



ANNUAL REPORT

FY - 2012

National Research Council

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Vision & Mission

VISION

“Enable Sri Lanka to achieve science and knowledge based developed country status”

MISSION

“To promote, fund and facilitate and monitor fundamental and applied research and enhance human resource of Sri Lanka to achieve science and technology based developed country status”

Objectives

- ❖ To bring in private sector and industry representation in addition to the highly productive academics into the Council;
- ❖ To promote fundamental and applied research and facilitate human resource development in all disciplines of Science by funding University based Research Students registered for Higher Research Degrees;
- ❖ To plan and coordinate the research effort of researchers in each Public Sector Scientific Research and Development Institutes;
- ❖ To facilitate the research and evaluate the performance of individual researchers in the Public Sector Scientific Research and Development Institutes and make periodic recommendations through the Presidential Secretariat to the Treasury for funding such research;
- ❖ To promote, fund and facilitate collaborative research programmes between Researchers in Public Sector Scientific Research and Development Institutes and Universities leading to the award of Higher Research Degrees by the Universities;
- ❖ To promote and facilitate partnerships among the industry, Universities and the Public Sector Scientific Research and Development Institutes;
- ❖ To develop systems of national recognition and awards for successful research and innovations;
- ❖ To foster and sustain a Science and Technology Research Culture and Community in Sri Lanka that would respond productively to national development needs.

CHAIRMAN'S MESSAGE

Chairman's Message

It is with great pleasure to present to you the Annual Report of the National Research Council for the financial year 2012, the apex institution in funding for government research in Sri Lanka. The National Research Council was established under constitutional powers of His Excellence President Mahinda Rajapakse to fulfill his Mahinda Chinthana "Idiri dekma" development plan.

During the year 2012, NRC continued its Research grant and PhD training program by starting 58 new research grants projects and stating 56 PhD/M Phil students' fellowships during the period. Few Focus group meetings for NPK Fertilizer and Solar and Other Energy were held during the period to bring together scientists who work on a common research problem. Six progress review programs were conducted during the period.

The Presidential Awards for the Scientific Research in 2007, 2008 & 2009 Program continued and the database with all the awardees details was completed. The dates for the function is requested from the Presidential Secretariat through the Ministry of Technology and Research. The preliminary survey to the new changes planned to be introduced to the program is conducted during the period. The Private Public Partnership Program is advertised during the period and 6 projects were selected for funding during the period. The funds are requested from the treasury to commence the programs.

NRC has contributed significantly to the national development and popularization of science through its media and development programs conducted during the year. NRC exhibited its projects to the public at the Dayata Kirula Exhibition 2012 at Oyamaduwuwa, Anuradhapura. An awareness seminar, clinic and get together of parents of babies who have diagnosed as having congenital hypothyroidism by the New born screening program conducted during the period. As a pre development program for Dayata Kirula Development Program-2013, awareness program conducted at Ampara general hospital on iodine deficiency. There were several newspaper articles published in this year to publicize the results of Research.

I consider it is my pleasant duty to thank new Minister Hon. Pavithradevi Vanniarachchi, the Deputy Minister Hon. Faizer Mustapha, and Secretary to the Ministry Mrs. Dhara Wijayathilake for the support rendered to the National Research Council.

Prof. E. H. Karunanayake.
Chairman

Council

Vidyajothi Professor Eric H. Karunanayake
Chairman / NRC

B. SC (Cey), M. Sc (Lond), DIC.,
PhD (Lond) F. I Chem. C. Chem.



Professor W. A. J. M. De Costa

B.Sc Agric (Peradeniya), PhD (Reading) UK



Professor W. Priyan S. Dias

BScEng(Hons), PhD(Lond), DIC, CEng, FIE(SL), MIStructE, FNAS(SL)



Prof. Kirthi Tennakone

B.Sc (Ceylon), M. Sc (Hawaii) USA , PhD (Hawaii) USA



Professor M. Ira Thabrew

B.Sc. Hons. (Cey), Ph.D. (So'ton, UK), C.Chem., F.I.Chem.C., FNAS (SL)



Professor E. R. Jansz

BSc (Hons) (Ceylon), PhD Dalhouse



COUNCIL

Mr. Moksevi. R. Prelis

BSc(Engr., Cey.), MS(IE & Mgmt.,Purdue)
ISMP(Harvard B S), M.I.Mech.E-C.Eng.(Lond),F.I.E.(SI)
F.I.B(SI).



Vidyajothi Professor M. A. Careem

B,Sc (Ceylon), PhD. (Chelsea) UK



Vidyajothi Professor H. Janaka de Silva

MBBS (Colombo), MD (Colombo), DPhil (Oxford), FRCP (London), FRCP
(Edinburgh), FCCP, FNAS (SL), Hon. FRACP, Hon. FRCP (Thailand)



Prof. Kathirgamanathan Kandasamy

B.Sc (Cey) PhD(Keele) Eng.

Dr. G. A. S. Premakumara

B. Sc (Colombo), PhD Colombo)MIBiol CBiol MIChemC



Prof. Aruni Tilakaratne

BDS, Ph D, Dip (Coun)



Deshamanya Eng. Dr. Nihal Jinasena

D.Tech (H.C), B.Tech (Eng). D.L.C. (Hons). C.Eng, F.I.E.S.L

COUNCIL

Dr. D. S. Rajapaksa
MS (Sri Lanka); FRCOG (UK)



Ex Officio Member/Treasury Representative

Dr. D. S. Jayaweera

STAFF

Staff

Executive Secretary:	M. C. Rajapakse
Accountant:	N. S. Hewagama
Scientific Officer:	M. S. Maliyadde
Scientific Officer:	G. Pradeepan
Assistant Accountant:	S. K. Gamhewa
Accounts Assistant:	A. K. D. M. Perera
Program Assistant:	G. L. R. S. Karunathillake
Program Assistant:	A. E. K. Dayarathne
Program Assistant:	K. R. N. Perera
Drivers:	K. K. T. Sandaruwan
Drivers:	D. C. Perera
Naita Trainee	S. H. S. Priyankara

Review by the Chairman for Year 2012



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Executive Secretary's Report

The National Research Council a national funding agency for high quality scientific research, was formally established by a special directive of H. E. the President of Sri Lanka. Its functions are governed by the Chairman and the Council.

During the FY 2012 the NRC Research Grant Programme, PhD/MPhil Training Programme, Presidential Awards for Scientific Research Programme (PASR), Private Public Partnership Program and the Public Awareness Programme were in operation. It has been an exceptional year for the NRC, as we received the highest quantum of funds from the consolidated fund, we received a very large number of applications for the research grants programme and were able to award 56 PhD/MPhil fellowships.

The NRC administered, monitored and evaluated over 100 research project contributing towards the advancement of scientific knowledge and socio-economic development. The PhD/MPhil Programme was further expanded during this year with the number of fellowships awarded increasing from 80 to 120. Information on scientists were compiled for the PASR programme. During this year the NRC funded many R&D projects that are nationally important,

While taking the best use of our financial and human resource to achieve our mandated objective, I wish to thank all scientists who committed to their respective research projects and corporate with the NRC in all its activities to build a research culture in Sri Lanka. And hope you will continue to do so now and in the future as we need your support more than ever. I firmly believe 'our Strength is our Scientists.'

We at the NRC Secretariat strives to deliver the best to our scientists to ensure that there is good return on investment from the research projects we fund. I also wish to thank all Council members for their valuable contribution in our effort to take NRC to greater heights and the Treasury and the Ministry of Technology & Research for all the support extended to us during this year.

I am pleased to present the Annual Report to you and sincerely hope that it provides you with a deep appreciation of the National Research Council.

Manisha C. Rajapakse
Executive Secretary

FINANCIAL HIGHLIGHTS IN THE PRECEDING 3 YEARS

Financial highlights in the preceding 3 years

Programs(Strategies)	Physical Progress				Financial Progress Rs. Mn		
	Indicator	2010	2011	2012	2010	2011	2012
General administration of NRC					5.7	6.3	9.48
Development Assistance for below Programs					64.5	213.9	229.02
NRC Research Grant Program and NRC PhD fellowships Program	No of Research Grants Selected/Applications	19 Research and PhD Grants out of 74 applications	51 Research and PhD Grants was awarded out of 200 applications	58 Research and PhD Grants was awarded			
	PhD/ M Phi Students	6 PhD Students	67 PhD /M Phils are awarded	67 PhD /M Phils are awarded			
Research Roster Development and Presidential Awards Program	Functions held and No of Scientists awarded	One program held covering 2003,2004,2005 and 2006 and 484 Scientists were awarded by the President	Compilation of database of awarding scientists for 2007, 2008 and 2009 is continued	Compilation of database of awarding scientists for 2007, 2008 and 2009 is completed	-	-	-

FINANCIAL HIGHLIGHTS IN THE PRECEDING 3 YEARS

Other Programs -Development programmes of research grants and other R & D promoting activities -Establishment of collaborative research programmes with international partners.	Institutions Completed	Department of agriculture was reviewed and Review report was Submitted to President	Department of agriculture was reviewed and Review report was Submitted to President	-	-	-
	Activities completed	Participated Dayata Kirula development Exhibition, Introducing Scientists to the nation, Few Media casts and Development of Website etc.	Participated Dayata Kirula development Exhibition, Young scientist program was started.	Participated Dayata Kirula development Exhibition		
Total				70.2	220.2	238.5

NRC Programs

Research Grant and PhD Program

Research Grant Program

The R&D activities in Sri Lanka are conducted mainly by public institute and universities are funded from various sources; government institutional funds, competitive grants and research contracts. The NRC Research Grants programme was initiated for scientists to do research with minimum bureaucracy.

NRC Research Grants programme provides competitive grants for R & D activities to public institute. This programme has been streamlined over years of its implementation and now is more or less perfected. The grants are advertised annually, evaluations are based on scientific aspects, relevance to national development, and the findings being published in international journals. The applications undergo a strict evaluation process. For the proposals selected, the Council will decide on an appropriate allocation of funds which will be channelled from the Treasury directly to the Principal Investigator, who will be solely responsible for implementing the project. Funds are considered for equipment, consumables, etc. A project bank account is opened for each project and the NRC monitors all transactions. This gives the scientists considerable flexibility in utilizing the funds with minimum red tape. The monitoring and evaluation are done by the Council and the NRC Secretariat.

It should be mentioned here that the present grants are diversified in nature. Other than funding research on pure science and on food, water, environment and energy, the NRC has lately been funding research on national surveillance, irrigations systems, wildlife and

It should be mentioned here that the present grants are diversified in nature. Other than funding research on pure science and on food, water, environment and energy, the NRC has lately been funding research on national surveillance, irrigations systems, wildlife and ecotourism, speech translations, construction & architecture, railway traffic, sports and many others.

Group research with multidisciplinary approaches, collaborative research programmes, and problem oriented research are encouraged. Start-up grants are offered to young scientists and post doctoral fellowships will be offered from this year. A simple but comprehensive single set of applications is available for all programmes. The number of applications we receive has increased over the year which is a positive sign. The challenges for this programme is to keep the momentum that we have already achieved.

Research Grant and PhD Program

PhD/ M Phil Training Program

Research and Development activities in developing countries are relatively limited and are far from being a technological frontier. Technology diffusion is essential for productive growth, but technology diffusion can only be efficient if the level of human resources is high enough, incentives for technological improvement are strong and institutions are relatively well functioning.

However to face these new challenges our human resource capital in S&T in Sri Lanka is very low. Sri Lanka has a total of 4037 R&D scientists employed either in R&D institutes or universities across the country. Of this 61%, or 2466, are from the fifteen universities, 29%, or 1187, are from thirty two R&D and S&T

institutes and the other 10%, or 384, and are from the private sector and NGOs. Of the total R & D scientists, 28%, or 1138, had PhDs while 27%, or 1081, has Masters' degrees (i.e. M.Phil & M.Sc) and the remaining 45% had basic degrees with other qualifications. This indicates that we do not possess adequate advanced technical support to engage in independent, productive R & D activities. (NSF, 2008)

A World Bank has reported that in 2006, Sri Lanka had only 237 researchers and scientists in R & D per million residents compared with other developing countries – 374 per million and the world average of 894 per million.

This information too supports the need to increase R&D personnel in the country. An important area in which Sri Lanka compares poorly with the other major countries in the region is post-graduate education, particularly research-based higher education. This has serious implications for future development in the field of STI in our country and moving towards a knowledge economy. The NRC has already addressed this issue by implementing the PhD/MPhil training programme, which is essential to build a science base in Sri Lanka by producing the critical mass of high quality scientists and technologists.

This programme operates along with the research grants programme and where the Principal Investigator trains a MPhil/PhD student/s during the grant period. The students are given a fellowship during this period. With a very modest start this programme has grown to where we have passed 100 fellowships by end of 2012.

Presidential Awards for Scientific Research Program

The programme of Presidential Awards for Research was started in year 2001, to honour scientists for reaching international standards, to increase national scientific production and to stem brain drain. The national statistics of output of publications from 1991 to 2006 shows what could perhaps be the beginning of an upward trend.

The program was designed by Sir Arthur c Clarke, Prof Arees Kovoov and other senior scientists of the NRC council and the country.

The entire scheme is based on the Science Citation Index (SCI). SCI is a database of the world's scientific periodicals judged to be the topmost by its publisher, with respect to quality and impact on science. Thus the SCI analyses about 3700 periodicals containing a world total of about 12,000,000 titles of articles, in a given year.

The compilation done for the Research Award scheme covers all the "hard science" titles (excluded the social science) with a Sri Lankan address against at least one author as given in the SCI.

Under this program it was completed several programs by 2011 covering publications listed in SCI (Science Citation Index) from 1999 – 2006. At the last program held at Temple trees on 27th July 2010, 383 scientists were awarded for 2003-2006 years by H. E. the President of Sri Lanka. It has been commenced the evaluation of publications and identification of scientist to be awarded from 2007 onwards.

Public Private Partnership Program

Advances in R&D in S&T will lead to development of value-added products and services that are competitive in the global market, and which will form an essential pillar of Sri Lanka's envisaged economic development aimed at becoming the Wonder of Asia. To accomplish this goal, research carried out in Sri Lanka needs to be demand-driven by addressing the needs of key industries of the country, which are expected to drive the economy forward.

The Public R & D -- Private Industry -- Partnership (PPP) programme is to build on local strength by networking key players in R & D activities and industries to contribute towards the economic development of the country. Promoting R&D in S&T should lead to economic development by way of increasing exports, diversifying exports, and promoting import substitutes. All innovative research leading to the development of new or better products, processes, services, value addition and solving technical problems with commercial potential will be considered for this programme. Meaningful partnerships between the different sectors will enable us to share our research expertise, cost, services and facilities more effectively to develop solutions for industry R&D needs. The partnerships will also improve efficiency of public R&D activities and reduce the time horizon for it. The Private sector participation is encouraged by providing tax concessions in relation to R&D expenditure undertaken by an enterprise with public sector partnership. The NRC will interface

between government -- local institute -- ministries --University -- R & D Institutes -- corporate sector- SME sector in providing research based solutions to national needs.

The PPP Programme was started in 2012 and at least one or two cycle will have to be in operation before the programme is streamlined.

Other Programmes

Review of Research & Development

Institutes -- The NRC is empowered to review and evaluate activities of public R & D Institutes under its mandate. The review of the Department of Agriculture (DoA), one of the largest departments of the country was completed and it disclosed the strengths and weakness of the DoA, and made recommendations to strengthen its capacity for more effective research and technology transfers. The recommendations of this report will contribute towards achieving the government's objective of increasing agricultural production, improving food security etc.

Development of Research Laboratories

-- Through the NRC research grants programme high-valued, specialized equipment has been provided to research laboratories. Collaborative research programmes facilitate the use of such equipment.

Public Awareness programme -- Grantees are encouraged to publish their research in peer reviewed journals. At the same time NRC facilitates scientists to publish their finding in newspapers to make the general public aware the research carried out by scientists.

NRC RESEARCH GRANTS AND & PHD TRAINING PROGRAM...

NRC Research Grants and & PhD Training Program...

Calling for Applications for both NRC Research Grants and & PhD Training Program by paper advertisement, the advertisement was circulated to all universities, faculties and the R & D institutes and emails were sent to all researchers in our database.

Group research with multidisciplinary approaches, collaborative research were encouraged, start-up grants were also offered during this call for applications. All inquiries on the application were attended promptly during this period.

Applications closed by end of February 2012. The following is a summary of both programs.

Activities	2011	2012
No of Applications received	199	152
PhD/M Phil Students	270	167
Co-investigators/Collaborations	254	182

Highlights of 2012 Grants by Research Topics

Medical	Agriculture	Energy /Eng.	Forestry /Env.	Computer
Malaria	Rice Breeding	Solar Energy	Elephant Movement	Clinical Mgt. Solution
Carpel Tunnel Syndrome	Blister Blight	Bio Fuel	Sigiri Bambara	Railway Traffic Mgt. System
Diabetics	Tea	Heavy Metal	Monsoon variability	
CKDu		Irrigation System	Water Pollution	
			Ruhunu Tank System	

During the first Quarter. The annual progress reports of the ongoing grants were send for evaluations. The applications (2012) were send to two anonymous rapporteurs, who are experts in the field. The Council which met on the 17 & 18 of June screened the applications further and selected the application with high scientific merit and national relevance.

Activities	2011	2012
No. of Applications selected for funding after evaluation	79	61
No of Grants Funded	51	58
No. of PhD/MPhil fellowships awarded	67	56
No. of Collaborations initiated	76	45
Total value of grants awarded	Rs. 213 Mn	Rs. 220 Mn
No. of Applications referred for resubmission		32
No. of applications rejected		55
No of applications on hold for future evaluation		5
No of applications referred to PPP		2

Only 40% of the applicants submitted got selected. The selected applications were forwarded to the treasury for funding. And at the first round 16 grants were funded and the 12 grants were funded in the second round.

NRC RESEARCH GRANTS AND & PHD TRAINING PROGRAM...

The legal documents and bank documents were prepared. Later the grant accounts was opened. The chairman met all the grantees on the day of signing the legal documents. A briefing was given to all the grantees on how to operate the NRC grants.

Third round of grants of 30 were funded in the final quarter of 2012. A total of 56 PhD/MPhil students registered during this period. All relevant documents were requested from the students.

The following Focus group meeting and Progress reviews meetings were held during period

Focus Group Meeting for NPK Fertilizer: 27th June 2012

The Chairman met Grantees who were conducting research on Rice, Fertilizer. This was mainly done to bring together scientists who work on a common research problem. The meeting was held at the Rice research & Development Institute, Batalagoda. Director, RRD, Prof. WAJM Costa, Council Representative and Principal and Co-Investigators to 12 Research Projects, and NRC representatives were participated in the Discussion.



Focus Group Meeting for Solar Energy & Other Energy: 13th December 2012

The Chairman met Grantees who were conducting research on Solar Energy & Other Energy. This was mainly done to bring together scientists who work on a common research problem. The meeting was held at the National Research Council Board room and Prof. K. Kandasamy Council Representative and Principal and Co-Investigators to 12 Research Projects, and NRC representatives were participated in the Discussion.

Progress Review Meetings of Research Grants



NRC RESEARCH GRANTS AND & PHD TRAINING PROGRAM...



Funded Research Grants 2012

Grant No	Principal Investigator & Institution	Project Title
11-39	Dr. (Mrs) T. H. P. S. Fernando RRI	Studies on White Root Disease of Rubber to Develop Improved Management Strategies
11-40	Prof. R. L. C. Wijesundara University of Colombo	A study of diversity of macrofungi in selected dry zone forest reserves and investigation of their bioactive compounds
11-44	Dr. R. S. Rajakaruna University of Peradeniya	Human and animal (domestic) otoacariasis in Sri Lanka: Seasonality, risk factors and the role of intra-aural ticks as disease carrying vectors
11-49	Dr. M. N. S. Kottegoda University of Sri Jayawardenepura	Rubber nanocomposites: Effects of hybrid nanomaterial systems on mechanical and flame retardant properties
11-70	Prof. A. D. L. C. Perera University of Peradeniya	Glycolipids for liposome and microemulsion formation for applications in the pharmaceutical and cosmetic industry
11-79	Dr. S. Jayakody Wayamba University of SL	Preparation of a national collection and evaluation of the current distribution and species diversity of regular and irregular echinoids (Class: Echinoidea Phylum: Echinodermata) in Sri Lanka and determining the diet composition of Stomopneustes variolaris
11-86	Dr. H. A. M. Wickramasinghe University of Peradeniya	Analysis of the Genetic Diversity of Eating and Cooking Qualities and Nutritionally Important Starch Fraction of Representative Germplasm of Rice in Sri Lanka
11-09	Prof. A. Nanayakkara IFS	Determination of physical conditions and chemical processes inside Sonoluminescence bubbles using theoretical and experimental techniques
11-10	Prof. G. Ranawaka Open University of SL	Genetic diversity of Sri Lankan butterflies (Lepidoptera)

NRC RESEARCH GRANTS AND & PHD TRAINING PROGRAM...

Grant No	Principal Investigator & Institution	Project Title
11-13	Dr. L. B. D. R. P. Wijesundara University of Kelaniya	Research and development of Cu ₂ O based (CuO) _x (Cu ₂ O) _{1-x} /Cu ₂ O and CuInS ₂ /Cu ₂ O heterojunction thin film solar cells using electrodeposition technique
11-18	Prof. K. H. Tennekoon University of Colombo	Identification of potential molecular and genetic markers of sporadic breast cancer and evaluation of selected traditional medicines as potential anti cancer drugs for breast and ovarian cancers using an in vitro model
11-21	Dr. T. L. S. Tirimanne University of Colombo	Production of nitrogen fixing rice plants in Sri Lanka through the introduction of A. caulinodans
11-100	Prof. M. D. S. Lokuhetty University of Colombo	Analysis of the HER 2 neu receptor status, and its correlation with the clinicopathological parameters of gastric carcinoma.
11-107	Prof. (Mrs) N. Salim University of Sri Jayawardenepura	Screening endophytes of Nothapodites nimmoniana for feasible production of camptothecin, an anti-cancer agent
11-113	Prof. D. Dias University of Moratuwa	Multipurpose Self-Configurable Indoor Wireless Sensor Network for Green Buildings
11-124	Dr. M. Meegaskumbura University of Peradeniya	Analyzing phylogenetic relationships of Sri Lankan amphibians to facilitate conservation in a Biodiversity Hotspot
11-127	Prof. H. M. D. N. Priyantha University of Peradeniya	Determination of chemical composition of wet only and bulk deposition and ambient concentration of sulfur dioxide, nitrogen dioxide, and ammonia in urban and industrialized areas in Sri Lanka
11-149	Prof. S. Premaratne University of Peradeniya	Value addition and cost/benefit analysis of goat milk production with supplemental Thampala (Amaranth spp.) feeding to enhance fatty acids beneficial to human health with special reference to conjugated linoleic acid (CLA)
11-198	Prof. M. P. B. Wijayagunwardena University of Peradeniya	Effect of the presence of gamete/Embryo on the modulation of secretory proteome in the cow: Alteration by the heat stress
12-005	Dr.(Mrs) D. N. Wijeratne University of Kelaniya	Multi –element fingerprinting and quantification of the pollution status of the Bolgoda Lake sediments
12-007	Prof. S. W. Kotagama University of Colombo	Ecotourism in Sri Lanka and its impact on Communities and Bio diversity
12-010	Dr. M. Kommalage University of Ruhuna	Screening and treatment of garment factory workers for Carpal tunnel syndrome

NRC RESEARCH GRANTS AND & PHD TRAINING PROGRAM...

Grant No	Principal Investigator & Institution	Project Title
12-017	Dr. L. Ranatunga University of Moratuwa	Efficient Depiction of Video for Semantic Retrieval Applications by Dimensionality Reduction of Visual Feature Space
12-018	Dr. A. Pasqual University of Moratuwa	Machine Vision Based Intelligent Surveillance System for Expressways
12-022	Dr. I. R. M. Kottegoda University of Sri Jayawardenepura	Synthesis of graphene and graphene composites from Natural Graphite for application as electronic materials
12-023	Dr. L. D. A. M. Arawwawala ITI	Development of a natural gastroprotective agent from <i>Trichosanthes cucumerina</i> Linn
12-025	Dr. T. M. S. S. Y. K. Ekanayake University of Peradeniya	Mobile phones on a private network for science teaching and learning in schools
12-027	Dr. A. L. Ranawaka University of Ruhuna	Understanding the molecular basis of submergence tolerant traditional rice cultivars in Sri Lanka with respect to SUB 1A gene expression
12-029	Prof. D. A. N. Darmasena University of Peradeniya	Aerated soaking for reduced leaching of organic matter in cold soaking of paddy and testing of a bio-tower for treating low strength effluent
12-031	Dr. R. Rathnayake IFS	Biofuel and other microbial products from cellulosic biomass
12-032	Prof. U. L. B. Jayasinghe IFS	Bioactive metabolites from some selected Sri Lankan fruits and their associated fungi: possible uses in agricultural, pharmaceutical and functional food products
12-037	Dr. S. R. Weerakoon Open University of SL	1. Developing herbicide resistant (HR) Sri Lankan rice (<i>Oryza sativa</i> L.) varieties by means of seed/anther mutagenesis and developing molecular markers to identify HR rice
12-043	Dr. R. W. K. Punchihewa University of Ruhuna	Assessment of the ecological and economic importance bambara honeybee (<i>Apis dorsata</i> : apidae); a major pollinating species now facing destruction due to misunderstood concepts and mismanagement
12-048	Prof. S. G. Yasawardena University of Sri Jayawardenepura	Normal morphology and morphometry of the prostate gland and study of Benign Prostatic Hyperplasia: proportion, treatment modalities and outcomes at selected tertiary care centre and private hospitals in Western province, Sri Lanka
12-050	Dr. B. D. R. Prasantha University of Peradeniya	Effect of Hermetic storage on physico-chemical and functional properties of grain legumes

NRC RESEARCH GRANTS AND & PHD TRAINING PROGRAM...

Grant No	Principal Investigator & Institution	Project Title
12-053	Dr. M. R. Wijesinghe University of Colombo	An investigation of the toxicity of nitrates, phosphates and selected heavy metals on freshwater organisms
12-068	Prof. H. Perera University of Colombo	Screening of Fragile X pre-mutation among individuals attending special education institutes - a community survey
12-071	Dr. A. M. S. D. Dissanayake University of Peradeniya	The effect of water quality and climate factors on pathogenesis of CKDu
12-074	Dr. M. Jayawardena University of Colombo	Commercial software product development methodologies for Sri Lankan universities
12-075	Dr. K. De Zoysa University of Colombo	Railway Traffic Optimization System
12-077	Dr. S. M. Handunnetti University of Colombo	Studies on factors contributing to pathogenesis of severe leptospirosis in Sri Lanka
12-081	Dr. (Mrs.) S. Chelvendran ITI	Bioactivity studies and activity guided separation of anti-inflammatory compounds from <i>Alpinia calcarata</i> rhizome and leaf
12-082	Dr. B. G. L. T. Samaranayake University of Peradeniya	Nanotechnology to improve efficiency of Organic Bulk Heterojunction Solar cells
12-092	Dr. I. V. N. Ratnayake University of Kelaniya	Development of an optical whole cell microalgal-cyanobacterial array biosensor to assess the bioavailable toxic heavy metals in aquatic systems
12-093	Dr. P. Abiman University of Jaffna	Modification of Carbon Surfaces Using Organic Substrates for Advanced Materials and Heavy metals uptake
12-096	Dr. G. A. P. Chandrasekara Wayamba University of SL	Background food and nutritional studies on millets in Sri Lanka
12-098	Dr. D. K. Dayawansa University of Peradeniya	Spatial modeling of elephant movement for identification of elephant corridors and prediction of corridor change in case of a disturbance
12-104	Dr. D. G. T. Priyadarshana University of Ruhuna	Restoration of ancient Ruhunu Rata tank system to meet the future water demand and livelihood developments as an adaptable strategy to overcome the impacts of climate change
12-109	Dr. G. A. K. S. Perera Wayamba University of SL	Investigation of gel polymer electrolytes as cation and anion conductors to be used for possible applications
12-110	Dr. S. S. P. Silva University of Peradeniya	Formulation of Suitable Organic Acid Blend to control Salmonellosis in Poultry

NRC RESEARCH GRANTS AND & PHD TRAINING PROGRAM...

Grant No	Principal Investigator & Institution	Project Title
12-114	Prof. B. M. R. Bandara University of Peradeniya	Polyphenols from refuse tea and green tea dust for clinical applications: enhancing activity of antibiotics against common drug-resistant pathogens and inhibition of biofilm formation
12-115	Dr. J. Wijeratne University of Colombo	Mathematics in indigenous knowledge in Sri Lanka
12-122	Dr. R. B. Mapa University of Peradeniya	Characterization of Soils in the Northern region of Sri Lanka to develop a soil data base for land use planning and environmental applications
12-125	Dr. S. K. Gunathilake Sabaragamuwa University of SL	Contamination of paddy soils by toxic trace metals due to long term application of fertilizer
12-129	Dr. S. Geekiyanage University of Ruhuna	Investigation of genetic basis for variation in flowering time among Sri Lankan traditional rice varieties
12-133	Dr. M. Hapugoda University of Kelaniya	Species abundance and Physico-chemical characteristics of malaria vector breeding habitats
12-145	Dr. P. P. M. Jayaweera University of Sri Jayawardenepura	Unified Framework for Healthcare Application Integration: Clinic Management Solution for Public Sector Health Service Institutes
12-148	Dr. S. K. Wasala Plant Genetic Resource Centre-Peradeniya	Tagging of Yellow Vein Mosaic Virus (YVMV) resistant genes in wild okra species <i>Abelmoschus angulosus</i>

Presidential Awards for Scientific Research...

The Presidential Awards for Scientific Research (PASR) program is entirely based on the Science Citation Index (SCI). SCI is a database of the world's scientific periodicals judged to be the topmost by its publisher, with respect to quality and impact on science. Thus the SCI analyzed approximately 3800 journals containing a world total of about 1,200,000 titles of articles per year.

The total number of publication for year 2007, 2008 & 2009 are follows, 274, 318 and 300. The Council approved to following scheme as the baseline for years 2007, 2008 & 2009 awards. The final list of Awardees for Year 2007, 2008 & 2009 was prepared with the Institutional Indexes and Individual Cumulative Indexes.

The database with Awardees information was completed. The database includes Personal information, Academic information and the title of the award winning publication/s. Full name, preferred name in certificate, residential address, institutional address, telephone numbers etc. came under the personal information. While Academic information included, academic qualification, field of specialization, and a brief description of their R & D activities.

Letters were sent to the Ministry of Technology and Research requesting for a date to hold the function. Minister Mrs. Pavithra Wanniarachchi was met and discussed about the function.

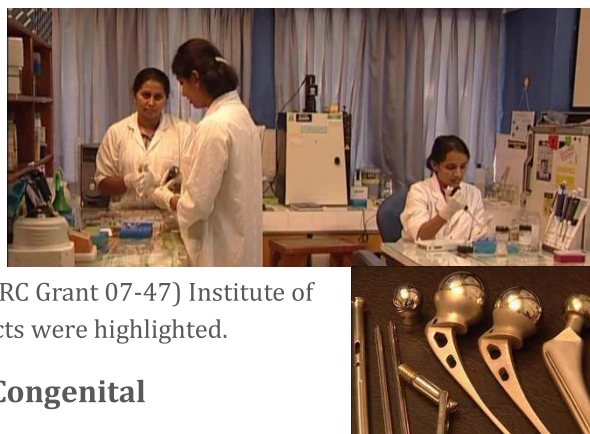
Change of selection criteria for the Presidential Awards was considered by the Council. A comparison of SCOPUS & SCI was done for year 2009. Meetings were held before and after the comparison with the board of new selection criteria.

Preparation of a scientific documentary for the Presidential Awards function was initiated. Printing of the souvenir book as well as the production of the velvet certificate folders for the function was initiated.

Media & Development Program...

“DEYATA KIRULA” Development Exhibition...

The NRC participated at the “*Dayata Kirula*” Exhibition held at Oyamaduwa, Anuradhapura from 4th to 10th of February 2012. A video has been prepared and presented at the Exhibition representing NRC research grants, and the role of NRC to the General Public. The research activities of Prof. R. P. V. J. Rajapakse (NRC Grant 09-05) University of Peradeniya, Dr D. Magana-arachchi (NRC Grant 07-47) Institute of Fundamental Studies and several other grant projects were highlighted.



Awareness Program & Get together for Congenital Hypothyroidism Patients 2012

The Awareness seminar, clinic and get together of parents of babies who have diagnosed as having congenital hypothyroidism by the New born screening program of the Nuclear Medicine Unit, has been held on Faculty of Medicine, University of Ruhuna on 28th June 2012.



Dr. Manjula hettiarachchi (NRC Grant 11/160) and Prof C. Liyanage (NRC grant 08/08) had organized the program and Dr Navoda Atapattu (Pediatric Endocrinologist, Lady Ridghway hospital for children colombo) and Dr. Manilka Sumanathilake (Endocrinologist, Teaching hospital, Karapitiya) have conducted lectures/presentations and the cognitive development assessment of the children was conducted by the clinical psychologists of Faculty of Medicine.

“DEYATA KIRULA-2013” Pre Development Programs...

A program to increase awareness of Iodine deficiency and the neonatal hypothyroidism among health officials were initiated to be held at the Ampara General Hospital. The program will be coordinated by NRC and collaborated with the Faculty of Medicine, University of Ruhuna and the Ampara General Hospital.

Private Public Partnership (PPP) for R & D

The PPP Program is continued during the period. The Progress is as follows

Activities	2012
No of Expression of Interest (EOI) received for PPP	59
No of EOI's Selected to submit detail proposals	17
No. of Partnerships to be facilitated with Private Sector	6
Total Funds required	Rs. 156 Mn
Funds Provide buy the Private Sector (Approx. 50%)	Rs. 78 Mn

Highlights...

- Milk (nutrient Validation and Shelf life)
- Energy – Bio Mass
- Plantation – Resin
- Medical – Respiratory Products
- Agriculture – Control of fruit Flies
- Agriculture - Energy + bio char

Pirith Ceremony

NRC shifted to a new location during the year and a pirith ceremony was held before starting work at the new premises.



Some of News Papers articles published during the period



[illegible]

[illegible][illegible]

THYROID INSUFFICIENCY IN CHILDREN IN THE SOUTH

Affected numbers stand at a ratio of 1: 2000

By SARETHA WILKINSON

GALLE

It has been found that one in 2000 children in the southern province have shown signs of deficiency in the hormone thyroxine, a condition that results in retarded mental and physical development in children.

A senior lecturer at the Karapitiya Medical Faculty of the Ruhuna University, Dr. Manjula Hettiarachchi said however, that any abnormalities can be rectified through regular treatment. He was addressing a seminar to create awareness in this regard among parents whose

“Occasionally, certain children may be required to continue treatment throughout their lives to prevent possible mental disorders. However the expenses for treatment would be less than Rs.1 per day”

children had shown signs of deficiency in thyroxine through laboratory tests conducted at the Karapitiya Medical Faculty.

THYROID DEFICIENCY AND MENTAL HEALTH

- The thyroid gland produces the hormone thyroxine
- Thyroxine regulates the body's basal metabolic rate
- Most common cause of hypothyroidism (low levels of thyroxine) is an autoimmune disease, Hashimoto's thyroiditis
- Thyroid deficiency may be associated with cognitive and emotional disturbances

Dr. Hettiarachchi said that the secretion of thyroxine from the thyroid gland in some individuals could be insufficient for metabolism due to natural causes.

"If a new-born is identified as a victim of thyroxine deficiency, treatment should commence immediately after birth. Occasionally, certain



Forty children have been found to be deficient in thyroxine in a programme launched in September 201

children may be required to continue treatment throughout their lives to prevent possible mental disorders. However the expenses for treatment would be less than Rs.1 per day.

The Karapitiya Medical Faculty launched a programme with the

cal Faculty for tests.

We have identified 40 such children since we launched the programme in September 2011," Hettiarachchi said. He added that children who had received treatment were enjoying sound mental and physical health.

Financial Statements for year 2012

STATEMENT OF FINANCIAL PERFORMANCE

STATEMENT OF FINANCIAL POSITION

CASH FLOW STATEMENT

STATEMENT OF CHANGES IN NET ASSETS/EQUITY

NOTES TO THE FINANCIAL STATEMENTS

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL -SRI LANKA

STATEMENT OF FINANCIAL PERFORMANCE FOR THE YEAR ENDED DECEMBER 31, 2012

		2012	2011 (Restated)
	Notes	Rs.	Rs.
Revenue			
Recurrent receipts – NRC Administration	3.11B	9,189,900.00	6,314,000.00
Recurrent receipts – Research and development	3.11A	47,713,220.42	19,465,533.81
Other receipts		632,392.40	33,810.00
Total revenue		57,535,512.82	25,813,343.81
Expenses			
Personal emoluments		3,686,321.78	1,737,859.80
Research & development	3.11A	47,713,220.42	19,465,533.81
Supplies and consumables		1,481,809.86	2,250,603.59
Depreciation and amortization expense –NRC Grants	3.8	21,946,231.75	16,153,547.11
Depreciation – NRC office equipments	3.8	441,829.55	364,931.97
Other expenses	3.15	3,761,309.34	5,093,893.05
Finance costs		8,000.00	13,394.25
Total expenses		79,038,722.70	45,079,763.58
Share of surplus of associate's		-	-
Surplus/(deficit) for the period		(21,503,209.88)	(19,266,419.77)
Attributable to:			
Owners of controlling entity		(21,503,209.88)	(19,266,419.77)
Minority interest		-	-
		(21,503,209.88)	(19,266,419.77)

Notes from the pages 05 to 18 form an integral part of these financial statements.

Figures in brackets indicate deductions

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL -SRI LANKA

STATEMENT OF FINANCIAL POSITION AS AT DECEMBER 31, 2012

	Notes	2012 Rs.	2011(restated) Rs.	2010(restated) Rs.
ASSETS				
Current assets				
Cash and cash equivalents		3,583,250.75	1,122,565.99	1,819,173.90
Receivables		150,896.00	150,896.00	241,742.00
Inventories		-	-	-
Prepayments	3.13	250,000.00	-	-
NRC grants		346,873,287.07	268,124,599.97	114,996,533.07
Other current assets				
		350,857,433.82	269,398,061.96	117,057,448.97
Non-current assets				
Receivables		-	-	-
Investments in associates		-	-	-
Other financial assets	3.12	480,000.00	105,000.00	130,000.00
Property, plant and equipment	3.8	181,855,802.16	111,519,880.94	102,543,908.36
Land and buildings		-	-	-
Intangible assets		-	-	-
Other non-financial assets		-	-	-
		182,335,802.16	111,624,880.94	102,673,908.36
Total assets		533,193,235.98	381,022,942.90	219,731,357.33
LIABILITIES				
Current liabilities				
Payables	3.14	494,268.76	47,545.38	55,807.23
		494,268.76	47,545.38	55,807.23
Non-current liabilities				
Payables		-	-	-
		-	-	-
Total liabilities		494,268.76	47,545.38	55,807.23
Net assets		532,698,967.22	380,975,397.52	219,675,550.10
NET ASSETS/EQUITY				
Capital contributed by; other government entities		-	-	-
Reserves		-	-	-
Accumulated surpluses/(deficits)		532,698,967.22	380,975,397.52	219,675,550.10
Minority interest		-	-	-
Total net assets/equity		532,698,967.22	380,975,397.52	219,675,550.10

The Council is responsible for preparation and presentation of these financial statements.

Signed for and on behalf of the Council,

.....
Prof. E. H. Karunanayake
(Chairman NRC)

February, 28, 2012

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL -SRI LANKA

CASH FLOW STATEMENT FOR THE YEAR ENDED DECEMBER 31, 2012

	2012 Rs	2011 Rs
CASH FLOWS FROM OPERATING ACTIVITIES		
Receipts		
Taxation		
Receipt from treasury (Recurrent)	9,189,900.00	6,314,000.00
Receipt from treasury (Development Assistance)	220,940,000.00	200,000,000.00
Sales of goods and services	-	-
Receipts from closed grants	10,198,477.45	13,099,174.56
Interest received	-	-
Other receipts	632,392.40	124,656.00
Payments		
Cash payment to employees	(3,686,321.78)	(1,737,859.80)
Superannuation	-	-
Suppliers	-	-
Research grants	(227,456,450.51)	(213,879,527.82)
Interest paid	-	-
Other payments	(5,794,095.82)	(3,835,232.08)
Net cash flows from operating activities	4,023,901.74	85,210.86
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchase of plant and equipment	(1,563,216.98)	(781,818.77)
Proceeds from sale of plant and equipment	-	-
Proceeds from sale of investments	-	-
Purchase of foreign currency securities	-	-
Net cash flows from investing activities	(1,563,216.98)	(781,818.77)
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from borrowings	-	-
Repayment of borrowings	-	-
Distribution/dividend to government	-	-
Net cash flows from financing activities	-	-
Net increase/(decrease) in cash and cash equivalents	2,460,684.76	(696,607.91)
Cash and cash equivalents at beginning of period	1,122,565.99	1,819,173.90
Cash and cash equivalents at end of period	3,583,250.75	1,122,565.99

Notes from the pages 05 to 18 form an integral part of these financial statements.

Figures in brackets indicate deductions

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL - SRI LANKA

STATEMENT OF CHANGES IN NET ASSETS/EQUITY FOR THE YEAR ENDED DECEMBER 31, 2012

	Accumulated Surplus or Deficit Rs	Total Rs	Total net Assets / Equity Rs
Balance as at December 31, 2010 (Restated)	219,675,550.10	219,675,550.10	219,675,550.10
Change in net asset/equity for 2011			
Gain on property revaluation	-	-	-
Loss on revaluation of investments	-	-	-
Exchange differences on translating foreign operations	-	-	-
Net of revenue recognized directly in net asset/equity	180,566,267.19	180,566,267.19	180,566,267.19
Surplus/ (deficit) for the period	(19,266,419.77)	(19,266,419.77)	(19,266,419.77)
Total recognized revenue and expenses for the period			
Balance at December 31, 2011 carried forward	380,975,397.52	380,975,397.52	380,975,397.52

	Accumulated Surplus or Deficit (Restated) Rs	Total Rs	Total net Assets / Equity Rs
Balance as at December 31, 2011	380,975,397.52	380,975,397.52	380,975,397.52
Adjustment to opening balance	-	-	-
Changes in accounting policy	-	-	-
	380,975,397.52	380,975,397.52	380,975,397.52
Change in net asset/equity for 2012			
Gain on property revaluation	-	-	-
Loss on revaluation of investments	-	-	-
Exchange differences on translating foreign operations	-	-	-
Net of revenue recognized directly in net asset/equity	173,226,779.58	173,226,779.58	173,226,779.58
Surplus/ (deficit) for the period	(21,503,209.88)	(21,503,209.88)	(21,503,209.88)
Total recognized revenue and expenses for the period	-	-	-
Balance at December 31, 2012 carried forward	532,698,967.22	532,698,967.22	532,698,967.22

Notes from the pages 05 to 18 form an integral part of these financial statements. Figures in brackets indicate deductions

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL -SRI LANKA

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2012

1. CORPORATE INFORMATION

1.1 GENERAL

National Research Council ("NRC") is established as a special agency by a Presidential Directive under the article 33 of the constitution by the extra ordinary gazette notification No. 1514/28.

The National Research Council is a public organization located at 380/97, Baudhdhaloka Mawatha, Colombo 07.

The financial statements are prepared for a common financial year, which ends on 31st December.

1.2 THE PRINCIPAL ACTIVITIES AND NATURE OF OPERATIONS

The functions of NRC set out in the Presidential Directive under the article 33 of the constitution by the extra ordinary gazette notification No. 1514/28. The following main programs carried out during the year to fulfil the stated objectives.

Research Grants & PhD Program

- Funding for research in public R & D institutions and post graduate fellowships.

Presidential Awards for Scientific Research

- Recognition to researchers and research institutions of Sri Lanka

Private Public Partnerships Program

- Funding for research needs of private sector/public in a combined approach

Other Development Programs

- Other programs necessary to fulfill the objectives of NRC

1.3 DATE FOR AUTHORIZATION FOR ISSUE

The Financial Statements of National Research Council, for the year ended 31st December 2012 were authorized for issue by the Board of Council Members on 2013

2. ACCOUNTING POLICIES

2.1 BASIS FOR PREPARATION

The financial statements have been prepared in accordance with Sri Lanka Accounting Standards Comprising SLFRS and LKAS (hereafter "SLFRS") as issued by the Institute of Chartered Accountants of Sri Lanka.

For all periods up to and including year ended 31st December 2012, NRC prepared its financial statements in accordance with generally accepted accounting principles and practices

These financial statements year ended 31st December 2011, are the first, NRC has prepared in accordance with SLFRS financial statements (refer to Note 3 for explanation for transition)

Subject to certain transitional elections and exceptions, the group has consistently applied the accounting policies used in the preparation of its opening SLFRS statement of financial position through all periods presented, as if these policies had always been in effect.

2.1.1 STATEMENT OF COMPLIANCE

The financial statements of the NRC have been prepared in accordance with the Sri Lanka Accounting Standards (SLFRS) as issued by the Institute of the Chartered accountants of Sri Lanka.

2.1.2 GOING CONCERN

The Council of NRC is satisfied that the NRC has recourse to continue in its activities for the foreseeable future. Furthermore, the Council is not aware of any material uncertainty.

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL -SRI LANKA

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2012

2.1.3 BASIS OF MEASUREMENT

The financial statements of NRC have been prepared on the basis of historical costs and no adjustment has been made for inflationary factors affecting these accounts.

2.1.4 FUNCTIONAL AND PRESENTATION CURRENCY

The financial statements are presented in Sri Lankan Rupee, is the functional currency of NRC.

All financial information presented in Sri Lankan rupee has been given to the nearest cent, unless stated otherwise.

2.4 SIGNIFICANT ACCOUNTING JUDGMENTS, ESTIMATES AND ASSUMPTIONS

The financial statements are sensitive to assumptions and estimates made in measuring certain carrying amounts represented in the statements of financial position and amounts charges to the statement of financial performance. These could result in significant risk of casing material adjustments to the carrying amounts of assets and liabilities which are disclosed in the relevant notes to the financial statements.

The presentation of financial statements in conformity with SLFRS requires managements to make judgments, estimates, and assumptions that affect the application of accounting policies and reported amounts of assets, liabilities, income and expenses. Judgments and estimates are based on historical experience and other factors, including expectations that are believed to be reasonable under circumstances. Hence actual experience and results may differ from these judgments and estimates.

Estimates and underlying assumptions are reviewed at an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised if the revision affects only that period and any future periods affected

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accounting policies set out below are consistent with those used in previous year.

Certain comparative information has been reclassified wherever necessary to conform to the current year's presentation.

3.1 FOREIGN CURRENCY TRANSLATION

All foreign exchange transactions have been converted in to functional currency at the rates of exchange prevailing at the date of the transactions.

3.2 ASSETS AND BASES OF THEIR VALUATION.

Assets classified as current assets on the balance sheet are cash and bank balances and those which are expected to be realized in cash during the normal operating cycle or within one year from the reporting date, whichever is shorter.

3.2.1 PROPERTY PLANT AND EQUIPMENT

3.2.1.1 INITIAL RECOGNITION

All Items of property plant and equipment are measured at cost less accumulated depreciation. They are initially recognize at cost. The cost of property plant and equipment includes the cost of purchase or construction together with any incidental expenses that are directly attributable to the acquisition or construction of assets and to bringing any assets to a working condition for its intended use, and cost of dismantling and removing the items and restoring the site on which they are located. Purchased software that is integral to the functionality of related equipment is capitalized as a part of that equipment. When parts of an item of property plant and equipment have different useful lives, they are accounted for as separate items of property plant and equipment.

Property plant and equipment purchased from NRC research grants are identified as part of property

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL -SRI LANKA

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2012

plant and equipment of NRC temporarily until they transferred or disposed.

The accumulated depreciation is provided for, on the basis specified in 3.2.1.3 below

3.2.1.2. SUBSEQUENT EXPENDITURE

The cost of replacing part of an item of property, plant & equipment is recognized in the carrying amount of the item if it is probable that the future economic benefits are embodied within the part will flow to the NRC/NRC grants and its cost can be measured reliably. This includes major inspection and overhaul expenditure and accounted separately.

The cost to day to day servicing of property plant and equipment are recognized in profit and loss as incurred.

All other expenses include repairs or maintenance of property, plant and equipment in order to restore or maintain the future economic benefits expected from the originally assessed standard of performance, is recognized as an expense when incurred.

3.2.1.3 DEPRECIATION

The depreciation is recognized in profit and loss calculated on the cost of fixed assets in order to write off such cost over the estimated useful life provided.

The depreciation is recognized in profit and loss on straight line basis over estimated useful lives of assets from the date on which they are available to use.

During the year depreciation policy has been changed and retrospectively adjusted and specified in 3.9 below.

The estimated useful lives and annual rates of depreciation generally used by NRC for current and comparative periods are as follows:

Sundry assets	2 years	50.00%
Cutlery & Crockery	3 years	33.33%
Room linen	3 years	33.33%
Safety Equipment	3 years	33.33%

Library books	3 years	33.33%
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Computers, Printers, and Accessories	5 years	20 %
Calculators & Clocks	5 years	20 %
Power supply equipment	5 years	20 %
Brass item	5 years	20 %
Motor vehicles	5 years	20 %
Air conditioners/Safes	10 years	10 %
Building	10 years	10 %
Expandable assets	10 years	10 %
Machinery & Tools	10 years	10 %
Office equipment	10 years	10 %
Refrigerators	10 years	10 %
Internet installation	0	

The estimated useful values of property plant and equipment purchased from research grants are depreciated until they are transferred or disposed based on following useful lives and percentages for current and comparative periods.

Lab equipment (Section 1)	10 years	10 %
Lab equipment (Section 2)	5 years	20%

Depreciation methods, useful lives and residual values are reassessed at the reporting date.

3.2.1.2. DERECOGNITION

The carrying amount of the property plant and equipment's or any subsequent expenditure is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any Gains and losses arising of such de recognition of assets (calculated as the difference between the net disposal proceeds and carrying amount of the assets) are recognized in profit and losses (in the statements of financial performance) in the year the assets are derecognized and gains are not classified as revenue.

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL -SRI LANKA

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2012

3.2.2. INTANGIBLE ASSETS AND AMORTIZATION

An intangible asset is recognized if it is probable that future economic benefits that are attributable to the assets will fall to the NRC and the cost of the asset can be measured reliably. These assets are stated in the in balance sheet at cost less accumulated amortization. Amortization is recognized in profit and loss on straight line basis over the estimated useful lives of intangible assets from the date on which they are available to use.

3.2.3. INVENTORIES

Inventories are measured at historical cost basis.

3.2.4. TRADE AND OTHER RECEIVABLES

Trade and other receivables are stated at their estimated realizable amounts.

3.2.5. NRC GRANTS

NRC grants represent the total amount accumulated over the years of awarded research grants.

Expenditure incurred from NRC grants are recognized as an expense in the income statement in the period in which they are incurred, except to the extent that they are directly attributable to acquisition, construction or production of assets, in which case they are identified as part of property plant and equipment until they are transferred or disposed

The funds received for research grants are capitalized directly to accumulated funds and the expenditure incurred except to acquisition, construction or production of assets are recognized in the income statement in year in which the expenses are incurred.

The expenditure from NRC grants identify as expenses incurred are recognized as part of recurrent receipt in income in the income statement in the respective periods in which the expenses are recognized.

3.3 LIABILITIES

Liabilities classified as current liabilities on the balance sheet are those which fall due to payments on demand or within one year from the reporting date. Noncurrent liabilities are those balances fall due for payment later than one year from the reporting date.

All known liabilities as at the date of the Balance Sheet have been accounted for in preparing the financial statements.

3.3.1. EMPLOYEE PROVIDENT FUND AND EMPLOYEE TRUST FUND

Employees are eligible for Employees Provident fund contributions and Employees trust fund contributions in line with respective statues and regulations. These are recognized as an expense in the statement of financial performance as incurred.

EPF deductions from the gross emoluments are as follows:

Employer	12%
Employee	8%

ETF deduction from the gross emoluments is as follows:

Employer	3%
----------	----

3.3.2. TRADE AND OTHER PAYABLES

Trade and other payables are stated at their cost.

3.4. STATEMENT OF FINANCIAL PREFORMANCE

For the purpose of presentation of the statement of financial performance (statement of income), the nature of expenses method is adopted.

3.4.1 REVENUE

Government Grants received during the year under review towards recurrent and capital expenditure of NRC administration have been recognized to income statement and accumulated funds respectively. The expenditure from NRC grants identify as expenses incurred are recognized as part of recurrent receipt

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL -SRI LANKA

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2012

in income in the income statement in the respective periods in which the expenses are recognized.

Gains and losses on disposal or transfer of items of property plant and equipment are determined by comparing the net sales or transfer proceeds with carrying amounts of property, plant and equipment and are recognized in profit and loss.

3.4.2. EXPENDITURE

All expenditure incurred NRC operations has been charged to income in arriving at the profit /loss of the year. Repairs and renewals are charges to profit and loss in the year in which the expenditure is incurred. Expenditure from NRC grants is also recognized as research and development expense in the income statement in the period in which they are incurred, except to the extent that they are directly attributable to acquisition, construction or production of assets, in which case they are identified as part of property plant and equipment.

Finance income and expenses comprises of gains and losses of translation of foreign currency are recognized in profit and loss as it occurs.

Rental income is recognized on an accrual basis.

Other income is recognized on an accrual basis.

statements in accordance with generally accepted accounting principles and practices.

These financial statements have been prepared in accordance with the accounting policies described in Note 2. In preparing these financial statements, the NRC has applied the requirements of SLFRS1 –First time adoption of Sri Lanka Accounting standards, including retrospective application of SLFRS effective, unless otherwise indicated.

3.5. EVENTS AFTER THE BALANCE SHEET DATE

All material post balance sheet events have been considered and where appropriate adjustments or disclosures have been made in the respective notes in the financial statements.

3.6 CASH FLOW STATEMENT

Cash flow statement has been prepared using the direct method.

3.7 FIRST TIME ADOPTION OF SLFRS

The NRC adopted Sri Lanka Accounting standards comprising LKAS and SLFRS ("SLFRS") which were effective from 01st January 2012. Prior to the adoption of SLFRS, the NRC prepared its financial

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL -SRI LANKA

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2012

3.7.1 First time adoption 2010

	2010 as per GAAPP*	NRC measurement/ reclassification**	SLFRS As at 31 st December 2010
Notes	Rs		
ASSETS			
Current assets			
Cash and cash equivalents	1,819,173.90	-	1,819,173.90
Receivables	241,742.00	-	241,742.00
Inventories	-	-	-
Prepayments	-	-	-
NRC grants	114,996,533.07	-	114,996,533.07
Other current assets	-	-	-
	117,057,448.97	-	117,057,448.97
Non-current assets			
Receivables	-	-	-
Investments in associates	-	-	-
Other financial assets	130,000.00	-	130,000.00
Property, plant and equipment	109,726,350.68	(7,182,442.32)	102,543,908.36
Land and buildings	-	-	-
Intangible assets	-	-	-
Other non-financial assets	-	-	-
	109,856,350.68	(7,182,442.32)	102,673,908.36
Total assets	226,913,799.65	(7,182,442.32)	219,731,357.33
LIABILITIES			
Current liabilities			
Payables	55,807.23	-	55,807.23
	55,807.23	-	55,807.23
Non-current liabilities			
Payables	-	-	-
	-	-	-
Total liabilities	55,807.23	-	55,807.23
Net assets	226,857,992.42	(7,182,442.32)	219,675,550.10
NET ASSETS/EQUITY			
Capital contributed by; other government entities	-	-	-
Reserves	-	-	-
Accumulated surpluses/(deficits)	226,857,992.42	(7,182,442.32)	219,675,550.10
Minority interest	-	-	-
Total net assets/equity	226,857,992.42	(7,182,442.32)	219,675,550.10

*GAAPP-Generally accepted accounting principles and practices

**includes change in Accounting policy and Correction of Errors

3.7.2 First time adoption 2011

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL -SRI LANKA

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2012

	Notes	2011 as per GAAPP Rs	NRC measurement/ reclassification**	SLFRS As at 31 st December 2011
ASSETS				
Current assets				
Cash and cash equivalents		1,122,565.99	-	1,122,565.99
Receivables		150,896.00	-	150,896.00
Inventories		-	-	-
Prepayments		-	-	-
NRC grants		268,113,399.97	11,200.00	268,124,599.97
Other current assets		-	-	-
		269,386,861.96	11,200.00	269,398,061.96
Non-current assets				
Receivables		-	-	-
Investments in associates		-	-	-
Other financial assets		105,000.00	-	105,000.00
Property, plant and equipment		119,496,763.03	(7,976,882.09)	111,519,880.94
Land and buildings		-	-	-
Intangible assets		-	-	-
Other non-financial assets		-	-	-
		119,601,763.03	(7,965,682.09)	111,624,880.94
Total assets		388,988,624.99	(7,965,682.09)	381,022,942.90
LIABILITIES				
Current liabilities				
Payables		47,545.38	-	47,545.38
		47,545.38	-	47,545.38
Non-current liabilities				
Payables		-	-	-
		47,545.38	-	47,545.38
Total liabilities		47,545.38	-	47,545.38
Net assets		388,941,079.61	(7,965,682.09)	380,975,397.52
NET ASSETS/EQUITY				
Capital contributed by; other government entities		-	-	-
Reserves		-	-	-
Accumulated surpluses/(deficits)		388,941,079.61	(7,965,682.09)	380,975,397.52
Minority interest		-	-	-
Total net assets/equity		388,941,079.61	(7,965,682.09)	380,975,397.52

*GAAPP-Generally accepted accounting principles and practices

**includes change in Accounting policy and Correction of Errors

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL -SRI LANKA

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2012

3.7.3 First time adoption 2012

	Notes	2011 Rs	NRC measurement /reclassification**	SLFRS 2011 Rs.
Revenue				
Recurrent receipts – NRC Administration		6,314,000.00	-	6,314,000.00
Recurrent receipts – Research and development		19,476,733.81	11,200.00	19,465,533.81
Other receipts		33,810.00	-	33,810.00
Total revenue		25,824,543.81	11,200.00	25,813,343.81
Expenses				
Personal emoluments		1,737,859.80	-	1,737,859.80
Research & development		19,476,733.81	11,200.00	19,465,533.81
Supplies and consumables		2,250,603.59	-	2,250,603.59
Depreciation and amortization expense –NRC Grants		15,057,436.03	1,096,111.08	16,153,547.11
Depreciation – NRC office equipment		343,425.17	21,506.80	364,931.97
Other expenses		5,093,893.05	-	5,093,893.05
Finance costs		13,394.25	-	13,394.25
Total expenses		43,973,345.70	1,128,817.88	45,079,763.58
Share of surplus of associate's		-	-	-
Surplus/(deficit) for the period		(18,148,801.89)	1,117,617.88	(19,266,419.77)
Attributable to:				
Owners of controlling entity		(18,148,801.89)	1,117,617.88	(19,266,419.77)
Minority interest		-	-	-
		(18,148,801.89)	1,117,617.88	(19,266,419.77)

Notes to the statements of financial performance for the year ended 31st December 2013

- A. On adoption of SLFRS, NRC has corrected the misclassification of expense for patent filing as a property plant and equipment.
- B. The net effect of adoption of SLFRS as of the transition date of 31st December 2010 is recorded through "Accumulated fund".

**includes change in Accounting policy and Correction of Errors

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL -SRI LANKA

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2012

3.8 PROPERTY, PLANT AND EQUIPMENT

3.8.1. GROSS CARRYING AMOUNTS (Before Restatement)

	Balance as at 31.12.2010 Rs.	Additions /Transfers	Disposals/ Transfers**	Balance as at 31.12.2011 Rs.	Additions /Transfers	Disposals/ Transfers*	Balance as at 31.12.2012 Rs.
Cost							
NRC Office Assets	6,436,703.28	781,818.77	-	7,218,522.05	1,563,216.98	-	8,781,739.03
Grants' Major Equipment	151,297,576.72	25,880,990.95	5,288,484.15	171,890,083.52	83,184,056.84	578,850.00	254,495,290.36
Grants' Minor Equipment	7,596,147.97	1,688,922.83	1,102,659.00	8,182,411.80	7,976,708.70	-	16,159,120.50
Total - Assets	165,330,427.97	28,351,732.55	6,391,143.15	187,291,017.37	92,723,982.52	578,850.00	279,436,149.89

3.8.2. DEPRECIATION (Before Restatement)

	Balance as at 31.12.2010 Rs.	Previous Years Adjustment	Annual Depreciation	Disposals/ Transfers**	Balance as at 31.12.2011 Rs.	Change in Accounting policy ***	Additions /Transfers	Disposals/ Transfers	Balance as at 31.12.2012 Rs.
Less : Provision for Depreciation									
NRC Office Assets	4,996,536.60	-	343,425.17	-	5,339,961.77	151,838.75	-	-	5,933,630.07
Grants' Major Equipment	47,965,362.09	100,431.11	13,576,641.55	2,457,361.76	59,185,072.99	6,292,949.04	19,771,430.14	-	85,249,452.18
Grants' Minor Equipment	2,642,178.60	-	1,480,794.48	853,753.50	3,269,219.58	953,244.30	2,174,801.60	-	6,397,265.48
Total - Provision for Depreciation	55,604,077.29	100,431.11	15,400,861.20	3,311,115.26	67,794,254.34	7,398,032.09	22,388,061.29	-	97,580,347.73

* Correction of misstatement as assets valued to Rs. 578,850.00

**this includes disposal loss of Rs. 2,889,101.89 & correction of misstatement as assets valued to Rs. 190,926.00(net)

***adjustment to previous years depreciation due to the change in accounting policy of depreciation.

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL -SRI LANKA

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2012

3.8.1. GROSS CARRYING AMOUNTS (Restated)

	Balance as at 31.12.2010 (restated) Rs.	Additions /Transfers	Disposals/ Transfers**	Balance as at 31.12.2011 Rs.	Additions /Transfers	Disposals/ Transfers*	Balance as at 31.12.2012 Rs.
Cost							
NRC Office Assets	6,436,703.28	781,818.77	-	7,218,522.05	1,563,216.98	-	8,781,739.03
Grants' Major Equipment	150,400,516.72	25,880,990.95	4,970,274.15	171,311,233.52	83,184,056.84	-	254,495,290.36
Grants' Minor Equipment	7,596,147.97	1,688,922.83	1,102,659.00	8,182,411.80	7,976,708.70	-	16,159,120.50
Total - Assets	164,433,367.97	28,351,732.55	6,072,933.15	186,712,167.38	92,723,982.52	-	279,436,149.89

3.8.2. DEPRECIATION (Restated)

	Balance as at 31.12.2010 Rs.	Annual Depreciation	Disposals/ Transfers**	Balance as at 31.12.2011 Rs.	Additions /Transfers	Disposals/ Transfers	Balance as at 31.12.2012 Rs.
Less : Provision for Depreciation							
NRC Office Assets	5,126,868.55	364,931.97	-	5,491,800.52	441,829.55	-	5,933,630.07
Grants' Major Equipment	53,342,102.53	14,465,997.27	2,330,077.76	65,478,022.04	19,771,430.14	-	85,249,452.18
Grants' Minor Equipment	3,420,488.53	1,655,728.85	853,753.50	4,222,463.88	2,174,801.60	-	6,397,265.49
Total - Provision for Depreciation	61,889,459.61	16,486,658.09	3,183,831.26	75,192,286.44	22,388,061.29	-	97,580,347.73

**Disposal loss is Rs. 2,889,101.89 (Rs. 60,072,933.15- Rs. 3,183,831.26)

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL - SRI LANKA

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2012

3.8.3 NET BOOK VALUES OF PPE (Before Restatement)

	2012	2011	As at 31.12.2010
	Rs.	Rs.	Rs.
NRC Office Assets	2,848,108.96	1,878,560.28	1,440,166.68
Grants' Major Equipment	169,245,838.19	112,705,010.53	103,332,214.63
Grants' Minor Equipment	9,761,855.01	4,913,192.22	4,953,969.37
Total	181,855,802.16	119,496,763.03	109,726,350.68

3.8.4 NET BOOK VALUES OF PPE (Restated)

	2012	2011 (Restated)	As at 31.12.2010
	Rs.	Rs.	(Restated) Rs.
NRC Office Assets	2,848,108.96	1,726,721.53	1,309,834.73
Grants' Major Equipment	169,245,838.18	105,833,211.49	97,058,414.19
Grants' Minor Equipment	9,761,855.02	3,959,947.92	4,175,659.44
Total	181,855,802.16	111,519,880.94	102,543,908.36

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL -SRI LANKA

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2012

3.9 CHANGE IN ACCOUNTING POLICY

During the year 2012, NRC has changed the accounting policy for depreciation of Property Plant and Equipment. The changes to accounting policy was made due to in line with new standards.

The previous policy of depreciation has changed from “The depreciation is recognized in profit and loss calculated on the cost of fixed assets in order to write off such cost over the estimated useful life provided Full year’s depreciation in the year of disposal while no depreciation is provided in the year of purchase.” to “the depreciation is recognized in profit and loss on straight line basis over estimated useful lives of assets from the date on which they are available to use.”

The effect of restatement to the financial statements due to retrospective adjustment is summarized below. There is no effect in 2012.

	2012	2011	2010
Increase (decrease) in annual depreciation	0	1,117,617.88	1,608,808.27
Increase (decrease) in total expense	0	1,117,617.88	1,608,808.27
Increase (decrease) in Net Profit for the Period	0	(1,117,617.88)	(1,608,808.27)
Increase (decrease) in Net book Value of PPE	0	(7,398,032.09)	(6,280,414,.21)
Increase (decrease) in Net Assets	0	(7,398,032.09)	(6,280,414,.21)

3.10 ERRORS AND CORRECTIONS

During the year 2012, an error of mis-identification of a Patent Expense of Rs. 578,850.00 incorrectly included in PPE has discovered and the financial statement has been restated to correct this error. The depreciation has not been made to this item as per previous accounting policy. Also a misidentification of an expense item in year 2011 of Rs. 11,200.00 is also identified and the financial statements were retrospectively restated to correct the error.

During the year 2012, an error of mis-identification of a Patent Expense of Rs. 578,850.00 incorrectly included in PPE has discovered and the financial statement has been restated to correct this error.

The effect of restatements to the financial statements due to retrospective adjustment due to the errors correction is summarized below. There is no effect in 2012.

	2012	2011	2010
Increase (decrease) in total expenses	0	11,200.00	11,200.00
Increase (decrease) in total income	0	11,200.00	11,200.00
Increase (decrease) in Net Profit for the Period	0	0	0
Increase (decrease) in Grants	0	11,200.00	0
Increase (decrease) in Accumulated Fund	0	(567,650.00)	(578,850.00)

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL - SRI LANKA

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2012

Increase (decrease) in Net Assets	0	(567,650.00)	(578,850.00)
Increase (decrease) in PPE (Net Book Value)	0	(578,850.00)	(578,850.00)

The opening balance of 2010.12.31 also have been restated after correcting errors occurred in 2011 and above.

3.11 RECURRENT RECEIPTS

	2012 Rs.	2011 (Restated) Rs.
3.11 A RESEARCH & DEVELOPMENT		
Grantees' Consumable	20,772,469.42	14,460,141.73
Grantees' Documentation	-	-
Grantees' PhD Stipend	24,962,469.50	4,071,126.07
Grants & Programs Administration	535,056.00	894,953.45
PASR Prog . Expenses	971,944.00	
Grantees' Travelling	471,281.50	39,312.56
.	47,713,220.42	19,465,533.81
3.11 B TREASURY RECURRENT RELEASE		
January to December	9,189,900.00	6,314,000.00
Funds Returned to Treasury	-	-
	9,189,900.00	6,314,000.00
Total Amount (3.11A + 3.11B)	56,903,120.42	25,779,533.81

3.12 OTHER FINANCIAL ASSETS

	2012 Rs.	2011(Restated) Rs.
Building Rental Deposit	465,000.00	90,000.00
Telecommunication Deposit	15,000.00	15,000.00
Transport Deposit	-	-
Total	480,000.00	105,000.00

3.13 PREPAYMENTS

	2012 Rs.	2011(Restated) Rs.
Building Rent	250,000.00	-
Total	250,000.00	-

FINANCIAL STATEMENTS FOR YEAR 2012

NATIONAL RESEARCH COUNCIL -SRI LANKA

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2012

3.14 PAYABLES

	2012	2011 (Restated)
	Rs.	Rs.
Telecommunication Payable	22,757.66	31,876.24
Electricity Charges Payable	36,709.74	15,151.70
Water Charges Payable	517.44	517.44
Audit Fee Payable	32,592.00	-
Other Payables	401,691.92	-
EPF Payable	-	-
ETF Payable	-	-
Total	494,268.76	47,545.38

3.15 OTHER EXPENSES

Other expenses includes Audit Fee of Rs. 32,592.00

Auditors General's Report



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கணக்காய்வாளர் தலைமை அறிபதி திணைக்களம்
AUDITOR GENERAL'S DEPARTMENT



මගේ අංකය } LS/F/NRC/
எனது இல. } FA/2012
My No }

ඔබේ අංකය }
உமது இல }
Your No. }

දිනය } 09 October 2013
திகதி }
Date }

The Chairman
National Research Council

Report of the Auditor General on the Financial Statements of the National Research Council for the year ended 31 December 2012 in terms of Section 14(2)(c) of the Finance Act. No. 38 of 1971.

The audit of financial statements of the National Research Council for the year ended 31 December 2012 comprising the statement of financial position as at 31 December 2012 and the comprehensive income statement, statement of changes in equity and cash flow statement for the year then ended and a summary of significant accounting policies and other explanatory information was carried out under my direction in pursuance of provisions in Article 154(1) of the Constitution of the Democratic Socialist Republic of Sri Lanka read in conjunction with Section 13(1) of the Finance Act, No. 38 of 1971 and Section 40 of the Science and Technology Development Act, No. 11 of 1994. My comments and observations which I consider should be published with the Annual Report of the Council in terms of Section 14(2)(c) of the Finance Act appear in this report. A detailed Report in terms of Section 13(7)(a) of the Finance Act was furnished to the Chairman of the Council on 26 June 2013.

1:2 Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Generally Accepted Accounting Principles and for such internal control as the management determines is necessary to enable the preparation of financial statements that are free from material misstatements, whether due to fraud or error.

අංක 306/72 පොල්දූව පාර,
பத்தரமுல்லை இலங்கை

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இல. 306/72, பொல்துவ வீதி,
பத்தரமுல்லை இலங்கை

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Fax No }

2887223

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#- மெயில் }
E-mail }

oaggov@sltnet.lk

1:3 Auditor's Responsibility

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with Sri Lanka Auditing Standards. Those Standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgements, including the assessment of the risks of material misstatements of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Council's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Council's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of financial statements. Sub - sections (3) and (4) of Section 13 of the Finance Act, No. 38 of 1971 give discretionary powers to the Auditor General to determine the scope and extent of the audit.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my qualified audit opinion.

1:4 Basis for Qualified Audit Opinion

My opinion is qualified based on the matters described in paragraph 2.2 of this report.

2. Financial Statements

2:1 Qualified Opinion

In my opinion, except for the effects of the matters described in paragraph 2:2 of this report, the financial statements give a true and fair view of the financial position of the National Research Council as at 31 December 2012 and its financial performance and cash flows for the year then ended in accordance with Generally Accepted Accounting Principles.

2:2 Comments on Financial Statements

2:2:1 Accounts Receivable and Payable

Action had not been taken for the recovery of the deposit of Rs.90,000 made for the building taken on lease previously for the Research Council. The sum of Rs.24,143 payable in respect of the telephone, electricity and water charges of that building had not been settled.

2:2:2 Non-compliance with Laws, Rules, Regulations and Management Decisions

The following non-compliances were observed.

Reference to Laws, Rules, Regulations, etc.	Non-compliance
(a) Section 14 of the Finance Act, No. 38 of 1971	The Annual Report for the year 2011 had not been tabled.
(b) Gazette No. 1514/28 of 15 September 2007.	The Annual Presidential Awards for successful Researches and Modernizations had not been held from the year 2007. But a sum of Rs.971,944 had been spent in that connection.

(c) Financial Regulation 154

Separate distribution lists had not been maintained for the laptop computers and mobile phones issued personally to the officers of the Research Council.

(b) Section 4.2(c) of the National Procurement Guidelines No. 08 of 25 January 2006.

A Procurement Plan in respect of the expected purchases of goods and services for the ensuing year had not been prepared and approved.

3. Financial Review

3:1 Financial Results

According to the financial statements presented, the working of the Council for the year ended 31 December 2012 had resulted in a deficit of Rs.21,470,618 as compared with the corresponding deficit of Rs.18,148,802 for the preceding year, thus indicating a deterioration of Rs.3,321,816 in the financial results. The main reason for the deterioration had been the increase of the total expenditure by a sum of Rs. 35 million as compared with the increase of the total income by a sum of Rs. 32 million.

4. Operating Review

4:1 Performance

4:1:1 Physical Performance

The physical performance of the years 2010, 2011 and 2012 is given below.

Research Grants	2012	2011	2010
-----	-----	-----	-----
Applications received	152	199	74
Grants given	58	51	19
Master of Philosophy Students	67	67	06
Holding the Presidential Awards Ceremony	Completion of Selection of Researchers for the awards for the years 2007, 2008 and 2009.	Selection of Researchers for the awards for the years 2007, 2008 and 2009.	Awards made to 484 Scientists for the years 2003, 2004, 2005 and 2006.

4:1:2 Operating Inefficiencies

The National Research Council had granted a sum of Rs.702,000,000 for 206 researches during the years 2006 to 2012. Details appear below.

Year	Amount granted	Number of Researches Granted	Number of Researches Completed	Number Abandoned	Number of Successful Researches	Number of Publications Released
-----	-----	-----	-----	-----	-----	-----
2006	150,000,000	35	30	05	28	51
2007		14	10	04	08	09
2008		05	04	--	04	04
2009	72,000,000	24	09	02	03	08
2010	60,000,000	19	03	01	02	01
2011	200,000,000	51	--	03	--	--
2012	220,000,000	58	--	--	--	--
	-----	-----	-----	-----	-----	-----
	702,000,000	206	56	15	45	73
	=====	=====	=====	=====	=====	=====

The matters observed in this connection are given below.

- (i) Out of the 206 research grants made during the period from the year 2006 up to 31 December 2012 only 56 or 27 per cent had been completed.

- (ii) The number of researches abandoned had been 15 and that represented 7 per cent.
- (iii) Out of the 56 researches completed, a publication along with the final report had been presented only in respect of the 45 completed researches.
- (iv) Out of the 56 researches completed only 45 researches had been identified as successful researches.
- (v) It is observed that the money granted for researches does not receive value for money due to the final results of researches being limited to research publications and due to action not taken to obtain patent rights.

4:2 Management Inefficiencies

The following observations are made.

- (a) The action on handing of the fixed assets and equipment valued at Rs.127,354,214 purchased for the research projects commenced and completed during the years 1999 to 2006 to those institutions had not been completed and had been shown in the financial statements as the assets of the Research Council. Certain assets had been fully depreciated and the depreciation of the those assets for the year under review amounted to Rs.11,410,417.
- (b) As the periods of completion of the following projects had expired the Bank Accounts had also been closed down. Nevertheless, evidence of completion of the researches and presentation of final reports was not available even by May 2013.

Project Number	Date of Commencement of the Project	Scheduled Date of Completion of the Project	Value of Project Grants
-----	-----	-----	-----
			Rs.
06-22	2008.04.01	2011.09.30	2,299,611
07-39	2009.04.30	2012.04.29	4,250,000
08-29	2009.12.01	2012.12.20	705,321

4:3 Operating Inefficiencies

The following observations are made.

- (a) Sixteen researchers who had obtained research grants amounting to Rs.32,859,458 had abandoned their research projects and the money given for the projects had been idling in the Bank Current Accounts for 01 to 04 years. No course of action whatsoever had been taken against the researchers who abandoned these projects.
- (b) Even though the research equipment valued at Rs.20,890,325 from the research grants given in the years 1999/2000 had been transferred to other research grants, the Inventory Registers had not been updated.

4:4 Idle and Underutilised Assets

The following observations are made.

- (a) The equipment purchased under the following research grants below had not been used over long periods and had been idling.

Grant Number	Value of Equipment	Idle Amount	Idle Period	Transfers to other Projects
-----	-----	-----	-----	-----
	Rs.	Rs.		Rs.
05-19	1,199,700	362,750	06 years	836,950
05-56	1,677,641	1,677,641	06 years	--
05-18	439,800	85,008	06 years	--

- (b) A sum of Rs.215,615,052 had been deposited in Current Accounts in the year under review for 58 research projects and only a sum of Rs.10,004,194 had been used for research work up to 31 December 2012. It was observed that due to the present system of giving money for research grants, Government Funds remain idle in different Bank Accounts over long periods. Research grants amounting to Rs.16,818,386 given to 04 researchers in April and July 2012 had not been utilized even by 31 December 2012.

4:5 Identified Losses

Even though an equipment purchased for a research project had been returned to the supplier in the year 2009 as it was not working, a sum of Rs.150,869 recoverable from that institution remains without being recovered over a period exceeding 04 years.

5. Accountability and Good Governance

5:1 Meetings of the Board of Directors

Four meetings only had been held in the year under review. The Board of Directors of the National Research Council comprises 15 members and the participation of members for meetings was not adequate. Five members had not attended any of the meetings.

5:2 Action Plan

The following observations are made.

- (a) The programmes, projects and activities introduced for the achievement of the different objectives shown in the Action Plan prepared by the Council had not been clearly stated. The physical targets for achievement in each quarter had not been shown for the timely review of the Action Plan.
- (b) The total annual expenditure of the Council according to the budget amounted to Rs. 253 million and the total expenditure of the Action Plan had been estimated at Rs.231 million.

5:3 Audit Committee

A formal Audit Committee had not been appointed in terms of Section 7.4.1 of the Public Enterprises Circular No. PED/12 of 02 June 2003. One meeting had been held for the year under review with the participation of 03 members of the Board of Directors.

6. Systems and Controls

Special attention is needed in respect of the following areas of control.

- (a) Accounting
- (b) Regulation of Research Grants
- (c) Fixed Assets Control

H.A.S. Samaraweera
Auditor General

-/dk

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