekera Research Engineer	Training Programme on IOMC Toolkit for Local Stakeholders	National Cleaner Production Centre (NCPC)	25.11.2021 & 16.12.2021	01
17	Mr. M D Sahardeen Research Engineer	Training Programme on Consultant Development in Quantification of carbon Footprint	National Cleaner Production Centre (NCPC)	13.12.2021 to 17.12.2021	01
18	Eng. (Mrs.) J A C Chrishanthi Director (Technical)	Inaugural workshop for Mainstreaming Resource Efficient Housing and Construction Sri Lanka	CIDA	13.12.2021	01

6.2.5 Industrial/ Technical Training Facilities provided for Apprentices/ Under Graduates

NERDC has provided in plant training opportunities for 51 nos. of apprentice/ trainees who were directed by National Universities and Technical Institutions for in plant training period of 03 months/ 06 months/ 01 year within the year 2021.

7. PERFORMANCE HIGHLIGHTS OF THE YEAR 2021

The National Engineering Research and Development Centre comprises with 5 departments for carrying out R & D activities while 3 departments involve in providing technical services and the two departments engaged in Financial and HR management.

R & D divisions carry out research and development activities in the fields of Civil Engineering, Electrical & Electronics, Mechatronics, Energy & Environmental Engineering and Agriculture and Machine Development. Techno Marketing Department is responsible for taking the developed technologies in to the society. Energy & Environmental Services Department provides technical services mainly to the industry on commercial basis and Department of Projects implements developed technologies by the Centre such as cost effective buildings, NERDC developed crematoria, etc. on commercial basis.

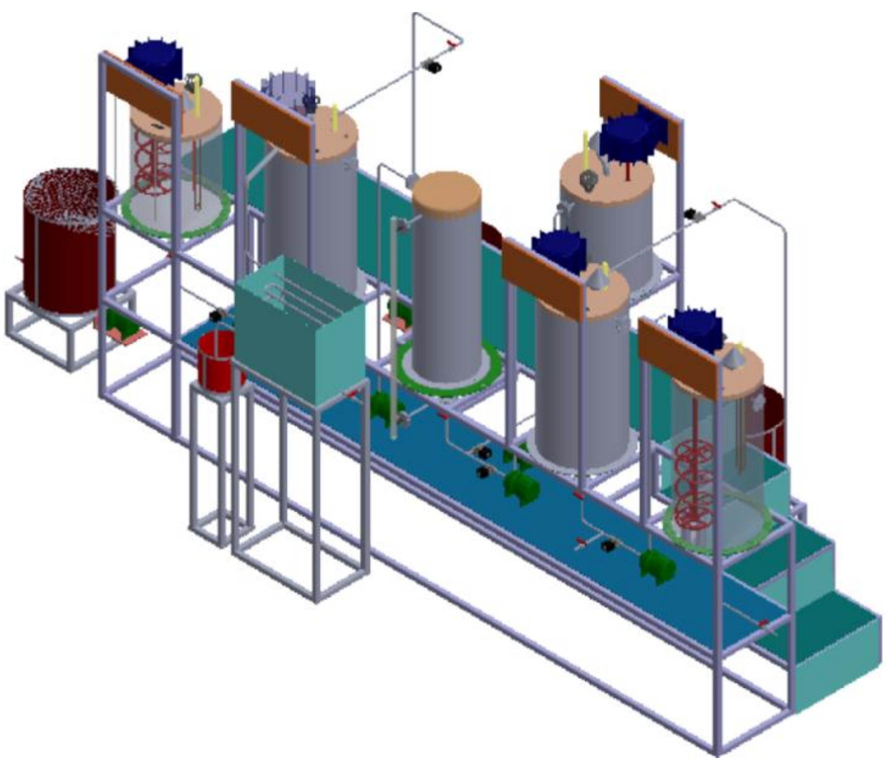
Major projects undertaken, in 2021, for each category of R & D, Technical Services and Commercial are highlighted below.

7.1 Key Research and Development Highlights

Completed R & D projects

Design of Bio- Diesel Plant at Laboratory Scale

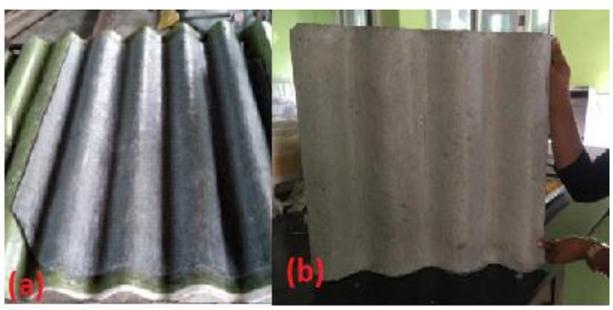
Biodiesel is mainly made from used cooking oil and is a clean renewable energy source that can be used in existing diesel engines without any modification. There is considerable amount of cooking oil used once and discarded from hotels and other food based industries in Sri Lanka. Unfortunately, this used cooking oil is used illegally by some food processors for their products and consumers are jeopardized with these unhygienic, unhealthy products. Introduction of biodiesel industry to Sri Lanka have many benefits, saving foreign exchange, minimizing petroleum emissions and stopping unhealthy reuse of once used cooking oil would be an additional advantage. This laboratory scale biodiesel plant design was carried out on a request by Faculty of Technology, University of Sri Jayawardenepura. Designing of the Bio- Diesel Plant for laboratory scale was completed on 30.09.2021 and complete Design Report was handled over to the Faculty of Technology, University of Sri Jayawardenepura.



Manufacturing Roofing Sheets Using Cellulose Fibers Extracted from Corn Plant Residues as Raw Material

This research activity was successfully completed collaboratively with the Civil Engineering Department. The aim of the project was manufacturing of an alternative roofing sheet for the asbestos sheet. A Pre-treated cornhusk fiber from Alkaline Hydrogen Peroxide (AHP) pre-treatment was used as a reinforcement of the composite mixture with Ordinary Portland Cement. The existing AHP pre-treatment was modified in the project for the application of the pre-treatment at industrial level to prepare pre-treated fibers in a short time and cost effectively. Additionally, Poly Vinyl Alcohol (PVA) and Polypropylene are also used as reinforcement materials to improve the properties of the sheets. The developed roofing sheet had average water absorption was 17.09% and average flexural load was 0.6 kN, which are within Sri Lankan standards of concrete roofing semi sheet.

Visual observation of shaded cornhusk and pre-treated fibres from AHP Composite mixture spread on iron mould in a bed of a vibration machine



(a) Wet and (b) dried prepared roofing sheets

Development of a woodchip feeding system for Tea Industry

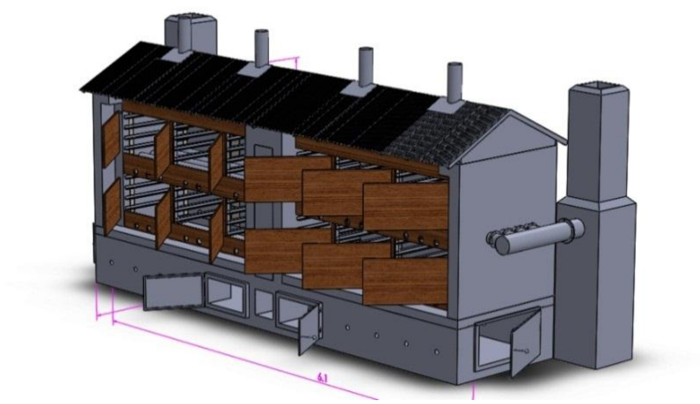
The technology was developed and the results were disseminated by publication of a research paper at NERDC Research Symposium. The maximum moisture content of wood chips that could be used using this technology was found to be 25% by weight (wet basis). Demonstration of the technology for the tea industry and assessing of the performances in varying operation conditions and for different feed stock types were not possible to be done in this pandemic situation.

This is a collaborative R&D project with Tea Research Institute. Field trials were conducted at the Rilhena Tea Factory at Palmadulla.

- **Development of a Maldive fish dryer with capacity of 100 kg per batch**

This R&D project was initiated with the decision of NERDC to extend the support towards efforts National Aquatic Resources R&D Agency (NARA) to upgrade the fish processing technology to produce Maldives fish in southern coastal area of Sri Lanka. NERDC was supposed to design, fabricate and install a suitable dryer at the site of fishing community to meet the given process conditions and capacities by NARA and also by considering the socio-economic conditions of the users.

Design, fabrication, construction and installation of the dryer at the site at Kottagoda, Dikwella were completed by NERDC. NARA and NERDDC are supposed to conduct testing in early 2022.



- **Development of lightweight wall block system for cost effective construction industry**

Lightweight walls are one of the essential item that was highly required recently in the construction field. There are various sizes of wall block materials can be cast by using the developed material. One of the main blocs are lightweight Decorated wall blocks.

By using the light weight construction materials , structural parameters and dimensions of structural building components such as main beams, foundations and the foundation system, could be reduced. Hence the cost of construction can be reduced. Lightweight walls are non-load bearing walls and these kind of walls are used only to reduce the weight of construction.

Wall constructed with light weight blocks

Light weight panel

Design & Fabrication of Automated Wall Painting Device

This machine has been designed to automate the activity of painting of walls. The sprayer of the machine can move vertically, while the machine could be moved horizontally on the floor. Purchasing of the materials were completed and assembling is in progress. The development of the controlling unit is in progress. This project will be continued to year 2022.

Fabricated Wall Painting Device

Development of an Oxygen Concentrator

The objective of this project is to locally develop of an oxygen concentrator. Oxygen concentrators of capacity 5 liter /m and 10 liter/m were developed, fabricated and tested at NERDC. Only the compressor and the Zeolite material to concentrate of oxygen in air, were imported. The control system was locally developed. Endurance test for these machines as per the ISO standard were conducted at the NERDC. Oxygen concentrator of capacity 10 l/m was sent to NMRA for approval.

7.2 Services From Energy and Environmental Services Department in 2021

E&ESD of NERDC Centre is involved in monitor, control, improve and manage the energy systems, industrial processes & environmental systems in industries, commercial establishments, government institutions, etc. and to provide the standard testing facilities for air quality, wastewater, refrigerators, electrical lamps and automobile batteries. It operates with ISO17025:2017 accredited laboratories for wastewater analysis, Noise level measurements, Air quality measurements, electrical lamps testing and refrigerator testing. During the year 2021 department had provided 387 services to the industry with income generation of LKR16.71mn.

Commercial Activities Targets and Achievements of E& ESD

A summary of physical & financial targets and achievements of commercial activities in 2021 are given in

Project/Activity	Physical (Number of Services)		Financial (Million LKR)					
			Income			Contribution		
	Target	Achievement	Target (LKR)	Achievement (LKR)	Target Over Achievement (%)	Target (LKR)	Achievement (LKR)	Target Over Achieveme nt (%)
Services to Industries	952	367	30,500	14,258	46.75	22,000	5,438	24.71
Laboratory Testing for Industries	275	164	5,500	2,456	44.65	3,500	703	20.09
Training Programs	2	0	100	0	0	30	0	0
Total	**1229**	**531**	**36,100**	**16,714**	**46.30**	**25,530**	**6,141**	**24.05**

Services to Industries

Services to industries is the main commercial activity involved in the department and the under category mentioned of services are provided to different industries as per their request.

- Boiler analysis, tuning and efficiency tests
- Industrial process monitoring services
- Noise and air quality control system designs
- Emission control system designs
- Noise and air quality monitoring services based on the standards
- Stationary sources emission monitoring services based on the standards
- Indoor air quality monitoring based on the OSHA standard.

The income target and achievement through the industrial services in 2021 were LKR 30.5 Million and LKR 14.2 Million respectively.

Number of services carried out in different activities are given in the Table.

Activity Type	Number of Services
Boiler performance & emission monitoring of stationary sources combustion systems	130
Noise level measurements as per the regulations	99
Ambient air quality monitoring as per the regulations	63
Providing solutions to control environmental issues in industries	31
Industrial process monitoring services	36
Instrument calibration and cross checking - Noise Level Meter - Lux Level Meter	 04 23
Energy Audit	01

Different Laboratory Services

Activity Type	Number of Services
Waste water sample analysis	83
Electrical lamp testing	66
Refrigerators testing	07
Automotive battery testing	08

7.3 Commercial work done by Department of Development and Projects

No.	Commercial Activities	Total Commercial Value (Rs. Mn.)
01	Civil Engineering Consultancy Services	10.65
02	Construction of building and structures	38.60
03	Sold of concrete products	7.75
04	Manufacture and supply of products, construction, fabrication, installation, repair and improvements of plants and periodic services of cremators	7.76

- **Construction of lecture hall and the canteen building at Institute of Indigenous Medicine, University of Colombo**

- **Renovation Work for Stores Building at MILCO Factory at Polonnaruwa**

Construction of 9m x 2.1m pre-stressed concrete foot bridge across Moratiyana Ela at Heenpandala North, Paragoda

7.4 Services From Techno-Marketing Department

Technology Transfers for year 2021

	Activity	Quantity
01	Licenses Issued for the Entrepreneurs	20
02	License Renewal	80
03	Awareness Programs	18
04	Training Programs	03

Technology Popularization activities conducted by the Techno Marketing Department

	Activity	Quantity
01	Electronics & Print Media Activity	02
02	Published Articles	10
03	Newsletters	06
04	Social Media Activities	06

Patents Processed

Patent Filed

No	Patent
01	Radial Flow Drier
02	Automated fresh milk collecting pails washing machine
03	A process of manufacturing of Sodium Carboxyl Methyl Cellulose (NaCMC) using corn husks and bagasse as main raw materials using energy saving technique.
04	Occupancy status notification unit for buses.
05	Method for making an eco-composite mixture for manufacturing soil base building materials

Patent Obtained

No	Patent
01	Compact system for treatment of waste water in Automobile service station
02	Fertilizer Applicator
03	Toe operated Prosthetic Hands
04	A lifting mechanism for easy operation of lifting gates in irrigation canals using a floater.
05	Mechanized device for slip-form wall construction
06	Smoked fish processing unit

Activities of Technology Park & Engineering Museum

	Activity	Quantity
01	Visitors to Technology Park & Engineering Museum	327
02	Special Study Programmes	12

7.5 Services from Development and Projects Department

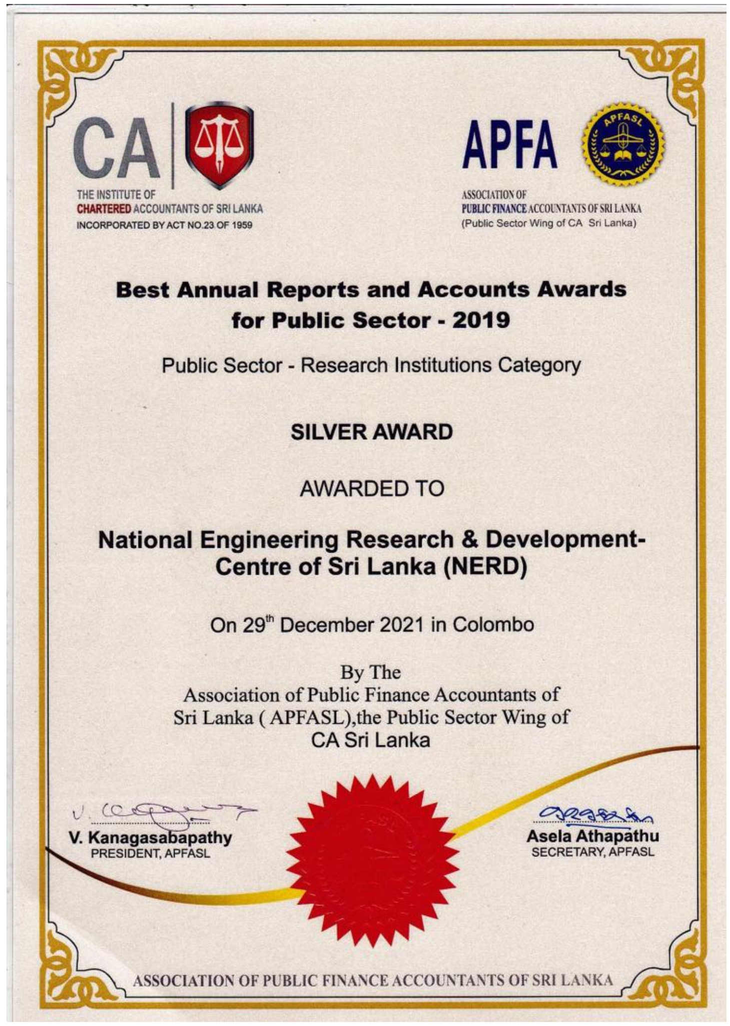
Development & Project Department (DPD) provides the services to industrial sector including government and non-government institutions and individuals almost in many disciplines with NERDC developed technologies and consultancies. In general, DPD undertake jobs in related to NERDC developed technologies such as; cost effective building construction, foot bridges, retaining walls, crematoria, incinerators, bio gas generators, machinery fabrication including design and consultancies. Additionally, rehabilitation works of the infra-structure and the buildings and the maintenance activities of the center also carry out by the department. Activities Performed by Development & Projects Department are,

	Activity	**No of Projects**	**Income Generated LKR Mn**
1	Providing Civil Engineering consultancy services	04	10.65
2	Construction of cost effective buildings and structures	03	25.5
3	Sales of pre-cast and pre-stressed concrete items	01	2.4
4	Manufacture and supply of products, construction, fabrication, installation, repair and improvements of plants and periodic services of cremators	15	7.765
5	Rehabilitation work of the buildings and the infra-structure at the Center	10	6.025
6	Maintenance activities at the center		

8
AWARDS
AND ACHIEVEMENTS
IN 2021

Best Annual Report & Accounts

Association of Public Finance Accountants of Sri Lanka (APFASL), The public sector wing of CA Sri Lanka presented **SILVER AWARD for Best Annual Report and Accounts - 2019** in the Public Sector (Research Institutions). Due to COVID 19 pandemic situation, the Awarding Ceremony was held on 29 December 2021 at BMICH, Colombo.



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THE INSTITUTE OF
CHARTERED ACCOUNTANTS OF SRI LANKA
INCORPORATED BY ACT NO.23 OF 1959

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ASSOCIATION OF
PUBLIC FINANCE ACCOUNTANTS OF SRI LANKA
(Public Sector Wing of CA Sri Lanka)

Best Annual Reports and Accounts Awards
for Public Sector - 2019

Public Sector - Research Institutions Category

SILVER AWARD

AWARDED TO

National Engineering Research & Development-
Centre of Sri Lanka (NERD)

On 29th December 2021 in Colombo

By The
Association of Public Finance Accountants of
Sri Lanka (APFASL),the Public Sector Wing of
CA Sri Lanka

V. Kanagasabapathy
PRESIDENT, APFASL

Asela Athapathu
SECRETARY, APFASL

ASSOCIATION OF PUBLIC FINANCE ACCOUNTANTS OF SRI LANKA

9

FINANCIAL REVIEW OF THE CENTRE IN 2021

9.1 ACCOUNTING POLICIES

1.1 Basis of Preparation

Financial Statements, which comprise the Statement of Financial Position, Statement of Performances, Changes in Equity and Cash Flows together with Accounting Policies and Notes to the Financial Statements, have been prepared in accordance with Sri Lanka Public Sector Accounting Standards.

Current accounting period is from 1st January 2021 to 31st December 2021

These Financial Statements are for year ended 31st December 2021

1.2 Basis of Measurement

The Financial Statements of the Centre, which comprise the Statement of Financial Position, Statement of performances, Changes in Equity and Cash Flows have been prepared on the basis that the Centre is going concerns and on a historical cost basis.

1.3 Functional and Presentation of Currency

Items included in the Financial Statements of Centre are measured using the currency of the primary economic environment in which the entity operates (‘the functional currency’). Financial Statements are presented in Sri Lankan Rupees, which is the Centre’s functional and presentation currency unless stated otherwise.

1.4 Comparative Information

The Financial Statements for the comparative periods comprise results for the twelve months period from 1st January 2020 to 31st December 2020. In this circumstance, the comparative information for the Statement of Financial Position, Statement of Performances, Statement of Changes in Equity and Cash Flow Statement and related notes are comparable with the current period.

Changes to the comparative information were done based on the previous year adjustments consist from page no 41 & 43 due to accommodate of the impact of said changes, the comparative information has been titled with "Restated".

1.5 Significant Accounting Judgments, Estimates and Assumptions

The preparation of Financial Statements are in conformity with Sri Lanka Public Sector Accounting Standards requires Management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income, expenses and the disclosure of contingent liabilities. However, uncertainty about these assumptions and estimates could results in outcomes that require material adjustment to the carrying amounts of the assets or liabilities affected in future periods. The Centre's Management has made an assessment of its ability to continue as a going concern and is satisfied that it has the resources to continue in business for the foreseeable future. Furthermore, Management is not aware of any material uncertainties that may cast significant doubt upon the Centre's ability to continue as a going concern. Therefore, the financial statements continue to be prepared on the going concern basis.

02. Property, Plant and Equipment

2.1 Recognition and Measurement

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labor, any other costs directly attributable to bringing the assets to a working condition for their intended use, the costs of dismantling and removing the items and restoring the site on which they are located and capitalized borrowing costs. Purchased software that is integral to the functionality of the related equipment is capitalized as part of that equipment. When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment. The gain or loss on disposal of an item of property, plant and equipment is determined by comparing the proceeds from disposal with the carrying amount of the property, plant and equipment, and is recognized net value within other income/other expenses in Performance Statement. When revalued assets are sold, any related amount included in the revaluation reserve is transferred to retained earnings.

2.2 Revaluation

The items within a class of property, plant and equipment are revalued simultaneously in order to avoid selective revaluation of assets and the reporting of amounts in the Financial Statements that are a mixture of costs and values as at different dates. However, a class of assets is revalued on a rolling basis provided revaluation of the class of assets is completed within a short period and provided the revaluations are kept up to date.

The fair value of items of property, Plant & Equipment, is usually determined from market-based evidence by appraisal. An appraisal of the value of an asset is normally undertaken by a member of the valuation profession, who holds a recognized and relevant professional qualification. For many assets, the fair value will be readily ascertainable by reference to quoted prices in an active and liquid market.

If the carrying amount of a class of assets is increased as a result of a revaluation, the increase shall be credited directly to revaluation surplus. However, the increase shall be recognized in surplus or deficit to the extent that it reverses a revaluation decrease of the same class of assets previously recognized in surplus or deficit.

If the carrying amount of a class of assets is decreased as a result of a revaluation, the decrease shall be recognized in surplus or deficit. However, the decrease shall be debited directly to revaluation surplus to the extent of any credit balance existing in the revaluation surplus in respect of that class of assets.

Revaluation increases and decreases relating to individual assets within a class of property, plant and equipment has been offset against one another within that class but must not be offset in respect of assets in different classes.

2.3 Depreciation

Depreciation is based on the cost of an asset less its residual value. Significant components of individual assets are assessed and if a component has a useful life that is different from the remainder of that asset, that component is depreciated separately. Depreciation is recognized in profit or loss on a straight-line basis over the estimated useful lives of each component of an item of property, plant and equipment. The estimated rates of the current and comparative years are as follows:

Asset Category	Depreciation %
Land	- (Note 01)
Building	2.5
Office Equipment	15
Tools	15
Demonstration items	15
Computers	33 1/3
Vehicle	15
Furniture & Fittings	10
Plant Machinery & Lab Equipment	15
Library Books	5
Infrastructure	15
Soft ware	331/3

Land (Note 01)

Land is rent basis for 50 years from Industrial Development Board. That agreement continues up to 13th August 2028. The land contains areas of A 9.5 R3 P19.

2.4 De-Recognition

The carrying amount of an item of property, plant and equipment is de-recognized on disposal of or when no future economic benefits are expected from its use or disposal. Gains and losses on de-recognition of the asset are determined by comparing the proceeds from disposal with the carrying amount of property, plant & equipment and are recognized net within ‘other income’ in the Performance Statement .

2.5 Intangible Assets

Intangible assets that are acquired by the Centre and have finite useful lives are measured at cost less accumulated amortization and accumulated impairment losses. Subsequent expenditure is capitalized only when it increases the future economic benefits embodied in the specific asset to which it relates. Amortization is based on the cost of an asset less its residual value. Amortization is recognized in Performance Statement on a straight-line basis over the estimated rates of intangible assets, from the date that they are available for use. The estimated rates for current and comparative years are as follows:

Patents and trade-marks and software are represented in this classification. Among the list of patents, the items that patents obtained and the items in patent proceeds in progress are represented. Once the patent applications is rejected, it will be charge to the income statement. The value of the patent is represented the fee of the patent application which had been taken as the nominal value as NERD Centre needs to show the items in financial statements. However the revaluation process of the patents is continued with high expectation of the revaluation of patents will be done soon.

• Software 33 1/3 years Amortization methods, useful life and residual values are reviewed at end of each year.

3. Inventories

Inventories are measured at the lower of cost and net realizable value. The cost of inventories is based on the first-in-first-out (FIFO) principle, and includes expenditure incurred in acquiring the inventories and other costs incurred in bringing them to their existing location and condition.

Chemical stocks and the Work in progress of projects are valued at the cost or net realizable value whichever is lower.

4. Trade Receivables

Trade receivables of the Centre are recognized at fair value

Provision for Uncertainty Recoveries

A provision for Rs.313, 171.36 had been taken in to the books that based on the judgment and feedback of the customers and the nature of business environment of the customer in concern. Based on above criteria following amount is forecasted as some sort of risk of recoveries.

(A). Department of Agrarian Development Rs-313,171.36

5. Cash and Cash Equivalents

In the Statement of Cash Flows of the Centre, cash and cash equivalents include cash in hand, cash at bank, Temporary call deposits.

6. Loans and Receivables

Financial assets with fixed or determinable payments that are not quoted in an active market, such assets are recognized initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition Loans and receivables comprise cash and cash equivalents, trade receivables and amounts due from related parties.

7. Financial Liabilities

The Centre classifies non-derivative financial liabilities into the other financial liabilities category. Other financial liabilities comprise trade payables and related party payables. Such financial liabilities are recognized initially at fair value plus any directly attributable transaction costs. The Statement of Financial Position when, and only when, the Centre has a legal right to offset the amounts and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

8. Employee Benefits

Retirement benefits to employees are provided according to the laid down statutory requirements. Centre contribution for provident fund and employees' Trust Fund is 15% and 3% respectively. Gratuity provision is made according to the Gratuity Act No.12 of 1983. Provision is done for the employees from year one of service in the Centre. The funds required for payment of gratuity is given by Treasury when requires. Provision is calculated as follows

(Last drawn Basic Salary plus cost of living & other allowances) x ½ x Completed Number of Years.

Extended Retirement age

The retirement age of an employee is extended to year 62 according to the circular 02/2021 dated 2021/12/14.Therefore no current liabilities of gratuity provision exist for the year 2022 as no employee is predictable as retire on the year 2022.

9. Provisions

A provision is recognized if, as a result of a past event, the Centre has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation.

10. Provisions, Contingent Assets and Contingent Liabilities

Provisions are made for all obligations existing as at the Balance Sheet date when it is probable that such an obligation will result in an outflow of resources and a reliable estimate can be made of the quantum of the outflow. All contingent liabilities are disclosed as a note to the financial statements.

11. Revenue

Revenue is recognized to the extent that it is probable that the economic benefits will flow to the Centre, and the revenue and associated costs incurred or to be incurred can be reliably measured. Revenue is measured at the fair value of the consideration received or receivable, net of trade discounts, NBT and value added taxes. The following specific criteria are used for recognition of revenue:

a) Sale of Developed Products

Revenue from the sale of developed products, is recognized when the significant risk and rewards of ownership of the products have passed to the buyer with the Centre retaining neither a continuing managerial involvement to the degree usually associated with ownership, nor an effective control over the products which are sold.

b) Rendering of Services

Revenue from rendering of services is recognized in the accounting period in which the services are rendered or performed.

c) Construction Revenue

Construction revenue is recognized by reference to the stage of completion where the contract outcome cannot be measured reliably and revenue is certain.

d) Taxes

Taxes include Income Tax, Value Added Tax, and Nation Building Tax. The Centre Companies in the Centre pay such taxes in accordance with the respective statutes. Currently NBT is not applicable and the Centre is Non registered institute for VAT.

e) Interest Income

Interest income is recognized as and when the interest accrues.

f) Gains and Losses on Disposal of Assets

Net gains and losses of a revenue nature arising from the disposal of property, plant and equipment and other non-current assets, are accounted for in the Income Statement, after deducting from the proceeds on disposal, the carrying amount of such assets and the related selling expenses. Gains and losses, arising from activities incidental to the main revenue, generating activities and those arising from a Centre of similar transactions which are not material, are aggregated, reported and presented on a net basis.

g) Other Income

Other income is comprised with net income of Technology Transfer Projects which are completed, Interest income on call deposits, Liquidity damages, Bond income, Interest on loans, Nonrefundable deposits, Registration of Suppliers, Sundry income, Damaged Stock disposal income, Gain on disposal of assets and overhead recovery etc.

h) Differed Income

Where the Capital grant relates to an asset released from the general treasury, when the recurrent grant relates to an expense item, it is recognized as income over the period necessary to match the grant on a systematic basis to the costs that it is intended to compensate.

Differed income has been recognized from Capital grants received from other sources from the year of 2021 accompanied the Prior year adjustments from the initial year the Differed Income treatment accommodated in the Accounts. Accordingly differed income recognized all ought of capital grants benefited by the NERDC.

12. Grants

Grants are recognized when there is a reasonable assurance that the grant will be received and all attaching conditions will be complied with. When the recurrent grant relates to an expense item, it is recognized as income over the period necessary to match the grant on a systematic basis to the costs that it is intended to compensate. Where the Centre receives non-monetary grants, the asset and that grant are recorded at fair value.

Capital grants from the treasury are received in two forms according to the nature of the items as for procurement of items represented in balance sheet as Rehabilitations and acquisitions. The other form is for procurement or rendered services on recurrent nature items in income statement comprise of Research and Development, popularization, capacity building and calibration. Accordingly, the statement of equity represent only the capital funds utilization for acquiring balance sheet items as the rest accounted through income statement. Capital grants for income statement items are recognized in the income statement as revenue when the grants are utilized actually.

Current year total capital grant Rs.28,730,000.00 and recurrent grant Rs,280,675,000.00 were received in compliance with Treasury grants. The total grants received history represents in Page 125-127 of financial statements.

Contingent Liability Impact of Grants.

Out of Rs 8,975,449.33 the amount in the progress of completion in the equity statement of the heading of Rs.1,530,000 amount represents from the year 2017 in progress for establishment of the overall information system package which the composition of HR module. Payroll module and the Accounting module. The Supplier could not yet to complete the accounting module as to comply the requirement of NERDC which the said allocation is still in the NERDC. Since there arise an uncertainty to successfully completion of Accounting module, NERDC may refund or to utilize for needed capital budgetary item in the acquisition category in a future year.

13. Expenditure and Presentation in Income Statements

Expenses are recognized in the income statement on the basis of a direct association between the cost incurred and the earning of the specific items of income where appropriate. All expenditure incurred in running of the Centre and depreciation of the property, plant & equipment has been charged against to income in calculating the surplus/ (deficit) for the period.

14. Research & Development

Research & Development projects are mainly funded by the Treasury. If Research projects are partly or fully funded by a client this income is taken against the expenditure.

When costing the research projects only the direct cost considered.

15. Mechatronics Enabled Economic Development Initiative (MEDI)

The Standard Training Prototyping and Testing Facility (SPTF) will be a Project under the NERDC and will be transformed to government owned private, independent and non-profitable entity where the Sri Lankan Electronics/Mechatronics companies/startups could utilize for their product designing developing and prototyping, testing and certifying with nominal fee.

Main Objective of this project is to increase locally developed high tech product exports in the country therein increase the GDP growth. Further creation of a set of local Hi Tech manufactures and value chain for licensed products is an objective too.

9.2 Statement of Financial Position As At 31.12.2021

Figures in LKR

	2021	**Restated 2020**
Assets		
Current Assets		
Cash & Cash Equivalent	144,590,658.86	157,907,012.39
Trade Receivables	13,745,632.78	7,254,932.16
Inventories	12,615,896.85	12,832,182.07
Pre – Payments	599,744.50	634,754.82
Other Current Assets	24,536,267.34	25,691,004.57
	196,088,200.33	204,319,886.01
Non-Current Assets		
Property Plant & Equipment	424,238,974.24	458,974,164.25
Capital Work in Progress	-	5,452,215.80
Other Intangible Assets	404,319.45	390,029.45
Other non-current Assets	29,308,189.13	28,880,147.48
	453,951,482.82	493,696,556.98
Total Assets	650,039,683.15	698,016,442.99
Liabilities		
Current Liabilities		
Trade & Other Payables	43,472,623.47	50,832,249.37
Total Current Liabilities	43,472,623.47	50,832,249.37
Non-Current Liabilities		
Provision for Gratuity	126,544,822.50	122,199,330.84
Security Deposit	6,200.00	6,200.00
	126,551,022.50	122,205,530.84
Total Liabilities	170,023,645.97	173,037,780.21
Total Net Assets	**480,016,037.18**	**524,978,662.78**
Net Assets/Equity		
Differed Income	358,191,645.28	392,926,835.29
Capital Contributed by the Government Entities	158,628,984.20	188,020,650.81
Revolution Reserve		
Accumulated Surpluses/(Deficits)		
Total Net Assets/Equity	(36,804,592.30)	(55,968,823.32)
Total Net Assets/Equity	**480,016,037.18**	**524,978,662.78**

Prof.Leelananda Rajapaksha	K R Pathmapriya	J.M.R S. Jayasinghe
Chairman	Acting Director General	Director Finance

9.3 Statement of Financial Performances for the Year Ended 31.12.2021

Figures in LKR

	2021	Restated 2020
Revenue		
Transfers from the Government Entities	296,345,345.09	276,993,402.55
Differed Income	76,792,936.82	73,535,856.06
Other Income	35,492,126.28	27,546,941.58
Total Revenue	408,630,408.19	378,076,200.19
Expenditure		
Administrative Cost	290,286,777.23	318,263,514.21
Other Expenses	22,339,215.12	14,678,176.19
Depreciation	76,792,936.82	73,528,335.56
Financial Cost	47,240.00	38,260.00
Total Expenditure	389,466,169.17	406,508,285.96
Surplus/(Deficit) for the Period	19,164,239.02	(28,432,085.77)

9.4 Cash Flow Statement for the Year Ended 31 December 2021

Figures in LKR

	2021	Restated 2020
Net Cash flows from Operating Activities		
Surplus/ (Deficit) from Ordinary Activities	19,164,239.02	(28,432,085.77)
Non- Cash Movements		
Depreciation	76,792,936.82	73,528,335.56
Differed Income	(76,792,936.82)	(73,535,856.06)
Increase in provision for bad debts	313,171.36	-
Increase/(decrease) in payables	(12,491,940.90)	8,004,983.04
Increase/(decrease) in relating to employee costs	9,477,806.66	11,054,511.84
(Gains)/losses on sale of property, plant and equipment	(11,377.50)	(187,800.00)
(Increase)/decrease in other current assets	977,991.12	4,569,324.26
(Increase)/decrease in receivables	(6,803,879.98)	11,425,396.99
Net Cash Flows from Operating Activities	10,626,009.78	6,426,809.86
Cash Flow From Investment Activities		
Purchase of assets	(37,013,395.72)	(19,311,622.10)
Proceeds from sales of assets	11,377.50	187,800.00
Capital Item Grants from other sources		99,900.00
Net Cash Flows from Investment Activities	(37,002,018.22)	(19,023,922.10)
Cash Flow From Financing Activities		
Capital grant	13,059,654.91	50,840,597.45
Net Cash Flow from Financing Activities	13,059,654.91	50,840,597.45
Net Increase/(Decrease) in Cash & Cash Equivalents	(13,316,353.53)	38,243,485.21
Cash & Cash Equivalent at Beginning of the Period	157,907,012.39	119,663,527.18
Cash & Cash Equivalent at End of the Period	144,590,658.86	157,907,012.39

9.5 Statement of Changes in Equity as at 31.12.2021

Figures in LKR

	Capital Introduced	Re Stated Government Contributed Capital	Capital from Other sources	Re Stated Differed Income	Re stated Accumulated Surplus /(Deficit)	Total Net Assets/Equity	Balance As At 31.12.2021
Balance as at 01/01/2020	**1,000,000.00**	**4,500,000.56**	**148,553,634.87**	**452,191,906.28**	**(27,415,144.20)**	**578,830,397.51**	**615,191,450.66**
Changes in equity for 2020						-	
Capital Grant received –Treasury		50,840,597.45				50,840,597.45	33,543,940.11
SPTF Net result adjustment					(121,593.35)	(121,593.35)	
Net impact - Differed income, disposal 2020				(2,702,697.00)		(2,702,697.00)	
Net of Capital purchase less recoverable depreciation to Differed Income		(16,973,482.07)		(56,562,373.99)		(73,535,856.06)	(64,656,358.72)
Capital Reserved From other Sources			99,900.00			99,900.00	
Surplus/Deficit for the period					(28,432,085.77)	(28,432,085.77)	(5,269,473.83)
Increase in revaluation reserve							20,839.29
Balance as at 31/12/2020	**1,000,000.00**	**38,367,115.94**	**148,653,534.87**	**392,926,835.29**	**(55,968,823.32)**	**524,978,662.78**	**578,830,397.51**
Changes in Equity for 2021							
Capital Grant received –Treasury		13,059,654.91				13,059,654.91	50,840,597.45
SPTF Net result adjustment							(121,593.35)
Balance Sheet Vs Income statement					8.00	8.00	
Net of Capital purchase less recoverable depreciation to Differed Income		(42,451,321.52)		(34,735,190.01)		(77,186,511.53)	(73,535,856.06)
Correction to previous additions							(2,702,697.00)
Capital Reserved From other Sources							99,900.00
Surplus/Deficit for the period					19,164,239.02	19,164,239.02	(28,432,085.77)
Balance as at 31/12/, 2021	**1,000,000.00**	**8,975,449.33**	**148,653,534.87**	**358,191,645.28**	**(36,804,592.30)**	**480,016,037.18**	**524,978,662.78**

9.6 Previous Year Adjustments

Ref No	Description	Details of adjustment			2020	Balance before 01.01.2020	Effect to the Balance Sheet
		Details	Declared	After adjustment			
	Balance b/f				(42,242,335.18)	(260,732,718.48)	
1.01	Being Corrected depreciation of disposal assets 2020	Acc.Dep.Tools-Other Sources	7,520.54				Increasing the WDV of the assets
		Acc.Dep Furniture		0.03			
		Acc.Dep Tools		0.01			
		Previous Year Adjustment AC		7,520.50	7,520.50		
1.02	Being corrected incentive provision	Provision for Incentive	11,220,184.38	10,388,206.38	831,978.00		Being decreased the current liabilities
1.03	Being increased VWD based revenue-DPD/COM/34/19	VWD Debtors	4,374,906.03	4,389,875.29	14,969.26		Being increased the current assets
1.04	Being increased cost of E&ESD/COM/ACT/09 /01/2020		6,699,490.20	7,888,030.20	1,188,540.00		Being increased the current liabilities
1.05	Being increased differed income to all the assets purchased through Grants-Either GoSL or Other party	Accumulative Depreciation from 2006-2020 the initiate year of the treatment to last year	931,859,376.24				Being Increase Differed Income
		Total Differed Income from 2006-2020 the initiate year of the treatment to last year	694,572,869.38		5,094,832.12	232,191,674.74	
		Net Impact	237,286,506.86				
1.06	Cost of the disposed assets from 2006 the initial year differed income treatment had done		28,495,782.49		6,949,824.99	21,545,957.50	
	Accumulative depreciations disposed assets from 2006 the initial year differed income treatment had done		(18,484,254.69)		(4,247,127.99)	(14,237,126.70)	
		Net Impact	10,011,527.80		2,702,697.00	7,308,830.80	

1.07	Being over provision of expenditure - CED/COM/73/2018	Income	7,709,040.81	7,709,040.81			Being decreased the current liabilities
		Expenditure	(7,315,471.32)	(7,304,367.13)			
		Net	393,569.49	404,673.68		11,104.19	
1.08	Being ovr provision of expenditure - DPD/COM/37/2019	Income	1,487,000.00	1,487,000.00			Bing decreased the current liabilities
		Expenditure	(1,283,648.78)	(1,264,573.04)			
		Net	203,351.22	222,426.96		19,075.74	
1.09	Being over provision of expenditure - DPD/COM-ACT/07/47/2019	Income	305,000.00	305,000.00			Being decreased the current liabilities
		Expenditure	(192,648.71)	(173,005.21)	19,643.50		
		Net	112,351.29	131,994.79			
1.10	Being over provision of expenditure - APH/COM/99/17	Income	2,229,184.01	2,229,184.01			Being decreased the current liabilities
		Expenditure	(1,890,741.49)	(1,796,248.90)		94,492.59	
		Net	338,442.52	432,935.11			
1.11	Being identified extra works to - DPD/COM/35/19	Income	13,600,000.00	13,637,836.94			Being increased current assets
		Expenditure	10,906,944.87	10,906,944.87			
		Net	2,693,055.13	2,730,892.07		37,836.94	
1.12	Being identified retention receivable for -DPD/COM/35/19	Income	13,600,000.00	13,877,575.00			Being increased current assets
		Expenditure	10,906,944.87	10,906,944.87			
		Net	2,693,055.13	2,970,630.13		277,575.00	
1.13	Being identified extra works to - DPD/COM/46/19	Income	8,169,431.59	8,222,434.74			Being increased current assets
		Expenditure	6,259,043.65	6,259,043.65			
		Net	1,910,387.94	1,963,391.09		53,003.15	

1.14	Audit fee under provision adjustment for the Government Auditors	Expenditure	275,400.00	306,000.00	(30,600.00)		Being increased current liabilities
			275,400.00	306,000.00			
1.15	Popularization Income	Income		3,150.00	3,150.00		Being increased current assets
		Total		3,150.00			
1.16	Being increased cost for DPD/COM/48/19	Income	300,000.00	300,000.00			Being increased current liabilities
		Expenditure	75,601.37	113,700.51			
		Net	224,398.63	186,299.49	(38,099.14)		
1.17	Being increased cost for DPD/COM/52/20	Income	432,000.00	432,000.00			Being increased current liabilities
		Expenditure	344,160.00	354,014.00			
		Net	87,840.00	7,986.00	(9,854.00)		
1.18	Being increased cost of Consultancy services to proposed clinical building at Wadduwa-Stage-1	Income	5,110,589.00	5,110,589.00			Being increased current liabilities
		Expenditure	1,385,280.95	1,992,319.23			
		Net	3,725,308.05	3,118,269.77	(607,038.28)		
1.19	Being increased opening Ronio stock				336,721.58		Being increased current assets
	Total				**(32,727,874.64)**	**(20,739,125.33)**	

9.7 Notes to the final Position as at 31/12/2021

02. Deposits Kept as Securities for Guarantee Bonds

Guarantee is issued in favor of	Bond No /Date	Expires On	Bond	Certificates Pledge as security	Amount (LKR)	Bank	Bond Value (LKR)
Toyota Lanka (Pvt)Ltd	15/2008 12/18/2020-12/17/2021	12/17/2022	Guarantee Bond	C/33734579 -507908	100,000.00	BOC-JAELA	75,000.00
Industrial Technology Institute	11/02/2021-03/31/2022	3/31/2022	Performance Bond	1711258-86324444	100,000.00		34,500.00
Milco Private Limited	20200003940 12/16/2020-07/15/2021	7/15/2021	Advance Payment Guarantee	1711283-86598161 1711284-86598169	3,000,000.00 1,500,000.00		4,346,332.16
The Institute of Indigenous Medicine	20210003979-12/22/2021-11/06/2022	11/06/2021	Advance Payment Guarantee	1804804-87961092 1804805-87961119	5,000,000.00 5,000,000.00		8,558,410.00
The Institute of Indigenous Medicine	20210003978 12/22/2021-11/06/2022	11/06/2021	Performance Bond	1804809-8808829	3,000,000.00		2,379,412.75

03. Disposal of Fixed Assets

Figures in LKR

Asset Category	Written down value	Differed Income for Disposed Assets	Sale Proceeds	Profit/(loss)
Furniture Fittings	19,158.49	19,158.49	1,942.50	1,942.50
Office Equipment	140,733.85	140,733.85	3,663.00	3,663.00
Demonstration	4,742.19	4,742.19	-	-
Plant and Machinery's	499.18	499.18	11.10	11.10
Tools	136,091.61	136,091.61	1,925.85	1,925.85
Computer	12.00	12.00	-	-
Equipment's	92,337.39	92,337.39	3,835.05	3,835.05
TOTAL	**393,574.71**	**393,574.71**	**11,377.50**	**11,377.50**

04. Commissioner General of Inland Revenue

NERDC is regarded as VAT non registered institute with effect from the financial year 2020 and reactivate for volunteer basis for VAT registration with effect from February 2021.

05. Temporary Deposits

Funds received as bond Income from NERDC employees who has left the services before completion of the bond period is invested in State Institutions Temporary Surplus Trust Fund maintained at Bank of Ceylon, .However at being the balance was LKR.7,011,594.73has been taken back to the Consolidated fund of the treasury ,therefore the necessary accounting adjustments were incorporated in the financial statements of 2020, non considering the previous year impact.

Additionally, in 2021 accounts a previous year adjustment had been re stated.

Further advances received from the customers are secured in the form of temporary call deposits with the bank, until such time it is used for the purpose. Interest earned is shown under other income.

06. Work in Progress

Work in progress of ongoing projects has been disclosed under inventories.

Capital work in progress has been presented separately in the statement of financial position.

All capital work in progress had been turned into completed works with additional effort by NERDC as the treasury policy of all capital works funds of current year could not continue to the next year.

07. Related Party Disclosures (SLPSAS 14)

The following disclosures are made in the financial statements of National Engineering Research & Development Centre of Sri Lanka for the year 2021, which is a separate reporting entity. During reporting period Centre had not provided any remuneration compensation to close family members of key management personnel.

08. (a) Standards Training Prototyping & Testing Facility

The Ministry has already initiated a project on Mechatronics Enabled Economics Development Initiative (MEDI) with the main Objective to grow our Economy and our hi-tech exports, and to reduce our imports through designing smart Machines for licensed manufacture locally and globally. In achieving this objective, it is intended to setup a product Design Engineering Park (PDEP) for mechatronics PDE companies with two components; a Long – Term Loan Facility (LTLF) and shared services Standards Training, Photocopying and test facility(SPTF). The NERDC handles the SPTF transactions as the way of current account and reflection the status in the statement of Financial Position as impact from last year.

(b) Discontinue in Future

The SPTF operation has been decided by the ministry to wind up with the NERDC once in the progressing activities are completed.

09. Accidents, Damages and Recoveries

For the financial year 2021, the motor car KR -5435 had an accident and the total value which has been agreed to pay by the Insurance company has been recorded under the note no 06 of other current assets.

10. Changes in Comparative Information

Telephone reimbursement for the employees has been recognized under Personal emoluments from the other operating activities as considering the rationality of the classification.

Cash Flow Note for the Year Ended 31st December 2021

Figures in LKR

Cash Flow from Operating Activities	**2021**	**Restated 2020**
Receipts		
Project Income	69,803,517.48	60,660,779.48
Recurrent & Research Grants	296,345,345.09	276,993,402.55
Interest Received	6,481,305.93	5,974,642.01
Other Receipts	1,234,379.70	678,138.71
Payments		
Employee Cost	(234,834,403.32)	(249,746,388.25)
Superannuation cost	(15,682,081.66)	(26,296,060.48)
Supplies	(87,448,936.39)	(33,281,472.13)
Other Payments	(23,586,245.04)	(28,128,247.15)
Corporate Income Tax & Others	(1,686,872.01)	(427,984.88)
Net Cash Flow from Operating Activities	10,626,009.78	6,426,809.86
Cash Flow From Investment Activities		
Purchase of assets	(37,013,395.72)	(19,311,622.10)
Proceeds from sales of assets	11,377.50	187,800.00
Capital Item Grants from other sources		99,900.00
Net Cash Flows from Investment Activities	(37,002,018.22)	(19,023,922.10)
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Net Increase/(Decrease) in Cash & Cash Equivalents	(13,316,353.53)	38,243,485.21
Cash & Cash Equivalent at Beginning of the Period	157,907,012.39	119,663,527.18
Cash & Cash Equivalent at End of the Period	**144,590,658.86**	**157,907,012.39**

10.

REPORT OF THE AUDITOR GENERAL FOR THE YEAR ENDED 31 DECEMBER 2021

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தேசிய கணக்காய்வு அலுவலகம்
NATIONAL AUDIT OFFICE

මගේ අංකය / எனது இல. / My No. } මබේ අංකය / உமது இல. / Your No. } දිනය / திகதி / Date }

IMT/C/NRDC/FA/2021 27 July 2022

Chairman
Sri Lanka National Engineering Research and Development Center

Report of the Auditor General issued in terms of Section 11 (1) of the National Audit Act No.19 of 2018 on the Financial Statements of the Sri Lanka National Research and Development Center for the year ended 31st December 2021

1. Financial Statements

1.1 Qualified Opinion

The audit of the financial statements of Sri Lanka National Engineering Research and Development Center for the year ended 31st December 2021 consisting of the statement of financial position as at 31st December 2021, the statement of financial performance, the statement of changes on equity and the statement of cash flow for the year then ended was carried out under my direction in pursuance of the provisions in Article 154 (1) of the Constitution of the Democratic Socialist Republic of Sri Lanka read with the provisions of the National Audit Act No.19 of 2018 and the Financial Act No. 38 of 1971. My Report to be submitted in pursuance of the provisions in Article 154 (6) of the constitution will be tabled in Parliament in due course.

I am of the opinion that the financial statements of the Center for the year ended 31st December 2021 give a true and fair view of its financial position, financial performance and cash flows for the year then ended in accordance with the generally accepted Accounting Policies.

1.2 Basis for Qualified Opinion

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

1.3 Other information included in the annual report 2021 of the Center

Other information means the information that has been included in the annual report 2021 of the Center expected to be provided after the date of the report of this audit but not included in the financial statements and my audit report thereof. The management shall be accountable for this other information.

Other information is not covered by my opinion for the financial statements and I do not give any confirmation or express any opinion in that regard in any manner.

My accountability with regard to my audit on the financial statements is to consider whether the above identified other information is substantially inconsistent with the financial statements or my knowledge obtained during my audit or in any manner, in reading such information and doing so when such information can be available.

In reading the annual report 2021 of the Center, if I observe any material misstatements, such matters should be communicated to the controlling parties for rectification. If such matters are further included without doing rectification will be included into the report to be tabled in Parliament by me in due course in terms of the Article 154 (6) of the constitution.

1.4. Responsibilities of the management and controlling parties on Financial Statement

Management is responsible to determine the necessary internal control mechanism for the preparation and fair presentation of this financial statements in accordance with the State Sector Accounting Standards where such statements can be free from material misstatement whether due to fraud or error.

In preparing the financial statements, the management is accountable to determine the possibility of continuous existence of the entity and except if the management intends to liquidate the entity or discontinue its operations where no alternatives, then it is the responsibility of the management to maintain accounts based on the ongoing concept and disclose the matters with regard to the continuous existence of the Center.

Controlling parties will bear the responsibility with regard to the financial reporting process of the Center.

As per Section 16 (1) of the National Audit Act No.19 of 2018, it is the responsibility of the Center to maintain proper books and records of all its income and expenditure and assets and liabilities in order to enable it to prepare annual and periodic financial statements that have to be prepared by it.

1.5 Auditor's Responsibility on Audit of Financial Statement

My objective is to obtain reasonable assurance about whether the financial statements as a whole are free from the 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; however is not a guarantee that an audit conducted in accordance with the Sri Lanka Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise due to fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to make influence on the economic decisions of users taken based on these financial statements.

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

- Identified and assessed the risks from material mistake of the financial statement, whether due to fraud or error, design and perform audit procedures to 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 an error, as the fraud may involve collusion, fake, deliberate omissions, misrepresentations, or the override of internal control.

- Obtained an understanding of internal control relevant to the audit in order to design the audit procedures that are appropriate in the circumstances, but not for expressing an opinion on the effectiveness of the internal control.

- Evaluated the relevance of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the management.

- Decided the suitability of the application based on the continuation of the Center for accounting based on the audit evidence obtained whether a material uncertainty appears on the continuation of the Center due to events and conditions. If I observe any material uncertainty, I have to pay my attention in my audit report with regard to such disclosures in the financial statements and if such disclosures are not sufficient then I have to change my opinion. I made my observations based on the evidence obtained up to the date of this audit report. However, continuation of the Center may come into cease on the future events and conditions.

- Evaluated the total presentation, structure and content of the financial statements, along with the disclosures and whether the financial statements are representing the underlying transactions and events in a manner that achieve fair presentation.

I brought the important audit findings, major weakness of internal control and other matters being identified during my audit into the notice of the relevant parties.

2. Report on Other Legal and Regulatory Requirements

2.1 The National Audit Act No. 19 of 2018 includes the special provisions regarding the following matters.

2.1.1 I obtained the information and explanations required for the audits as per the requirements mentioned in section 12 (a) of the National Audit Act No. 19 of 2018, and the Center had maintained the proper financial statements as shown by my examinations.

2.1.2 The Center's financial statements are consistent with the previous year as per the requirements mentioned in section 6 (1) (d) (iii) of the National Audit Act No. 19 of 2018.

2.1.3 In accordance with the requirements mentioned in section 6 (1) (d) (iv) of the National Audit Act No 19 of 2018, the recommendations have been included in the presented financial statements.

2.2 In keeping the proceedings adopted and the evidence obtained to the material facts, nothing has come to my notice so as to make the following remarks.

2.2.1 According to the requirements mentioned in section 12 (d) of the National Audit Act No. 19 of 2018, a member of the governing body of the Center has a conflict of interest, directly or indirectly that existed outside of the ordinary course of business in relation to any agreement involving the Center.

2.2.2 According to the requirements mentioned in Section 12 (f) of the National Audit Act No. 19 of 2018, there are actions that do not comply with any relevant written law or other general or special directives issued by the governing body of the Center.

2.2.3 According to the requirements mentioned in Section 12 (g) of the National Audit Act No. 19 of 2018, no action has been taken in contradiction to the powers, duties and functions.

2.2.4 According to the requirements mentioned in Section 12 (h) of the National Audit Act No. 19 of 2018, except the following observations, resources of the Center have not been purchased against the relevant laws and regulations and utilized economically, efficiently and productively within the relevant period.

Rs.4,522,370 had been disbursed for the year 2021 for purchasing of computers for the Center. Except the primary level staff of the Center, number of present officers in the staff was 143. However, totally there were 240 computers (Desktop, Laptop, Notebook, and Tablet) in the Center. Accordingly it was observed that 97 computers have been purchased uselessly exceeding the number of the staff who needed such computers.

2.3 Other Matters

(a) Balance of trade and receivables in the previous year which stood as at the end of the year was Rs. 7,254,932. Such balance had increased up to Rs. 13,745,632 in the year under review. Receivable balance had increased by 89 percent due to inefficiency in existed recovery of loans when compared to the previous year. Also, no action had been taken in the year under review to recover any amount from Rs. 2,346,964 receivable as at 31st December 2021 only from 5 institutions to the Center.

(b) It was observed that 18 posts at senior level, 05 posts at tertiary level, 06 posts at secondary level and 48 posts at primary level had become vacant as at the date of audit which is 25 May 2022.

W P C Wickramaratne
Auditor General

10.
OBSERVATION OF THE BOARD OF DIRECTORS FOR THE REPORT OF THE AUDITOR GENERAL

The corrective actions taken and clarification on the queries raised in the Auditor General report of year 2021 are as follows.

2.2.4 According to the requirements mentioned in Section 12 (h) of the National Audit Act No. 19 of 2018, except the following observations, resources of the Center have not been purchased against the relevant laws and regulations and utilized economically, efficiently and productively within the relevant period.

Rs. 4,522,370 had been disbursed for the year 2021 for purchasing of computers for the Center. Except the primary level staff of the Center, number of present officers in the staff was 143. However, totally there were 240 computers (Desktop, Laptop, Notebook, and Tablet) in the Center. Accordingly, it was observed that 97 computers have been purchased uselessly exceeding the number of the staff who needed such computers.

At present there are 240 computers at the Centre which includes both laptops and desktop computers. The distribution is as follows.

Two numbers of computers each, which includes a desktop and a laptop have been distributed among the 26 numbers of categories of higher management, heads of the departments and management assistants resulting in a total 52 computers. They were used especially 'work from home' activities. Another 117 numbers of computers (desktops and laptops) have been distributed among 117 number of other staff members. (total staff was 143.)

Remaining computers have been distributed in the following way.

40 numbers of computers for laboratories, museum, library, outside activities, innovative activities and and common places. 10 numbers of computers are used as server computers. 3 numbers of computers are reserved for emergency replacements. 18 numbers are identified as outdated. Total is 240.

For the year 2021, Rs. 4,522,370.00 has been spent for purchasing new computers, accessories, and new requirements of printers. The computers have been purchased as replacement of damaged computers and also to provide computers to facilitate work from home.

Accordingly, it is incorrect to state that 97 computers have been purchased surpassing the actual number of people in need of computers.

2.3 Other details.

(a) The balance received at the end of the last year was Rs. 7,254,932 and it was increased up to Rs. 13,745,632 in the year concerned. This balance had increased by 89% due to the inefficiency in recovery of debts. At the same time, in the year concerned arrangements had not been made to recover an amount of Rs. 2,346,694 to be received by December 31st 2021 by 5 institutions.

Rs. 13,745,632.78 is the balance that remains in the entries made to identify the income after deducting the total payments as at 31.12.2021, which was determined based on the percentage of work done.

During the year 2022, we received Rs. 4,136,542.50 upon the completion of work having offset the mobilization advance received in the beginning. Once the defect liability period expires, arrangements will be made to charge the balance amount of Rs. 1,401,191.31. The income was calculated by considering the value of work done. As per the agreement, only Rs. 618,853.05 can be requested after completing the next stage. Adjustments are expected to be made in the books upon the confirmation of the final value, taking the work completed vs estimated and the changes in VAT into account. These adjustments are estimated to be around Rs. 1,120,353.72 and will update the books accordingly. Finally, steps have been taken to collect Rs. 6,468,692.20 from debtors.

b) It was observed that 18 posts at senior level, 05 posts at tertiary level, 06 posts at secondary level and 48 posts at primary level had become vacant as at the date of audit which is 25 May 2022

It was not possible to make any recruitments for the vacancies in the recent past. Because of the cabinet decisions and the government circulars issued. (We have informed in this regard, to the State Ministry of Skill Development and Vocational Education, Research and Innovation and to the Department of Management Services in time to time.)

- Suspension of recruitments for primary level (PL-1, PL-2, PL-3) vacancies of government institutions according to the Management Service Circular No. 1/2020, dated 25.02.2020
- Cabinet decision regarding the review of government expenditure of No.21/1596/304/134, dated 2021.08.31. The cabinet decision of No. අමප/22/0178/304/014, dated 2022.02.07 on the title of "Critical management of government expenditure".
- National budget circular No.03/2022, dated 2022.04.26 titled "controlling of government expenditure"

In addition to that as it is an internal recruitment senior research Fellow (HM 2-3) could not be completed due to unavailability of a suitable candidate in the Centre.