

Natural Resources, Energy and
Science Authority of Sri Lanka,
47/5, Maitland Place,
Colombo 7.
15-03-1988.

His Excellency the President,
Presidential Secretariat,
Galle Face,
Colombo 1.

Your Excellency,

ANNUAL REPORT OF THE NATURAL RESOURCES, ENERGY & SCIENCE AUTHORITY OF
SRI LANKA FOR THE PERIOD 1st JANUARY TO 31st DECEMBER 1986

In terms of Section 16(III) of the Natural Resources, Energy & Science Authority of Sri Lanka Act No. 78 of 1981, I have the honour to submit the Annual Report of the Natural Resources, Energy & Science Authority of Sri Lanka for the period 1st January to 31st December 1986. together with

- (a) A copy of the Audited Income and Expenditure Account
- (b) A copy of the Audited Balance Sheet
- (c) Auditor General's Report

Yours obediently,



(Dr. R. P. Jayewardene)

Director-General

NATURAL RESOURCES, ENERGY & SCIENCE AUTHORITY OF SRI LANKA

ANNUAL REPORT
OF THE
NATURAL RESOURCES, ENERGY & SCIENCE AUTHORITY OF SRI LANKA
FOR THE
FINANCIAL YEAR 1986

Letter of submission to His Excellency the President

Annual Report

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ANNUAL REPORT - 1986

1. Membership of the Natural Resources, Energy and Science Authority of Sri Lanka during the year

Board Members from 1st January 1986 - 31st December 1986

Dr. R.P. Jayewardene (Director-General), NARESA
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
Mr. L.C.A. de S. Wijesinghe (Addl. Director-General, NARESA)
Dr. R.L. de Silva
Prof. T.E.J. de Fonseka

2. Principal Staff

Director General

Dr. R.P. Jayewardene - M.D., F.R.C.P. (Lond.)

Additional Director-General

Mr. L.C.A. de S. Wijesinghe - B.Sc. (Hons.) (Cey.), M.A. (Oxon)

Director (Scientific Affairs)

Mr. M.A.T. de Silva - B.Sc. (Lond.); M.Sc. (Lond.)
Mr. D.E.F. Fernandez - B.Sc. (Lond.); M.Sc. (Wales)

Asst. Director (Scientific Affairs)

Mrs. S.P. Prelis - B.Sc. (Hons.) (Cey.)
Dr. K.S.S. Liyanage - B.Sc. (Hons.) (Cey.); Ph.D (Aust.)

Scientific Officer

Mr. M. Watson - B.Sc. (Cey.); M. Phil (Lond.)
Mr. D.P. Athulathmudali - B.Sc. (Hons.) (Cey.)
Mrs. V. Galapitage - B.Sc. (Cey.); M.Sc (Canada)
Mr. J.W. Chandrasekera - B.Sc. (Cey.); Dip. Stat. (Cey.)
Mr. R.M.W. Amaradasa - B.Sc (Cey.); M.Sc (Cey.)
Miss C.G. Perera - B.Sc (Hons.)(Cey.)

Staff Assistants

Mr. J.A. Chandrasiri - B.Sc (Hons.) (Cey.) (On study leave)
Miss J.D.S. Dela - B.Sc (Cey.) (On study leave)
Mr. W.D.S. Danthanarayana - B.Sc (Cey.)
Miss H.A.U. Amarasinghe - B.Sc (Cey.)
Mr. J.S. Premawardena - B.Sc (Cey.)
Mr. I.W.A.R. Amarasena - B.Sc (Cey.)
Mr. B.N.C.K. Basnayake - B.Sc. (Cey.)
Mrs. W.R.M. Sandanayake - B.Sc (Cey.)
Mr. W.B. Yapa - B.Sc (Cey.)

Director Information

Mr. N.U. Yapa - B.Sc. (Cey.); A.L.A; A.S.L.L.A.; M.L.S. (W. Ont.)

Asst. Director (Publications)

Mrs. N.R. Amarasuriya - B.Sc. (Hons.) (Cey.); A.L.A. (Lond.)

Documentalists

Miss I.R. de Silva - A.S.L.L.A.
Mrs. S.R. Namuni - A.S.L.L.A.
Mr. W.R. Jayakody - B.Sc (Cey.)
Mr. B.G.N. Kumarasinghe - B.Sc (Cey.)

Administrative Secretary

Mr. A.L. de Alwis - B.Sc (Econ.) Lond.

Asst. Administrative Secretary

Mr. M.A.P. Mudannayake

Chief Accountant

Mrs. C. Jayamanne - A.C.A. (Cey.)

Asst. Accountants

Miss T. Ranasinghe

Miss K.C.J.T.K. Fernando

Graduate Translator

Mrs. S.L. Tillekartne - B.A. (Cey.)

Confidential Secretary

Mrs. S. Ratnayake

Repographic Technician

Mr. S.R.U. de Silva

Establishment Assistant

Mr. S. Galketiya

Printing Superintendent

Mr. A.A.A. Ranasinghe

1.0 BOARD ACTIVITIES

1.1.0 Nine Authority meetings were held during 1986.

1.1.1 The Authority submitted memoranda to the Presidential Secretariat on:

- (a) The observations of the Natural Resources Working Committee on felling of forests in the upper montane region.
- (b) The recommendations of a seminar on reforestation.
- (c) The observations on the National Science and Technology policy documents published by the Ministry of Plan Implementation.
- (d) The Forestry Master Plan which expressed the concern of the Natural Resources Working Committee of NARESA with regard to some of the proposals made in the plan.

1.1.2 Authority approved the following:

- (a) Supplementary research grants
- (b) The award of sixty grants on the NARESA Research Grants Scheme for 1987, covering the Biological Sciences, Chemical Sciences, Physical & Engineering Sciences, Agricultural Sciences, Medical & Vet. Sciences, Social Sciences, and Science Education.
- (c) Research grants were awarded from funds provided by the Canadian International Development Agency for Research connected with the Use of Potash Fertilizer.
- (d) The Sri Lanka-Australian project for the Biological Control of Salvinia under which

Australian \$ 75400 will be provided to Sri Lanka for a co-operative project aimed at controlling salvinia through biological means.

A Working Group on National Technology Policy was constituted and submitted a memorandum embodying its recommendations.

1.1.3 The Authority selected the scientists for the presentation of merit awards for research work carried out on grants provided by NARESA.

1.1.4 The Authority studied and ratified the recommendations of the Selection Committee for the National Awards ie. The President's Award and NARESA Award for scientific achievements.

1.1.5 The Authority took action regarding the appointment of a committee on the Adaptation of the National Languages in Information Technologies and the appointment of a new MAB National Committee.

2.1 WORKING COMMITTEE ON SCIENCE EDUCATION

2.1.1 Nine meetings were held during this period.

2.1.2 The Committee recommended two grants for the year.

2.1.3 Supplementary Reading Material in Science
The manuscript on "Ceramics in Sri Lanka" written by Dr. J.W. Herath was received.

2.1.4 Seminar
A seminar on "Further English for Junior Scientists" was held on 28th of November.

2.1.5 The project on science learning at the secondary school level in Sri Lanka which was commissioned at the beginning of the year was completed.

2.2 WORKING COMMITTEE ON SOCIAL SCIENCES

2.2.1 Eight meetings were held during 1986.

2.2.2 A lecture by Prof. G.L. Peiris on "Some Recent Developments in English and Commonwealth Administrative Law" was delivered on 10 March 1986.

2.2.3 Core Group Meeting:

A meeting to set up a core-group of social scientists was held on 19th September. Seventeen members were nominated to the group with Prof. K.W. Goonawardena as the co-ordinator of the group. Three core group meetings were held during the year.

2.2.4 Seminars

(a) A Seminar on Resource Allocation for Social Science Research in Sri Lanka was held on the 7th April 1986.

(b) Mr. N. Amarasinghe, Director NLSB attended the experts meeting on the establishment of a Regional Network of Social Science Information and Documentation Centres which was held in Bangkok from 12 to 16 May.

2.3 WORKING COMMITTEE ON AGRICULTURE & ANIMAL HUSBANDRY

2.3.1 Five meetings were held during this period. The position of grants is given in Table 1.

2.3.2 Seminars

A Seminar for all the Grantees, Co-grantees Research Assistants of NARESA funded grants was held on 22 August 1986.

2.3.3 CIDA Research Monitor Prof. R.J. Soper visited Sri Lanka and held discussion with NARESA and the CIDA funded grantees.

2.4 WORKING COMMITTEE ON BIOLOGICAL SCIENCES

2.4.1 Ten meetings were held during 1986 and the position of grants is given in Table 1.

2.4.2 Workshop for Grantees

A workshop was held for grantees to present their work on the projects funded by NARESA.

2.5 WORKING COMMITTEE ON CHEMICAL SCIENCES

2.5.1 Eight meetings were held during this period, and the position of grants is given in Table 1.

2.5.2 Other Activities

(a) A seminar on "Carbohydrates" was held on 13 October 1986 at the NARESA Auditorium. Six grantees presented review papers at this seminar. Fifty five grantees, research assistants and nominees participated.

(b) A workshop on "Phytochemical and Biological Investigations on Medicinal Plants" sponsored by NARESA, SLAAS and SCAMAP was held from 17-19 October 1986 at the University of Peradeniya.

2.6 WORKING COMMITTEE ON MEDICAL & VETERINARY SCIENCES

2.6.1 Twelve meetings were held during this period and the position of grants is given in Table 1.

2.7 WORKING COMMITTEE ON PHYSICAL & ENGINEERING SCIENCES

2.7.1 Eleven meetings were held during this period and the position of grants is given in Table 1.

2.7.2 Five NARESA grants were awarded during the year.

2.7.3 Seminars

(a) A seminar on 'Landslides - Causes & Prevention' was held on the 12 July 1986. The Committee decided to document the proceedings of the seminar.

(b) A seminar for grantees in the Physical & Engineering Sciences was held in 27 September 1986.

2.7.4 Mr. A.D.S. Gunawardene and Prof. K. Tennakone have been appointed as members of the Committee as replacements for Prof. M. Amaratunga and Prof. O.W. Jayaratne.

2.8 WORKING COMMITTEE ON NATURAL RESOURCES

2.8.1 Eight meetings were held during this period.

2.8.2 The preparation of a series of manuscripts on natural resources of Sri Lanka were in progress. The first publication of the services, titled "Economic Geology of Sri Lanka" by Dr. M.M.J.W. Herath, was completed.

2.8.3 A seminar on Reforestation was held in April for the purpose of identifying some of the main problems of reforestation in the country.

2.8.4 A sub-committee was appointed to draw up provisional models for reforestation and the first meeting was held in December.

2.8.5 A sum of Rs. 129000/= was approved for a project of 15 months duration on ecological studies in pine plantations.

2.8.6 Forestry Master Plan

A memorandum on the plan prepared by the Forestry Resources Development Project (FRDP) was submitted to His Excellency the President.

2.8.7 Inventory of Mineral Resources

Photocopies of several original reports on Mineral Survey of Sri Lanka dating back to 1910-1922 were prepared with a view to preserving these valuable records.

2.9 WORKING COMMITTEE ON ENERGY

2.9.1 Six meetings were held during 1986.

2.9.2 Appointment of two additional members were recommended and approved by the Board.

2.9.3 A seminar and an exhibition on 'Practical Developments in the Field of Energy' were held.

2.9.4 Project on 'Experimental Work and Field Evaluation of IDB Fuelwood Cooker - Stage II

Further production of stoves were temporarily stopped since the project on field evaluation of

fuelwood cookers commenced under a separate NARESA grant. A decision regarding continuation of the grant to be taken once the results of the new project is available.

2.9.5 Project on Monitoring Field Performance of the Sarvodaya, CISIR, IDB and CEB Stoves

The project was completed and a final report including recommendations regarding the stoves were submitted to NARESA. The Committee decided that a follow-up study be carried out at the same sites for confirmation of observations.

2.9.6 Geothermal Energy

A request was made by the Presidential Secretariat to the Ministry of Industries and Scientific Affairs that feasibility studies on the development of thermal springs be undertaken by the Geological Survey Department. The water Resources Board and the Atomic Energy Authority were to assist the Geological Survey Department.

2.9.7 Project on Oil Producing Plants

Planting of oil producing plants had been delayed in two out of the three sites selected namely Gampaha, Pattipola and Kurunegala, since the expected rains did not come. Planting had been done at Pattiypola but growth had not been successful. Replanting was done in two sites namely Thanamalvila and Kurunegala. Arboreta were also established in these two sites. Negotiations were carried out regarding a land at Veyangoda for trials with the oil producing plant rata endaru (Jatropha curcas)..

2.9.8 Project on Suitability of Jatropha Seed Oil as Substitute for Kerosene

Grant originally awarded to Dr. S.C. Wijesundara of the CISIR was transferred to Dr. A.L. Jayawardena as recommended by the Director, CISIR since Dr. Wijesundara went abroad for one year; and the work on the project commenced

2.9.9 Possible EEC Support to Sri Lanka in the Development and Implementation of a Biomass Energy Strategy

The projects submitted to EEC by other Institutes, and also the project on planting to be submitted by the Forest Department to the EEC were discussed by the Committee.

2.9.10 Project: Socio-Economic and Energy Survey - Watinapaha, Gampaha District

The final report on the project which had been completed earlier was submitted to NARESA. Project proposals for introducing improved energy technologies will be submitted by January '87 in order to forward them to the EEC.

3.0 OTHER COMMITTEES AND STUDY GROUPS

3.1 National Committee on Man & Biosphere (MAB) Research Programme

3.1.1 Nine meetings were held during this period.

3.1.2 Arrangements were finalised for the holding of the Regional Training Workshop on the Ecology and Conservation of Humid Tropical Forests of the Indo-Malayan Realm. UNESCO has agreed to provide funds for holding this seminar.

3.1.3 Field Station

The Committee studied and approved the improvements proposed for the research station at Sinharaja.

3.1.4 Botanical Survey

A project to carry out a Botanical Survey of Sri Lanka was initiated. Prof. B.A. Abeywickrema was appointed to co-ordinate this programme. Six members including Prof. Abeywickrema was appointed to an advisory committee for the above survey.

3.1.5 New Committee Members

The term of office of the members of the MAB Committee expired at the end of August. Therefore, Prof. R.N. de Fonseka (Chairman), Prof. B.A. Abeywickrema, Prof. S. Balasubramaniam, Dr. K. Vivekanandan, Dr.(Mrs.) S. Gunatillake and Mr. M.A.B. Jansen were appointed to the committee with effect from 1st September 1986.

3.1.6 Publications

- (a) Checklist of Blue Green Algae. MAB Publication No. 15.
- (b) Checklist of endangered plants of Sri Lanka

3.1.7 Research Projects

Four research projects are in progress.

4.0 FOREIGN GRANTS FOR RESEARCH

4.1 USAID Programme

Eight preproposals were received under the programme. Based on the comments of the respective

Working Committees one preproposal was withheld, and seven forwarded to the USAID office in Colombo. Work on 9 grants are continuing.

4.2 Working Committee on Biological Control of Salvinia

4.2.1 Five meetings were held during this period and the position of grants is given in Table I.

4.2.2 Three grants were functioning during the year.

4.2.3 Work on the project funded by ACIAR continued satisfactorily. Quarantine work was completed and cage release of insect pest was carried out. Work is continuing.

4.3 Third World Academy of Science (TWAS)

Information relating to various TWAS schemes was communicated to the relevant persons, either through press notices or letters to Heads of Institutions.

A scheme for making annual awards to young scientists under TWAS sponsorship, amounting to a cash prize of Rs. 10,000/= for each of 4 disciplines was formulated and is awaiting ratification by TWAS.

4.4 Continued Support to SAREC-NARESA Research Co-operation

In January, NARESA's request for support from SAREC for the two year period 1986/87 and 1987/88 was submitted. During March these requests were discussed and clarified with Dr. C.G. Thornstrom of SAREC who spent about 10 days in Sri Lanka. During the same period a general agreement for research

co-operation between SAREC and Sri Lankan institutions was signed between the Swedish Charge d' Affairs and the Director, Department of External Resources. SAREC approved the release of a sum of SEK 3,200,000 for 1986/87 and a sum of SEK 1,500,000 for 1987/88.

Dr. C.G. Thornstrom was in Sri Lanka again from 23 October to 7 November 1986 to review the ongoing projects, and also to discuss support for new areas of research. Visits to several institutions were organized both in Colombo and at Peradeniya. At the end of this visit a joint communique was prepared on the future programmes of research.

Among the new activities to be considered by SAREC are the following.

- (a) Support to S&T libraries with a few selected periodicals.
- (b) A paper cutter for NARESA's printing Dept.
- (c) Training of a staff member at the RPI in Lund.
- (d) Additional facilities to the Moratuwa University to commence preparation of graduated laboratory glassware.

4.4.1 NARESA-SAREC Zoological Survey of Sri Lanka

On the recommendation of Prof. H. Crusz, Scientific Co-ordinator of Zoological Survey of Sri Lanka (ZSSL), SAREC assigned Dr. Soren Svensson of Sweden to visit Sri Lanka during February-March for consultation on planning of the ZSSL. Thereafter following a report by Dr. Svensson, and on a request by NARESA, a sum of Rs. 549,821.40 (SEK 146000) was

provided by SAREC to support three of the six projects recommended by NARESA. Following the release of funds by SAREC, 3 projects were initiated. The SAREC representative, Dr. Thornstrom met the grantees during this visit in Oct/Nov. It was decided by the Authority that the remaining 3 projects would be supported by funds allocated by the Authority under special research units.

4.4.2 NARESA-SAREC Inland Fisheries Research Programme

The Socio-economic study was completed and a draft final report was submitted for comments. The comments of the referee have been forwarded to the Director, Agrarian Research and Training Institute to facilitate preparation of the final report. The final report on the commissioned study titled "Socio-economic conditions of Inland Fisherman in Sri Lanka", was submitted by the ARTI.

4.4.3 NARESA-SAREC Buffalo Research Programme

Seven meetings of the Research and Advisory Committee were held during the year. The SAREC representations, Dr. Thornstrom attended one of the meeting on invitation. The letters of award for new projects were issued after SAREC had approved the release of funds for 1986/87. The main thrust of the Advisory Committee was to completed the first phase of development of the Narangalla Buffalo Research Station and most of the activities were completed.

A successful field day was organized at Narangalla Buffalo Research Station on 18 December 86, by the

Research and Advisory Committee. The Chairman of NLDB and the Director General of NARESA were among the participants at the field day.

4.5 CSC-Science Management and Multidisciplinary Research Programme

An international workshop to be held on the above theme in October 1986 was postponed to March 1987. In this connection Dr. Michaela Y. Smith from the CSC was in Sri Lanka from 1st to 8th December 1986 to plan the technical content of this workshop.

The science indicator study on a comparison of science planning structures in Sri Lanka and Nepal was concluded following financial support provided by UNESCO and Mr. M.A.T. de Silva, Director, Scientific Affairs visited Nepal for 2 days in December 1986 to complete this study.

5.0 NATIONAL MANGROVE COMMITTEE (NATMANCOM)

The National Mangrove Committee was reappointed with the following members in the Committee.

Dr. R.P. Jayewardene (Chairman), Mr. L.C.A. de S. Wijesinghe, Dr. S. Liyanage, Dr. S. Wignarajah, Prof. R.N. de Fonseka, Mr. J. Paranamanna, Mr. M. de Silva, Mr. V.R. Nanayakkara, Mrs. D. Sadacharan, Mr. R.A. Wijewansa, Mrs. M. Amarasinghe, Mr. Alloy Fernando, Dr. L. Pinto, Mr. S.J. Sumanasekera Banda, Mr. Sinha Senanayake, Dr. Shelton Attapattu.

5.1 Three meetings were held during the period.

5.2 UNESCO Sponsored Regional Project on Mangrove Ecosystem-Phase I

Phase I of the UNESCO Mangrove Research Project was completed and the reports of the activities I, II and

III (a), III (b) of the project were submitted to the UNESCO Head Quarters. The title of the project activities are as follows.

Activity I: Inventory and distribution of existing mangroves in the project area, Activity II: Socio-economic status of the Human Communities of selected Mangrove Areas on the West Coast of Sri Lanka. Activity III: (a) Mangrove along the South West Coast of Sri Lanka with special reference to the Insects of Mangroves in the Bentota Estuary.(b) Survey of Flora and Fauna of Mangroves in the West Coast of Sri Lanka.

5.3 Integrated Research Project on Mangrove Ecosystem in Negombo Lagoon

An integrated programme of research on mangrove ecosystem in the Negombo lagoon was formulated with the assistance of the researchers from the University of Kelaniya, NARA and the Open University. The project proposal was ratified by the Committee and the Authority. It was also submitted to the Chief Technical Advisor, Regional Mangroves Project.

5.4 Drafting a Memorandum on the Conservation of Mangroves of Sri Lanka

The NATMANCOM has decided to draft a memorandum on the conservation of Mangroves to be submitted to His Excellency the President. The representatives from Forest Dept., Ministry of Fisheries, NARA and Coast Conservation were invited to the drafting committee. The draft memorandum was ratified by the NATMANCOM. It was decided to submit the memorandum to His Excellency the President.

5.5 Workshops and Seminars

Eight Sri Lankan scientists have participated at the workshops in Singapore, Thailand, Philippine and India which were organized under the phase I of the UNESCO programme.

A Regional Symposium on New Perspectives in Research and Management of Mangrove Ecosystem was held in Colombo from 11-14 November 1986. Thirty two foreign participants were attended the symposium.

5.6 Mangrove Postage Stamp

Four postage stamps on mangrove vegetation were issued on the 11th November 1986, with the assistance of the National Commission for UNESCO and the Department of Posts and Telecommunications.

5.7 Poster Competition on Mangroves

A poster competition on mangrove ecosystem was held on 14th Nov., 1986 at Newstead Girls College in Negombo with the assistance of the Education Department. Dr. (Mrs.) M. Vannucci, Chief Technical Advisor, UNESCO awarded the prizes for winning entries.

5.8 Book on Mangroves of Sri Lanka

The book titled "Mangroves of Sri Lanka" was prepared by Dr. L. Pinto and it was published by NARESA.

6.0 SAARC TECHNICAL COMMITTEE ON SCIENCE AND TECHNOLOGY

At present Sri Lanka is the Chairman of the SAARC Technical Committee on Science and Technology. The Sri Lanka focal

point for the work of the committee is NARESA. A meeting of the Technical Committee was held in Colombo in October 1986. The objectives of the meeting were to evaluate the progress made in the regional activities and to prepare a revised calendar of activities for 1986/87. The activities included seminars and workshops, training courses and visits of scientists in specific areas of science and Technology. Mr. L.C.A. de S. Wijesinghe, Chairman, SAARC Technical Committee on Science and Technology attended the Programming Committee meeting that was held in Bangalore preceding the summit meeting of November 1986.

7.0 UNESCO/NARESA PROJECT ON DEVELOPMENT OF SCIENCE INDICATORS

7.1 Under the national participation programme of the UNESCO, a project proposal to study the development of science and technological indicators was accepted.

8.0 Sri Lanka Scientific and Technical Information Centre (SLSTIC)

8.1 Sri Lanka Scientific and Technical Information Centre (SLSTIC) which was established by the Authority in 1977 continued its information and documentation services. The main objective of SLSTIC is to serve as the coordinating centre for the activities of Scientific and Technical Libraries in Sri Lanka.

8.2 Working Committee on Scientific and Technical Information

The Working Committee which functioned as the National ASTINFO Advisory Group and the Sri Lanka National UNISIST Committee had 9 meetings during 1986. The following persons served in the Committee.

Dr. N.W.N. Jayasiri (Chairman), Mr. N.T.S.A. Senadhira, Mr. G.P.S.H. de Silva, Mr. Dayananda de Silva, Mrs. I. Unamboowe (appointed on 86-09-01).

The Committee recommended award of one research grant in Library and Information Science. Two research projects were approved during the year.

On the recommendation of the Working Committee the Authority established a Special Committee on Adaptation of the National Languages in Information Technology.

8.3 Committee on Adaptation of National Languages in Information Technology (CANLIT)

The Authority appointed the Committee on Adaptation of National Languages in Information Technology to study how Sinhala and Tamil languages could be used in modern information technology, to identify and evaluate problems associated with use of national scripts and to make recommendations with regard to adaptation of the scripts in information technology.

The Computer and Information Technology Council (CINTEC) made available a grant of Rs. 7,500/= for the activities of the Committee.

The Committee consisted of the following members:

Dr. N.W.N. Jayasiri (Chairman), Prof. V.K. Samaranyake, Dr. A. Kandiah, Mr. W.S. Perera, Mr. N. Amarasinghe, Mr. S.G. Samarasinghe, Mr. V.K.U. Ramanayake, Mr. G.P.S.H. de Silva, Mr. N.T.S.A. Senadhira, Mr. Dayananda de Silva, Mr. Somapala

Jayawardhana, Prof. J.B. Disanayaka, Mrs. I. Unamboowe, Mr. M.P.D.C. Fernando, and Mr. L.S. Perera.

The first meeting of the committee was held on 25 August 1986. Two meetings were held subsequently.

The Committee identified three areas of study: (a) evolution of the National Scripts (b) Experience of other countries in modification of scripts and (c) User needs. The Committee initiated the following tasks during 1987:

- Preparation of a digest on the evolution of the Sinhala script from its origin to the present day particularly the influence of information technology and media.
- Preparation of a report on adaptation of the Tamil script in Sri Lanka for information technology.
- Collection of alphabetical sorting systems used in Sinhala script.
- Collection of systems of transliteration of Sinhala script to the Roman script.
- Collection of sources of information relating to change of script and the impact of such changes.
- Study of the needs and problem of the Government Departments and other private

sector organizations to computer use in which data originates or is required as output in national languages.

8.4 Coordination with Libraries in Sri Lanka

During 1986 SLSTIC participated in the following library networks.

- Health Science Literature, Library and Information Systems (HELLIS)

Participated in the meeting of the Librarians and assisted in organizing a training programme in March 1986.

- Agricultural Information Network (AGRINET)

Provided secretarial services to the network. A meeting of the network was held on 01.08.86.

- Renewable Energy Resources Information Network (RERINET)

Coordinated the activities of the network. A meeting of the network was held on 09.05.86.

8.5 Co-ordination with International Organizations

SLSTIC served as the focal point in Sri Lanka for international information networks and international organizations.

8.5.1 Regional Network of the Exchange of Information and Experience in Science and Technology in Asia and Pacific (ASTINFO)

The fourth ASTINFO consultative meeting was held in Colombo from 27-29 October 1986. Dr. R.P. Jayewardene functioned as the Chairman of the meeting which was organized by the

Authority. A proposal to establish an International Coconut Information Network was submitted to Unesco. A team of Unesco Officers visited Sri Lanka during October/November 1986.

CISIR was nominated the national node and Miss C.L.M. Nethsinghe, Head, Information Division, CISIR was nominated a member of the Board, of the Asian and Pacific Information Network on Medicinal and Aromatic Plants (APINMAP).

8.5.2 Regional Information Network for South & Central Asia (RINSCA)

SLSTIC served as the focal point of this Network. Sri Lanka participated in the following RINSCA programmes :

(i) Regional Training Programme on Systems Analysis, Pakistan, 19-26 October 1986. Mr. H.G. Wijewansa, Programmer/Systems Analyst, University of Peradeniya participated.

(ii) Regional course for Computer Facilities Maintenance, India, 17-21 November 1986. Mr. P.M.K. Alahakoon, Asst. Lecturer, University of Peradeniya and Mr. N.H.K.G. de Silva, Computer Operator, University of Moratuwa participated.

8.5.3 - International Federation of Documentation (FID)
SLSTIC served as the national member of FID. At the 9th FID/CAO General Assembly & Congress

held from 17-21 November 1986 in Bangkok, Mr. S.K.W. Fernando, Head/Dept. of Techno-Economics, NERD Centre represented Sri Lanka.

Dr. R.P. Jayewardene, DG, was nominated as a member of the FID Committee for Education and Training (FID/CAO/ET).

8.5.4 - Commonwealth Regional Renewable Energy Information System (CRRERIS)

SLSTIC served as the National co-ordinating Centre for CRRERIS which is operated by CSIRO, Australia. SLSTIC was assigned to prepare a computerized keyword index to documents received by CRRERIS.

8.5.5 - National Technical Information Service (NTIS)

SLSTIC continued to serve as the co-operating agency for NTIS of the US Dept. of Commerce. Documents were procured from NTIS for customers in Sri Lanka. Due mainly to the exorbitant prices, a sharp reduction of NTIS reports procurement was observed.

8.6 Co-operative Activities

8.6.1 Union Catalogue of Scientific & Technical Books (UNICAST)

Compilation of computerized Union Catalogue (UNICAST) was continued with the co-operation of the libraries. Information on 3559 books were received during 1987.

8.6.2 - Union List of Scientific and Technical Periodicals (UNILIST)

Data entry for compiling a computerized data

base for UNILIST was completed. Print outs were sent to libraries for correction.

8.6.3 - Selective Dissemination of Contents Pages (SDCP)

Selective Dissemination of contents pages service was organized with the assistance of 24 agricultural libraries to dissemination contents pages of 316 agricultural periodicals among 290 scientists.

8.7 Information and Documentation Activities

8.7.1 National Scientific Reports Collection

The reports collection was organized to collect published and un-published reports. 237 local reports, 73 foreign reports on energy and 64 annual reports were added to the repository.

8.7.2 Sri Lanka Science Index

169 issues of local scientific periodicals, important articles in local newspapers and papers presented to local scientific seminars were indexed during 1982. Sri Lanka Science Index Vol. 7, No. 3/4 and Vol. 8, No. 1/2 were issued.

8.7.3 Inter-library loans

SLSTIC served as the co-ordinating centre for Inter-library loans by channelling requests to appropriate libraries. The requests that could not fulfilled were directed to the British Library Lending Division. 58 local requests and 6 international requests were handled.

8.8 Technical Services

8.8.1 Photocopying Service

SLSTIC operates photocopying and photocopy procurement services for libraries and scientists. 4937 official and 243 personal requests for 159,018 impressions were satisfied.

8.8.2 Micrifiche Service

Bureau service for microfiche making and duplication were undertaken 52, request were executed for making 575 silverfiche masters and 1917 diazofiche.

8.8.3 Desk-top printing

SLSTIC Operated a desk-top printing service to duplicate documents at low-cost. 180 printing jobs for 385,570 impressions were executed.

8.8.4 NARESA Press

Services were offered for printing scientific publications at the NARESA Press. 31 major printing jobs were executed. Value of jobs executed was estimated to be Rs. 424,580.

8.8.5 Computer Service

SLSTIC possess a WANG 2200 MVP mini computer which was used for data processing and word processing. The three local data bases namely UNICAST, UNILIST, and SLSI were maintained. Print outs for Off-set printing of database products were obtained. NARESA reports were compiled

using the word processing facilities. Consultation services were provided to the Coconut Research Institute for Computerizing Library System.

8.8.6 Audio-visual Service

A pool of AV equipment including video, film, slide, overhead projectors, video camera, projection system and conference communication system was maintained for hiring out for Scientific Organization. AV facilities were provided for all NARESA Seminars.

8.9 Training, Education and Seminars-

8.9.1 SLSTIC Education and Training Programmes(STEP)

(i) Seminar on Scientific Information

The Seminar was held on 17 March 1986 at the NARESA Auditorium. 31 research assistants participated. Dr. R.P. Jayewardene, DG, presided the Seminar.

(ii) Seminar on CRRERIS Services

The Seminar was held on 23 September 1986 at the NARESA Auditorium.

(iii) Workshop on Writing Scientific Papers

The Workshop was held on 3rd & 4th April 1986 at the NARESA Auditorium.

(iv) Workshop on Micro-computer Software

The Workshop was held from 3-6 November 1986, at the NARESA Auditorium. 4 micro-computers were organized for the Workshop which was conducted by Prof. A. Neelameghan, Unesco Consultant. 10 librarians were trained on handling CDS/ISIS library software package.

(v) Seminar on Database Management Systems for Libraries

The Seminar was held on 7 November 1986 at the

NARESA Auditorium. Dr.R.P. Jayewardene, DG, presided. Prof. A. Neelameghan, Unesco consultant was the key speaker. 80 librarians/information officers participated in the Seminar.

8.9.2 Seminars

(i) NARESA/CINTEC Joint Meeting on the use of Sinhala in Computers

A meeting in collaboration with the Computer and Information Technology Council to discuss matters relating to modification of Sinhala script to suit information technology was held in 25 July 1986 at the NARESA Auditorium.

(ii) UNESCO-NARESA National Seminar on Scientific and Technical Information Policy

This was held at NARESA Conference Hall on 20th and 21st October 1986. The seminar was inaugurate by Mr. S. Athukorala, Chairman, Sri Lanka National Library Services Board. 30 selected persons attended the seminar which was presided by Dr. R.P. Jayewardene, Director-General, NARESA. Mr. C. Montviloff, Systems Specialist, Unesco served as a resource person.

(iii) UNESCO-NARESA Regional Seminar on National Information Policy and Transborder Data Flow

The seminar was held from 22-25 October, 1986 at the Hotel Taj Samudra which was inaugurate by

Prof. Willie Mendis, Vice Chancellor, University of Moratuwa.

Representatives from 13 countries attended the seminar. 2 Unesco Officers, 3 resource persons and 5 local observers also attended. On 24th October 1986, the participants visited the Coconut Research Institute.

(iv) Fourth ASTINFO Consultative Meeting

The meeting was held from 27-29 October 1986, at the Hotel Taj Samudra. Liaison Officers from 13 countries attended the meeting which was chaired by Dr. R.P. Jayewardene. Proposals on Projects and activities in regular programme for 1987 were discussed.

8.9.3 Lectures

- (a) Mr. N.U. Yapa, DI and Mrs. N. Amarasuriya AD(P) delivered lectures at the National Training Course on Health Science Librarianship, organized by HELLIS Network during 3-14 March 1986.
- (b) Mr. N.U. Yapa, DI and Mrs. N. Amarasuriya AD(P) delivered lectures on "Computers in Chemical Information" and "SLSTIC Services"

respectively at the Seminar on "Chemical Information" held on 28th Feb. 1986.

- (c) Mr. N.U. Yapa delivered a lecture on "Information Services in a Small Technical Library" at a Seminar organized by the National Library Services Board for Technical College Librarians on 86-09-04.
- (d) Mr. N.U. Yapa delivered a lecture on SLSTIC services at University of Kelaniya, Dept. of Library and Information Science on 86-08-05.
- (e) Mr. N.U. Yapa and Mrs. N. Amarasuriya delivered lectures at the User Seminar organized by the Coconut Research Institute on 20th November 1986.

8.9.4 Training

4 batches of library students from the Sri Lanka Library Association followed 2 week in-service training at SLSTIC. Participants of the International seminar on Development Science Information organized by the Marga Institute visited SLSTIC on 86-07-01.

8.10 Publications (Scientific)

8.10.1 Journal of the National Science Council

- (i) Vol. 12 no. 1 & no. 2, Vol. 13, no. 1

were printed and distributed. Vol. 13(1) was composed and printed at the NARESA press.

(ii) Vol. 13 no. 2 and Vol. (14) no. 1 were handed over to the NARESA press for composing and printing.

(iii) A meeting of the Editorial Board was held on 26 December 1986.

8.10.2

Vidurawa

Vol. 8(1) Mangroves (English), Vol. 7(1) Computers & Information Management (Sinhala), Vol. 7(2) Biological Control (Sinhala) were issued. Vol. 9(1) Mangroves was translated into Sinhala.

8.10.3

SLSTINET Newsletters

Vol. 6(1) July 1986 and Vol. 6(2) November 1986 were issued.

9.0

Staff Publications

- (1) Historical Landmarks in the Orientation of Science Planning in Sri Lanka by M.A.T. de Silva. Sri Lanka Journal of Social Science, 7, (1/2), 77-96, (1984).
- (2) Science and Creativity in Crop Research by M.A.T. de Silva Theme Seminar on "Science and Creativity" - 42nd Annual Sessions of the Sri Lanka Association for the Advancement of Science 9th December 1986.
- (3) A Measure of Social Returns in Academic Research by M.A.T. de Silva. Proceedings 42nd Annual Sessions Sri Lanka Association for the Advancement of Science (1986) Part 1, 218.

- (4) Operating Experience with Biogas Plants in Sri Lanka by L.C.A. de S. Wijesinghe and J.A. Chandrasiri. Natural Resources Forum, 10(3), United Nations, New York.
- (5) Minicomputer assisted resource sharing programmes in Sri Lanka by N.U. Yapa. Proceedings 43rd FID Conference and Congress, 8-18 Sept. 1986 - Montreal.
- (6) Use of minicomputer to improve resource sharing activities of AGRINET in Sri Lanka by N.U. Yapa. Sri Lanka Library Review, 1(2) : 55-76.

Table 1

LOCAL GRANTS SPONSORED BY NARESA - 1986

Field Position re. grants	Agriculture & Animal Husbandry	Biological Sciences	Chemical Sciences	Medical & Vet. Sciences	Physical & Engineering Sciences	Social Sciences
No. of Functional Grants	12	37	33	21	08	25
No. of Applications received for 1987	25	24	20	37	18	21
Amt. requested by applications for 1987	Rs. 1468445/=		Rs. 211532/=	Rs. 2624217/=	Rs. 1413957/=	Rs. 483040.75/=
No. of grants awarded in 1986	05	10	07	05	05	10
Sum allocated during 1986	Rs. 331370/=	Rs. 496801/=	Rs. 812,900/=	Rs. 409460/=	Rs. 273470/=	Rs. 123100/=
No. of grants completed	09	08	04	05	05	08
No. of grants withdrawn	-	00	01	-	-	06
No. of grants terminated	-	01	01	-	-	03
Copies of thesis (P.G) received	01	01	04	03	01	03
No. of registered for P.G Training during 1986	-	02	10	01	02	04
No. of RA's appointed during 1986	01	04	07	09	04	03

THE STATUS OF MEDICAL & VETERINARY SCIENCES
RESEARCH GRANTS DURING 1986

Year of award	Proposed duration	No. of grants in operation during 1986	Status of grants during 1986			
			Completed	Terminated	Withdrawn	Ongoing
1982	1 year	-	-	-	-	-
	2 years	-	-	-	-	-
	3 years	-	-	-	-	-
1983	1 year	-	-	-	-	-
	2 years	3	-	-	-	3
	3 years	3	1	-	-	2
1984	1 year	2	1	-	-	1
	2 years	3	2	-	-	1
	3 years	1	-	-	-	1
1985	1 year	3	1	-	-	2
	2 Years	6	-	-	-	6
	3 years	2	-	-	-	2
1986	1 year	4	-	-	-	4
	2 years	2	-	-	-	2
	3 years	1	-	-	-	1

MEDICAL & VETERINARY SCIENCES

Ref. No.	Name & Institution	Project Title	Year of Award	Duration	Initial Financial Allocation Es. cts.	Status during 1985
RGB/82/27	Dr(Mrs) N.V.I. Ratnatunga Dept. of Pathology Univ. of Peradeniya Peradeniya	Histopathology of chronic proliferative arteri. disease of limbs in the central province.	1982	3 years	18000.00	On going
RGB/82/28	Dr P.C.A. Ratnatunga Faculty of Medicine Univ. of Peradeniya Peradeniya.	A study into the feasibility of reconstructive arterial surgery in Sri Lankan patients.	1982	1 year	13859.00	On going
RG/83/29	Dr E.H. Karunanayake Dept. of Biochemistry Faculty of Medicine Colombo 8.	Biochemical, Pharmacological and Phytochemical study of Antidiabetic Medicinal plants of Sri Lanka.	1983	3 years	55500.00	Completed 35 -
RG/83/30	Dr A.T.W.P. Jayewardene 14, Albert Place Dehiwela. Dr C.G. Urugoda 385, Deans Road Colombo 10.	Measurements of Lung Function in Normal Sri Lankans.	1983	2 years	26000.00	On going (final report to be submitted).

Ref. No.	Name & Institution	Project Title	Year of Award	Duration	Initial Financial Allocation Rs. cts.	Status during 1985
RG/83/35	Dr (Mrs) M.C.P. Canagaratne Dept. of Biochemistry Faculty of Medicine Kynsey Road Colombo 8.	Urinary hydroxyproline excretion in patients with metastatic bone disease from breast cancer.		3 years	70500.00	On going
RG/83/40	Dr A.R. Mohamed Dr G.S. Peiris Veterinary Research Inst. Gannoruwa	A study of the infectious abortions in cattle, buffaloes and goats.	1983	2 years	35500.00	On going final report to be submitted.
RG/83/42	Dr D.D. Wanasinghe Veterinary Research Inst. Gannoruwa	Evaluation of Black Quarter Disease vaccine with a view to produce an improved vaccine.	1983	1 year	20500.00	Completed
RG/83/75	Prof. N. Sreeharan Dr K. Ranjadayalan Dept. of Medicine Univ. of Peradeniya Peradeniya.	The use of Momordica charantia (Bitter gourd) in Diabetes mellitus.	1983	1 year	10000.00	On going Final report to be submitted

Ref. No.	Name & Institution	Project Title	Year of Award	Duration	Initial Financial Allocation Rs. cts.	Status during 1985
RG/83/79	Prof. S.T. Fernando Department of Veterinary Para- Clinical studies Univ. of Peradeniya Peradeniya.	Collaborative programme in research and train- ing in the faculty of veterinary medicine & animal sciences. 1) Clinical Hormonal studies on the re- productive functions of indigenous buff- loes in Sri Lanka. 2) Cellular and humoral immune reactions of buffaloes to <u>Toxocara Vitulorum</u> 3) Buffaloes calf mor- tality due to bacteria and viruses.	1983	3 years	119860.00	On going
RG/84/M/2	Dr L.N.D. Abeygunawardene Health Education Bureau 2, Kynsey Road, Colombo 8.	A study of some factors influencing the high defaulter rate among leprosy patients in the health unit areas of Kalutara, Panadura & Moratuwa.	1984	1 year	22400.00	Completed
RG/84/M/3	Dr T.A. Kulatilaka Dr A.V.K.V.de Silva Epidemiology Unit 385, Deans Road Colombo 10	Socio-Medical aspect of traumatic injuries (Patients) treated at accident services General Hospital Colombo.	1984	1 year	18300.00	On going

Ref. No.	Name & Institution	Project Title	Year of Award	Duration	Initial Financial Allocation Rs. cts.	Status during 1986
RG/84/M/4	Dr Kamani Mendis Mr W. Abeywickrema Dept. of Parasitology Faculty of Medicine Kynsey Road Colombo 8	Biology, Bioeconomics and population genetics in relation to 'possible' <u>Anopheles culicifacies</u> species complex in Sri Lanka.	1984	2 year	36000.00	On going
RG/84/M/7	Dr(Mrs) L.I.M. Dharmawardene MOH Office Kiribathgoda Kelaniya Prof. G.P. Samarawickrama Dept. of Community Medicine, Univ. of Ruhuna	An investigation into the incidence and prevalence of pesticide poisoning in Matara and Hambantota Districts	1984	1 year	46500.00	On going
RG/84/V/1	Dr V.Y. Kuruwita Dr B.M.A.O. Perera Dr V.K. Gunawardene Dept. of Vet. Pre- Clinical studies Univ. of Peradeniya	Endocrinological and histological studies on pubertal developments in goats and post. partum oestrian activity in female goats.	1984	3 years	111960.00	On going
RG/84/V/2	Dr R. Wickremasinghe Veterinary Research Inst., Gannoruwa Peradeniya.	A survey of mortality in poultry in Sri- Lanka	1984	2 years	41000.00	Terminated

Ref. No.	Name & Institution	Project Title	Year of Award	Duration	Initial Financial Allocation Rs. cts.	Status during 1986
RG/84/V/3	Prof. E.A. Wijewanta Dr C.P. Kodikara Mrs H.M.S.S. Dep Faculty of Vet. Medicine & Animal Sciences, Univ. of Peradeniya.	Studies on bacterial aetiology of clinical and subclinical mastitis in goats.	1984	2 years	55000.00	Completed
RG/85/M/01	Dr. Ravindra Fernando Dept. of Forensic Medicine Fac. of Medicine Colombo 8.	A bibliography of publications on legal medicine and forensic sciences.	1985	1 year	9500.00	Completed
RG/85/M/02	Prof. C. Sivagnanasundram Prof. N. Sreeharan Mrs J. Jegatheesan Fac. of Medicine Univ. of Jaffna Jaffna	Study of the demographic socio-economic & epidemiological features in relations to the state of health of the Brahmin community in Jaffna.	1985	1 1/2 years	38000.00	On going Final report to be submitted
RG/85/M/03	Miss Sriyani Ekanayake Dept. of Parasitology Medical Research Inst. Colombo 8.	Studies on the prevalence of antibodies to Toxoplasma gondii among pregnant women in Sri Lanka	1985	1 year	22762.00	Completed

Ref. No.	Name & Institution	Project Title	Year of Award	Duration	Initial Financial Allocation Rs. cts.	Status during 1985
RG/85/M/04	Dr Diyanath Samarasinghe Fac. of Medicine Univ. of Colombo	Traditional therapists- Evaluation of present role and potential usefulness.	1985	2 years	71900.00	On going
RG/85/M/05	Dr(Mrs) M.C. Attapathu Medical Research Inst. Colombo 8.	Some aspects of pulmo- nary & systemic mycotic disease in Sri Lanka.	1985	2 years	98800.00	On going
RG/85/M/06	Dr(Mrs) T. Saravana- pavanathan Dept. of Pharmacology Univ. of Jaffna	A study of the aetiology of urinary calculi	1985	2 years	50000.00	On going
RG/85/M/07	Dr N.A. de S. Amaratunga Dental School Augusta Road, Peradeniya Dr(Mrs) K. Karaliedde Dr I.G. Premadasa Faculty of Medicine Univ. of Peradeniya	A study of epidemiolo- gical, clinical and bacteriological aspects relevant to treatment of cleft lip and palate and a feasibility study of a system of initial management of cleft lip and palate.	1985	2 years	77300.00	On going
RG/85/M/08	Dr(Mrs)G. Ponnampalam Medical Officer Maternity & Child Health Jaffna. Prof. C. Sivagnanasundram Fac. of Medicine Univ. of Jaffna Jaffna	Study of infant morta- lity and still-births in the Jaffna Municipal area.	1985	1½ years	15000.00	On going

Ref. No.	Name & Institution	Project Title	Year of Award	Duration	Initial Financial Allocation Rs. Cts.	Status during 1985
RG/85/M/09	Dr K. Weerasuriya Mr P.L.D.S. Perera Dept. of Pharmacology Fac. of Medicine Kynsey Road, Colombo 8	Pharmacokinetics and pharmacodynamics of propranolol in Sri Lankans	1985	1 year	3000.00	On going
RG/85/V/01	Dr(Miss) P. Abeynayake Prof. S.T. Fernando Fac. of Vet. Sciences Fac. of Vet. Medicine Univ. of Peradeniya Peradeniya	Effect of an antelmintic (benzimidazole) on Toxocara vitulorum in buffalo calves	1985	3 years	58000.00	On going
RG/85/V/02	Dr(Miss)C.P. Kodikara Fac. of Vet. Medicine & Animal Sciences Univ. of Peradeniya Peradeniya.	A study of bacteriological quality of producer milk.	1985	2 years	44400.00	On going
RG/85/V/04	Prof. S.G. de S. Wettimuny, Dept. of Veterinary Sciences Univ. of Peradeniya.	A study of Cerebrospinal nematodiasis in goats.	1985	3 years	172800.00	On going

Ref. No	Name/Institute	Project Title/Duration	Breakdown Finances	Initial Financial	Remarks
RG/86/M/1	Dr D.D. Karaliedde Dept. of Surgery Univ. of Peradeniya	Secretory immunoglobulins and the post-operative response in relation to nutritional status 1 year	Consumables (F) Consumables (L) Miscellaneous Total	22000.00 2500.00 5000.00 =====	On going
RG/86/M/2	Dr J.S.M. Peiris Dept. of Microbio- logy Univ. of Peradeniya	Humoral antibody response to Sniga toxin in Shigellosis. 1 year	Personnel (RA) Personnel (TA) Consumables (F) Consumables (L) Travel Miscellaneous Total	22800.00 10800.00 6400.00 6000.00 1000.00 3000.00 =====	On going
RG/86/M/3	Dr T. Vinayagamoorthy Dept. of Biochemistry FAC. of Medicine Univ. of Jaffna	Stability of R-plasmids (isolated from clinical sources and drinking water sources) in <u>Salmonella typhi, Shigella</u> <u>dysenteriae, E.coli and</u> <u>Klebsiella aerogenes</u> in nutritive and non nutritive media 2 years	Personnel (RA) Consumables (L) Total	45600.00 4400.00 =====	On going

Ref. No.	Name/Institute	Project Title/Duration	Remarks
G/86/M/4	Dr (Mrs) I.I. Angunawela Dept. of Pharmacology Medical School Univ. of Peradeniya	A prospective, study of the prescribing habits in the state sector 1 year	On going
RG/86/M/5	Dr (Mrs) L.N. Mendis Dept. of Microbiology Fac. of Medicine Univ. of Colombo	Type specificity and duration of actively and passively acquired immunity to Rotavirus 3 years	On going
RG/86/M/6	Dr U.N. Premaratne Dept. of Parasitology Fac. of Medicine Univ. of Colombo	Production of mono- clonal antibodies against microfilaria and infective harras (L3) of <u>Wuchereria</u> <u>bancrothi</u> 2 years	On going
RG/WHO/1	Mrs R.A. Jayewardene No. 1 Flower Avenue Colombo 7.	The social costs of malaria to settlers in the Mahaweli Development project, Sri Lanka	On going

The Status of Biological Science Research Grants During 1986

Year of Award	Proposed Duration	No. of grants in operation during 1986	Status of grants during 1986			
			Completed	Terminated	Withdrawn	Ongoing
1982	1 year	-	-	-	-	-
	2 years	-	-	-	-	-
	3 years	2	-	-	-	-
1983	1 year	-	-	-	-	-
	2 years	5	3	-	-	2
	3 years	1	-	-	-	1
1984	1 year	1	1	-	-	-
	2 years	3	-	-	-	3
	3 years	5	-	-	-	5
1985	1 year	5	2	-	1	2
	2 years	1	-	-	-	1
	3 years	6	-	1	-	5
1986	1 year	5	-	-	-	5
	2 years	4	-	-	-	4
	3 years	1	-	-	-	1

BIOLOGICAL SCIENCES

Ref. No.	Name & Institution	Project Title	Year of Award	Duration	Initial Financial Allocation Rs. cts	Status during 1986
RGB/82/11	Mr W.L.E. de Alwis 30 Hotel Road Mt. Lavinia.	Aspects of the ecology of Udawalawe National park	1982	3 years	60108.00	Final report to be submitted.
RGB/82/12	Dr H.G. Nandadasa Department of Zoology Univ. of Sri Jayewardenepura Nugegoda.	Microbial production of ethanol from cellulose.	1982	3 years	61840.00	Completed.
RGB/82/13	Dr J. Jinadasa Department of Zoology Univ. of Sri Jayewardenepura Nugegoda.	Productivity of the Bolgoda Lagoon.	1982	3 years	45690.00	Final report to be submitted.
RGB/82/62	Prof. W.E. Ratnayake Department of Zoology Univ. of Sri Jayewardenepura Nugegoda.	To study the genetic proper- ties of <i>Culex pipiens fatigans</i> Wiedmann (<i>C. quinquefasciatus</i> , say) males for possible use in its control.	1982	3 years	128970.00	Completed.
RG/83/06	Prof. M.A. Pemadasa Mr P.S.M. Sirisena Department of Botany University of Ruhuna Matara.	Taxonomy & Ecology of Kekana- dura rain forest reserve.	1983	2 years	67000.00	Completed.
RG/83/08	Dr K. Jayaseelan Department of Biochemistry University of Jaffna Jaffna.	Single Cell Proteins	1983	2 years	26200.00	Completed.

Ref. No.	Name & Institution	Project Title	Year of	Duration	Initial Financial Allocation Rs. cts	Status during 1986
RG/83/11	Dr N.K.B. Adikaram Department of Botany University of Peradeniya Peradeniya.	Latent infection of fruits and vegetables, its physiological basis and possible control measures.	1983	3 years	58200.00	On-going
RG/83/12	Prof. U.Coomaraswamy Department of Botany Eastern University of Sri Lanka Chenkaladi.	Microbiological studies on the forest soils of the dry zone (Batticaloa District) of Sri Lanka.	1983	3 years	113460.00	On-going
RG/83/13	Prof. M.D. Dasanayake Dr I.A.U.N.Gunatilleke Department of Botany University of Peradeniya Peradeniya.	Vegetation studies of some mechanically logged areas in Sinharaja.	1983	3 years	161160.00	On-going
RG/83/14	Dr S.W. Kotagama The Open University Maradana.	Status, Ecology & Biology of the Avian Fauna in the Sinharaja MAB reserve.	1983	3 years	82255.00	Final report to be submitted.
RG/83/15	Dr J.P. Edirisinghe Department of Zoology University of Peradeniya Peradeniya.	Biology and the integrated control of the brinjal pod-borer <u>Leucinodes orbanalis</u> (Lepidoptera pyralidae)	1983	3 years	62610.00	On-going
RG/83/16	Prof. V.K. Ganesalingam Department of Zoology University of Jaffna Jaffna.	Suppression of ovarian development in insects of stored products, fed with seeds of local plants.	1983	2 years	52440.00	On-going
RG/83/69	Dr S. Widanapathirana Department of Botany University of Kelaniya Kelaniya.	Microbio-geochemical activities in forest soils in Sri Lanka with special reference to mineral cycling and Nitrogen transformation.	1983	2 years	115000.00	Final report to be submitted.

Ref. No.	Name & Institution	Project Title	Year of Award	Duration	Initial Financial Allocation Rs. cts	Status during 1986
RG/83/70	Dr P. Shivanathan Mr R.S.V. de Silva Plant Quarantine Office C.A.R.I. Gannoruwa.	To develop methods of detection and exclusion of papaw viruses and vectors in plant imports.	1983	3 years	114000.00	On-going
RG/83/71	Dr S.A. Gunasekera Department of Botany University of Kelaniya Kelaniya.	Survey of fungi associated with water hyacinth in Sri Lanka with the view of utilising them as bio-control agents.	1983	3 years	65210.00	On-going
RG/83/83	Dr Neelakanthi Gunawardene Department of Chemistry University of Kelaniya Kelaniya.	Development of a means of luring agricultural insect pests in Sri Lanka by use of pheromones.	1983	2 years	45000.00	Completed
RG/84/B/1	Prof. W.E. Ratnayake Department of Zoology University of Sri Jayewardenepura Nugegoda.	A further study of the mutants of <u>Drosophila ananassae</u> (isolated in the earlier project).	1984	3 years	60460.00	On-going
RG/84/B/2	Dr J. Jinadasa Department of Zoology University of Sri Jayewardenepura Nugegoda.	Biology and the fishery of the pony fishes of the Bolgoda Lagoon, Sri Lanka.	1984	3 years	70560.00	On-going
RG/84/B/3	Prof. M.A. Pemadasa Mr S. Hettiarachchi Department of Botany University of Ruhuna Matara.	Ecology of soil microfungi in the Kekanadura rain forest reserve.	1984	3 years	94500.00	On-going

Ref. No.	Name & Institution	Project Title	Year of Award	Duration	Initial Financial Allocation Rs. cts	Status during 1986
RG/84/B/5	Dr J.P. Edirisinghe Department of Zoology University of Peradeniya Peradeniya.	Studies on the field release of the parasites <u>Evania appendigaster</u> and <u>Tetrastichus hagenowii</u> for the control of <u>Periplaneta americana</u> , the American cockroach.	1984	3 years	73870.00	On-going
RG/84/B/7	Rev. Dr L.H. Cramer Department of Botany Eastern University of Sri Lanka Chenkaladi.	Taxonomic studies on the flora of the southern part of Polonnaruwa District.	1984	3 years	82023.00	On-going
RG/84/B/8	Dr J.P.N.R. Chandrasena Department of Botany University of Colombo Colombo.	A survey of paddy field weeds in the wet zone of Sri Lanka.	1984	1 year	11700.00	Completed
RG/84/B/9	Dr M.S.M. Sideek Mr J.M.P. Jayasinghe NARA Mattakkuliya.	Studies on the recruitment mechanism of commercially important penaeid prawns in Negambo.	1984	2 years	32888.00	On-going
RG/84/B/10	Mr B.D.L. Joseph Mr N.M. Moiyadeen NARA Mattakkuliya.	The ecology of commercially exploitable <u>Holothuroides</u> on the Northwest coast (Puttalam to Mannar) with the purpose of conserving and rehabilitating the fisheries already existing there.	1984	2 years	50390.00	On-going
RG/84/B/11	Mr B.D.L. Joseph Mrs C.Amarasiri NARA Mattakkuliya.	Study of fishery biology and aspects of population dynamics of skipjack tuna off west and south west coastal waters of Sri Lanka.	1984	2 years	36200.00	On-going

Ref. No.	Name & Institution	Project Title	Year of Award	Duration	Initial Financial Allocation Rs. cts	Status during 1986
RG/85/B/1	Dr J.P.N.R. Chandrasena Department of Botany University of Colombo Colombo.	A survey of paddy-field weeds in the wet zone of Sri Lanka: Stage II - Kalutara and Galle Districts.	1985	1 year	21680.00	Completed
RG/85/B/2	Dr (Mrs) M.V.E. Attygalle Department of Zoology University of Sri Jayewar- denepura Nugegoda.	Study of blood physiological properties in five species of cultivated fish (3 tilapia sp. common carp and grass carp).	1985	3 years	79700.00	On-going
RG/85/B/3	Dr A.B. Samarakoon Department of Botany University of Colombo Colombo.	Salinity stress and plant growth, some studies on sea shore plants.	1985	1 year	17000.00	On-going
RG/85/B/4	Prof.K. Theivendirarajah Department of Botany University of Jaffna Jaffna.	Cultivation of baker's yeast and fodder yeast in palmyrah palm sap and in sugar cane molasses.	1985	1 year	34300.00	Completed
RG/85/B/5	Dr J. Jinadasa Department of Zoology University of Sri Jayewar- denepura Nugegoda. Mrs S.C. Jayamanne NARA Mattakkuliya.	Bionomics of mud crab fishery in Negambo Lagoon.	1985	3 years	57900.00	On-going
RG/85/B/6	Dr G.F. Rajendram Department of Zoology University of Jaffna Jaffna.	Studies on the taxonomy, biology and distribution of the mosquito fauna (<u>Diptera</u> <u>Culicidae</u>) in Jaffna.	1985	3 years	98400.00	Terminated

Ref. No.	Name & Institution	Project Title	Year of Award	Duration	Initial Financial Allocation Rs. cts	Status during 1986
RG/85/B/8	Dr A.H.M. Jayasuriya National Herbarium P.O. Box 15 Peradeniya.	Systematic investigation of the plant family Discoraceae in Sri Lanka.	1985	1 year	45000.00	On-going
RG/85/B/9	Dr K.S.P. Kalpage Antifilaria Campaign Hotel Road Mt. Lavinia. Miss V.L. Gunatilaka SACEP 5 Amarasekara Mawatha Colombo 5.	A study of the mosquito fauna of the Sinharaja MAB reserve with special reference to their breeding biology.	1985	2 years	36457.00	On-going
RG/85/B/11	Dr S. Kandiah Department of Botany University of Jaffna Jaffna.	Evaluation and establishment of advanced propagation and cultural techniques for fruit tree selections from Sri Lanka.	1985	3 years	132800.00	On-going
RG/85/B/12	Dr K.H.G.M. de Silva Department of Zoology University of Peradeniya Peradeniya.	Pond culture of snake heads (Ophiocephalus spp.)	1985	3 years	70000.00	On-going
RG/85/B/13	Dr R.L.C. Wijesundera Department of Botany University of Colombo Colombo.	Studies on Colletotrichum leaf diseases in Rubber.	1985	1 year	12500.00	On-going
RG/86/B/1	Dr K. Chitravadivelu Department of Zoology University of Jaffna Jaffna.	Biology of prawns in the Jaffna Lagoon and the evaluation of the performance of the gear used in prawn fishery.	1986	2 years	60540.00	On-going

Ref. No.	Name & Institution	Project Title	Year of Award	Duration	Initial Financial Allocation Rs. cts	Status during 1986
RG/86/B/2	Dr (Mrs) P.K. de Silva Department of Zoology University of Peradeniya Peradeniya.	Studies on the semi-intensive and intensive pond and tank culture of Tor khudree (teleostei: Cyprinidae).	1986	3 years	86400.00	On-going
RG/86/B/3	Dr (Mrs) R.M. Herath Department of Botany University of Kelaniya Kelaniya.	Floristic and Palynological studies at Sigiriya.	1986	2 years	34800.00	On-going
RG/86/B/4	Dr J.P.N.R. Chandrasena Department of Botany University of Colombo Colombo.	Survey of rice-field weeds of Sri Lanka - Stage II.	1986	1 year	23400.00	On-going
RG/86/B/5	Dr H.N. de Silva Miss T.D. Silva Department of Botany University of Colombo Colombo.	Characterization of Sri Lankan banana germplasm based on morphological, vegetative and biochemical characters.	1986	1 year	21645.00	On-going
RG/86/B/6	Dr R.L.C. Wijesundera Department of Botany University of Colombo Colombo.	Studies on Colletotrichum leaf disease in rubber.	1986	1 year	18500.00	On-going
RG/86/B/7	Dr A.B. Samarakoon Department of Botany University of Colombo Colombo.	Studies on the Biology of Mangroves.	1986	2 years	86280.00	On-going
RG/86/B/8	Dr M.P. de Silva Department of Botany University of Ruhuna Matara.	Growth phenology of tropical trees in relation to cambial activity.	1986	2 years	75700.00	On-going

Ref. No.	Name & Institution	Project Title	Year of Award	Duration	Initial Financial Allocation Rs. cts	Status during 1986
RG/86/B/9	Dr Rohan Rajapakse Department of Agronomy University of Ruhuna Mapalana.	Impact of native parasites on the rice leaf folder <u>Cnaphalacrocia medinalis.</u>	1986	1 year	25000.00	On-going
RG/86/B/10	Dr L. Pinto Colombo Regional Center Open University Maradana.	Part I: Seasonality in the utilization of Mangroves and adjoining seagrasses by juvenile fish and Crusta- ceans in Negambo Lagoon.	1986	1 year	64536.00	On-going

The Status of Physical & Engineering Research Grants during 1986

Year of Award	Proposed durations	No of grants in operation during '86	Status of grants during 1986			
			Completed	Terminated	Withdrawn	On going
1983	1 year	1	1	-	-	-
	2 years	-	-	-	-	-
	3 years	-	-	-	-	-
1984	1 year	1	1	-	-	-
	2 years	1	1	-	-	-
	3 years	-	-	-	-	-
1985	1 year	3	2	-	-	1
	2 years	2	-	-	-	2
	3 years	-	-	-	-	-
1986	1 year	1	-	-	-	1
	2 years	3	-	-	-	3
	3 years	1	-	-	-	1

PHYSICAL & ENGINEERING SCIENCES

Ref. No.	Name & Institution	Project Title, Duration	Initial Financial Allocated Rs. Cts.	Status during 1986
RG/83/81	Dr. K.T.L. de Silva Dr. T.R. Ariyaratne Dept. of Physics Univ. of Colombo.	Photoelectrochemical Solar Energy Conversion 1 year	48290.00	Completed
RG/84/P/1	Dr. T.R. Ariyaratne Dept. of Physics, Univ. of Colombo.	Molecular Description Mass Spectroscopy. 1 year	45000.00	Completed
RG/84/E/2	Dr. L.N. Pussegoda Dept. of Mechanical Engineering, Univ. of Peradeniya.	Effect of the mode of prior deformation on the subsequent mechanical properties of two phase metals (Continuation of work done under RG/82/35) - 2 years	10710.00	Completed
RG/85/P/01	Prof. O.W. Jayaratne Dept. of Physics, Univ. of Colombo, Colombo.	Some aspects of atmospheric electricity in Sri Lanka (a) Diurnal and annual variations of earth's vertical electric field (b) the 'sunrise effect' (c) possible correlations with plant growth. - 2 years	12405.00	On going
RG/85/P/02	Dr. K.T.L. de Silva Dr. T.R. Ariyaratne Dept. of Physics, Univ. of Colombo.	Photoelectrochemical solar energy conversion 1 year	31500.00	Completed

Ref. No.	Name & Institution	Project Title/Duration	Initial Financial Alloca. Rs. Cts	Status during 1985
RG/85/E/01	Dr. C. Kariyawasam Dept. of Civil Engi. Univ. of Moratuwa.	Evaluation of hydropower potential in existing irrigation schemes in Sri Lanka. 1 year	6075.00	On going
RG/85/E/02	Mr. W.W.K.L. Mendis Mr. S.E.G. Jayamaha C.C.C. (E) Ltd. P.O. Box 1191, Colombo.	Automation of the TRI-CCC fluid bed tea drier. 2 years	163760.00	On going
RG/85/E/03	Mr. N. Jayawardene 51, Sri Dammadara Mw. Ratmalana.	Access-Mobility as a locational factor in industrial location with special reference to the Colombo Urban Area and the Area of Authority of the Greater Colombo Economic Commission. 2 years	61000.00	On going

PHYSICAL & ENGINEERING SCIENCES

Ref. No.	Name/Institution	Project Title/Duration	Initial Financial Alloca. Rs. Cts.	Remarks
RG/86/E/1	Dr. C. Kariyawasam Dept. of Civil Engi. Univ. of Moratuwa.	Hydrological impact of rehabilitation of minor tanks. 1 year	9850.00	Ongoing
RG/86/E/2	Dr. L.N.Pusegoda Mr. K.E.D. Sumanasiri Dept. of Mech. Engi. Univ. of Peradeniya.	Prediction of the stress-strain curve of a cold twisted circular bar and compare with experimental results. 2 years	15800.00	Ongoing
RG/86/P/1	Prof. K. Tennakoon Dept. of Physics, Univ. of Ruhuna, Matara.	Semiconductor materials for chemical storage of solar energy 2 years	45600.00	Ongoing
RG/86/P/2	Prof. K.G.A. Dehanayake Prof. C.B. Dissanayake Dept. of Geology, Univ. of Peradeniya.	Petrological, sedimentological and Geochemical studies of Precambrian iron occurrences of Sri Lanka. 2 years	195200.00	Ongoing
RG/86/P/3	Dr. D.A. Tantrigoda Dept. of Physics, Univ. of Sri Jayewardenepura Nugegoda.	A gravity and magnetic study of some selected regions in Sri Lanka 3 years.	122700.00	Ongoing

THE STATUS OF RESEARCH GRANTS IN SOCIAL SCIENCE RESEARCH DURING 1986

Year of Award	Proposed Duration	No. of grants in operation during 1986	Status of grants during 1986			
			Completed	Terminated	Withdrawn	Ongoing
1982	1 yr.	1	-	1	-	-
1983	1 yr.	1	-	-	-	1
	2 yrs.	2	-	-	-	2
1984 RG grants	1 yr.	12	2	1	1	8
	2 yrs.	1	-	-	-	1
1984 SAREC grants	1 yr.	3	2	1	-	-
	2 yrs.	3	1	-	-	2
1985	1 yr.	5	2	-	1	2
	1½ yrs.	1	-	-	-	1
	2 yrs.	3	1	-	1	1
1986	1 yr.	5	-	-	1	4
	2 yrs.	2	-	-	1	1
	3 yrs.	3	-	-	1	2

SOCIAL SCIENCE RESEARCH GRANTS DURING 1986

Ref.No.	Name & Institution	Title of Project	Year of Award	Proposed Duration	Financial Allocation	Status during 1986
RCB/82/44	Mr. U.H. Palihakkara No. 14, Visaka Rd., Colombo 4.	Resource Allocation in Health Administration- Mainly Financial	1982	1 year	Rs.Cts. 4000.00	Terminated
RCB/83/46	Mrs. Y. Balapatabendi 2/49, Mahalwarawa Pannipitiya (Ph.D. Student) Fac.of Education Univ.of Colombo	An inquiry into the Post-Secondary Non- University Education in Sri Lanka	1983	2 years	12000.00	Ongoing
RCB/83/51	Mrs. A.K. Peerie 'Dilantha' Hokandara Road Talawatugoda. (M.Phil. Student) Fac.of Education Univ.of Colombo	Measures that may be adopted under the special educational programme for the socialisation of the educable mentally handi- capped children of school going age in Sri Lanka	1983	1 year	2750.00	Ongoing
RCB/83/62	Mr S. Berugoda Deputy Surveyor- General Surveyor General's Office P.O.Box 506 Colombo.	Undivided lands in Sri Lanka and land productivity	1983	2 years	21930.00	Ongoing

Ref.No.	Name & Institution	Title of Project	Year of Award	Proposed Duration	Financial Allocation	Status during 1986
RG/84/SS/2	Mrs. A.R.P.Gunawardene 70, Jambugasumulla Road Nugegoda. (Post-graduate student) Fac.of Education Univ.of Colombo.	A critical study of the non-formal educational activities of the Sarvodaya Movement in some selected villages of Sri Lanka.	1984	1 year	Rs.Cts. 2500.00	Ongoing
RG/84/SS/3	Mrs. S. Senadeera 86/41, Kandy View Garden George E.de Silva Mawatha Kandy. (Ph.D. Student -Edu. University of Colombo)	Arts education curriculum in the universities of Sri Lanka: its reorganization & innovations.	1984	2 years	3500.00	Ongoing
RG/84/SS/5	Mr M.M.Jayawardana Programme Asst. Economics & Project Division, Dept. of Agriculture Peradeniya. (M.A. Student-Econ. Univ.of Peradeniya)	Development feasibilities of the villages under minor tanks in Sri Lanka	1984	1 year	3500.00	Ongoing
RG/84/SS/6	Mrs.Himalli Wanigapura 5/21, Sulaiman Terrace Colombo 5. (M.Phil.Student-Edu. Univ.of Colombo)	An evaluation of the vocational training programme of the labour department of Sri Lanka as an educational programme for the effective utilization of human resources pertinently and as required (in Sinhala)	1984	1 year	2500.00	Withdrawn

Ref. No.	Name & Institution	Title of Project	Year of Award	Proposed Duration	Financial Allocation Rs.	Status during 1986
RG/84/SS/7	Mr S.R. Hettihewa 'Hevana' Raigamtuduwa Bandaragama. (M.Phil.student-Edu. Univ.of Colombo)	An investigative study of the nature of the informal education imparted to youth by youth societies in Sri Lanka (in Sinhala)	1984	1 year	2500.00	Ongoing
RG/84/SS/8	Mrs. K.P.K.Wimala- dharma 'Swasthika' Aegiriya Gampaha. (M.Phil.student-Edu. Univ.of Colombo)	A study of the wastage of human resources in the field of education in Sri Lanka and strategy for its prevention;with special reference to the district of Anuradhapura. (in Sinhala)	1984	1 year	2500.00	Ongoing
RG/84/SS/9	Mr P.M.U. Pathiraja Walauwatta Kudagalgamuwa Kurunegala. (M.Phil.student-Edu. Univ.of Colombo)	An analytical study of the vocational educational segment in the syllabus of the training courses (Sinhala medium) in the teacher training colleges in Sri Lanka (in Sinhala)	1984	1 year	2500.00	Ongoing
RG/84/SS/12	Mrs.W.A. Charlotte 662A, Eriyawatiya Kelaniya. (M.Phil.student-Edu. Univ.of Colombo)	An investigation into the influence of the school environment on the educational achievements of G.C.E.(Advanced Level) students and its consequences; with special reference to the district of Gampaha (in Sinhala)	1984	1 year	2500.00	Completed

Ref. No.	Name & Institution	Title of Project	Year of Award	Proposed Duration	Financial Allocation	Status during 1986
RG/84/SS/13	Mr. S.P. Liyanage 'Nuwana' Mapalana Kamburupitiya (M.Phil. student- Edu. Univ. of Colombo)	A study of the adult education programme in the Mataara district of Sri Lanka (in Sinhala)	1984	1 year	Rs. 2500.00	Terminated
RG/84/SS/14	Mrs. N.P. Senda- nayake 'Sensni' Galpatha Kalutara. (M.Phil. student- Edu. Univ. of Colombo)	A study of the educational problems of mentally handicapped children in Sri Lanka and the development of their motor ability - a study in relation to the Sukhitha School at Galpatha for mentally handicapped children and the School for Special Children at Chitra Lane, Colombo 5 (in Sinhala)	1984	1 year	Rs. 2500.00	Ongoing
RG/84/SS/15	Mrs. T.C.C. Jeewa- ratne 32/8, Sapumal Pedesa Rajagiriya. (M. Phil. student- Edu. Univ. of Colombo)	A study of the awareness of Secondary school children and teachers to educational and behavioural objectives considered important in an education system (in Sinhala)	1984	1 year	Rs. 2500.00 + additional sum of Rs. 1200.00	Completed

Ref. No.	Name & Institution	Title of Project	Year of Award	Proposed Duration	Financial Allocation	Status during 1985
NC/84/SS/16	Dr. S. Natarasachchi "Kangadri" Kalshikya Kolosmilla, (M.Phil. student-Edu, Univ. of Colombo)	An analytical study of the administrative role of the principal in Sinhala medium central colleges and senior schools in Sri Lanka (with special reference to the Hambantota district) (in Sinhala)	1984	1 year	Rs. 2500.00	Ongoing
NC/84/SS/17	Mrs. Gotham Fernando "Yamuna" Parakrama Road Tangalle. (M.Phil. student-Edu, Univ. of Colombo)	Population Education in school curricular	1984	1 year	Rs. 2500.00	Ongoing
SAREC/13/SSR/1	Dr. A.L.H. Perera No. 9, Hoque Road Dehiwala. Head, Techno Economics Dept. & Principal Research Engineer, NERD Centre of Sri Lanka Egala, Je-ela.	Process of Innovation in Sri Lanka	1984	1 year	Rs. 7500.00	Terminated

Ref.No.	Name & Institution	Title of Project	Year of Award	Proposed Duration	Financial Allocation	Status during 1986
SAREC/13/SSR/4	Mr. B. Gajameragedara Lecturer Dept. of History Univ. of Peradeniya Peradeniya.	Development Strategies Foreign Aid and foreign Policy of Sri Lanka since 1955	1984 commencement of the project on 1.1.85	2 yrs.	Rs. 10000.00	Ongoing
SAREC/13/SSR/5	Mr. P. Withanage, Asst. Lecturer, Dept. of Economics, Ruhuna University College, Matara.	Agricultural modernization and socio-economic changes with reference to the Hambantota District (in Sinhala)	1984	2 yrs.	Rs. 10000.00	Completed
SAREC/13/SSR/6	Dr. C. Sivayoganathan Lecturer, Dept. of Agric. Econ. & Extension, Fac. of Agriculture Univ. of Peradeniya Peradeniya. Dr. K. Kallapathy Lecturer Dept. of Agric. Chemistry Fac. of Agriculture Univ. of Peradeniya Peradeniya.	Household utilization of vegetables: A study on knowledge, attitudes and nutrient losses	1984	1 yr.	Rs. 25000.00	Completed

Ref. No.	Name & Institution	Title of Project	Year of Award	Proposed Duration	Financial Allocation	Status during 1986
SAREC/13/SSR/7	Prof. W.D. Laksman Prof. of Economics Dept. of Economics Univ. of Colombo Colombo.	Industrial Development in Sri Lanka 1980-82: Policies, Problems & Socio-Economic Impacts	1984	2 yrs.	Rs. 25000.00	Ongoing
SAREC/13/SSR/8	Prof. A. Liyana- gamage No. 63/1, Pagoda Rd. Nugegoda, Prof. of History Univ. of Kelaniya Kelaniya.	Public Health and Concepts and Systems of Sanitation in Buddhist Monastic Contexts in Ancient Sri Lanka A Historical and Archaeo- logical Survey	1984	1 yr.	Rs. 7500.00	Completed
RG/85/SS/1	Mr. L. Ranwatta Circuit Inspector Kangikkuliya Mugunuwatawana Malawata.	An investigation into the supervision of teaching in the schools in Sri Lanka to highlight its weakness (in Sinhala)	1985	1 yr.	Rs. 5410.00	Ongoing
RG/85/SS/2	Mr. M.B. Wijedasa Asst. Lecturer Dept. of Geography Univ. of Kelaniya Kelaniya.	A study of 'Integrated Rural Development' in Sri Lanka - The Kandyan Peasant- try Commission (in Sinhala)	1985	1 yr.	Rs. 3000.00	Completed

Ref. No.	Name & Institution	Title of Project	Year of Award	Proposed Duration	Financial Allocation	Status during 1986
RG/85/SS/3	Mrs. Vijayalatha Balasuriya 235, Malagala Padukka. Asst. teacher M. Phil Student Univ. of Colombo	A study of the upper primary (grade 3-5) education in Sri Lanka (in Sinhala)	1985	2 yrs.	Rs. 3663.00	Withdrawn
RG/85/SS/4	Mr. K.G. Guruge Asst. Lecturer Dept. of Geography Univ. of Kelaniya Kelaniya.	A study of the influence of tourism on the traditional fishing villages in the western coast of Sri Lanka (in Sinhala)	1985	1 yr. 6 mths.	5000.00	Ongoing
RG/85/SS/5	Mrs. Padma Dattatota 132, Municipal Council Quarters, Anuradhapura. Asst. teacher A/Balika Maha Vidyalaya Anuradhapura.	To study the socio-economic factors responsible for the education in Sri Lanka being examination oriented (in Sinhala)	1985	1 yr.	5000.00	Ongoing
AS/85/SS/6	Mr. A.D.S. Abeyackera Ihala Kumbura Madelgamuwa Gampaha. Graduate teacher Minu/Udugampola M.V., (M. Phil Student Univ. of Colombo)	The professional or carrier aspirations of graduates in Sri Lankan universities (in Sinhala)	1985	1 yr.	5000.00	withdrawn

Ref. No.	Name & Institution	Title of Project	Year of Award	Proposed Duration	Financial Allocation	Status during 1986
RG/85/SS/7	Mr. W. Chandrasiri 'Indunil', Koswatta Road Polgasovita. Plan Implementation Officer, Min. of Plan Implementation (M.A. Student, Univ. of Sri Jayewar- denepura)	A community development programme for shanty settle- ments in the city of Colombo; An action cum research programme	1985	2 yrs.	Rs. 5000.00	Ongoing
RG/85/SS/8	Mr. R.H.H.O. Ranasinghe Planning Officer High Schools Div., Ministry of Education Malay St., Colombo 2.	A study of the achievements of the population educational concept through the subject of social study by students completing their junior secondary education. (in Sinhala)	1985	2 yrs.	10,730.00	Completed
RG/85/SS/9	Mr. W. Wickremasinghe 'Vikuruvilla', Ve-Oya Yatyantota.	An evaluation of the service centres of the 1/4 area of the Mahaveli Development Scheme (in Sinhala)	1985	1 yr.	4,400.00	Completed

Ref.No.	Name & Institution	Title of Project	Year of Award	Proposed Duration	Financial Allocation	Status during 1986
RG/86/SS/1	Mrs.C.W. Divisekera Lecturer in Economics Dudley Senanayake Technical College Warakapola.	The Impact of State Industrial Policy on the Economic Development of Sri Lanka 1946-1982	1986	3 years	Rs. 30,000.00	Ongoing
CG/86/SS/2	Dr. S.T. Hettige Lecturer Dept. of Sociology Univ. of Colombo Colombo.	Social network and exchange of favours among higher officials in formal organizations in Sri Lanka	1986	1 year	Rs. 20,900.00	Ongoing
CG/86/SS/3	Mr K. Arumugam Mr S.T.B.Rajeswaran Lecturers Dept. of Geography Univ. of Jaffna Jaffna.	Housing Problems in eastern coast of Jaffna Peninsula. Special reference on fishing villages.	1986	3 years	Rs. 70,250.00	Withdrawn
CG/86/SS/4	Miss A. Srinathamby Temporary Asst. Lecturer Dept. of Economics Univ. of Jaffna Jaffna.	Vegetable production and marketing in Jaffna district.	1986	3 year	Rs. 9,900.00	Ongoing
CG/86/SS/5	Dr.L.S.Pereira Mr.S. Rupasinghe Lecturers Fac. of Education Univ. of Colombo Colombo.	An assessment of the academic abilities of students studying at junior secondary level in Sri Lanka.	1986	1 year	Rs. 15,600.00	Ongoing

Grant No.	Name & Institution	Title of Project	Year of Award	Proposed Duration	Financial Allocation	Status during 1986
RG/86/SS/6	Mr. M.K.D. Dharmadasa Lecturer Training College Maharagama.	The progress of blind students in special schools and the uniform education system- a comparative assessment. (in sinhala) (2 years)	1986	2 years	Rs. 9,500.00	Ongoing
RG/86/SS/7	Mrs. Ranika Ratnayake Asst. Lecturer Dept. of Geography Kelaniya University Kelaniya.	Difference in family sizes in villages and urban societies in Sri Lanka - analysis (in sinhala) (1 year)	1986	1 year	Rs. 4,000.00	Ongoing
RG/86/SS/8	Mr. M.K. Dangalle Mr. M.B. Wijedasa Asst. Lecturers Dept. of Geography Kelaniya University Kelaniya.	Comparative study of 'common services' in selected 'estate' settlement and 'village' settlement in central Sri Lanka. (in Sinhala) (1 year)	1986	1 year	Rs. 8,000.00	Ongoing
RG/86/SS/9	Dr. M.J.A. Cooray Head of the Dept. of Law Univ. of Colombo Colombo.	A preliminary survey of the law relating to the Police force in Sri Lanka (1 year)	1986	1 year	Rs. 3,500.00	Withdrawn
RG/86/SS/10	Miss P. Sivapathasundaram Temporary Tutor Univ. of Jaffna Jaffna.	Land and water potential and utilisation in the Jaffna peninsula-Sri Lanka (2 years)	1986	2 years	Rs. 9,000.00	Withdrawn

THE STATUS OF CHEMICAL SCIENCES RESEARCH GRANTS DURING 1986

Year of Award	Proposed Duration	No. of Grants	Status during 1986			
			Completed	Terminated	Continuing	Withdrawn
1981	1 yr.	-	-	-	-	-
	2 yrs.	1	-	-	-	-
	3 yrs.	2	-	-	-	-
1982	1 yr.	1	-	-	-	-
	2 yrs.	1	-	-	-	-
	3 yrs.	4	-	-	-	-
1983	1 yr.	-	-	-	-	-
	2 yrs.	4	1	-	1	-
	3 yrs.	6	1	-	3	-
1984	1 yr.	1	-	-	-	-
	2 yrs.	2	-	-	2	-
	3 yrs.	6	-	-	6	-
1985	1 yr.	2	-	-	2	-
	2 yrs.	4	-	-	4	-
	3 yrs.	9	-	1	8	-
1986	1 yr.	-	-	-	-	-
	2 yrs.	2	-	2	2	-
	3 yrs.	5	-	1	4	-

CHEMICAL SCIENCES

Ref. No.	Name and Institution	Title	Financial allocation (Rs)	Duration	Status during 1986
RG/81/20	Dr. C.E. Dissanayake Dept. of Geology Univ. of Peradeniya	"The environmental Geochemistry of well-water in and around Kandy"	50240/=	3 years	Completed
RGB/81/23	Dr. E.H. Karunanayake Dept. of Biochemistry Fac. of Medicine	"Study of the metabolism and mode of action of the orally hypoglycaemic principle(s) of <u>Scalasia reticulosa L.</u> "	23160/=	3 years	Completed
RG/82/23	Dr. B.M.R. Bandara Dept. of Chemistry Univ. of Peradeniya	"Chemical investigation of the marine flora of Sri Lanka with view to isolation of biologically industrially useful compounds"	132740/=	3 years	On-going
RG/83/20	Dr.(Mrs)L.S.R. Arambewela CISIR Colombo 7.	"phytochemical studies on some selected medicinal plants of Sri Lanka with a view to enhance their economic value"	62960/=	3 years	Completed
RG/83/22	Prof. S. Mageswaran Dr. K. Jayaseelan Dept. of Chemistry Univ. of Jaffna	"Chemistry and Biochemistry of palmyrah products"	75210/=	3 years	On-going
RG/83/23	Dr(Mrs)R. Mageswaran Dept. of Chemistry Univ. of Jaffna	"Chemical investigation of seaweeds"	67710/=	3 years	Completed
RG/83/24	Dr. E.D. de Silva Dr. L.M.V. Tillekeratne Dept. of Chemistry Univ. of Colombo	"Structural elucidation and biological activity of marine natural products"	127700/=	3 years	On-going

Ref No.	Name and Institution	Title	Financial Allocation (Rs)	Proposed Duration	Status during 1986
RG/83/25	Dr (Mrs) T.M.S. Atukorala Dept. of Biochemistry Univ. of Colombo	"Evaluation of vitamin A, β carotene zinc and copper contents of some rural and urban diets"	45000/=	2 years	Completed
RG/83/26	Dr J.S.H.Q. Perera Dept. of Chemistry Univ. of Peradeniya	"Chemical transformation of natural rubber"	50690/=	3 years	On-going
RG/83/73	Prof. Tuley de Silva Dept. of Chemistry Univ. of Sri Jayewardenepura Nugegoda	"An addendum to Ayurveda Pharmacoposia"	40240/=	2 years	On-going
RG/83/74	Prof. M. Mahendran Dr. W.D. Ratnasooriya Dept. of Chemistry Univ. of Colombo	"Studies on the effects of extracts of Sri Lanka soft corals, sponges and marine algae on fertility in animals"	131460/=	3 years	On-going
RG/84/C/2	Prof. Tuley de Silva Dept. of Chemistry Univ. of Sri Jayewardenepura Nugegoda	"The Chemistry and Pharmacognosy of the substitutes drugs and adulterants of Ayurvedic medicinal plants"	33240/=	2 years	On-going
RG/84/C/3	Mr D.T. Jayamanna Division of Occupational Hygiene Dept. of Labour Colombo 5.	"Investigation of health hazards due to Chromium in exposed workers of leather tanning and electroplating industries and role of Chromium in the effluents"	57460/=	3 years	On-going
RG/84/C/5	Prof. Sotheeswaran Prof. A.A.L. Gunatilleka Dept. of Chemistry Univ. of Peradeniya	"Economically useful plants of Sri Lanka"	39960/=	3 years	On-going

Ref. No.	Name and Identification	Title	Financial Allocation (Rs)	Proposed Duration	Status during 1986
RG/84/C/6	Prof. G.P. Wannigama Prof. S. Sotheeswaran Dr B.M.R. Bandara Dr E.L.V.V. Kerunaratna Dept. of Chemistry Univ. of Peradeniya	"Alkaloides, Coumarins, triterapenes and other biologically active principles of some plant families of Sri Lanka".	164460/=	3 years	On-going
RG/84/C/7	Dr L.B. de Silva Mr W.H.M.W. Herath Medical Research Institute Colombo 8.	"Research in indigenous medicinal plants"	57000/=	3 years	On-going
RG/84/C/8	Dr (Mrs) V.D.P. Sirimanne Dept. of Chemistry Univ. of Sri Jayewardenepura Nugegoda	"Studies on Plant gums found in Sri Lanka"	46240/=	2 years	On-going
RG/85/C/9	Dr (Mrs) T.M.S. Atukorala Dept. of Bio-Chemistry Faculty of Medicine Colombo 8.	"A study of total and glucose tolerance factor chromium content of foods"	68980/=	3 years	On-going
RG/84/C/10	Dr K.K.M.W. Silva Prof. C.B. Dissanayeke Dept. of Geology Univ. of Peradeniya	"Study of Geology and Rock, Soil and Water Geochemistry of the Walawe Ganga basin"	126780/=	3 years	On-going
RG/85/C/1	Prof. S. Sotheeswaran Dept. of Chemistry Univ. of Peradeniya	"Organosulphur compounds Natural and synthetic"	136400/=	3 years	On-going
RG/85/C/2	Mr P. Jayanetti Ceylon Steel Corporation Aturugiriya	"Extension of Emission Spectrographic Analytical Methode for all types of Iron, Steels Ferro Alloys and Steel making slags"	70900/=	3 years	Terminated

Ref. No.	Name and Institution	Title	Financial Allocation (Rs)	Proposed Duration	Status during 1986
RG/85/C/3	Prof. K. Balasubramaniam Univ. of Jaffna Jaffna	"Bio Chemistry of Drought Resistance in coconut and palmyrah"	151400/=	3 years	On-going
RG/85/C/4	Dr (Mrs) Siromi Samarasinghe Dept. of Chemistry Univ. of Sri Jayewardenepura Nugegoda	"Chemistry and activity Studies of compounds isolated from tissue cultures of Sri Lankan Medicinal plants"	88100/=	2 years	On-going
RG/85/C/5	Dr Arthur Bamunuarachchi Dr I.K. Perera Dept. of Chemistry Dept. of Physics Univ. of Sri Jayewardenepura Nugegoda	"Post harvest changes and performance at processing of some Sri Lankan Vegetables"	168400/=	3 years	On-going
RG/85/C/6	Prof L.M.V. Tillegaratna Dr (Mrs) S.A. Deraniyagala Dept. of Chemistry Univ. of Colombo	"Isolation and structure Elucidation of Natural Products from Marine Organisms and Determination of their Biological activity"	150900/=	3 years	On-going
RG/85/C/7	Prof. A.A.L. Gunatilake Dept. of Chemistry Univ. of Peradeniya	"Use of Potato Disc Assay for Antitumour screening and isolation of Antitumour Agents from Sri Lanka plants"	157500/=	3 years	On-going
RG/85/C/8	Mr C.D.R.A. Jayawardena Sri Lanka Standards Inst., Dharmapala Mawatha Colombo 3.	"Development of Methods for estimation of fruit content in processed Fruit products"	90600/=	2 years	On-going
RG/85/C/9	Prof. N.S. Kumar Dr. B.M.R. Bandara Dept. of Chemistry Univ. of Peradeniya	"Organic and aqueous extractives of some medicinal plants of Sri Lanka"	112400/=	3 years	On-going

Ref. No.	Name and Institution	Title	Financial Allocation (Rs)	Proposed Duration	Status during 1986
RG/85/C/10	Prof. V. Kumar Dept. of Chemistry Univ. of Peradeniya	"Studies on Citrus and other rutaceous plants"	75600/=	2 years	On-going
RG/85/C/11	Prof. P.A.J. Perera Mr H.M. Cahandana Santha Kumara Dept. of Bio-chemistry Univ. of Peradeniya	"The role of histidine decarboxylase in the pathogenesis of diarrhoea caused by <u>E. Coli</u> "	19000/=	1 year	On-going
RG/85/C/12	Prof. K. Tuley de Silva Dr Arthur Bamunarachchi Dept. of Chemistry Univ. of Sri Jayewardenepura Nugegoda	"Biological activity directed phyto-chemical studies of some Sri Lankan plants"	162500/=	3 years	On-going
RG/85/C/13	Dr (Mrs) Chandra Malani Arawgoda Mrs Sukumal Wimalasena Dept. of Chemistry Univ. of Kelaniya	"Pollution due to trace metals and agrochemicals in Kelaniya area"	61600/=	2 years	On-going
RG/85/C/14	Dr N.S. Kumar Dept. of Chemistry Univ. of Peradeniya	"Chemical investigation of the mucilaginous constituents in some plants used in traditional medicine"	29800/=	1 year	On-going
RG/85/C/15	Dr L.B. de Silva Dr W.H.M.W. Herath MRI Colombo 8.	"Chemical investigation of indigenous medicinal plants"	141400/=	3 years	On-going
RG/86/C/1	Mrs Sukumal Wimalasena Dept. of Chemistry Univ. of Kelaniya	"Chemical studies on <u>Wrightia anti-dysenterica</u> (Apocynaceae) and <u>Horsfieldia irya</u> (Myristicaceae)"	67600/=	2 years	On-going

Ref.No.	Name & Institution	Title	Financial Allocation (Rs.)	Proposed Duration	Status during 1986
RG/86/C/2	Dr G.S. Jayatilake Mrs. S. Wijesundare Natural Products Section CISIR, Colombo 7. Dept. of Chemistry, Univ. of Colombo.	"Metabolism of herbicides in Resistant bacteria"	96000/=	3 years	Withdrawn
RG/86/C/3	Mr K.P. Perera Mrs. M. Senanayaka Dr P. De A. Gurusinghe Research Station Dept. of Minor Export Crops Matale	"An investigation to detect the correlations between organoleptic characteristics and chemical constituents of Cinnamon"	75000/=	3 years	On-going
RG/86/C/4	Dr N.L.V.V. Karunaratna Dr B.M.R. Bandara Dept. of Chemistry Univ. of Peradeniya	"Isolation of Antimicrobial and/or Insecticidal compounds from Higher plants"	186400/=	3 years	On-going
RG/86/C/5	Dr M.P. de Silva Dr R.N. Pathirana Dr C.P. Pathirana Univ. of Ruhuna Matale	"Studies of Medicinal plants in Southern Sri Lanka. With special reference to families Meliaceae, Euphorbiaceae, Leguminosae, and Chemistry and Pharmacology of their natural products"	206400/=	3 years	On-going
RG/86/C/6	Dr M. Jayaratna Univ. of Moratuwa Mr F.L.N. Dissanayake Ceylon Ceramics Corp. Negombo	"A study of the use of Zirconium minerals occurring in Sri Lanka in the fabrication of refractories and other ceramics"	43500/=	3 years	On-going
RG/86/C/7	Dr A.M. Mubarak Agro Industries Section CISIR Mr K.A.D.W. Senaratna Dept. of Zoology Univ. of Ruhuna	"Evaluation of Insecticidal properties of neem formulations against insect pests of rice and vegetables"	138000/=	2 years	On-going

AGRICULTURE & ANIMAL HUSBANDRY

THE STATUS OF RESEARCH GRANTS DURING 1986

Year of Award	Proposed Duration	No. of Grants	Status during 1986			
			Completed	Terminated	Continuing	Withdrawn
1983	1 year	3	3	-	-	-
	2 years	4	4	-	-	-
	3 years	2	1	-	1	-
1984	1 year	4	4	-	-	-
	2 years	2	-	-	2	-
	3 years	1	-	-	1	-
1985	1 year	1	1	-	-	-
	2 years	1	-	-	1	-
	3 years	3	-	-	3	-
1986	1 year	2	-	-	2	-
	2 years	3	-	-	3	-
	3 years	-	-	-	-	-

AGRICULTURE & ANIMAL HUSBANDRY -1986

Ref. No.	Name & Institution	Title	Year of Award	Duration	Financial Allocation Rs. Cts.	Status during 1986
RG/83/1	Dr. M.A.S.K. Ranasinghe Dept. of Agric. Biology Fac. of Agriculture Univ. of Peradeniya Peradeniya.	Investigation of the botanicals with a view to their potential application as pest- control agents in Sri Lanka	1983	3 years	150,200.00	Ongoing
RG/83/2	Mrs. S.F.B.N. Gunawardene Faculty of Agriculture Univ. of Ruhuna Matara.	Studies on the use of green manures in crop production	1983	3 years	77,500.00	Completed
RG/83/61	Prof. H.P.N. Gunasena Mrs. I.P. Wickremasinghe Fac. of Agriculture Univ. of Peradeniya Peradeniya.	Genetic Evaluation and selection of winged bean	1983	2 years	90,800.00	Completed
RG/83/66	Prof. N.A. Pamadasa Mr. K.T. Serasinghe Fac. of Agriculture Univ. of Ruhuna Matara.	Improvement of Grass land productivity under coconut culti- vation in southern Sri Lanka	1983	2 years	91,320.00	Completed
RG/83/67	Dr. K.M. Pathirana Fac. of Agriculture Univ. of Ruhuna Mapalana Kamburupitiya.	Effect of variety and stage of harvesting on the nutritive value of rice straw for ruminants	1983	1 year	88,660.00	Completed

Ref. No	Name & Institution	Title	Year of Award	Duration	Financial Allocation Rs. Cts.	Status during 1986
RG/83/68	Dr. G. Keerthisingho Mr. K.A. Nandasena Dept. of Agricultural Chemistry Univ. of Peradeniya Peradeniya.	Studies on the availability of Phosphorus of some of the important soils in Sri Lanka	1983	2 years	47,320.00	Completed
RG/84/AG/1	Mr. K.N. Palipana Mr. M.D. Fernando Mr. T.P. Adhikarinayake Rice Processing Research and Development Centre Anuradhapura.	Improvement of farm level grain storage methods.	1984	1½ years	15,150.00	Completed
RG/84/AG/2	Mr. W.L. Weerakoon Regional Agricultural Research Station Mahallupalama.	Multi-storied cropping in the Dry Zone of Sri Lanka	1984	1 year	15,000.00	Completed
RG/84/AG/3	Mr. G.A. Gunatilake Mr. W.M. Jayatilake Bandara Regional Agricultural Research Centre Dombuwela.	Effect of Iron Toxicity on Rice Cultivation	1984	3 years	102,050.00	Ongoing
RG/84/AG/4	Dr. P.A.J. Yapa, Head Biochemistry Section Rubber Research Inst. Telawala Rd., Ratmalana.	Role of aquatic plants in effluent treatment systems in rubber plantation	1984	2 years	40,000.00	Ongoing

Ref. No.	Name & Institution	Title	Year of Award	Duration	Financial Allocation Rs. Cts.	Status during 1986
RC/84/Ag/7	Dr. P. Shivanathan Central Agricultural Research Institute Gannoruwa Peradeniya.	A checklist of pest and diseases of Sri Lanka	1984	1 year	56,000.00	Ongoing
RC/85/Ag/1	Dr. U. Samarajeewa Dept. of Agric. Chemistry, Univ. of Peradeniya Peradeniya.	Development of a peanut dryer	1985	1 year	44,740.00	Completed
RC/85/Ag/2	Dr. M.A. Pemadasa Dept. of Botany Univ. of Ruhuna Matara. Mrs. S.F.R.N. Gunawardena, Fac. of Agriculture Univ. of Ruhuna Mapalana Kumburupitiya.	Studies on the Rhizobium inoculation and nutrient requirements of some under exploited leguminous crops	1985	3 years	174,400.00	Ongoing
RC/85/Ag/3	Mr. P.J. Wickremasinghe Dr. P.de A. Curusinghe Mr. I.M.H.B. Herath Dept. of Minor Export Crops Research Station Matale.	Generic improvement and cultural practices in Betel	1985	3 years	186,000.00	Ongoing

Ref. No.	Name & Institution	Title	Year of Award	Duration	Financial Allocation Re. Cts.	Status during 1986
RG/85/Ag/4	Mr. M.H. Mendlu Mr. P.K. Samarajeewa Mr. K.P.U. de Silva C.A.R.I. Gannoruwa.	Utilization of tissue culture technology in root and tuber crop improvement	1985	2 years	192,000.00	Ongoing
RG/85/Ag/5	Dr. I.A.U.N. Gunathilake, Dept. of Botany Univ. of Peradeniya Peradeniya.	Contribution of soil biological processes and environment to soil fertility in a rainforest and a Heava rubber plantation	1985	3 years	225,000.00	Ongoing

Ref. No.	Name & Institution	Title	Year of Award	Duration	Financial Allocation Rs. Cts	Status during 1986
RG/86/Ag/1	Dr. Ananda N. Jayakody Dept. of Agric. Chemistry Univ. of Peradeniya Peradeniya.	Effect of incorporation of Coir Dust, Paddy Husks and Saw Dust on Nitrogen and Phosphorus availabi- lity in-soils	1986	2 yrs.	152,170.00	Ongoing
RG/86/Ag/2	Dr. I.V.S. Fernando Dept. of Zoology Univ. of Kelaniya Kelaniya.	Evaluation of the effi- ciency of protection of Snake Gourds from Melonfly attack using polythene covers	1986	1 yr.	7,000.00	Ongoing
RG/86/Ag/3	Ms. A.M.K. Hemalatha Mr. D.B.T. Wijeratne Ms. S.F. Hussain Div. of Food Technology C.A.R.I. Gannoruwa.	Investigation of Post Harvest losses (Nutritional inclusive) in rice	1986	1 yr.	75,000.00	Ongoing
RG/86/Ag/4	Dr. P.A.J. Yapa Biochemistry Section Rubber Research Inst., Ratmalana.	Role of aquatic plants in effluent treatment systems in rubber planta- tion	1986	2 yrs.	45,600.00	Ongoing
RG/86/Ag/5	Mrs. S.F.B.N. Gunawar- dene Fac. of Agriculture University of Ruhuna Mapalana Kamburupitiya.	Studies on the use of organic matter in crop production	1986	2 yrs.	51,600.00	Ongoing

CIDA FERTILIZER GRANTS 1986

Ref. No.	Name & Institution	Title	Year of Award	Duration	Financial Allocation Rs. Cts.	Status during 1986
CIDA/83/1	Dr. S.L. Amarasiri Mr. M.A. Lathiff C.A.R.I. Gannoruwa.	Determination of the potassium status of Sri Lankan rice soils and evaluation of the effect of potassium fertilizer on the growth of rice.	1983	3 years		Ongoing
CIDA/83/2	Dr. S.L. Amarasiri Mrs. I.S. Padmasiri C.A.R.I. Gannoruwa.	Evaluation of the potassium requirements of banana in the midcountry wet zone of Sri Lanka.	1983	5 years	395,000.00	Ongoing
CIDA/83/3	Dr. G. Keerthisinghe Mr. K.A. Nandasena Prof. M.W. Thenabadu Dept. of Agric. Chemistry Fac. of Agriculture Univ. of Peradeniya.	Effect of potassium buffer capacity & the mobility of nonexchangeable potassium on the availability of potassium in some of the important rice soils of Sri Lanka.	1983	5 years	466,650.00	Ongoing
CIDA/83/4	Mr. M. Jeganathan Miss Malathi Nirmala Dias C.R.I. Lunuwila.	Studies on K - Mg interaction in coconut.	1983	5 years	515,000.00	Ongoing

Ref. No.	Name & Institution	Title	Year of Award	Duration	Financial Allocation Rs. Cts.	Status during 1986
CIDA/83/5	Dr. S.L. Amarasinghe Mr. H. Wijewardene Mr. J.M.P. Jayasundera Regional Agricultural Research Centre Bandarawela.	Fertilizer studies on selected vegetable crops in the upcountry with emphasis on residual activity of soil P & K.	1983	5 years	896,000.00	Ongoing
CIDA/83/6	Dr. K.M. Wickremasinghe Dr. S. Krishnapillai Tea Research Inst. Talawakele.	To evaluate the efficiency of utilization of potash fertilizers for tea in Sri Lanka with special reference to soil fertility and crop production.	1983	5 years	1,183,800.00	Ongoing
CIDA/83/7	Mr. M. Watson Mr. G. Wadasinghe Tea Research Institute Low Country Station Ratnapura.	Role of Potassium in relation to drought hardiness in young tea.	1983	5 years	1,001,115.00	Ongoing
CIDA/83/8	Dr. M.K.S.A. Samaraweera Rubber Research Inst. Agalawatta.	Study of the Potassium & Magnesium deficiencies in young rubber.	1983	5 years	615,200.00	Ongoing

Ref. No.	Name & Institution	Title	Year of Award	Duration	Financial Allocation Rs. Cts.	Status during 1986
CIDA/83/9	Dr. N. Yogarajnam Rubber Research Inst. Agalawatte.	Potassium nutrition on <u>Hevea brasiliensis</u> and associated covers: (1) Soil and leaf as a guide to potassium nutrition of <u>Hevea brasiliensis</u> . (2) Effects of different levels of K on kg uptake by immature rubber. (3) Potassium nutrition of <u>Hevea</u> in relation to stimulation. (4) The influence of K on N status of leguminous covers and growth of <u>Hevea</u> during the immature phase.	1983	5 years	552,200.00	On-going.
CIDA/83/10	Mrs. L.V.K. Liyanage Coconut Research Inst, Lunuwila.	To study the effects of nitrogen, phosphorus and potassium and magnesium fertilizers on the early growth and nutrient uptake of a cover crops (<u>Pueraria phaseolodes</u>) grown under coconut.	1983	5 years	348,000.00	On-going.

Ref. No.	Name & Institution	Title	Year of Award	Duration	Financial Allocation Rs. Cts.	Status during 1986
CIDA/83/11	Dr. K. V. Premaratne Prof. H.P.M. Gunasena Dr. U.R. Sangakkara Fac. of Agric. Univ. of Peradeniya.	Fertilizer Potassium	1983	5 years	743,400.00	Ongoing;
CIDA/83/12	Prof. M.A. Pemadasa Dept. of Agronomy Fac. of Agriculture Univ. of Ruhuna Matara.	Studies on the fertility status of soils with special emphasis on pota- ssium and the use of muriate of potash in Matara District.	1983	3 years	476,600.00	Ongoing;
CIDA/83/13	Mr. P.J. Wickrema- singhe Mr. H.A. Sumanasena Mr. H.A.S. Perera Dept. of Minor Export Crops Matale.	Investigation on Carbo-nan under CIDA fertilizer project.	1983	5 years	890,000.00	Ongoing;
CIDA/83/14	Dr. S. Kathiragama- thiyal Dept. of Minor Export Crops National Housing Secretariat Kandy.	Demonstration of the effect of fertilizers on Minor Export Crops in cultivators fields.	1983	5 years	650,000.00	Ongoing;

Ref. No.	Name & Institution	Title	Year of Award	Duration	Financial Allocation Rs. Cts.	Status during 1986
CIDA/85/15	Dr. N. Yegaratnam Rubber Research Inst. Agalawatta.	Influence of K on tolerance to moisture stress in <u>Hevea brasiliensis</u> .	1985	3 years	300,000.00	On-going
CIDA/85/16	Mrs. L.V.K. Liyanage Mr. H.A.J. Gunathilake Coconut Research Inst., Lunuwila.	Effect of nitrogen and potassium on the growth and yield of Cacao grown under Coconut as mixed crops in the wet zone of Sri Lanka.	1985	3 years	75,600.00	On-going
CIDA/85/17	Dr. L.G.C. Yapa Dept. of Agric. Chemistry Fac. of Agriculture Univ. of Peradeniya Peradeniya.	Effects of soil moisture and soil strength/bulk density on the availability of potassium in some of the important soils in the dry zone of Sri Lanka.	1985	3 years	213,790.00	On-going

Ref. No.	Name & Institution	Title	Year of Award	Duration	Financial Allocation Re. Cts.	Status during 1986
CIDA/86/18	Dr U.R. Sangakkara Fac. of Agriculture Univ. of Peradeniya Peradeniya.	Effect of Potassium Fertilizer on growth and yield of Tropical Tubers	1986	2 yrs.	115,700.00	Ongoing
CIDA/86/19	Dr. (Mrs.) Sujatha Premaratne Dept. of Animal Sc. Univ. of Peradeniya Peradeniya.	To investigate the effect of Potassium application on the establishment, management and persistence of legume based pastures in the mid-country of Sri Lanka.	1986	3 yrs.	290,700.00	Ongoing
CIDA/86/20	Dr P.A.J. Yapa Head/ Microchemistry Section Rubber Research Inst. Telawala Road Ratmalana. Dr N. Yogarajnam Rubber Research Inst., Agalawatta.	Use of rubber factory effluents as a fertilizer with special reference to nitrogen, potassium and phosphorus.	1986	3 yrs.	1320200.00	Ongoing
CIDA/86/21	Dr U.R. Sangakkara Fac. of Agriculture Univ. of Peradeniya Peradeniya.	Effect of Potassium on Nodulation and Growth of Tropical legumes.	1986	2 yrs.	183,900.00	Ongoing
CIDA/86/22	Dr J. Handawela Agric. Research Station Angunakolapelessa.	Study the role of potassium fertilizer for stabilizing upland rainfed farming in the dry zone of Sri Lanka	1986	3 yrs.	692,200.00	Ongoing

Grant No.	Grantee and Inst.	Project Title	Year of Award and Duration	Total Allocation Rs. Cts.	Remarks
MAB/81/2	Dr. H.D. Gunawardena Dept. of Chemistry Univ. of Colombo	Pesticide and Water Quality monitoring programme for system B of the Mahaweli Project	3 yrs. 1981	200800/-	Ongoing
MAB/85/1	Mr. W.L.E. De Alwis Dr. S.W. Kotagama Mr. K.C.I. De Alwis	The Ecology and Social-Biology of the Western Purpled faced Leaf Monkey	3 yrs. 1985	112138/-	Ongoing
MAB/85/2	Mr. J.S. Gunasekera Mahaweli Authority	Integrated Land Use and Conservation Planning and Utilization of Resources in Mahaweli/Pannala Micro-Catchment	2 yrs. 1985	176500/-	Ongoing
MAB/86/01	Prof. B.A. Abeywickrema Dept. of Botany Univ. of Colombo	Botanical Survey Sri Lanka	2 yrs. 1986	167200/-	Ongoing

NATURAL RESOURCES

Grant No.	Grantee and Institution	Project Title	Year of Award & Duration	Initial Allocation	Remarks
RG/85/EN/1.	Dr M.W.R.N. de Silva National Aquatic Resources Agency Crow Island Colombo 15.	Collection and Pre- servation of Marine Algae	15 Nov 1985 6 months	50000/=	Final report to be submitted

INLAND FISHERIES

Grant No.	Grantee and Institution	Project Title	Year of Award and Duration	Initial Allocation	Remarks
SAREC/10/IF/2/3	Prof. S.S. de Silva Prof. M.A. Pemadasa University of Ruhuna	Feasibility studies on the commercial exploitation of minor cyprinid fishery resources of perennial reservoirs	3 years September 1984	866,300	On going Extended for two years in 1986

ENERGY

Grant No:	Grantee/Institution	Project Title	Year of Award and Duration	Initial Allocation Re. cts	Remarks
RG/EP/2/85	I.D.B.	Experimental work on and field evaluation of SAVOOD hearth.	10 October 1984 1 year	24676.00	On-going
RG/EP/1/85	Mr B.P. Sepalage C.E.B.	Socio-Economic and energy survey.	24 May 1985 6 months	20700.00	Completed
RG/EP/86/1	Dr M.B. Herath	Monitoring field performances of the Savodaya, CISIR, IDB, and CEB stoves.	1 year	25000.00	Completed
RG/EP/86/2	Mr D.B.J. Ranatunga	Energy survey in the Industrial Sector.	3 months	35000.00	The grant was awarded in March 1986. Not functioning.
RG/EP/86/3	Dr A.L. Jayawardena	Suitability of Jatropha seed oil as a substitute for kerosene.	6 months	15500.00	On-going

SALVINIA

Grant No.	Grantee and Institution	Project Title	Year of Award and Duration	Initial Allocation	Remarks
RG/SAL/1	Dr I.V.S. Fernando	Biological Control of Salvinia	18 November 1985 3 years	982,800/=	On going
RG/SAL/2	Dr P. Shivanathan C.A.R.I.	Biological Control of Salvinia	18 November 1985 3 years	193,800/=	On going
RG/SAL/3	Mr G.A. Gunathilake Agricultural Research Centre, Bombuwela	Biological Control of Salvinia	18 November 1985 3 years	237,500/=	On going

COMMONWEALTH SCIENCE COUNCIL GRANT

Grant No.	Grantee/Institution	Title	Year of Award Duration	Initial Allocation	Remarks
CSC/86/8.1	<p>Prof. K.T. de Silva Univ. of Sri Jayewardene- pura</p> <p>Dr(Mrs) R. Herath Mrs S. Wimalasena Univ. of Kelaniya</p> <p>Dr(Mrs)L. Arambewela CISIR</p> <p>Dr U.V. Ratnayaka Ayurveda Drugs Corpora- tion</p> <p>Dr V.K.N. Padmasiri BMARI</p> <p>Dr B.M.R.S. Dissanayake Dr S.G. Ranasinghe Institute of Indigenous Medicine</p>	<p>Pharmacognostic Authentication and standardisation of crude Drugs from Zingiberaceae and Rutaceae, and the conservation of the germplasm and Herbarium species of these medicinal plants</p>	<p>1986 3 years</p>	<p>253,200</p>	<p>On going</p>

Table 2

Participation at Conferences, Seminars and Workshops Overseas
During 1986 on the Nomination of NARESA.

<u>Subject and Period</u>	<u>Awarding Agency</u>	<u>Nominees</u>
(1) Workshop on Household Energy Demand and Supply in South Asia. New Delhi, 17-19 February 1986	International Institute for Environment and Development. (IIED).	Mr L.C.A. de S. Wijesinghe NARESA
(2) Expert Group meeting to review a draft hand book on technology policy formulation and Planning. Dakarta, 25-30 January 1986.	The Asia Pacific Centre for the Transfer of Technology.	Mr L.C.A. de S. Wijesinghe NARESA
(3) Project Meeting on Science and Technology Indicators. London, 8 - 11 April 1986	CSC and SAREC	Dr R.P. Jayewardene Mr M.A.T. de Silva NARESA
(4) CSC sponsored Workshop on "Managing change within Organizational Patterns" Ghana, 30 June - 4 July 1986.	CSC	Dr S. Liyanage NARESA
(5) 52nd General Conference and Pre-session Seminar of the International Federation of Library Associations. Japan, 17 - 19 August 1986.	SAREC	Mrs N. Amarasuriya NARESA
(6) Seminar on Energy and Urban Development La Plata, Argentina, 30 June-3 July 1986	SAREC	Mr L.C.A. de S. Wijesinghe NARESA

Natural Resources Energy & Science Authority of Sri Lanka

Balance Sheet as at 31st December 1986

As at 31.12.85

<u>Funds Employed</u>			
NARESA Fund :-		10,807,605.15	
Add Acquisition of Assets			1,866,218.32
Treasury Deposit			
12,932,723.00			
Less Excess of Expenditure over Income			8,941,386.83
2,125,118.00			
10,807,605.00			
Documentation Unit Capital Fund :-			
Add Drawings from Treasury		606,805.28	
Treasury Deposit			1,000,000.00
1,257,734.00			
Less Net Expenditure - Note No. 1.1			1,606,805.28
650,929.00			709,249.73
606,805.00			
2,635,381.00			
Research Grants Fund :-			
Add Drawings from Treasury		3,192,140.02	
Funds received from WHO			897,555.55
Treasury Deposit			
6,758,981.00			
Less Net Expenditure - Note No. 1.2			6,192,140.02
3,566,841.00			2,143,007.94
3,192,140.00			
435,801.00			
Man & Biosphere Fund :-			
Add Drawings from Treasury		756,378.50	
Funds received from other sources - Note No. 1.3			350,000.00
Treasury Deposit			89,090.50
966,936.00			111,110.00
210,558.00			950,200.50
756,378.00			
Less Net Expenditure - Note No. 1.4			1,306,579.00
324,927.00			250,557.52
525,000.00			
Miscellaneous Fund :-			
Add Drawings from Treasury		521,075.67	
Treasury Deposit			875,000.00
Acquisition of assets			110,560.00
Less Expenditure - Note No. 1.5			1,513,033.67
849,927.00			760,259.34
328,853.00			
521,074.00			
Total carried over to			
			752,794.33
			15,696,800.27

As at 31.12.85

171,367.00	Scientific Manpower Project Fund :-	153,497.94	15,696,890.27
-	Add Drawings from Treasury	-	
-	Treasury Deposit	-	
171,367.00		153,497.94	
17,869.00	Less Expenditure	-	
153,498.00		-	153,497.94
276,598.00	Working Committee Fund	722,542.56	
500,000.00	Add Drawings from Treasury	400,000.00	
117,900.00	Funds received from UNDP	-	
-	Treasury Deposit	400,000.00	
894,458.00		-	
171,915.00	Less Net Expenditure - Note No. 1.6	1,122,542.56	
722,543.00		436,491.90	686,050.66
11,475,918.00	Foreign Aid Fund	7,532,725.03	
3,500,000.00	Add Drawings from Treasury	10,000,000.00	
400,000.00	Treasury Deposit	5,378,699.43	
598,285.00	Money held in Advance by Treasury	-	
922,495.00	Foreign aid held by NARESA	-	
16,896,698.00		15,378,699.43	
9,363,973.00	Less Net Expenditure - Note No. 1.7	22,911,424.46	
7,532,725.00		4,776,630.89	18,135,393.57
90,909.00	Current Liabilities		
375,233.00	Creditors - Note No. 3.1	6,267.12	
2,811,457.00	Accrued charges	563,078.37	
3,277,599.00	Provisions - Note No. 3.2	1,838,757.78	
27,570,367.00		-	2,428,103.27
			37,099,935.71

As at 31.12.86

	Total brought forward	2,803,874.57	3,836,066.02
47,987.00	Postage	435,788.27	
10,450.00	Audit Fees	72,353.65	
300.00	Bank charges	9,500.00	
17,170.00	Medical Expenses	974.56	
41,284.00	Advertising	6,993.21	
165,499.00	Maintenance of Motor Vehicles	35,994.50	
36,294.00	" " Office equipment & furniture	109,359.70	
34,775.00	" " Office Building	36,128.34	
-	Staff Welfare	135,550.18	
51,747.00	Insurance	2,125.00	
480.00	Water consumption	53,701.27	
17,124.00	Bad debts	434.00	
13,079.00	Provision for Doubtful Debts	634.12	
-	Loss of Calculator	12,197.87	
92,700.00	Security Services	585.00	
1,709,746.00	Depreciation	102,069.25	
40,102.00	Sundry Expenses	2,051,850.00	
194,532.00	International Youth year	81,411.55	
188.00	Commission given on sale of publications	-	
-	Custom duty & B.T.T.	-	
5,807,124.00		<u>3,557.72</u>	5,953,082.76
2,045,796.00	Excess of Expenditure over Income	<u>3,149,208.19</u>	<u>2,117,016.74</u>
-	Less Creditors written off	80,795.48	
79,322.00	Prior year adjustments (net)	<u>170,002.94</u>	<u>259,798.42</u>
2,125,118.00			1,866,218.52

Notes on Accounts

1. General Accounting - Expenditure on funds
 Expenditure on research grants and SLSTIC for acquisition of equipment has been excluded from expenditure under respective funds and is shown under relevant categories of equipment. Expenditure shown under ^{the} respective funds are the net expenditure after charging adjustments necessary for the relevant funds.

1.1 Documentation Unit Capital Fund Expenditure

(i)	SLSTIC	Books & Periodicals	191,435.89
(ii)	"	in House Printing & Binding	80,804.78
(iii)	"	Consumables	154,570.18
(iv)	"	Miscellaneous	28,979.75
(v)	"	Services	69.75
(vi)	"	Publications & Publicity	220,070.10
(vii)	"	Maintenance & repairs	75,379.52
(viii)	"	Equipment	<u>14,403.75</u>
			765,713.72
<u>Less:</u>		Cost of Documentation equipment & library books	<u>49,101.30</u>
			716,612.42
<u>Less:</u>		Prior adjustments	1,888.24
		NTIS funds for Documentation fund expenditure	5474.45
			<u>7,362.69</u>
			<u>709,249.73</u>

1.2 Research Grants expenditure

	Actual expenditure for the year	1,755,813.47	
<u>Add</u>	Expenditure on grants T & & completed before '86	<u>3,055.30</u>	1,758,868.77
<u>Less:</u>	Cost of scientific equipment acquired during the year		<u>272,216.13</u>
			1,486,652.64
<u>Add</u>	Provision for balance funds	1,244,186.53	
<u>Less:</u>	Funds available under grants terminated & completed during '86	(638,324.91)	605,861.62
<u>Add</u>	Net prior year adjustments		<u>50,493.68</u>
	Note 1.2.1		
	Net expenditure for 1986		<u>2,143,007.94</u>

1.2.] Prior year adjustments

WHO funds received during 85 transfer in 86		68,600.00
<u>Less</u> Cancelled cheques	14,924.50	
Refunds received re. grants terminated & completed before 86	<u>3,181.82</u>	<u>18,106.32</u>
		<u>50,493.68</u>

1.3 Funds received from other sources

(i) Mehweli Economic Agency		75,000.00
(ii) UNESCO		<u>14,090.50</u>
		<u>89,090.50</u>

1.4 MAB Expenditure

(i) MAB/77/1.3/3		11,241.33
(ii) MAB/86/1		8,250.00
(iii) MAB/71/5		94,576.62
(iv) MAB/85/2		19,866.48
(v) MAB/Gen		4,906.50
(vi) MAB/85/1		70,303.30
(vii) MAB/81/2		46,526.79
(viii) MAB National Committee		<u>10,668.00</u>
		266,339.02
<u>Less</u> Cost of scientific equipment acquired during the year		<u>13,406.50</u>
		252,932.52
<u>Less</u> Prior adjustments (cancelled cheque)		<u>2,375.00</u>
Net Expenditure for 1986		<u>250,557.52</u>

1.5 Miscellaneous Fund Expenditure

(i) Awards for outstanding Research work		198,867.14
(ii) Participation in International Scientific work		163,286.63
(iii) Seminars & Symposias		61,047.90
(iv) Subscriptions to International Scientific Unions		201,265.50
(v) Special Research Projects:-		
1. MANGROVE Commission	9,064.81	
2. SAREC/11/ZSSL/2.3 & 4	121,309.86	
3. STP Survey	<u>5,577.50</u>	<u>135,772.17</u>
		<u>760,239.34</u>

1.6 Working Committee Fund Expenditure

(i) Agriculture & Animal Husbandry W/C	2,416.00
(ii) Biological Sciences W/C	13,813.74
(iii) Chemical Sciences W/C	149,256.43
(iv) Editorial Committee	151.00
(v) Medical & Veterinary Sciences W/C	11,824.00
(vi) Natural Resources W/C	22,342.25
(vii) Physical Engineering Sciences W/C	10,818.52
(viii) Social Science Research Working Committee	56,893.40
(ix) Science Education Research W/C	105,247.83
(x) Science Information W/C	12,269.25
(xi) Working Committee on Energy	5,115.00
(xii) Mangrove Survey	<u>46,931.98</u>
	437,079.40
<u>Less</u> Prior adjustments (cancelled cheques)	<u>587.50</u>
Net Expenditure for 1986	<u>436,491.90</u>

1.7 Foreign Aid Fund Expenditure

(i) ACIAR Project Expenditure	832,663.47
(ii) CIDA " "	2,116,668.11
(iii) SAREC " "	1,839,343.65
(iv) RG AID " "	1,939,499.71
(v) WHO/86/01	207,566.39
(vi) UNESCO/86/PP/01	1,584.00
(vii) Advisory & Buffalo Research W/C	<u>8,741.75</u>
	6,946,067.08
<u>Less</u> Cost of Scientific Equipment, Documentation Equipment & Motor Vehicles acquired during 86 614,731.89+844,970.06+278,950.02+428,905.85	<u>2,167,557.82</u> 4,778,509.26
<u>Less</u> Prior year adjustments (cancelled cheques)	<u>2,478.37</u>
Net expenditure for the year	<u>4,776,030.89</u>

2. Assets and the basis of their valuation

Depreciable Assets &

Depreciation

Depreciation has been provided on original cost or at valuation on a straight line basis consistent with that of the previous years and is calculated to write-off the assets over their estimated useful lives.

2.1 Capitalization of Assets

Treatment of accounting in capitalization of scientific and documentation assets in the current year has been changed. The credit that had been given to NARESA fund up to 1985 for all assets purchased for research grants and documentation unit has been omitted in 1986, as the cost has been directly debited to the relevant assets.

2.2 Debtors

Total Debtors	879,588.60
<u>Less Provision for doubtful debts</u>	<u>25,777.57</u>
	<u>853,811.03</u>

3. Liabilities & Provisions

3.1 Creditors

Creditors amounting to Rs. 11,742.00 represents monies held by NARESA on behalf of 4 projects given below:

NTIS Creditors	1,509.75
Reserves for NTIS lending of books programme	597.37
CANLIT	<u>4,160.00</u>
	<u>6,267.12</u>

These sums will be expended as the programmes advance.

3.2 Provisions

Provisions include the provisions made for the balance funds allocated to the various research grants and not utilized during the current year, but allowed on principle to be utilized in future, during the currency of the grant.

3.3 Employee' Benefits

All employees are covered by E.P.F. and E.T.F.

3.4 Retiring Gratuity

Provision has been made in the accounts in respect of liability for retiring gratuity.

4. Events after the balance sheet date Out of 55 grants whose official duration had been expired as at 31.12.86, 5 had been completed, 14 grants have been granted official extensions. Work of 34 grants had been completed and final reports awaited; 2 grants have been recommended for termination.

FUND FLOW STATEMENT

Sources

External sources

Contribution from Government for Research work	5,625,000
Grants from foreign agencies	15,489,809
Assets received as a gift from UNESCO for Mangrove committee	116,960
Funds received from Mahaweli Authority & UNESCO	<u>89,090</u>
	21,320,859

Add Adjustments for items ^{not} involving movement of funds

Depreciation	2,051,850	
Previous year provision for depreciation re. IBM Composer	<u>17,707</u>	2,069,557
Net increase in provisions		960,502
Net previous year adjustments re. fixed assets	<u>(172,810)</u>	<u>2,857,249</u>
		24,178,108

Application

Excess of expenditure over increase for the year	2,045,111
Adjustments in respect of previous year	(190,742)
Acquisition of fixed assets	2,759,533
Expenditure re. Research funds	<u>10,048,429</u>
Increase in working capital as analysed below	<u>9,515,777</u>

CHANGE IN WORKING CAPITAL

	Increase	Decrease
Stocks	136,953	-
Debtors	278,580	-
Prepayments	2,049,723	-
Deposits	2,366	-
Treasury Deposit	6,357,463	-
Creditors	84,642	-
Accrued charges	-	207,845
Provisions	960,502	-
Cash & bank balances	<u>-</u>	<u>146,607</u>
	<u>9,870,229</u>	<u>354,452</u>
		<u>9,515,777</u>

විගණකාධිපති පවර්තනය

ශ්‍රී ලංකා ජනරජයේ විද්‍යා, බලශක්ති හා සිංදා අධිකාරියේ 1986 දෙසැම්බර් 31 දිනෙන් අවසන් වර්ෂය යැයි ප්‍රකාශ වූ ගිණුම් 1971 අංක 38 දරණ මුදල් පනතේ 13(1) විගණක පමණ සංස්කරණය කිරීමේ බලතලය යටතේ මාසිකව පරීක්ෂණය කළ බවට ප්‍රකාශයක් 154(1) වාර්තාවට ප්‍රකාශිත වශයෙන් විගණක පවර්තනය කරන ලදී.

මුදල් පනතේ 14(2)(බී) විගණකාධිපති ප්‍රකාරව ප්‍රකාශයට පත්කළ පුදා මෙම ගිණුම් පිළිබඳව මාගේ විධිමත්කරණය අවසන් කිරීමේ අවසරයක් ලද බව දින දරණ මාගේ වාර්තාවේ ඇතුළත්ව ඇත.

D.H.F. Hewagama
(D.එච්.ඒ.ඒ. හේගමගේ)
වැඩ බලන විගණකාධිපති
1987 ඔක්තෝබර් 16 දින,
කොළඹ - 07, විගණකාධිපති දෙපාර්තමේන්තුවේ දිව.

CERTIFICATE OF THE AUDITOR GENERAL.

The accounts of the Natural Resources, Energy of Science Authority of Sri Lanka for the year ended December 31, 1986 was audited under my direction in pursuance of provisions in Article 154(1) of the Constitution of the Democratic Socialist Republic of Sri Lanka read in conjunction with Section 13(1) of the Finance Act, No.38 of 1971.

My observation which I consider should be published in terms of Section 13(1) of the Finance Act are contained in my report of even date addressed to the Director General of the Authority.

(D.H.F. Hewagama)
Acting Auditor General.
Auditor General's Department,
Colombo 07.
October 16, 1987.



විගණකාධිපති දෙපාර්තමේන්තුව
 නිදහස් වතුරලය, කොළඹ 7, ශ්‍රී ලංකාව
 கணக்காய்வாளர் தலைமை அலுவல்து திணைக்களம்
 சுதந்திர வதுகம், கொழும்பு 7, இலங்கை
 AUDITOR-GENERAL'S DEPARTMENT
 INDEPENDENCE SQUARE, COLOMBO 7, SRI LANKA

දිනය/தேதி/Date: October 16 1987.

දුරකථන
දුරකථන
Telephone } 91151

මගේ අංකය
எனது இல.
My No. } EC/S/NARESA/86

ඔබේ අංකය
உமது இல.
Your No. }

Director General,
 Natural Resources Energy and Science
 Authority of Sri Lanka,
 47/5, Maitland Crescent,
 Colombo 07.

Report of the Auditor General on the accounts of
 the Natural Resources, Energy and Science Authority
 of Sri Lanka for the year ended December 31, 1986
 in terms of Section 14(2)(c) of the Finance Act,
 No. 38 of 1971.

The audit of the accounts of the Natural Resources, Energy and Science Authority of Sri Lanka for the year ended December 31, 1986 was carried out under my direction in pursuance of provisions in Article 154(1) of the Constitution of the Democratic Socialist Republic of Sri Lanka read in conjunction with Section 13(1) of the Finance Act, No. 38 of 1971. My observations which I consider should be published with the Annual Report of the Authority in terms of Section 14(2)(c) of the Finance Act appear in this report. A detailed report in terms of Section 13(7)(a) of the Finance Act was forwarded to the Director General on August 18, 1987.

1:2 Scope of Audit:

Audit opinion, comments and findings in this report are based on a review of the financial statements presented to audit and substantive tests of samples of transactions. The scope and extent of such reviews and tests were such as to enable as wide an audit coverage as possible within the limitations of staff, resources and time available to me. Sub-sections (3) and (4) of Section 13 of the Finance Act give discretionary powers to the Auditor General to determine the scope and extent of the audit.

2. Accounts:

2:1 Audit Opinion:

Subject to my comments in this report, I am of opinion that the accounts presented have been satisfactorily prepared on the basis of generally accepted accounting principles applied on a basis consistent with that adopted in the previous year.

2:2 Financial Results:

2:2:1 NARESA Fund:

According to the accounts the working of the Authority for the year ended December 31, 1986 resulted in an operating deficit of Rs.2,117,017 in the General Fund as compared with a corresponding deficit of Rs.2,045,795 in the preceding year.

The following statement gives a summary of the financial results of the General Fund for the year under review and the previous year. ✓

	<u>Year ended December 31,</u>			
		<u>1986</u>		<u>1985</u>
	Rs.	Rs.	Rs.	Rs.
<u>Income</u>				
Government Grant for Recurrent Expenditure	3,420,000		3,450,000	
Interest Received	23,882		24,653	
Sale of Publications	73,414		66,750	
Income from Photo-copying Services	11,234		7,731	
Others	<u>307,536</u>	3,836,066	<u>212,194</u>	3,761,328
<u>Less: Expenditure</u>				
Staff Emoluments	2,767,671		2,935,636	
Office Administration	3,160,882		2,851,045	
Travelling	24,530	<u>5,953,083</u>	20,442	<u>5,807,123</u>
Excess of Expenditure Over Income		2,117,017		2,045,795
Add/Less: Adjustments for previous year		<u>(250,798)</u>		<u>79,323</u>
		<u>1,866,219</u>		<u>2,125,118</u>
		-----		-----

Contd..3

(1)

2:2:2 Special Funds:

(1) The following statement shows the operations of the seven Special Funds during the year.

Funds balances as at January 01, 1986	13,485,163
Income received during the year	<u>21,320,860</u>
	34,806,023
Less: Expenditure	<u>9,075,578</u>
Fund Balances as at December 31, 1986	<u>25,730,445</u>
	=====

(II) A summary of the net expenditure of the Seven Funds during the year under review compared with that during the previous year is given below:

	<u>Net Expenditure</u>					
	Rs.	<u>1986</u>	Rs.	Rs.	<u>1985</u>	Rs.
<u>Documentation Unit</u>						
<u>Capital Fund</u>						
Expenditure for the year	765,713			,650,929		
Adjustments for previous year	(1,888)			(133,313)		
Acquisition of Fixed Assets	(49,101)			(84,430)		
Expenditure NTIS Fund	<u>(5,474)</u>	709,250		-		433,186
<u>Research Grants Fund</u>						
Expenditure for the year	1,755,813			3,566,841		
Adjustments for previous year	50,494			28		
Funds on completed and terminated grants during the year	(638,325)			488,131		
Expenditure met from previous years' provisions	3,055			935,568		
Acquisition of Fixed assets	(272,216)			(303,093)		
Provision for the year	<u>1,244,187</u>	2,143,008		(2,490,042)		2,197,433
<u>Man and the Biosphere Fund</u>						
Expenditure for the year	266,339			210,558		
Adjustments for previous year	(2,375)			382		
Acquisition of Fixed assets	<u>(13,406)</u>	250,558		<u>30,337</u>		180,603

Contd..4

<u>Miscellaneous Fund</u>				
Expenditure for the year	760,239	760,239	328,859	328,853
Scientific Manpower Project Fund	-	-	17,869	17,869
<u>Working Committee Fund</u>				
Expenditure for the year	447,080		171,915	
Adjustments for previous year	(588)	436,492	488	172,403
<u>Foreign Aid Fund</u>				
Expenditure for the year	6,946,067		9,363,973	
Adjustments for previous year	(2,478)		(2,773,977)	
Acquisition of Fixed assets	(2,167,558)	4,776,031	(3,059,695)	3,530,301
		9,075,578		6,860,648
		=====		=====

2:3 Financial Structure:

The financial structure of the Authority as at December 31, 1986 compared with that at December 31, 1985 is given below:

	<u>As at December 31,</u>	
	<u>1986</u>	<u>1985</u>
	Rs.	Rs.
<u>Resources</u>		
General Fund of the Authority	8,941,387	10,807,605
<u>Special Fund</u>	<u>25,730,445</u>	<u>13,485,163</u>
	34,671,832	24,292,768
	=====	=====
<u>Utilisation</u>		
Fixed Assets at written down value	12,509,556	11,646,267
Net current assets	<u>22,162,276</u>	<u>12,646,501</u>
	34,671,832	24,292,768
	=====	=====

Contd..5

2:4 Source and application of Funds:

The following statement shows the source and application of funds of the Authority during the year under review:

	Rs.	Rs.	Rs.
<u>Source</u>			
Contribution from Government Consolidated Fund		5,625,000	
Foreign Aid		15,620,860	
Funds received from Mahaweli Authority		<u>75,000</u>	
		21,320,860	
<u>Application</u>			
Excess of expenditure over income for the year		2,117,017	
Add: Adjustments in respect of previous year		<u>(250,798)</u>	
		1,866,219	
<u>Less: Adjustments not affecting movement of funds:</u>			
Depreciation 2,051,850			
Net Decrease in Provisions for Guarantees 1,032,407		<u>(3,084,257)</u>	
		(1,218,038)	
Net expenditure on Special Funds	10,263,591		
Acquisition of Fixed assets	<u>2,759,532</u>	<u>13,023,123</u>	<u>11,805,085</u>
Increase in working/capital as analysed below			9,515,775

Contd..6

	<u>Effect on Working Capital</u>		
	<u>Increase</u>	<u>Decrease</u>	
	Rs.	Rs.	
Stock	136,953	-	
Debtors	278,580	-	
Prepayments	2,049,723	-	
Deposits receivable	2,366	-	
Treasury Cheques	11,278,850	-	
Money held in advance by Treasury	-	4,921,387	
Sundry Creditors	84,641	-	
Accrued Expenses	-	207,845	
Provisions	960,502	-	
Cash and Bank Balances	-	146,608	
	<u>14,791,615</u>	<u>5,275,840</u>	<u>9,515,775</u>
	=====	=====	=====

2:5 Comments on Accounts:

2:5:1 Accounting Principles:

Whilst the accounting principles followed by the Authority have not been disclosed it was observed that a clear policy had not been adopted in accounting under capital and recurrent expenditure ^{the issue of} instruments and equipment ^{as} such/calculators glass pads required by research grantees for their research activities.

2:5:2 Unidentified transactions:

A sum of Rs.46,245 debited by the bank to the Authority's account during the period 1984 to 1986 has not been identified and brought to account.

2:5:3 Items not brought to account:

The values of shortages and excesses disclosed by Boards of Survey have not been brought to account.

<u>Year</u>	<u>Shortages</u>	<u>Excess</u>
	Rs.	Rs.
1986	734	350
1985	713	21
1984	140	-

2:5:4 Inappropriate disclosure:

Photo-copying income for Rs. 220 omitted from the accounts for 1985 has been incorrectly brought to account under income for 1986.

2:5:5 Systems and Controls:

Budgetary control in the authority was not satisfactory.

2:5:6 Identified Losses:

An adding machine costing Rs. 585 issued to a staff officer had been lost by him but the cost had not been recovered from him. Instead, the amount had been written off.

2:5:7 Lack of evidence for audit:

The following items could not be vouched or accepted in audit due to the lack of documents shown against them.

<u>Item</u>	<u>Value</u> Rs.	<u>Evidence not forwarded for audit</u>
Petty cash imprests issued for Research work	556,896	a. Confirmations had not been received in respect of 23% of the value. b. Included in this amount was a sum of Rs.500 remaining unsettled for over 5 years and Rs.4,861 not settled for over 2 years.
(ii) Deposits	57,403	} Confirmations had not been obtained.
(iii) Sundry Debtors	112,263	
(iv) Sundry Creditors	6,267	
(v) Overtime	58,937	
		a. Prior approval had not been obtained for overtime work performed by 5 officers. b. Particulars of work done in overtime were not available.

Contd..8

(vi)	Entertainment Expenses	11,673	Acceptable receipts were not furnished for expenditure on 8 vouchers amounting to Rs.1,405,35 paid on reimbursement of expenditure on tea.
(vii)	Research	1,755,813	Vouchers were not available in respect of payments on 2 vouchers amounting to Rs.2,650.
(viii)	Vehicle maintenance expenditure	109,359	Some running charts were not forwarded.

3. Financial and operating review:

3:1 Financial review:

According to the accounts, the / deficit for the year was Rs.2,117,017 whilst the / deficit in the previous year was Rs. 2,045,795.

The unfavourable increase in the deficit by Rs. 71,222 was due to the following reasons.

	<u>Variance</u>	
	<u>Favourable</u> Rs.	<u>Adverse</u> Rs.
Income for the year	74,737	-
Committee Expenditure	-	3,252
Staff Expenses	167,965	-
Office administration expenses	-	<u>310,672</u>
	242,702	313,924
Less unfavourable variance	<u>313,924</u>	<u>313,924</u>
	71,222	-
	*****	*****

3:2 Research Projects:

The research projects of the Authority are being carried out through the research grants given to individuals and institutions. The position as at December 31, 1986 in regard to incompleted projects and research grants is shown below:

<u>Year of accounting</u>	<u>One year grants</u>	<u>Two year grants</u>	<u>Three year grants</u>	<u>Four year grants</u>	<u>Total</u>	<u>Lapsed grants as at 86.12.31</u>
1979	-	-	01	-	01	01
1980	-	-	-	-	-	-
1981	-	01	-	-	01	01
1982	01	-	-	-	01	01
1983	01	07	12	4	24	20
1984	12	07	15	-	34	19
1985	13	16	17	-	46	13
1986	18	16	11	-	45	-
	45	47	56	04	152	55

4. Systems and Controls:

Deficiencies observed in audit were shown in the detailed report forwarded to the Director-General. Special attention is needed in respect of the following areas of control.

1. Research projects
2. Receipts
3. Revenue and expenditure accounting
4. Material control.

(D.H.F. Hewagamage)
Acting Auditor General.

CH/7119.

Comments of the Authority on the Audit Report of the Accounts
for the year of the ending December 1986

- 2.5.2 Unidentified Bank Debits Out of 22 unidentified debits for the Rs.46,245/= 13 debits amounting to 15,552/= were identified during '87. We are in the process of finding the balance 9 items, also action has been taken to avoid this situation in the future.
- 2.5.3 Shortages & Excesses not accounted re. stock varification Excesses and shortages disclosed from '85 & '86 stock varification reports had been omitted from accounts due to an oversight. This error had been rectified already.
- 2.5.5 Systems and Management The main item on which there has been an appreciable under expenditure is the Capital Expenditure on foreign aid. This item covers financial assistance provided by Foreign Agencies (US AID, CIDA, SAREC etc.) for research projects. At the time the annual budget is prepared, we have very little information about the funds that the Foreign Agencies would be providing and as such tentative estimates have to be made. Another reason is that there is a delay in starting the projects by the Scientists in the Universities and other Institutions which too results in under expenditure.
- 2.5.6 Identified Losses The matter had been investigated, and Director General had approved the cost to be written off, due to the circumstances under which it was lost.
- 2.5.7 Lack of evidence for Audit
- 1) Cash Imprest given to grantees Only 18% of the Petty Cash Imprest were unconfirmed. This 18% consists mainly of imprests given to grantees. In 1987 an amount of Rs.2861/= has been settled out of a total of Rs. 5361/=.
- 11) Deposits Schedule No.6 attached to the accounts clearly shows the details of debtors. Of the deposits receivable amounting to Rs.57,403.45, Rs.52203.45 are being held by Government Institutions, and they rarely respond to a request for confirmation.
- 111) Sundry Debtors Rs.112,263/= Confirmations have been called. Out of the total Sundry Debtors, Rs.97,613 has already being settled during '87.

- IV) Sundry Creditors
- Out of Rs.6267/=, Rs.4160/= represents a balance of the funds already transferred to this Authority from CINTEC for a Specific Educational Programme, to be utilized when the programme is in progress. The other creditor (NTIS) amounting to Rs.1509.75 has already being settled during 1987.
- V) Overtime
- At present there is a strict control over obtaining prior approval for overtime and infact 04 officers had obtained prior approval.
- V1) Entertainment
- Action has been taken to obtain official receipts during '87, even for the small quantities of Sugar, tea leaves etc. bought for the tea pool, which is maintained for purposes of official meetings.
- V11) Research Grants Expenditure
Rs. 2650/=
- This represents two vouchers. For the payment of Rs.150/= the receipt is available. For the payment of Rs.2500/= we have called for a receipt.
- V111) Maintenance of Motor Vehicles
- All running charts except for two vehicles reported not produced for Audit are now available. These two running charts are now being prepared.
3. Financial & Operating Review
- 3.2 Research Grants
- Out of the 55 research grants whose official duration had expired at the end of 1986, 23 grants had been since completed, 4 grants had been terminated, 01 grant was withdrawn in 1987. Final reports were awaited on 18 grants, and 07 grants had been given official extensions. 02 grants had been combined under another on-going 02 grants to enable completion of the work.
4. Systems & Controls
- Controls over materials budgeting, receipts and Research Projects are maintained satisfactorily. A few short-falls that had been reported in the maintenance of the relevant records, also had been since rectified.