

The left side of the page features a decorative graphic consisting of two vertical bars and two horizontal bars. The vertical bars are positioned on the far left, with the leftmost one in a dark olive green and the one next to it in a light lime green. The horizontal bars are positioned to the right of the vertical bars, with the top one in a dark blue and the bottom one in a light blue. The text is centered in the white space to the right of these bars.

# **ANNUAL REPORT**

## **2013**

**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

I am pleased to submit for tabling in Parliament, the Annual report of the National Research Council (NRC) of Sri Lanka for the Year 2013, the apex institution for funding scientific research in state sector institutions in Sri Lanka. The National Research Council was established under constitutional powers of His Excellence President Mahinda Rajapakse to fulfill his Mahinda Chinthana "Idiridekma" development plan through Research.

During the period, H. E. the President has changed the composition of the NRC to be make it more widely representative, and appointed me as Chairman.

Ten areas have been identified by the Ministry of Technology and Research as thrust areas of research, and in line with these areas the new NRC Council has introduced the target oriented multi-disciplinary research project programme. These projects provide up to Rs. 50 million, over a five year period to groups of scientists, which is considerably more than the individual investigator driven projects that we fund. The programme was initiated with several panel discussions and meetings with Sri Lankan scientists requesting them to collaborate with each other in order to solve, through research, major issues that prevail in our country.

The Mahinda Chinthana development framework also focuses on supporting private and public sector partnerships to accelerate the economic development through research, which we carry out through our ongoing Public Private Partnership programme.

During the past few years, we have been able to assist in developing infrastructure in our universities and public sector research institutions through investigator driven research grants. This has led to enhancing research capacity in these institutions. Now the focus has shifted slightly towards building research partnerships between the private and public sector and the encouraging scientists to collaborate through our target oriented multi-disciplinary research projects.

I am deeply grateful to the Minister for Technology and Research Hon. Patali Champika Ranawaka and the Secretary to the Ministry Mrs. Dhara Wijayathilake, for the support they have extended, and continue to extend, to the NRC.

Prof. H. J. De Silva.  
Chairman

## COUNCIL

The council of the NRC is changed during the year by a presidential directive.

### **Council from 2013.07.07 to 2013.12.31**

Chairman

1. Prof. Hithanadura Janaka de Silva Esquire

Other Members

2. Madam Prof. Kamini Nirmala Mendis
3. Prof. Ananda Rajitha Wickremasinghe Esquire
4. Madam Prof. Hema Malinie Kumbalgoda Kankanam Pathirana
5. Madam Prof. Hemanthi Ranasinghe
6. Madam Prof. Wijerupage Sandhya Sulochana Wijesundera
7. Prof. Lakshman Lloyd Ratnayake Esquire
8. Madam Prof. Aurelia Jennifer Perera
9. Prof. Delgahawattage Raj Kumar Somadeva Delgahawatta Esquire
10. Prof. Wiranjith Priyan Solomon Dias Esquire
11. Prof. Kathiragamanathan Kandasamy Esquire
12. Madam Prof. Aruni Tilakaratne
13. Dr. Nanda Amarasekera Esquire
14. Dr. Rohan Prasantha Perera Esquire
15. Dr. Galbada Arachchige Sirimal Premakumara Esquire
16. Dr. Nihal Jinasena Esquire
17. Moksevi Preli Esquire

Treasury Representative

18. Ms. D. Senanayake

### **Council from 2013.01.01 to 2013.07.14**

Chairman

1. Prof. Ulpagoda Pathira-arachchige Eric Hamilton Karunanayake

Other Members

2. Prof. Mohamed Abdul Careem
3. Prof. Weerathunga Arachchige Janendra Mathalee De Costa
4. Prof. Hithanadura Janaka de Silva

5. Prof. Wiranjith Priyan Solomon Dias
6. Prof. E. R. Jansz
7. Deshamanya Eng. Dr. Nihal Jinasena
8. Prof. Kathirgamanathan Kandasamy
9. Prof. Atulugamage Asiri Nanayakkara
10. Mr. Moksevi Prelis
11. Dr. Galbada Arachchige Sirimal Premakumara
12. Dr. Samson Rajapaksa
13. Prof. Kirthi Tennakone
14. Prof. (Mrs.) Myrtle Iranganie Thabrew
15. Dr. Aruni Tilakaratne

Treasury Representative

16. Ms. D. Senanayake

## STAFF

Executive Secretary:	M. C. Rajapakse
Accountant:	N. S. Hewagama
Assistant Accountant cum Research Officer	S. K. Gamhewa
Scientific Officer:	S. Sarathchandra
Scientific Officer:	S. Nonis
Scientific Officer:	H. Priyashanthi
Accounts Officer:	A. K. D. M. Perera
Programme Assistant:	A. E. K. Dayarathne
Drivers:	K. K. T. Sandaruwan
Naita Trainee	S. H. S. Priyankara

As at 31.12.2013

## REVIEW BY THE CHAIRMAN FOR YEAR 2013

The Year was a very successful year to the national research council, with the appointment of the new council and streamlining of present programmes and introducing new programmes to achieve the mandated objectives.

I am pleased to submit for tabling in Parliament, the Annual report of the National Research Council of Sri Lanka for the Year 2013.

During the period, H. E. the President has changed the composition of the council to be made more widely representative.

Ten areas were identified by the Ministry of Technology and Research as thrust areas of research and in line with these areas the new NRC Council has introduced the target oriented multi-disciplinary mega research programme to the Country. The programme was immediately started with several panel discussions and meetings requesting Sri Lankan scientists to get together and solve major issues prevail in country through research.

Mahinda chinthana development frame work more focused on supporting private and public sector partnerships to accelerate the economic development through research.

For the last few years, we have been hard at developing infrastructure base of universities through investigator driven research grants which leads to national development. Now this focus has slightly changed towards building research partnerships with private and public sector and the target oriented multi-disciplinary mega research projects.

By the end of the year 2013, 41 new Investigator Driven Research grants with 36 MPhil/PhD student fellowships were commenced and 4 private public partnership projects started signing partnership agreements.

The most prestigious President's Awards for the Scientific Publication for the 2007, 2008 & 2009 years was scheduled to be held on 17<sup>th</sup> January of 2014 and the preparation for the function was continued over the latter half of the year.

Dayata Kirula development Exhibition 2013 held at Ampara was a great platform to disclose the research findings to the general public where several NRC research projects participated for the event. Local newspaper articles were published over year showing how the NRC research grants contributes to national development.

In the year ahead, the government will continue its investment on research and technology strengthening private public partnerships, and bridging the division between the research and business communities towards the development of the country. With the view of creating the economic and knowledge hub, the NRC will be able to contribute immensely through its programme portfolio which will ultimately benefit the general public of the country.

## 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. A new Council was appointed in September 2013, and the Chairman is Prof. Janaka De Silva. He has been a Council member from its inception.

During the FY 2012 the NRC continued with its programmes set out to facilitate scientific research. All on-going programmes were re-visited, changes were made, and new programmes were introduced to achieve the objectives of the NRC. The present programmes are - Investigator Driven Research Grant Programme (1999), Private-Public Partnership Programme (2012), Target Oriented Multi-disciplinary Research Programme (2013), Presidential Awards for Scientific Publications (2001) and Other programmes (Research to Development : R2D & Public Awareness programme).

The Target Oriented Multidisciplinary Programme took centre stage last year. Two new committees were appointed, the Performance and Evaluation Committee to monitor the progress of the grants and the Audit and Management Committee to recommend on financial matters to the Council. The appointment of these two committees has facilitated the internal processes of the NRC.

During this year 41 new grants were awarded with the participation of 74 collaborations. Twelve grants were completed with 12 international publications, the research finding being presented at 47 local and international conferences: 3 projects offered diagnosis services and 6 postgraduate students completed their PhD/MPhil degrees.

The first four grants of the PPP Programme which promotes the R & D needs of the Private sector, were awarded during the year. One significant factor of these grants was the participation & cooperation of the Private sector in conducting research and contributing 50% of the total cost of the project.

A new initiative, the Target Oriented Multidisciplinary programme was introduced last year, to find solutions through R&D intervention to critical national issues. The entire funding scheme was developed by the Council. Applications were called based on the Ten Thrust Areas identified by the Ministry of Technology & Research and the initial selection process was started during the latter part of the year.

All arrangements were made to hold Presidential Awards for Scientific Publication programmes for publications of years 2007/2007/2008, early next year. The Public Awareness Programme was conducted to disseminate valuable research outcomes to the public and 36 articles were published in local papers.

We at the NRC Secretariat strive to deliver the best possible support to our scientists to ensure that there will be a positive outcome from the research projects we fund. I also wish to thank all Council members past and present 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 of the National Research Council.

Manisha C. Rajapakse  
Executive Secretary

## FINANCIAL HIGHLIGHTS IN THE PRECEDING 3 YEARS

Programmes(Strategies)	Indicator	Physical Progress			Financial Progress Rs. Mn		
		2011	2012	2013 *	2011	2012	2013 *
General administration of NRC					6.3	9.48	10.815
Development Assistance for below Programmes					213.9	229.02	245.77
Private Public Partnership Programme	No of Programmes	-	-	4 Programmes commenced			
NRC Research Grant Programme	No of Research Grants Selected/Applications PhD/ M Phi Students	51 Research and PhD Grants was awarded out of 200 applications 67 PhD /M Phils are awarded	58 Research and PhD Grants was awarded 67 PhD /M Phils are awarded	41 Research and PhD Grants was awarded 36 PhD /M Phils are awarded	-	-	-

President's Awards for Scientific Publications Programme	Functions held and No of Scientists awarded	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	Preparations for the PASP Function was continued	-	-	-
Other Programmes	Activities completed	Department of agriculture was reviewed and Review report was Submitted to President  Participated Dayata Kirula development Exhibition, Young scientist programme was started.	-Participated Dayata Kirula development Exhibition	Maritime training programme is being established at Ocean university – Prof. N. D. Kodikara/NRC Grant 11-065.  NRC facilitated initial conference on structural engineering construction conference and management in Kandy – Dr. PBR Dissanayake/NRC Grant 11-106.	-	-	-

Discussions with the Ministry of Health was conducted on Neonatal Screening Programme – by Prof. C. Liyanage and Dr. M. Hettiarachchi, They agreed to continue to improve it as a policy. (NRC Grant 08-08 & 11-160)

Participated Dayata Kirula development Exhibition

Total						220.2	238.5	256.585
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\*Tentative

## NRC PROGRAMMES

The year 2013 was a changing year to NRC with the appointment of the Present council by a presidential directive in the mid of the year which led to change the Structure of the programmes introducing new programmes to the NRC operations.

Key Programmes;

1. Investigator Driven Projects
2. President's Awards for Scientific Publications
3. Private Public Partnerships
4. Target Oriented Multi-Disciplinary Research Projects
5. Other Programmes

### **Investigator Driven Research Grants**

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 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.

The focus for the PhD/MPhil generation has incorporated to the grant programme during the year by the Present Council to be more focus on the Research outcomes, which making PhD/MPhil are a additional output of the investigator driven Research Grants.

Lot of new regulations and guidelines were introduced by the council to the benefit of the programme, focusing on maximum output to the general public and other benefitting party.

### **Presidential Awards for Scientific Research Programme**

The programme of Presidential Awards for Research was started in year 2001, to honour scientists for reaching international standards, to increase national scientific production. The national statistics of output of publications from 1991 to 2009 shows what could perhaps be the beginning of an upward trend.

The programme 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. This criteria will be changed by the Council incorporating the SCORPUS in to the criteria and the present standards will increase in future awarding ceremonies.

Under this programme it was completed several programmes by 2013 covering publications listed in SCI (Science Citation Index) from 1999 – 2006. The last programme held at Temple trees on 27th July 2010, 383 scientists were awarded for 2003-2006 years by H. E. the President of Sri Lanka. By the end of the Year 2013 dates have been fixed for the awarding ceremony for 2007, 2008 & 2009 publications.

### **Public Private Partnership Programme**

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.

#### **Target Oriented Multi-Disciplinary Research Projects**

As a policy, in developing countries, maximum use should be made of the scarce internal skills and every effort should be made to prevent duplication of effort as well as wasted efforts. Research should focus on deriving the maximum tangible economic and social benefits. Isolated research is only rarely able to advance the understanding of or solve complex problems. Through simple collaboration, researchers from different disciplines can accomplish much more by teaming. A multidisciplinary approach involves drawing appropriately from multiple disciplines to redefine problems outside of normal boundaries and reach solutions based on a new understanding of difficult issues. The formation of multidisciplinary teams is vital to modern biomedical research, because these teams are not only important contributors to the advancement of scientific discovery but also to the translation of those discoveries into useful practice.

The NRC has revised its funding policy, and from 2014, the major thrust of funding will be for target-oriented research projects. Each year, pre-proposals will invited from groups of researchers of public scientific R & D organizations and universities for possible funding of target-oriented multi-disciplinary research projects aimed at solving nationally-relevant issues aiming at economic development, social welfare and environmental sustenance of the country. The value of a grant would be up to Rs. 50 million,

over a 5 year period. Proposals will be invited from several priority areas in keeping with the National Science and Technology Policy Report.

As the NRC would be investing a fairly substantial sum of public money on these projects and funding would, therefore, be on a very competitive basis. We will be careful to select the most appropriate and capable researchers who could work together as a team on projects the NRC considers likely to have a tangible outcome in 5 years.

### **Other Programmes**

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 findings in newspapers to make the general public aware of the research carried out by scientists.

## **NRC INVESTIGATOR DRIVEN RESEARCH GRANTS PROGRAMME...**

The 2014 year started with calling for Applications for the NRC Investigator driven Research Grants Programme by paper advertisement, which was circulated to all universities, faculties and the R & D institutes.

The priority for Group research with multidisciplinary approaches, collaborative research continued. Applications were closed on 28th February 2013 and 169 applications were received.

During the first Quarter the annual progress reports of the ongoing grants were sent for evaluations. Meanwhile 15 Grants were funded\*.

The applications (2013) were sent to evaluators 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.

Activity	2011	2012	2013
No. of Applications selected for funding after evaluation	79	61	28

Activity	2011	2012	2013
No of Grants Funded	51	58	26+15*
No. of PhD/MPhil fellowships awarded	67	56	36
No. of Collaborations initiated	76	45	78
Total value of grants awarded	Rs. 213 Mn	Rs. 220 Mn	Rs. 183 Mn
No. of Applications referred for resubmission		32	6
No. of applications rejected		55	129
No of applications on hold for future evaluation		5	-
No of applications referred to PPP		2	6

Only 16% of the applicants submitted got selected. The selected applications were forwarded to the treasury for funding.

During the Year, 26 Research Grants were funded and the legal and bank documents were prepared after the selections and grant accounts were 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.

A total of 36 PhD/MPhil students registered during this period. All relevant documents were requested from the students.

### Funded Research Grants 2013

Grant No	Principal Investigator & Institution	Project Title
11-64	Dr. S.N. Surendran University of Jaffna	Morphological and molecular characterization and Phylogenetic analysis of sandflies of the genus <i>Sergentomyia</i> (Diptera: Psychodidae) in relation to leishmaniasis transmission in Sri Lanka
12-012	Prof. K. Seneviratne University of Kelaniya	Development of Commercially important natural antioxidant preparations based on coconut cake to stabilise and improve the nutritional quality

<b>Grant No</b>	<b>Principal Investigator &amp; Institution</b>	<b>Project Title</b>
12-020	Dr. P. N. Ranasinghe Geological Survey and mines Bureau	Exploring winter monsoon variability using marine and terrestrial proxies
12-038	Prof. R. Premaratne University of Kelaniya	Effect of single dose intravenous methyl prednisolone in adult patients who develop severe dengue during febrile phase, a double blind placebo control trial
12-086	Dr. J. Manatunge University of Moratuwa	Sustainable solutions to problems encountered in treatment and management of oil and grease from food industry, hotel and restaurant wastewater
12-100	Dr. R. Samarasekera Industrial Technology Institute	Validation and Value Addition of Bio-active Natural Ingredients for Industrial Applications
12-102	Prof. R. L. R. Chandrajith University of Peradeniya	Chemico-geography of selenium and its impact on food chain quality and animal health in Sri Lanka
12-106	Dr. H. M. A. Sominanda University of Peradeniya	Immunopathological characterization of multiple sclerosis in Sri Lanka
12-113	Dr. P. M. P. C. G. Bandaranayake University of Peradeniya	Molecular and biochemical characterization of Sri Lankan pomegranates and expression analysis of major hydrolyzable tannin genes under different environmental conditions and maturity stages to popularize cultivation in Sri Lanka
12-116	Dr. S. K. Weragoda National Water Supply and Drainage Board	Comparative Analysis of Disinfection By-Products Formation Mechanism with other Water Quality Parameters to Minimize the Health Effect
12-121	D. M. D. Yakandawala University of Peradeniya	Chromosome evolution of the endemic species of Sri Lanka with emphasis on families Anacardiaceae, Ebenaceae, Orchidaceae and Zingiberaceae
12-130	Prof. R. Weerasooriya University of Peradeniya	Development of Unit Process for Chemical Removal of Nitrate from Drinking Water
12-140	Prof. J. Perera University of Colombo	Genetic mutations responsible for isoniazid(INAH) resistance in Mycobacterium tuberculosis,

<b>Grant No</b>	<b>Principal Investigator &amp; Institution</b>	<b>Project Title</b>
		Development of a rapid molecular method for detection of INAH resistance and study of molecular epidemiology of INAH resistant strains of <i>M. tuberculosis</i> in Sri Lanka
12-003	Prof. K. Abewickrema University of Kelaniya	Improvement of the post harvest storage life of banana using novel strategies and technology transfer to banana industry
12-054	Dr. N. S. Weerakkody Open University of Sri Lanka	Application of extracts from selected spices, herbs and medicinal plants to reduce cross contamination of food borne bacteria and to extend the shelf life of ready to cook marinated chicken meat
13-16	Dr. S. K. Gunathilke Sabaragamuwa University of Sri Lanka	Removal of Toxic Metals from Industrial Wastewater Using Agro-based waste products- A laboratory simulated study
13-31	Dr. L. Perera Coconut Research Institute	Determination of the etiology of tapering disorder of coconut ( <i>Cocos nucifera</i> L.) and molecular characterization of the causal agent
13-32	Dr. C. S. Ranasinghe Coconut Research Institute	Determination of the effects of heat and water stress on fertility of female and male reproductive organs of coconut ( <i>Cocosnucifera</i> L.)
13-33	Dr. Senani Williams University of Kelaniya	Baseline assessment of micronuclei formation and chromosomal aberration as an index of exposure to natural radiation in the Sri Lankan population
13-42	Dr. R. Hanwella University of Colombo	Baseline assessment of micronuclei formation and chromosomal aberration as an index of exposure to natural radiation in the Sri Lankan population
13-50	Dr. C. N. R. A. Alles University of Peradeniya	Feasibility study of herbal plant extracts in increasing bone formation and reducing bone resorption in both in vitro and in vivo
13-56	Dr. R. S. Lokupitiya University of Sri Jayewardenepura	Estimation of carbon fluxes for the South Asian region using Maximum Likelihood Ensemble Filter (MLEF)

<b>Grant No</b>	<b>Principal Investigator &amp; Institution</b>	<b>Project Title</b>
13-62	Dr. S. M. W. Ranwala University of Colombo	Effect of endocrine disrupting fungicide "Mancozeb" (metal ethylene-bis- dithiocarbamate) on human endometrial receptivity and fertility
13-87	Dr. M. C. M. Iqbal Institute of Fundamental Studies	Development of natural adsorbents for heavy metal and textile dye contaminated waste water treatment
13-88	Dr. R. A. U. J. Marapana University of Sri Jayewardenepura	Assessment of pesticide residues and heavy metals in water, vegetables and milk in Nuwara Eliya district and development of mitigation techniques to minimize health hazards caused by these xenobiotics
13-95	Dr. H. M. T. Herath Industrial Technology Institute	Production of Glucose Syrup and High Protein concentrates from locally available raw materials of broken rice, maize and manioc
13-105	Dr. R. C. Siriwardena University of Kelaniya	Biological analysis of angiogenesis tumour proliferation and tumour necrosis in hepatocellular carcinoma after trans-arterial therapy
13-108	Prof. R. W. Jayasekera University of Colombo	Genetic risk alleles for ulcerative colitis among a Sri Lankan case-control panel
13-109	Dr. R. M. K. U. Rajapaksha University of Moratuwa	An evidence based model for near carbon neutral non-domestic buildings in warm humid climates
13-115	Dr. Shehan Williams University of Kelaniya	A randomised controlled trial investigating the effectiveness of cognitive behavior group therapy compared to a wait list control in the treatment of university students with social phobia
13-121	Prof. V. Arasaratnam University of Jaffna	A study on Malnutrition and Associated factors among children aged 1 to 5 years in Jaffna District
13-122	Prof. V. Arasaratnam University of Jaffna	A study on Prevalence, Demographic, Socio-economic and Associated factors of Diabetes mellitus and metabolic syndrome among adults in Jaffna district
13-130	Prof. P. V. Udagama University of Colombo	High Risk Human PapillomaViral infections & the risk of developing oral and pharyngeal cancer: Immuno and Molecular epidemiologic evidence from Sri Lanka

Grant No	Principal Investigator & Institution	Project Title
13-134	Dr. L. D. Rajasooriyar University of Jaffna	Risk of saline groundwater in the Pungudutivu Island of the Jaffna Peninsula and measures for improving groundwater quality enabling sustainable utilization of the resource
13-145	Prof. R. N. Jinadasa University of Peradeniya	Comparative antimicrobial resistance patterns and genotypes of Escherichia coli isolates associated with acute diarrhea in humans, healthy poultry and retail chicken products in a selected area of Sri Lanka
13-152	Dr. B. S. M. S. Siriwardana University of Peradeniya	Analysis of the significance of invasive front characteristics in relation to prognosis of oral squamous cell carcinoma
13-156	Dr. C. M. B. Dematawewa University of Peradeniya	Effect of hydrological regimes on fish yield and livelihood of fishing communities of Victoria reservoir and implications for management
13-158	Dr. N. P. Ranatunge University of Ruhuna	Utilization of microbial antagonism in controlling anthracnose disease in chilly
13-159	Dr. C. S. Herath Coconut Research Institute	Assess the possibility of reducing fertilizer subsidy by enhancing other influential factors
13-160	Dr. J. M. C. K. Jayawardana Sabaragamuwa University of Sri Lanka	Evaluation of water quality and macro invertebrate composition in relation to catchment land use practices in Umav Oya and Badulu Oya sub catchments in Upper Mahaweli Catchment Area (UMCA) in Sri Lanka
13-164	Dr. E. Lokupitiya University of Colombo	Strengthening of Capacity and assessment of life cycle carbon footprint of main agricultural export products of Sri Lanka in relation to climate change

## PRESIDENTIAL AWARDS FOR SCIENTIFIC RESEARCH

During the Year the date is selected for the 2006, 2007 & 2009 Awarding ceremony and the preparations for the function were continued during the period.

## PRIVATE PUBLIC PARTNERSHIP PROGRAMME

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

Activities	2012	2013
No of Expression of Interest (EOI) received for PPP	59	14
No of EOI's Selected to submit detail proposals	17	6

### Ongoing Private Public Partnerships...

Research Partner	Project Title
Dr. Anil Goonatileke University of Sri Jayewardenepura	Locally developed respiratory care products
Mr. R. M. Dharmadasa Industrial Technology Institute	Formulation of a Para- pheromone from local varieties of Ocimum sanctum for the control of fruit and melon flies
Dr. R. M. C. Deshapriya University of Peradeniya	Determination and validation of optimum time - temperature combinations for HTST pasteurization and ultra high temperature treatment of milk to assure food safety, extended shelf life, preservation of natural sensory qualities and minimum loss of nutrients during routine manufacture of liquid milk products in Sri Lanka at lowest energy cost
Dr. S. M. C. U. P. Subasinghe University of Sri Jayewardenepura	Variation of naturally and artificially induced agarwood resin content and quality of Gyrinops walla for commercial extraction and its nursery establishment

## TARGET ORIENTED MULTI-DISCIPLINARY RESEARCH PROJECTS...

After few brain storming sessions and discussions with industry and public researchers the programme line up is prepared by the council.

In the final Quarter of the year 2013, Pre-proposals were invited from groups of researchers of public scientific Research & Development organizations and universities for possible funding and received 61 pre-proposals were screened by the council. After the screening the shortlisted projects were invited to submit detailed proposals. The further activities will be scheduled in the following year.

## MEDIA & DEVELOPMENT PROGRAMME...

A programme to increase awareness of iodine deficiency and the neonatal hypothyroidism among health officials was held at the Ampara General Hospital.

This Programme was conducted on 2nd January 2013 in collaboration with Ampara General Hospital and University of Ruhuna. Prof. Sujeewa Amarasena, Prof. Chandrani Liyanage and Dr. M. Hettiaracchi were the resource persons to this programme. After the function a discussion was held with health officials of the district to start screening of the new born for neonatal hypothyroidism at the Ampara General Hospital.

### Dayata Kirula Development Exhibition 2013 – Ampara - March 2013

The NRC participated at the “Dayata Kirula” Exhibition held at Ampara in March 2013. The stall was prepared 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, Eng. (Dr.) Sudhira De Silva (NRC Grant 11-193) Department of Civil and Environmental Engineering, Faculty of Engineering, University of Ruhuna and several other grant projects were highlighted.

### New Paper Articles

Awareness of the research grants and other NRC programmes were also a part of NRC development activities. Several articles published during the period in various newspapers published in Sri Lanka

List of some News Papers articles published during the period

No	Date	Paper	Article Topic
1	2013.04.28	Sunday Times	The Butterfly effect
2	2013.04.26	The Sunday Times	The Complexities of being a butterfly
3	2013.04.29	ලංකාදීප	බර ඉසිලීමේ ක්‍රීඩක වැරදි හඳුනා ගැනීම : ජේරාදේණි සරසවි පර්යේෂණයට සම්මානයක්

No	Date	Paper	Article Topic
4	2013.04.24	මව්බිම	බර ඉසිලීමේ ක්‍රීඩාවේදී සිදුවන වැරදි නිවැරදිව හඳුනාගැනීමට ක්‍රමවේදයක්
5	2013.04.25	රිවිර	නෝවර්ස් සික්‍රටස් රටට වැඩ ඇති පර්යේෂකයන් අගයයි.
6	2013.05.01	Daily News	Nature's Secrets presents "Research Award"
7	2013.05.05	දිවයින	නෝවර්ස් සික්‍රටස් පර්යේෂණ සම්මානය 2012 ජේරාදෙණිය විශ්ව විද්‍යාලයේ නවතම සොයාගැනීමක් වෙනුවෙන්
8	2013.06.02	The Sunday Times	West Nile Virus making people ill here <i>Joint university identifies it as causing brain fever</i>
9	2013.06.02	රිවිර	නිසරු නිසරු කරන පරපුරු ජාන වියරුව පියයුරු පිළිකා කල්තියා හඳුනාගැනීමේ අලුත් ක්‍රමයක්
10	2013.06.10	ලංකාදීප	උතුරු ප්‍රදේශයේ පාංශු සම්පත් සිතියමට නැගෙයි.
11	2013.06.15	ලංකාදීප	වන අලුත්ගේ ගමන් මඟ දැනගන්න ගණිතානුකූල මොඩලයක්
12	2013.06.29	ලංකාදීප	ගොඩනැගිලි-පාලම්-මහා මාර්ග තත්ව පරීක්ෂාවට නවීන තාක්ෂණයක්
13	2013.07.06	ලංකාදීප	අත් පා අභිමිච්චන්ට රොබෝ බාහු
14	2013.07.23	ලංකාදීප	කැළණි ගඟේ ජලය දුෂ්‍ය වෙලාද?
15	2013.07.20	ලංකාදීප	අධිවේගී මඟට නවීන ආරක්ෂණ පද්ධතියක්
16	2013.07.27	ලංකාදීප	කොළ හකුලන දළඹුවා මර්දනයට බිත්තර පරපෝෂිත කෘමීන්
17	2013.09.08	රිවිර	වන්දිකා සංඥා තාක්ෂණයෙන් දුම්රිය ගමන අලුත් වෙයි.
18	2013.09.14	ලංකාදීප	දුම්රිය ධාවනය කරවන්න ස්වයංක්‍රීය පද්ධතියක්
19	2013.10.27	Daily Mirror	New device to spot train locations
20	2013.10.27	The Sunday Times	Modern tech to optimise train movement
21	2013.10.11	අද	දුම්රිය පැමිණෙන වෙලාව නිවැරදිව දැනුම්දිය හැකි නව මෙහෙයුම් පද්ධතියක්
22	2013.10.21	ලංකාදීප	දුම්රිය පැමිණෙන වෙලාව මගීන්ට නිවැරදිව දැනුම්දිය හැකි නව මෙහෙයුම් පද්ධතියක්
23	2013.10.19	Daily Mirror	Timing train travel
24	2013.08.17	ලංකාදීප	මන්ද මානසික දරුවන් කලින් හඳුනාගන්න ක්‍රමයක්
25	2013.08.17	ලංකාදීප	නැනෝ තාක්ෂණයෙන් නව රබර් නිපැයුම්
26	2013.08.31	ලංකාදීප	ගින්නකදී, භූකම්පනයදී තොරතුරු සපයන රැහැන් රහිත සංවේදී ජාලකරණයක්
27	2013.09.04	ලංකාදීප	රබර් වගාවේ සුදුමුල් රෝගය මර්දනය කිරීම සඳහා නව පර්යේෂණ
28	2013.09.11	ලංකාදීප	එලදායිතාව නංවන්න ගුණාත්මක තේ සංරක්ෂණය කරයි.
29	2013.09.21	ලංකාදීප	කොළඹ විශ්ව විද්‍යාලයේ පර්යේෂණ කණ්ඩායමක් බේසල් පියයුරු පිළිකා හඳුනාගන්න හදයි.
30	2013.09.24	අද	අඩු පිරිවැයකින් වැඩි වී අස්වැන්නක් නෙළා ගන්න ජේරාදෙණිය කෘෂි පර්යේෂණ කණ්ඩායමක් සැරසෙති.
31	2013.09.25	සිරිකත	මාසේ ගැස් වියදම ඉතිරිකර ගන්න ගෙදර හදන බයෝ ගැස්
32	2013.09.28	ලංකාදීප	කිනිතුල්ලන්ගේ රෝග වාහක හැකියාව අවම කරන්න පර්යේෂණ
33	2013.10.12	ලංකාදීප	ගෝලීය උණුසුමෙන් සමනලුන්ගේ ජාන වෙනස් වෙලාද?

No	Date	Paper	Article Topic
34	2013.10.07	අද	පිටිමකුණන් මර්දනයට සරසවි පර්යේෂණ කණ්ඩායමක්
35	2013.10.14	ලංකාදීප	අයඩින් නැතුවම බැරිද?
36	2013.10.18	අද	කුකර්බිටටෙසි කුලයට අයත් ශාකවල දිලීර රෝග පාලනයට සිලිකා රසායනිකය
37	2013.10.19	ලංකාදීප	ආමාශ පිළිකාවල දරුණුව වැඩිකරන ප්‍රතිග්‍රාහක හඳුනාගනී.
38	2013.10.25	අද	'තම්පලා' ආහාර සලාකයක් ලෙස ලබා දී එළිකිරි නිෂ්පාදනය වැඩිකරන්න පර්යේෂණ
39	2013.10.30	ලංකාදීප	අඩු පිරිවැයකින් වැඩි වී අස්වැන්නක් නෙළා ගන්න පේරාදෙණිය කෘෂි පර්යේෂණ කණ්ඩායමක් සැරසෙති.
40	2013.11.15	අද	නකල්ස් රක්ෂිතයේ මුඩු බිම් නැතිකරන්න දේශීය ශාක සංයෝජන අත්හදා බලයි
41	2013.12.02	අද	එලදායිතාව නංවන්න ගුණාත්මක තේ සංරක්ෂණය කරයි.
42	2013.12.16	අද	අඩු පෝස්පේට් පොහොර යොදවා වැඩි වී අස්වැන්නක් ගන්න පර්යේෂණ
43	2013.12.21	ලංකාදීප	ලංකාවේ මුහුදු ඉතිරි සොයයි.

# FINAL ACCOUNTS 2013

## Financial Statements for Year 2013

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**NATIONAL RESEARCH COUNCIL -SRI LANKA**  
**STATEMENT OF FINANCIAL PERFORMANCE FOR THE YEAR ENDED DECEMBER 31, 2013**

		<b>2013</b>	<b>2012 Restated</b>
	<i>Notes</i>	<b>Rs.</b>	<b>Rs.</b>
<b>Revenue</b>			
Recurrent receipts – NRC Administration	<b>3.09B</b>	9,867,000.00	9,189,900.00
Recurrent receipts – Research and development	<b>3.09A</b>	145,865,650.50	69,532,415.75
Other receipts		673,000.00	632,392.40
<b>Total revenue</b>		<b>156,405,650.50</b>	<b>79,354,708.15</b>
<b>Expenses</b>			
Personal emoluments		6,155,020.34	3,686,321.78
Research & development	<b>3.09A</b>	116,822,400.19	47,713,220.42
Supplies and consumables		1,829,320.58	1,481,809.86
Depreciation expense –NRC Grants	<b>3.8</b>	29,043,250.31	21,819,195.33
Depreciation – NRC office equipment's	<b>3.8</b>	609,577.85	441,829.55
Other expenses		4,293,341.19	3,761,309.34
Finance costs		10,500.00	8,000.00
<b>Total expenses</b>		<b>158,763,410.46</b>	<b>78,911,686.28</b>
Share of surplus of associate's		-	-
<b>Surplus/(deficit) for the period</b>		<b>(2,357,759.96)</b>	<b>443,021.87</b>
Attributable to:			
Owners of controlling entity		(2,357,759.96)	<b>443,021.87</b>
Minority interest		-	-
		<b>(2,357,759.96)</b>	<b>443,021.87</b>

*Notes from the pages 06 to 14 form an integral part of these financial statements.*

*Figures in brackets indicate deductions*

**NATIONAL RESEARCH COUNCIL -SRI LANKA**  
**STATEMENT OF FINANCIAL POSITION AS AT DECEMBER 31, 2013**

		<b>2013</b>	<b>2012 Restated</b>
	<i>Notes</i>	<b>Rs.</b>	<b>Rs.</b>
<b>ASSETS</b>			
<b>Current assets</b>			
Cash and cash equivalents		3,539,852.86	3,583,250.75
Receivables		-	150,896.00
Inventories			-
Prepayments	3.11	400,000.00	250,000.00
NRC grants		354,392,389.88	346,873,287.07
NRC PPP Program		41,948,125.00	
Other current assets			
		<b>400,280,367.74</b>	<b>350,857,433.82</b>
<b>Non-current assets</b>			
Receivables			-
Investments in associates			-
Other financial assets	3.10	480,000.00	480,000.00
Property, plant and equipment	3.8	201,871,941.71	181,964,334.18
Land and buildings			-
Intangible assets			-
Other non-financial assets			-
		<b>202,351,941.71</b>	<b>182,444,334.18</b>
<b>Total assets</b>		<b>602,632,309.45</b>	<b>533,301,768.00</b>
<b>LIABILITIES</b>			
<b>Current liabilities</b>			
Payables	3.12	601,220.68	494,268.76
		<b>601,220.68</b>	<b>494,268.76</b>
<b>Non-current liabilities</b>			
Payables			-
		-	-
<b>Total liabilities</b>		601,220.68	<b>494,268.76</b>
<b>Net assets</b>		<b>602,031,088.77</b>	<b>532,807,499.24</b>
<b>NET ASSETS/EQUITY</b>			
Capital contributed by; other government entities			-
Reserves			-
Accumulated surpluses/(deficits)		602,031,088.78	532,807,499.24
Minority interest			-
<b>Total net assets/equity</b>		<b>602,031,088.78</b>	<b>532,807,499.24</b>

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

Signed for and on behalf of the Council,

.....  
 Prof. H. J. de Silva  
 Chairman/NRC

.....  
 M. C. Rajapakse  
 Executive Secretary

.....  
 N. S. Hewagama  
 Accountant

April, 04, 2014

**NATIONAL RESEARCH COUNCIL -SRI LANKA**  
**CASH FLOW STATEMENT FOR THE YEAR ENDED DECEMBER 31, 2013**

	<b>2013</b>	<b>2012 Restated</b>
	<b>Rs</b>	<b>Rs</b>
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
<b>Receipts</b>		
Taxation		
Receipt from treasury (Recurrent)	9,867,000.00	9,189,900.00
Receipt from treasury (Development Assistance)	217,447,000.00	220,940,000.00
Sales of goods and services		-
Receipts from closed grants	28,649,245.14	10,198,477.45
Interest received		-
Other receipts	673,000.00	632,392.40
<b>Payments</b>		
Cash payment to employees	(6,155,020.34)	(3,686,321.78)
Superannuation		-
Suppliers		-
Research grants and Other Programs	(243,541,990.07)	(227,456,450.51)
Interest paid		-
Other payments	(5,991,506.75)	(5,794,095.82)
<b>Net cash flows from operating activities</b>	<b>947,727.98</b>	<b>4,023,901.74</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Purchase of plant and equipment	(991,125.87)	(1,563,216.98)
Proceeds from sale of plant and equipment		-
Proceeds from sale of investments		-
Purchase of foreign currency securities		-
<b>Net cash flows from investing activities</b>	<b>(991,125.87)</b>	<b>(1,563,216.98)</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Proceeds from borrowings		-
Repayment of borrowings		-
Distribution/dividend to government		-
<b>Net cash flows from financing activities</b>	<b>-</b>	<b>-</b>
<b>Net increase/(decrease) in cash and cash equivalents</b>	<b>(43,397.89)</b>	<b>2,460,684.76</b>
<b>Cash and cash equivalents at beginning of period</b>	<b>3,583,250.75</b>	<b>1,122,565.99</b>
<b>Cash and cash equivalents at end of period</b>	<b>3,539,852.86</b>	<b>3,583,250.75</b>

*Notes from the pages 06 to 14 form an integral part of these financial statements.*

*Figures in brackets indicate deductions*

**NATIONAL RESEARCH COUNCIL -SRI LANKA**  
**STATEMENT OF CHANGES IN NET ASSETS/EQUITY FOR THE YEAR ENDED DECEMBER 31, 2013**

	Accumulated Surplus or Deficit	Total	Total net Assets / Equity
	Rs	Rs	Rs
<b>Balance as at December 31, 2012 Restated</b>	532,807,499.24	532,807,499.24	532,807,499.24
Adjustment to opening balance	-	-	-
Changes in accounting policy	-	-	-
	<u>532,807,499.24</u>	<u>532,807,499.24</u>	<u>532,807,499.24</u>
<b>Change in net asset/equity for 2013</b>			
Gain on property revaluation	-	-	-
Equipment Transfers Proceeds to Institutions	-	-	-
Loss on revaluation of investments	-	-	-
Exchange differences on translating foreign operations	-	-	-
	<u>Net of revenue recognized directly in net asset/equity</u>	<u>71,581,349.50</u>	<u>71,581,349.50</u>
	<u>Surplus/ (deficit) for the period</u>	<u>(2,357,759.96)</u>	<u>(2,357,759.96)</u>
<b>Total recognized revenue and expenses for the period</b>	-	-	-
<b>Balance at December 31, 2013 carried forward</b>	<b>602,031,088.78</b>	<b>602,031,088.78</b>	<b>602,031,088.78</b>

*Notes from the pages 06 to 14 form an integral part of these financial statements. Figures in brackets indicate deductions*

# NATIONAL RESEARCH COUNCIL -SRI LANKA

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2013

### 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 31<sup>st</sup> 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. The Program Combined to one Program during the Year as “Investigator Driven Research Grants Program”

##### *Presidential Awards for Scientific Research*

- Recognition to researchers and research institutions of Sri Lanka

The name of the program is changes during the year to “President’s Awards for Scientific Publication”

##### *Private Public Partnerships Program*

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

The private sector partnership program keeps the investment by the private sector and there are four PPP projects ongoing during the year, thus the balances in these private partners’ accounts at 31<sup>st</sup> December 2013 is Rs. 3,944,113.07

##### *Other Development Programs*

- Other programs necessary to fulfill the objectives of NRC

##### *Target Oriented Multi-Disciplinary Mega Projects Program*

NRC council has revised its funding policy, and from 2014, the major thrust of funding will be for target-oriented research projects. Each year, pre-proposals will invited from groups of researchers of public scientific R & D organizations and universities for possible funding of target-oriented multi-disciplinary research projects aimed at solving nationally-relevant issues aiming at economic development, social welfare and environmental sustenance of the country. The value of a grant would be up to Rs. 50 million, over a 5 year period. Proposals will be invited from several priority areas in keeping with the National Science and Technology Policy Report.

#### 1.2 DATE FOR AUTHORIZATION FOR ISSUE

The Financial Statements of National Research Council, for the year ended 31<sup>st</sup> December 2013 were authorized for issue by the Board of Council Members on 04.04.2014

### 2. ACCOUNTING POLICIES

#### 2.1 BASIS FOR PREPARATION

The financial statements have been prepared in accordance with Sri Lanka Public Sector Accounting Standards (SLPSAS) as issued by the Institute of Chartered Accountants of Sri Lanka.

**NATIONAL RESEARCH COUNCIL -SRI LANKA  
NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2013**

**2.1.1 STATEMENT OF COMPLIANCE**

The financial statements of the NRC have been prepared in accordance with the Sri Lanka Public Sector Accounting Standards (SLPSAS) 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.

**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 causing 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 SLPSAS, 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 TRANSLATON**

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.**

**NATIONAL RESEARCH COUNCIL -SRI LANKA**  
**NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2013**

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 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.

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%
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 %

**NATIONAL RESEARCH COUNCIL -SRI LANKA**  
**NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2013**

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.

**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.

# NATIONAL RESEARCH COUNCIL -SRI LANKA

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2013

### 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 statutes 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 PERFORMANCE

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 as expenses incurred identify, annual depreciation of grants equipment, and loss on transferring equipment to Research Centers are recognized as part of recurrent receipt in income in the income statement in the respective periods in which the expenses are recognized.

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 statement of financial position as a loss and the impact to revenue is also identify as income to reflect the true nature of operations in the statement of financial position. The gains are adjusted vice versa.

### 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.

## NATIONAL RESEARCH COUNCIL -SRI LANKA NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2013

Rental income is recognized on an accrual basis.  
Other income is recognized on an accrual basis.

### 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

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 First time adoption of Sri Lanka Accounting standards, including retrospective application effective, unless otherwise indicated.

### 3.8. CHANGE OF ACCOUNTING POLICY

The Accounting policy for identification of the revenues and the identification of the proceeds of transferring the items to the Research Institutions as per the Research agreement and the following council decisions has been changed to reflect the true nature of operations of NRC, as it seems the present picture in the income statement/statement of the financial performance is unrealistic.

Changed paragraph is as follows;

“The expenditure from NRC grants as expenses incurred identify, annual depreciation of grants equipment, and loss on transferring equipment to Research Centers are recognized as part of

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

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 statement of financial position as a loss and the impact to revenue is also identify as income to reflect the true nature of operations in the statement of financial position. The gains are adjusted vice versa.”

The previous policy of NRC does not identify losses and transfer proceeds in the statement of financial performance as income, which has shown unrealistic loss in the income statement.

It is decided to change the policy retrospectively and the adjustment to previous year has made and the effect of the change to the accounts is given under note 3.13.

### 3.8. ERRORS AND CORRECTIONS

Over/under statement of depreciation of depreciable assets have been corrected, and financial statements were retrospectively restated to correct the error. The effect of the change to the accounts is given under note 3.14.

**NATIONAL RESEARCH COUNCIL -SRI LANKA**  
**NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2013**

**3.8 PROPERTY, PLANT AND EQUIPMENT**

**3.8.1. GROSS CARRYING AMOUNTS**

	<b>Balance as at 31.12.2012 restated Rs.</b>	<b>Additions /Transfers</b>	<b>Disposals/ Transfers*</b>	<b>Balance as at 31.12.2013 Rs.</b>
<b>Cost</b>				
NRC Office Assets	8,781,739.03	736,425.87	102,630.42	9,415,534.48
Grants' Major Equipment	254,476,785.96	66,256,119.21	96,754,482.21	223,978,422.97
Grants' Minor Equipment	16,159,120.50	14,376,043.36	4,064,611.61	26,470,552.25
<b>Total - Assets</b>	<b>279,417,645.49</b>	<b>81,368,588.44</b>	<b>100,921,724.24</b>	<b>259,864,509.70</b>

**3.8.2. DEPRECIATION**

	<b>Balance as at 31.12.2012 restated Rs.</b>	<b>Additions /Transfers</b>	<b>Disposals/ Transfers</b>	<b>Balance as at 31.12.2013 Rs.</b>
<b>Less : Provision for Depreciation</b>				
NRC Office Assets	5,933,630.07	609,577.85	97,192.28	6,446,015.64
Grants' Major Equipment	85,131,284.14	25,095,627.61	65,306,384.45	44,920,527.30
Grants' Minor Equipment	6,388,397.10	3,947,622.70	3,709,994.77	6,626,025.03
<b>Total - Provision for Depreciation</b>	<b>97,543,311.31</b>	<b>29,652,828.16</b>	<b>69,113,571.50</b>	<b>57,992,567.97</b>

**3.8.3 NET BOOK VALUES OF PPE**

	<b>2013 Rs.</b>	<b>2012 Restated Rs.</b>
NRC Office Assets	2,969,518.84	2,848,108.96
Grants' Major Equipment	179,057,895.65	169,345,501.81
Grants' Minor Equipment	19,844,527.22	9,770,723.41
<b>Total</b>	<b>201,871,941.71</b>	<b>181,964,334.18</b>

**NATIONAL RESEARCH COUNCIL -SRI LANKA**  
**NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2013**

**3.09 RECURRENT RECEIPTS**

	<b>2013</b>	<b>2012 Restated</b>
	<b>Rs.</b>	<b>Rs.</b>
<b>3.09 A RESEARCH &amp; DEVELOPMENT</b>		
Grantees' Consumable	34,508,642.74	20,772,469.42
Grantees' Documentation	-	-
Grantees' PhD Stipend	41,068,001.18	24,962,469.50
Grants & Programs Administration	3,088,236.89	535,056.00
Transfer Proceeds	31,802,714.60	-
PPP Prog . Expenses	4,286,951.00	-
PASR Prog . Expenses	110,509.10	971,944.00
Grantees' Travelling	1,957,344.68	471,281.50
<b>3.09A</b>	<b>116,822,400.19</b>	<b>47,713,220.42</b>
Depreciation of Major & Minor Equipment	29,043,250.31	21,819,195.33
<b>3.09B</b>	<b>145,865,650.50</b>	<b>69,532,415.75</b>
<b>TREASURY RECURRENT RELEASE</b>		
January to December	9,867,000.00	9,189,900.00
Funds Returned to Treasury	-	-
<b>3.09C</b>	<b>9,867,000.00</b>	<b>9,189,900.00</b>
<b>Total Amount (3.09A + 3.09B + 3.09C)</b>	<b>126,689,400.19</b>	<b>56,903,120.42</b>

**3.10 OTHER FINANCIAL ASSETS**

	<b>2013</b>	<b>2012 Restated</b>
	<b>Rs.</b>	<b>Rs.</b>
Building Rental Deposit	465,000.00	465,000.00
Telecommunication Deposit	15,000.00	15,000.00
Transport Deposit	-	-
<b>Total</b>	<b>480,000.00</b>	<b>480,000.00</b>

**3.11 PREPAYMENTS**

	<b>2013</b>	<b>2012 Restated</b>
	<b>Rs.</b>	<b>Rs.</b>
Building Rent	250,000.00	250,000.00
Advance for Hotel Reservation	150,000.00	-
<b>Total</b>	<b>400,000.00</b>	<b>250,000.00</b>

**NATIONAL RESEARCH COUNCIL -SRI LANKA**  
**NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2013**

**3.12 PAYABLES**

	<b>2013</b>	<b>2012 Restated</b>
	<b>Rs.</b>	<b>Rs.</b>
Telecommunication Payable	45,713.84	22,757.66
Electricity Charges Payable	59,503.84	36,709.74
Water Charges Payable	1,045.24	517.44
Audit Fee Payable	-	-
Other Payables	494,957.76	434,283.92
EPF Payable	-	-
ETF Payable	-	-
<b>Total</b>	<b>601,220.68</b>	<b>494,268.76</b>

**3.13 EFFECT OF RESTATEMENT**

	2013	2012 Restated
Increase (decrease) in total expenses	0	0
Increase (decrease) in total income	60,845,964.91	21,819,195.33
Increase (decrease) in Net Profit for the Period	(60,845,964.91)	(21,819,195.33)
Increase (decrease) in Grants	0	0
Increase (decrease) in Accumulated Fund	0	0
Increase (decrease) in Net Assets	0	0
Increase (decrease) in PPE (Net Book Value)	0	0

**3.14 EFFECT OF ERRORS CORRECTION**

	2013	2012 Restated
Increase (decrease) in total expenses	0	(127,036.42)
Increase (decrease) in total income	0	0
Increase (decrease) in Net Profit for the Period	0	127,036.42
Increase (decrease) in Grants	0	0
Increase (decrease) in Accumulated Fund	0	108,532.02
Increase (decrease) in Net Assets	0	108,532.02
Increase (decrease) in PPE (Net Book Value)	0	108,532.02

# AUDITOR GENERAL'S REPORT



**විගණකාධිපති දෙපාර්තමේන්තුව**  
**கணக்காய்வாளர் தலைமை அலுவலகம்**  
**AUDITOR GENERAL'S DEPARTMENT**



මගේ අංකය } LS2/F/NRC/1/2013  
 எனது இல. }  
 My No. }

මගේ අංකය  
 உமது இல.  
 Your No.



අයුතු  
 திகதி } 5 December 2014  
 Date }

Chairman,  
 National Research Council.

**Report of the Auditor General on the Financial Statements of the National Research Council for the year ended 31 December 2013 in terms of the 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 2013 comprising the Statement of Financial Position as at 31 December 2013 and the statement of financial performance, 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 the Section 13(1) of the Finance Act, No. 38 of 1971 and the Gazette Extraordinary No. 1514/28 of 15 September 2007. 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 issued to the Chairman of the Council on 28 August 2014.

**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 Sri Lanka Public Sector Accounting Standards 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.

**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 consistent with International Standards of Supreme Audit Institutions (ISSAI 1000 – 1810). 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 judgment, including the assessment of the risks of material misstatement 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 audit opinion.

## 2. Financial Statements

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### 2.1 Opinion

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In my opinion, the financial statements give a true and fair view of the financial position of the National Research Council as at 31 December 2013 and its financial performance and cash flows for the year then ended in accordance with Sri Lanka Public Sector Accounting Standards.

### 2.2 Comments on Financial Statements

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#### 2.2.1 Accounting Deficiencies

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The following observations are made.

- (a) The provision for the payment of audit fees for the years 2012 and 2013 had not been made in the accounts.

- (b) Instead of recording the advances of Rs.75,000 granted for the Presidential Awards Celebration as advances that had been included under the cash and cash equivalents.

### 2.2.2 Accounts Receivable

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Action had not been taken even up to the end of the year under review for the recovery of the sum of Rs.90,000 deposited for the building in which the Research Council office was maintained up to June 2012.

### 2.3 Non-compliances with Laws, Rules, Regulations and Management Decisions

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Non-compliances with the following laws, rules, regulations and management decisions were observed.

Reference to Laws, Rules and  
Regulations

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Non-compliance

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- (a) Establishments Code of the  
Democratic Socialist Republic of  
Sri Lanka
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Sections 12.5.4 and 13.3 of  
Chapter II

Even though an acting appointment should be made only as a temporary measure until a permanent appointment is made, contrary to that, acting appointments for the post of Secretary to National Research Council and the post of Accountant had been made from the years 1999 and 2003 respectively.

Even though the allowances payable for an acting appointment should not exceed 25 per cent of the basic salary, contrary to that a sum of Rs.303,756 had been paid for acting in the post of Secretary in the year under review and the preceding year while Rs.90,900 had been paid for acting in the post of

Accountant in the year under review.

- (b) Treasury Circular No. 842 of 19 December 1978  
A Register of Fixed Assets had not been maintained for the fixed assets totaling Rs.201,871,941.
- (c) Public Enterprises Circular No. PED/12 of 02 June 2003  
(i) Section 9.2  
Action had not been taken to register the Organization Chart of the Council in the Department of Public Enterprises.
- (ii) Section 9.3.1  
Even though a period exceeding 06 years had elapsed since the establishment of the Research Council action had not been taken for preparation of a formal Scheme of Recruitment and obtain the concurrence of the Department of Public Enterprises.
- (d) Letter No. DMS/1765 dated 17 August 2012 of the Director General of the Department of Management Services  
Instead of taking action to fill the vacancies in the staff, 06 officers had been recruited on the assignment basis without obtaining approval and allowances amounting to Rs.911,390 had been paid in respect of the year under review.

### 3. Financial Review

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#### 3.1 Financial Results

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According to the financial statements presented, the financial results of the operations of the Research Council for the year ended 31 December 2013 had been a deficit of Rs.2,357,760 as against the surplus of Rs.443,022 for the preceding year, thus indicating a deterioration of Rs.2,800,782 in the financial results. The increase of expenditure on personnel by a sum of Rs.2,000,000 had been the main reason for the deterioration of financial results.

### 3.2 Analytical Financial Review

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Money deposited in Bank Accounts for research grants represented 99 per cent of the current assets.

## 4. Operating Review

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### 4.1 Performance

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The following observations are made.

- (a) The National Research Council had made grants amounting to Rs.919,000,000 for 247 researches during the period from the year 2006 to the year 2013. Out of that Science Citation Indexes for 39 research grants and other International Publications for 47 researches had been published. Nineteen researches had been abandoned while the patent rights only for 74 researches had been obtained.
- (b) The final results of the researches conducted by spending Treasury provisions during a period of 03 years had been limited to the publication of researches. It was observed that there is no value addition to the money given for researches due to the non-use of the results of researches and the failure to take action for obtaining patent rights.
- (c) According to the Annual Action Plan, provision of Rs.273,000,000 had been made for 60 researches in the year under review. Nevertheless, only a sum of Rs.217,000,000 had been given for 41 researches.
- (d) Even though plans had been made for the grant of awards for 350 researches published in the Science Citation Index in the year under review, no awards whatsoever had been granted in the year.
- (e) Even though plans had been made for the registration of 80 candidates for postgraduate degrees only 36 candidates for degrees had been registered.



### 4.3 Operating Inefficiencies

The following observations are made.

- (a) In the grant of Treasury provisions for the researches selected by the National Research Council, the total provisions required for a period of about 03 years is credited to the Current Accounts relating to the projects at the commencement of the research work. An examination of the balances of the Bank Current Accounts of several preceding years revealed that large amounts of money had been idling in the Current Accounts as shown below.

Year	Provisions Credited to Current Accounts	Balance at the year end in the Bank Current Accounts
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	Rs.	Rs.
2011	200,000,000	268,113,399
2012	220,000,000	346,873,287
2013	217,000,000	396,340,514

- (b) It was observed during the course of examination of the Current Accounts that out of the provisions given to 18 projects completed in the year under review, a large sum of money remained without being spent. Certain projects had not been implemented and the related provisions remained idle for long periods in the Bank Accounts. Accordingly, it was observed in audit that a sum of Rs.23,736,730 had remained idle in the Bank Current Accounts for more than 03 years from the year 2009 to 2013. The management had not taken any action whatsoever in this connection.
- (c) The equipment and chemicals needed for the project during the project period of 03 years should be purchased without delay and the research work should be completed within the project period. Nevertheless, chemicals valued at Rs.217,785 had been purchased from the National Research Council Bank Account in the year 2013 for the Project 08-29 of

which the Current Account had been closed down in the year 2012 on the completion of the project period.

- (d) In terms of clauses 8(1) and (11) of the Project agreement, the Bank Current Accounts of the abandoned and uncompleted projects should be closed down without delay and action should be taken to recover the balance money of those accounts without delay. Even though the research projects of 18 researchers who had obtained research grants totaling Rs.38,659,069 had stopped the projects halfway, action had not been taken promptly to close down those Bank Current Accounts and recover the money.
- (e) (i) Four agreements had been entered into with 04 private companies in the year under review 04 projects for the “Public and Private Sectors Partnership Programme” based on the contribution of 50 per cent each by the National Research Council and the Private Sector for the Research Sector. The Project period was 03 years and the contribution of the National Research Council for the 04 projects amounting to Rs.45,798,008 had been credited in one installment to a Current Account on 17 May 2013 the date of commencement of the projects. In view of the release of more than Rs.45 million in one installment instead of releasing provisions from time to time based on the progress of the projects, it was observed that Government money had been retained idle in Current Accounts.
- (ii) An examination of the Bank Current Accounts of the Projects revealed at a balance of Rs.41,948,125 in the Bank Accounts and other than the opening a letter of credit for the purchase of an equipment for a project (Project No. 12 – 18) on 18 December 2013, no other activities relating to the 04 projects whatsoever had been done.
- (iii) Even though the relevant 04 private companies should have banked contributions totaling Rs.23,465,600 by 31 December 2013 in terms of the Project Agreements, only a sum of Rs.3,937,588 had been banked.
- (iv) Even though the private companies should have furnished six monthly progress reports to the National Research Council every six months in terms of Chapter II of the agreement, progress reports had not been furnished.

- (v) Out of the sum of Rs.78,370,921 received for the projects, a sum of Rs.32,572,913 had been utilized for other activities of the Research Council without being utilized for the objectives of the projects.

#### 4.4 Uneconomic Transactions

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The following observations are made.

- (a) Even though the monthly salary for the post of Secretary to the Research Council approved by the Department of Management Services had been Rs.38,530 and instead of recruiting an officer for the post, an officer released from the Institute of Fundamental Studies had been deployed in the post of Secretary and had been paid monthly allowance of Rs.73,367. As such the Research Council had to spend an additional sum of Rs.243,860 in the year under review.
- (b) An equipment purchased for a research project had been returned to the institution from which it was purchased as it had become inoperative. The further amount receivable in that connection amounting to Rs.150,869 had been written off in the year under review without the approval of the Board of Governors. The Value Added Tax of Rs.159,000 paid on the purchase of the machine had been written off from the accounts in the preceding year.

#### 4.5 Expenditure Contrary to the Objectives

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Even though the primary objective of the National Research Council in accordance with the Notification published in the Gazette Extraordinary No.1514/28 of 15 September 2007 is the improvement of research activities based on knowledge and science, the Council had granted a sum of Rs.1,250,000 in the year under review in respect of 02 occasions extraneous to the objective.

#### 4.6 Personnel Administration

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The following observations are made.

- (a) Nine vacancies in the Executive and Non-Executive personnel existed as at 31 December 2013.
- (b) The post of Secretary which is the Senior Management and Executive post of the National Research Council and the post of Accountant had been vacant since the years 1999 and the year 2003 respectively and action had not been taken even by the end of the year under review to fill the vacancies.
- (c) Even though 05 officers had been recruited on the assignment and contract basis from the year 2006 for the approved staff of the Research Council and action had not been taken even by the end of the year under review to convert them permanent status.

#### 4.7 Failed Projects

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After the evaluation of the Research Reports of 07 researches completed at a cost of Rs.15,682,293, those projects had been categorized as failed projects / unsatisfactory projects.

### 5. Accountability and Good Governance

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#### 5.1 Deviation from the Procurement Guidelines

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Four items of equipment valued at Rs.32,290,822 had been purchased in the year 2011 deviating from the Procurement Guidelines.

#### 5.2 Internal Audit

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An Internal Audit Unit had not been established and the assistance of the Internal Audit Unit of the Line Ministry had not been obtained for the internal audit work.



### 5.3 Examination of the Budget

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The actual expenditure as at 31 December 2013 had exceeded the budgeted expenditure in the ranges of 13 per cent to 82 per cents, thus indicating that the budget had not been made use of as an effective instrument of management control.

### 6. Systems and Controls

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Deficiencies in systems and controls observed during the course of audit were brought to the notice of the Chairman of the Council from time to time. Special attention is needed in respect of the following areas of control.

- (a) Research Grants
- (b) Assets Management
- (c) Accounting
- (d) Budget
- (e) Project Management

W.P.C. Wickramaratne  
Acting Auditor General

## CONTACT INFORMATION

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