1968-2008

40

NSC - NARESA - NSF

Celebrating 40 years of dedicated service to science & technology

NATIONAL SCIENCE FOUNDATION

1968-2008 40 NSC - NARESA - NSF

CONTENTS

About us

The National Science Foundation (NSF) is a state funded institute under the MInistry of Science and Technology. The NSF, established in 1998 by the Science and Technology Development Act No 11 of 1994, is the successor to the Natural Resources Energy and Science Authority of Sri Lanka (NARESA) which succeeded the National Science Council, established in 1968.

Our Vision

To be the premier driving force in science and technology leading to competitive advantage and the rapid advancement of the nation.

Our Mission

We promote research, development and innovation to create a knowledge economy by building public - private , institution-industry partnerships

We facilitate capacity building, infrastructure development, technology transfer, knowledge creation and sharing, in all fields of science and technology to improve the quality of life of our people

We achieve our goals by nurturing a competent workforce in a conducive work environment which is performance driven & results oriented.

Objectives and Functions

- To initiate, facilitate and support basic and applied scientific research by universities, science and technology institutions and scientists, with a view to:
  - * strengthening scientific research potential, including research in the social sciences, and scientific education programmes,
  - * developing the natural resources of Sri Lanka,
  - * promoting the welfare of the people of Sri Lanka and
  - * training research personnel in science and technology
- To foster the interchange of scientific information among scientists in Sri Lanka and foreign countries
- To award scholarships and fellowships for scientific study or scientific work at science and technology institutions
- To maintain a current register of scientific and technical personnel, and in other ways to provide a central clearing house for the collection, interpretation and analysis of data, on the availability of, and the current and projected need for, scientific and technical resources in Sri lanka, and to provide a source of information for policy formulation on science, technology and other fields
- To popularize science amongst the people by funding programmes for that purpose

The NSF subscribes to the following principles in carrying out its functions

Universality of Science:

The NSF observes and upholds the freedom of scientists as individuals to communicate and associate with other scientists, in the furtherance of their science, without discrimination on grounds other than scientific merit, through national and international scientific activities.

Freedom in the Pursuit of Science:

The NSF observes and upholds the rights of scientists to freely pursue science in accordance with scientific processes which are to be undertaken responsibly.

Organizational Structure

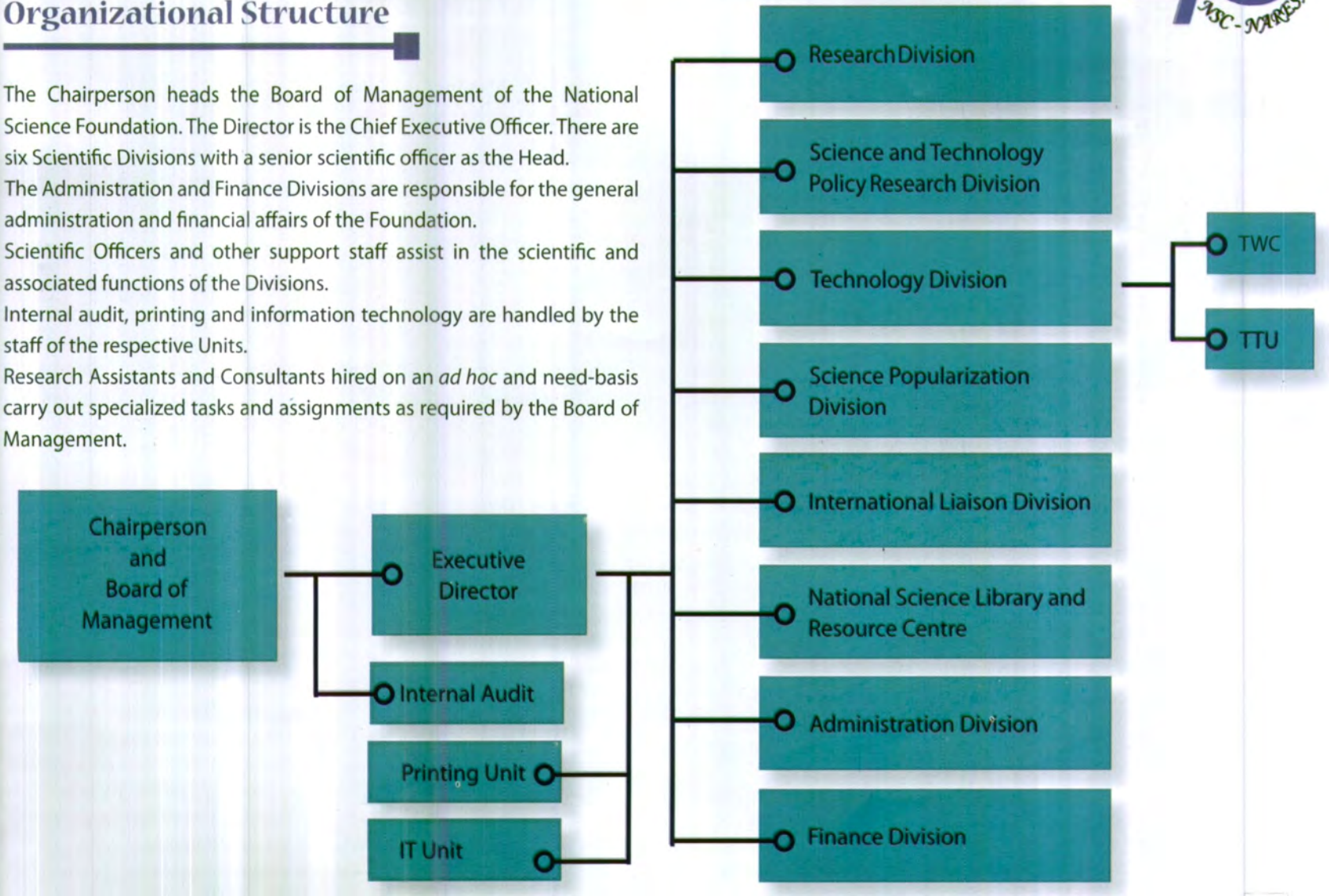
The Chairperson heads the Board of Management of the National Science Foundation. The Director is the Chief Executive Officer. There are six Scientific Divisions with a senior scientific officer as the Head.

The Administration and Finance Divisions are responsible for the general administration and financial affairs of the Foundation.

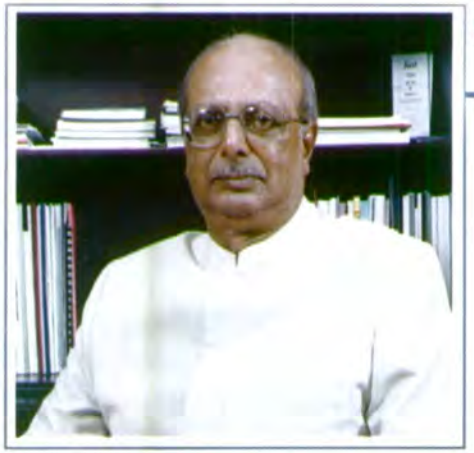
Scientific Officers and other support staff assist in the scientific and associated functions of the Divisions.

Internal audit, printing and information technology are handled by the staff of the respective Units.

Research Assistants and Consultants hired on an *ad hoc* and need-basis carry out specialized tasks and assignments as required by the Board of Management.



MESSAGE FROM HON. MINISTER OF SCIENCE AND TECHNOLOGY



PROF. TISSA VITARANA

I consider it a privilege and an honor to be able to send a message when the National Science Foundation (NSF) is celebrating 40 years of promotion of science and research in our country. The fact that this promotion has been done through several successive organizations over this period and that the National Science Foundation actually came into being 10 years ago, may reflect the lack of a clear long term vision at leadership level for harnessing and promoting science, research and technology to meet the need for socio-economic development, through industrialization. Even the decision to split the Natural Resources, Energy and Science Authority (NARESA), after 20 years, into the NSF and the National Science and Technology Commission (NASTEC) was taken largely because of the need to pay more attention to science policy formulation, monitoring and evaluation through NASTEC, rather than to promote industrialization.

The development of science and research in Sri Lanka was initiated during British rule largely on the British model where each researcher could choose the subject without much regard for national needs. However, the researchers working in government departments e.g. Agriculture, Health, were required to address relevant national problems. But from a point of view of emerging from our role as a primary producer and becoming industrialized, there was little research done. This shortcoming was highlighted by the Science Policy Task Force headed by Prof. K.K.Y.W. Perera in 1993 and they recommended the separation of NARESA into NSF and NASTEC, and also the restructuring of the CISIR to better meet the industrial development needs renaming it the Industrial Technology Institute (ITI).

Korea, Taiwan and Singapore have emerged from poverty by becoming industrialized though the promotion of science and technology and relevant research and development; for instance capturing the emerging wave of microelectronics and becoming a world leader in that technology. In fact more than 70% of Korea's large R&D investment (3% of GDP) is devoted to "development" research, and only 13% to basic research and 12% to applied research.

I am glad that the Board of NSF has appreciated the value of this trend and made appropriate changes in their research promotion agenda e.g. thematic research programme, funding schemes for industries, particularly SMEs, technology transfer programmes and entrepreneurship promotion among scientists. The NSF is playing the leading role in helping Sri Lanka to catch the next technology wave, nanotechnology.

In the context of globalization and the open economy our efforts to industrialize, particularly by value addition to our natural and agricultural resources, requires a determined focus on generating appropriate technology, especially for the SME sector. The Government needs to spend at least 1% of the GDP on R&D, and the NSF requires a much larger budget. I compliment the staff and the Board of NSF for its significant progress in meeting this vital emerging need despite the various handicaps.

MESSAGE FROM .....

PROF. SIRIMALI FERNANDO

CHAIRPERSON

NATIONAL SCIENCE FOUNDATION

The National Science Foundation is the longest serving premier state institution for the promotion of Science and Technology in Sri Lanka. As the present Chairperson of NSF, I am pleased to send a message on this occasion to celebrate 40 years of dedicated, uninterrupted service by the NSF and its predecessors to the nation.

I take this opportunity to congratulate and thank all present and past Chairpersons, Directors-General, Secretaries-General, Boards of Management of NSF, NARESA and NSC, their Directors, employees of the Secretariat and more than 1000 scientists who have served in various Advisory Boards and Committees over four decades, for this achievement. This institution has survived many changes over the years, thanks to the strong foundations laid and the unstinted cooperation and support extended by them.

The concept of science policy formulation and the need for an apex body to give leadership with regard to a national policy for the development of science in this country was first voiced by the Ceylon Association for the Advancement of Science (CAAS) in 1948. However, it was only 20 years later, in 1963, that a Head of State, H.E. Sirimavo Bandaranaike responded to this request. As a result, the National Science Council (NSC) was established in 1968 by an Act of Parliament during the premiership of H.E. Dudley Senanayake.

On this occasion, I wish to pay a special tribute to all the scientists and the Ceylon Association for the Advancement of Science and its successor, SLAAS, for their leading role in establishing and supporting the National Science Council.

With the reconstitution of the NSC in 1977 a National Science Policy was drafted by a statutory committee on science policy research led by Prof. S N Arseculeratne. The first science policy statement for Sri Lanka was presented to the Head of State and accepted by the Cabinet in 1978. This was 30 years after independence and 10 years after the establishment of the NSC.

In 1977, The National Science Council was redesigned by a new Act of Parliament as the Natural Resources, Energy and Science Authority (NARESA), perhaps to provide it with more authority,.

Eight years after the 1978 policy, in 1986, under the direction of H.E. the President, J R Jayewardene, a large group of scientists

coordinated by Prof. Cyril Ponnamperuma and Dr. Wickrema Weerasooriya worked out an implementation strategy which has not been totally operationalized even todate. However, the role of NARESA in this whole exercise remains uncertain, but there had been subsequent efforts to revise the policy.

The Science and Technology Development Act in 1994 split the mandate of NARESA between the National Science Foundation (the successor to NARESA) and the National Science and Technology Commission (NASTEC). The NASTEC is still in the process of finalizing the next revision to the science policy document, 10 years since its establishment and, 30 years after the 1978 Science Policy was accepted by the government.

The National Science Council commenced awarding research grants 2 years after its establishment – i.e. in 1970. To date, the three successive institutions together have awarded 1860 grants to a value of Rs. 420 million. Of this, the NSF has awarded over 320 million as research grants within the last three and a half years, since August 2004, as we were able to increase the allocation for R&D many fold with the support of the present Minister for Science and Technology. To this we have now added the support for industrial R&D, recognizing that it is a major force that drives both science and the economy. It is also for this reason that the NSF, together with the Ministry of Science and Technology lead the National Nanotechnology Initiative to infuse nanotechnology to our local industries.

We need to assess the global developments in science and technology. It is interesting to note that more or less at the same time as the NSC was established in 1960s, two other countries that were economically not better off than Sri Lanka also focused on and invested in science and technology activities in their countries. Korea initiated its activities through its first economic development plan in 1962. Singapore established the Ministry of Science and Technology and the Singapore Science Council in 1967 to promote the role of science. We see the marked transformation in the economies of South Korea and Singapore today. These economies were propelled by science and technology. These countries have surpassed Sri Lanka today because of their sustained planning and implementation strategies and the speed at which they operate. On this occasion when we celebrate 40 years of service to the nation, we should resolve to appreciate the need for planning and operationalization of those plans and the importance of speed at which we work and make decisions in order to face the global challenges and forge ahead as a 'developed nation'.

Finally, I take this opportunity to thank Hon. Prof. Tissa Vitarana, Minister for Science and Technology and Mr. A.N.R. Amarathunga, the Secretary to the Ministry, for the support extended to the present Board of Management and the Secretariat of the National Science Foundation as we navigate through the turbulent waters of Government bureaucracy and restricted funding, to harness science and technology for the socio economic development of our nation.

MESSAGE FROM .....

DR. M.C.N. JAYASURIYA

DIRECTOR

NATIONAL SCIENCE FOUNDATION

I consider it a very rare privilege to have been able to contribute this message at the 40th Anniversary Celebrations of the National Science Foundation.

The year 2008 is a very special year for the National Science Foundation. It has reached the ripe age of 40 years. Founded in 1968, as the National Science Council (NSC), and then later re-designated by two Acts of Parliament, first to be called the Natural Resources, Energy and Science Authority (NARESA) from 1978-1997 and then the National Science Foundation from 1998, it has been serving Sri Lanka's scientific community as the premier funding organization for research and development in science and technology.

My initial encounter with the NSC dates back to 1975, when I received my first research grant for a study on pasture agronomy while at the Faculty of Agriculture, University of Peradeniya. Although the amount of funds received was comparatively small in present day terms, it meant a lot to me as a novice in research. This research grant and a subsequent one helped me to bring out my first publication in the Journal of the National Science Council of Sri Lanka in 1976. Today, after 32 years I am proud to be associated with the same institution – though differently named – as its Director/ Chief Executive Officer.

The events highlighted in this Anniversary Publication by distinguished scientists such as Dr. C.R. Panabokke, Dr. R.O.B. Wijesekera, Prof. Priyani Soysa, Prof. C.B. Dissanayake, Prof. S.N. Arseculeratne, Prof. Veranja Karunaratne, Dr. J. Dela, Mr. M.A.T. de Silva – just to name a few – are a clear indication of the immeasurable service that the organization has been able to provide to the scientific community.

Over the 40 years of its exsistence, the organization has developed many mechanisms of importance for consolidating the national science and technology base. It has been the stepping stone for many scientists to excel themselves in their respective fields both in Sri Lanka and abroad. I have no doubt that they are immensely grateful for the pivotal support they received from the NSC/NARESA/NSF, to be what they are today.

Today we lack skilled and enterprising scientists who could conduct cutting edge research. Brain drain has continued with most of our young, able and talented men

and women going overseas to serve other organizations/countries because of better facilities and remuneration, which Sri Lanka has not been able to offer. Thus, the biggest challenge we face today is the development of a research culture that would produce scientists of the highest calibre who could serve the country to bring it out of the developing nation status to a developed nation status.

NSF which is ten years old this year has grown to become a well recognized institution both nationally and internationally. The new programmes that the NSF has initiated, such as the Coordinated Thematic Research Programme, Overseas Special Training Programme for on-the-job short term training on areas of high priority, international linkages established with world renowned institutions and organizations and the support services that go with these, including the provision of a high quality publication site for scientific achievements, should provide an avenue to address these challenges that we face today.

The NSF's strength has been its dedicated and committed staff. Today, as we celebrate 40 years of NSF's existence we pay tribute to all those staff members, the Chairpersons, Directors-General, Secretaries-General, Directors and others and the successive Boards of Management for their dedicated service and guidence for bringing NSF to what it is today.

The Board of Management - 2008

The NSF is governed by a Board of Management which consists of the Chairperson, Director, a member each representing the University Grants Commission, the Sri Lanka Association for the Advancement of Science, the Institute of Engineers of Sri Lanka and the Ministry of Finance; and four members appointed by the Hon. Minister for Science and Technology. The Director functions as the Chief Executive Officer of the Foundation.

Chairperson

Prof. Sirimali Fernando
Professor of Microbiology, Department of Microbiology, Faculty of Medicine, University of Sri Jayawardenepura

Executive Director/Chief Executive Officer

Dr. M. C. N. Jayasuriya
Former Technical Officer and Regional Expert for Africa, Animal Production and Health Section, International Atomic Energy Agency, Vienna, Austria;
Fellow, Institute of Biology, UK

Members of the Board of Management

Mr. C. M. R. Anthony
Director, Science Health and Physical Education, National Institute of Education

Ms. B.M.D.N. Balasooriya
Assistant Director, State Accounts Department, General Treasury (up to 14.09.2007)

Prof. Uma Coomaraswamy
Emeritus Professor of Botany, Open University of Sri Lanka;
Fellow, National Academy of Sciences;
Consultant, Open University of Sri Lanka-Life Long Learning (L3) Project

Prof. Tuley D. de Silva
Retired Special Advisor, Chemical Industries Branch, United Nations Industrial Development Organization, Vienna, Austria;
Former Professor of Chemistry, University of Sri Jayewardenepura

Prof. Lakshman Dissanayake
Director, Postgraduate Institute of Science, University of Peradeniya;
Senior Professor of Physics, Faculty of Science, University of Peradeniya

Dr. Lochana Guneratna
Charted Architect; Urban Planner;
Former General President, Sri Lanka Association for the Advancement of Science

Prof. M.T.M. Jiffry
Senior Professor of Physiology, Faculty of Medicine, University of Sri Jayewardenepura; Member, University Grants Commission

Prof. Rohan Rajapakse
Senior Professor, Department of Agricultural Biology, University of Ruhuna; Executive Director, Sri Lanka Council for Agriculture Research Policy; Member, University Grants Commission

Mr.J.V. Weerasena
Deputy Director, Department of Public Enterprises, General Treasury

Eng. M. Zubair
Charted Engineer, Former President, Institute of Engineers

Board of Management 2008

Chairpersons Since 1968

Prof. Sir Nicholas Attygalle	1968 - 1970
Dr. A.N.S Kulasinghe	1970 - 1972
Prof. Osmund Jayaratne	1972 - 1977
Prof. E.O.E. Pereira	1977 - 1982
Dr. R.P. Jayewardene	1982 - 1992
Prof Priyani E Soysa	1992 - 1998
Prof. Kapila Dahanayaka	1998 - 2001
Prof. Eric Karunanayake	2001 - 2002
Prof. Ranjan Ramasamy	2002 - 2004
Prof. Sirimali Fernando	2004 to date

Chief Executive Officers

Mr.B.J.P. Alles	May 1968 - Aug. 1969	Secretary General (part-time)
Dr. C.R. Panabokke	Sept. 1969 - Feb. 1971	Secretary-General
Dr. G.C.N. Jayasuriya	Mar. 1971 - Sept. 1978	Secretary-General
Dr. R.P. Jayewardene	Nov. 1978 - May 1982	Secretary-General
	June 1982 - April 1992	Director-General
Prof. Priyani E Soysa	May 1992 - April 1998	Director General
Mrs. S.P. Prelis	April 1998 - Oct. 1998	Director
Mr. M. Watson	Oct. 1998 - Jan. 2005	Director
Dr. M.C.N. Jayasuriya	Feb. 2005 to date	Director

Boards of Management - 1968-2007

National Science Council

1970-1971

1 October 1970 – 22 April 1971

Chairperson Mr. A.N.S. Kulasinghe

Vice Chairperson Prof. B.A. Abeywickrema

Dr. C.R. Panabokke, Secretary-General (until February 1971)

Dr. G.C.N. Jayasuriya, Secretary- General (from March 1971)

Members Mr. B.J.P. Alles (resigned, March 1971), Prof. V. Appapillai, Prof. H. Cruz, Prof. C. Dahanayake, Dr. L.H. Fernando, Mr. L.J.D. Fernando, Mr.J.V. Fonseka, Dr. Charles St. George

Dr. S. Gnanalingam (resigned, February1971), Dr. R.P. Jayewardene, Dr. J.W.L. Peiris, Prof. E.O.E. Pereira, Prof. P.P.G.L. Siriwardena, Mr. A.E.K. Tisseverasinghe, Dr. R.A.H. Weerakoon

23 April 1971 - 30 September 1971

Chairperson Mr. A.N.S. Kulasinghe

Vice Chairperson Prof. B.A. Abeywickrema

Members Prof. V. Appapillai, Prof. H. Cruz, Prof. C. Dahanayake, Dr. L.H. Fernando, Mr. L.J.D. Fernando, Mr.J.V. Fonseka, Dr. Charles St. George, Prof. H.A. de S. Gunasekera, Dr. R.P. Jayewardene, Dr. J.W.L. Peiris

Prof. E.O.E. Pereira,
Prof. P.P.G.L. Siriwardena,
Mr. A.E.K. Tisseverasinghe, Dr. R.A.H. Weerakoon

1972

1 October 1971 - 18 April 1972

Chairperson	Mr. A.N.S. Kulasinghe
Vice Chairperson	Prof. B.A. Abeywickrema
Members	Prof. V. Appapillai, Prof. H. Cruz, Prof. C. Dahanayake, Dr. L.H. Fernando, Mr. L.J.D. Fernando, Mr. J.V. Fonseka (resigned February 1972), Dr. Charles St. George, Prof. H.A. de S. Gunasekera, Dr. R.P. Jayewardene, Dr. J.W.L. Peiris, Prof. E.O.E. Pereira, Prof. P.P.G.L. Siriwardena (resigned January1972),Mr.M. Sivanathan, Mr. A.E.K. Tisseverasinghe, Dr. R.A.H. Weerakoon

2 May 1972 - 31 December 1972

Chairperson	Dr. O.W. Jayaratne
Vice Chairperson	Mr. D.B. Pattiarachchi
Secretary General	Dr. G.C.N. Jayasuriya
Members	Prof. B.A. Abeywickrema, Dr. R.C. de Silva, Dr. M.A.V. Devanathan, Dr. L.H. Fernando, Dr. S.T.G. Fernando (resigned, October 1972), Dr. L.P.D. Gunawardena, Mr.S.F. Laurentius, Mr. A.S. Mendis, Mr. T.W. Mendis, Dr. W.R.N. Nathanael, Dr. C.R. Panabokke, Dr. J.W.L. Peiris, Dr. O.S. Peries, Mr. M.M. Pillai, Mr.N. Puyapalarasan, Mr. J.J. Rajanayagam, Mr.M. Ranaweera, Prof. K.N. Seneviratne, Mr. A.E.K. Tisseverasinghe

1973

Chairperson	Dr. O.W. Jayaratne
Vice Chairperson	Mr. D.B. Pattiarachchi
Secretary General	Dr. G.C.N. Jayasuriya
Members	Prof. B.A. Abeywickrema, Dr. R.C. de Silva, Dr. M.A.V. Devanathan, Dr. N.N. de Silva (appointed, September 1973), Dr. L.H. Fernando, Dr. L.P.D. Gunawardena, Mr. S.F. Laurentius, Mr.A.S. Mendis, Mr. T.W. Mendis, Mr. E.I. Munasinghe (Appointed, June 1973), Dr. W.R.N. Nathanael, Dr. C.R. Panabokke, Dr. J.W.L. Peiris, Dr. O.S. Peries, Mr.M.M. Pillai, Mr. N. Puyapalarasan (resigned, June 1973), Mr. J.J. Rajanayagam, Mr.M. Ranaweera, Prof. K.N. Seneviratne, Mr. A.E.K. Tisseverasinghe

1974

Chairperson	Dr. O.W. Jayaratne
Vice Chairperson	Mr. D.B. Pattiarachchi
Secretary General	Dr. G.C.N. Jayasuriya
Members	Prof. B.A. Abeywickrema, Dr. N.N. de Silva, Dr. R.C. de Silva, Dr. M.A.V. Devanathan, Dr. L.H. Fernando, Dr. L.P.D. Gunawardena, Mr. S.F. Laurentius, Mr.A.S. Mendis, Mr. T.W. Mendis, Mr.E.I. Munasinghe, Dr. W.R.N. Nathanael, Dr. C.R. Panabokke, Dr. J.W.L. Peiris, Dr. O.S. Peries, Mr.M.M. Pillai, Mr. M. Ranaweera, Prof. K.N. Seneviratne, Mr. A.E.K. Tisseverasinghe

1975

Chairperson	Dr. O.W. Jayaratne
Vice Chairperson	Mr. D.B. Pattiarachchi
Secretary General	Dr. G.C.N. Jayasuriya
Members	Prof. B.A. Abeywickrema, Mr. L.A.C. Alles (appointed, February 1975), Mr. H.C.D. de Silva, Dr. N.N. de Silva (resigned, February 1975), Dr. R.C. de Silva, Dr. M.A.V. Devanathan, Dr. L.H. Fernando, Dr. L.P.D. Gunawardena, Mr.S.F. Laurentius, Mr. A.S. Mendis, Mr.T.W. Mendis, Dr. W.R.N. Nathanael, Dr. C.R. Panabokke, Dr. J.W.L. Peiris, Dr. O.S. Peries, Mr. M.M. Pillai, Mr.M. Ranaweera, Prof. K.N. Seneviratne, Mr. A.E.K. Tisseverasinghe

1976

Chairperson	Dr. O.W. Jayaratne
Vice Chairperson	Prof. K.N. Seneviratne
Secretary General	Dr. G.C.N. Jayasuriya
Members	Prof. B.A. Abeywickrema, Mr.L.A.C. Alles, Prof. R.R. Appadurai, Dr. R.C. de Silva, Mr. R.G. Gomes (resigned, May 1976), Mr. Ajit Gunatilleke, Mr.A.S. Jayawardena, Dr. R. Mahalingasivam, Mr.P.H. Perera, Mr. V.J. Rajanandan (appointed, May 1976), Dr. R.O.B. Wijesekera

1977

1 January 1977 - August 1977

Chairperson	Dr. O.W. Jayaratne (resigned, February 1977)
Secretary General	Dr. G.C.N. Jayasuriya
Members	Prof. B.A. Abeywickrema, Mr.L.A.C. Alles, Mr. Ajit Gunatilleke, Mr. A.S. Jayawardena (resigned, March 1977), Mr. P.H. Perera, Mr.V.J. Rajanandan,

	Prof. K.N. Seneviratne, Prof. R.R. Appadurai, Dr. R.O.B. Wijesekera (resigned, April 1977), Dr. R. Mahalingasivam

October 1977 - 31 December 1977

Chairperson	Prof. E.O.E. Pereira
Secretary General	Dr. G.C.N. Jayasuriya
Members	Dr. R.C. de Silva, Dr. R. Mahalingasivam, Mr. L.A.C. Alles, Prof. P.C.B. Fernando, Mr. Bradman Weerakoon, Prof. S.N. Arseculeratne, Dr. H.N.S. Karunatilleke, Prof. J.A. Gunawardena, Dr. K.G. Dharmawardena

1978

Chairperson	Prof. E.O.E. Pereira
Vice Chairperson	Prof. F.S.C.P. Kalpage
Secretary General	Dr. G.C.N. Jayasuriya (resigned, February 1978) Dr. R.P. Jayewardene (appointed, November 1978)
Members	Mr. L.A.C. Alles, Prof. S.N. Arseculeratne, Mr. A.L. de Alwis (appointed, March 1978), Dr. R.C. de Silva (resigned, February 1978), Dr. K.G. Dharmawardena, Prof. P.C.B. Fernando, Mr. C. Gamage, Prof. J.A. Gunawardena, Dr. H.N.S. Karunatilleke, Dr. R. Mahalingasivam, Mr. Bradman Weerakoon

1979

Chairperson	Prof. E.O.E. Pereira
Vice Chairperson	Prof. F.S.C.P. Kalpage
Secretary General	Dr. R.P. Jayewardene
Members	Mr. L.A.C. Alles (resigned, November 1979), Prof. S.N. Arseculeratne, Mr. A.L. de Alwis (resigned April 1979), Dr. K.G. Dharmawardena, Prof. P.C.B. Fernando, Mr. C. Gamage, Prof. J.A. Gunawardena, Dr. H.N.S. Karunatilleke, Dr. R. Mahalingasivam, Mr. Navasivayam (resigned, November 1979)

1980

1 January 1980 - 14 March 1980

Chairperson	Prof. E.O.E. Pereira
Vice Chairperson	Prof. F.S.C.P. Kalpage
Secretary General	Dr. R.P. Jayewardene
Members	Prof. S.N. Arseculeratne, Dr. K.G. Dharmawardena, Prof. P.C.B. Fernando, Mr. C. Gamage, Prof. J.A. Gunawardena, Dr. H.N.S. Karunatilleke, Dr. R. Mahalingasivam

15 March 1980 - 31 December 1980

Chairperson	Prof. E.O.E. Pereira
Vice Chairperson	Prof. F.S.C.P. Kalpage
Secretary General	Dr. R.P. Jayewardene

Members Mr. Lyn de Alwis, Dr. R.N. de Fonseka, Mr. Donald Gunasekera, Dr. J.A. Gunawardena, Dr. M.M.J.W. Herath, Dr. H.N.S. Karunatilleke, Dr. R. Mahalingasivam, Dr. O.S. Peries

1981

Chairperson Prof. E.O.E. Pereira
Vice Chairperson Prof. F.S.C.P. Kalpage
Secretary General Dr. R.P. Jayewardene

Members Mr. Lyn de Alwis, Dr. R.N. de Fonseka (resigned January1981), Mr. Donald Gunasekera, Dr. J.A. Gunawardena, Dr. M.M.J.W. Herath, Dr. H.N.S. Karunatilleke, Dr. R. Mahalingasivam, Dr. O.S. Peries (resigned August1981)

1982

1January - May 1982

Chairperson Prof. E.O.E. Pereira
Vice Chairperson Prof. F.S.C.P. Kalpage
Secretary General Dr. R.P. Jayewardene

Members Dr. J.K.P. Ariyaratne, Mr.Lyn de Alwis, Mr. Donald Gunasekera, Dr. J.A. Gunawardena, Dr. M.M.J.W. Herath, Dr. H.N.S. Karunatilleke, Dr. R. Mahalingasivam

June - December 1982

Director General Dr. R.P. Jayewardene

Members Mr. U.G. Bulumulle, Mr.Lyn de Alwis, Dr. Nalini de Alwis, Dr. D.B. Dhanapala (appointed August 1982), Dr. M.M.J.W. Herath, Dr. Mohan Munasinghe (appointed August 1982), Mr. V.R. Nanayakkara, Dr. K.K.Y.W. Perera, Dr. O.S. Peries (appointed August 1982), Dr. R.S. Ramakrishna (appointed August.1982)

NATURAL RESOURCES, ENERGY, AND SCIENCE AUTHORITY OF SRI LANKA (NARESA)

1983

Director General Dr. R.P. Jayewardene

Members Mr. U.G. Bulumulle, Mr.Lyn de Alwis, Dr. Nalini de Alwis, Dr. D.B. Dhanapala, Dr. M.M.J.W. Herath, Dr. Mohan Munasinghe, Mr. V.R. Nanayakkara, Dr. K.K.Y.W. Perera, Dr. O.S. Peries, Dr. R.S. Ramakrishna

1984

Director General Dr. R.P. Jayewardene

Members Mr. U.G. Bulumulle, Mr.Lyn de Alwis, Dr. Nalini de Alwis, Dr. D.B. Dhanapala, Dr. M.M.J.W. Herath, Dr. Mohan Munasinghe.

Mr. V.R. Nanayakkara, Dr. K.K.Y.W. Perera,
Dr. O.S. Peries, Dr. R.S. Ramakrishna

1985

1 January 1985 - 31 May 1985

Director General — Dr. R.P. Jayewardene

Members — Mr. Lyn de Alwis, Dr. Nalini de Alwis, Mr. U.G. Bulumulle, Dr. D.B. Dhanapala, Dr. M.M.J.W. Herath, Dr. Mohan Munasinghe, Mr. V.R. Nanayakkara, Dr. K.K.Y.W. Perera, Dr. O.S. Peries, Dr. W.P.D. Pereira

1 June 1985 - 31 December 1985

Director General — Dr. R.P. Jayewardene

Members — Mr. L.C.A. de S. Wijesinghe (Addl. Director General)
Prof. S.T. Fernando, Dr. Irwin Gunawardene, Mr. M. Faiz Mohideen, Prof. W.P.D. Pereira, Prof. K.K.Y.W. Perera, Prof. N. Ratnasiri, Mr. L.K. Seneviratne, Prof. S. Balasubramanium (up to September 1985), Dr. Mohan Munasinghe (up to September 1985), Dr. R.L. de Silva (from December 1985), Prof. T.E.J. de Fonseka (from December 1985)

1986

Director General — Dr. R.P. Jayewardene

Members — Mr. L.C.A. de S. Wijesinghe (Addl. Director General)
Prof. S.T. Fernando, Dr. Irwin Gunawardene, Mr. M. Faiz Mohideen, Prof. (Mrs) W.P.D. Pereira, Prof. K.K.Y.W. Perera, Prof. (Mrs) N. Ratnasiri, Mr. L.K. Seneviratne, Dr. R.L. de Silva, Prof. T.E.J. de Fonseka

1987

Director General — Dr. R.P. Jayewardene

Members — Mr. L.C.A. de S. Wijesinghe (Addl. Director General)
Prof. S.T. Fernando, Dr. Irwin Gunawardene, Mr. M. Faiz Mohideen, Prof. W.P.D. Pereira, Prof. K.K.Y.W. Perera, Prof. N. Ratnasiri, Mr. L.K. Seneviratne, Dr. R.L. de Silva, Prof. T.E.J. de Fonseka

1988

1 January - 31 May 1988

Director-General Dr. R.P. Jayewardene

Members Mr. L.C.A. de S. Wijesinghe (Addl. Director General)
Prof. S. Balasubramaniam, Prof. S.T. Fernando,
Dr. S.D.I.E. Gunawardene,
Mr.M. Faiz Mohideen,
Dr. Mohan Munasinghe,
Prof. W.P.D. Pereira, Prof. K.K.Y.W. Perera,
Prof. N. Ratnasiri, Mr.L.K. Seneviratne

1 June - 31 December 1988

Director General Dr. R.P. Jayewardena

Members Mr. L.C.A. de S. Wijesinghe (Addl. Director General)
Dr. S.L. Amarasiri, Prof. S. Balasubramaniam,
Prof. V. Basnayake, Prof. H. Crusz,
Dr. R.L. de Silva, Dr. E.R. Jansz,
Dr. Swarna Jayaweera,
Prof. N.S. Karunarathne, Dr. D.T. Wettasinghe

1989

1 January 1989 - 16 April 1989

Director General Dr. R.P. Jayewardene

Members Mr. L.C.A. de S. Wijesinghe (Addl. Director General)
Dr. S.L. Amarasiri, Prof. S. Balasubramaniam,
Prof. V. Basnayake, Prof. H. Crusz,
Dr. R.L. de Silva, Dr. E.R. Jansz,
Dr. Swarna Jayaweera, Prof. N.S. Karunarathne,
Dr. D.T. Wettasinghe

17 April 1989 to 31 December 1989

Director General Dr. R.P. Jayewardene

Members Mr. L.C.A. de S. Wijesinghe (Addl. Director General)
Prof. S. Balasubramaniam, Prof. V. Basnayake,
Prof. W.R. Breckenridge, Prof. P.C.B. Fernando,
Prof. S.A. Gunasekera, Dr. S.D.I.E. Gunawardena,
Dr. E.R. Jansz, Prof. N.S. Karunarathne,
Dr. A.M. Mubarak, Prof. H. Sriyananda

1990

Director General Dr. R.P. Jayewardene

Members Mr. L.C.A. de S. Wijesinghe (Addl. Director General)
Prof. S. Balasubramaniam, Prof. V. Basnayake,
Prof. W.R. Breckenridge, Prof. P.C.B. Fernando,
Prof. S.A. Gunasekera, Dr. S.D.I.E. Gunawardena,
Dr. E.R. Jansz, Prof. N.S. Karunarathne,
Dr. A.M. Mubarak, Prof. H. Sriyananda

1991

Director General	Dr. R.P. Jayewardene
Members	Prof. S. Balasubramaniam, Prof. V. Basnayake, Prof. W.R. Breckenridge, Prof. P.C.B. Fernando, Prof. S.A. Gunasekera, Dr. S.D.I.E. Gunawardena, Dr. E.R. Jansz, Prof. N.S. Karunarathne, Dr. A.M. Mubarak, Prof. H. Sriyananda

1992

1 January 1992 - 17 April 1992

Director General	Dr. R.P. Jayewardene
Members	Prof. S. Balasubramaniam, Prof. V. Basnayake, Prof. W.R. Breckenridge, Prof. P.C.B. Fernando, Prof. S.A. Gunasekera, Dr. S.D.I.E. Gunawardena, Dr. E.R. Jansz, Prof. N.S. Karunarathne, Dr. A.M. Mubarak, Ms. A. Sabanayagam

18 April 1992 - 31 December 1992

Director General	Prof. Priyani E. Soysa
Members	Prof. Senaka Bandaranayake, Prof. C. Dahanayake, Prof. N. Kodagoda, Prof. R. Ramasamy, Ms. . A. Sabanayagam, Dr. D.J.T. Siyambalapitiya, Mr. W.K. Wickramarachchi

1993

Director General	Prof. Priyani E. Soysa
Members	Prof. Senaka Bandaranayake, Prof. C. Dahanayake, Mr.G.R. Gunawardena, Prof. N. Kodagoda, Prof. R. Ramasamy, Dr. D.J.T. Siyambalapitiya, Mr. W.K. Wickramarachchi

1994

1 January 1994 - 26 September 1994

Director General	Prof. Priyani E. Soysa
Members	Prof. Senaka Bandaranayake, Prof. C. Dahanayake, Prof. N. Kodagoda, Prof. R. Ramasamy, Dr. D.J.T. Siyambalapitiya, Mr. W.K. Wickramarachchi, Mr. G.R. Gunawardena

27 September1994 - 31 December 1994

Director General	Prof. Priyani E. Soysa
Members	Prof. C. Dahanayake, Mr.Godfrey Gunatilleke, Dr. A.S. Induruwa, Prof. N. Kodagoda, , Dr. C.R. Panabokke, Dr. Upali Pilapitiya, Mr. D.G. Senadhipathy, Dr. Tissa Vitarana, Dr. R.O.B. Wijesekera

1995

Chairperson	Prof. Priyani E. Soysa
Members	Prof. C. Dahanayake, Mr.Godfrey Gunatilleke, Dr. A.S. Induruwa, Prof. N. Kodagoda, Dr. C.R. Panabokke, Dr. Upali Pilapitiya, Mr. D.G. Senadhipathy, Dr. Tissa Vitarana, Dr. R.O.B. Wijesekera

1996 and 1997

Chairperson	Prof. Priyani E. Soysa
Members	Prof. C. Dahanayake, Mr.Godfrey Gunatilleke, Dr. A.S. Induruwa, Prof. N. Kodagoda, Dr. C.R. Panabokke, Dr. Upali Pilapitiya, Mr. D.G. Senadhipathy, Dr. Tissa Vitarana, Dr. R.O.B. Wijesekera

1998

Chairperson	Prof. Priyani E. Soysa
Members	Dr. Malcolm de Alwis, Prof. Uma Coomaraswamy, Prof. C. Dahanayake, Dr. Gihan Dias, Prof. W.D. Lakshman, Dr. C.R. Panabokke, Mr. D.G. Senadhipathy, Prof. Tissa Vitarana, Dr. R.O.B. Wijesekera

1999

Chairperson	Prof. K. Dahanayake
Director	Mr. M. Watson
Members	Prof. Uma Coomaraswamy, Prof. A.D.V. de S. Indraratna, Prof. M.T.M. Jiffry Prof. Vijay Kumar, Dr. W.W.D. Modder, Ms. S.C. Perera, Prof. P.A.J. Ratnasiri, Eng. A.N.P. Wickremasuriya

2000

Chairperson	Prof. K. Dahanayake
Director	Mr. M. Watson
Members	Prof. Uma Coomaraswamy, Prof. A.D.V. de S. Indraratna, Prof. M.T.M. Jiffry, Prof. Vijay Kumar, Dr. W.W.D. Modder, Ms. S.C. Perera, Mr.W. Wilfred Perera, Dr. P.A.J. Ratnasiri, Eng. A.N.P. Wickremasuriya

2001

1 January 2001 - 15 August 2001

Chairperson	Prof. K. Dahanayake
Director	Mr. M. Watson
Members	Prof. Uma Coomaraswamy, Prof. A.D.V. de S. Indraratna, Prof. M.T.M. Jiffry, Prof. Vijay Kumar, Dr. W.W.D. Modder, Mr. W. Wilfred Perera, Dr. P.A.J. Ratnasiri, Eng. A.N.P. Wickremasuriya

15 August 2001 - 31 December 2001

Chairperson	Prof. Eric Karunanayake
Director	Mr. M. Watson
Members	Prof. J.N.O. Fernando, Prof. Carlo Fonseka, Eng. P. Mervin Gunasekera, Dr. G.B. Gunawardhane, Prof. Vijay Kumar, Prof. W.D. Lakshman, Dr. W.W.D. Modder, Mr. K.G.K. Nommawaththa, Prof. Janaka de Silva

2002

1 January 2002 - 12 January 2002

Chairperson	Prof. Eric Karunanayake
Director	Mr. M. Watson
Members	Prof. J.N.O. Fernando, Prof. Carlo Fonseka, Eng. P. Mervin Gunasekera, Prof. Vijay Kumar, Prof. W.D. Lakshman, Dr. W.W.D. Modder, Mr. K.G.K. Nommawaththa, Prof. Janaka de Silva

5 February 2002 - 31 December 2002

Chairperson	Prof. Ranjan Ramasamy
Director	Mr. M. Watson
Members	Prof. K.D. Arulpragasam, Prof. Uma Coomaraswamy, Prof. Anoja Fernando, Eng. B.R.O. Fernando, Prof. J.N.O. Fernando, Prof. Savitri Goonesekere, Ms. N. Madanayake, Prof. Lalitha Mendis

2003

Chairperson	Prof. Ranjan Ramasamy
Director	Mr. M. Watson
Members	Prof. K.D. Arulpragasam (from January to August), Prof. Uma Coomaraswamy, Prof. Anoja Fernando, Eng. B.R.O. Fernando, Prof. J.N.O. Fernando, Prof. Savitri Goonesekere, Ms. N. Madanayake, Prof. Lalitha Mendis

2004

1 January 2004 - 28 April 2004

Chairperson	Prof. Ranjan Ramasamy
Director	Mr. M. Watson
Members	Prof. Uma Coomaraswamy, Prof. Anoja Fernando, Eng. B.R.O. Fernando, Prof. J.N.O. Fernando, Prof. Savitri Goonesekere, Ms. N. Madanayake, Prof. Lalitha Mendis,

5 August 2004 - 31 December 2004

Chairperson	Prof. Sirimali Fernando
Director	Mr. M. Watson
Members	Mr. C.M.R. Anthony (July to December), Prof. J.N.O. Fernando (October to 31 December), Prof. S.R.H. Hoole (August to December), Mr.K.K.V. Jayaratne, Dr. M.C.N. Jayasuriya (November to December), Dr. Janaka Ratnasiri, Prof. H.J. de Silva, Prof. Tuley D de Silva, Eng. M. Zubair (July to December)

2005

Chairperson	Prof. Sirimali Fernando
Director	Dr. M.C.N. Jayasuriya
Members	Mr. C.M.R. Anthony, Prof. J.N.O. Fernando, Prof. S.R.H. Hoole, Mr.K.K.V. Jayaratne, Dr. Janaka Ratnasiri, Prof. H J. de Silva, Prof. Tuley D. de Silva, Eng. M. Zubair

2006

Chairperson	Prof. Sirimali Fernando
Director	Dr. M.C.N. Jayasuriya
Members	Mr.C.M.R. Anthony, Ms. B.M.D.N. Balasooriya, Prof. Uma Coomaraswamy, Prof. Lakshman Dissanayake, Dr. Lochana Guneratna, Prof. M.T.M. Jiffry, Prof. Rohan Rajapakse, Prof. Tuley D. de Silva, Eng. M. Zubair

2007

Chairperson	Prof. Sirimali Fernando
Director	Dr. M.C.N. Jayasuriya
Members	Mr.C.M.R. Anthony, Ms. B.M.D.N. Balasooriya (up to September2007), Prof. Uma Coomaraswamy, Prof. Lakshman Dissanayake, Dr. Lochana Guneratna, Prof. M.T.M. Jiffry, Prof. Rohan Rajapakse, Prof. Tuley D. de Silva, Mr.J.V. Weerasena (from October 2007), Eng. M. Zubair

Landmark Events of the National Science Council Years (1968-1977) – Some Personal Recollections

Dr. R.O.B. Wijesekera

One ought to write for the youth of his own generation, the critics of the next, and the schoolmasters of ever afterwards.
- F Scott Fitzgerald.

1 Prelude

This year, 2008, the National Science Foundation, celebrates forty years of sponsorship of research and scientific activity, in the country. When one goes back to the Foundation's genesis, it may be recorded that the institution was a successor to the National Science Council (NSC), which was founded in 1968. The NSC came under the same kind of administrative and financial framework which was applied to government corporations of the time. In the post-1977 era it was re-designated, by a new Act of Parliament, as the Natural Resources, Energy & Science Authority (NARESA), presumably on the assumption that an "Authority" spelt more autonomy than before. In reality, this proved scarcely to be the case. NARESA, too, faced similar bureaucratic impediments as its predecessor. Then in 1998, NARESA, by yet another Act of Parliament, was bifurcated into the present National Science Foundation (NSF), and the National Science & Technology Commission (NASTEC). The latter was conceived to be the apex umbrella organization to determine policies and priorities for Science & Technology. Somewhere along the conceptual line, and even during the process of formulation of the Act, there appeared to have been serious omissions that rendered it incapable of functioning as the expected apex organization.

For a start , NSF was not placed under the highest political authority in the land. Although the same comments applied to the original NSC, the latter was a better designed concept, where the appropriate functions were clearly mandated.

Although not directly placed under the highest political authority, at the time the NSC was constituted, it was viewed as a landmark event in the country's history. It was the culmination of a long drawn struggle, to have science and technology recognized at the highest decision making level [1].

The scientists of Ceylon, later Sri Lanka, had been waging an incessant battle for a body to give leadership with regard to a national

policy for the development of science in the newly independent country since 1948, or even a little earlier. The organ of their expression then was the Ceylon Association for the Advancement of Science, (at the time CAAS, later SLAAS).

Successive General Presidents of the Association, at first, D.N. Wadya, A. Kandiah, and A.W.R.Joachim, and in later years C.C.de Silva, N.G. Baptist, and M.U.S.Sultanbawa, had made impassioned addresses at the respective annual sessions of the CAAS , underscoring the national need for a potent apex body to play a coordinating role. Finally, in 1963 one head of state, responded.

Mrs. Sirimavo Bandaranaike, Ceylon's, and the world's, first woman Prime Minister, in opening the annual sessions of the CAAS that year had this to say:

"I assume that your invitation to me as Prime Minister is your method of expressing your view that Science and Scientific Research is of primary significance to our country. My acceptance of your invitation will in itself indicate to you the fact that I rate your work as of the greatest importance.....

For its part the government has accepted the need for the formation of a national body with the necessary authority to guide scientific activity, on the lines that many other countries have adopted with such profit to themselves. In India there has been a Council of Scientific and Industrial Research for many years. Here we have unfortunately had no such body to coordinate scientific activity and make maximum use of the available scientific personnel. This, I have no doubt, is one of the reasons that the scientists of this country have lacked the feeling that they are part of a national effort. I am glad to announce on this occasion, that the government holds the view that a body such as the National Research Council, which has been proposed for Ceylon by your association, is most essential, and the necessary steps will be taken to constitute such a body as early as possible" [2].

Then commenced the initiative for implementing the leap in policy that the Prime Minister had initiated. She appointed a committee with the able civil servant Mr. M. J. Perera as Chairman, which also included several members of SLAAS among others, to formulate a bill to be placed in Parliament. Unfortunately as it seemed, as the M.J.Perera Committee deliberations were in progress, the government changed in 1965 and the event took another turn. Prime Minister Dudley Senanayake, in opening the Annual sessions of the CAAS spoke thus:

"Before I came here, one of the members of your association wanted me to touch on the proposed National Research Council..... I find that my predecessor addressing you a few years back, assured your association that there will be such a council set up..... I for my part would like to attach even greater importance to the subject of scientific research. I am thinking on the line of a separate ministry of Research and Technical Education. We have many research institutions. It would be very necessary for their advancement, for their progress, to coordinate these activities, and it would enable the government to give greater assistance if what I have in view came into being....." [3].

At that time the scientists felt that this was a backward step, and no particular directive

was given, afterwards. However, the original concept and initiative meandered through the bureaucratic framework of the M.J. Perera Committee, and was also referred to the Planning Ministry, which was then in charge of Dr Gamani Corea, a member of SLAAS.

Finally in 1968, through a bill in parliament, the National Science Council was born as a statutory body under a Ministry which combined Scientific Research and Housing as its mandated subjects. To say that the scientists, who had struggled long for what they hoped would be an autonomous body free from the yoke of bureaucracy were bitterly disappointed, was putting it mildly.

They had envisioned a body resembling the counterpart institution in India, the Council of Scientific and Industrial Research (CSIR), which was directly under their visionary Prime Minister, Nehru himself. The NSC that was constituted, was not as envisioned under the head of state, and even had as its Chairman, Professor Sir Nicholas Attygalle, a distinguished medical professional, who had hardly evinced any interest in the movement for the creation of an apex scientific body for science. It was not a surprise when he eventually made way for a somewhat more representative Chairman, in the engineer Dr A.N.S.Kulasinghe.

The initial years of the Council's work has been reviewed in narrative sequence [1]. It is not the intention here to retrace the review, but instead to highlight some of the major landmark events that took place during that period, some of which have not found a place in any previous published review.

These brief sketches are constructed from memory, while mindful of and underscoring Aldous Huxley's conviction that:

"Every man's memory is his private literature".

Accordingly, since memory is the basis of the descriptions of the events that follow, they are only comparatively brief sketches, where the personal observations of the author and his own recollections is the premier guiding force. The events are not taken in strict chronological sequence either, that aspect having been adequately done in a previous review [1].

2. Workshop on Natural Products, jointly sponsored by the National Science Council and the National Academy of Sciences (NAS) of the USA.

In 1974, NSC requested the Board of Science and Technology for Development (BOSTED) of NAS to assist in a workshop to identify natural products which may contribute towards the country's economic development in the future.

The workshop was held from 2 to 6 June 1975. The NSC had long been involved in elaborate preparations for this key event. Mr. Victor Rabonovich, of BOSTED, visited the NSC to finalize the arrangements. NAS-BOSTED sponsored the team of visiting specialists under the leadership of Professor Carl Djerassi. They included the following:

- Prof. Edward Ayensu, Chairman, Department of Botany, Smithsonian Institute, Washington DC (citizen of Ghana)
- Prof. William J.Dauben, Professor of Chemistry, University of California, Berkeley, California.
- Prof. Carl Djerassi, Professor of Chemistry, Stanford University and Chairman of the Board of Science and Technology, NAS; Chairman of the American group of participants.
- Prof. Norman R.Farnsworth, Professor of Pharmacognosy, University of Illinois at the Medical Center, Chicago, Illinois.
- Prof. Donald L. Plucknett, Department of Agronomy and Plant Science, University of Hawaii, Hawaii.
- Prof. Paul Scheuer, Professor of Chemistry, University of Hawaii, Hawaii.
- Prof. Richard E.Schultes, Director, Botanical Museum, and Mangeldorf Professor of Natural Sciences, Harvard University, Cambridge, Massachusetts.
- Dr. Ernst Theimer, former Vice-President, R&D, International Flavors & Fragrances Inc.
- Dr. Noel Vietmeyer, Professional Associate, NAS-BOSTID.

The NSC appointed the following steering committee to make and oversee all the local preparations and inputs for theworkshop.

- Prof. B.A.Abeywickreme
- Dr. G.C.N.Jayasuriya, Secretary-General NSC, Chairman.
- Dr. Seetha Rodrigo, (Coordinating Secretary for Sri Lanka)
- Mr. A.E.K.Tissaverasinghe
- Prof. G.P.Wannigama.
- Dr. R.O.B.Wijesekera (Leader of the Sri Lanka group of participants)

A Workshop Secretariat of 26 persons, including nine scientists, supported the Steering Committee. Dr Seetha Rodrigo, of the NSC led the Secretariat. A comprehensive written review of Natural Product-related Activities in Sri Lanka was prepared by the National Science Council [4]. In addition to research, the document spelt out a case for an international centre in the region for natural products research

The Workshop was inaugurated on June 2nd at the auditorium of the Sri Lanka Foundation Institute, by the Hon. T.B. Subasinghe, Minister for Industries and Scientific Affairs. The U.S. Ambassador in Sri Lanka, H.E.Christopher van Hollen also graced the occasion.

Dr Osmund W. Jayaratne, Chairman of the NSC in a welcome address stated thus:

'Never before have we had the privilege of welcoming such a distinguished galaxy of scientists for an event in this country'.

Prof. Djerassi responded on behalf of the US team and Dr. Wijesekera on behalf of the Sri Lankan participants.

But the crux of the Workshop was three days of intensive joint working sessions by four separate working groups covering the following subjects:-

- Under-utilized food crops
- Plant-derived industrial products
- Essential oils and spices
- Medicinal plants and plant-derived pharmaceuticals

Each American participant made a presentation on his special theme. The final report of each working group was presented to the plenary session on the final day and Dr. Noel Vietmeyer prepared the edited version of the reports:

"Natural Products for Sri Lanka's Future" and published by the NSC [5]

Additionally, the two leaders, Prof. Djerassi and Dr. Wijesekera, prepared a companion report entitled: SLICHEM - Sri Lanka International Chemistry Programme [5]. This report outlined a major project to expand and upgrade natural products research in Sri Lanka's universities and research institutes.

The long term benefits from this exercise are evident to this day. It enabled many Lankan scientists to conduct post-graduate and graduate research in US universities as a result of the very positive contacts established during the workshop. The area of marine research was a specific example, and at least one senior professor today (Dilip de Silva) had his post-graduate training at the University of Hawaii following a contact with Paul Schauer of the US team. Several others obtained similar placements with Farnsworth in Chicago, and Djerassi at Stanford. Besides, Farnsworth enabled several researchers in Sri Lanka to utilize the unique NAPRALERT computerized database which was a boon to them in view of the limited literature resources available in the country. Ernst Theimer and William Dauben supplied researchers with authentic samples of rare compounds as well as selected literature. It was a pity that, due to reasons which are obscure, the proposal for direct assistance did not take off. Yet the overall benefits of the exercise had a lasting and profound impact. In that respect it was a truly landmark event.

During the Proceedings. *L to R.*
Dr. G.C.N.Jayasuriya, Secretary-General of the NSC, Professor Carl Djerassi, and Dr R.O.B.Wijesekera Co-Chairmen of the Workshop.

3 Science policy initiatives and Professor Michael J.Moravcsik.

In January of 1976, the Secretary-General of NSC, Dr G.C.N.Jayasuriya was to spend six months at the University of Hawaii on a Fellowship and I was assigned, by the Minister, to act for him as Secretary General of the NSC; this was in addition to my duties at the CISIR, as the Head of the Natural Products Section.

At the same time the Chairman, Dr O.W. Jayaratne, and I were invited to the Pugwash Conference in Madras, during the first week of the year. The Chairman placed Ms. Marina Wijesekera in charge of the NSC and she reacted swiftly to a request from Professor Michael J. Moravcsik, to include Colombo in his Asian tour. Professor Moravscik, Professor of Physics of the University of Oregon, USA, was a leading authority on science policy and had written many articles and a book on the subject. He was well known to those acquainted with this field, and particularly to Marina who had just a year back completed a successful M.Sc. course on Science Policy and Organization, at the University of Manchester, an institution with a reputation for pioneering research in this field.

When Chairman Osmund Jayaratne, and the author, returned from Madras, Marina had already organized a one-day workshop on Initiatives in Science Policy, with Professor Moravcsik as the resource person. Many of the scientists, who were interested in the subject, attended what turned out to be a most fruitful workshop. At the end, a set of initiatives relevant to the local scenario had been developed and adopted. After this workshop, many of those who were hardly acquainted with the subject became interested and continued to interact with each other, and Prof. Moravscik continued to assist the NSC in many ways. Later, Professor Moravscik became the adviser to several other countries in assisting them to compile their country papers for the United Nations Conference on Science and Technology for Development, UNCSTD, which took place a few years later. It was this conference that gave rise to organizations like UNIDO, the United Nations Industrial Development Organisation in Vienna. With the training of Marina in Manchester, and Professor Moravcsik's initiative there arose a renewed interest in Science Policy. Soon Dr Osmund Jayaratne was to spend a spell with the Indian CSIR Science Policy Unit, which was headed by A.Rahman in New Delhi, and Marina was to follow later. One other initiative that came about at this time was the Indo-Sri Lanka Science Cooperation Programme which functions to this day. Two other landmark events, in the area of science policy in the country, were in the form of two well received and attended lectures: "Science Policy – Concepts and Misconceptions" by Marina Wijesekera, "Science Policy, and Political Policy Initiatives" by Osmund Jayaratne, held in the Chemistry Lecture Theatre of the University of Colombo.

A further initiative was the enhancement of the NSC with the entry of four young graduates: N. Ambalagan, Tusitha Wijesinghe, Eleanor Juriansz, and Shantha Liyanage. Of them, Liyanage, has now distinguished himself as a University Professor and an

international expert in the science policy field, and remains a visiting consultant to the Minister for Science and Technology.

To reflect back on our visit to India for the Pugwash conference, the Chairman and I were able to interact with several international scientists of repute including Dr Nayudamma the Director-General of the Indian CSIR, Dr Johan Galtung, and Professor Dorothy Crowfoot Hodgkin, the Nobel Laureate. She wrote a review for the Journal of the NSC on: X-Ray Crystallography, - a subject which at the time of her work was regarded as a new paradigm in chemistry. By a sad, and unpardonable lapse, it never got published.

Summit meeting of scientists of the Non-Aligned Movement.

This was an initiative which was primarily the brainchild of Eng. D.L.O. Mendis. Again, the facts are memory-dependent, and this time I am indebted to DLO Mendis for recalling, from his memory, some of the salient features of this event in which the NSC played a major facilitating role. It all happened like this. [6]. The Non-aligned Movement (NAM) was a powerful global political force at the time. Mrs. Bandaranaike was the Chairperson of the NAM - Summit Meeting that was to be staged in Colombo with Ceylon as the host. DLO Mendis together with Earnest Abeyratne, the distinguished agriculturist, had forged the idea that it was appropriate to stage a NAM Science Summit. All arrangements for the Big Summit were in place when DLO worked on his idea and proceeded with its implementation.

His driving force was that this could be a memorial to a great irrigation engineer Mr. H. de S. Manamperi who was the President – elect of SLAAS and had passed away recently.

The major issue was the question of funding. This had been finally achieved by a combination of several factors. The Minister for Industries and Scientific Affairs, Mr.T.B.Subasinghe, and his Permanent Secretary Mr. Niel Bandaranayake, had been supportive. DLO had also enlisted the support of the Secretary to the major summit, who was the Secretary to the Ministry of Planning, Dr. H.A.de S. Gunasekera. They had agreed to a Science Summit to be held concurrently with the NAM Summit. The Ministry solved the funding issue by soliciting funds from all the government corporations, and there were at the time over a hundred of them.

DLO approached me, as I was acting Secretary-General of the NSC at the time, and solicited NSC support to dispatch the official letters through the NSC. This was readily done with the Chairman's, Dr Osmund Jayaratne's, support.

The response from the corporations too was unbelievably encouraging as the climate for support of a NAM event was good. There remained the question of hotel accommodation and a suitable venue for the Science Summit. The BMICH was being used for the major NAM Summit and most of the accommodation was already reserved. DLO then recalled that the new wing of the

Oberoi Hotel was under construction. By an unorthodox intervention from Engineer Lloyd Perera, through the Hotel CEO Mr. Maralande on a personal basis, the hotel and its premises were offered free of charge for the Science Summit. The advertisement value of the prestigious event was well accepted by the Oberoi authorities.

Thus, this unique event was accomplished. The invitations were sent, through the NSC, to all of the NAM countries. Around 40 overseas delegates attended the meeting, which was held at the New Wing of the Oberoi, in July 1976.They were accommodated at the hotel, also on a complimentary basis.

During the sessions, the deliberations of four working groups were formulated into a multi component resolution which was then submitted to the main Summit Meeting, and placed on their agenda. Mr.Justin Samarasekera, the architect who was the General President, presided at the Science Summit sessions, and Dr. Charles de Silva Kulasiri, General Secretary of the SLAAS supported the organizational work. The Indian delegation led by the experienced Dr. A Rahman played a key role in drafting the resolutions.

5 Commonwealth Science Council meeting - 1976.

In 1976, Sri Lanka played host to the biennial meeting of the Commonwealth Science Council (CSC). The NSC was the focal organization for the activities concerning the CSC and, in 1976, Dr. G.C.N.Jayasuriya, was its Chairman. The meeting was staged in December at the BMICH. The NSC was committed to the organization of the meeting on behalf of the Government of Sri Lanka, and Marina was in charge of this. The CSC meeting drew delegates from all of the countries of the Commonwealth and they included most of those in charge of science policy and related matters. There was Dr. Y. Nayudamma, Director-General of the Indian CSIR, and Dr. Eddie Robertson the Director-General of the New Zealand DSIR, who had been a visitor to the country before. Mr. T.B.Subasinghe, Minister for Industries and Scientific Affairs declared the meeting open. Dr. Maurice Goldsmith delivered the key-note address. The High Commissioner for India in Sri Lanka, Shree B.K.Kapur entertained the delegates to a lavish cocktail party at his residence.

CSC 1976.

Ms. Marina Wijesekera & Dr.G.C.N.Jayasuriya in Conversation with Dr Eddie Robertson DG of the New Zealand DSIR

One of the functions of the CSC was to implement the Guinness Awards for Scientific Achievement, based on a donation made by the Guinness Company at the instigation of the heir to the Guiness Foundation Mr.Diurmed Guiness. The awards were for displayed meaningful research conducted within the country with a possibility for beneficial application.

Winner of the Guinness Award for Scientific Achievement -1976
Pix commissioned specially by the Guinness Award Committee (taken by Studio Times)

The CSC had mobilized a high-powered team of experts which included Nobel laureates and eminent scientists to make the selections. The role of the NSC and other commonwealth organizations was to submit worthy nominees for these awards. 1976 was the first occasion on which these awards were being given and my own submission on the Chemistry and Technology of Essential Oils was one of the selected entrees. I was fortunate to be one of the winners of this award.

On a very personal note, and in lighter vein: The news of my success came to me under strange circumstances. I was on an initial UNIDO-ESCAP technical mission, along with the celebrated Indian technocrat, and Industrialist, Shri

Govind Kelkar; we had just visited five countries and were writing our report at the UN-ESCAP Office in Bangkok.

I received a cable from my wife which was meant to read:

"Guinness Award is yours.
Congratulations stop.
Loving good wishes,
Marina."

It actually read as follows:

"Guinness Award is yours.
Congratulations.
Stop loving. Good wishes.
Marina"

My now very well established friend Govind Kelkar, and other colleagues at ESCAP enjoyed the joke at my expense.

The CSC had planned that I receive the Official Scroll at the CSC Meeting in Colombo, but something had gone awry and this did not happen. It was something that neither we, nor the Guinness agents in Colombo, Morrison's, was able to unravel. As it happened I was presented the Scroll and Guinness Medal in Georgetown Guyana two years later by the Deputy Prime Minister, and later President of Guyana, Dr. Desmond Hoyte, at a special ceremony in Georgetown organized by Dr. Pat Munroe who succeeded Jayasuriya as the Chairman of CSC. My Guinness Award Lecture entitled "Enlarging of the Bounds," was delivered on the occasion [8].

6 The Asian Symposium on Medicinal Plants and Spices. (ASOMPS)

A series of UNESCO sponsored international meetings related to Medicinal Plants and Spices continue to be held to date. However NSC played a key role in establishing it as a continuing international event. The series commenced in Peshawar in 1960 and UNESCO and Professor Finn Sandberg of Uppsala University Sweden were the prime initiators; Peshawar was then a part of Pakistan, under General Ayub Khan.

The next meeting was held in Kandy in 1964. The Ministry of Health of the Government of Ceylon was the host and I was appointed Chief Organizer. There had been no further meetings when, in 1976, Professor Finn Sandberg visited Ceylon once again to interact with the CISIR group on Natural Products and the University at Peradeniya (Prof. S.W.Bibile). At a meeting at the NSC with the Secretary General, Dr. G.C.N.Jayasuriya, it was suggested to him that the meetings should be revived and that the NSC could host another meeting. He was authorized to carry the message to UNESCO in Paris. In time Sandberg had initiated the revival and NSC proposed the addition of Spices as well.

In October 1976 the Swedish Agency for Research Cooperation and the University of Uppsala invited me to tour the Scandinavian countries. I established contacts with Nicolai Herlofson, the Head of SAREC at the time, and Rune Liminga of SIDA. This forged further the Swedish Research support idea. Marina had accompanied me on a personal basis, but knowing her identity with NSC, Sandberg initiated a visit to UNESCO Paris to discuss the renewal of the Medicinal Plants

meeting. At UNESCO, Dr. Eneberg, and his colleague John Kingston invited Marina and me to a meeting to decide on issues and we, on behalf of NSC, offered to host the next meeting in Colombo and Kandy. And so came into being the meeting now designated with the acronym ASOMPS henceforth.

The NSC and Dr. Jayasuriya then formalized the UNESCO meeting as well as the future Swedish assistance connection. The meeting which is now referred to as ASOMPS III took place in 1977 and was formally opened by Prime Minister Sirimavo Bandaranaike, with the Minister for Health Mrs. Siva Obeysekera in attendance. The formal presentations were held in Colombo, and the Pharmacology and Pharmacognosy demonstration workshop, conducted by Prof Sandberg with assistance of Dr. Lars Bohlin, in Peradeniya. The meeting, like its 1964 predecessor, drew a galaxy of distinguished scientists such as Prof. Arthur Birch FRS of Australia, Dr Narong Chomchalow of Thailand, Dr Atta-ur-Rahman of Pakistan and Dr Y.S.Lewis of India.

ASOMPS III is now regarded as the meeting that revived the series that has run into over a dozen such meetings. The National organizer for the meeting on behalf of the NSC was Dr. A.L.Jayewardene of the CISIR. The NSC can take credit for giving life to an internationally recognized series of meetings which is a model for UNESCO.

The Opening Ceremony of ASOMPS III presided over by the Prime Minister. Dr Jayasuriya, Secretary-General of the NSC is welcoming the delegates. From L to R. Dr Eneberg (UNESCO Director)

Dr. R.O.B.Wjesekera, unidentified person, Mrs. Siva Obeysekera, Minister for Health, the Prime Minister Mrs. Bandaranaike, and Dr G.C.N. Jayasuriya, S-G, NSC.

Concluding in a lighter vein...

One has only lightly skimmed the crowded years of the seventies, relying on a faded memory, some notes and photographs, and the faded memories of colleagues. Some of the participants of the olden days are now no more. Some are spread far and wide in alien lands. Many have prospered and some are still with us. In the old times that were in the years 1966-1977 there was much work done which may now even be forgotten. There was also much fun and laughter. The NSC began in Horton Place with Dr. C. Panabokke as Secretary-General, who soon gave way to Dr. G.C.N.Jayasuriya - affectionately referred to as Niel. It was he who piloted the institution in its formative stage. He was ably assisted at, various stages, by Dr. Kamala de Soysa, Marina De Silva (now Wijesekera), Dr. Seetha Rodrigo, who were joined by more ladies in the form of Clodagh Fernando, Swarna Prelis, Irangani Thabrew, and Eleanor Jurianz. This was a time when the NSC was affectionately referred to by scientists as "Niel's Saree Council" (NSC).

Then in the next phase, following the changes in government, Niel was deposed and Dr. Roley Jayewardene assumed charge. Following the change to NARESA, Professor Priyani Soysa mapped out another chapter in the institution's story. I was privileged to join her on the Board of NARESA in 1995 and reconnect myself with the institution where I served on the Governing Board, and as Chairman of the Editorial Board of the Journal in the period of Niel Jayasuriya.

Accordingly this article is dedicated to all I have been privileged to work with at the NSC, and the CISIR, as colleagues.

"The generous country of our birth,
The single land from which we borrow
All that is ours – air, insight, tears,
Our fragile lives for a few years,.....
.....Well, those few short years,
We spend pursuing our careers,
Our needs, our longings, our obsessions
Upon this earth, once gone, are dead.
Of some who've spent their time, it's said
They gathered manifold possessions;
Of some, they broke their lives for wealth;
Of some, their striving broke their health"

Vikram Seth.

Acknowledgements.

I thank the National Science Foundation, and its Director, Dr. Noble Jayasuriya, for the invitation to write this collection of recollections, and several scientists who helped me remember the events.

I am also deeply grateful to my wife Marina with whom I shared several of the poignant moments I have described, and who from time to time during the exercise of writing this piece helped me with recalling the events.

Sources cited

1. De Silva, M.A.T. (1993). NARESA. A Historical Narration 1968-1993. (NARESA In-House Publication).
2. Anon. (1964) , Proceedings of the Nineteenth Annual Session of the CAAS. Part II, p 34-40.
3. Anon. (1966). Proceedings of the Twenty First annual Sessions of the CAAS. Part II, p.64-67.

4. Anon. (1975).-Workshop on Natural Products Documentation. National Science Council.

5. Vietmeyer, N.D. (1975) Natural Products for Sri Lanka's Future. National Science Council / National Academy of Sciences.

6. Mendis, D.L.O. (2008). Privately communicated.

7. Contact Dr G.C.Yapa, NSF for a copy.

Natural Resources, Energy and Science Authority (NARESA) and its Successor – The National Science Foundation

Prof. Priyani E. Soysa

The Natural Resources, Energy and Science Authority (NARESA) was the successor to the National Science Council (NSC) which had been established on May 28, 1968 under the Ministry of Scientific Affairs and Housing presided over by the Chairman, Professor Sir Nicholas Attygalle. This year 2008 thus marks the Fortieth Anniversary of its Scientific Activities.

The apparent concern of the Government for action in the fields of natural resources and energy, in spite of the work of the NSC, resulted in the establishment of NARESA under the purview of the President by Act No. 78 of 1981. In 1989 the Authority came under the Ministry of Industries, Science and Technology and the Project Ministry of Science and Technology.

I was appointed Director General of NARESA in 1992 by Hon. Ranil Wickremasinghe as Minister for Science and Technology and came under the direct supervision of Hon. Paul Perera, the Project Minister whose office was housed on the first floor of the main building of NARESA.

With a Board of 11 members, NARESA broadened the supervision of the Research Committees of different disciplines selecting Research Grantees, the Awards for Scientific Achievement, the Science Education Programme, the Zoological Survey and continued the membership of International Scientific Organizations viz. The Commonwealth Scientific Council, the International Council of Scientific Unions, Third World Academy of Sciences (TWAS) etc.

Hon. Paul Perera informed me, as Director General, that Prof. Ranjan Ramasamy was appointed Additional Director General. Although Professor Ramasamy participated in NARESA activities for a while, he was not, however, released from his position or seconded for appointment from the Institute of Fundamental Studies by the authorities of that Institution. He took a great interest as Editor-in-Chief of the National Science Journal for inclusion in the International Science Index by publishing the required number of issues annually.

The publishing unit and printing press functioned efficiently, by not only facilitating the regular publication of the above journal but of Vidurawa as well. Further, this printing facility accepted services of other scientific institutions thereby earning funds for NARESA's coffers.

The Silver Jubilee Celebrations took place in a large tent erected in the garden of NARESA in 1993. A Souvenir was published, edited by Mr. Asoka de Silva. During the time of Minister Hurulle, the Project Minister for Science and Technology, a Science Exhibition was held in Kadugannawa with a railway compartment, with science exhibits arranged by Prof. V.K. Samaranayake.

The Computerization of the Scientific Information Centre broadened its capabilities. With flooding problems and the cramped position of the library, a mezzanine floor, constructed in the library, popularized the services of the Information Centre and the library.

The financial assistance for the SAREC research grantees was streamlined for greater acceleration of their research activities. The Water Buffalo Research Project stood out as the best outcome of the SAREC Research Grant Scheme. The Director General drove up to the Veterinary Research Institute to supervise the monthly review of research flow.

When Hon. Bernard Soysa was appointed the first Cabinet Minister for Science and Technology and Human Resources Development on 19 August 1994, he requested the Board to choose the best pieces of research in the various disciplines to Get Research Into Practice (GRIPS). The late Mr. Thondaman eagerly accepted the Water Buffalo Project as a success. The buffalo, instead of wandering and nibbling for food on waysides, was tethered in the homestead, given a "nutritious brick" for food thus improving milk production and reducing calf mortality. This was the foundation for the National Livestock Board to replicate the project in many areas.

The SAREC Travel Grant Scheme was very popular enabling scientists to attend international conferences, and the Director General and interested Board members to enjoy the membership of international organizations by participating in their sectional activities.

It was around that time that the Director of External Resources, Ms. S.Kuruppu, suggested that NARESA might levy a fee for the active supervision of the SAREC Research Scheme in its multifarious components. Having made an estimate of NARESA's expenses, the Director General made such a plea which was granted annually and distributed equally among all members of NARESA staff. This was greatly appreciated in the background of mediocre salary emoluments.

At the suggestion of President Chandrika Bandaranaike Kumaranatunga, on her appointment as Executive President, that welfare should be increased to neutralize the inability to increase salaries, various steps were taken to relieve the staff of their financial burdens. A canteen was opened; the Family Death Allowance was increased; a Day Care Centre for the children of working women, to relax after school, was created; and loan systems etc. were granted to the general satisfaction of, mostly, the members of the non-scientific staff. A new outlet for the sale of NARESA publications at the office entrance increased sales. An accomplishment of note was the Science Policy Document by a Special Committee appointed by the Board. The Hon. Bernard Soysa presented this to H.E. the President

at Temple Trees, along with the scientists who compiled it in 1994. Besides many important points for the future outlook of science, the need to activate a science culture was highlighted. The Report on the Natural Resources of Sri Lanka was revised with Prof. K.D. Arulpragasam as Editor. This was translated into Sinhalese by Prof. Sarath Kotagama, in 1994, and presented to the President of Sri Lanka at that time, H.E. D.B. Wijetunga.

The contribution of Ms. Clodagh Fernando as a consultant to NARESA in compiling the National Survey of Research and Development with NARESA in 1996 is noteworthy.

ADB (Asian Development Bank) funding commenced during Hon. Mr. Soysa's tenure. This helped in sending scientific officers to Australia for doctorates .

The National Science Foundation (NSF) is the perpetual successor to NARESA, implemented by Act No. 11 of 1994. However, the institution functioned in much the same way. It was after the demise of Hon. Bernard Soysa that Hon. Batty Weeakoon was appointed Minister for Science and Technology in January 1998. His interpretation of the Act temporarily dismissed the scientific committees as not conforming to the spirit of the Act. However NSF could not comply with the routine research activities. In the meantime, both the Director Ms. Swarna Prelis and I tendered our resignations in 1998.

Since then time has rolled by and NSF is now flourishing with better assets and direction with Hon. Tissa Vitharana as Minister, Prof. Sirimali Fernando as Chairperson and Dr. Noble Jayasuriya as Director. The building has been refurbished and many new activities have been commenced. Nevertheless the research financing in the country has come down from 0.18% to 0.13%. Scientific problems need multiple answers and a multidisciplinary approach that NARESA and NSF have sponsored in the recent past. Younger scientists must step in to the challenge, preparing the next generation of scientists and scientifically literate citizens for the Golden Jubilee celebrations.

The National Science Council – Its Initial Years

Dr. C.R. Panabokke

Attempting to recall from memory at this "ripe old age" of 82 events that had taken place forty years ago could be very daunting. However, at the same time, it could be quite apposite because the more important events tend to stand out in one's memory over this span of time, while the trivia tend to fade away rapidly. It is against such a "mind set" that I have attempted to recall, what I consider, are some of the more significant happenings that shaped the early identity of the National Science Council (as it was then known) during the time that I was its Secretary General from mid 1969 to mid 1971 or thereabouts.

The year 1968 had a special significance for me. Having moved to Colombo after an eleven years' spell of intensive field research activities, I had to adjusted myself to be more closely involved in policy and related strategy initiatives at the higher levels of the Ministries of Irrigation and of Agriculture. It was a case of having to 'grow up' to look at matters from perspectives different to those that I was accustomed to earlier. It was during this transitional phase in my career that I assumed duties as Secretary General of the NSC, on secondment from my substantive position in the Irrigation and Mahaweli Ministry.

The National Science Council was itself constituted some time in late or mid 1968 by the then Ministry of Housing and Scientific Affairs. It was not very clear to us on what criteria selections were made for appointments as members of the Council. Ten members, from different backgrounds and of diverse views / opinions were appointed. (Some eyebrows were raised in scientific circles about the make up of these appointments).

Mr. Jinapala Alles, from the Ministry of Education, had functioned as Secretary General pro-tem initially and had very successfully established an office and staff support at a rented house in Horton Place. We should acknowledge his contribution in this regard because it made life easy for me when I took up my duties, and it also helped NSC to move on functionally.

The most difficult task however, was one of developing a proper agenda for Council deliberations. This was no easy task considering the eclectic nature of the different members and their interests. It was here that the intervention of both Dr. George Ponnamperuma (Director CISIR) and Dr. Gamini Corea (Central Bank, Ministry of Planning) came in very timely.

Dr. Ponnamperuma had already initiated a study at CISIR on S&T indicators. This was

carried out in the "Economics Unit" under his direct control where (the late) Ms. Noreen Cooray had pioneered this groundbreaking study. The results of this study showed that the country's investment in R&D in 1969 was approximately 0.4 % of the GDP and this was made up mainly of agriculture and medical research institutions and very little in industry, and allied sciences. Under-funding of University research was also identified.

As commented by both Dr. Corea and Dr. Ponnamperuma, it was necessary to redress this imbalance, especially the under-funding of University research; while Mr. A.N.S. Kulasinghe stressed the need for strengthening the funding in R&D in the Research Branch of the State Engineering Corporation (SEC). This enabled a rational system of allocating funds for these sectors from the limited funds available within the NSC.

Alongside these developments a scheme of research grants and research studentships were initiated for the universities and other state Research Institutions. Prof. B.A. Abeywickrema was instrumental in drawing up a schedule for making such grant awards.

A scheme of (outright) research grants for special, urgent and vital research requirements in the form of grants for purchase of specialized equipment, or else for regional specific research was also instituted. Under this scheme, Dr. R.O.B. Wijesekara at CISIR was awarded a grant to purchase a Gas Liquid Chromatograph (GLC) for the CISIR in order to facilitate his natural products research. This has had far-reaching beneficial results to the country in respect of natural products research and development.

Similarly, Dr. S. Gnanalingam was given a grant that enabled him to develop a research programme on the geomagnetic equator, in view of Ceylon's unique position as the geomagnetic equator passes directly through this country.

By any standards, these could be considered substantial achievements for an institution in its initial two years.

As my period of secondment was coming to a close by late 1971, and as the NSC had by then identified a very suitable scientist in (the late) Dr. G.C.N. Jayasuriya from the Chemistry Department at Vidyodaya University, I reverted to my substantive position in the Ministry of Irrigation.

Dr. Jayasuriya was able to handle and advance the affairs of the National Science Council in a very organized, systematic and effective manner in the ensuing years, and we should therefore recognize and value his important contribution in this regard during the formative years of this institution.

Some observations

The normal functioning of the National Science Council was seriously hampered following the April 1970 elections when major changes were made in the composition of the Secretaries to Ministries. It took four months to get an appointment with the new Minister for Industries and Scientific Affairs while the council itself had to be reconstituted. Both Dr. Corea and Dr.

Ponnamperuma had left the country by then. This was then followed by the 1971 insurgency that caused serious disruption of affairs. I had to revert for a short time to help with the security of the Polgolla tunnel in the Mahaweli Project.

Post Script

It is fortunate that we now have a separate Ministry for Science and Technology rather than science been tagged on to another Ministry as existed earlier, e.g. Industries and Scientific Affairs. It is now possible for a single minister to devote full time to science. Let us hope this will prevail in the future as well.

Memories of a Career Committed to Enhancing S&T Capability

Mr. M.A.T. de Silva

My professional career commenced in January 1955, when I assumed duties as a research scientist in the Soil Chemistry Division of the Coconut Research Institute (CRI). This fascinating and productive career at the CRI concluded in May 1977, when I accepted the senior management position of Assistant Secretary General (ASG) at the National Science Council of Sri Lanka (NSC).

My recruitment to a newly created position (ASG) at the National Science Council, as I learned later, was partly due to my strong research background at the CRI and partly due to the vision of the Secretary General, Dr. G.C.N. Jayasuriya, who conceptualized that NSC had to be built around a team of senior scientists who had "gone through the mill".

One of my initial inquiring efforts was to understand and study the circumstances that led to the creation of NSC as an apex organization. The findings of this study led to a publication, which records for the first time, the historical events in the development of science and technology management in Sri Lanka: "Historical Landmarks in the Orientation of Science Planning in Sri Lanka - by M.A.T. De Silva, Sri Lanka J. Social Sci. (1984) , 7 (I & 2), 77-96"

The NSC's main functions included: (a) advising the Minister in charge of Scientific Affaires on matters pertaining to formulation of policies for S&T; (b) initiating sponsoring, and coordinating scientific research in all disciplines of science (including the social sciences); (c) retrieving, collating and disseminating scientific and technological information, and; (d) establishing contacts, and liaising with both local and foreign scientists and scientific organizations. My position at NSC required that I should take an active role in many of these functions.

In 1972, in terms of its mandate NSC formulated and commenced a scheme for sponsoring "curiosity oriented" scientific research, which was of a flexible, non-restrictive, and open-ended character. Its main objective was to build a strong research capability in Sri Lanka while, at the same time, to provide a conducive and non-bureaucratic research environment for the foreign-trained young scientists to re-orient themselves to local conditions on returning home.

In support of this philosophy, NSC did not push for a rigid protocol for close monitoring and evaluation of research, and the main yardstick for measuring success was the generation of postgraduates and of quality publications. However, by the early 1980's queries and questions on accountability

began to be raised with increasing frequency. With resources for research dwindling, and costs of research increasing steeply, the demand for public accountability was inevitable, and had to be expected.

My own conscience as a one-time research scientist induced me to seek a solution to these problems, especially to find an explanation as to how funds allocated for research, which are generally classified as capital expenditure, could be accounted for. It had been recognized worldwide that investments in research result in economic benefits, yet I could find no scientific literature that convincingly demonstrated this philosophy in quantitative terms. As I was keen to ensure continued investments in research, I undertook an extensive literature search for convincing evidence on the profitability of investments in scientific research, which resulted in tracing just one concept paper by I.C.R. Byatt and A.V. Cohen in 1969, for the UK Department of Education, titled *"An Attempt to Quantify the Economic Benefits of Scientific Research"*. This 'White Paper' however, gave me some vital 'leads', which led me to evolve a simple valuation.

It was in the midst of these studies that I encountered a bright young audit officer who was engaged in the annual audit of NARESA. This young man walked into my office after getting an appointment. He looked agitated and when I asked him as to what he wanted, he said, "Sir, NARESA has been funding research under a 'Capital' grant allocated from the Consolidated Fund. Now Sir, can you tell me what has happened to this capital investment? If it was a capital investment we must be able to see it recorded in an inventory, from which we can calculate how it depreciates in value?".

Before I could gather my wits I realized that a noose was around my neck. While I was playing time to wriggle out of this mess, it suddenly dawned on me that I may have a chance of playing straight bat by bringing to his notice my analysis of the research grants scheme, in which I had demonstrated (though hypothetically) a sound Return on Investment (ROI). Collecting my composure I showed him the paper I had published, and explained to him in simple terms that our capital investment was on "knowledge capital", which is embodied in the large number of doctoral and masters degrees that we have been able to produce. I explained further that human capital, which we had produced through this research grants scheme, appreciates in value unlike other capital goods which tend to depreciate in value with time. There was a sigh of relief in him which made me realize that I had just managed to escape by the skin of my teeth from a precarious predicament.

This memoir would not be complete if I do not refer to my most satisfying contribution to the development of scientific capability of the country.

From 1982 to 1990, I was delegated the authority to initiate, formulate and coordinate all activities that were to be supported by SAREC. It has been the normal practice for SAREC and NARESA to draw up a Memorandum of Agreement on a biannual basis, on a consolidated programme of activities to be implemented or coordinated by NARESA, which is later communicated

to the Department of External Resources through the Swedish Embassy. This MOA was signed by me and the SAREC representative, on behalf of the respective contracting parties.

In 1984, based on the findings of our national surveys, it was decided that I should negotiate with SAREC to develop a special programme that specifically focussed on the critical issues hindering the progress of S & T in the country. Accordingly, SAREC agreed to provide resources for the following services and facilities:

- To strengthen the library services of universities, by subscribing to 5 critically important journals selected by the relevant researchers for each university, for 5 years.
- To establish two modern glass blowing centres at the Universities of Colombo and of Moratuwa.
- To establish a well equipped modern repair facility for electronic scientific equipment at the Engineering Faculty of the University of Peradeniya, to serve all scientific institutions.
- To establish a fund in Sweden to be replenished annually, to enable NARESA to requisition and provide urgently required spare parts for electronic scientific equipment directly to any scientist.
- To allocate a grant annually to an International Contacts Fund at NARESA, to provide travel assistance to young scientists invited to present scientific papers at international meetings abroad.

Since I was responsible for drawing up this programme and signing the MOA with SAREC, the Director General of NARESA assigned me the task of personally handling all these activities, which I am sure had a major impact in enhancing the S&T capability of our scientific community.

A CALENDAR OF EVENTS – 1968-1998

May 1962

The Ceylon Association for the Advancement of Science resolves that a Science Commission should be appointed .....*'to investigate the facilities at present available in Sri Lanka for scientific and technical research and development, how these should be coordinated and extended and to formulate a scientific policy for the country'*

Matter brought to the notice of Hon Prime Minister and Hon. Minister for Industries, Home Affairs and Culture

November 1963

Cabinet approval given for setting up a Science Commission comprising of 5 members

However, Science Commission not appointed based on discussions of Hon. Prime Minister with Director, UNESCO-Science Cooperation Office, New Delhi and Permanent Secretaries to the Ministry of Commerce and Industries and Ministry of Education and Cultural Affairs

April 1964

A meeting convened of representatives from the following Ministries/organizations

Ministry of Transport and Works
Ministry of Agriculture and Food
Ministry of Land, Irrigation and Power
Ministry of Posts, Broadcasting and Information
Ministry of Health
Ceylon Association for the Advancement of Science
(3 representatives)
Director, CISIR or his representative
University of Ceylon, Peradeniya
(2 representatives)
Controller, Economics Division, Treasury
Mr. Clark, Chief of UNESCO Mission
Director, National Planning
Secretary, National Commission, UNESCO

The meeting presided by Permanent Secretary to the Ministry of Education and Cultural Affairs appoints a sub-committee to prepare a draft proposal for the establishment of a National Research Council. The sub-committee comprised of:

* Permanent Secretary, Ministry of Education and Cultural Affairs
* Prof. O.E.R. Abhayaratna, Dean, Faculty of Medicine
* Dr. N.G. Baptist, Representative of CAAS
* Mr. B. Mahadeva, Secretary, Ministry of Agriculture & Fod
* Mr. A.S. Navaratnarajah, Director of Development
* Dr. A. Sundaralingam, Director, CISIR

* Mr. A.O. Weerasinghe, Senior Assistant Secretary, M/LIP
* Mr. T.C.I Ekanayake, Secretary, National Commission, UNESCO as Secretary to the sub-committee

May 1968

National Science Council of Sri Lanka established by an Act of Parliament – National Science Council Act No.9 of 1968, as a statutory body of the Ministry of Scientific Research and Housing

Inaugural meeting held on 28 May 1968 with Hon. Prime Minister as Chief Guest. Professor Sir Nicholas Attygalle, the First Chairman of the Council presided at the meeting.

Mr. B.J.P. Alles appointed as the part time Secretary General

The newly appointed Council comprised of the following members

Professor Sir Nicholas Attygalle – Chairman, Dr. G. Ponnamperuma, Mr. A.N.S. Kulasinghe, Mr. L.J.D. Fernando, Dr. P.P.G.L. Siriwardene, Prof. S.W. Bibile, Dr. Charles St. George, Dr. S. Gnanalingam, Prof. E.O.E. Perera, Mr. B.J.P. Alles, Dr. J.W.L. Peries, Dr. V. Appapillai, Dr. R.P. Jayewardene, Prof. B.A. Abeywickrema, Prof. H. Cruz, Mr. D.B. Rampala, Prof. A.S. Dissanayake, Dr. E.F.L. Abeyaratne, Mr. W.D.V. Mahatantile (Permanent Secretary, Ministry of Scientific Research and Housing), Dr. Gamini Corea (Permanent Secretary, Ministry of Planning and Economic Affairs), Mr. B. Mahadeva (Permanent Secretary, Ministry of Agriculture and Food)

October 1968

An Establishment Committee for establishment matters appointed

April 1969

A Research Grants Committee appointed for award of research grants

July 1969

Draft National Science Policy Statement submitted to the Government

September 1969

Dr. C.R. Panabokke appointed as the First full time Secretary General of NSC

The National Science Policy Statement and Aspects of National Science Policy forwarded to the Ministry of Scientific Research and Housing

November 1969

Research Board appointed for evaluation of applications for scholarships offered by foreign sponsoring agencies

February 1970

Research Grants Committee recommends 23 applications for funding

March 1971

Dr. G.C.N. Jayasuriya succeeds Dr. Panabokke as Secretary General of NSC

October-November 1971

Award of initial three Research Studentships

1971

A National Committee for UNESCO sponsored the appointments of the Man and Biosphere Programme; and awarding of multidisciplinary research grants in the areas of Taxonomy,

Ecology, Natural Resources and Pollution concluded

1972

Standing Research Committees appointed NSC takes Membership of Commonwealth Scientific Committee, International Council of Scientific Unions (ICSU) and International Union of Radio Science

First Survey – Survey of the Scientific and Technological Man Power Potential of Sri Lanka (1971-1972)

August 1973

Publication of the inaugural issue (Vol 1. No.1) of the Journal of the National Science Council of Sri Lanka

NSC given the responsibility to disburse Funds for Research Grants through respective institutions

1974

NSC takes membership of Association for Science Cooperation in Asia (ASCA), International Union of Physiological Sciences (IUPS), International Foundation for Science (IFS) and International Union of Nutritional Sciences (IUNS)

National Committee for UNISIST formed

1975

Research Funds disbursed directly to grantees

Amendment of the NSC Act the Establishment of National Science Council of Sri Lanka, Law No. 36 of 1975

1976

National Science Council of Sri Lanka, Law No. 36 of 1975 becomes operative. Membership of the Council reduced from 21 to 13

Dr. R.O.B. Wijesekera nominated by NSC and wins the Guinness Award for Scientific Achievements

Launching of Vidurawa – NSC news bulletin

1977

Award of First SAREC grant – SEK 800,000

Sri Lanka Scientific and Technical Information Centre (SLSTIC) established

Award of Six Scholarships under the Man Power Training Programme

Award of Five Fellowships to RRI

June 1978

Inaugural Issue of Journal of Social Sciences released

December 1978

Statement on Science and Technology Policy for Sri Lanka promulgated by H.E the President at the inaugural session of the Sri Lanka Association for the Advancement of Science

November 1979

A further Amendment introduced reducing the membership to 11 – eight members to be appointed by the Minister with 3 ex-officio members, the Secretary General and a representative each from the Ministry of Industries and Scientific Affairs and the Ministry of Finance

1980

Council establishes the Solar Energy Group (SEG) and Renewable Energy Resources Information Service (RERIS)

1981

Journal of Science Investigations by Science Education Research Committee released

June 1982

NSC reconstituted as the Natural Resources, Energy and Science Authority (NARESA) by enacting the Natural Resources, Energy and Science Authority of Sri Lanka Act No. 78 of 1981 and placed directly under the Presidential Secretariat

A Scheme of National Awards for Scientific Achievement instituted. First award given to a five member research team (Dr. H. Weeraratne, Dr. Senadira, Mr. M.P. Dhanapala, Mr. C. Kudagamage and Mr. C.A. Sandanayake) for pioneering research towards the development of high yielding paddy varieties, the BG series

1983

An Auditorium and the additional wing to the main building constructed

An agreement signed with USAID for USD 117,704 for research projects on improving nitrogen fixation in grain legumes, characterization of important root and tuber crops and biological control of insect pests in vegetables

1984

NARESA Printing Unit established

1985

NARESA assumes the Chairmanship of the SAARC Technical Committee on S&T for 1985-1986 period

National Award for distinction in the Teaching and Learning of Science established

In consultation with NLDB an agreement signed for the establishment of a Buffalo Farm in Kuliyapitiya

Celebration of the International Youth Year.

Initiation of the First Phase of the Science Indicators and Statistics study with assistance from UNESCO

1986

Regional Seminar on Information Policy held in Colombo

National Awards for Scientific Achievement – President's Award won by Prof. M.U.S. Sultanbawa and NARESA award shared by Dr. R.L. Wickremasinghe and Dr. H.E. Fernando

Issue of four postage stamps, poster competition and publication of a booklet as a part of science education

1987

A Wang microcomputer system installed at NARESA

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1989

Natural Resources, Energy and Science Authority transferred from the President's Office to the Ministry of Industries, Science and Technology

Preparation of a Natural Resources Profile of Sri Lanka with assistance from USAID

1990

The second major multidisciplinary research programme on Coastal Ecology Research initiated

NARESA becomes the participating agency for the establishment of a Natural Resources Information Centre

1991

National Awards for Scientific Achievement – Won by Prof. C.B. Dissanayake, Prof. K.A.A.P. Warnakulasuriya and the 12 member research team from Rubber Research Institute headed by Dr. A. De S. Liyanage

1993

The Mezzanine floor in the library constructed to expand library facilities

1996

Local Area Network (LAN) established at NSF with 15 work stations

e-mail Network established with Lanka Educational Academic and Research Network (LEARN)

1997

A web server installed at NSF and the NSF web site launched

A Global Information Gateway (GIG) established at NSF offering remote on-line access to national and international databases

1998

The National Science Foundation (NSF) established by Act of Parliament - S&T Development Act. No 11 of 1994

MEMORIES - WHAT THEY HAVE TO SAY

Sri Lanka's First Hydrogeochemical Atlas, the Supportive Role of NSF

Prof. C.B. Dissanayake

In the 1980s, over 80% of Sri Lanka's population did not have access to tap water. This vast, largely rural, population of the country had to therefore obtain their water from dug wells, rivers, lakes, and the newly installed deep wells – tube wells as they are often termed. Thus, the quality of water from these sources would most certainly affect the health of those millions of people. The inorganic ions present in the groundwater originated in the underlying rocks and minerals. While the water in the shallower dug wells was in contact with the loose overburden, the water in the deep wells had a somewhat different chemistry due to the greater water – rock interaction at deeper levels.

This geographical variation of water quality in the groundwater indicated the possibility of geographical variations in some diseases associated with water quality. The author thus felt the need to prepare a hydro-geochemical atlas, highlighting the distribution of some chemical parameters which may have affected the health of the population that consumed the water. The author subsequently applied to NARESA (Natural Resources, Energy and Science Authority) which later became the National Science Foundation (NSF), for a research grant. This was readily granted and the author obtained the services of Rohan Weerasooriya, his Ph D. student, as the Research Assistant, under a NARESA research grant RGB 81/20. It was an unprecedented challenge and it is worth mentioning that analytical facilities were in extremely short supply. The Faculty of Agriculture of the University of Peradeniya kindly assisted us with chemical analyses. Computers were not available at that time and all maps were hand drawn. After several years of sample collection, and chemical analysis, the first Hydro-geochemical Atlas of Sri Lanka was published by NARESA in 1987. This was presented to H.E. Hon. J.R.Jayewardene, the President of Sri Lanka, in the presence of Dr. R.P. Jayewardene, Director General of NARESA. The Atlas was co-authored by the author and S.V.R. Weerasooriya, who later obtained his Ph D. degree.

Dr. R.P. Jayewardene, in his foreword to the Atlas, stated *"The Atlas is the result of the work done by the Environmental Geochemistry Research Group of the Department of Geology, University of Peradeniya. The geochemistry of potable water of Sri Lanka has been an important area of research undertaken by this group. The importance of this work is evident when we realize that water borne diseases are widespread in our country. These diseases are preventable. If our water resources are monitored and well managed*

these preventable diseases may ultimately be controlled.

I am extremely happy that NARESA is contributing towards this research effort and to the preparation of this Atlas which will be of great help to all those working with groundwater resources".

The Atlas provided a wealth of information which later culminated in the publication of a large number of research publications in reputed international journals. One of the most interesting outcomes of the Atlas was a map of flouride distribution in the groundwater. It had great application in the study of dental and skeletal fluorosis widely prevalent in the dry zone. Even now, this particular map is used as the background map for such studies.

Apart from the distribution of fluoride in the groundwater, information on the distribution of other parameters such as total dissolved solids, nitrates, water, hardness, metals, etc. was useful as well.

Perhaps the most important aspect of the hydro-geochemical Atlas of Sri Lanka, in my opinion, was the beginning of research on a new interdisciplinary field of study – medical geology. It was quite apparent to me that the geology of a terrain, with its characteristic minerals and their chemistry would, via soil, water, and plants, have an impact on the population living on that terrain. Research into the aetiology of geology-related diseases then commenced, and our pioneering efforts were very well supported by the NSF all the way. Even though the medical fraternity viewed the field of medical geology, understandably with an element of doubt, the subject itself is now internationally recognized and our pioneering efforts, supported by NSF have now been acclaimed internationally. The peak of our achievements could be considered as the invitation accorded to the author by the prestigious international science journal SCIENCE to write an essay on "Stores and Health". This article appeared in Science, in August 2005, and can be considered as a tribute to the NSF, which supported the author in his efforts.

The research pertaining to the research and publication of the Hydro-geochemical Atlas of Sri Lanka was recognized nationally when the author received the National Award for Scientific Achievement (NASA), the gold medal of the Institute of Chemistry, and the merit award from NARESA. Water quality studies, supported by NSF, are now clearly high in the priority list for research in Sri Lanka.

Recollections on the National Science Council 1977-1980

Prof. S. N. Arseculeratne

In accepting the invitation to write an essay in commemoration of the 40th year of the NSF, my special aim is to highlight a crucial facet of planning for science in Sri Lanka that I think has been down-played, or even ignored at best or distorted at worst; that is the vexed problem of a Policy for Science in Sri Lanka. This is not synonymous with 'science policy' a term that is too frequently misused.

With the new government in 1977, I was asked by the new Minister for Scientific Affairs to serve on the Council of the National Science Council (NSC) that was then the only arm of science in government. I was appointed Chairman of the Statutory Committee on Science Policy Research (CSPR) – a term that confused me initially. I recommended to the Chairman, NSC members who might, as members, contribute to this Committee's work.

Firstly, before the work done by this Committee is discussed for the purposes of this commemoration, an introduction to the importance, for us, of a Policy for Science is necessary. The history of modern science, and the so-called (but incorrectly) the Scientific Revolution remind us that modern science (to distinguish it from science in the ancient world- Indian, Chinese, Arabic for example) is justifiably regarded as having originated in Western Europe. Justifications of this view are available not only in the writings of Western authors but also of Asian ones. One thereby notes that these Western countries, that are also described as Developed, Advanced countries (terms that are contestable, and for which I prefer to use the term Technologically Developed Countries, TDC, in contrast to Technologically Underdeveloped Countries TUC), had planning mechanisms for science that did not begin, three centuries ago, with an explicit Policy for Science to initiate the process of the development of science; its needs and plans for them grew with the growth of modern science and its derivative technology. Yet, specific policies were later developed when rapid expansion of science-based technology was taking place, for their specific goals such as space exploration or for coping with the genetic revolution. The situation in what are now termed the TUCs was different. The ancient science that they practiced is now known (see for example, Needham, Abdul Rahman, Butterfield, Hoodbhoy) to have provided some roots of modern science through the spread of information, through travellers, colonial conquests, and by the international spread of cultures. Modern Science therefore, which later arrived in the TUCs through colonialism may be considered alien to the TUCs in content, methods and modes of advance [1]. To that extent, planning for the promotion of science in the TUCs needed an explicit statement of governance as to the aims and direction of the growth of science that were considered necessary. The most illustrative example of such planning is the foundation that Shri Jawaharlal Nehru laid for the growth of science in India after British colonialism ended. Nehru's statement to the Indian

parliament in 1958 is a classic statement that spells out the need for an explicit policy for the development of science, a statement that after a preamble on the relevance of Science and Technology (S&T) in development, then defined the desirable direction of the growth of science in India. The aftermath of the implementation of that wisdom of Nehru is to be seen today in the state of science and technology in India which was referred to in an article in the prestigious journal Nature, in the mid – 1960s, as Excellence in the Midst of Poverty. That is certainly a lesson for us in Sri Lanka where grand plans remain in dust-gathering documents unlike in India where the grand plans were translated into action through the famous country-wide, still existent Indian Institutes of Science under Nehru's Department of Science.

In 1978, the CSPR (that had its first meeting on 20 January 1978) decided that the most urgent task before it was to draft a Policy for Science that could guide the Sri Lanka Government in its efforts to develop science and science-based technology. Previously (see letter from Sec. Gen. NSC 1/2/30, 1977-06-03 to the National Academy of Sciences [NAS], of Sri Lanka [a non-governmental organization of the leading scientists in the country]) titled 'Aspects of National Science Policy' was submitted to the Fellows of the NAS. A joint statement 'For the Mobilisation of Science and Technology for National Development' was drafted by the NSC and the Sri Lanka Association for the Advancement of Science (SLAAS). It is heartening to note the links between the NSC, as the only state arm for science, the non-governmental NAS and the SLAAS.

Drafts of different statements for a National Policy were made by three members of the Committee for SPR, but with the need for brevity and comprehensiveness, one of them, that drew on Nehru's documents, was selected by the CSPR and forwarded to the NSC for approval. It was finally submitted to the Head of State, His Excellency J. R. Jayewardene for presentation to the Parliament. It was accepted by the Cabinet and it (the 1978 Policy Statement) still remains the first and only state-approved policy for science in Sri Lanka. It was of comprehensive coverage, a fact that future planners and authors of recurring future Policy Statements need to remember: to involve scientists in the state's planning for science; to foster scientific activity in all its aspects and scope; to maintain a drive towards self-reliance in S & T capability; to provide the widest possible basic education in science; to provide the institutes for scientific activity with the needs for science for optimal use of science and our natural resources; to provide the best possible conditions for work of scientists to stop or reverse the brain-drain; and to disseminate the fruits of scientific and technological activity amongst the citizens.

With that first and major accomplishment - the acceptance by the state of a seven-point Policy for Science in Sri Lanka - the next and perhaps more vital and difficult task was the formulation of Policy Instruments, for the implementation of the National Policy for Science and Technology (S&T) in Sri Lanka. At its meeting on 8 Jan 1979, a letter from HE the President J. R. Jayewardene, was

tabled; HE had requested the Council "....*to make suggestions on an implementation programme for achieving the objectives set out in the S & T Policy Statement*" with a reminder on 9 March 1979. These 'Policy Instruments [PI]' that the CSPR began with, included explicit and implicit ones such as .... *to build-up S & T infrastructure, to regulate technology imports, to define the pattern of demand for technology, to promote the performance of S & T activities* etc. The minutes of the CSPR on 9 March 1979 recorded that "... the SLAAS had also written to the President thanking him for the S & T Policy Statement made by him at his inaugural address at the 34th Annual Session of the Association".

To revert now to a personal note; with the re-organization in the early 1980s and re-naming of the NSC with a new 'Director General', the NSC became the NARESA. However, in the vein of these recollections, the most retrograde and, perhaps, most destructive step in this so-called 're-organization' was the elimination of the Committee for Science Policy Research that was working on the next and crucial step of defining the Instruments for the implementation of the National S & T Policy Statement of 1978. I had no opportunity to continue that work as I was excluded, while I was away in 1980 on short-sabbatical leave, from the new NARESA. The pillow was changed but the headache persisted and still persists as in many other pursuits in this country.

With the establishment of new agencies and organizations in Sri Lanka that are concerned with S & T, the wheel was subsequently re-invented a few times (1983-4, 1994) but (as I saw it, and as I told a prominent member of one of the subsequent groups that came out with yet another 'new' policy statement), with cosmetic changes to the original document of 1978. I think I am right in stating that there was no subsequent national policy for science and technology, nor effective, nationally-integrated, inter-disciplinary instruments for the implementation of whatever vestiges of plans and policies that remain. And now in 2008 I am told, the wheel is about to be re-re-invented with yet another policy document. If the wheel keeps turning, then I will be happy but if it, as in the 1980s, gets stuck in the mud of woolly-mindedness, then I will remain sad.

On looking back on the tragic story of the abortion of planning for science in Sri Lanka, this [the absence of measures for the implementation of the instruments] was the stumbling block that existed and still persists, for effective state sponsorship of S&T. That story is recorded in M. A. T de Silva's (former Assistant Secretary General, NSC) article Historical landmarks in Science Policy...[2], and in his Science Planning: the Sri Lankan perspective [3], but we need to remind ourselves that, especially in Sri Lanka, "We learn from History that men never learn from History". I have used this example (the abortion of planning for science in Sri Lanka) to refute our distinguished diplomat Mr. Jayantha Dhanapala after he wrote; "*I have long believed that the most durable achievements in public policy are best realized through institutions rather than individuals*". In the 2nd Prof. S. T. Fernando Memorial Lecture of the SLVA in 2002, I said in refutation of Mr. Dhanapala, citing

several important examples in Sri Lanka including the wrecking of planning for science that I discuss in this essay, that it is not the institutional structure or its policies that matter but the performance of the administrators of these institutions, who can, as square pegs in round holes, on personal, authoritative whims and ignorance, wreck the work of any institution.

References

1 Arseculeratne, S. N. 1997. The determinants of the growth of science in pre-modern South Asia. In: Millennial Essays. Felicitation volume for Professor K. M. de Silva, Law & Society Trust, Colombo

2 De Silva, M. A. T. 1984. Historical landmarks in Science Planning. Sri Lanka J Social Sciences, 7(1&2): 77-96.

3 De Silva, M. A. T. 1989. Science Planning: the Sri Lankan perspective. Science & Public Policy, 16(6): 367-371,

SLSTIC Network: the Union List of S & T Periodicals and Training

Ms. Nanda P Wanasundera

The Sri Lanka Scientific and Technical Information Centre (SLSTIC) of the National Science Council (NSC), set up in 1977 with UNESCO aid, was to be the Lankan counterpart of other recent information centres in many developing countries. Thus , the Indian Scientific Documentation Centre (INSDOC), in New Delhi and the Pakistan Scientific Documentation Centre (PANSDOC), in Islamabad, were instituted. This move by UNESCO was an attempt to decrease, if not obviate, the disparity in information possession, and use, between the developed northern hemisphere and the information poor Third World. These centres were to act as nodes in their countries, facilitating networking among scientific and technical libraries and vanguarding the implementation of an aggressive and coordinated advance in national information service, particularly in science and technology. The activities of the network of scientific and technical (S&T) libraries were targeted to be varied and helpful to both libraries and their clients.

Thus, the National Science Council, then under the directorship of Prof. G.C.N Jayasuriya, set up SLSTIC with Ms. Ira Unamboowe, as part-time head of the information unit, overseeing the implementation of the initial exploratory stages of the project.

In May 1977, Mr. Upali N. Yapa was appointed Director, SLSTIC. He worked rapidly to get the Centre going with approximately fifteen officers working under him, including two documentalists - newly recruited Millicent Perera and myself, library assistants, clerical staff and office aides, all of whom had been working in the NSC Library.

SLSTINET

A preliminary meeting with invited librarians saw the networking of 67 libraries in the scientific or technology fields, or both, and

those other libraries like public and university libraries with S&T collections. This network was named **The Scientific and Technical Information Network** (SLSTINET).

Two tools were needed to set up facilitating the sharing of resources: namely, a union catalogue to document the books available in the cooperating libraries, and a union list with regard to periodicals.

I was involved with the latter reference tool from its very inception. Along with Ramya de Silva, under the close supervision of Upali Yapa, and with the ready cooperation of the libraries included, the first edition of the Union List of Scientific and Technical Periodicals in Sri Lankan Libraries was compiled and published in 1979. A supplement was prepared and published in 1981 to up date the original union list.

Let me begin my narrative on the compilation of the union list by defining the term and enumerating its uses in a scheme of library cooperation.

The Union List

Definitions:

- A union list displays summary holding statements for each library within the union list group that holds copies of a specific serial publication.
- A complete list of the holdings of a group of libraries for materials of a specific type, on a certain subject, or in a particular field usually compilèd for the purpose of resource sharing. The entry of each bibliographic item includes a list of codes representing the libraries that own at least one copy.

Stated simply, a union list is a listing of the periodical holdings of a group of cooperating libraries.

(NOTE: The terms periodical and journal are used interchangeably to denote any publication that has a standard format and is published at regular intervals and has a specific title, with its continued publication ensured. Each periodical has a distinct four-digit number - the International Standard Serials Number (ISSN). Magazines are for popular reading while journals/periodicals are subject oriented and specialized to varying degrees. All these are classified as serial publications).

In consultation with Upali Yapa, the paradigms of the proposed union list were set in place and the format of the publication decided upon. It was to be based on, and closely resembled, a prestigious British union list with title: World List of Scientific Periodicals. The periodical holdings of the 67 cooperating libraries were to be documented by visiting the libraries which had extensive journal coverage.

The usefulness of a union list housed in the central/main/nodal library of the cooperating scheme, to individual libraries is that:

- The location of a particular journal and the issues available in a library that receives the journal are known
- Interlibrary loans of a journal or the request and receiving of photocopies of journal articles is facilitated.
- Cooperative acquisition of journals is facilitated in that the acquisition of particular journals is allocated to particular

libraries, ensuring thus a wide coverage of journal literature with maximum use of monetary resources of the cooperating libraries

The actual compilation of the Union List

Ramya and I visited most of the libraries in the Union list, and and documented their periodical holdings. If the libraries maintained visible indexes, our work was easy. We copied the titles of journals onto 5"x3" cards, with details regarding each journal's inception and changes of name, if any. These were arranged in alphabetic order of the first significant word of the title. Each library was designated a set of initials (e.g. University of Colombo Medical Faculty – UCM). Beside the titles of journals, the holdings of libraries were entered.

An entry such as 1970-73, 1976 - represented an interrupted supply of the journal. An asterisk at the end of the entry denoted missing issues. An open entry; e.g. 1998 – indicated the journal was received from 1998 and continues. A closed entry, needless to say, ended with the year the subscription to the journal ceased.

The data collected on cards by Ramya and I were collated and a first list typed, after which the first edition of the document was published, in-house, in 1979. It was titled: **Union List of Scientific and Technical Periodicals in Sri Lanka Libraries.** We worked on its revision as well which was printed as a Supplement in 1982.

Serendipity down the road

If those reading this article presume it was dull or tedious work, we persuade them to change their opinion. It was, admittedly, tiring and unpleasant when unwelcome looks were directed at us (almost nil, I must say) in the libraries that we visited; or the periodical holdings were extensive and/ or not recorded meticulously. The worse scenario was when a library had no record of its journal holdings and the librarian waved us to its collection of dust ridden past issues; and even worse was when these were jumbled and thrown haphazardly in a dark room!! These instances were extremely rare, such being the efficiency of the library fraternity.

Another bonus was the creation of good vibes and forging close public relations with the librarians we met. It helped in the furthering of the objectives of SLSTINET.

Ramya and I had our working holidays too. We had to stay about ten days in Kandy/ Peradeniya to visit the main, and faculty, libraries of the University of Peradeniya. What about our weekend at the Tea Research Institute, Talawakelle? We were generously accommodated in one of TRI's circuit bungalows. Agalawatte (RRI) and Lunuwila (CRI) entailed day visits chauffeured in a NSC vehicle. Jaffna was not to be visited and unless we got the information from source, Jaffna University would not make it to the Union List. It was a merciful time when motoring to Jaffna was safe and visitors were made welcome. I went on holiday to Jaffna and during my three days in the Peninsula, utilized the opportunity to visit and document the journal holdings of the University of Jaffna. Nowhere else did I receive such a warm welcome!

I mentioned the word serendipity in my subtitle, deliberately. It was serendipitous making friends with diverse librarians in

different types of libraries and being treated so well, although intruding persons could be an extraneous disturbance to the quiet running of a library. It was serendipitous visiting various places and institutions.

Computerization of the information centre of the presently named National Science Foundation has proved a boon to both libraries and the scientific and technical community of the Island. Subsequently, updated compilations with title **Current List of Periodicals: scientific and technical periodicals available in libraries in Sri Lanka** were printed and computer input in 1998 and 2005. The updated 2007 edition is being printed.

The union list is now a computerized database and is available on CD-ROM and also online; website www.nsf.ac/lk/nslrc

Training programmes for SLSTINET Librarians

I was also, fortuitously, charged with arranging training programmes for network librarians and/or their assistants. The acronym selected for this activity was STEP, which unravels itself to read: **SLSTINET Training and Education Programme**. My Director, Mr Yapa, gave me the barebones of the intended programmes and I carried out the planning, selection of venue (the NSC auditorium once it was built) and other logistics.

We also had a couple of training programmes for users – the S&T fraternity.

Why training? Librarians needed to be more committed towards cooperation and networking, including computerization once SLSTIC went electronic in its storage of information. Standard cataloguing had to be introduced so that conformity in the catalogue cards and, later, catalogue data which was sent electronically, was ensured. They needed to be introduced to reference tools, such as the Science Citation Index, and clarifications on its complicated methods of exploitation.

These training sessions were often one day events, but we did conduct two, three and four day programmes as well. There were about five training sessions, annually for around three years, very successful by all accounts; feedback received from participants was consistently positive.

It was both a joy and a pleasure to have been a part of the inauguration and initial working of a new concept – library cooperation and networking; and to have been a cog in the wheel of the Sri Lanka Scientific and Technical Information Centre as it started on its road to helping, information-wise, the scientific community in the Island. It is more than pleasing to know the progress of the Centre has been continuous. Most of the original staff are now scattered far and wide: professionally and globally, but all richer through the experiences shared at SLSTIC of the NSC then, later NARESA and now NSF.

My Memories of the NSF

Dr. Chandrasiri Jayakody

Having just graduated with a Bachelor of Science degree from the University of Colombo, I was excited to receive an invitation for my first job interview at the Natural Resources, Energy and Science Authority of Sri Lanka (NARESA). I was nervous and even more nervous when I realized that one member of the interview panel was the Director General of NARESA, Dr. R. P. Jayewardene, the brother of the then President of the country, His Excellency J. R. Jayewardene. The other members of the interview panel were the Deputy Director-General Mr. Leslie Wijesinghe and the Administrative Secretary, Mr. Alwis. However, their friendly demeanor made me comfortable to face the interview with confidence. I was hired as a Staff Assistant at NARESA in 1982. I first worked for the Social Sciences Committee for a few months, but my first major assignment was to help Mr. Wijesinghe with his two national energy surveys on biomass fuel consumption and bio-gas consumption. This provided me with an opportunity to travel island-wide to collect data . We had to visit each household, which was randomly selected, which was visited twice to measure their actual biomass fuel consumption. It was a great opportunity to travel the length and breadth of the country and meet people from all walks of life. And It was a pleasure to report to Mr. Wijesinghe, who later became the Additional Director General of NARESA. The experience I gained from working for him was invaluable.

NARESA has a special place in my life. If not for NARESA, my life story would have been completely different. I believe that it was NARESA which brought me all the fortunes in my life. I first met Thilaka at NARESA. She was an accountant who shared her room on the third floor with two other accountants, Ms. Chaturangani Fernando and Ms. Manohari Senanayake. Thilaka and I became friends during our lunch time visits to a near by ice cream parlour, located at Bauddhaloka Mawatha; that relationship grew and it was on Mano's wedding day that I decided to ask her for her hand.

Thilaka left NARESA in January 1987 to accept a Finance Officer's position at the Peoples' Bank, Karapitiya branch, Galle. I used to accompany her during her week-end visits home. On one of those weekend trips, coming home from Galle, when the bus approached Kalutara, I took courage and proposed to her. I still remember the smile on her face.

In March of 1985 I left NARESA to work for my M.Phil degree on a NARESA chemical grant awarded to Professor L.M.V. Tillekeratne and Dr. Shiranthi Deraniyagala of the Department of Chemistry, University of Colombo. Though I was granted no-pay leave by NARESA, I was paid a modest salary as a Research Assistant from the grant. I completed my research work on the isolation and structure elucidation of natural products from marine organisms and the determination of their biological activity, under the joint supervision of Professor Tillekeratne and Dr. Shiranthi Deraniyagala

in October 1988. I was able to isolate two new cembranoid diterpenes from Lankan soft corals and also several anti-bacterial and anti-fungal compounds.

For me, the most important part of this three and half years of work with Professor Tillekeratne was not my M.Phil degree, but the trust and the friendship that I developed with him. I believe that the trust a student develops with his or her research advisor is a wonderful experience that mutually benefits each other and could develop into a life long friendship between the two. It was that friendship and trust that paved the way for me to come to the United States for my PhD. studies. I strongly believe that without his guidance and support I would not have been able to make that journey. The continued friendship and association with him and his family, who now live in Ohio, the state next to ours, is a blessing even today, not only for the two of us, but also for our two kids, Nipuna (18) and Thilani (12).

NARESA is also associated with the happiest day of my life. It was on Christmas Eve of 1987 that Thilaka and I registered our marriage. Mr. Wijesinghe and Professor Tillekeratne were there to convey their best wishes. We were both so glad to have them as witnesses at our wedding.

I also enjoyed my volunteer work at the Sri Lanka Association for the Advancement of Science as the secretary of the committee for the popularization of Science in 1988 and also as a Council member and Assistant Editor in 1989.

After completing my MPhil research work, in October 1988, I re-joined NARESA as a Scientific Officer and continued to work for Mr. Wijesinghe. Even though I enjoyed my work at NARESA, I dreamed of earning a PhD. degree. Was there any other gift that I could have given my parents to make them happy for all what they have done for me? It was no easy task to raise a family with a single income as a driver as my father did, and the sacrifices my mother made as a housewife to raise and educate us were immense. My parents gave me something that they could not achieve, a good education.

Thanks to the opportunity given by NARESA to complete my MPhil degree, thanks to Professor Tillekeratne who arranged an interview for me with Dr. Neely, of the University of Oklahoma who visited Sri Lanka to interview students for US universities, I was able to receive a teaching assistantship at Marquette University, Milwaukee, Wisconsin to pursue my dream.

I will never forget the day I resigned from NARESA. It was not easy to leave colleagues and friends who were so close to my life. Some have now left NSF and some are still there. I am glad that I was able to keep in touch with most of them for the past 17 plus years.

On August 7, 1990, four days before my son's first birthday, I left Sri Lanka for the USA. That was my first experience of air travel. Thilaka and Nipuna joined me two years later. I will never forget the support Thilaka received from NARESA's former Deputy Director of Scientific Affairs, Mr. Asoka de Silva and from Professor H.D. Gunawardhana of the Chemistry Department, Colombo University.

I made my dream become real by earning my PhD. degree in Organic/Polymer Chemistry in 1994 under the guidance of Professor Charles A. Wilkie of Marquette University. I am also grateful to Professor Gordon L. Nelson of the Florida Institute of Technology for the guidance and support I received during my postdoctoral training. My field of specialization is fire-resistant polymers. Though it is not a major issue in Sri Lanka, fire is a major social issue in the United States. With the extensive use of polymeric materials in our day to day lives, fire safe materials have become so important in saving thousands of lives and millions of dollars worth of property damaged by fires annually. An event which gave me much satisfaction occurred during my visit to Sri Lanka in July 2004. NSF Director (Scientific Affairs), Dr. Wasantha Amaradasa suggested, "Why don't you give a talk at NSF on fire and polymers ?". I readily accepted the invitation and gave a seminar on Fire and Polymers at the NSF auditorium. The event was chaired by Director of NSF, Mr. Watson. I was so glad to be there after 14 years to see some familiar faces. Also, I never forget to see Mr. Wijesinghe.

My third visit to NARESA, now NSF, occurred in January, 2007 during my visit to Sri Lanka to participate in the opening ceremony of the Tsunami-damaged Ariyawansa Maha Vidyalaya, Beruwala. The Sri Lankan- American Association of Western Pennsylvania mediated with the Brothers Foundation in Pittsburgh, Connecticut Schools Association, and the American Jewish Joint Distribution Committee for the construction of this USD 800,000 new model school in association with one of the Rotary Clubs in Sri Lanka.

My memoir will be incomplete if I do not mention a few more names. I always appreciated the support I received from Ms. Pushpa Irangani, Ms. Ajantha Kanthi, Ms. Priyadharsani at NARESA and Ms. Dhammika de Silva at Dean's Office, University of Colombo for typing my MPhil Thesis, and all the chemical structures, and my dear colleagues at NARESA, Dr. Geethika Yapa, Ms. Anusha Amarasinghe, Ms. Chatu Fernando, and others and those who left for new career opportunities, Mr. Chandrasekera, Mr. Athulathmudali, Ms. Jaya Athputharajah, Ms. Manohari Sandanayaka, Dr. Wipula Yapa, Mrs. Subadra Thilakaratne, Ms. Jinie Dela, Mr. Basnayake, Mr. Upali Gunaratne, Mr. Jayan Karunasinghe, Dr. Wasantha Amaradasa and others.

As for my family, Thilaka is now an Enrolled Agent and a Master Tax Advisor for a tax firm; Nipuna started his undergraduate studies last August at Purdue University, Indiana. He doesn't want to be a chemist like his dad. He plans to major in aeronautical engineering. Thilani who just turned 12, wants to be a singer-lawyer-dancer–teacher. I have no idea what she wants to add next to her job title.

By the way, how I defended my MPhil thesis was interesting. There was a strike at the campus the day I came in to defend my MPhil thesis and I was not able to do it. Guess who made arrangements with the College House and the Chairman of the Marquette

University Chemistry Department for me to defend my MPhil thesis at Marquette University and to send the report to College House? You probably can guess!

As stated earlier, one of the most memorable periods I had at NARESA was when I was working for Mr. Wijesinghe with his national energy surveys on biomass and bio-gas consumption in Sri Lanka. The bio-gas survey report, entitled "Operating experience with biogas plants in Sri Lanka" which appeared in the Natural Resources Forum (Vol. 10, 221-9, 1986) was the first international publication I co-authored. During that time I had the opportunity to travel all over the country for data collection with a special group of people. They are the NARESA drivers, Mr. Nandasena, Mr. Rathanapala, Mr. Ranaweera, Mr. Dharmadasa, and Mr. Walter, if I recall their names correct. Thank you all for the wonderful memories.

Finally, let's pay a tribute to all those Directors General, Additional Directors General, Directors, administrative officers, staff members, employees, and well-wishers of NSC, NARESA, and NSF, the past and present who, by sacrificing their time, energy, talent, and experience, paved the way to the success that the National Science Foundation is today, 40 years of dedicated service to science and technology.

Ten Years of Science with the NSF

Dr. M.C.M. Iqbal,

My first encounter with the NSF was in 1998 when I applied for a Travel Grant. I had a pleasant surprise when my application was approved and I was able to attend the annual congress of the International Association of Plant, Cell and Tissue Culture, in Israel, to present a paper. This visit opened a new area of research, after listening to one of the keynote speakers on Phyto-remediation, a newly emerging area of research where plants are used to remove toxic heavy metals from the environment. Besides an intellectually stimulating conference, the visit provided an opportunity to experience a land steeped in history and confrontation. Subsequently, I was fortunate to receive travel grants to present papers in Germany and Italy. These papers were eventually published in peer reviewed indexed journals, besides initiating collaborative projects.

Participation in an international conference is

a vital component in our career development and enhancing our research capabilities. Such conferences provide us an opportunity to not only discuss our research findings with critical peers but to also learn at first-hand the state of research in our fields and in related ones as well. It invariably provides the participant with ideas for new areas for research and to establish collaborations.

The visit to Italy contributed towards a research project to study plant ecology and geological significance of the serpentine sites in southern Sri Lanka. This is a unique site with flora which adapted to a unique, harsh ecological niche - a living laboratory for evolutionary biology. In association with the National Man and Biosphere committee of NSF, we intend to integrate the local villagers to maintain and conserve this area as a "Geo-Park". This research project is funded by NSF.

The NSF also provided other research grants, which contributed towards training post-graduate students and thereby strengthening the research capability of a new generation of scientists. A study visit to Germany in 2003 enabled us to submit a collaborative research project for one of my students to do his PhD in Germany. I am happy to say that he recently returned with his PhD and is now a Senior Lecturer in one of the new Universities in Sri Lanka.

The NSF has contributed directly and indirectly towards improving our research standards through participation at conferences, study visits, research grants and eventually publishing our findings in international peer reviewed journals, thus enhancing our country's international standing in science. Personally, this has also contributed to my career development.

The NSF has contributed immensely towards my research capability. Above all, the staff have been extremely helpful and cooperative showing a commitment to push research forward in our country. I consider it a privilege to have been associated with NSF during the last ten years.

My Recollections of NARESA in the 1980s

Dr. J. Dela

I was just out of university and working as a demonstrator in the Botany Department of the University of Colombo when I joined The Natural Resources Energy and Science Authority (NARESA) in 1982 as a young Staff Assistant. Happy with my new found independence, I opted to go for the interview with a friend, who also did not know where NARESA was located. Upon wider inquiry someone said "Oh is that the government office that is like an international organization?". That summarized the NARESA I knew.

I was interviewed by Mr. Leslie Wijesinghe, the second in command at NARESA at the time, Mr. Alwis the Administrative Secretary and Mr. D.E. F Ferdinandez, Director Scientific Affairs. Despite the fact that NARESA was headed by Dr. R.P.Jayewardene, brother of Sri Lanka's President, merit was the sole

criterion by which officers were recruited and their work evaluated. I entered NARESA as a raw Staff Assistant with three others. I found that I had been selected to handle the Social Sciences Committee under the supervision of Mr. Ferdinandez (affectionately called Ferdy by his peers), who himself was new. Fortunately, the "Division" had Mrs. Seetha Wijesinghe who had been at NARESA 'from time immemorial. On my first day, Mr. Ferdinandez told me "ask Seetha for what you want", and that was all the training I received. I soon realized, with the mound of files Seetha was placing on my desk, that there were 30 general files and about 80 grant files that I had to handle and keep upto date. This also included producing the Sri Lanka Journal of Social Science, making summarising of all the final reports and lengthy theses that were handed in by the NARESA Social Sciences grantees, and handling the monthly meetings of the Social Sciences Working Committee chaired by Prof. Ralph Peiris.

For someone used to the freedom of university life, the strict discipline at NARESA and handling such a large number of files was truly daunting. I remember going to meet Madame (Prof) Seneviratne, Head of the Botany Department at Colombo University the very next day to tell her that I wanted to come back. With infinite wisdom, and tact, she pointed out that NARESA had much better prospects for me than a temporary demonstrator's job. Seeing that I was quite determined, she said, "give it two months. If you still want to come back I will take you back." At the end of two months, however, I decided that I wanted to stay on. NARESA had grown on me. I realised that I would find few other government institutions with the clean and pleasant atmosphere that NARESA had, despite the strict rules and regulations. NARESA would become almost a second home until I left it in 1994.

Starting work at NARESA in those days meant being thrown in at the deep end. Although everything was extremely well organized, there was no spoon-feeding. There were set procedures for all Staff Assistants (SAs) and Scientific Officers (SOs). If one did not know the procedure, one asked a more senior officer and got on with it. No excuses were accepted, if you had not found out the correct procedure. Interestingly, I found as time went on that Staff Assistants and Scientific Officers at NARESA did the same work, the difference being that the latter had a postgraduate degree and were older! Each SA or SO handled at least two Working Committees. Several SAs and SOs worked under a 'Director, Scientific Affairs' or under the Deputy Director General (later Additional Director General) Mr. Leslie Wijesinghe. Each of these supervising officers had one or two stenographers whom the SAs and SOs had to share. There were no computers when I joined NARESA, and only the senior secretaries had electronic type-writers. The work turnover, however, remained extremely efficient.

I remember that a Working Committee, comprising experts in the relevant sphere, met once a month. Letters of notice were sent 2 weeks in advance with the minutes and agenda. The Administrative Secretary was notified regarding room arrangements and refreshments. The accountant was notified about allowances for Committee Members and travel forms. The day before the meeting, the relevant Director Scientific

Affairs and the SA or SO in charge would meet and go through the agenda. The 'gate' would be routinely given a copy of the attendance sheet. On the day of the meeting the SA or SO would have to come in early and see that all was in order, and that the labourer allocated for duty (by the Administrative Secretary) had polished the floor and arranged the Board Room where the meeting would be held. A vase with flowers (from the garden) was absolutely mandatory and so were a few foliage plants--also from the garden. The air conditioner had to be switched on 20 minutes before the meeting. The officer in charge would then sit punctually in the room with all the relevant files, extra copies of minutes, agenda, etc. Dr. R.P.Jayewardene would usually come in about 20 minutes before a meeting and check the AC. Last minute running around, before Committee meetings, was hardly ever seen. A SA or SO coming in late for a meeting was unthinkable! The Minutes would be typed, corrected, and taken to the Chairperson before the week was out. This was the usual routine for SAs and SOs.

This attention to detail and punctuality were aspects that set NARESA apart from many other government institutions, whether it involved holding a meeting or workshop, or preparing a document or policy. This did not mean that lavish spending was condoned. On the contrary, waste or unnecessary expenditure was frowned upon. It was quite a joke that we SAs/SOs would telephone all the accepted caterers in town before a workshop to get the best menu at least cost.

On learning that I was interested in art and cultural affairs and had some contacts in this sphere, organizing the NARESA cultural show (again with minimum cost but with the best of artists) for receptions at international conferences was assigned to me on several occasions. The SOs, who were a united bunch, enjoyed these rare gathering at which we were expected to dress smartly and participate so as to be a credit to the office.

Both Dr. Jayewardene and Mr. Wijesinghe were also extremely particular about the quality of documents that went out from NARESA whether they be Minutes, a letter of invitation, a technical report or a Board Paper. This concern got communicated down to the youngest SA. Spelling mistakes or errors in figures were just not tolerated, and all SAs and SOs were given copies of the Oxford English Dictionary which we were expected to refer. This concern was extended to names of people. I still remember having to make a list of 500 names for local invitations to be sent out for the opening of an international conference in 1983. Despite all the work involved, the invitees names had to be checked for correct initials and spelling before the invitation cards were typed!. If anyone complained to Dr. R.P.Jayewardene that their initials or surname was written wrong in a missive from NARESA – it was considered a very serious business indeed. This kind of discipline seemed hard for us young officers at the time, but I later realized that it was this attention to detail that helped us to become particular about technical matters as well.

It was not all work at NARESA, and there were many efforts for the professional

advancement of the younger members of the staff. During my second year, we were told that those of us with no postgraduate qualifications could select a field of study, and find a NARESA grantee under whom they could work as a Research Assistant. We would technically be on no-pay leave from NARESA. It was then that I experienced another side of Dr. Jayewardene. On hearing that my field of interest was primates, I would get regularly called on the intercom to come and meet him in his office. Although he was extremely mild mannered, his presence was such that a 'chat' with the DG was an awesome experience for us youngsters. On entering the room and sitting rather nervously on the edge of my chair, I would be given a paper or journal article on primates and asked searching questions on the subject matter. I must have scored fairly well because Dr. Jayewardene gave me his utmost assistance to get adequate leave and facilities to do my field work under the MAB programme, after enrolling as a Research Assistant under Mr. Lyn de Alwis and Dr. S.W. Kotagama. He knew nothing of me expect my work at NARESA and the fact that I was dedicated enough in my chosen field to embark on a rather difficult regime of field work. That was what mattered to him, and his interest in primates was genuine. Once when explaining about my field of study to a foreign visitor I recollect that he said "primates are also people". I remember he even got my project filmed by the Rupavahini Corporation because he wanted to show that NARESA could fund and support PhDs in Sri Lanka, although the done thing at the time was to go overseas for postgraduate work. Years later, the faith Dr. Jayewardene had placed in me, and the wholehearted support he had given my primate work, spurred me on to complete my PhD despite many obstacles. I know that other young people working at NARESA too were encouraged to write up their post graduate work and to develop themselves professionally.

Once I got back after my study leave in 1987, I was given a letter informing me that I would now be working directly under the Additional Director General, Mr. Leslie Wijesinghe, himself. By this time I had been promoted to the post of Scientific Officer – without ever having asked for it. Having heard of how exacting Mr. Wijesinghe was, I naturally had reservations about working with him. Little did I know that this was a defining moment in my career. I had worked with Mr. Ferdinandez, and more briefly with Mr. M.A.T Silva. Both were extremely kind and very able persons. But working with Mr. Wijesinghe was a real challenge. He had the knack of starting innovative and far reaching projects. He also got through an incredibly huge amount of administrative and technical work and expected his assistants to do the same. I learned quickly that he was a good teacher and that mistakes—if genuine-- were allowed once, though not a second time. Also, one had to speak up, and if you made sense, your opinions would be sought and respected. Later on, he would insist that it is not years of experience that counts, but ability. Another plus point was that I was released from routine grant work and placed in charge of the National Mangrove Commission and the newly formed Technical Committee on the Conservation of Genetic Resources. At the time, the word 'biodiversity' had not been

introduced to Sri Lanka, and the work of this latter Committee formed the precursor for work on biodiversity conservation in the country later on.

Being young or inexperienced did not stop Mr. Wijesinghe from getting me (or his other assistants) to work to our full potential and, for this, I am thankful to him. On learning that I had done aerial photo interpretation and mapping for my post graduate work, I was sent off to the Survey Department for over a month to map all the mangrove areas around Sri Lanka. I also remember being given a brief introduction to writing a project proposal and requested to write a proposal for a national project for conservation of mangroves. I had never written a project proposal before this, but the concise guidance and documents given to me, with a few additions by Mr. Wijesinghe, served to prepare a proposal that got accepted for funding by IUCN. To his regret, and my great relief, the project was given over to the Forest Department for implementation.

A great deal of technical work at NARESA was done by the senior staff helped adequately by the SAs and SOs and the secretarial staff. Upon learning that I was an active member in a conservation NGO, Mr. Wijesinghe put me on to several 'jobs' which, I later realized, had considerable national significance. With minimum direction from Mr. Wijesinghe, I had to organize seminars and workshops on various aspects relevant to the conservation of genetic resources in Sri Lanka. As the secretary to the relevant committees I handled, I (like the other SOs) had to get the cooperation of experts, organize workshops and seminars, prepare material to be sent out, and also prepare the workshop reports on time. Of course, we had to keep our supervising officers informed and all letters were signed by the DG or the supervising officer. Mr. Wijesinghe would also readily advise when requested, but work was effectively delegated leaving the senior officers free to attend to the more demanding technical and administrative work.

Upon my suggestion to Mr. Wijesinghe that NARESA could join up with the March for Conservation (a conservation NGO dominant in the education field at the time) to ascertain the problems and constraints of teachers with regard to environmental education, I was given all encouragement to go ahead. I had to prepare a memo to him defining why this was important and how we would proceed. Once the DG's approval was obtained, I had to prepare a Board Paper to use a small balance that remained from USAID funds for this purpose. From this commenced a project that spanned three provinces. Implementing the project meant that I had to coordinate with the National Institute of Education, Provincial Education Ministries, a large number of schools in the Uva, Southern and Western Provinces, and experts from the March for Conservation. It also meant working outside office hours and at weekends. It was also hugely rewarding. I was given complete freedom to contact the necessary institutions, schools, and resource persons, prepare questionnaires, collect educational material for distribution, discuss subject areas with experts, hold the workshops, and then compile the workshop reports and recommendations.

Mr. Wijesinghe and Dr. Jayewardene both attended the Colombo and Galle workshops and were appreciative of the outcome, but I remember having to handle the Badulla workshop on my own. Later, under Prof. Priyani Soysa, and working as Secretary for the Man and the Biosphere Programme, I was permitted to extend this project to organize further teacher training workshops in Kandy (in the Botanic Gardens), at Sinharaja and at Horton Plains with the collaboration of the March for Conservation. We also produced informative posters and booklets that the teachers wanted as additional material to help with environmental education. Again, this project had national ramifications. I was helped by the excellent support given by several members of the secretarial staff, the drivers, Sunil and Asoka who accompanied me very willingly to some way out places for these workshops. Several members of the secretarial staff were released to accompany me, including Mr. Wijesinghe's secretary who was excellent at logistic arrangements in places with little facilities. To ensure that all went well, we would take even the cake for tea, the knife to cut it, kettle, tea cups and water boiler ! Despite the hard work all of us enjoyed these outstation workshops. The drivers would willingly chip in as assistant cooks at the Sinharaja research station and would regale their friends with 'forest stories' on their return to the NARESA office. All worked as a team and did their allocated work. We never lost anything that we took out of the office and Sunil and Asoka saw to it that we never left any litter behind.

Another important activity of the Technical Committee on the Conservation of Genetic Resources was the preparation of the "Biological Conservation in Sri Lanka", a national status report. Mr. Wijesinghe compiled much of the document with the inputs of several experts. As his expertise was with flora, I being the "zoologist" had to review and see to the section on fauna contributed by Prof. S.W. Kotagama. I was also enlisted by Mr. Wijesinghe to prepare a preliminary list of threatened fauna of Sri Lanka for this document. With very broad guidance from Prof. Kotagama, I had to wade through the existing field guides in various libraries and come up with the list – with the correct scientific and common names and spelling. I can't say I relished this work at the time, but this list became the precursor for the many lists of threatened species in Sri Lanka that have followed. This document, revised later by Mr. Wijesinghe in 1993 (at IUCN Sri Lanka) also played a significant part in the preparation of the National Biodiversity Conservation Action Plan of 1999. Likewise, I had to go through all the technical documents that Mr. Wijesinghe prepared and to give my inputs – by way of comments or suggested amendments. I know now that this served as excellent training ground to develop my own writing skills. I also recollect that during this time, under the Natural Resources Working Committee, Mr. Wijesinghe and Mr. Mahen Watson were involved with bringing out another land mark document, Natural Resources of Sri Lanka: Conditions and Trends 1991.

An important activity that I was involved with during my time at NEARESA was the preparation of a film on a very successful project for the control of salivinia carried out by NARESA's Technical Committee for

the Biological Control of Aquatic Weeds. My lack of experience in film making was never considered. Mr. Wijesinghe had written an excellent script of which he was very proud. However, when I suggested some changes to the script to make it more 'alive' and up-to-date, and some additional filming to what had already been done, he readily agreed, and promptly handed over the Committee files to me the very next day – much to the relief of Mr. Watson who was handling this committee at the time. According to many people, this video reached a high standard and was shown on National TV. Although the film was produced, in collaboration with the Rupavahini Corporation, the filming at the relevant sites and at the RRI and the quarantine division was done entirely by NARESA, and I was left solely in charge of directing the technical editor at the Rupavahini Corporation to suit our script "to ensure the technical accuracy of the film". I also leant the finer points of producing a film this way and got my first introduction to the varied impacts of " alien invasive species" and the needs of biological control.

Needless to say, this is but a very brief snapshot of all the incredible work that got done at NARESA during my fulfilling 12 years' stay there. Most of us were proud to work in the premier science organization of the country. I treasure the opportunities that NARESA gave me, and am proud that many activities that we initiated then became the foundation for national ventures in the sphere of biodiversity conservation later on. I hope that, as the present National Science Foundation, this valuable and historic organization will continue to strengthen science and technology capacity in this country for many more years to come.

Memories of the National Science Foundation

Dr. Shantha Liyanage

If science can be measured in terms of success in Sri Lanka, look no further beyond the mid 1970s where excitement and enthusiasm to revitalize scientific development was at its highest. It was a time when renowned scientists such as Prof. Bibile, Prof. Sultan Bawa, Prof. Devanandan and others were at the peak of their careers and the universities were functioning as well managed, scholarly institutions. I joined the National Science Council (now, the National Science Foundation) in 1976, when the Council was only 8 years old and was in the thickest of reorganizing the scientific infrastructure of the country. The economy was healthy, and there was hope, and despair, that science in developing countries must be developed, and Dr Abdus Salam, who won the Nobel Prize for physics in 1979, gave leadership to the Third World Academy of Science to boost

investment in science in the developing countries. That was the time I was completing my final year at the University of Colombo, and had no idea what science policy was..

Prof. Granville Dharmawardene, who was the Director of the Isotope Centre at the University of Colombo, asked me whether I would like to work at NSC as they were looking for new graduates to work in the Council. I said yes, and promptly a meeting was organized with Prof. P.P.G.L. Siriwardene, Professor of Chemistry, and a member of the NSC Board. Prof. Siriwardene asked me a few questions about my interest and he asked me to meet with Dr. R.O.B. Wijesekera, who was the Acting Director of NSC at the time when Dr. Neil Jayasuriya, the Director General was on study leave. The NSC was located at Maitland Place in Colombo, besides well known landmarks such as the Ceylon Institute of Scientific and Industrial Research (CISIR) at Bullers Road, and the SSC cricket grounds. I was naturally apprehensive of my first meeting at the NSC, but, my nervousness disappeared with the warm welcome given by Dr. Wijesekera and Ms. Marina de Silva and other senior staff who were at the interview. I recollect a few details about my first encounter with Dr. Wijesekera .....he impressed me as a brilliant scientist who was very knowledgeable in his field, and about science and technology in developing countries. We had a lot of discussions about science, under development and third World countries.

I listened intensely to ROB's narration about why science is underdeveloped in developing countries and what we need to do to boost science and technology development in Sri Lanka. Naturally, his knowledge about well known great scientists of the era such as Prof. Homi Bhaba and Prof. Abdul Rahman in India and Francis Sagasti's and Stephen Dediger's work on Underdeveloped Science and Underdeveloped Countries did excite me and I was glad my interview with the Council was successful, and I was immediately offered a position at NSC. The working conditions at NSC were excellent with nice offices and a relaxed and friendly atmosphere prevailed. As a new graduate, I was looking for application of my knowledge to something useful and relevant to society. I must admit I was not sure about science and its relevance to society when I dissected numerous dead sharks, rats and cockroaches for my Zoology practical.

At the time, when I joined the Council, the Chairman was (the late) Prof. Osmund Jayaratne, who was an inspiring person. I had a lot to do with him on his 'seeding clouds' projects to create artificial rain and I learned a lot about natural products chemistry from ROB. I was one of the new recruits among three other graduates who joined with me: Elanor Jurianz, Thusitha Wijesinghe and Nadarajah Ambalagan. Indeed, as four young recruits from Colombo and Peradeniya Campuses, our friendship grew fast and we were the Junior Scientific Officers.

My first few days at NSC were largely spent reading science policy related literature. We had lots of discussions with ROB and we spent talking about various issues that were pertinent to science and development in developing countries. My first task was to research on the history of the formation of NSC, and I was also given the task of

working with the Science Policy Research Committee. When Dr. Wijesekera was the General Secretary of the Ceylon Association for Advancement of Science (now Sri Lanka Association for Advancement of Science), he was involved in the establishment of the National Research Council which was finally established as the National Science Council in 1968 which I happened to work for. I was given access to the archives of the CAAS. The history of establishing NSC was rich with many twists and turns. The study of the history of formation was a turning point for my career as well, and I became interested in the History and Philosophy of Science; and later, I pursued doctoral studies in this area. Since independence in 1948, scientists have fought to establish the National Research Council (NRC) to organize and provide funding support for scientific research. The examination of historical files highlighted several important issues:

a) Senior scientists without any racial differences fought side by side to develop scientific and research capabilities

b) Both the calibre and commitment of the senior scientists from universities, research institutions and government departments were impressive and leading scientists did spend substantial efforts and time to promote and pursue the cause for science in Sri Lanka; the efforts to establish NRC was a testimony to this effort and a long and hard fought battle for over 10 years

c) The rift between state and science was a major hurdle, in which some politicians and civil administrators regarded science as an intellectual and elite movement, with none or little relevance to progress and development

d) Scientists were not well networked and sufficiently connected to political and economic networks, and were confined to research laboratories of the university sector

e) Politics among scientists to stay on course, and the lack of timely leadership and entrepreneurial thinking, hampered the golden opportunities scientists had to establish the NRC under the Prime Minister's office.

As an interested observer of history of science in Sri Lanka, in my view, the above observations still hold true and the organization of science is still hampered due to the same mitigating factors.

My early contribution and engagement with the NSC was in the area of policy formulation. I was given the task of engaging in scientometric work in the Council. There were no reliable statistics on the availability of manpower, nor on the expenditures devoted to research and development. The absence of factual information on science and technology development hampered the planning and strategic management of science. I built my work on previous attempts conducted by Noreen Cooray at CSIRO, who compiled a list of scientists in research institutions. NSC was under the Ministry of Industries and I did not get the impression that the Ministry of Industries was interested in the science portfolio. However, Mr. Gamini Seneviratne who was one of the Additional Secretaries to the Ministry of

Industries was interested in science statistics and he supported my efforts to develop science and technology statistics at NSC. Dr. Niel Jayasooriya, Secretary General also supported my efforts and I embarked on the first National Survey of R&D Expenditure and Manpower in the country. Through this work, I was able to visit all scientific institutions and understand the working structures, organizational complexity and individual aspirations of scientists. One of the best incidents I recall was our visit to Jaffna, to the KKS Cement Corporation and Paranthan Chemicals Research Institute. That was at an era where one could move freely and interact freely with people of all different races and ethnic groups. We were able to look at issues of science development as a cohesive group for a single purpose.

Our work also met with criticism from some scientists who clearly thought quantification of scientific effort was a futile task. As young researchers, we were not disheartened pirited by those views, however we had to counter such arguments. My interest in the policy analysis deepened and I decided to do my PhD in the science policy area. As one of the Council members objected to the field of research, I had to take no pay leave to pursue my studies and decided to spend own resources to support my studies overseas. I did my PhD under the well known professor of policy research Ron Johnston in Australia.

I returned to NSC after my PhD work and worked there for a few more years as Associate Director of Science Policy. There was new staff who had joined the Council and Asoka de Silva and Ferdinandez were among them. We had a wonderful time changing the culture of the organization and becoming less bureaucratic and more efficient in service delivery. We managed to attract funding from overseas donors ,such as IFS in Sweden and subsequently SIDA/ SAREC, which became one of the main organizations supporting Lankan scientists.

I was also involved in the formulation of science policy for Sri Lanka with Prof. Cyril Ponnamperuma, a well-known scientist at NASA, who was invited by the President to establish the Institute of Fundamental Studies (IFS). The science planning exercise was organized by the Ministry of Plan Implementation and I was involved from the NSC. Unfortunately, NSC did not participate fully in this exercise, partly due to politics of scientists at the time. There was a perception that Dr. Ponnamperuma was an outsider and did not know much about the local scientific conditions. Inability to work towards a collective objective, once again, hampered the progress of science. Although I was able to see both sides of the problem and issues, there was very little one could do to change the behaviour and provide leadership at short spells. During this time, we made considerable efforts to popularize science, environmental protection work and obtained UNESCO funding for programmes to create exhibitions, documentary films etc on a variety of subjects. I also had the opportunity to initiate and develop Science Policy Networks such as STEPAN which were central to NSC's national and international services.

Looking back, my impressions of NSC are vivid. Science in Sri Lanka had its renaissance when NSC was thriving in collaboration with

CAAS and in its formative stages. Despite NSC's attempts to revitalize science, there seems to have be a boom, gloom, and doom when it came to science and technology development in Sri Lanka. This can be partly attributed to weak political support where politicians were preoccupied with their own life and survival rather than the future of the nation and their country. Scientists themselves were unable to capitalize on social capital. Although attempts were made, there was no cohesive effort to make science relevance to social and industrial development. Not much attempts were made to extend science to the commercial domain. Government policies for such a sea change were not forthcoming and policies were rather incremental. Individual scientists were fiercely independent and territorial. My recent study for SIDA/SAREC for 30 years of funding to Sri Lanka revealed that our scientists were not able to capture the benefits of science and build on existing capabilities in a systematic manner.

Looking back and forward, I see leadership in science is essential. Unless we develop leadership in science, and help develop young scientists who can thrive in a system of excessive bureaucracy, a relatively high level mistrust, and lack of cooperation and recognition of individual achievements, science in Sri Lanka will remain marginal in the international sphere. NSF has an important role to play in providing an entrepreneurial leadership. I do not want to be an armchair critique of the development of science in Sri Lanka; and I know how hard it is to struggle against all odds and to passionately believe in conducting excellent science in developing countries. It is not an enviable task and I like to pay a tribute to those Lankan scientists who still struggle hard to promote and advance science and technology.

Reminiscences of a Junior Librarian (1974 to 1985)

Ms. Shrianjani (Gina) de Alwis (nee Jayasuriya)

It was 1974. I had just passed my first examination in librarianship, acquired one year's experience with a university library and was ready for a career change. The advertisement required a Library Assistant at an organization I had unheard of before. Since this was the pre-Internet era, my father's encouragement and my gut feeling was all I had to go on, and I decided to take a chance and apply for the position.

I still recall how I trembled when I faced the interview panel of a very serious looking gentleman and a very elegantly dressed lady. It was not until I joined the organisation later that I discovered that I had been in the grand company of an eminent scientist, the Director General himself, Dr. G.C.N. Jayasuriya and one of the most illustrious librarians that

Sri Lanka has ever produced, Vijitha de Silva (former Museum Librarian who eventually got a posting with UNAPDI in Bangkok). It was the vision of these two individuals that paved the way to secure a UNDP grant to establish the Sri Lanka Scientific and Technical Information Centre (SLSTIC), a one-stop scientific and technical information hub at the former National Science Council (NSC)/ NARESA (now National Science Foundation) to serve Sri Lanka's scientific community.

Although the Government of Sri Lanka had approached UNESCO as early as 1968 for funds for a Scientific and Technological Information Centre [1, 2] the lack of infrastructure facilities did not see it through until the establishment of the National Science Council. One prerequisite to obtain a UNDP grant necessitated the NSC Library to conduct a "Survey of the Scientific and Technological Information Resources in Sri Lanka". As the library team was miniscule at this stage with just Vijitha de Silva, Kusala Rajapakse (who has since migrated to New Zealand) and myself, it triggered a wonderful opportunity for me to travel the length and breadth of Sri Lanka to visit libraries and meet with eminent librarians. However, I did get a sneaky feeling that some of these senior librarians had misgivings on being interviewed by a 'young pup'.

During this period the library also acted as the Sri Lanka focal point for the UNESCO/ UNISIST Working Committee and in 1974 hosted the UNISIST Meeting of Experts on Regional Information Policy Development in South Asia, which offered me a window to experience the organization of international conferences at first hand.

Apart from these exciting activities, I had my fair share of day-to-day responsibilities which encompassed a multitude of varied tasks ranging from coping with the technical aspects of librarianship to assisting with the production of the Journal of the National Science Council to my first exposure to moving a library, albeit from level three to ground level. Various other duties devolved on me; all of which provided rich insights and experiences that I have since drawn on.

The interim years saw the UNDP project report undergo many changes. Kusala typed stacks and stacks of stencils which I helped to proof-read and collate. Finally in 1977, the UNDP project for a four-year period was approved and it was in the capable hands of Upali N. Yapa with the support of a multi-talented team of library staff that the NSC library evolved into a Scientific and Technical Information Centre to serve both the Lankan scientific community as well as the information professionals supporting this user group.

My specific responsibilities with the establishment of the Centre comprised the development of a "Reports Depository" of grey literature – a task I cherished as I got the opportunity to do intelligence work and track down unpublished/published S & T materials for the S & T Index which is still existent. Other tasks ranged from proactively engaging the scientists to identify their information needs while manning the reference desk; scheduling the time consuming task of searching the ton s and ton s of printed indexes and abstracting services since limited funds did not permit the luxury of

accessing online databases; corresponding with overseas agencies to request materials; to managing two Selective Dissemination of Information Services (SDI) – the Environment Information Service (EIS) and Renewable Energy Resources Information Service (RERIS). These tasks were eye openers to the frustrations that scientists from Third World countries such as Sri Lanka faced in their research work. Awaiting materials from overseas via air/sea mail helped me cultivate Job's patience. I still recall how I struggled to source for information (to name but a few), on water hyacinth for Prof. I. Balasuriya (University of Kelaniya) and on bio-fuels for Leslie de S. Wijaysinghe (NSC). To support the SDI services, I produced quarterly current awareness bulletins on environment and renewable energy, liaised with the Australian funded Commonwealth Renewable Energy Resources Information Service (CRERIS) and the UNEP/INFOTERRA referral service. The liaisons with the international agencies had a two-way benefit – I was able to draw on them for computer searches and back-up literature and at the same time have Sri Lankan literature included in their databases. Additionally I coordinated the Renewable Energy Resources Information Network (RERINET) of local librarians. These experiences taught me first-hand the intricacies of reference interview skills, search skills, and over and above it all - people skills. As there was strong interest in the country at that time in the use of renewable energy it spurred me on to compile a Bibliography on Renewable Energy Resources as well.

Working at NSC had its fun moments too, like when international cricket matches were played at the SSC grounds. We got an opportunity to literally have a bird's eye view of it - for free!

Since staff training was integral to the efficient management of the Information Centre, the UNDP project included a component for it and thus I was provided an avenue to gain exposure at overseas libraries. In 1979 I had the opportunity of an attachment to the Asian Institute of Technology Library, Bangkok, and to also visit libraries in neighbouring Malaysia and Singapore. Little did I realise during this brief encounter with Singapore libraries that come 1991 I would lay down temporary roots in this country and work as a librarian here for many years.

These reminiscences will be not be complete without a reference to another eminent person, the one and only Clodagh Nethsinghe (now deceased), former Chief librarian of CISIR, who in her quiet way contributed much to the success of SLSTIC as a member of the Working Committee on Scientific and Technical Information, and was also my mentor, especially during the periods when the NSC library was sans a head.

Thank you NSC for having faith in a greenhorn. I am indeed proud to have been associated with the Institute in the formative stage of my career and in the initial years of the Library/SLSTIC and pleased that NSF continues in the service of the scientific fraternity in the country.

References

1 De Silva, Vijitha (1975) Towards a National Scientific and Technological Information System for Sri Lanka: some observations In: I. Corea (ed) Libraries and People. Colombo: Public Library. p. 96-106.

2 Samarasinghe, L. E. (1969) Ceylon: National Scientific and Technical Documentation Centre. Paris: Unesco (1159/BMS.RD/DRA).

Sri Lanka Scientific and Technical Information Centre (SLSTIC) 1977-1990

Mr. N. U. Yapa

UNESCO and the International Council of Scientific Unions launched a programme in 1974 to improve the provision of global scientific information by facilitating a mechanism for the speedy and systematic exchange and on scientific information. This programme, which was known as UNISIST, encouraged member states to initiate national infrastructure towards creating a global information network on scientific information.

The most significant contribution by the National Science Foundation (and its predecessors) in the field of library and information science was the establishment of the Sri Lanka Scientific and Technical Information Centre (SLSTIC) in 1997.

UNISIST encouraged member states to initiate national infrastructure comprising three components:

a) NATIS: a national scientific and technical information network by linking scientific information resources in the country.

b) STIC: a national scientific and technical information centre to serve as the coordination centre of the national network.

c) UNISIST Committee: a national committee to advice STIC on NATIS activities.

SLSTIC served as a coordinating centre for scientific information. Its main purpose was to facilitate the linking of scientific information sources which were scattered island-wide. SLSTIC was not meant to transform itself into a national science library, and it started functioning in May 1977, with the available resources. The following year, with a UNDP project grant of over USD400,000, these services expanded and strengthened the national information infrastructure, and the national information resources, in several ways. The activities were not confined to scientific information, but included all fields

of information. Its services were propagated globally making SLSTIC a key information facility in the region.

SLSTIC functioned as

a) the national coordination centre for scientific and technical information

b) the national scientific documentation centre

c) a national training centre for scientific library personnel

d) a national service bureau for the provision of information products and services

e) a national nodal point in global information networks

SLSTIC activities that supported and catalyzed the services of other libraries and information centres are outlined below:

a. Coordinating centre

SLSTIC created a national network of scientific libraries, the Sri Lanka Scientific and Technical Network (SLSTINET), which was the first library network in the country. SLSTIC organized several projects to share and improve information resources in the country. Among them are:

i. compilation of the Union Catalogue of Scientific and Technical Books in libraries in Sri Lanka (UNICAST). This was the first union catalogue in Sri Lanka; it operated from 1977-1990. 'UNICAST model' was adopted by all other union catalogues including National Union Catalogue (NUC), Union catalogue of Development (UNIDEV), Union catalogue of Environmental Books (UNICEB)

ii. Compilation of the Union List of Scientific and Technical Serials in libraries in Sri Lanka (UNILIST). This was a catalogue to serialise collections in university and research libraries in the country.

iii. Corporate Acquisition Programmes (CAP). These programmes were designed to rationalize acquisition of scientific publications

SLSTINET created several subject oriented library networks. These sub-networks helped to build closer relationships among libraries dealing with related subjects. In addition to establishing the sub-networks, SLSTIC initiated their networking activities as well. Once the network was firmly established, the coordination function was handed over to an appropriate library.

The agricultural Information Network (AGRINET) was the first sub-network created by SLSTIC. A Selective Dissemination of Contents Page (SDCP) service was organized to share serial literature among agriculture libraries. This was considered a unique programme as a similar type of programme is not reported in the literature. The Coconut Research Institute initially coordinated AGRINET and the Council for Agricultural Research Policy (CARP) handles it presently.

The sub-network on medicine was established in collaboration with the Medical Library of the University of Colombo, which served as the nodal point for the Health

Library and Literature System (HeLLIS) developed by WHO. The original name Medical Information Network (MEDINET) had to be changed to HeLLIS, to suit WHOs programmes.

SLSTIC initiated a sub-network on environmental sciences. This was named the Environmental Library Network (ENLINET) and coordination was handed over to the Central Environmental Authority (CEA).

As a national coordination centre, the programmes initiated by SLSTIC had boosted the sharing of scientific information resources and the scientific libraries still continued some of these services by.

b) Documentation centre

SLSTIC functioned as a national scientific documentation centre. One of the major documentation activities was the compilation of the Sri Lanka Science Index. This documented national output of scientific literature and was thus an index of scientific and technical documents generated in the country. SLSTIC developed a repository of published and unpublished documents (grey literature) to promote scientific documentation.

c) SLSTIC organized training programmes

SLSTIC organized training programmes - STEPs - to train and educate library personnel. More than 40 STEPs were conducted during 1977-1990. These covered a wide range of subjects such as citation indexing, microforms, library automation, cataloguing, reference sources and library management. Additionally, STEPs conducted workshops on scientific information for scientific research personnel.

The popular training workshops on CDS/ ISIS were conducted more frequently.

d) Service bureau

SLSTIC undertook the responsibility of providing support services to libraries - as libraries faced difficulties in procuring equipment to prepare special information material and to conduct user services.

SLSTIC purchased specialized equipment, at USD 300,000 to operate these services.

i) Printing service

Printing equipment was acquired to provide printing services to scientific institutions. A high quality printing system including composing, page design, filming, printing and binding was set up; and a mini-press was established to provide low-cost printing.

ii) Microfilming

SLSTIC established the first microfiche system in the country. The system had a filming camera, duplicating machines, microfilm readers, reader printers, jacketing machines etc. In addition to libraries, other organizations such as banks benefited by the SLSTIC microfilm service.

iii) Audi Visual pool

A pool of AV equipment was set up to provide audio visual services to

libraries at a nominal rate. The pool was equipped with a video projection system, audio recording system, video recording system, conference communication system and projectors (film and slide).

iv) Computer system

SLSTIC established a mini-computer system in 1983. This was the first computer system set up by a library in Sri Lanka. The SLSTIC staff developed the application software for the operation of this system. Later, in 1987, SLSTIC became the national distributor for CDS/ISIS library software. (NSF continues to serve as the national distributor for the windows version of CDS/ISIS- WINISIS)

The Computer system promoted automation activities of libraries in Sri Lanka. SLSTIC provided consultation services on planning, operation and maintenance of the automated library systems.

The development of library services in Sri Lanka was strongly influenced by SLSTIC. Coordinating library resources for the improvement of information services, promoting library automation enabling the utilization of IT facilities, preparing library personnel to face future challenges, providing high quality information products and systems, have all contributed towards establishing SLSTIC as a change-agent in the field of scientific information in Sri Lanka.

In the occasion of its 40th anniversary celebration, NSF could proudly commemorate the contributions that it had offered to the nation in the field of scientific information.

Memories of NSC/NARESA/NSF Funded Research at Peradeniya.

Prof. N. Savitri Kumar

The National Science Council (NSC) of Sri Lanka was the only funding agency available for young researchers in the early 1970s. I had returned to Sri Lanka in 1971 after completing my PhD at the University of London in 1970. My PhD was in Carbohydrate Chemistry, an area which was more inclined towards synthetic organic chemistry. At this time, Prof. M.U.S. Sultanbawa was the Head of the Department of Chemistry at Peradeniya and he lost no time in encouraging me to apply for a research grant which I was fortunate to obtain. The Organic Research Laboratory at Peradeniya was a hive of activity under the leadership of Prof. Sultanbawa and the NSC was most helpful in supporting the research programmes of many young staff members at Peradeniya.

Since then I have been the recipient of many grants from the National Science Council (NSC) of Sri Lanka, which metamorphosed into the Natural Resources, Energy and Science Authority (NARESA) of Sri Lanka and then into the National Science Foundation (NSF) of Sri Lanka. I also applied frequently to the SAREC-NARESA Spare Parts Fund and this support was invaluable. I regularly received spare parts that kept the equipment I had purchased, from various research grants, in working order. Grants from the National Science Council had an added bonus. Funding from foreign funding agencies became available to those who could provide evidence of active research which was, of course, easier for those who were supported by the national funding agency. I applied for, and received, grants from the International Foundation for Science (IFS) Stockholm in 1977, Third World Academy of Science (TWAS) and the International Seminar in Chemistry, Uppsala University.

My first research NSC grant was awarded in 1974 – 34 years ago. At that time there were no constraints on young academic staff in applying for research grants and research assistants. I received my first grant from the NSC, in 1974, just four years after completing my PhD. In retrospect, I realize that this was an important time for receiving support from funding organizations. Returning to Sri Lanka and grappling with problems peculiar to universities and other research institutes in developing countries, is demoralizing for young people who have been working under more research friendly conditions. Young academics, who wish to embark on research careers of their own, need maximum support and encouragement at the start of their careers, at a time when there is less involvement in administrative matters, sitting on committees etc. The combination of Prof. Sultanbawa's vision with his dedication towards marshalling funds for research and his constant encouragement, a group of colleagues at Peradeniya who were dedicated researchers, and funding from the NSC and other agencies like the WHO and the USDA, was an unbeatable combination. The Peradeniya group received the Presidential award (1985) for Scientific Achievement, based on the research output during this period.

My memories of the NSF will always include the many young postgraduate students who worked with me on different NSC/NARESA/NSF funded projects. They have all had very successful professional careers and their achievements have been a source of personal satisfaction. The fortieth anniversary of the NSF, in 2008, is a fitting time for me to remember their contributions.

In the early 1970s there was a great deal of interest in passion fruit cultivation. Perhaps this was the reason I applied for a grant to study the extraction of pectin from passion fruit peel. My very first postgraduate student happened to be Mr. J. A. G. Anandarajah. From passion fruit research at Peradeniya, Mr. Anandarajah went on to the State Rubber Manufacturing Corporation in 1975 after which he joined Dipped Products PLC in January 1980 as an Executive (Assistant to the General Manager), then promoted as Commercial Manager, and then Deputy General Manager before being appointed a Director in April 1989. He was appointed Managing Director, Dipped Products PLC and Director of its holding company, Hayleys PLC, in January 2007.

Since 1974 I have been the recipient of many NSF research grants. My next postgraduate student was Mr. Anura P. Dantanarayana. In 1977 Prof. Sultanbawa, Prof. S Balasubramaniam (Dept of Botany) and I applied successfully to the NSC for a project to study the seaweed polysaccharides and Anura's studies began with the isolation of agar from some selected red seaweeds of Sri Lanka. I remember that the field trips to collect plant material with Prof. Balasubramaniam were some of the undoubted attractions of postgraduate research at the Organic Chemistry Research Laboratory at Peradeniya. Anura also carried out some studies on the lupane triterpenes from *Pleurostylia opposita*, Celastraceae. This was a more productive area for research and he was awarded the Kandiah Memorial award for his work. The NSC also supported my application (1981) for a grant to work on the Lankan Celastraceae. Anura completed his MPhil. in 1981 and proceeded to the US to continue with postgraduate research. He completed his PhD. at Oregon State University and later joined Alcon Ophthalmology Discovery Research at Fort Worth, Texas. He became the Principal Scientist at Alcon in Glaucoma Drug Development Research. He is back in Sri Lanka now as the Alcon Regional Advisor for South-East Asia.

The seaweed studies were continued by Shyamali de Silva who worked on two areas of polysaccharide chemistry. A NARESA grant (1982) supported her work on some brown seaweeds of Sri Lanka. During this time I was awarded a research grant from IFS, Stockholm. My first IFS research grant was used in its entirety to purchase an automatic polarimeter which was used mainly by the Natural Products Research group at Peradeniya. The IFS funded my participation at ASOMPS III in Bangkok, where I met Bo Gohl from the IFS and discussed with him the difficulties of training postgraduate students in instrumental techniques. This discussion had been conveyed to Prof. Rune Liminga who, having visited the Department of Chemistry at Peradeniya in 1980-81,had indicated that the International Seminar in Chemistry, Uppsala University would be willing to support some of our research students. This was the beginning of a long and fruitful collaboration with IPICS.

Shyamali was the first student from Peradeniya to be awarded a Research Fellowship by the International Seminar in Chemistry. She worked with Dr Per Aman at the Swedish University of Agricultural Sciences, Uppsala. Her work in Sri Lanka, to study the mucilaginous constituents of plants used in traditional medicine, was supported by a NARESA grant (1984) and she carried out structural studies on the water soluble polysaccharide from Neolitsea cassia (Lauraceae) species and completed a sandwich PhD programme in 1985. After marriage she migrated to the US and is an active researcher at Wichita State University, Kansas.

The work on triterpenes from Celastraceae was continued by P. M. Muthukuda who completed an MPhil (1984), again with support from NARESA. Mr. Muthukuda was awarded the Kandiah Memorial Award by the Institute of Chemistry for this work. Mr. Muthukuda went on to work at the CISIR and later joined Swadeshi Industrial Works Ltd.

where he is now Deputy General Manager of Research, New Product Development and Quality Assurance.

Swarna Wimalsiri continued the work on polysaccharides. Her work was supported by grants from NARESA (1985) and the International Programme in Chemical Sciences (IPICS), Uppsala University. She carried out a sandwich PhD programme and part of her work was carried out at the Department of Organic Chemistry, Arrhenius Laboratory, University of Stockholm. Swarna was the recipient of the Young Scientist award from the Third World Academy of Sciences in 1992. She joined the Open University of Sri Lanka after her PhD and is currently a Senior Lecturer at the Department of Food Science, Faculty of Agriculture, University of Peradeniya. Mr. H.M.T.B. Herath too was supported by NARESA. He continued the work on water soluble polysaccharides from Litsea glutinosa (Lauraceae). He completed his PhD in 1991 and then joined (1992) the Institute of Fundamental Studies, Kandy, as a Research Fellow. He migrated to the US in 2001 and is now a Research Scientist at the National Center for Natural Products, University of Mississippi.

The work of these students supported by NSF grants resulted in the publication of research articles in international journals and national journals including J. Chem. Soc. Perkin 1 (2), Phytochemistry (4), Carbohydr. Res. (3), Carbohydrate Polymers (2), J. Enthnopharm. (1) and J. Natl. Sci. Council Sri Lanka (2). The work reported in these publications had been carried out in Peradeniya while international collaborators helped us to record spectral data for which facilities were then not available in Sri Lanka.

Research publications, such as these, from NSF funded research helped Prof. Vijaya Kumar and me (University of Peradeniya), Dr. Sarath Abeysinghe (Tea Research Institute, Talawakelle), Dr. H.M.T.B. Herath (IFS, Kandy) and later Dr. Premaratne Bandara (HORDI, Gannoruwa) when we made a joint application to SAREC (Sida) for a project entitled Biochemical Pest Control. We were awarded a generous grant which, over a 9 year period, resulted in a substantially increased research capacity both in terms of equipment and human resource development at the University of Peradeniya, the TRI, IFS and HORDI. The valuable equipment purchased for Peradeniya including a 300 MHz NMR spectrometer, HPLC, GC-MS, medium pressure liquid chromatography systems, high-speed counter-current chromatograph (HSCCC), IR and UV spectrophotometers, electroantennograph systems, polarimeters and many other smaller items like freeze dryers, rotavapors, incubators, centrifuges, microscopes etc. which continue to be of immense value to the research programmes at Peradeniya.

Later on, in 2005, Prof. B.M. Ratnayake Bandara, Dr. Vasanthi Thevenesam and I were awarded an NSF grant to work on Clinical applications of tea polyphenols. I was also awarded a Research Fellowship from the NSF during my sabbatical leave in 2006-2007. During this period, we were trying to complete some work on Shot-hole Borer infestation of tea. This work had been previously supported by CARP and SAREC (Sida).

I will be retiring from University service this

year (2008). It is quite a coincidence that my research at Peradeniya was supported by NSC at the beginning, and by NSF at the end of my university career.

My Memories of NSF

Prof. Veranja Karunaratne

Count the number of researchers who dabble in science these days in Sri Lanka and you would find that a large number have benefited from the National Science Foundation. In the virtual absence of a coherent narrative on research policy in Sri Lanka, where researchers working for the Government Institutes are scattered across several ministries, NSF is a unifying force that brings together scientists who are diverse in their disciplines, research culture, and priorities. It attempts to shake our perceived ideas on research, supports those who will try to seek something different and put their heads down and work, and stretch the limits of their efforts. It can do all this and more because, being a holistic Foundation, they support many facets of science including the offer of research grants, facilitating publication of your research findings through the Journal of the National Science Foundation or at international meetings and is the most reliable and largest purveyor of research assistantships aimed at training the next generation of scientists in Sri Lanka.

My association with the NSF began in 1986 when I received my first research grant. Having being trained as a synthetic organic chemist this was my first entry into the world of natural products chemistry. Instead of making organic molecules whose structures were certain, I would now work at elucidating their structures as nature made them. The grant was for Rs. 350,000, worth ten times in today's money, to investigate insecticidal, antifungal, and antibacterial activity of about 100 medicinal plants of Sri Lanka. During this important period, I established long lasting research collaborations with Ratnayake Bandara, Siril Wijesundara and Nimal Adikaram. During the years that followed we published our results as three comprehensive full papers in the Journal of the National Science Foundation, thus commencing my career as an independent scientist. This was followed by a steady

stream of grants and research efforts, which culminated in a new area of natural products chemistry, namely the chemistry of Lankan lichens in 1996 with substantial support from the NSF. I was promoted to the position of Associate Professor, while our work on lichens was gathering full steam. However, we realized that all our efforts would come to nothing if we couldn't name the lichens we were working on. This problem took a serious twist when we looked around and found no lichen taxonomists in Sri Lanka. The NSF came to the rescue by offering us money to conduct a workshop in lichens. We established contacts with Ms. Pat Wolseley of the British Natural History Museum and Dr. H. Hariharan of the Swaminathan Research Institute in Chennai and, with the three of us working as resource persons, we conducted the First National Workshop on lichens in 1999. This workshop facilitated our research immensely and the number of publications grew.

A noteworthy achievement of our research during this period was the isolation of a potent anti-neoplastic compound from an *Usnea* sp. growing on the rotting tree trunk of *Acacia decurrens* in Ambewela, which we fondly named Ambewelamide. On a roadside rock prominently located near Ramboda pass, we stumbled on to a new lichen species, which we named *Lepraria atrotomentosa*. As improbable as it may sound, yet another roadside rock at the Beragala junction was to reveal a fascinating lichen story. At this picturesque ecosystem overlooking the Rakwana mountain range, we uncovered evidence for the feeding and sequestration of lichen products from the lichen *Leproloma sipmanianum* by the adult wild-caught imagines and larvae of the butterfly *Talicada nyseus nyseus*. Here, the butterfly flies in close proximity to the lichen and lays eggs on *Kalanchoe pinnata*, the host plant of the butterfly. The lichen compounds enter the adult through its larvae feeding on the lichen, a phenomenon hitherto not recorded among the butterflies. It was also shown that larvae were not viable on the lichen alone in the absence of the host plant, but were healthy when the lichen and host plant were present. The presence of lichen compounds in the adult population throughout the season suggests that larvae of *T. nyseus nyseus* are feeding on the lichen *L. sipmanianum* to obtain protection against predators during their life cycle.

Two milestones in my research career occurred in 2000, when two of my students received their PhDs. Dr. Karunananda Bombuwela (who was a NSF funded RA) was the first to graduate in Sri Lanka doing research on lichens and Dr. Rukmal Ratnayake carried our seminal research on the endemic plant genus *Hortonia*, the latter project being an off-shoot of the work from my first NSF grant. The second milestone was my promotion to full Professor.

Three other PhDs Drs. Selvaluxmy Kathirgamanathar, Ajith Herath and Vinitha Thadhani graduated between 2004-2008, all received financial assistance from NSF. The work on lichens has become rather extensive under continued funding from NSF. We have now embarked on an ambitious research programme to map and survey the lichen flora of the Horton Plains National Park. Death of the natural forests in the Park had been a concern among scientist recent

times. Our research is aimed not only at finding new lichen records but also at assessing the forest's health by using lichens as an environmental tool. We have thus far collected over 200 lichen species along with a number of new records in Sri Lanka.

During 2005-2008 I served on the Editorial Board of the Journal of the National Science Foundation. It was a very exciting period when I witnessed the growth of the Journal where it made it to the ISI Master List of Journals. Growth of a Journal indicates growth in science and the challenge for the scientific community is to elevate the Journal of the NSF to the status of a fully indexed Journal.

It is often said that life must be lived forwards but can only be analyzed backwards. Looking at my research career, I owe much to the NSF; from its launch to my continued journey into as yet undiscovered domains.

පස් වසරක මගේ අත්දැකීම් 1982-1987

සරත් මහිපාල

ඒ 1982 වසරේ මැද භාගයයි. දහවල් විවේකයේ දී පුවත් පතක් බලමින් සිටි මා හට කොළඹ 07 මේවිල්න්ඩ් පෙදෙසේ විද්‍යා මාවතේ පිහිටා ඇති ජාතික විද්‍යා සභාව(National Science Council) නම් ආයතනයට සූක්ෂම ඡායාරූප ශිල්පී/ ශ්‍රව්‍ය දෘශ්‍ය ක්‍රියාකරු (Micro Photographer/ Audio-Visual Operator) නම් තනතුර සඳහා සුදුසු අයෙකු සොයන බව දැක්වෙන දැන්වීම දක්නට ලැබිණ. මේ වන විට මම විද්‍යා පුහුණු ගුරුවරයෙකු ලෙස සේවය කරමින් සිටියෙමි. ඡායාරූප ශිල්පයට මගේ තිබූ කැමැත්ත සහ අයදුම් පතේ ඉල්ලා තිබූ සුදුසු කම් සියල්ල තිබූ නිසාත් එවකට ලබමින් සිටි වැටුපට සමාන වැටුපක් ගෙවන බව දක්වා තිබූ නිසාත් ඉක්මනින් අයදුම් පතක් සකසා ලියාපදිංචි තැපැලෙන් යැවිවෙමි.

සති කිපයකට පසු සම්මුඛ පරීක්ෂණයට පැමිණෙන ලෙස දන්වා ජාතික විද්‍යා සභාවෙන් මා හට ලිපියක් ලැබුණි. සැහෙන පිරිසක් සම්මුඛ පරීක්ෂණයට පැමිණ සිටි අතර ඒ අය අතර මෙම තනතුරට අදාළ මට වඩා අත්දැකීම් ඇති අය සිටින බව ඔවුන් සමඟ කරන ලද කතා බහෙන් මට හැඟී ගිය නිසා මෙම තනතනතුර මා හට ලැබේ යැයි මා තුල විශ්වාසයක් ඇති නොවිය.

නමුත් පුදුමයකට මෙන් තවත් සති කිපයකට පසු ඉහත තනතුරට තෝරා ගැනීමට, ප්‍රායෝගික පරීක්ෂණයකට පෙනී සිටීමට පැමිණෙන ලෙස මා හට ලිපියක් ලැබුණි. ප්‍රායෝගික පරීක්ෂණයට කැඳවා තිබුණේ පස්දෙනෙකු පමණි. එම කණ්ඩායමට ඇතුලත් වීමට හැකිවීම ගැන තරමක ආඩම්බරයක්ද මා තුල ඇතිවිය. සූක්ෂම ඡායාරූප ශිල්පයට මෙන්ම ශ්‍රව්‍ය දෘශ්‍ය විෂය පථයන්ට අදාලවූ එම ප්‍රායෝගික පරීක්ෂණය තරමක් අමාරු පරීක්ෂණයක් වූ බව මට නාමත් මතකය.

ඒ 1982 සැප්තැම්බර් මාසයයි. "1982 සැප්තැම්බර් 16 වන දින සිට ඔබ ස්වාභාවික සම්පත් බලශක්ති හා විද්‍යා අධිකාරියේ සූක්ෂම ඡායාරූප ශිල්පී/ශ්‍රව්‍ය දෘශ්‍ය ක්‍රියාකරු තනතුරට තෝරා ගත් බව සතුටින් දන්වමි" යි සඳහන් පත්වීමේ ලිපියක් මාහට ලැබුණි. මා සම්මුඛ පරීක්ෂණයට හා ප්‍රායෝගික පරීක්ෂණයට ගියේ ජාතික විද්‍යා සභාවටය. නමුත් පත් වීම එවා ඇත්තේ විද්‍යා අධිකාරිය නම් ආයතනයකිනි. ලිපිනය එකමය. කෙසේ වුවද මා අයදුම් කල තනතුර ලැබී ඇති නිසා වැඩ භාර ගැනීමට ගියෙමි. පසුව කල විමසීමකදී ජාතික විද්‍යා සභාව ස්වාභාවික සම්පත් බලශක්ති හා විද්‍යා අධිකාරිය ලෙස

අධිකාරියක් (Natural Resources Energy & Science Authority)බවට පරිවර්තනය කර ඇති බව දැන ගනිමි. මෙම ආයතනයේ ඉංග්‍රිසි නාමයේ මුල් අකුරු ගෙන ආයතනය නරේසා ආයතනය (NARESA) ලෙසද හැඳින්විය. එවකට මෙම ආයතනයේ අධ්‍යක්ෂ ජනරාල් ධුරය දැරුවේ වෛද්‍ය ආර්.පී ජයවර්ධන මහතාය. ආයතනයට එකතු වීමෙන් පසු මහු මා ඇමතුවේ පොටෝ මහත්තයා නමිනි.

මා හට සේවය කිරීමට ලැබුණේ තොරතුරු හා සන්නිවේදන අධ්‍යක්ෂ ධුරය දැරූ එන්. යූ යාපා මහතා යටතේ පුස්තකාලයේය. පුස්තකාලයේ එක් කෙළවරක පරිගණක තිබූ කාමරයේ සුසජ්ජ ඡායා කැමරාව සවි කොට තිබුණි. මෙම කැමරාව භාවිතය පටල විකාශණය අනු පිටපත් නිපදවීම ආදිය පිළිබඳව මෙම ආයතනයේ ප්‍රතිරූපණ ශිල්පි (Reprographic Technician)ලෙස සේවය කළ එස් ආර් යූ සිල්වා මහතාට විදේශිය පුහුණුවක් ලබාදී තිබූ අතර ඒ මහතා මට එම පුහුණුව ලබා දුනි.

මෙම කැමරාව මගින් වටිනා ලියකියවිලි පැරණි පොත් පත් ඡායා රූප ගත කෙරුණි මා දන්නා පරිදි මේ වර්ගයේ කැමරාවක් ලංකාවටම තිබුණේ මෙම ආයතනයේ පමණි. ශ්‍රී ලංකා ජාතික පුස්තකාලයේ හා ශ්‍රී ලංකා ජාතික ලේඛණාගාරයේ මෙම කාර්යය සිදු කෙරුණද ඉහතකි ලේඛණ මි.මී 35 ප්‍රමාණයේ දළ සේයා පටල රෝල් වලට ඡායාරූප ගත කොට පසුව ඒවා රූප රාමු පහ බැගින් වූ කොටස් වලට වෙන් කර එම කොටස් හතරක් එකිනෙකට පහලින් පිළිවෙලින් තබා තනි ඒකයක් වන පරිදි සකසා තුනී පොලිතීන් කවරයක බහා ලනු ලැබිය.

මෙම අධිකාරියේ කැමරාවෙන් තැපැල්පත් ප්‍රමාණයේ සේයා පටලයක පේලි හතක විවිධ ලේඛණ පිටු 98, 196 හා 294 යන ප්‍රමාණ වලින් ඡායාරූප ගත කල මයික්‍රෝ ෆිල්ම් (Microfiche) නිපදවිය හැකි විය. පිටු ප්‍රමාණ වෙනස් කිරීම කැමරාවට සවිකරන උපාංග වෙනස් කිරීමෙන් සිදු කරනු ලැබිය.

මෙසේ නිපදවනු ලැබුවේ සෘණ පලකය (Negatives). වැඩි ඉල්ලුමක් වූයේ පිටු 98 සහිත මයික්‍රෝ ෆිල්ම් (Microfiche) වලටය.

පුස්තකාලයේ එක් කෙළවරක වූ සුසජ්ජ ඡායා කැමරාවෙන් අනාවරණය (Expose) කර ගත් මයික්‍රෝ ෆිල්ම් (Microfiche) පටල විකාශ (Develop/Process) කිරීම සඳහා පුස්තකාලයේ ම අනෙක් කෙළවරේ ඒ සඳහා අවශ්‍ය යන්ත්‍ර තිබූ අඳුරු කාමරය වෙත දිනකට මම වාර දහයකට වඩා ඇවිද්දෙමි.

මෙසේ සකසනු ලැබූ මයික්‍රෝ ෆිල්ම් (Microfiche) සංරක්ෂණය කර තබනු ලැබූ අතර එයින් සකසා ගත් පිටපත් භාවිතය සඳහා යොදා ගනු ලැබිය. මෙම පිටපත් Diazo Duplicates ලෙස හඳුන්වනු ලැබිය. මෙම පිටපත් සැකසීමේදී ඇමෝනියා වායුව භාවිත විය.

මයික්‍රෝ ෆිල්ම් (Microfiche) හෝ Diazo Duplicates වල අඩංගු දේ කියවීම සඳහා මයික්‍රෝ ෆිල්ම් රීඩර්(Microfiche Reader) නම් යන්ත්‍රයක් විය. මෙම යන්ත්‍රයේ තිරය මත මයික්‍රෝ ෆිල්ම් (Microfiche) හෝ Diazo Duplicates වල අඩංගු දේ දිස් විය.

මයික්‍රෝ ෆිල්ම් (Microfiche) හෝ Diazo Duplicates මා සේවය කළ ආයතනයේ අවශ්‍යතා මත නිපදවනය කළ අතර දුණුවිල පිහිටි පොල් පර්යේෂණ ආයතනය ශ්‍රී ලංකා ප්‍රමිති කාර්යාංශය මා සේවය කළ කාලයේ නිරතුරුව විවිධ ලිපි ලේඛණ වල මයික්‍රෝ ෆිල්ම් (Microfiche) හෝ Diazo Duplicates නිපදවා ගත් අතර එම සේවා සඳහා ගාස්තුවක් අය කෙරුණි.

මා නිපදවූ මයික්‍රෝ ෆිල්ම් (Microfiche) හෝ Diazo Duplicates එංගලන්තයේ නිපදවිත එම මයික්‍රෝ ෆිල්ම් (Microfiche) හෝ Diazo Duplicates වල ප්‍රමිතීන්ට අනුකූලවූ බව එම ආයතන මගින් දන්වා ඇතැයි මගේ ප්‍රධානියා වූ එන් යූ යාපා මහතා පැවසූ විට මට ඇතිවූයේ ඉමහත් සතුටකි.

ඉහතකි රාජකාරියට අමතරව ආයතනය සංවිධානය කල විවිධ වැඩ සටහන් වල මෙන්ම විවිධ ප්‍රකාශණ සඳහා නිශ්චල ඡායාරූප ලබා දීමද මා අතින් සිදුවිය. එසේම රූපවාහිනී කැමරාකරණයද මා අතින් ඉටුවූ තවත් රාජකාරියකි. සිංහරාජ වනයේ පැවති වැඩ සටහන්, කඩොලාන සංරක්ෂණය සඳහා පැවති වැඩසටහන් එම පරිසරවලදී ඡායාරූපගත කිරීම සහ රූපවාහිනී කැමරාකරණය මම කලෙමි.

මෙම ආයතනයේ සේවය කල දැල මෙනෙවිය වඳුරන් පිළිබඳව පානදුර ප්‍රදේශයේ කල පර්යේෂණයට අදාලව එම වඳුරන්ගේ හැසිරීම් රටා රූප ගත කර දෙමින් මම ඒ මෙනෙවියගේ පර්යේෂණයට සහය වූයෙමි.

1985 දී මෙම ආයතනය සංවිධානය කල ASTINFO නම් ප්‍රදර්ශණයද මට මතක ඇත. මෙම ප්‍රදර්ශණයේ සියළු කුටි ඡායාරූප ගත කල අතර පසු කලෙක එය සජීවීව නැරඹීමට රූපවාහිනී කැමරාවෙන් රූප ගත කිරීමද කලෙමි.

මුද්‍රණ අංශය ආරම්භ වූයේ මා එම ආයතනයේ සිටි කාලයේදීය. රෝණියෝ අනුපිටපත් කටයුතු වෙනුවෙන් ඥානසිරි නම් මහතෙකු සේවය කල අතර ඕප්සෙට් (Offset) මුද්‍රණ කටයුතු වෙනුවෙන් අලුතින් කාර්ය මණ්ඩලය බඳවා ගනු ලැබිණ. එම්. ඩී ගුණසේන සමාග මේ සේවය කොට පැමිණි ජෝර්ජ් ෆිලිෂියන් මහතා Plate Maker විය. ඔහු මුද්‍රණ ක්ෂේත්‍රයේ පරිණත අත්දැකීම් බහුල අයෙක් විය. වික්‍රමසිංහ මහතාද එම්. ඩී ගුණසේන සමාගමේ සිට පැමිණි අයෙකි . ඔහු Offset machine minder තනතුර දැරිය. පොත් බැඳීම් කටයුතු කුරුප්පු මහතා කළේය. මොවුන් සියළුදෙනම තම රාජකාරීන් විෂයෙහි අතිදක්ෂයන් වූ බව මා සඳහන් කරන්නේ අතිශයෝක්තියෙන් නොවේ. මම මොවුන් සමග සමීපව සිටිබව සඳහන් කරනුයේ ඉමහත් සතුටිනි.

පුස්තකාලයේ කාර්ය මණ්ඩලයද නොමඳ සේවාවක් ඉටුකල අය වූහ. වයන්තා මහතම්ය ජයන්ති මහත්මිය තවමත් සේවයේ යෙදී සිටීම සතුටකි.

පරිපාලන අංශයේ කාර්ය මණ්ඩලය, කණීමයි කාර්ය මණ්ඩලය හා රියැදුරු කාර්ය මණ්ඩලය මා සමග සුහදව කටයුතු කල බව සතුටින් සිහිපත්වේ . මා නරේඝා අයතනයෙන් ඉවත්වී දැන් වසර විස්සකට වැඩිය. එහෙත් 1982 සිට 1987 දක්වා මා එහි සේවය කල වසර පහ යහපත් මිනිසුන් සහ මිතුරන් සමග ගත කල කාලයක් ලෙස මට තවමත් දැනේ.

NSF was the Bridge in my Career

Mr. P.M.D.W.D.Pallawala

It is generally accepted that research scientists and administrators often travel different paths, which implies that scientists are not familiar with administration, and that administrators are not familiar with science. Nevertheless, the "home" of administration of scientific research, the National Science Foundation, has laid a foundation where the Lankan scientific community can meet, and work, with administrators.

I was a Scientific Officer in the Research Division at NSF, from May 2005 until October 2006, when I received my appointment to the Sri Lanka Administrative Service (SLAS). The competition to enter the NSF as a Scientific Officer was an experience in itself. The competitive examination, in March, 2005, was a very tough examination to test the candidate's ability in the English language . The interview, a month later, was equally tough. To end all doubts, I received a telephone call in late April informing me that

I had been selected as a Scientific Officer. That was the end of my first job as a Demonstrator at the University of Peradeniya.

Eight officers joined NSF on 2nd May 2006 and all of us wished to do our best for the NSF. I hoped that everything would be well-organized and we would be assigned to our respective Divisions. It was important to seek our opinions before assigning us to the various Divisions. However, I did not have any other preference, as I was only interested in the Research Division. Each of us was supervised by senior scientific officers, Heads of Divisions and the Director, as the Chief Executive Officer. Everything was organised, and it was commendable how Mr. Perakum Dissanayake, the Administrative Officer, coordinated the scientific officers. I was assigned several responsibilities. I was the coordinating officer for the Research Committee on Water and Energy, and the organizer for meetings organized by the Research Division. Later, I was the Coordinator to the Research Committees on Fundamental Research, Disaster Management and Mitigation, and to the Task Force on Nanotechnology. I had to develop personnel and managerial skills to handle the Committees, and to perform the other duties which were assigned to me.

All the Scientific Officers were university graduates and they had no experience in management and administration before joining NSF. However, all the officers learned and developed managerial and administrative skills along the way. We were given reasonable opportunities to attend local and foreign training, and we were exposed to new trends in the world of science and technology. As recent graduates, it was often difficult to handle senior research scientists. Nevertheless, the Scientific Officers develop their negotiation, communication, organization, secretarial and information technology skills as they are regularly instructed and supervised by experienced senior officers and the Heads of Divisions. I must acknowledge the supervision given by Dr. Geethika Yapa, Head of the Research Division and the other senior officers in the Division.

We had to adhere to tight deadlines regularly, and we were usually successful in achieving our objectives; we held several international and national workshops.

The NSF's active welfare society organised new year festivals, annual sermons and alms giving, Vesak festivals and other activities to commemorate special events

As an officer in the Sri Lanka Administrative Service (SLAS), I do not hesitate to acknowledge that I received my foundation in administration at the National Science Foundation. It might have been difficult to enter SLAS directly from the university. The NSF was clearly a bridge for me in the transition from the university system to the administrative service. As the Assistant Divisional Secretary, at Ambanganga, Korale, in the Matale district, I was able to co-ordinate a workshop for school children in the area with the Science Popularization Division of NSF, and through the VIDATHA centre of the divisional secretariat. It is very satisfying to serve the school children in remote areas. The present management at NSF has identified the importance of creating scientific communities in Sri Lanka and each division at NSF plays a vital role towards achieving this goal. I would like to offer my sincere gratitude to all the officers, from the Chairperson to the office aids, who supported me in performing my duties effectively. Finally, I congratulate the National Science Foundation on its 40th anniversary and I extend my good wishes to the Board of Management and its other officers in achieving their organizational objectives.

ජාතික විද්‍යා පදනම තුළ අවුරුදු 28 ක මතකයන්

එස්. එච්. වංසා ද සිල්වා මිය

1 අසුවේ දශක ඇරඹුණු කාලයක
ලැබුවේ යතුරු ලිපිකාරිනි තනතුරෙක
ආවේ දුම්රියෙන් සැතපුම් බොහෝ දුරෙක
පැමිණිය විගස සැනසුම ලැබෙනව නොසැක

2 "ජාතික විදු සභාවක්" නමිනු පරසිදු
ආරක හොඳ ගුණය එහි තිබුණු ගරු ලදු
කෝක වුවත් සමගිය තිබුනයි නොබෙදු
නෑ සැක තිබුණෙ විරසක් ඇතිදැයි කිසිදු

3 ලොකු පොඩි භේදයක් නොදුටුව යස බිමෙක
පවුලක අය වගෙයි ගත වුනෙ හැමදාක
මහතැන් පටන් සේවයෙ නිරත දායක
කාටත් පොදු වුනා වැටුපද හැම දේක

4 හරියාකරවම වැඩ කටයුතු කෙරුනා
වැටුපද අනෙක් දෙන දෑ වලෙසම දුන්නා
තුන් අංශයෙම සහයෝගය බල පෙන්නා
කවුරුත් එදා හැම අයටම කන් දුන්නා

5 මෙහි තිබූ විශේෂය නම් හිඟණ කාලේ
පෙනුමෙහි තිබුණු හෝටල් සුපිරිය ලිලේ
ආයතනයක පෙනුමක් උන් නොදැකපු කලේ
යන්තම් බේරුණා නොවැටී ගිණි මාලේ

6 එකල මෙකල මෙහි පැමිණිය අය සිටිති
සකල සුහද බව ඇතිවම සැටි සරති
නිමල බවින් කාහට වුවද සලකති
සසල නොවී සේවකයෝ වැඩ කරති

7 පුරා විසි අටක වසරක් ගතවිය
සරා සොඳ බවක් උසුලති සවිසිරිය
අරාගෙන තිබුණු මෙහි පාලන සිරිය
ගරා ගත් වටින මැණිකක් මෙන් විය

8 මෙකලට පවතිනා හතලිස් වසර පුරා
වැඩිකොට ඇතිය දියුණුවෙ උපරිමය කරා
සරිකොට තැනූ පරිසර නවකරණ සරා
රිසිකොට තැනේ මහලින් විදු පදන අරා

9 යම් යම් රටේ පාලන බලයන් සමයේ
හයිරම් පපා කල පවුකම් ඒ සමයේ
සේවා අයිති උදුරාගත් අය සිටියේ
දැන් නම් ඒ අයද නැත මිනිසත් බවයේ

10 දැන් පවතිනා පාලනයේ හුරු බුහුටි
විදු කටයුතුද හරවත් ලෙස පැතිර සිටි
දියතම පුරා පතලව ගොස් ඇතිද සැටි
පෙන්වා දුන්නේය විද්‍යා සතියෙ වටි

11 විදු පදනමේ සිටි හා සිටිනා අයට
නොපැකිල යමක් පවසනු හැක එඩිය පිට
යහගුණ පිරුණු ණීඅප" යන හැඟුම මතු කොට
පෙනුනා මෙහිම සේවය කරන අප හට

12 මෙහි සේවය කළා"""""""" කරනා අයට ගරු
හතලිස් වසක් පිරී මේ බිම ඇතිව සරු
සඳවට බැබළෙනා විලසින් සුපිරි තරු
විදු ලොව දිනේවා"""""""! විදු පදනම මහරු

OUR MAJOR ACHIEVEMENTS DURING THE PAST 10 YEARS

1998

The National Science Foundation established by Act of Parliament – The Science and Technology Development Act No 11 of 1994

Special Committee on Intellectual Property Rights & commercialization established at NSF

First MOU for cooperation in Biotechnology signed at the NSF under Indo-Sri Lanka S&T Cooperation

1999

First issue of 'Vidya' published replacing NARESA News letter

Publication of Book on 'Water Buffalo Research in Sri Lanka – a compendium of research information'. A compilation of research results obtained under SIDA/SAREC Research Cooperation agreement between Sri Lanka and Sweden

NSF identified as the focal point for development of a Manpower Infromation System on S&T (MIS) under the ADB project on S&T Manpwer Development

2000

Third Asian Buffalo Congress under the theme 'Changing role of the Buffalo in the new millennium in Asia' held in Kandy in collaboration with the NSF Buffalo Project

NSF establishes the STMIS database under the ADB project

Digitization of the National Repository of Science & Technology Literature initiated and NSF Digital Library (the first of its kind in Sri Lanka) offering on-line access to the full text of NSF journals launched.

2001

The Technology Watch Centre established under the S&T Personnel Development Project.

Inauguration ceremony held at BMICH, Colombo

Inaugural issue of TECHWATCH LANKA published

2003

National Bioethics Committee established

First patent application on NSF research results in the field of Health Sciences

NSF reorganized. Division of Scientific Affairs divided into five Divisions: S&T Policy Research Division, Schlorships and Fellowships Division, Research Grants Division, Technology Promotion Division and Information and Communication Division

NSF signed an Agreement with SIDA/SAREC for a grant of SEK 3 million over a period of 5 years from 2003-2007 for providing international travel grants, research grants and research policy training/studies

2004

Sri Lanka elected to the International Coordinating Council (ICC) on Man and Biosphere at 32nd Annual Sessions of the UNESCO

ICC approves the site Kanneliya-Dediyagala-Nakiyadeniya (KDN) as a Biopsphere Researve

Special Committee on Popularization of Science established

STMIS database goes on line – inauguration and launcing ceremony attended by Hon. Minister for Science and Technlogy

World Science Day celebrated on 10 November at 'Navarangahala', Royal College, Colombo. Chief Guest Hon. Minister for Science and Technology.

First patents obtained on two NSF research grants in the field of agriculture

2005

Divisions at NSF renamed as S&T Policy Research Division (STPRD), International Liaison Division, Research Division, Technology Division, Popularization of Science and the National Science Library and Resource Centre.

Introduction of the Equipment Grants scheme and re-introduction of Spare Parts Grants scheme

Initiation of a multidisciplinary Coordinated Thematic Research Programme (CTRP) to reorient and drive the national research system to produce well defined outputs that would directly benefit the stake holders in the short term.

Initiation of the NSF Science Magazine on TV (Mihimadala) – a series of documentaries on natural disasters to create an awareness amongst the general public on mitigating and minimizing loss of life and damage to property.

First documentary on 'Tsunami' produced and telecast on ITN

Book on Tsunami titled 'Muhuda Kalu Wuna' (The Sea Darkens) by Ms. Sumithra Rahubadda launched in Colombo

The Bureau of ICC of UNESCO's Man and Biosphere Programme approved Bundala National Park as a Biopsphere Reserve.

Chairperson and Director NSF appointed as members to the Interim Committee on The National Disaster Mitigation and Management Committee by HE the President to prepare a strategy for disaster mitigation and management and the development of a Tsunami Early Warning System for Sri Lanka

NSF in collaboration with the Ministry of Science and Technology organied an S&T Exhibition to mark the National Science Week

Refurbishing of the NSF initiated – first with the landscaping of the court yard and the first floor of the main administration building.

Internal networking for IT enhanced along with the purchase of new computers and accessories.

World Science Day celebrated on 10 November at BMICH, Colombo under the theme 'ScienceforDisaster Mitigation: Role of Information and Communication", with Prime Minister Hon. Mahinda Rajapaksa as Chief Guest and Hon. Minister for Finance Dr. Sarath Amunugama as Guest of Honour. Prof. Tissa Vitarana, Hon. Minister of Science and Technology also participated.

Nine R&D projects recognized for their contribution to Development of S&T in the country

NSF subscribes to SCOPUS database the worlds largest on-line S&T Abstracting and Indexing database covering 13,500 journal titles

'Muhuda Kalu Wuna' (The Sea Darkens) by Ms. Sumithra Rahubadda received the National Award for 'Best Children's Story Book' at the State Literary Festival 2005

2006

NSF Science Magazine on TV (Mihimadala) completes telecast of 6 documentaries on natural disasters and 7 on other topics on ITN and TNL

Introduction of 'Research Scientist' scheme to support full time research by scientists possessing post graduate degrees but not affiliated to a Research Institution or a University

NSF in collaboration with the Ministry of Science and Technology organied the second S&T Exhibition on the theme 'Technology for Development' at BMICH, Colombo

An International Workshop on 'Awareness raising in Disaster Management'

held in Colombo in collaboration with UNESCO. Participants were from SAARC and South East Asian countries.

World Science Day Schools Programme held on 7 November under the theme 'Nanotechnology', at BMICH, Colombo

Internet Bandwidth at NSF upgraded to 128 kbps from the previous 64 kbps allowing speedy internet access

NSF Awareness Day seminars organized at six R&D institutions to make these institutions aware of on going and proposed activities of the NSF

A programme of sponsorships for organizing scientific meeting initiated with a view to encouraging scientific organizations for conducting seminars, conferences, workshops etc. on S&T related areas. Sixteen such sponsorships were awarded during 2006

For the third consecutive year NSF coordinated the National Science and Technology Awards at the Prsidential Secretariat with the participation of HE Mahinda Rajapaksa as the Chief Guest

The Journal of the National Science Foundation gets cited in two databases of the Thompson Scientific Index, BIOSIS Previews and Zoological Records

A face lift to The Journal of the National Science Foundation of Sri Lanka – with the March edition – Vol. 34 No.1

NSF celebrates World Philosophy Day, 21-22 November

National MAB Committee of the NSF in collaboration with UNESCO organized the International Conference on 'Humid Tropical Ecosystems: Changes, Challenges and Opportunities' from 4 to 9 December in Kandy. The Conference coincided with the Golden Jubilee of the Humid Tropics Programme of UNESCO.

The five volume book series, on 'Medicinal Plants of Sri Lanka' by D.M.A. Jayaweera, with taxonomic updating by Lilani K Senaratne was reprinted as a publication of the NSF and launched at the Humid Tropics Conference in Kandy.

NSF, in collaboration with the NAM S&T Centre of India and NASTEC organized an International Conference on 'Science and Technology Policy and Statistical Indicators' from 8 to10 November in Colombo to coincide with the National Science Week celebrations

Initiation of Technology Foresight Study by the Technology Division covering the fields of rubber and aquaculture

Digitization of NSF publications launched with Phase 1 covering publications and documents held at NSF.

Overseas Special Training Programme (OSTP) initiated for supporting short and medium term training of scientists on specific subjects based on NSF 's thrust areas

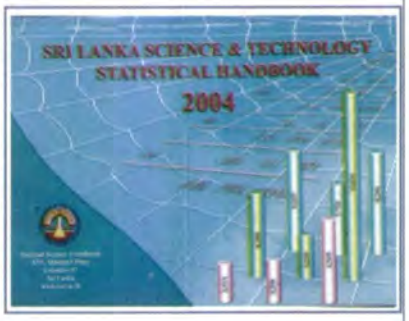
2007

The First 'Sri Lanka Science and Technology Statistical Handbook' published by NSF

NSF receives financial support from UNESCO for project on 'Development of Bioethics in Sri Lanka'

Prof. W.A.J.M. De Costa receives funds from ICGEB for research project on 'Expression of candidate genes for salt tolerance in Sri Lankan rice germplasm'

STPRD published the 'National Survey of Research and Development in Sri Lanka 2004' – a compilation based on information gathered from State and Private sector S&T institutions and Universities in Sri Lanka



A new segment called 'Vidudora' was introduced to the 'Pahandora' progrmme of ITN. Fifteen programmes highlighting achievements of local scientists were produced and telecast

NSF conducted a series of Introductory Workshops for school children and became a partner in the Sri Lanka Science and Engineering Fair organized by the Ministry of Education, Institution of Engineers and Intel

NSF joined the Zero Carbon City Programme of the British Council of Sri Lanka

As part of the National Science Week, activities were organized to commemorate NSF Day at the NSF premises. Four books of the Science Books Series were also launched the same day

World Science Day 2007 - Schools Programme held at the BMICH under the theme 'Our Technology for Our Development' with Hon. Minister for Science and Technology as the Chief Guest

Asia Pacific Network (APN) for Global Change Research funds project proposal on 'Developing an Integrated Framework for Science Policy Interactions towards Enhanced Management of Coastal Systems in South Asia'.

NSF facilitates two OSTP training programmes

An ICSU National Committee established to support ICSU realted activities in Sri Lanka. Prof. Nordin Hassan, Director, ICSU Regional Office for Asia and the Pacific, was the Chief Guest

A new programme on 'Support for Innovation' initiated by the Technology Division providing funds for three innovations to produce prototypes.

NSF in collaboration with the Ministry of Science and Technology organized the World Science Day, National Science and Technology Awards Ceremony 2007, for the third consecutive year. It was held at the Presidential Secretariat with Hon. Ratnasiri Wickremanayake, Prime Minister of Sri Lanka as the Chief Guest.

Phase 2 of the Digitization of NSF publications initiated covering 40 localy published periodicals

NSF awards 23 sponsorships for organizing seminars, conferences etc. by scientific organizations

Buffalo Research Programme – A Model Programme of Research and Development

The Water Buffalo Research Project conceived during 1982/83, received financial support from the Swedish Agency for Research Co-operation with Developing Countries (SAREC). It turned out to be one of the best research programmes carried out by NARESA.

The programme was implemented in three phases over a period of 12 years. The first and second phases were devoted to R&D in buffalo production and management. More than 125 scientists and technical personnel drawn from the Veterinary Research Institute of Sri Lanka, the Faculties of Veterinary Medicine and Animal Science, Agriculture, Medicine, Engineering and Arts (Social Sciences) of the University of Peradeniya, the Department of Animal Science of the Ruhuna University, and the University of Kelaniya, undertook a total of 69 research projects. The third and concluding phase over a period of two years was meant for demonstration and dissemination of scientific know-how.

The research programme was implemented, managed and monitored by NARESA, which also provided all the logistical support to ensure smooth operation of the programme. The programme officially known as the NARESA – SAREC Buffalo Research Programme was monitored and evaluated by a Research Advisory Committee comprising of nine members, of whom one was the Chief Executive Officer of NARESA. The remaining members were external experts in the field of buffalo research. The Advisory Committee met once a month in the vicinity of the experimental stations to discuss progress in all aspects of research, including administrative issues such as disbursement of funds and infra-structure development.

The investment on the research project was over Rs. 27 million. The major outputs and outcomes can be summarized as follows:

a) Research Findings:

Development and demonstration of over 25 different techniques, technologies, mechanisms, norms, reference values, checklists of disease agents, diagnostic tools, vector and disease carriers, physiological indicators and quality standards related to buffalo production and management.

b) Human Resource development:

(i) Award of 6 doctoral degrees and 7 masters degrees.

(ii) 7 awards for training fellowships of 2-4 months duration.

(iii) Training opportunities for 41 research assistants and 39 technical assistants.

c) Productivity

(i) Production of 93 research publications of which 23 were in international journals.

(ii) Publication of 10 monographs for information dissemination.

(iii) Publication of a compendium of buffalo research activities in Sri Lanka, and a book on diseases of the buffalo.

(iv) Publication of a Handbook for Veterinarians.

(v) Publication of a Training Manual for Veterinary Extension Officers.

d) Capacity Building

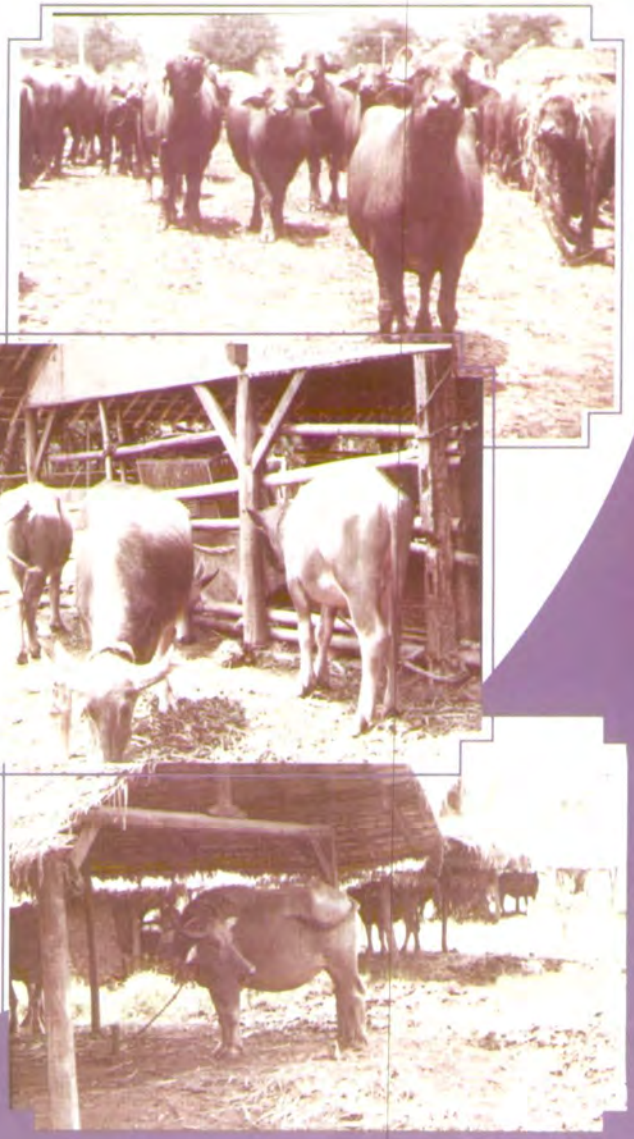
(i) Provision of equipment and specialized training in new techniques.

(ii) Establishment of a small research farm with a carrying capacity of 30 animals.

(iii) Establishment and equipping a larger research farm with a carrying capacity of 200 animals.

A training manual prepared at the conclusion of the programme, helped veterinary extension officers, and students and farmers, in finding solutions to a large number of field problems concerning nutrition, reproduction, disease control, vaccine development, draught power and management of the water buffalo found in Sri Lanka.

The management and outcomes of this programme were considered unique by international agencies including the Food and Agriculture Organisation of the United Nations (FAO). The FAO considered the programme as a model to be adopted by other Asian countries. It also won an international award.



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