



வீடகா ஸா தாக்ஷஸு அலாக்ஷா஁ம்ஸு விக்ஞான மற்று஡் தலாழினுட்ப அ஡ைஸ்க் Ministry of Science and Technology



2024

வீடகா தாக்ஷஸு லா ஈரீடீஷஸு றுலீந் குறநிஈ கரா
விக்ஞானம், தலாழினுட்பம் மற்று஡் ஆராய்ச்சிவினாடான சாதனைகள்
Achievements through Science, Technology and Research

The Progress 2024 and The Way Forward 2025

Ministry of Science and Technology

Message from the Hon. Minister



The Ministry of Science and Technology, together with its 12 implementing organizations, proudly presents the Annual Progress Report for 2024 to be submitted to the budget committee stage. This report reflects unwavering commitment to aligning Research and Development (R&D) with Sri Lanka's socio-economic development goals.

The forthcoming *National Science and Technology Policy* which is high priority of present government policy agenda will lay out a clear roadmap to address priority areas and catalyze measurable progress in the Science and Technology (S&T) sector. Accordingly, the Ministry has already started to focus on empowering talent, modernizing and restructuring S&T eco system, and integrating cutting-edge technologies across key sectors of the economy.

In this knowledge and innovation-driven era, S&T serve as critical drivers of sustainable industrial and economic progress. By promoting demand-driven research, facilitating research commercialization, and fostering an inclusive innovation ecosystem, this ministry is positioning Sri Lanka as a global player in science and technology. Informed by the experiences of developed nations, we have worked to align national priorities with global best practices. At the same time, this ministry remains dedicated to enhancing societal well-being through impactful R&D initiatives.

This year, the Ministry has made significant strides in deploying modern technologies in agriculture, health, energy, and manufacturing to address national challenges. Our initiatives emphasize foresight and innovation in research, promote the digitization of R&D requirements, and support the development of modern technology applications to enhance productivity and competitiveness. We are equally committed to making research relevant and impactful for rural communities, fostering equitable growth across the nation.

The achievements outlined in this report are a testament to the dedication and collaboration of our researchers, policymakers, entrepreneurs, and stakeholders. Their contributions drive the progress of S&T as a transformative force in realizing a prosperous and inclusive Sri Lanka.

As we look ahead, let us remain united in our efforts to cultivate a culture of innovation and position science and technology at the core of our nation's economic and social transformation. Together, we can shape a future of opportunity and progress for all Sri Lankans.

Dr. Chrishantha Abeysena (M.P)

Minister

Ministry of Science and Technology

December 2024

Message from the Secretary - Annual Report 2024



As the Secretary of the Ministry of Science and Technology, I am pleased to present the Annual Report for 2024, highlighting the Ministry's continued efforts in advancing science and technology to achieve sustainable development and national prosperity.

The Ministry, in alignment with the government's *Science and Technology* policy manifesto, has focused on fostering innovation, enhancing research commercialization, and building a robust ecosystem for technological advancements. With 12 implementing organizations under its purview, the Ministry has worked tirelessly to empower stakeholders, modernize infrastructure, and catalyze research-driven economic growth.

This year marked significant progress in deploying demand-driven research and embracing cutting-edge technologies such as biotechnology, nanotechnology, and other emerging scientific technologies. The ministry has taken key strides in providing policy directions to facilitate research infrastructure enabling Sri Lanka Institute of Nanotechnology (SLINTEC) and Sri Lanka Institute of Biotechnology (SLIBTEC) work harmoniously. These efforts have paved the way for modern scientific solutions to national challenges across key sectors like agriculture, manufacturing, and industries. Equally important are our endeavors to nurture a culture of innovation and scientific curiosity among the youth and communities. Through student research symposium, rural technology transfer programs supported by 267 Vidatha Resource Centres, and flagship events like the national science day events 2023 & 2024, the Ministry is ensuring that the benefits of science and technology reach all corners of the country.

In 2024, we also deepened our international collaborations, forming new partnerships with countries such as India, South Africa and Korea and cooperation such as BIMSTEC and NAMS&T while strengthening ongoing agreements. These initiatives have created opportunities for knowledge sharing, capacity building, and joint innovation, further bolstering Sri Lanka's presence in the global scientific and technological landscape.

The achievements of this year would not have been possible without the dedication and cooperation of our researchers, institutions, and stakeholders, who have embraced the Ministry's vision for a prosperous, innovation-driven Sri Lanka. As we continue to address emerging challenges and seize new opportunities, I am confident that science and technology will remain pivotal in transforming our nation and improving the lives of all Sri Lankans.

Y.L. Mohammad Navavi
Secretary
Ministry of Science and Technology
December 2024

Vision

A developed nation through Science, Technology and Innovation

Mission

To create an effective STI ecosystem which drive economic growth to improve the quality of life addressing national and global challenges within the sustainable development framework.

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1. Introduction

The Ministry of Science and Technology has been at the forefront of Sri Lanka's journey to harness the transformative potential of science, technology, and innovation (STI) as catalysts for sustainable economic development and enhanced quality of life for all citizens. Despite the Ministry's initial operation as a research and innovation division within the Ministry of Education for the first 10 months of the year, it has demonstrated remarkable progress in expanding its research and development (R&D) initiatives to align with global trends and address national priorities effectively.

Although the Ministry of Science and Technology returned to its current form in 2024 by the extraordinary gazette no 2412/08 on 25.11.2024, its origins date back to 1968, when the National Science Council was established to promote scientific research and development across the country. This was followed by the creation of the Natural Resources, Energy, and Science Authority of Sri Lanka (NARESA) in 1981, which focused on the development of the nation's natural resources and energy sectors. The Science and Technology Development Act No. 11 of 1994 formally led to the creation of the Ministry of Science and Technology, consolidating various scientific and technological bodies under one umbrella. The Ministry underwent several organizational changes over the years, evolving through various forms, including as part of the Ministry of Economic Reforms, Science, and Technology (2001–2003), the Ministry of Technology and Research (2010–2015), and the Ministry of Science, Technology, and Research (2016–2018). It also functioned as a non-cabinet ministry under the titles "Science, Technology, and Research" (from 28.12.2018) and "Higher Education, Technology, and Innovation" (from 10.12.2019). More recently, in 2020, it became the State Ministry of Skills Development, Vocational Education, Research, and Innovation. Throughout these transitions, the Ministry has played a critical role in advancing science, technology, and innovation in Sri Lanka, contributing to the nation's scientific and technological progress.

Throughout 2024, the Ministry oversaw a dynamic network of 10 institutions in the first 10 months and 12 by year-end, dedicated to monitoring the effective network of those institutions in advancing scientific research, technology development, and innovation. These institutions have collaborated on implementing strategic initiatives designed to promote demand-driven research, strengthen industry-research partnerships, and foster an environment conducive to technology-driven entrepreneurship and innovation. Special emphasis has been placed on emerging and advanced technologies such as biotechnology, nanotechnology, and sustainable energy solutions, positioning Sri Lanka as a leader in technological advancement.

The year 2024 marked significant milestones in Sri Lanka's R&D and innovation landscape, with notable contributions from key institutions and initiatives. The National Innovation Agency (NIA), as the apex body facilitating the country's innovation ecosystem, introduced a comprehensive commercialization guideline and Institutional Business Linkages (IBL) to strengthen commercialization strategies within R&D institutes. The National Institute of Fundamental Studies (NIFS) made groundbreaking strides with the development and commercialization of biofilm biofertilizers (BFBF). As an environmentally friendly alternative to conventional fertilizers, BFBF's widespread adoption and distribution at the national level have positively impacted the farmer community, promoting sustainable agriculture practices. Additionally, NIFS took decisive steps to preserve its around 50 years old research infrastructure at Hanthana mountain slope, stabilizing its hillside building site by constructing retaining walls and renovating critical facilities.

The Sri Lanka Institute of Nanotechnology (SLINTEC) significantly contributed to the economy through impactful commercialization projects, while the Sri Lanka Institute of Biotechnology (SLIBTEC) emerged as a key player in biotechnology research. SLIBTEC secured multiple international grants and expanded its infrastructure to meet future industry demands, laying the foundation for a robust biotechnology sector. The National Science Foundation (NSF) played a pivotal role in nurturing a research culture at the school level by organizing research symposia, which highlighted the exceptional R&D outputs and publication talents of students and educators. These initiatives have planted the seeds of innovation across all levels of education. Furthermore, NSF enhanced researcher accessibility by establishing a digital library consortium, facilitating a more inclusive research environment.

The Ministry expanded its technology transfer programs to support grassroots entrepreneurs and small and medium-sized enterprises (SMEs). These programs, implemented through 267 Vidatha Resource Centres, empowered rural populations by ensuring equitable access to STI benefits tailored to industry needs. On the international front, the Ministry strengthened collaborations with global partners, forging agreements with countries such as India, South Africa, and Korea. These partnerships enabled knowledge sharing, joint research, and capacity-building initiatives, enhancing Sri Lanka's competitiveness in the global STI landscape.

The accomplishments detailed in this report reflect the Ministry's unwavering commitment to advancing science and technology as pivotal drivers of national development. By fostering innovation, empowering communities, and strengthening Sri Lanka's position within the global knowledge economy, the Ministry aims to build a prosperous and sustainable future for the nation.

1.1. Priority Functions in the Ministry of Science and Technology

- Formulation, implementation, monitoring and evaluation of policies, strategies, programmes and projects, in relation to the subjects of science and technology, and those subjects that come under the purview of Departments, Statutory Institutions and Public Corporations listed in Column II based on the national policies implemented by the government.
- Provision of public services under the purview of the Ministry in an efficient and people friendly manner
- Reforming all systems and procedures using modern management techniques and technology, thus ensuring that the functions of the Ministry are fulfilled while eliminating corruption and waste.
- Facilitating research institutions to collaborate with international research institutions
- Formulating an efficient mechanism to utilize innovations and outcomes of research
- Taking steps to expand scientific, industrial, social and economic research and development activities
- Motivating and directing communities towards innovation
- Enforcing standards and matters related to administration in science and technology sector
- Provision of technical assistance to relevant Ministries for developing Green Technology Projects

1.2. Institutions Functioning under the Ministry of Science and Technology

- Arthur C. Clarke Institute for Modern Technologies (ACCIMT)
- Industrial Technology Institute (ITI)
- National Science and Technology Commission (NASTEC)
- National Engineering Research and Development Centre (NERDC)
- National Innovation Agency (NIA)
- National Institute of Fundamental Studies (NIFS)
- National Research Council (NRC)
- National Science Foundation (NSF)
- Sri Lanka Institute of Biotechnology (SLIBTEC)
- Sri Lanka Inventors Commission (SLIC)
- Sri Lanka Institute of Nanotechnology (SLINTEC)
- Sri Lanka Standards Institution (SLSI)

02. Progress of the Development Activities of the Ministry of Science and Technology

2.1. Progress of the Scientific Development Programmes

2.1.1 Research Division

- **Investments made in the Research and Development Sector**
- **Implementation of the National Research & Development Framework - (NRDF)**

Under the NRDF, methods and programs required for the advancement of the country's research and development sector are identified. The details and progress of the programs implemented in the year 2024 are as follows.

- *Development of a National Research Roadmap by Updating the National Research and Development Framework and Organizing Necessary Activities for its Implementation*

Preliminary action was initiated for the development of the National Research Roadmap with a view to adopting a clear vision and strategic direction for research and innovation in Sri Lanka. Under this initiative, Expression of Interests were called to develop a common platform to convene researchers, professionals and scientists. The Ministry received 111 applications across various fields of study and selected 70 applicants, categorizing them into 12 fields.

- *Organizing programs/projects to develop knowledge, applications in subject areas identified under NRDF*

(a) In 2024, four awareness programs were organized under the NRDF. These included a program on 2024.04.03, in collaboration with the National Innovation Agency (NIA), focusing on commercializing research outcomes while managing intellectual property rights, a two-phase program for ministry staff on using performance indicators to manage research and development activities effectively and an awareness program on Custom import clearance procedures for R&D related imports. These initiatives aimed to align research efforts with national economic development and improve performance evaluation in research and innovation.

(b) Maintaining Vidya E News website and organizing Vidya E News Article Competition for promotion of modern scientific knowledge.

The Vidya e-News website (www.vidyaenews.mostr.gov.lk), launched in 2022 as a trilingual platform, has published over 200 scholarly articles in Sinhala, Tamil, and English by 2023, with more than 100 articles added by end of 2024. Knowledge from fields such as AI, Augmented Reality, Astronomy, and nanotechnology is also shared via Facebook and YouTube, while an annual article competition engages students and the public, was organized and reviewing are in progress. The website serves as a portal for accessing government scientific knowledge resources and involves university professors and experts in evaluating content.

- **Indo-Sri Lanka Science & Technology Cooperation**

Under the Indo-Sri Lanka Joint Program of Cooperation signed in 2019, initiatives include the exchange of scientific knowledge, organizing bilateral conferences, training young scientists, publishing research papers, and issuing patents.

- *Indo-Sri Lanka Joint Cooperation Programme - 2019*

Financial allocations were provided for 08 research proposals and 01 workshop, with the two bi-annual progress reviews held on 22.03.2024 and 29.10.2024. A workshop on controlling White leaf disease in sugarcane was conducted in at Pelawatta Sugarcane Research Institute, involving researchers from both

countries, with results shared with cultivators. Additionally, research output on integrated multi-standard antennas for automotive communications was forwarded to the National Innovation Agency for commercialization. In addition, this program facilitated the publications of 26 journal articles and supported four MPhil students.



- *Indo-Sri Lanka Joint Cooperation Programme -2024*

The evaluation procedure and timeline were developed and the review was initiated for the 431 received proposals.

Popularization of Science

The Research and Innovation Division of the Ministry is tasked with promoting scientific and technical knowledge to improve scientific literacy among Sri Lankans, including school and university students.

- *Organizing National Science Day celebrations jointly with the institutions under the Ministry to coincide with World Science Day- 2023.*

The National Science Day Exposition, themed "Prosperity through Scientific Empowerment," was held on November 8–10, 2023, at the National Natural Science Museum. It showcased a replica of the planned National Science Center and involved contributions from universities and stakeholders, attracting over 8,000 participants, including students, researchers, and the public. The event held with the participation of the Minister of Education.

- *National Science Day Celebrations - 2024*

The National Science Week-2024 celebrations were coordinated in collaboration with the R&D institutions under the Ministry purview.

- **Facilitation of research projects**

The Research Division focuses on collecting, securing, and facilitating data from national research projects while fostering a market for research outcomes.

- *Establish and maintain a procedure to monitor and evaluate research conducted by research institutes and bilateral, multilateral collaborative research, under the purview of the Ministry*

A National Research Management Information System prototype has been finalized to register government research institutes and manage research data, ensuring transparency and avoiding

duplication. Discussions with universities are ongoing to implement the system, and it is proposed to use the platform for research grant applications

- *Review of research for payment of research allowances as per Management Services Circular No. 02/2014.*

The Ministry in charge of the subject of research will evaluate research proposals and provide recommendations by convening the Research Management Committee and the Research Supervision Committee for the purpose of the payment of research allowances to government officials. In 2023, 24 research projects were evaluated for allowances under Management Services Circular No. 02/2014, with three committee meetings held. In 2024, 26 projects were reviewed, guidelines were issued, and a Research Supervision Committee meeting evaluated completed projects and appointed new members for Research management Committees.

- *Monitoring and evaluation of research conducted by research institutes under the purview of the Ministry.*

Data on 177 research projects conducted in 2024 was compiled, with preliminary evaluations completed using the National Innovation Agency. Institutions were instructed to report bi-annual progress, and timelines were issued for preparing the 2025 research plan.

2.1.2. International Relations Division

1. Scientific Training

Providing publicity to the Indian Science & Research Fellowships for Sri Lanka (ISRF) Programme after Indian side call for the applications.

2. Science & Technology Collaboration under bilateral & multilateral collaboration

Country	Progress
Australia	- Request was made through Ministry of Foreign Affairs (MoFA), High Commission of SL in Australia to Australian Centre for International Agricultural Research (ACIAR) on 09.06.2023 to collaborate with NIFS (SL) in research; Rapid and cost-effective soil measurement approaches/ soil organic matter management etc. Accordingly, High Commissioner of Sri Lanka in Canberra has informed the request in writing to ACIAR. - A Concept Note was forwarded to MoFA to build up collaboration between Australian Institute of Policy and Science (AIPS) and NASTEC on 25.10.2024.
China	Establishment of a Joint Laboratory with Wuhan Polytechnic University of China is under discussion.
Cuba	A Concept Paper was submitted to collaborate with Ministry of ST&E of Cuba.interests on:- • Sugarcane Research Collaborations • Vaccine Development
Georgia	Amended draft of MoU with Georgia shared with the MoFA

Nepal	Nepal – Sri Lanka First Joint Committee Meeting (JCM):- Concept Paper submitted to the MoFA
New Zealand	Concept Paper was submitted to Massey University (NZ) to collaborate with NASTEC
South Africa	Virtual meetings were convened to form SA-SL Collaborations:- • Nanotechnology - 17.07.2024 (SLINTEC – Mintek) • Innovation - 31.07.2024 (NIA - TIA) • Food, Agriculture, Water Management - 28.10.2024 (NIFS – CSIR/ TIA)
South Korea	- A Concept Paper was submitted to SL Embassy in South Korea to Expertise exchange, Funding to foster innovation and Science Policy. - Eg: cooperated Agencies • Korean Advanced Institute of Science and Technology (KAIST) • Korean Institute of Intellectual Property Promotion (KIIPP) - A proposal prepared by NASTEC was forwarded to NPD to be sent to Korean side via ERD
Sweden	Coordination of tasks related to building up a collaboration between NIA (SL) and VINNOVA, Sweden. Sri Lanka Embassy in Stockholm invited NIA to participate in Swedish Innovation Day 2025 as initiation step for further collaboration.
Thailand	Request was made to Thailand Embassy on 20.09.2024 to build collaboration between Department of Science & Technology based on the signed MoU with STI institutes of SL. An informal meeting was held on 15.10.2024 with Asian Institute of Technology (AIT) to build collaborations with STI institutes of Sri Lanka and a Concept Paper was shared and discussions are ongoing.

3. Indo – Sri Lanka Joint Research Programme

Calling for Research Proposals

- 448 research proposals received by the Sri Lankan side.
- Combined total proposals received by both sides are 431
- Proposals are in evaluation process

Calling for Workshop Proposals under Indo – Sri Lanka Joint Research Programme

- **208** workshop proposals received.
- Proposals are in evaluation process

4. Coordination of tasks related to establishments of BIMSTEC TTF, Holding the 02nd EG-STIC under BIMSTEC

- 02nd Meeting of BIMSTEC Expert Group on Science, Technology and Innovation Cooperation held on 25th - 26th July 2024 in Colombo, Sri Lanka in-person
- Tentative date (30.01.2025) for the First Governing Board Meeting of BIMSTEC TTF was shared through MoFA to member countries

5. Getting approval of IORA Secretariat for the prepared Concept Papers

- 02 Concept Notes were prepared by Ocean University and NARA on 02 research projects.
- IORA Secretariat approved the Concept Notes on 24.10.2024.

6. Implementation of activities under European Organization for Nuclear Research Cooperation

- Information on CERN Teacher Training Programmes shared with the Ministry of Education's Foreign Agencies and External Affairs Division.

7. NAM S&T Centre

Programmes are coordinated with the help of NASTEC as the focal point in Sri Lanka.

Specific Indicators	2024		
	Target	Achievement	Percentage
No. of research fellowships awarded	10	Indian side need to inform the No. of fellowships for 2024	0%
No. of Concept Notes prepared	02	05	100%

2.1.3. Educational Training Project on Prototype Manufacturing of Solar Panels

1. Introduction

The Educational Training Project on Prototype Manufacturing of Solar Panels was implemented with the approval of the Cabinet of Ministers in 2017. The project's total estimated budget was LKR 240 million, as approved by the Department of National Planning (NPD) and funded by the Government of Sri Lanka. As indicated in the proposal, this is a capacity-building project for local scientists and technical personnel in solar energy. Developing the necessary research infrastructure (equipment) is also essential to this capacity building. The Ministry administers the project through the Project Office at the University of Kelaniya and it is implemented by the universities of Jaffna, Kelaniya, and Peradeniya. The initial project period was from 2017 to 2021. However, it was subsequently extended with the approval of the National Planning Department (NPD) of the General Treasury until 2022, and further extended until 31 December 2023 based on a Cabinet decision.

2. Functions of the Project

1. To train a world-class workforce (solar Technicians) of approximately 2,000 youth who are competent in solar energy and related technologies.
2. To create awareness among 2,000 school students and teachers on solar energy and its applications.
3. To develop research and training facilities for the prototype manufacturing of solar panels and to train 8 MPhil/PhD students in thin-film solar cells.

3. The Progress so far

- **The Solar Awareness programme, which provides hands-on experience in solar energy, has been successfully conducted at schools in all the provinces.**

A total of 36 school awareness programmes, reaching 3,277 students, were completed for 48 schools in different districts across the country, including the North and East provinces. These programmes focused on using solar energy as an alternative renewable electrical power source. A large number of school students benefited when this awareness programme was conducted at three national exhibitions organized by the Ministry and universities in 2019 and 2020. Additionally, a teachers' awareness programme was conducted for 38 Ordinary Level (O/L) and Advanced Level (A/L) school teachers.

NVQ Level 3 and 4 Solar Photovoltaic System Technicians Training Programme

This programme is another first-of-its-kind initiative in Sri Lanka, launched by this project.

As outlined in the Cabinet-approved proposal, the project team played a key role in preparing and implementing the NVQ Level 3 and 4 Solar Technicians training programme for the first time in the country, in collaboration with the National Apprentice and Industrial Training Authority (NAITA) and the Sri Lanka Sustainable Energy Authority (SLSEA). The project team developed the entire curriculum for this course, as NAITA required both a curriculum and a training programme for this category. The programme consists of 5 months of theoretical training, 12 months of on-the-job training (OJT), and 1 month of advanced training at the Solar Park in Hambantota. Additionally, a Training of Trainers (ToT) programme was conducted for selected NAITA staff to facilitate the NVQ Level 4 Solar Technicians training programme.

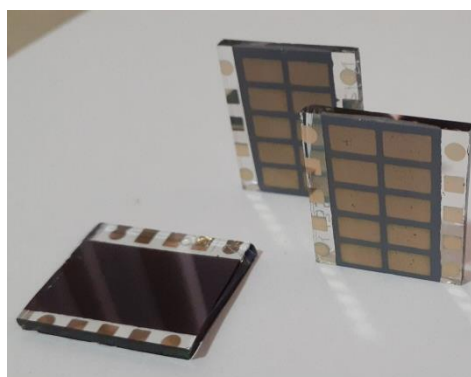
The first batch of 107 students completed the training portion of their NVQ Level 4 course for Solar Technicians in May 2021. The training programme was implemented in association with NAITA and SLSEA. Furthermore, 84 NVQ trainees completed an advanced training programme (practical session) at Hambantota Solar Park in collaboration with SLSEA.

The country needed qualified assessors to evaluate the competence of candidates since this was a new programme. Therefore, the project collaborated with the Tertiary & Vocational Education Commission (TVEC) and trained four assessors to evaluate the assessments of the NVQ Level 3 and 4 Solar Technicians training programme. An additional eight applications were received for the next training session and forwarded to TVEC. After the final assessments held at the Solar Park in Hambantota, 35 candidates graduated with NVQ Level 4 qualifications, and 30 graduated with NVQ Level 3 qualifications. The official graduation ceremony for these graduates was held on 22 August 2022.

The second batch of students for the NVQ Level 4 Solar Technicians training programme commenced with 136 candidates at nine NAITA centres. By the end of the project, a total of 71 new NVQ Level 3 and 4 certified solar technicians were successfully trained and graduated. With the support of the project team, the SLSEA has already started conducting the NVQ RPL (Recognition of Prior Learning) programme to provide NVQ Level 3 certification for technicians already working in the industry. NAITA has begun recruiting new candidates for this programme annually, and SLSEA has started the RPL programme under the guidance of project officials. As a result, the sustainability of this project component has already been secured within existing government-mandated training agencies.

- **Major Research Equipment which were Purchased for the participating universities by the project funds are as follows:**
Closed Space Sublimation (CSS) System
Atomic Force Microscope
Tube Furnace
Solar simulator
De-ionized (DI) water systems
Heating water bath circulators
Plasma cleaners
Ultrasonic cleaners
- **Research Assistants (Full-time research training at participating universities)**
Jaffna - 1 (MPhil - to be completed)
Kelaniya - 2 (1 PhD and 1 MPhil - completed)
Peradeniya - 2 (1 PhD - completed and 1 MPhil - to be completed)

These five MPhil/PhD students have published 19 journal articles, 1 book chapter, and 21 abstracts on new research findings related to thin-film solar cells from 2017 to 2024. The project successfully fabricated two thin-film solar panel prototypes, which were showcased at the Science Week programme held in 2021. All Research Assistants and Deputy Project Directors collaborated to produce lab-scale prototype panels based on completed R&D results. These prototype solar panels were exhibited on 2 February 2024 at the Main Project Office at the University of Kelaniya.



2.1.4. Improving Degraded Soil using Bio fertilizers

NIFS had developed two bio fertilizers for legumes and non-legumes, i.e. Rhizobium Bio Fertilizer (RBF) and Biofilm Bio Fertilizer (BFBF), respectively. Up to date, it has been showing that the chemical fertilizer NPK could be reduced up to 50% by using BFBF in paddy cultivation. Also, the BFBF has now been recommended by the Department of Agriculture for use in paddy cultivation. During Maha 2022/2023 and Yala 2023 seasons, BFBF was distributed to 285,000 acres of paddy cultivation in Kurunegala, Galle, Gampaha, Kilinochchi, Vavuniya, Mulativu and Mannar districts. Also, during the Yala season of 2023 experiments on the use of granular fertilizer and BFBF with reduced doses of the chemical fertilizers (a new fertilizer technology) for paddy cultivation were conducted in the Walikanda and Dehiattakandiya areas and the harvest was reaped. In addition, farmer field trials and demonstrations were conducted in Ampara and Polonnaruwa districts, in order to promote BFBF use in island wide paddy cultivations, as approved by the Cabinet of ministers in 2020.

Up to September 2023, RBF was distributed for about 5,200 acres of soybean, vegetable bean and Mung bean cultivations.



During the year 2024, this project was upgraded to national level by joining it to the Sectorial Oversight Committee (SOC) on Food Security and Agriculture of the Parliament. During Yala 2024, island wide farmers' field demonstrations in paddy cultivation with the new fertilizer technology were conducted in 7 provinces and 3 Mahaweli systems, as instructed by the SOC. The results showed that in about 90% of the locations, there were increased paddy yields with the new fertilizer technology in comparison to the conventional practice of 100% chemical fertilizers alone application. This is the largest field program conducted on ecofriendly new fertilizer technologies in the country. We are planning to expand this program island wide with the private sector in a public-private partnership. All the stakeholders in agriculture including the ministry and the department of agriculture are participating in this program. As Maha season 2024/2025 have already been started, sampling in the experiments are being conducted in selected paddy fields applied with this ecofriendly fertilizer.

2.1.5. Centre of Excellence for Robotics Application (CERA)

The center was officially established under this ministry through Extraordinary Gazette No. 2412/08, dated November 25, 2024. To ensure the project's success, discussions have been initiated with the Industrial Development Board (IDB) to identify strategies for its efficient continuation.

2.1.6. Vidatha Unit **Introduction**

The Vidatha programme, initiated 2000 at national level, serves as a bridge to transfer scientific knowledge and technology from research institutions under the Ministry of Science and Technology to grassroots communities, fostering national development and innovation. It addresses the technology gap between urban and rural populations, empowering individuals to optimize resource use through value addition, thereby contributing to the country's economic growth and improving the livelihoods of micro, small, and medium entrepreneurs.

Under Gazette No. 2311/42 dated 2022.12.22, the Vidatha programme was integrated into the Ministry of Industries. Under the Gazette No. 2412/08 dated 2024.11.25 integrated with the Science and Technology with effect. It operates as a dynamic unit that inspires industrialists by connecting them to competitive national and global markets through technology transfer. Its extensive network of Vidatha Resource Centers (VRCs), established in every Divisional Secretariat Division and supported by 925 dedicated employees, ensures widespread access and impact

Role

1. Technology transfer, improvement and standardization of products.
2. Implementation of small group income generation projects of small and medium entrepreneurs to reduced regional disparity through new technology transfer
3. Effective utilization of available resources through value addition and promotion of products.
4. Solving the issues scientifically, faced by entrepreneurs
5. Facilitation for research and development

Performance-2024

2.1 Quality upgradation and standardization of products (GMP and Testing certification)

The Vidatha Unit collaborates with the Industrial Technology Institute (ITI), Sri Lanka Standards Institute (SLSI), and private institutions accredited by the Sri Lanka Accreditation Board to issue test reports and quality certificates, ensuring the market readiness of rural products. Product standardization plays a crucial role in fostering entrepreneurship nationwide. In 2024, a budget of Rs. 10.0 million was allocated for Good Manufacturing Practices (GMP) certifications and quality testing in sectors such as food and beverages, spices, and herbal products. This initiative involved selecting qualified entrepreneurs from the pool of applicants. Of the allocated funds, Rs. 9.78 million was utilized, resulting in the issuance of 36 GMP certificates and 247 test reports to these entrepreneurs.

2.2 Market and Sales Promotion Programs for Entrepreneurs.

Rs. 4 million has been allocated to organize district-level trade fairs, engaging Micro, Small, and Medium Entrepreneurs (MSMEs) from across the island. These fairs aim to boost sales through financial support provided at the district secretariat level. Trade fairs have successfully been conducted in 21 districts. Additionally, an entrepreneur directory has been compiled to promote the enterprises empowered by the Vidatha initiative and enhance their market reach. The directory, which catalogs the profiles of 520 entrepreneurs nationwide, was completed at a cost of Rs. 0.085 million and is now available online.

2.3 Technology transfer programmes

The Vidatha Unit successfully implemented a range of technology transfer programs to empower entrepreneurs in 2024.

- Within the Technology Transfer and Entrepreneurship Development programme focused on spice-based products, cleaning agents, mushroom-related products, fish value addition, and other food value-added products, 34 training sessions have been successfully conducted. From the allocated budget of Rs. 7.5 million, Rs. 5.48 million has been utilized efficiently.



- As part of the technology transfer initiative to empower small and medium entrepreneurs in the coconut, Kithul, and palmyra sectors, 11 programs were successfully conducted, benefiting 525 entrepreneurs. Of the allocated Rs. 6.0 million, Rs. 2.54 million was utilized effectively.
- Seventy-five training programs were conducted during Global Entrepreneurship Week 2024, aimed at empowering micro-entrepreneurs to transition into small-scale enterprises through technology transfer and awareness-building. Of the allocated Rs. 7.0 million budget, Rs. 0.89 million has been utilized.
- 07 training programs had been completed on preservation and dehydration of vegetables, green leaves and fruits 214 entrepreneurs benefitted. (Rs. 7.23 million has been allocated and Rs. 0.67 million has been spent.).
- To foster new opportunities for entrepreneurs, a technology training program on natural flower preservation was conducted, benefiting 98 participants across five sessions. A budget of Rs. 7.50 million was allocated, with an expenditure of Rs. 2 million.
- To enhance the quality of Sri Lanka's textile and apparel sector, training programs have been conducted in collaboration with the Sri Lanka Institute of Textiles and Apparel. Seven programs have been successfully completed, benefiting 118 entrepreneurs. A total of Rs. 9.5 million was allocated, with an expenditure of Rs. 3.42 million incurred.
- District Vidatha offices and regional Vidatha resource centers are implementing training programs across diverse fields, including food production, chemical processing, marketing, entrepreneurship development, product value addition, and both practical and theoretical computer technology. The entrepreneurs have been benefitted by 26514 programmes conducted on above mentioned sectors.

2.4 Capacity Building programmes

- To enhance access to appropriate technologies for rural entrepreneurs, the program established a resource pool for more effective technology transfer by building the capacity of science and technology officers at the Vidatha Units. This included 09 training programs, benefiting 167 officers in milk-based and food value addition, and 77 officers in cleaning agents. (Allocation: Rs. 4 million, Expenditure: Rs. 3.33 million).
- To empower district Vidatha officers and resource center staff with the skills to support potential entrepreneurs, capacity-building programs have been conducted to provide solutions and advice on entrepreneurial challenges. (Rs. 3 million allocated, Rs. 0.84 million spent)

2.1.7. Sri Lanka Planetarium

Introduction

Sri Lanka Planetarium is the only planetarium in Sri Lanka established in 1965 with the main objective of popularizing knowledge on Astronomy. It is one of the largest planetariums in the world with the ability to accommodate 560 visitors per session. Throughout the past 59 years, Sri Lanka Planetarium has achieved its objectives by conducting planetarium presentations, outdoor programs and Astronomy courses to satisfy the curiosity of knowledge seekers among Sri Lankan school children as well as the general public. The Planetarium was upgraded with the installation of a 4D/Digital full dome projector to project the universe as a 3D space in 2014. Recently added Technological Park gives real time experience of Physics phenomena to its visitors. Night sky observation camps, special natural phenomena observation camps, astronomy workshops, science exhibitions and seminars are conducted islandwide to open some of the wonders of the universe, to those living outside the capital city. Furthermore, Astronomy courses and outdoor programs are conducted totally free of charge. All these activities are conducted for inspiring the public enthusiasm towards Astronomy via conscious experience.

Functions

- Promote Astronomy and Space Science knowledge among school children, teachers, and the general public
- Provide valuable navigational guidance to the SL navy personnel.
- Provide wide opportunities to studies and experiment on Astronomy and Space Science
- Provide up-to-date information on Astronomy to the general public
- Thrive as an Organization
- National & International collaboration
 - Collaborate with related institutions at national level.
 - Work with international groups to encourage planetarium efforts

Achievements of the Year 2024

Science Popularization Program

Following activities were carried out to popularize science among school children as well as the general public.

- **Technological Park at the Sri Lanka Planetarium**

Technological Park at the Sri Lanka Planetarium has been established as one of the most effective means to explain astronomical phenomena in universe and give real experience of those phenomena to planetarium visitors.

- **Planetarium Presentation**

Planetarium presentation consists of digital full dome films, Introduction to Solar System and demonstration of the night sky.

- **Outdoor Program**

- Mobile Planetarium Presentation

The Sri Lanka Planetarium has been successfully conducting planetarium presentations by using the mobile planetarium for students in rural areas all over the country.

- Night Sky Observation Camps

Night sky observation camps have been held all over the country to promote astronomy and improve the observation skills of school students as well as the public. These kinds of programs give live experiences of celestial objects by observing with the naked eye and using telescopes.

- Natural Phenomenal Observation Camps

Sri Lanka Planetarium has been arranging camps when natural phenomena occur such as solar eclipse, moon eclipse, comets, Mercury or Venus transit etc. Sri Lankans are very interested in engaging with us to observe these kinds of phenomena since some of them take place once their lifetime.

- **Astronomy Classes and Workshops**

The Sri Lanka Planetarium is conducting classes and workshops to secondary level school students to popularize Astrophysics and to primary level students to improve their creativity by engaging in interactive astronomy related activities. By conducting these kinds of programs, major objective is to build the next generation of astronomers with higher capacities of observation ability of the universe.

Progress of above programs are as follows

Method of Popularization	2023		Target 2024		Progress 2024	
	Program	Beneficiaries	Program	Beneficiaries	Program	Beneficiaries
1. Planetarium Presentations	478	217,235	400	250,000	493	227,931
2. Outdoor Programs	20	12,915	35	20,000	25	25,631
3. Astronomy Courses	3	115	3	150	3	75
4. Income Rs (Mn)	22.75		30.00		25.12	



2.1.8. Financial Progress

The following values are based on first supplement of the treasury printout

Financial Allocations and Expenditure

Year	Recurrent (Rs. Mn.)		Capital (Rs. Mn.)		Total (Rs. Mn.)	
	Allocation	Expenditure	Allocation	Expenditure	Allocation	Expenditure
2022	1842.5	1662.9	1664.5	499.8	3507	2162.7
2023	1266	1064.6	1391	623.6	2657	1688.2
2024	1350.5	1192.4	1026.8	359	2377.3	1551.4

Capital Allocations and Expenditure

Year	2022 (Rs. Mn.)			2023 (Rs. Mn.)			2024 (Rs. Mn.)		
	Allocated Amount	Expenditure		Allocated Amount	Expenditure		Allocated Amount	Expenditure	
National Budget	3407	2156.5	63.3	2657	1688.2	63.5	2377.3	1551.4	65.3
Budget Proposals	100	6.2	6.2	0	0	0	0	0	0
Foreign Loan	0	0	0	0	0	0	0	0	0
Total	3507	2162.7	69.5	2657	1688.2	63.5	2377.3	1551.4	65.3

Institution wise Allocation of Provisions – 2024

Institute/ Programme/Project	Recurrent (Rs. Mn.)		%	Capital (Rs. Mn.)		%
	Allocated Amount	Actual Expenditure		Allocated Amount	Actual Expenditure	
Ministry	178.2	144.2	80.92%	6.8	2	29.41%
Improving degraded soil				12	11	99%
Scientific Development Programme				34	5.08	21%
National Research and Development Framework (NRDF)				5.0	1.2	24%
Vidatha	784.07	690.51	88.06%	110.90	47.5	42.83%
Arthur C. Clarke Institute for Modern Technologies (ACCIMT)	188	170	90%	50	21	42%
Industrial Technology Institute (ITI)	500	362.9	73%	100	94.87	95%
National Engineering Research and Development Center (NERDC)	322	304	94%	60	57	95%
National Institute of Fundamental Studies (NIFS)	275	261	95%	220	72	33%
National Science Foundation (NSF)	168	161	95%	270	84	72%
National Research Council (NRC)	44	15	36%	130	57	44%

National Science and Technology Commission (NASTEC)	41	29	71%	22	6	27%
Sri Lanka Inventors Commission (SLIC)	52	50	96%	70	23	33%
Sri Lanka Planetarium	40	33	84%	106	1.08	1%
National Innovation Agency (NIA)	37	21	57%	41	14	35%
Sri Lanka Standards Institution (SLSI)	990.27	889	90%	593.4	79	13%
Total	3619.54	3130.61	80.77%	1831.1	575.73	44.14%
Department of Public Enterprises (PED) Allocation						
Sri Lanka Institute of Nanotechnology (SLINTEC)				306	226	74%
Sri Lanka Institute of Biotechnology (SLIBTEC)				850	450.44	53%

2.1.9. Targets for the Year 2025

- Prepare a national research roadmap, and organize related programs align with Science and Technology policy.
- Maintain the Vidya eNews website, organize the Vidya eNews article competition, and conduct a national survey to measure Civic Scientific Literacy. Monitor and coordinate science promotion programs, including National Science Day/Week, to enhance science literacy.
- Establish and manage the National Research Management Information System for government-funded and collaborative research. Monitor and review the progress of ongoing research projects, evaluate the 2025 research plan, and prepare the Annual Research Plan for 2026. Review research proposals for payment of allowances as per Management Services Circular No. 02/2014.
- Provide grants and conduct progress reviews for research projects under the Indo-Sri Lanka Joint Research Programme (2019 and 2024 initiatives).
- Signing new MOUs on science and Technology collaboration and conducting join committee meeting with the countries with which MOUs has been entered in to.
- Coordinate the activities related to BIMSTEC technology transfer facility, and European organization for Nuclear Research (CERN)
- Plans are underway to establish a network of incubation centers across the island in partnership with university research institutes and academic bodies to foster science and technology ecosystem within small and medium enterprises.
- Continuous enhancement and maintenance of the Vidatha unit database, encompassing human resources, physical infrastructure, and development activities.
- Increase the number of Planetarium Presentations for School children and general public up to 450
- No of Outdoor Programs to be conducted in rural areas - 40
- No of students enrolled in Planetarium Astronomy Courses - 200
- Annual Income expected to be generated by Planetarium presentations Rs (Mn) - 30.00
- Installation of online reservation system
- Upgrading the full-dome film database to be used in Planetarium presentations
- Upgrading the Telescopes with binoculars, Astro camera and Solar Filters and purchase of a new mobile planetarium
- Paint and renovate the planetarium building, renovate the roof of the library building as a solar observatory, renovate the technology park and repair the toilet system

3. Arthur C Clarke Institute for Modern Technologies (ACCIMT)

3.1. Introduction

The Arthur C. Clarke Institute for Modern Technologies (ACCIMT) is located in Katubedda, Moratuwa. ACCIMT was reconstituted on April 1, 1998, under the Science and Technology Development Act No. 11 of 1994, as the successor to the Arthur C. Clarke Centre for Modern Technologies, which was established by Act No. 30 of 1984. In collaboration with international space technology organizations, the ACCIMT serves as Sri Lanka's principal agency for national capacity development in space technologies and ITS applications.

The institute's primary functions include research and development, technology transfer, and training in modern technologies. Modern technologies to which the institution contributes include Communication and related sciences, Information Technology, Electronics, Micro-electronics, Space Technology and its applications, Robotics and Astronomy

Vision

To be the leading innovation center for Modern Technologies in the region

Mission

To develop, foster and facilitate the domestic base of modern technological capabilities through innovation, R&D, training, industrial services and international collaboration

3.2. Functions of the Institution

- i. Conduct research and development activities in the modern technological areas such as space, electronics and microelectronics, communication, information and robotics and drone technologies, space technology applications and astronomy
- ii. Engage in test and measurement, consultancy and calibration of electrical and electronic test and measurement instruments to cater for technological needs of state and privates sector organizations
- iii. Offer continuing professional development (CPD) programmes on highly specialized areas of technology for practicing engineers, technologists from industry and as well as workshops, training programmes and lectures to promote new technologies among general public specially targeting student community

3.3. Achievements in 2024

- **Development of a 2U Nano-Satellite in Technology Collaboration with Japan**

The 2U Nano satellite "Dragon Fly" is scheduled for launch in 2025, developed through a collaborative project with the Kyushu Institute of Technology (Kyutech). It will be the third Nano satellite developed with the technological contributions of the ACCIMT and is expected to be deployed into its operational orbit at an altitude of 400 km via the International Space Station. Completed as part of the BIRDS-X project, this satellite is primarily designed for research missions in communication engineering once it reaches orbit.

- **Development of selective Tea harvester**

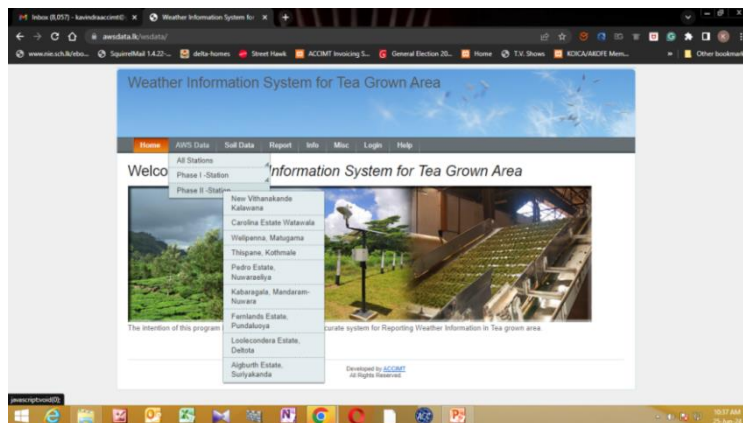
As a solution to the labour shortages in tea-growing areas, the demand for a mechanized selective tea plucking has significantly increased. The ACCIMT has been chosen by the Tea Research Institute to develop a mechanized tea plucking machine to address this need. The initial product development was successful, with the first prototype achieving over 70% selectivity accuracy and a throughput rate three times that of manual labor. Additionally, four field-testable machines were developed and deployed across different regions for suitability tests. In particular, this device has been developed to identify the secondary growth of tea leaves, and that ability is an essential factor to protect the identity of Sri Lankan tea. These enhancements were made in line with the requirements outlined by Tea Research Institute of Sri Lanka (TRISL).



- **Agro meteorology weather stations for tea plantation districts**

The institute has successfully developed a customized real-time automatic weather station for agricultural applications, specifically catering to the requirements of tea plantations sector. Up to December 31, 2023 the institute has successfully installed 12 of these stations at sites recommended by the TRISL in various tea plantation districts. The data collected from these stations is used for weather-related modeling and optimizing tea processing in factories. The real-time weather data gathered by these systems, include rainfall, sunshine hours and soil moisture. Additionally, the data generated from these systems are currently being used by tea estates and factories for daily operational decision making.

During 2024, eight such weather stations were installed through a project funded by Sri Lanka Tea Board. The newly added stations include Mandaramnuwara, Thispane, Nuwara Eliya, Welipenna, Kotapola, Sooriyakanda, Pundalu Oya, and Lookandura.



- **Recovery of locomotive electronic sub systems of Sri Lanka Railways**

Since 2010 the ACCIMT has engaged with Sri Lanka Railways (SLR) in recovering its faulty locomotives and power coaches saving several billions of Rupees as opportunity cost. The key engagement has been the recovery of Alstom AD 32C locomotives, the most powerful in SLR fleet which have been imported from France in the year 2000. The ACCIMT engineers have recovered a number of faulty Alstom AD 32C electronic systems of locomotives.

Apart from that the ACCIMT is currently engaged in recovery of sub systems of Chinese made Sefang power coaches. During the recent past (around 2023) the institute successfully completed recovery of 35 driver console sub systems of class S10 and S12 power coaches.

In 2024, eight system recoveries specific to the SLR have been carried out, which have helped to maintain the continuity of their services to the public.

- **Completion of Student Profile Module – Management Information System for Buddhist and Pali University**

The following modules were added to the system according to the client's requirements.

- Student Application process
- Student Registration process
- Index No generation
- New Reports as required

- **Usage of Remote Sensing on Tea Plantation Monitoring - Pilot project in Up- country and Low-country area.**

Despite being the world's fourth-largest tea producer by volume, the country's tea production has significantly decreased due to soil degradation and low replanting rate. The main objective of this project is to enhance national productivity by optimizing land use efficiency in tea-growing districts through the utilization of Remote Sensing (RS), Geographic Information System (GIS), and Global Navigation Satellite System (GNSS). The specific objectives of this project are to utilize Remote Sensing, including satellite and UAV images to monitor tea plantations across Sri Lanka, develop a GIS database focused on tea production for the pilot study area, facilitate improved policy planning within the Tea Sector and promote the use of RS/GIS technology in decision-making within the plantation industry in the country. Under this priority project, Geospatial Map Products were generated for Kotagala Tea Plantation.

- **Geospatial modeling of electricity distribution network**

Obtaining electricity distribution network and assets information from geographic data is important for companies involved in the electricity distribution process in order to increase service efficiency. Additionally, updating the data is quite challenging due to various practical difficulties in the field. The systematic gathering and structuring of asset information are critical for facilitating better asset management practices. Therefore, such related data can be mapped by using GIS technology, facilitating effective process management and also enhanced service efficiency. Under this pilot project, digitizing the existing medium voltage electrical distribution network in the selected area, developing a Mobile App for field data collection, and creating a map viewer app for real-time visibility have been carried out.

- **Satellite data based Potential Fishing Zone Forecast using GIS and Monte Carlo Simulation–Puttalam coastal line**

Fishing industry is crucial for food security and economic development, especially in Sri Lanka, where the sector employs over 560,000 people and support the livelihoods of over 2.7 million coastal communities. Remote Sensing (RS) provides real-time ocean data, aiding in predicting fish aggregation areas. However, regional prediction methods are lacking. This research aims to predict fishing grounds in Puttalam district waters by analyzing satellite oceanography data as a pilot project. Under this project, data obtained via Landsat satellite are analyzed to determine the distribution of Potential Fishing Zones (PFZs) along the coastal line of Puttalam district to identify water zones with high potential as fishing grounds, indicating the presence of abundant fish stock.

- **Comparative Analysis of Watershed Delineation using SRTM and ALOS PALSAR Data for Sri Lanka**

Watershed boundaries delineate the areas contributing to specific water bodies, vital for environmental planning and policymaking. Precise delineation aids resource management, land use planning, water quality control and hazard management. This project generates watershed boundaries for Sri Lanka using SRTM and ALOS PALSAR satellite imagery, identifying areas of uncertainty and discrepancies to enhance mapping accuracy. This aligns with the demand for GIS and remote sensing technologies, showcasing ACCIMT's capacity to contribute to watershed management and environmental planning. The objectives of this project include developing precise watershed boundaries, understanding their characteristics, and enhancing decision-making in environmental sectors.

3.4. Performance

I. Research Focus – Research and Development

No	Research field	No. of research 2023		No. of research 2024	
		Planned	Completed	Planned	Completed
1	Electronics and other related subject domains	12	05	09	05
2	Remote Sensing and GIS	5	5	5	02
3	Research in Astronomy	1	1	1	1

II. Research and Development – Technology Transferred/ Commercialized

No	Technology transfers/ Commercialization	Industrial partner			
		No	2023	No	2024
1	Embedded Control Systems	01	Sri Lanka Tea Research Institute (Ten Agro meteorology weather stations)	01	Sri Lanka Tea Board (Eight Agro meteorology weather stations)
2	Mechatronics /Automation	01	Sri Lanka Tea Research Institute	-	-

3	Electronics	01	Leader Battery Manufacturing (Pvt.) Ltd	-	-
4	Remote Sensing and GIS			01	Ministry of Plantations and Tea Research Institute Geospatial Map Products were generated for Kotagala Tea Plantation Forest Department Forest Degradation Index Map was developed and delivered

III. Awarded Patents

One patent was applied in Mechatronics/ Automation field in 2024

IV. Science Popularization

Method of popularization	Programmes - 2023			Programmes - 2024		
	Target	Completed	Beneficiaries	Target	Completed	Beneficiaries
Workshops (Astronomy)	2	1	40	1	1	45
Educational visits to ACCIMT	1	1	800	1	1	1076
Water rocket workshop/ competition	1	1	70	1	1	58
Symposiums	1	0	--	1	1	ACCIMT scientific community

V. Scientific Publications/ Research publications

No	Field	Type	2023		2024	
			Target	Published	Target	Published
1	Astronomy research	Research publications	1	1	1	1
2	Remote sensing / GIS	Research publications	4	3	2	5
3	Electronics		-	-	1	2
4	Innovation Management		-	-	1	1

VI. Invention and Innovation Promotion

Field	2023			2024		
	Target	Completed	with industry collaboration	Target	Completed	with industry collaboration
Electronics and other related subject domains	11	05	05	08	02	05
Nano satellite Technology, Radio Frequency, Mechatronics, Aerospace	08	03	05	04	02	04

VII. Technological Services

The institute successfully delivered its services to the state and industrial clientele and entrepreneurs in the areas of electronic and electrical test and measurement equipment calibration, performance testing of various types of related accessories and modules, advanced hardware recovery of sophisticated electronic systems/devices and general and specific consultancy services in lightening protection system design. During year 2024 institute carries out 08 advanced hardware recoveries for SLR, 15 lightening protection system design jobs for key customers and 321 jobs in other above specified areas. Further, in 2024 the institute conducted 05 continuous professional development training programmes for 112 participants and 07 basic and intermediate training programmes for 171 participants.

3.5 Targets for the Year 2025

- Design and a development of a backplane circuit board for cube satellite industry with more flexibility using FPGA (Field Programmable Gate Array) and incorporating the OBC (On Board Computer) capabilities to the same with more reliability and efficiency saving space for payloads in future cube satellites.
- Development of a VTOL (Vertical Take Off and Landing) type Drone for surveillance and Liquid Fertilizer Spraying and initiate collaborative projects to uplift related development and manufacturing capabilities in Sri Lanka, with Sri Lanka Air force.
- Development of application specific drones catering for sectors such as surveillance, agriculture, disaster management etc.
- Electronics, Microelectronics and ICT Projects for development of industrial solutions and electronic products with high socio-economic impact.
- Hardware recovery of sophisticated electronic systems (eg. Master Control Units of Locomotives), test and measuring equipment and medical instruments
- Commercialization of mechatronics products targeting tea industry of Sri Lanka
- Development of specialized equipment for factory compliance testing for an Automobile Battery Manufacturing and Exporting Company.
- Enhance the services related to lightning protection
- To conduct Continuing Professional Development (CPD) and basic and intermediate training programs in the areas of institute's expertise.
- To conduct performance testing and calibration services to industry.
- To provide consultancy and equipment system recovery services to industry.
- Conduct astronomy research projects and popularization activities

4. Industrial Technology Institute (ITI)

4.1. Introduction

The Industrial Technology Institute (ITI) is a statutory board established on 01st April 1998 under the Science and Technology Development Act No. 11 of 1994. ITI is the successor to the Ceylon Institute of Scientific and Industrial Research (CISIR) established in 1955 by Parliament Act no 15 of 1955 (CISIR Act) to support Industrial Development in the country. The ITI is the foremost government-owned scientific R&D and service organization in Sri Lanka with a complement of a diverse scientific staff. The Institute's core business is promoting industrial development through Research and development, consultancy, technology transfer, training, and the provision of testing and calibration services. The ITI assures the provision of calibration and technical services of the highest professional standards by maintaining the Laboratory Quality Management Systems ISO 17025:2017 and ISO 17043:2010 as a Proficiency Testing (PT) provider.

Vision

To be a center of excellence in Scientific and Industrial Research for national development.

Mission

To conduct innovative R&D and provide internationally competitive technical services to accelerate industrial development for the benefit of the people of Sri Lanka.

4.2 Functions and Objects

The Technology Institute shall be demand-driven. The object of the Technology Institute shall be to elevate the level of technology in Sri Lanka to the level required for rapid industrialization and in furtherance of this object, its functions shall be-

- a. To support the industry by-
 - (i) Undertaking on contract, testing, investigation and research, for improving product quality, technical processes and methods used in industry, and for discovering new processes and methods to be used in the industry;
 - (ii) Providing technical services and consultancies; and
 - (iii) Engaging in activities connected with technology transfers, the adaptation of technologies and the development of new technologies;
- b. To conduct research with a view to accelerating industrial technology development;
- c. To collect, process and disseminate useful technical information, in particular on “Shelf Technology” with a view to accelerating industrial development;
- d. To undertake the training of persons in areas related to the experience of the Technology Institute;
- e. To undertake or collaborate in the survey and monitoring of environmental pollution and to recommend remedial measures to mitigate such pollution;
- f. To co-operate with government departments and institutions, universities, technical colleges and other bodies in demand-driven research to promote industrial technology development.

4.3. Achievements in 2024

- More than 68 technology transfers were successfully made to various industries, empowering MSMEs to launch new businesses and enhancing the capabilities and scope expansion of existing businesses. These technologies were transferred to a wide range of sectors, including food and beverages, herbal-based cosmetics products and supplements, and homecare products.



- More than 50 R&D projects are in progress. These R&D initiatives are focused on the development of new products, processes and scientific methodologies.
- More than 100 programs, including Vidatha and rural support initiatives, were undertaken to provide technical support to SMEs.
- More than 100 training programs were conducted attracting a total of 500 participants from different industries strengthening industrial skills and capacity.
- Accredited laboratories of the technical services division have successfully issued a total of 17857 testing and calibration reports to industries including export-oriented sectors and government organizations.
- ITI conducted 1000 consultancy services across a wide range of environmental technology and waste management disciplines. including ambient air quality assessment, stack emission monitoring, air pollution control and mitigation, wastewater treatment, solid waste management, water quality studies, hazardous waste management and baseline surveys.
- ITI conducted a total of 138 Contract Projects in various disciplines.
- Around 20 research articles were published in high-impact /refereed journals and 52 abstracts were published in local and international symposium proceedings.
- Around 6 local patents were submitted and 03 patents were obtained.
- Around 10 scientific awards including Presidential awards were received.

4.4. Performance

I. Research and Development

No	Research Area	No. of Research Projects conducted in 2023		No. of Research Projects conducted in 2024	
		Target	Completed	Target	Completed
1.	Food Technology	12	05	15	-
2.	Herbal Technology	12	06	10	-
3.	Materials Technology	10	03	11	02
4.	Biotechnology	03	01	04	-
5.	Physical / Chemical Technology	-	-	01	-
6.	Environmental Technology	02	01	03	-

II. Technology Transfer of R&D outcomes / Commercialized

No	Research Area	2023		2024	
		No.	Industry Partner	No.	Industry Partner
1.	Food Technology	27	Harischandra Mills, Mente, Pvt. Ltd., Ceylon Coconut Pvt. Ltd., Jewellex Agri, Vidatha etc.	39	Serendib Global Trading (Pvt) Limited, Liberty Reit (Pvt) Limited, Mente (Pvt) Limited, Cee Green Engineering (Pvt) Limited,
2.	Herbal Technology / Techno Entrepreneurship	10	K&M Herbals, Challenge Lanka Agro Products, Blue Earth Pvt. Ltd, Vidatha Entrepreneur	16	WaterFront Properties (Pvt) Limited, Artigala Ayurvedic (Pvt) Limited
3.	Materials Technology	11	Vidatha, Group Technology Transfer	13	Sakura Graphite (Pvt) Limited, Sri Lanka Red Cross Society, Taprobane International (Pvt) Limited

III. Patents submitted / Patent obtained

No	method	2023		2024	
		Target	Achieved	Target	Achieved
1.	Patents Submitted	3	1	6	10
2.	Patents Obtained		4		3

IV. Science popularization

In 2023, ITI exceeded its target of 20 programs by completing 110, and in 2024, it surpassed its target of 30 by delivering 100. These programs included stakeholder workshops, guest speeches, awareness workshops, exhibitions, technology clinics, open days, newspaper articles, and television and radio programs.

V. Scientific Publications

No	Research Area	2023		2024	
		Target	Achieved	Target	Achieved
1.	Food Technology, Herbal Technology, Materials Technology, Biotechnology, Physical / Chemical Technology, and Environmental Technology	10	40	40	22

VI. Inventions and Innovation promotion

No	Area	2023			2024		
		Target	Achieved	Industry Linkage	Target	Achieved	Industry Linkage
1.	Food Technology	20	34	10	20	44	12
2.	Herbal Technology						
3.	Materials Technology						

VII. Other special programmes

- Obtained accreditation for 67 new test parameters from the Sri Lanka Accreditation Board
- 07 testing laboratories and facilities were established, upgraded and opened for the use of industries. Micro plastic testing laboratory, Pharmaceutical Laboratory, Petroleum & Lubricant testing laboratory, Organic fertilizer testing laboratory, Packaging testing laboratory, Laboratory for Identification of Genetically Modified Organisms and the ITI Business Center.
- Biennial (6th) Research Symposium and 1st International Symposium was held in November 2023.
- ITI actively involved in organizing 03 investors forums with the Ministry of Industries and was able to showcase ITI developed technologies to attract investors.
- International Consultancy - Thermal process verification at PT SALS and Sons, Pvt. Ltd, Central Sulawesi, Indonesia

4.5. Targets for Year 2025

- Diversifying the Institute's income sources and new revenue opportunities to increase financial stability eg. Upgrading Residual Analysis Laboratory with New LC/MS/MS System, Establish an Occupational Safety monitoring facility, establish a chemical reference laboratory, establish a food safety management facility, etc.
- Initiate at least 3 mega R&D projects in line with the National Policy / R&D Policy targeting new product, process development. Eg. Value Addition to Silica / Clay
- Initiate two projects to establish SME-related central facilities: Central Processing Facility for Cinnamon at Karadeniya with zero waste concept and Model pack house facility for fresh vegetables at Bandarawela with the introduction of proper value chain concept
- Commercialize at least 10 technologies (> LKR 2.0 Mn) from the technology bank via the S&T Business Center
- Initiate to establish product/process incubators and accelerators to support startups
- Digitalization of ITI Technical Library and Establishment of Training Centre

5. National Science and Technology Commission (NASTEC)

5.1. Introduction

The National Science and Technology Commission was established by the Science and Technology Development Act No. 11 of 1994. It was formally inaugurated on 06th December 1998 and became a functional Commission in January 1999. NASTEC is currently located on the 6th Floor of Sethsiripaya stage II, in Battaramulla. NASTEC has been designated as the apex policy formulating and advisory body on Science and Technology matters to the Government of Sri Lanka. The Commission is comprised of seven members who are appointed by H.E. the President of the Democratic Socialist Republic of Sri Lanka.

Vision

To be an excellent advisory body to the Government on the potential and use of Science and Technology to enhance the well-being and prosperity of the people of Sri Lanka

Mission

To furnish the Government with policies, strategies, and plans to build high national capabilities in Science and Technology for application for the sustainable development

5.2. Functions of the Institute

- To advise the Government on policies and plans for the development of science and technology including policies and plans relating to:
 - The application of science and technology to stimulate economic growth;
 - The impact of science and technology on the efficiency and competitiveness of industry, agriculture, services and the economy;
 - The impact of science and technology on health, nutrition, and poverty alleviation, to improve the quality of life of people;
 - The development of human and other resources needed for science and technology, in consultation with the authorities responsible for education, training and research;
 - The development and management of the natural resources of Sri Lanka;
 - The identification and prioritization of science and technology areas that are likely to be of national importance;
 - The creation of a climate conducive for the buildup, retention, and attraction of Science and Technology expertise;
 - The establishment of management strategies conducive to the productive application of science and technology;
 - The allocation of funds for science and technology, including the priority of funding research and development in science and technology institutions;
- To submit a report annually, to the government, reviewing the Science & Technology activities in Sri Lanka in the preceding year, and on the effectiveness of measures for the development of human resources, the performance of Science & Technology institutions, the effectiveness of public spending on Science & Technology and the use of Science & Technology by public sector undertakings;
- To review the progress of science and technology institutions in relation to the objects set out in section 2 of the S & T Development Act.;

- To consult relevant science and technology institutions before advising the government on policies and plans relevant to those institutions;
- To convene the Sri Lanka Conference on science and technology biennially, with the prior approval of the Minister, and to provide a forum for the discussion of Science and Technology in Sri Lanka in relation to the objects set out in section 2 of the Act; and submit a report to the Minister on such discussions.

5.3. Achievements of 2024

- Conducted 2nd expert meeting in Science & Technology Innovation (STI) under Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Corporation (BIMSTEC)
- Published 2021 and 2022 Science & Technology (S&T) status reports
- Conducted Science & Technology (S&T) institutional review implementation workshop and stakeholder meeting with government agencies
- Appointment of working committees for BICOST X
- Conducted 12th Young Scientist Forum (YSF) research symposium
- Initiation of institutional review for National Fertilizer Secretariat (NFS), Department of Export Agriculture (DEA) and completed the institutional review of Sri Lanka Inventors Commission (SLIC) and National Research Council (NRC)
- Developed S&T data gathering system (β version)
- Bilateral regional cooperation projects with South Korea, Republic of Cuba, New Zealand, Australia, and Thailand in policy studies (Initial discussion to sign a MOU with similar institutions in the countries respectively)
- Partnered with Sri Lanka Academy of Young Scientists (SLAYS) Annual Conference 2024

5.4. Performance

I. Science Popularization

Promotion Methodology	2023 Programmes			2024 Programmes		
	Targeted	Completed	beneficiaries	Targeted	Completed	beneficiaries
1. 9 th BICOST Conference	01	01	500	-	-	-
2. BICOST Post conference activities (implementation activities)				6	4	300
3. Young Scientists Forum Research Symposium	01	01	90	1	1	80
4. Awareness webinars on emerging S&T matters	04	04	110	8	8	800
5. S&T Workshops	02	01	150	4	4	350



II. Scientific publications

Sub No	Field	Type	2023 Number of Publications		2024 Number of Publications	
			Target	Published	Target	Published
1	Agriculture	Policy Recommendation Report	01	01	01	01
2	Energy	Policy Recommendation Report	01	01	01	01
3	Health	Policy Recommendation Report	01	01	01	01
4	Minerals	Policy Recommendation Report	01	01	01	-
5	Science and Technology	Status Report	04	02	02	02
6		Review Report	06	06	04	02
7		Symposium Proceedings	01	01	01	01
8		Thematic E-book	01	01	01	01
9		Internet/E-Newspaper Articles	10	07	02	-
10		Abstracts /Journal articles	04	02	06	06
11		Review monitoring Report	-	-	01	01

III. Other Special Programs

Field	2023 Other Programs		2024 Other Programs	
	Target	Number completed	Target	Number completed
Policy Formulation/ Advocacy	09	06	03	01
International relations - conference	03	02	02	01
International relations –coordinating training workshops	05	05	06	04

5.5. Targets for the year 2025

- Publishing the S&T status report 2023 and cabinet submission and data gathering for 2024 S&T status report.
- Convening the BICOST X conference, Developing an Implementation strategy for BICOST Policy recommendations and Developing an implementation plan for BICOST X technical outputs
- Develop a virtual database for S&T institution's data gathering
- Developing a framework/roadmap linking government priority areas in STI development
- Convening the 13th Young Scientist Forum (YSF) symposium
- National Training Programme on officers of S&T institutions on proper project proposal submission
- Conducting and completing 10 Institutional performance reviews: GSMB, ACCMIT, MRI, SEA, Department of Meteorology, NIHS, SLSI, Forest Department, DMS, Water Resource Board, Department of Irrigations and newly initiating review for 10 more institutions
- Seeking 2 foreign grants to conduct policy studies
- Establishing a NASTEC policy library

6. National Engineering Research and Development Centre of Sri Lanka (NERDC)

6.1. Introduction

The National Engineering Research and Development Centre of Sri Lanka (NERDC), the premier Engineering Research and Development Institution in the country was established in 1974 under the Sri Lanka State Industrial Corporation Act No. 49 of 1957 and functions currently under the purview of the Ministry of Science and Technology. This report presents data on targets and achievements of the National Engineering Research and Development Centre in completing, commercializing, patenting and popularizing Research and Development projects implemented from January to December of the year 2024 including the special achievements made during the period. The NERDC engages in a variety of intellectually challenging Engineering Research & Development projects of national importance and priority. Further, the main functions of NERDC are initiating pilot projects based on introduced technologies, providing solutions to existing problems in the industry, providing services required for industries, popularizing new technologies among the masses and promoting science knowledge among school children and the general public.

Vision

To be the premier engineering research centre in the South Asian 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 employees and stakeholders

6.2. Main Functions of the Institute

- Ensure engineering R&D contribution in addressing the national requirements
- Make NERDC enterprise-centric
- Promote and upgrade local export industry through engineering applications and solutions
- Engineering intervention towards energy conservation and environmental sustainability
- To make NERDC a globally competitive R&D Institute keeping pace with global trends in advancement of engineering knowledge relating to research, design & development

6.3 Achievements of the year 2024

- NERDC completed research and product development projects in developing a cost effective lightweight block for use in the construction industry. The lightweight block has a weight reduction of 42% compared to conventional block and also has a 22% cost reduction as no plastering is required.
- NERDC successfully completed a collaborative project with National Water Supply and Drainage Board for utilizing the sludge generated in water treatment process, to construct compressed stabilized earth blocks. NERDC along with the National Water Supply and Drainage Board conducted an awareness programme for transferring technology.

- NERDC successfully completed the collaborative project with a team of external researchers of University of Sri Jayawardhanapura, the University of Moratuwa and the Open University for developing a prototype plant to produce biochar from discarded organic matter. The plant developed by NERDC has been installed and tested at the compost yard at Karadiyana belonging to the Waste Management Authority of the Western Province.
- NERDC successfully completed a project to introduce a new precast and prestressed slab technology for building constructions. Compared to conventional concrete slabs, this significantly reduces construction time and results in cost savings of approximately 20%.
- A new chassis was designed by NERD for the local value added three-wheeler project jointly undertaken with Desinha Pathirage Motor Company. A patent has been applied for the above. The development is expected to significantly increase the local value addition of the three-wheeler, with plans to unveil a prototype of the vehicle in the final quarter of this year.
- NERDC successfully completed the development of the elephant fence energizer as per the requirement of its collaborative partner Nano Vision Anuradhapura. After completing the basic improvements of this electrical system, arrangements have been made to hand it over to the industry partner for practical use and deploy it for field tests.



6.4. Performance

I. Research Reference - Research and Development

No.	Field of Research	No. of Research Projects 2023		No. of Research Projects 2024	
		Targets	Completed Projects	Targets	Completed Projects
1	Civil Engineering	4	3	2	2
2	Mechanical Engineering	4	1	7	2
4	Mechatronics & Robotic	5	2	3	1
5	Electrical and Electronics Engineering	5	-	6	2

II. Research and Development transferred/ Commercialized

No.	Field or type of technology transferred/ commercialized	2023		2024	
		Nos.	Industry Partner	Nos.	Industry Partner
1	Civil Engineering	6	6	03	08
2	Mechanical Engineering	3	3	03	03
3	Energy & Environmental Engineering	1	1	04	05

III. Patent Filed/ Obtained

Field	Types	2023		2024	
		Target	Progress	Target	Progress
Civil Engineering	Patents Filed	-	1		2
	Patent Obtained	1	1	-	-
Mechanical Engineering	Patents Filed	-	1	-	-
	Patent Obtained	-	1	1	-
Mechatronics & Robotic	Patents Filed	4	1	-	-
	Patent Obtained	-	-	2	-
Electrical and Electronics Engineering	Patents Filed	-	-	-	-
	Patent Obtained	-	-	1	-

IV. Science Popularization

Method of Popularization	2023 Programmes			2024 Programmes		
	Targeted	Completed	Beneficiaries	Targeted	Completed	Beneficiaries
1. Awareness /Training Programmes	17	11	1302	18	22	1330
2. Visitors to technology park and Museum	7500	5104	5104	10000	4488	4488
3. Media Programmes	3	5	-	4	12	-
4. Exhibition	2	8	-	5	9	-
5. Maths Cafe programme for school teachers	2	2	66	4	5	360
Research Symposium	-	01	200	1	01	200

V. Scientific Publications (Newspaper/ Journal Publications)

Nos	Field	2023		2024	
		No. of Publications		No. of Publications	
		Target	Publications	Target	Publications
1	Civil Engineering		1	-	-
2	NERDC Newsletters	3	4	4	2
3	Others (Research Papers)		2	10	12

VI. Promotion of Inventions and Innovations

Field	2023 Invention and Innovation			2024 Invention and Innovation		
	Target	Achievements	Industry Partners	Target	Achievements	Industry Partners
1. Civil Engineering		-	-	-	-	-
2. Mechanical Engineering		3	-	-	-	--
5. Electrical and Electronics Engineering		7	-	-	-	-

VII. Other Special Programmes

- NERDC participated in the IDB International EXPO 2024 exhibition at BMICH Colombo, which was held from June 19 to 23, 2024, and also celebrated the 50th anniversary of NERDC
- Conducted a stakeholder forum of the engineering and industrial sectors.
- Conducting programs at BMICH to educate people about the technologies developed and improved by NERDC.
- Conducting a public awareness program regarding the production of Eco Blocks using treated sludge.
- Hold an International Engineering Research Symposium at Lotus Tower, Colombo
 - Launched a special booklet titled ‘Building the Future’, NERDC’s 50-year journey: A retrospective on the technological milestones.
 - A ceremony was held to appreciate the service of senior employees of NERDC
- Conducted an open-day program at NERDC in line with World Science Day.
- Launched a Water Pump Testing Facility at NERDC at the request of the Sri Lanka Sustainable Authority to provide services to the industry and local pump manufacturers.

6.5. Targets for 2025

- Increase both the quantity and the quality of services provided to industries.
- Providing financial benefits to organizations through energy conservation and environmental pollution reduction and providing necessary guidelines for environment-friendly development.
- Improve the facilities in electrical vehicle testing laboratory to assist Dept. of Motor Traffic.
- Establish a new facility for testing of pumps and motors to assist the industry for assuring the quality of the product.
- Identify the unique contribution of small and medium scale industrialists to economic development and empower them by providing advanced technology and expertise for a competitive market through technology collaborations.
- Collaborate with universities to engage in challenging projects and attract the experts to research and development activities in the Centre.
- Create local entrepreneurs through import substitution products with local value addition.

7. National Innovation Agency (NIA)

7.1. Introduction

The National Innovation Agency (NIA) is established as mandated by ACT, No. 22 of 2019 with the specific aim of promoting better understanding on innovations in the fields of social, science and technology, defence, environment and service, and their impact on the economy of the country.

Vision

A better Sri Lanka through innovation

Mission

To stimulate and develop the innovation eco- system of Sri Lanka

7.2. Functions of the Institution

- Liaise with the public and private sector institutions relevant to important aspects of the objects of the Agency.
- Make recommendations to the government, to initiate and fund National Innovation Programmes in order to support a creative economy.
- To develop and sustain a national innovation eco system in keeping with the Sri Lanka Innovation and Entrepreneurship Strategy as approved by the Cabinet of Ministers.
- Support the National Innovation and Entrepreneurship Strategy objectives through the facilitation of hi-tech enterprisesstemming from research and technology transfer.
- Monitor and evaluate the effectiveness of investment, policies and strategies on innovation and entrepreneurship.
- Coordinate and harmonize international activities in innovation with the relevant Ministries, Departments and other innovation institutions in Sri Lanka and with international institutions to encourage commercialization of the outputs of innovation activities
- Drive the progress of Sri Lanka upward through the ranking of global innovation indices to ensure a resilient economic standing, subject to the Sri Lanka Innovationand Entrepreneurship Strategy as approved by the Cabinet of Ministers.
- Receive, collate, evaluate and publish the Sri Lankan Annual Innovation and entrepreneurship reports covering the eco system taking into consideration the international linkage and presence

7.3. Achievements of the year 2024

- NIA and the Center for Defense Research and Development (CDRD) under the Ministry of Defense officially signed a MOU on a collaboration aims to activate the Defense Innovation Pillar of the NIA.
- NIA and the Bandaranaike Memorial Ayurveda Research Institute (BMARI) have embarked on a groundbreaking collaboration aimed at merging traditional Ayurvedic knowledge with cutting-edge scientific research and innovation.
- NIA showcased its initiatives and services at the Symposium on Best Practices and Innovation in Public Administration and Governance, organized by the Sri Lanka Institute of Development Administration (SLIDA)
- NIA held a productive meeting with representatives from Deutsche Bank AG, Sri Lanka Branch focusing on advancing research commercialization initiatives. This strategic dialogue aimed to

explore collaborative opportunities and introducing NIA virtual platform, Business to People Sri Lanka (www.b2p.nia.gov.lk) designed to bridge the gap between ideas to market. This platform is designed to assist inventors and researchers in commercializing their findings, providing them with a robust framework to connect with potential investors and industry partners

- A meeting took place between the NIA and the Gem and Jewelry Research and Training Institute (GJRTI) to establish an Institutional Business Linkage Cell (IBLC) and to draft a comprehensive Institutional Intellectual Property and Commercialization Policy (IICP).
- The National Budget Department hosted an important event focused on "Advocating Innovative Economy for Sri Lanka" at Ministry of Finance to discuss the future of Sri Lanka's economy through an innovative lens, where NIA was the resource institute.
- IEEE Innovation Nation Sri Lanka (INSL) is a volunteer-led initiative by the IEEE Young Professionals Sri Lanka catering to facilitating training, mentoring, and financial support to budding entrepreneurs and inspiring innovation and entrepreneurship among the Sri Lankan youth community. National Innovation Agency was recognized as the National partner for the year 2024 event. This programme was conducted covering all 25 districts and young inventors were selected, mentored and guided towards final round through district and provincial level. The final pitching event was held at Dialog Axiata auditorium.



- NIA has launched a pioneering initiative — the Institutional Business Linkage Cells (IBLCs). These cells are designed to catalyze collaboration among Ministries, Institutions, and the Private Sector, aiming to forge a robust national innovation ecosystem from idea inception to market realization.
- NIA compiled a report on Sri Lankan Innovations commercialized during 2018-2023, in which 108 such innovations are demonstrated.

- NIA launched IP into Rupees 2nd edition and the Commercialisation Guidelines during 2024.
- NIA enabled Sri Lanka to achieve a better position in the Global Innovation Index (GII) rank.
- NIA held 2nd Dolphin Tech Pitch on the locally developed Antivenom Serum.
- NIA was able to hold an Innovation Conference for Organizational Performance Efficiency (I-COPE) at the Presidential Secretariat, focusing the Railway Department of Sri Lanka.

7.4. Targets for 2025

- Holding 4 Dolphin Tech Pitch Events
- Publishing the Annual Innovation Report, including 50 successful innovations took place during 2024
- 6 Advocacy proposals presented to the Government through the NIA Steering Council.
- Strengthening the National Technology Transfer Network
- Operating digital platforms for smart connectivity, including the B2P, Solve Sri Lanka and analytic tools
- Supporting one project each under the five innovation pillars through Innovation Voucher scheme.

8. National Institute of Fundamental Studies (NIFS)

8.1. Introduction

The National Institute of Fundamental Studies was established in 1981 by the Act of Parliament (Act No. 55) to create an interest in and to provide facilities for fundamental and advanced studies. The said Act has been amended by the Parliamentary Amendment No. 05 of 1997 and the Parliamentary Amendment No. 25 of 2014 enabling further expansion of the scope of the National Institute of Fundamental Studies ensuring its significant contribution towards national development. In consideration of the national requirement for this institution, the name of the Institute of Fundamental Studies was amended as the National Institute of Fundamental Studies through the aforementioned parliamentary amendment in the year 2014.

Vision

To be a model institution for research in fundamental studies serving the national and global community

Mission

Contribute to the advancement of scientific knowledge and human capital development while effectively and efficiently promoting national development and social well-being.

8.2. Functions of the institute

- Initiate, promote, and conduct research and original investigations in fundamental studies in general with particular emphasis on mathematics, physical and chemical sciences, life sciences, social sciences, and philosophy, taken in the broadest sense; to collaborate with public and private institutions as may be necessary to develop applications relevant to the studies conducted.
- Arrange lectures, meetings, seminars, and symposia in pursuance of its research work and for the dissemination of scientific knowledge,
- Invite scientists research an from Sri Lanka and abroad, actively engaged in creative work to deliver lectures and participate in research activities.
- Coordinate with scientists and scientific institutions in other countries and promote international co-operation in matters relating to the aims and objectives of the institute and national requirements.
- Provide training, guidance, and assistance for research studies leading to the award of postgraduate degrees by institutions recognized by the University Grants Commission of Sri Lanka established by the University Act No.16 of 1978.
- To collaborate with public and private institutions as may be necessary to develop applications relevant to the studies conducted.
- Do such other acts and things as may be necessary to promote the aims and objectives of the Institute.

8.3. Performance

I. Research Reference/ Research and Development

Sub No.	Field of Research	Number of Research 2023			Number of Research 2024		
		Target	Completed	Ongoing	Target	Completed	Ongoing
01	Condensed Mater Physics and Solid-State Chemistry Research Programme	02	-	02	02	01	01
02	Energy and Advanced Material Chemistry Research Programme	04	-	04	04	-	04
03	Environmental Science Research Programme: Water Quality Research	04	-	04	04	-	04
04	Food Chemistry Research Programme	04	01	03	04	-	04
05	Material Processing and Device Fabrication Research Programme	04	-	04	04	01	03
06	Microbial Biotechnology Research Programme	03	-	03	02	-	02
07	Microbiology and Soil Ecosystems Research Programme	03	01	02	05	-	05
08	Molecular Biology and Human Diseases Research Programme	07	01	06	09	04	04
09	Natural Products Research Programme	04	02	02	03	-	03
10	Nanotechnology and Advanced Material Research Programme	02	-	02	02	-	02
11	Evolution, Ecology and Biodiversity Research Programme	04	-	04	04	-	04
12	Plant Taxonomy and Conservation Research Programme	03	-	03	03	-	03
13	Earth Resources and Renewable Energy Research Programme	02	-	02	03	01	02
14	Nutritional Biochemistry Research Programme	03	01	02	04	01	03
15	Material Development & Pollutant Remediation	03	01	02	03	01	02
16	Computer Science, Statistics & Mathematics Research Programme	02	-	02	02	-	02

II. Patents filed / Received

In 2023, three patents were filed under the Environmental Science Research Program focusing on water quality research. In 2024, two patents were filed under the Material Processing and Device Fabrication Research Program.

III. Science Popularization

Mode of Science Popularization	Programmes in 2023			Programmes in 2024		
	Target	Completed	Benefited	Target	Completed	Benefited
International Seminars/Conference	02	01	189	02	02	370
Lectures	12	04	358	08	10	486
Workshops	05	-	-	05	04	392
Science Videos	-	-	-	04	09	13,436
Workshops (School)	02	-	-	05	05	472
Lab Visits	on requests	-	-	On requests	05	196
Science Exhibitions	01	01	-	01	-	-
Science Competition	-	-	-	01	-	-
E- programmes	03	03	106,675	03	On- going	181,814

IV. Scientific Publications

Sub No.	Research Project	2023				2024			
		Research Papers		Other Scientific Publications		Research Papers		Other Scientific Publications	
		Target	Completed	Target	Completed	Target	Completed	Target	Completed
01	Condensed Mater Physics and Solid-State Chemistry Research Programme	03	09	04	02	04	10	04	09
02	Earth Resources and Renewable Energy Research Programme	05	01	05	02	03	01	05	03
03	Energy and Advanced Material Chemistry Research Programme	04	04	03	01	04	01	03	03
04	Environmental Science Research Programme: Water Quality Research	02	13	06	03	03	12	05	15
05	Evolution, Ecology and Biodiversity Research Programme	10	02	01	-	12	05	03	03
06	Food Chemistry Research Programme	05	04	04	08	04	06	03	15

07	Material Processing and Device Fabrication Research Programme	03	04	06	04	04	06	05	09
08	Microbial Biotechnology Research Programme	02	09	05	07	04	06	08	17
09	Microbiology and Soil Ecosystems Research Programme	03	04	04	07	03	01	03	06
10	Molecular Biology and Human Diseases Research Programme	06	12	07	16	04	03	08	06
11	Nanotechnology and Advanced Material Research Programme	03	-	06	10	04	01	12	04
12	Natural Products Research Programme	06	08	12	13	08	08	16	21
13	Nutritional Biochemistry Research Programme	02	06	05	03	03	01	04	04
14	Plant Taxonomy and Conservation Research Programme	04	08	02	05	04	08	02	05
15	Material Development & Pollutant Remediation	02	01	04	06	04	04	08	04
16	Computer Science, Statistics & Mathematics Research Programme	-	01	-	-	02	-	04	01

V. Promotion of new products and innovations

1. The water quality research project of the environmental science research programme achieved two targets linked to the industry in 2024.
2. Sri Lankan Vein Graphite Purification for Rechargeable Battery Applications was developed.



3. A Low-Cost Activated Carbon-Coated Stainless-Steel Counter Electrode Was developed for Dye-Sensitized Solar Cells

8.4. Targets for the Year 2025:

- To commercialize the results of the developed rechargeable battery production and superconductor production using Charcoal
- Investigations on geothermal energy, biodiesel production and materials processing project, planned to collaborate with potential industrial partners to achieve project objectives.
- Assist in developing an eco-friendly fertilizer policy for the country and conduct research activities to test Biofilm biofertilizer-based organic fertilizer practices.

8. National Research Council (NRC)

9.1. Introduction

The National Research Council (NRC) is a research funding agency. It provides financial assistance to the public sector scientists of the country, who are affiliated to universities and government research and development (R & D) institutes. It was founded in 1999 and established as a statutory body by Act No.11 of 2016, by the Parliament of Sri Lanka. Its main function is to assist the Government to plan, coordinate and facilitate research in Science and Technology so as to build a vibrant national scientific and technological community in the country.

Vision

Enable Sri Lanka to achieve Science and Knowledge-based developed country status.

Mission

To promote, fund, facilitate and monitor fundamental and applied research and enhance human resource development for Sri Lanka to achieve Science and knowledge-based developed country status.

Objectives

1. Assist the government to facilitate research relating to science and technology in order to build a vibrant scientific and technological community in the country.
2. Promote and facilitate research relating to science and technology in higher educational institutions and public sector research institutes and other governmental institutes so as to develop a research base that will contribute to national needs.
3. Solicit the cooperation of the private sector in the enhancement of research relating to science and technology.

9.2. Functions of the Institution

- To provide grants for the conduct of research relating to science and technology.
- To facilitate, coordinate, supervise and monitor research relating to science and technology in respect of grants provided to higher educational institutions, public sector research institutes, and other governmental institutions so as to ensure the efficient utilization of government investments in research
- To import, plant, machinery, and equipment required for the purpose of the Council and to receive equipment, funds, and any other assistance from recognized local or foreign sources for the efficient conduct of the Council
- To collect, print, and publish reports, periodicals, and papers on research relating to science and technology and related subjects
- To award scholarships and fellowships for scientific study or scientific work at local or foreign science and technology institutions
- To develop a national system to recognize and grant awards for research and innovations relating to science and technology
- To conduct lectures, seminars, and workshops on research relating to science and technology and related subjects.

9.3. Achievements in 2024

- Updated NRC Research guidelines to grantees issued in year 2024, to ensure smooth progress of physical and financial targets of the research projects.
- Invited Expression of Interest (EOI) from Private sector to obtain Industry research requirement. Received fifteen (15) EOIs and five (05) were shortlisted to submit full research proposals, after the initial evaluation. Out of that, four (04) research proposals have been received at the end of the year, while evaluation of one (01) proposal is completed to the date.
- The first bi-annual monitoring of five (05) grants awarded following the modernization of the Public Private Partnership Program has been completed.



- IDG funding mechanism was revisited and modified to yield research outputs benefitting the economy of the country.
- Target Oriented (TO) Grants progress review meeting was conducted for three (03) projects and two (02) new projects were shortlisted. Out of the two, one (01) project was funded for the year 2024.
- Four (04) Impact assessment of funded research projects are completed.
- Monitoring & Evaluation of Grants
- Twenty-six (26) Annual Progress Reports of IDG projects were collected and evaluated.
- Three (03) Annual Progress Reports of TO projects were collected & evaluated.
- Thirty-two (32) Final Reports of IDG projects were evaluated.
- Onsite visits of five (05) ongoing PPP projects were completed.
- NRC newsletters for the first, second and third quarters of the year were completed and released to the general public.
- The SCOPUS database for the year 2021 of the President's Award for Scientific Research program was obtained from ELSEVIER B.V. for free, and the information verification of the award-winning journal publications has been completed.
- Following projects were completed with expected outputs
 - TO 18-21 (Autothermal pyrolyzer plant to convert compost residues into biochar),
 - IDG 18-012 (Low-cost controlling method for Rough Bark Disease in Cinnamon) and
 - PPP 20-01 (A genetic test to identify Maturity Onset Diabetes of the Young).

9.4. Performance

I. Research Focus-Research & Development

No	Research Fields	2023 No. of projects		2024 No. of projects	
		Target	Awarded	Target	Awarded
1	ID Grants	10	04	10	10
2	PPP Grants	02	06	02	Out of four (04) research proposals, one (01) proposal evaluated.
3	TO Grants	01		01	01
4	Assessing the impact of completed grants	04	03	04	04

II. R&D Technology Transferred Commercialization programmes

No.	Field or Type of Technologies Transferred/ Commercialized	2023		2024	
		No.	Industry Partner	No.	Industry Partner
	Medicine	1	Hettigoda Industries (Pvt) Limited	2	Received EOI from private partners
	Engineering	3	i. Diaki Axis (Pvt) Limited ii. Synergy Bio (Pvt) Limited iii. Prosemino Limited	2	Received EOI from private partners
	Environment	1	Lalan Rubbers (Pvt) Limited	11	Received EOI from private partners

III. Patents Filed / Obtained

Field	Patent	2023		2024	
		Target	Progress	Target	Progress
Water Research	Filed	4	4	4	2
	Obtained	2	1	2	0

IV. Science Popularization Program

Field	Method	2023			2024		
		Target	Completed	Beneficiaries	Target	Completed	Beneficiaries
All Fields	1. Online workshops & conferences	04	04	300	04	04	420
All Fields	2. Updates to NRC website	04	04	not counted.	04	02	not counted.
All Fields	3. Uploads to NRC YouTube channel	04	-	-	04	Initial preparatory discussions were held.	-
All Fields	4. NRC Newsletter	04	(04) Four newsletters completed, one per each quarter	not counted.	04	(03) 2024 Q1, Q2 & Q3 newsletters completed and published	not counted.
All Fields	5. Other events/programmes funded by the Council	To be decided by the Council	Participated in two (02) Exhibitions	Nearly 1500 persons visited the Exhibition stalls.	To be decided by the Council	-	-
			Four (04) Vidya E-Newspaper articles	not counted.			

V. Scientific Publications

Publications	2023			2024		
	No. of Projects	Research Publications	Newspaper articles/book chapters	No. of Projects	Research Publications	Newspaper articles/book chapters
Medical Sciences / Food & Nutrition	9	28	0	6	23	1
Agriculture / Plantations / Livestock & Fisheries	4	6	4	9	34	5
Engineering Technology / Information Technology / Physical Sciences & Electronics	13	63	4	2	12	0

Ecology & Environment / Geo Sciences / Chemical Sciences / Others/Biology/Molecular biology	13	61	2	11	53	4
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VI. Inventions and Innovations

Field	2023 No. of Inventions / Innovations			2024 No. of Inventions / Innovations		
	Target	Achieved	Industry tie-ups	Target	Achieved	Industry tie-ups
Chemical Sciences / Others/Biology/Molecular biology	-	2 (IDG16- 138, TO16- 18)	1	-	1 (PPP23-22)	1
Medical Sciences / Food & Nutrition	-		-	-	1 (IDG18-80)	
Agriculture / Plantations / Livestock & Fisheries	-	1 (TO16-07)	-	-	1 (PPP19-04)	1
Engineering Technology / Information Technology /Physical Sciences & Electronics	-	1 (IDG17-19)	-	-		
Ecology & Environment / Geo Sciences	-		-	-	1 (TO18-21)	1

9.5. Targets for the Year 2025

- Increased Productivity of Research:
Optimizing the use of public funds through strengthening the existing legal agreements for grants, legally confirming the responsibility of the researcher's institution and implementing the necessary strategies to end all the research grants in operation by giving their expected outputs.
- Transforming the research grant culture aimed at scientific publications into a culture aimed at scientific innovation.
- Widening the public private partnership program of the National Research Council through diversification.
- Conduct training programs and implement revenue generation plans through YouTube channel.
- Study and implement the possibility of providing research grants through alternative funding sources.

10. National Science Foundation (NSF)

10.1. Introduction

The National Science Foundation (NSF) is a statutory body established in 1998 by the Science and Technology Development Act No. 11 of 1994, as the successor to the Natural Resources, Energy & Science Authority of Sri Lanka (NARESA) established in 1981 and the National Science Council (NSC) set up in 1968. The NSF takes the lead role in promoting Science, Technology and Innovation in the country operating under the purview of the Ministry of Science and Technology. It's located at no. 47/5, Vidya Mawatha, Colombo 7.

Vision

Be the nation's premier driving force in promoting Science, Technology and Innovation for economic and social prosperity of Sri Lanka

Mission

Promote progressive advancement of the science, technology and innovation eco-system to ensure wellbeing of citizens of Sri Lanka by

- Research, development & innovation and capacity building in all fields of sciences including social science,
- Information dissemination and knowledge mobilization,
- International cooperation and partnerships well connected with the global value chain,
- Science popularization and promoting science education,
- Policy research and providing evidence-based information for policy formulation on science, technology and other fields

whilst meeting stakeholders' expectations, nurturing a competent staff, ensuring core values and principles of sustainability.

10.2. Functions of the Institution

- Fostering research, development and innovation through a diverse spectrum of grant schemes towards progressive advancement of the national innovation ecosystem thereby to enhance R&D outputs, new knowledge creation and mobilization, improved critical mass, R&D commercialization and technology transfer contributing to socio-economic development.
- Collection, processing and disseminating STI information through e- repositories, online platforms, journal of national science foundation (JNSF) and Sri Lanka journal of social sciences for benefit of the STI community.
- Facilitating cross-border transfer of cutting-edge knowledge, research collaboration, technical cooperation through tapping the global talent pool to leverage R&D outputs and enhance global visibility of Sri Lanka's STI landscape.
- Awarding research scholarships and fellowships addressing high priority national concerns thereby capacity building of R&D workforce for betterment of the national innovation ecosystem.
- Maintaining a science and technology management information system, carrying out national R&D survey and policy research to generate STI policy indicators.
- Foster science education with special attention to STEAM to enhance creativity and innovativeness and science popularization to enhance science literacy of the nation.

10.3. Achievements in 2024

- NSF has won Gold award for Annual Report 2024 for the second consecutive year.
- Administering, managing and progress monitoring of 28 ongoing R&D grants and technology development grants. NSF has introduced new models namely 'Lab to Market' model and 'Research into Practice' model with 60% fund allocation for technology development, transfer and commercialization to yield more socio-economic benefits.
- Special arrangements were made to enhance innovation capacity and competitiveness of SMEs by opening a special call for applications for "Partnerships for SME development Grants" thereby to enhance contribution to GDP from SMEs.
- In recognizing and encouraging outstanding researchers, 98 researchers were awarded with NSF SUSRED Awards for their contribution in supervision of research degrees and enhance national R&D workforce.
- An international collaborative research programme was initiated jointly with National Natural Science Foundation of China (NSFC) to enhance R&D outputs as well as global visibility of Sri Lanka's R&D landscape.
- NSF played a lead role in facilitating and promotion of STEM education at school level hence preparing future workforce addressing demands of the global market.
- In order to inculcate an innovation culture at school level and nurturing future research leaders, 167 outstanding students and 31 teachers were recognized and motivated at the NSF Award Ceremony for Science Popularization.



- National R&D survey was carried out to generate national level R&D statistics, submit same to UNESCO Institute of Statistics thereby to enhance global visibility of Sri Lanka's science, technology and innovation landscape and contributing to improve the ranking in the Global Innovation Index.
- Published two issues of Journal of National Science Foundation (JNSF), the only journal in Sri Lanka indexed in SCIE hence enhance global visibility of Sri Lanka's R&D landscape.
- NSF has prepared its strategic plan for the next five years (2024-2028) addressing global developments and trends in the science, technology and innovation sector thereby to make a significant contribution to the GDP through science, technology and innovation.
- NSF has played a lead role in digitization of S&T libraries with integration of modern ICT for effective library management hence contributing to the digital economy.
- Capacity building of science technology and innovation sector workforce through harnessing the Sri Lankan expatriates abroad via NSF Global Digital Platform with special attention to cutting edge technologies.

- NSF launched its ‘Objective Science Reporting’ programme with the objective of disseminating accurate and authentic scientific information and research findings among general public to enhance civic science and science literacy of the nation.
- NSF plays a lead role in coordinating the technical cooperation with Brazilian Cooperation Agency (ABC), Brazil towards for improvement of sugarcane and dairy sectors of Sri Lanka.

10.4. Performance

I. Research Grants

No.	Research Field	2023 number of research projects		2024 Number of Research projects	
		Target	Completed	Target	Completed
1	Agriculture	Award 15 new grants	5	Award 40 new grants	01
2	Basic Sciences		6		04
3	Biotechnology		2		0
4	Environment & Biodiversity	Monitor 49 ongoing grants	2	Award 05 Scholarships grants and 18 Spare Parts Grants	01
5	Engineering, Architecture and ICT		4		06
6	Health Science		5		01
7	Social Sciences		1		0

II. Technology Transferred/ Commercialized

No	Field and method	Year 2023		Year 2024	
		Number	Industry partner	Number	Industry partner
01	Physical purification of Graphite of Sri Lanka as a high value addition	1	Ragedara Graphite Pvt Ltd		
02	Biofertilizers for vegetable production through eco-friendly agriculture	1	Sara Bhumi Lanka Pvt Ltd		
03	Proactive Dengue management system (Pro-DMS) developed by University of Colombo			1	Dengue Control Unit, Ministry of Health
04	The technique related to water purification in CKDU area			1	Water supply and drainage Board
05	The new technology to increase the PV solar integration to existing electrical transmission line			1	CEB & LECO

III. Patents Facilitated (through research grants)

Field	Patents	2023		2024	
		Target	Progress	Target	Progress
Health Science	No. of Patents Facilitated (filed)	2	6	2	0
	No. of Patents facilitated (obtained)	2	2	1	1

IV. Science popularization

Popularization method	Programmes in 2023			Programmes in 2024		
	Target	Completed	No. of beneficiaries	Target	Completed	No. of beneficiaries
Science Research Projects Training & Competition	Completion of the SRPC 2023	Completed	372	Initiation and competition of SRPC 2024 up to progress review	1. SRPC 2023 Competition Completed 2. SRPC 2024 Initiated (Students 06 months project)	837
Kid Naturalist Programme	Completion	100%	1200	June 2024-Jan 2025	90%	4,995
Science Competitions	Completion of 8 competitions	100%	2552	SSC 2023 final evaluation	100%	2,552
Community Programme	01 community base	2	150	Continue 01 village	It was in progress	150
SEPP Grant - Infrastructure	Support 02 schools	1 st installments of 2 grants given (50%)	1500	Supporting 02 School Field Centers	It was in progress	78,500 students
STEAM Career Programme	Conduct 01 programme	02 programmes conducted; 02 training programme initiated	1600	01	01programme completed	600
Inspirational visit	450 students and 50 teachers per visit	100%	500	-		
STEM Launching	Launch STEM encompassing all province	100%	3000			

National Science Day/	10 th November	100%	1500	Holding a special event coincide with the World Science Day	School research symposium was successfully conducted.	450
NSF Award Ceremony for Science Popularization				To hold NSF Award Ceremony for Science Popularization	Completed	230 direct beneficiaries and 750 indirect beneficiaries
Participating International Programmes	01 programme China Youth Camp	100%	12 students 3 teachers 10 awards received	02 programme participated ISEF -SA - And China Youth Camp	Completed	ISEF = 3 students; China Youth Camp = 4 students and 02 teachers
Teacher Training				02	02 programmes conducted	Teachers 775

V. Scientific publications

No.	Field	Category	2023 Number of Publications		2024 Number of Publications	
			Target	Published	Target	Published
1	Agriculture & Food Science, Basic Sciences, Biotechnology, Environment & Biodiversity Engineering, Architecture & ICT, Health Sciences, Social Sciences, Climate Change and Natural Disasters	SCIE indexed publications	25	21	55	13
		Refereed journal publications		07		04
		(Non-SCIE indexed)				
		Communication		44		15

VI. Other Special Programs

- NSF supported developing a Good Manufacturing Guideline (GMP) to enhance the quality of Sri Lankan Batik sector jointly with the National design Centre (NDC), Sri Lanka Standard Institute (SLSI) and National Crafts Council (NCC) with the purpose of uplifting the Sri Lankan batik sector through improvement of the production process, sustainability and development of the quality of batik products, contributing to the national economy.
- NSF, being the premier hub institution in the S&T sector of the country has developed the National Instrument Database - a state-of-the-art digital database of instruments available in those institutions. Besides ensuring rationalization and avoiding unnecessary duplication of high-end equipment, it will provide a user-friendly, cost-effective, analytical and testing service and research support for academia, R&D institutions and industry including MSME, particularly those which lack the requisite laboratory facilities and technical competencies
- On request of Univotec, a capacity building programme on IoT was conducted for its ICT lecturers through the NSF Global Digital Platform where resource person was an eminent Sri Lankan expatriate based in Australia having both academic and industry expertise in the field.
- A special project was implemented in collaboration with the Commercial Bank to enhance performance of selected underperforming schools.
- With NSF funding support in furtherance to an OSTP grant, new know-how was transferred to rubber plantation sector on sustainable bark management to ensure harnessing of full economic lifespan of rubber plants thereby to improve productivity in the rubber plantation sector.

10.5. Targets for 2025

- Make transdisciplinary STI interventions to export oriented plantation sector.
- Continue with ‘research into practice’ and ‘lab to market’ models.
- Awarding 15 new grants aimed at new knowledge creation.
- Awarding 20 new grants for technology development, technology transfer R&D commercialization and start-ups.
- Awarding 5 grants to enhance innovation capacity of export oriented SMEs.
- Awarding 10 new research scholarships aimed at capacity building of R&D personnel.
- Establishing 05 international collaborations to enhance R&D outputs and enhance global visibility.
- Updating the National Instrument Database by adding 2000 new equipment
- Publish 4 issues of the JNSF and 02 issues of Sri Lanka Journal of Social Science.
- Tapping the potential of Sri Lankan expatriates abroad through NSF Global Digital Platform.
- Strengthen networking with global STI organizations for advancement of the innovation ecosystem.
- Provide wider and convenient access to research publications through Sri Lanka Journal Online Platform hence contributing to digital economy.
- Foster digital libraries and building capacity of library professionals.
- Carrying out the National R&D survey, publish statistical handbook and submit national R&D statistics to UNESCO.
- Expand school science society network for the benefit of school community.

11. Sri Lanka Institute of Biotechnology (SLIBTEC)

11.1. Introduction

Based on a policy decision by the government of Sri Lanka, the Sri Lanka Institute of Biotechnology Private Limited (SLIBTEC Pvt Ltd) was incorporated on 12 October 2020 as a government owned company, Secretary to the treasury being the sole shareholder. Since November 2021, SLIBTEC has been operationalizing in Pitipana, Homagama. Currently, SLIBTEC is operationalizing under the Ministry of Science and Technology. SLIBTEC comprises of two components namely SLIBTEC Park and SLIBTEC Research. Through a Cabinet decision the entire second hexagon building and its amenities are allocated to SLIBTEC since March 2024 and Ministry is in the process of handing over this to SLIBTEC. Park development is in process where the land allocation is formalized by the Urban Development Authority.

Vision

Be the driving force for an innovation led bio-economy in Sri Lanka while being an internationally preferred destination for biotechnology

Mission

Create a state-of-the-art biotech innovation ecosystem in one physical location while working synergistically with other hi-tech sectors towards increasing novel biotechnology products and services that would significantly enhance Sri Lanka's economy, whilst enhancing and retaining a skilled human resource pool to position Sri Lanka as a global biotech hub

11.2. Functions of the Institution

Create an ecosystem conducive for high-end biotech innovation around a national centralized biotech innovation facility in Homagama, Pitipana by providing utilities, logistics and all supportive systems to enable research and innovation, pilot plants and up scaling for hi-tech manufacturing to happen in one physical location adhering to global best practices and enriching sustainability in all sphere of activity.

- Establish, facilitate and support a conducive, state of the art ecosystem adopting best practices for cutting edge biotechnology innovations
- Develop an innovation culture to accelerate development of high-end biotech industry
- Develop novel biotechnology industry to cater to the global market needs in niche area
- Develop a vibrant high-end biotech startup and SME culture in the country
- Foster the economic development of the country through enhancing capacity building, quality education, research and outreach activities using biotechnological tools
- Develop strategic partnerships with the universities, public research institutes, private sector and the global biotech centers of excellence
- Support the drive for Sri Lankan hi-tech biotech products to increase export market by 1% as in 2025

11.3. Achievements in 2024

- The molecular diagnostics and vaccines biotherapeutics, agro-biotech (including the tissue culture facility) laboratories are completing the laboratory development and receiving equipment
- Genomics facility and flowcytometry analysis is in the process of offering services
- Diagnostics services laboratory infrastructure modifications are completed and due to an operational matter cannot offer services
- First international meeting under the ICGEB was successfully completed
- Signed 2 Memorandum of Understanding (MoU) with University of Monash and Ohio State University
- Received 3 international research grants
ICGEB CRP - EURO 30,000
NIH R21 - USD 76,255
UNESCO TWAS - USD 41,000
- Two publications were received
- Two private sector contract research are ongoing to develop commercialized products
- The start-up incubator (RIVOLTA) company is in the process of obtaining NMRA approval for their products
- Park land legal clearance is in the near completion by the Urban Development Authority and had planned to move ahead with architectural drawings and park development
- Currently occupying building is allocated to SLIBTEC by the cabinet of ministers in March 2024 and awaiting the ministry to complete the matters

11.4. Performance

I. Research and Development

	Research field	2023 Number of research		2024 Number of research	
		Target	completed	Target	completed
01	Molecular diagnostics and vaccines	02	01	08	-
02	Bioinformatics	03	-	03	-
03	Agribiotech	03	-	03	-

II. Research and development Technology transferred/ commercialized

Technology transferred/ commercialized (Field of research)	2024	
	Target	Industry Sector Partner
Mycology	01	Private sector
Biopharma	01	Private sector
Biomaterials	01	Private sector
Enzymology	01	Private sector

III. Popularization of science

Method of Popularization	2023			2024		
	Number of targeted programs	Completed	Number of beneficiaries	Number of targeted programs	Completed	Number of beneficiaries
Workshop	05	01	75	03		

IV. Scientific Publications

Sub No	Field	2024	
		Target	Published
01	Agribiotech	03	00
02	Molecular diagnostic and vaccines	02	01
03	Biopharma	01	01
04	Mycology	02	02



11.5. Targets for Year 2025

- Park development to complete and mobilize the investors
- Complete the Startup incubator of SLIBTEC while bringing investors after clearing the building issues
- Capture investors for contract research focusing on commercial product development through NDAs
- Receive all equipment as approved by the NPD to SLIBTEC through the ADB additional financing grant from HSEP
- Establish the laboratories for research and services obtaining global standards
- Develop the IP policy through external support

12. Sri Lanka Inventors Commission (SLIC)

12.1. Introduction

The Sri Lanka Inventors Commission (SLIC) is a statutory body established in terms of the Sri Lanka Inventors Incentives Act No. 53 of 1979 with the principal objective of encouraging, promoting and inspiring the innovations of local inventors, and making provisions for matters incidental thereto.

Vision

Prosperity through Inventions and Innovations

Mission

Be the leading catalyst in bringing out innovative capability of the nation. Be a forerunner of the facilitation process in converting ideas into practical applications

12.2. Functions of the Institution

- Give technical assistance to inventors after examination of their inventions to determine their patentability and to help them prepare patent applications, under such terms and conditions as may be specified by the Commission.
- Grant financial aid to inventors to enable them to develop, perfect and produce their patented inventions or those which are pending patent, under such terms and conditions as may be specified by the Commission.
- Render legal assistance to inventors by representing them in filing their patent applications in Sri Lanka or abroad and by protecting their secured patents from infringement in patent cases.
- Recommend to government lending institutions inventions that are beneficial to Sri Lanka so as to enable such institutions to give long-term loans to inventors to manufacture their inventions, with only their patents, as security, the amount of any such loan to be granted depending upon the importance and market of their inventions as determined by the Commission.
- Help local inventors to find markets for their inventions in Sri Lanka and abroad.
- Encourage Sri Lankan inventors to make known their inventions by awarding “Presidential Awards for Inventions” annually to patented inventions in Sri Lanka in the fields of agriculture, chemistry, medicine, national defense, pharmacy, physics, public safety and welfare, public works, transportation and such other fields of science and technology.
- Establish and maintain a public research laboratory and experimental station where authorized inventors and researchers may avail themselves of its facilities and services for carrying out or perfecting their approved inventions and researches.

- Promote and encourage inventiveness and creativeness among people in Sri Lanka and to assist them in creating inventions in agriculture, chemistry, medicine and such other fields of science and technology through an annual “Creative Research Contest” with cash prizes and medals to the winners chosen by the respective judges of the “Presidential Awards for Inventions”.
- Publish and disseminate information about inventions, researches and science in general.
- Help Sri Lankan inventors join international competitions for inventions and researches, or to recommend them to such competitions.
- Organize creative societies in schools, colleges and universities to promote and encourage creativeness among Sri Lankan youth.

12.3. Achievements in the year 2024

• Presidential awards for local inventions (2017 to 2020)

Evaluations were done by 14 expert panels each comprising three members appointed by H.E the President of the Democratic Socialist Republic of Sri Lanka covering 14 technical fields, including every technical sector.

The Presidential Awards were presented in 2024 for patentable inventions in the time frame of 2017 to 2020. Accordingly, ten gold medals, forty-four silver medals, nineteen bronze medals, and forty-three merit awards were awarded.

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- **The project jointly launched by the National Council for Road Safety and the Sri Lanka Inventors Commission to harness local inventions and innovations to ensure the safety of road users**

During the call for applications, applications were received for 64 designs, of which 22 designs were recommended for technical support, practical application, field testing and commercialization support.

- **Joint Approach for Commercialization of Inventions and Innovations in Southern Province of Sri Lanka**

Sri Lanka Inventors Commission, Southern Province Ministry of Industries, Southern Province Industrial Development Authority, Technology Incubation Center of the University of Ruhuna, Provincial Education Ministry- Southern Province and Southern Province Agricultural Department will jointly implement this project adhering to government Financial Regulations and methodologies. Under this project proposal, the joint MoU of the institutions has been drafted and finalized and the agreements are due to be signed.

The potential inventions and innovations in the Southern Province with a potential for further development and commercialization will be promoted under this programme. It envisions to uplift the Sri Lankan economy and ensure the long-term sustainability of the targeted sectors, social justice and environmental quality.

- **INNOVABIZ Interest Relief Project for supporting the commercialization process of inventions and innovations**

Loans drawn from a bank by inventors for commercialization purpose of their inventions and innovations will be supported to reimburse the interest portion of the monthly repayment installment for a maximum period of five years, up to a capital of Rs. 01 million. A patented invention will get a proportion of 75% from the monthly interest and an invention with a pending patent status will be considered for a reimbursement up to a 37.5%. Under this project, commercialization of inventions will be motivated and patenting will be promoted.

- **Inventor Identity Card for the local inventors**

This ID card is issued under 05 categories in accordance with special criteria to create uniqueness among the people for inventors. Accordingly, 48 inventor identity cards have been issued up to now during this year.

12.4. Performance

I. Filed /obtained patents assistance/ Assistance for commercialization

Field	Type	2023		2024	
		Target	Progress	Target	Progress
All the fields are covered.	Technical assistance / Assistance for commercialization	10/10	13/14	12/05	40/16
	Financial assistance/ Assistance for commercialization	-	-	-	-/02

II. Popularization of Science

Method of popularization	Programmes-2023			Programmes-2024		
	Targeted	Completed	No. of Beneficiaries	Targeted	Completed	No. of Beneficiaries
Lectures	15	18	2000	15	28	6621
Workshops	4	7	180	3	8	440

III. Promotion of Inventions & innovations

Field	Inventions and Innovations - 2023			Inventions and Innovations - 2024		
	Target	Completed	With industry collaboration	Target	Completed	With industry collaboration
14 Identified Technical Fields.	15	24	2	15	32	04
* 1) Public Security, Welfare and National Defense, 2) Medicine and Pharmacology, 3) Public Industries, 4) Information & Communication Technology, 5) Applied Science and Technology, 6) Food Technology 7) Environmental Conservation, 8) Chemistry, 9) Traditional Medicine, 10) Physics, 11) Agriculture, 12) Energy, 13) Transport 14) Engineering						

12.5. Targets for the year 2025

- Introducing 10 commercialized new products from the southern province to the market.
- Review the progress of INNOVABIZ Concessionary Interest Project, 2024 and implement it in 2025 as well
- Conduct “Sahasak Nimavum” international exhibition and competition of inventions and innovations.
- Ensure expanded implementation of the program to generate initial business opportunities for new products in the coming year and the implementation of new programs that will increase the quality of the industry under the program of providing innovation support to the technical problems in the industry.
- Expanding the program to establish innovation societies in schools, universities and tertiary educational institutions, working to increase the innovative abilities and knowledge of school students through the "Inventor Champs" innovation reality program.
- Providing the opportunity for inventors to participate in international invention competitions and gain benefits, conduct workshops to guide inventors to secure intellectual property rights and further expand those services
- Making arrangements to conduct Presidential Awards for Inventions for the years 2021 and 2022

13. Sri Lanka Institute of Nanotechnology (Pvt) Ltd (SLINTEC)

13.1. Introduction

Sri Lanka Institute of Nanotechnology (Pvt) Ltd (SLINTEC) came into existence in 2009 following a cabinet paper initiated by the Government of Sri Lanka and it is the first public-private partnership between the Ministry of Science, Technology and Research and leading Sri Lankan private sector companies, namely MAS Holdings, Brandix Lanka Ltd., Camso Loadstar (Pvt.) Ltd, Dialog Axiata, Hayleys PLC, Lankem Ceylon PLC, Browns PLC, and LOLC PLC. On 31st March 2011 SLINTEC was merged with Nanco (Pvt) Ltd and the amalgamated entity adopted the name Nanco (Pvt) Ltd, which was later renamed as Sri Lanka Institute of Nanotechnology (Pvt) Ltd. (SLINTEC).

Vision

Inventions beyond the Horizon

Mission

To play a major role in the advancement of nanotechnology research in the country by twinning great minds and great technologies in our pursuit to discover and develop products that change the way we live.

13.2. Functions of the Institution

1. Build a world-class R&D center specializing in nano and advanced technologies
2. Make products more competitive using nano and advanced technologies
3. Add value to Sri Lanka's mineral resources by showcasing the benefits of coupling minerals with nanotechnology
4. Build and Manage a Nanotechnology and Science Park for research, development, and commercialization

13.3. Achievements in 2024

Mission Oriented Research

The current status of the projects undertaken with external funding during the period under review are listed below.

Title	Funding Agency	Project Cost (Rs. Mn.)	Current status
LOCAL			
lignin dye extracted from coir fibers for industry applications	Industry	10	The lignin-based natural dye project, launched in 2022 to develop an industry-feasible textile dyeing protocol, is now complete and in the final stages of Technology Transfer discussions.

Natural dyes for Textile applications - Microbial	Industry	5	Progressing
Development of sensor materials for selected applications	Foreign /Local	10	Progressing
Eighteen project proposals under the mission-oriented category	GOSL	75	Progressing (will have their budgets approved through the 2025 action plan.)
Exploring Natural and Synthetic Antioxidants as an alternative to 6PPD in Tire Manufacturing	Industry	10	Progressing
Enhancing Anticorrosion properties of conventional coating for applications in Marine environment.	Industry	10	Progressing
INTERNATIONAL			
Do agricultural micro plastics undermine food security and sustainable development in less economically developed countries?	NERC / GCRF	GBP 96,329.02 (SLINTEC)	The project is scheduled to be completed in 2025.
Graphene Applications in Electronics, Medical Devices, EV Batteries, Water Treatment, Agriculture, Materials Science, and Energy	Foreign n/ Abu Dhabi University	50	Progressing

Contract Research

- Development of Natural dye by King Coconut Husk Waste**

A three-month short-term project to optimize a natural dye extraction method from King Coconut husk waste has successfully completed its research phase with industry collaborate. Following two to three mini-trials, it has been handed over to the Technology Transfer team.

- **Development of sustainable natural textile dye from palm oil industry waste**

Synthetic dyes from petrochemical sources often contain carcinogens, creating health risks in textiles and increasing demand for eco-friendly alternatives, such as natural dyes from agricultural waste. In May 2022, SLINTEC and Industry launched research to create a novel natural dye from waste materials. In 2024, the project entered a new phase focused on developing sustainable dyes from palm oil industry waste. This phase successfully concluded with several mini and bulk trials, and the project has been transferred to the Technology Transfer team.

- **Development of Microbial Fertilizer**

Farmer's Fertilizer (Pvt) Ltd is a registered supplier of organic fertilizers to Sri Lanka's Fertilizer Secretariat, Ministry of Agriculture. In November 2022, SLINTEC launched a project to enhance fertilizer efficacy by incorporating beneficial microorganisms. The project was successfully completed in 2024 and has been handed over to the Technology Transfer team.

- **Development of Polymer Composite for TRAIN BRAKE SHOES**

The composite formulation project, launched in 2024 to develop a polymer composite for train brake shoes (brake blocks), has successfully completed its research phase and is now with the Technology Transfer team.

- **Sea Salt development for aquaculture**

The sea salt development project for aquaculture, aimed at creating a sea salt matching red sea salt parameters, has been successfully completed and transferred to the Technology Transfer team.

- **Development of Hydrophobic and Crack-Resistant Alternative Cement Coating for Flooring Application**

The development of a hydrophobic, crack-resistant alternative cement coating for flooring applications successfully completed its research phase in 2024 and is now undergoing bulk trials and Technology Transfer discussions.

- **Calcium Carbonate Modification**

The Calcium Carbonate Modification project aims to develop CaCO_3 with a high refractive index comparable to pigment-grade TiO_2 . The final project review and Technology Transfer discussions are currently underway.

- **Natural Dye from By-Products of Plant Extract**

The ongoing project aims to create a prototype natural dye formulation derived from plant extract industry by-products, with optimized color extraction parameters. This dye formulation is designed for application on 100% cotton fabrics, following a standard dyeing protocol. The project is progressing as planned, with the final two milestones targeted for completion by December 2024.

- **Contract Projects initiated during the period under review (2024)**

Title	Client	Amount
Ongoing contract Research		
Development of a Self-Adhesive Patch for Fabrics	Industry Partner	Total Project Research Value Approx. Rs 15 million
Identification of a Blood Sugar Regulation Method	Industry Partner	
Development of sustainable natural dye from Plant waste material	Industry Partner	
Novel Green Synthesis of Gold Nanoparticles	Industry Partner	
Development of Edible Ink Materials	Industry Partner	
Utilization of Anodized Aluminum Waste for Commercially Viable Applications	Industry Partner	
Development Projects		
Development of a plant-based black hair dye for gray hair coverage	Industry Partner	Approx. Rs 15 million
An engaging discussion is underway on conducting a feasibility study and launching 10 new research projects, all for clients within the private sector industry portfolio.		Clients Engagement fee of Rs 250,000 for the feasibility study. Approx. Rs 2.5 million

CONSULTANCY AND ANALYTICAL SERVICES

Consultancy Services

- Conducted mini projects to troubleshoot chemical contamination issues across various export industries, including beverage, garment, and other sectors.
- Tea Component Analysis Project - Entered into an agreement to analyze 23 compounds across 1,000 tea samples, projected to generate a total income of 12 million. The client has made an initial advance payment of 5 million for this project.
- Pioneering Drug Safety Together: SLINTEC partners with NMRA to streamline drug testing processes, ensuring timely and superior safety standards for all. This alliance marks a significant step forward in reducing delays and enhancing quality in the pharmaceutical industry.
- **Accreditation Program**

The Advanced Analytical Services Laboratory at SLINTEC has been selected by UNIDO as part of the BESP-FOOD PROJECT - Accreditation Readiness Program. Through this initiative, we are implementing the ISO 17025 Laboratory Quality Management System to achieve SLAB accreditation for select food testing services, addressing a significant demand

We submitted our application to the Sri Lanka Accreditation Board (SLAB) on October 31, 2024. Below is the detailed scope of accreditation

	Product(s) / Material of test	Specific tests performed
01.	Oils and Spices	Aflatoxin B1 and G1
		Aflatoxin B2 and G2
02.	Fats and Oils	Phthalate (DMP/ DEHP/ DBP/ DNOP DIDP/ DINP)
03.	Beverages	Phthalate (DMP/ DEHP/ DBP/ DNOP DIDP/ DINP)
04.	Milk and Confectionary Products	Salt
05.	Confectionary and Solid Milk Products	Fat
06.	Milk and Milk Products	Total sugar
07.	Confectionary Products	Total Sugar

Analytical Services 2024	No. of clients	Revenue (Rs. Mn)
Industry, Universities & Research Institutes	450	25.5

13.4. Performance

I. Research & Development

Nine research projects have been successfully completed, with four already commercialized and the remaining four in commercialization negotiations.

II. Technology Transfer/ Commercialization

SLINTEC has generated Rs. 76.6 million from following product commercialization: Natural dye extraction from King coconut, Natural dye from Palm oil waste, Sea Salt Development for Aquaculture, and Preparation of biodegradable packaging materials

III. Patent

In 2024, 06 patents were filed, primarily locally, covering the fields of textiles, cosmetics, and materials science, with one patent filed internationally.

IV. Science Popularization

Method of popularization	2023			2024		
	No: of Target programs	No: Completed	No: of Beneficiaries	No: of Target programs	No: Completed	No: of Beneficiaries
Lectures/workshops	4	3	1000	4	5	>3000
Exhibition	1	1	6000	1	3	> 5000

V. Scientific Publications

No:	Type	2023		2024	
		No: of Publications		No: of Publications	
		Target	Published	Target	Published
1	Books and Book Chapters	15	3	15	12
2	Journal articles (index)		6		
5	Abstracts (conference, Proceedings)		6		

VI. Other special programs

- Participation in Intex Sri Lanka 2024: SLINTEC showcased textile innovations at the premier international textile exhibition held at BMICH from August 7–9, 2024, organized by Worldex India Exhibition & Promotion Pvt Ltd.
- Green Legacy and LEED Certification: SLINTEC highlighted its eco-innovation journey at the "LEED in Sri Lanka" event on September 5, 2024, hosted by USGBC & GBCI at ITC Ratnadipa, Colombo, reaffirming its commitment to sustainable building practices.
- Industry Expo 2024: From June 19–23, 2024, SLINTEC presented research and developments at the International Industry Exhibition 2024 held at BMICH, organized by the Industrial Development Board.
- Idea Ignition Event: On July 11, 2024, SLINTEC hosted an Idea Ignition session at the NSF Auditorium, bringing together entrepreneurs, industry leaders, and students to discuss innovative research ideas and funding opportunities.
- Agricultural Innovations Open Forum: SLINTEC held an interactive session on May 17, 2024, focusing on agricultural research advancements, fostering collaboration among industrialists, entrepreneurs, and graduates.
- Nanotechnology Knowledge Hub Courses: SLINTEC conducted two certificate courses in nanotechnology in May and November 2024, training over 60 students with hands-on laboratory experience.

- Global Graphene Collaboration: SLINTEC partnered with Abu Dhabi University and Inovartec Investment to launch the ADU Graphene Center at ADIPEC 2024, supported by Sri Lankan and UAE dignitaries. This hub will drive Graphene innovation in industries like energy, electronics, and EV batteries, positioning Abu Dhabi as a leader in nanotechnology.



13.5. Targets for the Year 2025

- International Technology Transfers
- Become the Local Leader in Food Security Innovation
- Strategic Partnership for Sulfuric Acid Plant
- Strengthen SLINTEC's Academic and Research Excellence
- Enhance Collaboration with the Private Sector:
- Continue to focus on green innovations, emphasizing SLINTEC's commitment to the environment and sustainable

14. Sri Lanka Standards Institution (SLSI)

14.1. Introduction

The Sri Lanka Standards Institution (SLSI) was established as the Bureau of Ceylon Standards under the Bureau of Ceylon Standards Act No. 38 of 1964. This Act was repealed in 1984 by the Act No. 06 of 1984 and renaming the organization as Sri Lanka Standards Institution and empowered with the primary responsibility of promoting standardization and quality management practices in Sri Lanka.

Vision

To be the Sri Lanka's premier institution providing leadership to enrich the quality of life of the nation, through Standardization and Quality Improvement in all sectors of the economy.

Mission

To undertake, promote and facilitate Standardization, Measurement, Quality Assurance and related activities in all sectors of the national economy in order to;

- Increase productivity and maximize the utilization of resources;
 - Facilitate internal and external trade;
 - Achieve socio – economic development;
 - Enhance international competitiveness of products and services;
 - Safeguard the interests of consumers;
- whilst improving the quality of work life of employees of the Institution.

14.2. Functions of the Institute

- Preparation of standards on a National and International basis.
- Promotion of standardization and quality control in industry and commerce.
- Establishment of laboratories, library and other relevant facilities for furthering the practice of standardization and quality control.
- Examination and testing of products, commodities and materials as well as processes and practices used in the manufacture of locally produced products, commodities and materials.
- Making arrangements or providing facilities for the testing and calibration of instruments, and other apparatus in compliance with the required standards.
- Providing and arranging facilities for undertaking research in standardization and quality control.
- Operation of a certification marks scheme.
- Certification of quality of commodities, materials and other products.
- Promotion of standardization and quality control.
- Providing for co-operation with any person, association or organization outside Sri Lanka having objects similar to the institution.
- Co-ordination of the efforts of producers and users for improvement of commodities, materials, products, processes and methods.

14.3. Achievements of the Year 2024

- Thirty six (36) new Sri Lanka Standards were introduced in the field of Electric Vehicles and their charging stations to support the government initiative to promote and regulate Electric Vehicle usage.
- Eleven (11) new Sri Lankan standards were introduced in the field of Human Resource Management (HRM) following a request made by the Chartered Institute of Personal Management (CIMP) to improve the involvement of Human Resources for the development of Industry.
- ISO / TC 34 / SC 8 International Committee on Tea was held in Sri Lanka in which 37 local and foreign scholars participated.
- Thirty four (34) new imported goods were introduced to the Import Inspection Scheme by the Controller General of Imports and Exports through the Standardization and Quality Control Regulations made under the Import (Control) Act No. 01 of 1969 (Gazette Extraordinary No. 2384-35 dated 2024-05-17)
- Accreditation
 - (a) ISO 17020 Accreditation for Pre-Export Inspection for Cinnamon and Tea Leaves awarded by Sri Lanka Accreditation Board on 2024-02-05.
 - (b) ISO 17020 Accreditation for carrying out Import Inspection for ten (10) items was awarded by the Sri Lanka Accreditation Board on 2024-02-05.
 - (c) Expand the scope of calibration in;
 - IR thermometer
 - Measuring tapes
- Initiated Overseas Calibration (Maldives).
- Providing new foreign market access for Systems Certification. (ISO 14001 Certification - Thailand).
- Initiation of GMP certification for the license granted to the manufacturers by the National Medicine Regulatory Authority (NMRA).
- Established new management systems certification for ISO 14005, ISO 27001, ISO 37001.
- IP PBX System to enhance communication efficiency within the institution.
- Signed an MOU between SLSI and Standardization Administration of China (SAC)
- Signed an MOU between SLSI and China Quality Certification Centre (CQC)

14.4. Performance

I. Standards Development

	2023	2024
No. of Standards formulated	264	269
No. of Management System Standards adopted	113	49

II. Product Certification

	2023	2024
No. of new permits issued	100	94
Revenue earned (Rs.Mn)	433.648	401

III. Quality Assurance

	2023	2024
No. of consignments assessed for conformity	16 643	19 388
Revenue earned (Rs.Mn)	328.325	452

IV. Calibration Services

	2023	2024
No. of Calibration reports issued	4 284	4477
Revenue earned (Rs.Mn)	34.836	41

V. Laboratory Services

	2023	2024
Test reports issued	12 312	15 900
Revenue earned (Rs.Mn)	Direct 49.7 Internal 204.49	Direct 67 Internal 286

VI. Systems Certification

	2023	2024
No. of new certificates issued	143	182
Revenue earned (Rs.Mn)	118.491	124

VII. Training

	2023	2024
No. of Participants attended	1 444	1 583
Revenue earned (Rs.Mn)	41.161	45

VIII. Documentation & Information

	2023	2024
No. of standards issued to external parties	3 778	4445
Revenue earned (Rs.Mn)	19.204	22

IX. Science Popularization

Popularization method	Programmes in 2023			Programmes in 2024		
	Target	Completed	beneficiaries	Target	Completed	beneficiaries
Conduct Media Campaigns in digital method	15	75	1 116	20	128	4 850
Conduct webinars	4	11	655	5	7	840



14.5. Targets for the Year 2025

- Update National Standardization Strategy.
- Identify new product categories for product certification.
- Expand the accreditation scope of Import Inspection Scheme for new five (05) Products.
- Establish two (02) new accredited calibration methods in the fields of volume and temperature.
- Introduce seven new test methods for conformity assessment.
- Obtain accreditation for two new management systems certification schemes.
- Conduct awareness programme on Quality and SLSI services among School Children, University Undergraduate etc.
- Develop and integrate Business Processes - Phase II (Product Certification and Systems Certification)
- Develop and integrate Business Processes- Phase II (Laboratory Management System)

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Achievements through Science, Technology and Research



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