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ANNUAL REPORT

1973

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NATIONAL SCIENCE COUNCIL OF SRI LANKA

ANNUAL REPORT
of the
NATIONAL SCIENCE COUNCIL OF SRI LANKA
for the
FINANCIAL YEAR 1973

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National Science Council of
Sri Lanka (Ceylon),
47/5, Maitland Place,
Colombo 7.
12 - 05 - 1975

The Minister of Industries &
Scientific Affairs,
The Ministry of Industries &
Scientific Affairs,
48, Sri Jinaratana Road,
Colombo 2.

Dear Sir,

Annual Report of the National Science Council of
Sri Lanka (Ceylon) for the period 1st January
1973 to 31st December 1973

In terms of Section 28 of the National Science Council of
Ceylon Act No.9 of 1968, I have the honour to submit the Annual
Report of the National Science Council of Sri Lanka (Ceylon) for
the period 1st January to 31st December 1973 together with

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

Yours faithfully,

Dr. O.S. Jayaratne
Chairman
National Science Council.

REPORT OF THE NATIONAL SCIENCE COUNCIL OF SRI LANKA
COVERING THE PERIOD 1 ST JANUARY 1973 TO 31 ST DECEMBER 1973

I MEMBERS OF THE NATIONAL SCIENCE COUNCIL

CHAIRMAN

Dr. O.W. Jayaratne

(Appointed in terms of Section 7 (1) of the
National Science Council Act No. 9 of 1968)

VICE-CHAIRMAN

Mr. D.B.Pattiaratchi

(Elected in terms of Section 7 (2) of the
National Science Council Act No. 9 of 1968)

MEMBERS

Prof. B.A. Abeywickrema

Dr. R.C. de Silva

Dr. M.A.V.Devanathan

Dr. N.N. de Silva (appointed, September 1973)

Dr. L.H. Fernando

Dr. L.P.D.Gunawardena

Mr. S.F.Laurentius

Mr. A.S.Mendis

Mr. T.W. Mendis

Mr. E.I. Munasinghe (appointed, June 1973)

Dr. W.R.N.Nathanael

Dr. C.R. Panabokke

Dr. J.W.L.Peiris

Dr. O.S.Peries

Mr. M.M.Pillai

Mr. N. Puyapalarasan (resigned, June 1973)

Mr. J.J. Rajanayagam

Mr. M. Ranaweera

Prof. K.N. Seneviratne

Mr. A.E.K. Tisseverasinghe

SECRETARY--GENERAL

Dr. G.C.N.Jayasuriya

STAFF

SECRETARY-GENERAL

G.C.N. Jayasuriya - B.Sc. (Cey.), Ph.D.(Sheffield)
F.R.I.C., F.I.Chem.C.

SCIENTIFIC OFFICERS

Mrs. Seetha I. Rodrigo - B.Sc. (Cey.), Ph.D.(Nottingham)
F.I.Chem.C.

Mrs. Marina B. de Silva - B.Sc.(Cey.)

M.W.R.N. de Silva - B.Sc. (Cey.), Ph.D.(Liverpool)

Mrs. M. Iranganie Thabrew - B.Sc. (Cey.), Ph.D.(Southampton)

N. Shammugaratnam - B.Sc. Agric. (Cey.), M.Sc.Agric.(Japan)

Mrs. Swarna P. Prelis - B.Sc. (Cey.)

ASSISTANT SECRETARY

J.C.P. Jayasinghe - B.Com. (Cey.)

ACCOUNTANT

M.F. Hathy

II THE COUNCIL

The Council, appointed by the Minister on the 2nd May, 1972, continued in office during the year 1973. Mr. E.I. Munasinghe was appointed to the Council in June 1973 to fill the vacancy caused by the resignation of Mr. N. Puyapalarasan. Dr. N.N. de Silva was appointed to the Council in September 1973 to fill the vacancy caused by the resignation of Dr. S.T.G. Fernando in October 1972.

Thirteen meetings of the Council were held during the period under review.

III ACTIVITIES OF THE COUNCIL

The new building, constructed for the Council at 47/5, Maitland Place, Colombo 7, was handed over to the Council by the Ministry of Housing and Construction in March 1973. The Secretariat moved into the new premises on the 29th March 1973 from the temporary quarters it was occupying for a period of about four years at 69, Horton Place, Colombo 7. The Secretariat of the Council occupies the first and second floors of the new building, while the ground floor, which was meant to be an Auditorium, has now been converted to an office and is occupied by the Atomic Energy Authority.

The fact that the Secretariat was able to move into more spacious quarters, enabled the Council to recruit more staff. During the year, three more Scientific Officers were recruited and an Accountant was also appointed. Additional secretarial assistance was also obtained. The strengthening of the staff of the Council has enabled the Council to initiate many new projects during the course of the year.

Some of the major activities of the Council are summarised below.

RESEARCH GRANTS AND SCHOLARSHIPS BOARD

The activities of the Research Grants Committee and the Scholarships Board of the Council overlapped to a very large extent, and the Council decided to create one Committee, designated "The Research Grants and Scholarships Board" to administer Research Grants, Research Fellowships and Research Studentships.

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Research Grants, Research Studentships and Research Fellowships for 1973 were advertised in the Government Gazette of 22nd June 1973. It was stated in the advertisement that no foreign exchange will be available and that priority will be given by the Council for the projects listed below.

- 1) The Control of Virus diseases in passion fruit and papaw.
- 2) The effects of insecticides and weedicides on man.
- 3) Pollution of the environment as a result of the manufacture of paper and related products and suitable remedial measures.
- 4) Production of cheese as a cottage industry.
- 5) Studies of the recharge of ground water by rainfall in the dry zone.
- 6) Storage and preservation of grain.
- 7) Storage and preservation of fruit and vegetables.
- 8) Lipase activity in rice-bran and its deactivation.

Sixty-eight applications for Research Grants were received for 1973, requesting a total sum of Rs. 1,269,136.15 distributed over three years as follows :-

1st year	-- Rs. 739,318.35
2nd year	-- Rs. 337,968.90
3rd year	-- <u>Rs. 191,848.90</u>
TOTAL	-- <u>Rs. 1,269,136.15</u>

However, the total sum of money available for the year 1973 for both continuing projects and new grants was only Rs. 320,000.00. Since the financial year of the Government is now the Calendar Year, and also due to the large number of requests received, the Council decided that the funds for 1973 should be released in October 1973 and the rest of the approved grants which cannot be accommodated within those funds could be awarded as Research Grants for 1974 and these funds could be released in the early part of 1974.

The policy of the National Science Council in awarding Research Grants for the year 1973 has been to :-

- 1) give priority to projects advertised by the Council.

- 2) consider projects which were relevant to the economic, social and educational development of the country. Priority was to be given to lines of investigation that could have a more or less immediate impact.
- 3) promote post-graduate research which would eventually result in a young graduate being able to submit a thesis for a M.Sc. or Ph.D. degree in Sri Lanka. Thus the Council supported requests which would provide training for such post-graduate students.
- 4) not consider applicants who were already Research Grantees of the National Science Council and who have not completed these projects.

The final list of Research Grants recommended by the Council and approved by the Minister for the year 1973 is given in Appendix II. The list of projects approved for 1974 will be given in the Annual Report for 1974.

Analysis of Funds Approved for Research Grants

Table I shows the comparative numbers of the projects for which funds were requested and the number of projects approved in the different areas of scientific activity for the years 1973 and 1974.

TABLE I

Group	<u>Total No. Proposed</u>	<u>No. Approved for 1973</u>	<u>No. Approved for 1974</u>
1. Agriculture and Animal Husbandry	2	-	1
2. Biological Sciences	25	10	10
3. Chemical Sciences	7	2	1
4. Physical Sciences	7	2	2
5. Medical Sciences	19	2	12
6. Social Sciences	4	2	1
7. Engineering Sciences	4	-	3
TOTAL	68	18	30

Comparative figures of the funds requested and the funds allocated for the year 1973 and 1974 for the different areas of scientific activity are given in Table II.

TABLE II

Funds Approved for Research Grants*			
Group	Total funds requested	Funds approved for 1973	Funds approved for 1974
1. Agriculture and Animal Husbandry	25,900.00	-	10,200.00
2. Biological Sciences	546,783.15	96,160.00	201,263.15
3. Chemical Sciences	163,900.00	20,200.00	14,400.00
4. Physical Sciences	134,650.00	32,750.00	28,400.00
5. Medical Sciences	246,318.00	46,500.00	82,335.00
6. Social Sciences	72,085.00	11,435.00	14,250.00
7. Engineering Sciences	80,100.00	-	50,100.00
TOTAL	1,269,136.15	207,045.00	400,948.15

* It is the policy of the National Science Council to finance projects for periods of one, two or three years. The figures given in Table II include commitments for the second year or second and third year for projects of two years or three years duration respectively. See also Table III.

Research Grants 1973

Table III gives a break up of the funds allocated for Research Grants 1973.

TABLE III

Research Grants 1973				
Group	Funds 1st year	Funds 2nd year	Funds 3rd year	Total
1. Agriculture and Animal Husbandry	-	-	-	-
2. Biological Sciences	54,170.00	25,670.00	16,320.00	96,160.00
3. Chemical Sciences	20,200.00	-	-	20,200.00
4. Physical Sciences	20,550.00	12,200.00	-	32,750.00
5. Medical Sciences	16,500.00	15,000.00	15,000.00	46,500.00
6. Social Sciences	5,025.00	4,800.00	1,610.00	11,435.00
7. Engineering Sciences	-	-	-	-
TOTAL	116,445.00	57,670.00	32,930.00	207,045.00

Junior Research Awards - Health

On a recommendation made by the Standing Research Committee for Health, the National Science Council approved three Junior Research Awards to Medical Officers who have completed their period of Internship in October 1972 or who would be completing their Internship in October 1973. It was decided to award Rs. 1,000/= per selected candidate for the purpose of meeting the expenses involved in the investigation.

Applications were called for these in June and the following awards were recommended by the Standing Research Committee - Health, ratified by the National Science Council and approved by the Minister of Industries and Scientific Affairs.

<u>Name & Address</u>	<u>Title of Project</u>
Dr. Nanda Weerasuriya, M.O., O.P.D. Base Hospital, Matara.	"The investigation of arthritis in the Matara district with a view to proving a possible filarial aetiology."
Dr. Manchara Perumainar, H.O., General Hospital, Galle.	"The effect of Russels Viper Venom on the kidneys of rats and other mammals including the study of autopsy specimens in the human."
Dr. Parameswaraiyer, Ambikapathy, M.O. 1/C Peripheral Unit, Hemmatagama.	"Family Planning - A survey in depth of a small community."

Research Studentships - 1973 Awards

Sixty seven applications were received when the National Science Council Studentships were advertised in the Government Gazette of the 14th June 1973,

Of the sixty seven applicants, only thirty six were eligible. Since a large number of applications were received, the main criterion for selection of the candidates to be called for interview was, the relevance of the proposed research topic for the economic, educational or social development of the country,

Nine applicants were summoned for interview and they all presented themselves for the interview. The Research Grants and Scholarships Board recommended the award of five research studentships. These recommendations were ratified by the Council and approved by the Minister of Industries and Scientific Affairs.

Studentships

Name & Institution	Project	Supervisor
Mr. R.D. de Silva, Vidyalankara Campus	(1) "The study of the life cycle, growth rate and regeneration of Sargassum species with special reference to its Alginic acid contents." (2) "Sargassum species as an indicator of marine pollution."	Mr. M.W.R.N. de Silva, Prof. I. Balasuriya Vidyalankara Campus, Univ. of Sri Lanka, Kelaniya.
Mr. M.W.A. de Silva, Peradeniya Campus	"Social constraints to the Development of Fisheries Industry between Beruwala & Hambantota."	Mr. Sunimal Fernando, Peradeniya Campus, Univ. of Sri Lanka, Peradeniya.
Miss M.P.L.W. Mendis, Vidyodaya Campus	"Lipase activity in rice bran and its deactivation."	Dr. S. Senthe Shanmuganathan & Dr. K.T.D. de Silva, Vidyodaya Campus, Univ. of Sri Lanka, Nugegoda.
Mr. K.J.T. Dayananda, Peradeniya Campus	"Strain selection and improvement of Citronella (Cymbopogon Nardus)"	Dr. H.M.W. Herath, Dept. of Agriculture, Univ. of Sri Lanka & C.I.S.I.R.
Miss P.A.B. Perera, Vidyalankara Campus.	"Determination of the optimum conditions for the culture of mullet, <u>Mugil Cephalus</u> ."	Dr. S.S. de Silva, Vidyalankara Campus, Univ. of Sri Lanka, Kelaniya.

1970/71 Awards

Of the three studentships awarded in 1970/71, Miss W.M.K. Weerasekera and Mr. V.U. de S. Jayasuriya are now on the third year of the award, while Miss P.K. Jayatilike gave up the award in order to accept permanent employment elsewhere.

1971/72 Awards

Of the four studentships awarded in 1971/72, Mr. D.H.U. Wimalasiri, Mr. S.Ponnuchamy and Mr. G.C.Subasinghe are now on the second year of award, while Mr. M.A.R.Kularatne gave up the award in order to accept permanent employment elsewhere.

Research Fellowships - 1973 Awards

Four applications were received when the National Science Council Fellowships were advertised in the Government Gazette of 14th June 1973. Of the four applicants, only two were eligible. Of the two applicants summoned for the interview, only one presented himself for the interview.

The Research Grants and Scholarships Board recommended to Council that Mr. J.Jinadasa of the Department of Biological Sciences at the Vidyodaya Campus be awarded a Fellowship to work on "An attempt at farming Penaid Prawns and certain hydrobiological investigations incidental there to."

Mr. Jinadasa will be working together with Prof. A.C.J. Weerakoon.

1970/71 and 1971/72 Awards

No Fellowships were awarded in the year 1970/71. The fellowship awarded to Dr. L.J.M.Cooray for the year 1971/72 was postponed at Dr. Cooray's request and he hopes to start work in January 1974.

Summary of Progress of Grants Awarded in 1969/70

Out of the remaining nineteen projects, at the end of the year 1971/72 -

(1) one has been completed.

- (2) fourteen are continuing to the satisfaction of the National Science Council.
- (3) four are held up due to delays in obtaining equipment and chemicals from abroad on licences issued against foreign exchange allocations.

Summary of Progress of Grants Awarded in 1970/71

Of the remaining twenty three grants at the end of the year 1971/72 -

- (1) one has been completed.
- (2) nineteen projects are continuing to the satisfaction of the National Science Council.
- (3) one grant was recalled due to the inability of the grantees to proceed with the projects.
- (4) one project is held up due to delays in obtaining equipment and chemicals from abroad on licences issued against foreign exchange allocations.

Summary of Progress of Grants Awarded in 1971/72

Of the thirty nine grants awarded in 1971/72 -

- (1) thirty one projects are continuing to the satisfaction of the National Science Council.
- (2) three projects are held up due to the unavailability of foreign exchange.
- (3) two projects have been postponed for 1974 on requests made by the Grantees.
- (4) one project is held up due to the inability to recruit a suitable Research Assistant.
- (5) two grants are to be recalled due to the inability of the Grantees to proceed with the projects.

Publications arising out of the Research Grants awarded in 1969/70, 1970/71 and 1971/72 which were not published in Appendix IV of the Annual Report 1971/72 are listed in Appendix III.

NATIONAL SCIENTIFIC AND TECHNICAL DOCUMENTATION CENTRE

The request for UNDP assistance for this project, submitted by the Ministry of Industries and Scientific Affairs to the Ministry of Planning, during the previous year, was turned down due to the lack of funds and the fact that the Planning Ministry felt that this was not of very high priority. The Ceylon National Library Services Board which was also interested in setting up this centre has now intimated to the Ministry of Industries and Scientific Affairs that they are not interested in the project.

Both the Secretary-General of the Council and the Assistant Secretary (Scientific Affairs) of the Ministry of Industries and Scientific Affairs had had discussions with the Director General of Planning and it now appears that it may be possible for the Council to obtain assistance for setting up this centre in 1975. A token vote of Rs.10/= appears in the 1974 estimates for this purpose. A modified project proposal will be drawn up for this in 1974 and it is hoped that this could be implemented in 1975, as the Council felt strongly that one of the most important supporting services for Research is scientific and technical documentation.

FOREIGN EXCHANGE EXIGENCIES FUND

A proposal to establish a Foreign Exchange Exigencies Fund was approved in principle by both the Director, External Resources and the Controller of Imports and Exports. A sum of Rs.50,000/= in Foreign Exchange was promised for this purpose and the actual allocation was to be made when the Foreign Exchange Budget for 1973 was approved. The Council decided that the allocation of exchange from this fund should only be made in the case of emergencies on the certification of the Head of the Institution from which the request is made. The rupee value will have to be met by the Institution concerned.

However, due to the acute Foreign Exchange difficulties that the country faced in 1973, this proposal could not be implemented, as Foreign Exchange was not released for this purpose.

SURVEY OF SCIENTIFIC AND TECHNICAL POTENTIAL IN SRI LANKA

The second stage of this survey was continued and the information received was classified.

The third questionnaire was sent to individual scientists. Out of the 2,600 questionnaires sent to individual scientists and technologists employed in Government Departments and Public Corporations, 903 replies have been received to date. In the private sector, of the 210 questionnaires sent, 50 have been completed and returned. Preparations are being made to classify the information received.

DIRECTORY OF SCIENTIFIC RESEARCH PROJECTS IN SRI LANKA

The first directory of Scientific Research Projects in this country was compiled by the Technical Library of the Ceylon Institute of Scientific and Industrial Research in 1970. It was felt that a directory of this nature should be compiled at least once in three years. As such, in May 1973, a questionnaire was sent to Government Departments, Corporations, Universities and Private Institutions engaged in scientific research. Information on the scientific research undertaken during the three year period 1970/73 was solicited. The response from public sector was very satisfactory and of the order of 75%, although **from the private sector**, the response was poor, being only about 30%. The directory is now being compiled.

JOURNAL OF THE NATIONAL SCIENCE COUNCIL OF SRI LANKA

The inaugural issue (Vol. 1 No.1) of the Journal was published in August 1973. The price of the Journal was fixed by the Council at Rs.7.50 per issue (local) and \$4 per issue (foreign) inclusive of postage. The second issue (Vol. 1 No.2) will be published in January 1974. Henceforth, it is hoped to bring out the two issues for the year in June and December.

Dr. S.T.G.Fernando resigned from the Editorial Board and on the recommendation of the Editorial Board, the Council appointed Dr. S.P.F. Seneratne, Assistant Director, Department of National Museums to the Board.

DRAFT NATIONAL SCIENCE COUNCIL OF SRI LANKA BILL

The draft National Science Council of Sri Lanka Bill was submitted to the Minister of Industries and Scientific Affairs for his consideration. At the request of the Ceylon Association for the Advancement of Science, the Minister forwarded a copy of the draft for comments to the Ceylon Association for the Advancement of Science. The Minister also met a delegation from the C.A.A.S. to discuss the draft.

The Minister made certain modifications to the draft and submitted a Cabinet Memorandum for consideration by the Cabinet. The Cabinet has now approved the proposal and draft legislation has been prepared.

FOOD RESEARCH AND DEVELOPMENT IN SRI LANKA

A memorandum on the above subject which had been sent by the Secretary, Ministry of Foreign and Internal Trade to the Secretary, Ministry of Industries and Scientific Affairs for comments was forwarded to the National Science Council. The Council set up a Sub-committee to look into this matter. This Sub-committee prepared a report on "Food Research and Development in Sri Lanka" which was accepted by the Council and was submitted to the Secretary, Ministry of Industries and Scientific Affairs.

PRIORITIES FOR RESEARCH IN SRI LANKA

On a suggestion by the Secretary-General, the Council appointed five Sub-committees on -

- (1) Natural Resources
- (2) Health
- (3) Agriculture
- (4) Industry
- (5) Social Overheads

to indicate priorities for research -

- (a) in the context of the 5 Year Plan of the Government.
- (b) in terms of long term projects beyond the 5 Year Plan period.

Two of these Committees, namely, those on Health and Social Overheads have submitted their reports, while work on two others, namely, Natural Resources and Agriculture are nearing completion. Unfortunately, the Committee on Industry has not been able to meet.

INTERNATIONAL MEMBERSHIP

The Council is the adhering member for Sri Lanka on the following International Organizations.

- (a) Commonwealth Scientific Committee (CSC)
- (b) International Council of Scientific Unions (ICSU)
- (c) Union Radio-Scientifique Internationale -
International Union of Radio Science (URSI)
- (d) Association for Science Co-operation in Asia (ASCA)

A formal application by the National Science Council for Associate Membership of the International Union of Physiological Sciences (IUPS) was submitted in September 1973. The final decision of the IUPS-Council regarding the above application is not yet known.

NATIONAL COMMITTEES

The Council co-ordinated the working of the following National Committees.

- (a) The National Committee on Man and the Biosphere.
- (b) The National Committee for Radio Science, Aeronomy and Space Science.

The National Committee on "The Man and the Biosphere"

The Committee met three times during the period under review. During this period,

- (a) the Research Grants and Scholarships Board of the National Science Council approved a sum of ~~Rs. 18,750/-~~ for the continuation of the Research Projects under the MAB programme.
- (b) the committee reviewed the progress made in the research projects.

- (c) four research projects were in progress at the beginning of 1973 and work was started on two projects which were approved previously. One project which was previously approved could not be started.
- (d) a new research project "The ecology, cultivation and processing of cane" was approved by the Committee and the Committee has requested Prof. H.D. Dassana to submit a project report.
- (e) on a request from the International Co-ordinating Council of the MAB programme, the Committee agreed to set up four Panels of experts to commence work on -
 - i) Ecological effects of increasing human activities on tropical and sub-tropical forest ecosystems;
 - ii) Impact of human activities and land use practices on grazing lands: Savanna, Grassland, Tundra;
 - iii) Ecological effects of human activities on the value and resources of lakes, marshes, rivers, deltas, estuaries and coastal zones;
 - iv) Impact of human activities on mountain ecosystems.

The National Committee for Radio Science, Astronomy and Space Science

A meeting of the above committee was held in July 1973, to discuss the possibility of Sri Lanka being a participant in the International Magnetospheric Survey (1976/78) organized by the Inter Union Commission in Solar-Terrestrial Physics (IUCSTP) in collaboration with COSPAR. Assuming that the necessary Foreign Exchange could be obtained, the Chairman of the Committee, requested members to indicate to the Secretary-General the nature of the projects they could undertake for the above survey.

ENVIRONMENTAL MANAGEMENT IN SRI LANKA

The Planning Ministry, in collaboration with the National Science

Council of Sri Lanka prepared a report on "Environmental Management in Sri Lanka". The report was prepared by a Committee headed by the Secretary-General, with Dr. H.V.R.N. de Silva, Scientific Officer of the National Science Council, as Secretary. The report is now under consideration by the Ministry of Planning and Economic Affairs.

SCIENTIFIC MANPOWER PROGRAMME

During a visit to the island in 1973 of Dr. A. Kovoov of the University of Paris, he had been asked to draw up a project for providing adequate scientific manpower for this country. As a result of the proposal he had submitted to the Ministry of Planning, the National Science Council was requested to undertake this project. The Council discussed this project proposal on several occasions and in the first instance, it was decided to implement this scheme in the field of Plant Sciences. A Sub-committee was appointed to look into this question and the proposals submitted by this Committee were approved by the Council. The project is to be implemented in 1974.

INDO-SRI LANKA SCIENCE CO-OPERATION

At the third meeting of the Indo-Sri Lanka Sub-committee for Economic Co-operation held at New Delhi from the 23rd to 28th August 1973, the following paragraph was included in connection with co-operation in the field of Science and Technology.

"Science & Technology

The desirability of entering into an agreement for cooperation in the field of science and technology was recognized. This cooperation could cover -

- (a) exchange of information, documentation, research papers, etc.;
- (b) exchange of scientists and technologists;
- (c) the undertaking of specific joint research projects; and
- (d) transfer of technology in selected fields.

It was agreed that Sri Lanka would send a team of selected scientists and technologists to India to negotiate the terms of the agreement and identify fields of activity of natural interest."

At the request of the Secretary, Ministry of Industries and Scientific Affairs, this proposal was examined by the Council and recommendations regarding the implementation of this proposal have been submitted to the Minister for consideration.

The Council also examined the draft Agreement between the Government of the Republic of India and the Government of the Republic of Sri Lanka on scientific and technical co-operation and has made its recommendations to the Ministry.

SURVEY OF INSTRUMENTS

The Council felt that a survey of the more specialized equipment available throughout the island in research laboratories and Universities would be very useful. Such a survey would serve as a guide to the Council for directing research workers to institutions where the equipment required by them would be available. The Council decided to appoint an Advisory Committee to help with the survey of instruments. Further, the Council decided that all information obtained from such a survey should be kept strictly confidential.

Preliminary steps have been taken by the Secretariat to implement this proposal and it is hoped to carry out this survey during 1974.

INTERNATIONAL HYDROLOGICAL DECADE

A request was made by the National Committee for IHD for a sum of Rs.300/= for the award of two prizes of Rs.150/= each to the winners of an essay competition. The competition was to be conducted in all three languages among school children visiting an exhibition organized by the Sri Lanka National Committee for IHD. The Council approved this request on the condition that the prizes would be designated as National Science Council of Sri Lanka awards.

ESTABLISHMENTS COMMITTEE

The Establishments Committee met three times within the period under review. The committee which meets to consider routine administration and financial matters, approved a set of schemes for the recruitment of Council staff. The committee also approved the adoption of certain conditions of service of the minor grades of staff of the National Science Council.

COUNCIL VISITORS

A team of scientists from the University of Maryland visited the Council in July and had discussions with some members of the Council. The delegation from Maryland included Prof. Cyril Ponnampuruma, Prof. Francis C. Stark and Prof. John M. Curtis. This visit was in connection with a joint research programme between the University of Sri Lanka and the University of Maryland.

The Secretary-General and Dr. H.V.R.N. de Silva, Scientific Officer of the National Science Council of Sri Lanka met a joint UNDP/UN/ECAFE - a fact-finding mission on the Human Environment in August 1973. They discussed at length the Environmental Problems of Sri Lanka. The delegation consisted of Dr. Jerrold R. Voss; Mr. Turhan Mangun and Mr. Khin Maung Lwin (ECAFE).

Madame Chang Loh-hui and Madame Tseng Mi-pai of the Academy of Science of the People's Republic of China visited the Council in December 1973 and had discussions with the Secretary-General.

OVERSEAS VISITS

Dr. G.C.N. Jayasuriya, ~~Secretary-General~~ of the Council attended the second meeting of the Association for Science Co-operation in Asia, as the Head of the Sri Lanka delegation, held in Tokyo, Japan in March 1973.

The Secretary-General left the island on the 11th March 1973 and returned on the 13th March 1973.

IV ADMINISTRATION

THE SECRETARIAT

The Secretariat moved into the new premises at 47/5, Maitland Place, Colombo 7, on the 29th March 1973, from the temporary quarters it was occupying at 69, Horton Place, Colombo 7. During the course of the period under review, steps were taken to provide furniture, equipment and secretarial facilities for the new premises. Steps were also taken to demarcate the boundary, construct the approach road and finish some additional work in the building to make it more functional.

In 1973, the Council was able to purchase a new motor vehicle for the use of the Secretariat.

STAFF

The staff at the end of the period under review totaled thirty six. The Secretary-General, three Scientific Officers and the Assistant Secretary continued in office. Three more Scientific Officers and an Accountant were appointed in 1973.

One year's study leave was approved for Mrs. H.B. de Silva, Scientific Officer, to read for an M.Sc. degree in "The Structure and Organization of Science and Technology" at the University of Manchester, U.K. on a Colombo Plan Scholarship from September 1973.

Additional secretarial assistance was also obtained during the period under review.

COUNCIL LIBRARY

At the end of the period under review, the library collection stood as follows :-

Stock

1. Books

Total No. of books as at 31.12.73	: 691
Books added during 1973	: 232
Donations received	: 116

2. Periodicals

Foreign subscriptions	: 17
Local subscriptions	: 5
Complimentary subscriptions	: 20

3. Reports and documents received : 142

APPENDIX I

MEMBERSHIP OF THE BRANDING COMMITTEES AND PANELS 1973

I. Research Grants & Scholarships Board :

Mr. D.B. Pattiaratchi (Chairman)
Prof. B.A. Abaywickrama
Dr. H.A.V. Devanathan
Dr. G.C.N. Jayasuriya
Mr. S.F. Laurentius
Dr. J.W.L. Peiris
Mr. M.H. Pillai
Prof. K.N. Seneviratne
Dr. Seetha Rodrigo (Secretary)

II. Establishments Committee :

Dr. Osmund Jayaratne (Chairman)
Mr. D.B. Pattiaratchi
Dr. G.C.N. Jayasuriya
Dr. R.C. de Silva
Mr. J.C.P. Jayasinghe (Secretary)

III. Journal of the National Science Council - Editorial Board :

Dr. G.C.N. Jayasuriya (Chairman)
Prof. P.V. Nethsinghe
Dr. M.L.T. Kannangara
Prof. S. Mahalingam
Miss. Clodagh Nethsinghe (Secretary-Vol. 1 No.2-1973)
Dr. C.R. Panabolke
Mr. D.B. Pattiaratchi
Prof. K.N. Seneviratne
Mr. A.E.K. Eiseverasinghe
Dr. R.O.B. Wijesekera
Mrs. Marina de Silva (Secretary-Vol.1 No.1-1973)

IV. National Committee for Radio Science, Information and Space Science :

- Dr. H.L.H. Kannangara (Chairman)
- Mr. M.K.P. Mahipala
- Prof. P.C.B. Fernando
- Prof. C. Dalmsayake
- Mr. H.D.S.A. Gunawardena
- Dr. G.C.H. Jayasuriya
- Dr. C.N. Jayaratne
- Mr. H.H.G. Fernando
- Mr. G.S. Jayamaha
- Dr. Irangunie Mubrow (Secretary)

V. National Committee on Man and the Biosphere :

- Prof. B.A. Abeywickrema (Chairman)
- Mr. H.D. Ariyadasa
- Prof. E. Cruz
- Prof. C. Dalmsayake
- Dr. G.C.H. Jayasuriya
- Mr. E.M. Jayaraj
- Mr. A.S.A. Pacheco
- Prof. P.P.S.L. Siriwardena
- Mr. A.E.M. Missoverasinghe
- Mr. L.G.A.D. de S. Wijesinghe
- Mr. E. Athapathanathan
- Dr. H.W.R.M. de Silva (Secretary)

APPENDIX II

RESEARCH GRANTS APPROVED FOR 1973

Ref. No.	Name, Institution/Address Title	Duration (Years)	Total amount approved
2/RG/73/1	Dr. N.N. de Silva, C.W.E. Research and Development Division, 21, Vauxhall Street, Colombo 2. Production of cheese as a cottage industry. (Fermented Milk Products)	1	Rs. 5,100/=
2/RG/73/2	Dr. (Mrs.) I.S. Ratnaike, Dept. of Biochemistry, Faculty of Medicine, Colombo Campus. Production of cheese as a cottage industry	1	Rs. 2,500/=
2/RG/73/3	Mr. J. Elizer, Dept. of Botany, Colombo Campus Irradiation effects on yeasts with special reference to fermentation, morphology and enzyme distribution.	2	Rs. 4,300/=
2/RG/73/4	Dr. M.W.R.N. de Silva, Scientific Officer, National Science Council, 47/5, Maitland Place, Colombo 7. Study of the Life Cycle, Growth Rate and Regenera- tion of Sargassum species with special reference to its alginic acid content. Sargassum as an indicator of marine pollution.	2	Rs. 2,600/=
2/RG/73/5	Dr. P.A.J. Perera, Dept. of Biochemistry, Peradeniya Campus. Lipase activity in rice bran and its deactivation.	2	Rs. 3,100/=
2/RG/73/6	Mrs. T.M.S. Atukorala, Dept. of Biochemistry, Faculty of Medicine, Colombo Campus. Lipase activity in rice bran and its deactivation.	1	Rs. 900/=
2/RG/73/7	Dr. H.N. de Silva, C.W.E. Research and Development Division, 21, Vauxhall Street, Colombo 2. Storage and preservation of grain.	1	Rs. 15,200/=
2/RG/73/8	Dr. V.K. Ganesalingam, Dept. of Zoology, Peradeniya Campus, Biological control of rice weevils.	2	Rs. 4,000/=
2/RG/73/9	Dr. S.S. de Silva, Dept. of Zoology, Vidyalankara Campus, Kelaniya. Determination of the Optimum condition for the culture of mullet, <u>Mugil Cephalus</u>	2	Rs. 7,000/=

Ref. No.	Name, Institution/Address Title	Duration (years)	Total amount approved
2/RG/73/10	Dr. S.N. de S. Seneviratne, Division of Plant Pathology, Central Agricultural Research Institute, Gannoruwa, Peradeniya. Investigation on virus diseases of passion fruit.	3	Rs. 50,760/=
2/RG/73/11	Mr. D.S. Jayasuriya, Dept. of Chemistry Peradeniya Campus. Study of the environmental pollution caused by the Paper Mills at Valachchenai.	1	Rs. 13,000/=
2/RG/73/12	Dr. K.Sundaralingam, Dept. of Physics, Peradeniya Campus. An investigation of the physical properties of an artificial material manufactured from pyrolysed coconut dust, and an investigation of the impact strength of plaster board reinforced with coconut fibre.	2	Rs. 24,400/=
2/RG/73/13	Dr. H.Selvaratnam, Dept. of Chemistry, Peradeniya Campus. Graft - Polymerisation of rubber latex with various monomers.	1	Rs. 8,350/=
2/RG/73/14	Dr. N.J.Walloppillai, Cardiology Unit, General Hospital, Colombo 10. A prospective study into the pattern of coronary heart disease and risk factors in an urban population in Sri Lanka.	3	Rs. 45,000/=
2/RG/73/15	Dr. N. Nagaratnam, Visiting Physician, General Hospital, Colombo. Abnormal haemoglobins and haemolytic anaemias.	1	Rs. 1,500/=
2/RG/73/16	Mr. D.B.Rajapakse, Ceylon Steel Corporation, Athurugiriya. Economic geography of the steel industry in Ceylon.	3	Rs. 5,435/=
2/RG/73/17	Mr. Sunimal Fernando, Dept. of Sociology, Peradeniya Campus. Social constraints to the development of the fisheries industry between Beruwela and Hambantota.	3	Rs. 6,000/=
2/RG/72/21	Dr. K.T.D.de Silva, Dept. of Chemistry, Vidyaaya Campus, Nugegoda. Lichens of Ceylon - A study of the Chemical constituents and their antibiotic activity. (RG/72/21 approved)	1	Rs. 7,200/=

APPENDIX III

PUBLICATIONS OF RESEARCH GRANTEES

1. NSCA/1/17/2: Prof. M.U.S.Sultanbawa
- 1.1 BANDARANAYAKE, W.M., SELLIAM, S., SULTANBAWA, M.U.S. & GAGES, D.E. (1973) Characterisation of the coumarins in the seed extract of mesua thwaitesii (S: Diya na) Guttiferae by combined gas chromatography and mass spectrometry. Proc. Ceylon Ass. Advmt. Sci. 29(1) : 124.
- 1.2 GUNASEKERA, S.P. & BALASUBRAMANIAM, S. (1973) Chemical investigation of Ceylonese plants. Part II. Isolation of Nagostin from the barks of Hydnocarpus octandra Gaertn (Flacourtiaceae). Phytochemistry 12 : 232 - 233.
- 1.3 GUNASEKERA, S.P. & SULTANBAWA, M.U.S. (1973) Chemical investigation of Ceylonese plants. Part IV. Six new triterpenoids from the bark of Hydnocarpus octandra Thw. (Flacourtiaceae) Chem. & Ind. : 790 - 791.
- 1.4 GUNASEKERA, S.P. & SULTANBAWA, M.U.S. (1973) Extractives of Madhuca neriifolia Thw. H.J. Lam (S: Gan mi) Sapotaceae. Proc. Ceylon Ass. Advmt. Sci. 29(1) : 120 - 121.
- 1.5 GUNASEKERA, S.P. & SULTANBAWA, M.U.S. (1973) Extractives of Calophyllum cordato-oblongum Thw. (S: Kalukina) Guttiferae. Proc. Ceylon Ass. Advmt. Sci. 29(1) : 132 - 133.
- 1.6 GUNASEKERA, S.P. & SULTANBAWA, M.U.S. (1973) Chemical investigation of Ceylonese plants. Part V. Four new Friedelane carboxylic acids from the bark of Trichadenia zeylanica Thw. (Flacourtiaceae). Tetrahedron Letters : 2837 - 2840
- 1.7 GUNASEKERA, S.P., SULTANBAWA, M.U.S. & BALASUBRAMANIAM, S. Extractives of Palaguim rubiginosum Thw. Engl. (S: Tawenna) and Palaguim peiolare Thw. Engl. Sapotaceae. Proc. Ceylon Ass. Advmt. Sci. 29(1): 144
- 1.8 GUNATILAKE, A.A.L. & SULTANBAWA, M.U.S. (1973) Chemical investigation of Ceylonese plants. Part III. Extractives of the fruits of Argyrea populifolia Choisy (Convolvulaceae) J. Chem. Soc. Perkin I. : 1155 - 1157

- 1.9 JAYATILAKE, G.S., SELLIAN, S. & SULTANBAYA, M.U.S. (1973)
Extractives of Calophyllum soulattri Burm. f. (S: Domba kina)
Guttiferae. Proc. Ceylon Ass. Advmt. Sci. 29(1) : 153.
- 1.10 KUMAR, V., RAMACHANDRAN, S. & SULTANBAYA, M.U.S. (1973)
Isolation of Jacareubin from timber of Calophyllum inophyllum
(Guttiferae) collected in Sri Lanka. Proc. Ceylon Ass. Advmt.
Sci. 29(1) : 130 - 131.
- 1.11 PAVANASASIVAM, G. & SULTANBAYA, M.U.S. (1973) Chemical investi-
gation of Ceylonese plants. Part VI. Cycloartenyl acetate,
cycloartenol and cycloartenone in the barks of Artocarpus
species (Moraceae). Phytochemistry 12 : 2725 - 2726.
- 1.12 PAVANASASIVAM, G. & SULTANBAYA, M.U.S. (1973) Extractives of
Artocarpus nobilis Thw. (S: Walde) Moraceae. Proc. Ceylon
Ass. Advmt. Sci. 29(1) : 139.
2. NSCA/1/17/5 : Dr. A.R.T. de Silva
- 2.1 DE SILVA, A.R.T. (1973) Metallurgical factors which led to the
crack on a rotating cement kiln type.
(Paper read at Institution Day, 17 March 1973)
- 2.2 DE SILVA, A.R.T. & FERRELANDO, B.M.L. (1973) Failure of sea water
pump drive shafts.
(Paper read at Annual Conference, Institute of Engineers,
September 1973.)
3. NSCA/1/17/6 : V. Pavanasasivam
- 3.1 PAVANASASIVAM, W. (1973) Manganese studies in some high organic
matter soils. Plant and Soil. 38 : 245 - 255.
4. NSCA/1/17/7 : Prof. S.N. Arsekularatne
- 4.1 ARSEKULARATNE, S.N. (1972) Aflatoxins in coconut products.
Ceylon Cocon. Q. 23 : 103 - 113.

5. NSCA/1/17/14 : Dr. R.S. Ramakrishna
- 5.1 RAMAKRISHNA, R.S. & KAMAGARATHAN, H. (1973) A study of vanadium (V) as an oxidant for thiol compounds. Proc. Ceylon Ass. Advmt. Sci. 23(1) : 121 - 122.

6. 2/NSCA/1/17/19 : Dr. R.H. Wijayanayake
- 6.1 WEERASINGHE, L. & WIJAYANAYAKE, R.H. (1973) Effects of solutes of azeotropes Part I. Effects of chlorides on water-isopropanol azeotrope. Proc. Ceylon Ass. Advmt. Sci. 23(1) : 118 - 119
- 6.2 WEERASINGHE, L. & WIJAYANAYAKE, R.H. (1973) Effects of solutes on azeotropes Part II. U.V. and I.R. study on the effects of CsCl high concentrations on the water-isopropanol azeotrope. Proc. Ceylon Ass. Advmt. Sci. 29(1) : 119 - 120

7. 2/NSCA/1/17/23B : Dr. K. Mahadeva
- 7.1 ARUNACHALAM, S. & MAHADEVA, K. (1973) A pilot study of the effect of Punarnava Mandoora on anaemia (Pandu). Proc. Ceylon Ass. Advmt. Sci. 23(1) : 17.
- 7.2 CHANDRASHEKERA, K.I. & MAHADEVA, K. (1973) A study of the effect of Psoralea corylifolia on leucoderma. Proc. Ceylon Ass. Advmt. Sci. 29(1) : 13.
- 7.3 GOONATILLEKE, S. & MAHADEVA, K. (1973) A pilot study of evaluating the effect of ayurvedic drugs on bronchial asthma. Proc. Ceylon Ass. Advmt. Sci. 29(1) : 15-16.

8. 2/NSCA/1/17/23C : Dr. H. Gunawardena
- 8.1 GUNAWARDENA, H. (1972) The new Cassegrain telescope at the Colombo Observatory. Equatorial 3(2 & 3) : 39 - 40.
- 8.2 GUNAWARDENA, H. () The new Astronomical Observatory at the Department of Meteorology. J. Ceylon Met. Soc.

9. 2/NSCA/1/17/23D : Dr. H.H. Costa
- 9.1 COSTA, H.H. & DE SILVA, S.S. (1973) Hydrobiology of Colombo (Beira)Lake III. Seasonal fluctuations of plankton. Bull. Fish. Res. Stn. Ceylon (In press).

- 9.2 COSTA, H.H. & DE SILVA, S.S. (1973) Hydrobiology of Colombo (Beira) Lake IV. Seasonal fluctuations in aquatic fauna living on water plants. Bull. Fish. Res. Stn. Ceylon (In press)
- 9.3 COSTA, H.H. & DE SILVA, S.S. (1973) Hydrobiology of Colombo (Beira) Lake V. Seasonal study of the marginal fauna. Bull. Fish. Res. Stn. Ceylon (In press)
- 9.4 COSTA, H.H. & DE SILVA, S.S. (1973) Hydrobiology of Colombo (Beira) Lake VI. Seasonal variations in primary productivity. Bull. Fish. Res. Stn. Ceylon (In press)
10. 2/NSCA/1/17/24 : Dr. S. Sotheeswaran
- 10.1 SELVARATNAM, M., SOTHEESWARAN, S. & SUSEELADEVI, S. (1973) Graft polymerisation of natural rubber. Q. Jl. Rubb. Res. Inst. Ceylon
- 10.2 SUSEELADEVI, S., SOTHEESWARAN, S. & SELVARATNAM, M. (1973) Graft polymerisation of natural rubber. International Rubber Conference (Sri Lanka) : Abstracts of papers.
11. 2/NSCA/1/17/38 : Dr. R.S. Ramakrishna
- 11.1 RAMAKRISHNA, R.S. & PARAMASIGAMANI, V. (1973) Nature of the colour forming complex species between TiO^{2+} and salicylic acid in concentrated H_2SO_4 . Proc. Ceylon Ass. Advmt. Sci. 29(1) : 126.
- 11.2 RAMAKRISHNA, R.S. & WILLIAMS, D.S. (1973) Mixed metal complex of Fe(III) and Ti(IV) in perchloric acid. Proc. Ceylon Ass. Advmt. Sci. 29(1) : 135.
12. 2/NSCA/1/17/41 : Prof. K.H. Seneviratne
- 12.1 SENEVIRATNE, K.H., SEMANAYAKE, N. & NIMALASURIYA, A. (1973) Evidence of early nerve dysfunction in diabetic as assessed by the post ischaemic paraesthesiae response. Proc. Ceylon Ass. Advmt. Sci. 29(1) : 31 - 32.

13. 2/ISCA/1/17/43 : Dr. W.L.Ratnayake

13.1 JAYASURIYA, V.U. DE S. (1973) Dosage-mortality and toxicity studies on Drosophila melanogaster of some pesticides used in Sri Lanka. Proc. Ceylon Ass. Advat. Sci. 29(1) : 100.

13.2 JAYASURIYA, V.U. DE S. & RATNAYAKE, W. L. (1973) The mutagenic and chromosomal effects on Drosophila melanogaster of some pesticides commonly used in Sri Lanka. Proc. Ceylon Ass. Advat. Sci. 29(1) : 100.

14. 2/ISCA/1/17/49 : Dr. H. Nagaratnam

14.1 NAGARATNAM, N., DE SILVA, D.P.K.M. & DE SILVA, S.P. (1973) Tropical splenomegaly syndrome. J. Trop. Med. & Hyg.
(In press)

NATIONAL SCIENCE COUNCIL OF SRI LANKA
INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST DECEMBER, 1973

For the 15 months
ended 31.12.72

	Rs.	cts.	Rs.	cts.
Income for the Year				
Interest on Distress loans		398.98		
Discount received		15.00		
Sale of old News Papers		62.50		
Rent received	2,700			
Telephone undercharges		1.00		477.48
Less: Expenditure for the year				
Council Expenditure			243.20	
Travelling (Council Members)	2,531			
Seminars & Symposia	2,629			
Printing & Publications	2,640			
Research Studentships	24,400	46,400.05		
Subscriptions to International Scientific Unions	10,930	16,787.80		
Assistance to International Science Project Work	4,883			
Participation in Sri Lanka				
Incidental Expenses for Visiting Scientists	467	127.80		
International Hydrological Decade Prizes		300.00		
	48,480		63,856.85	
Staff Proportions				
Salaries and Allowances	120,729		163,931.28	
Employees Provident Fund (Council Contributions)	17,355		19,669.03	
Overtime	3,042		11,196.72*	
	141,129		194,797.03	
	189,609		258,655.88	477.48
			Balance o/f.	

* Of this amount, Rs.4,777.63 represents arrears of overtime payments for 1968, 1969 and 1970.

For the 15 months
ended 31.12.72
189,609

Balance b/f.

Office Administration				
Travelling (Official)				
Stationery				
Rent payable				
Electricity				
Telephone				
Less: Telephone charges (Private calls)				
Postage				
Depreciation of Buildings and Road				
office equipment & furniture				
Motor Car				
Refrigerator				
Bicycle				
Furnishings				
Wall Clocks				
Sports Equipment				
Accessories & Miscellaneous				
Audit Fees				
Bank charges				
Sundry Expenses				
Consergency				
Entertainment				
Medical Expenses				
Advertising				
Contingencies				
Maintenance of Motor Car				
Maintenance of Office & Furniture				

Balance c/f.

Rs. ots. Rs. ots. Rs. ots.

258,655.88 477.48

2,418.25
11,640.82
3,750.00
1,799.48
9,248.81
2,670.52
2,089.13
11,738.25
2,347.91
76.87
60.29
96.56
42.00
75.20
341.68
500.00
627.64
5,742.71
40.00
570.29
94.50
6,273.00
2,769.40
745.68
202.35

65,961.40

324,617.28 477.48

59,054
248,663

For the 15 months
ended 31.12.72

248,663

Miscellaneous
Consumables
Suspense A/c.

974.36
66.40

1,040.76

245,963

Excess of Expenditure over Income

Rs. ots. Rs. ots. Rs. ots.

324,617.28 477.48

Balance b/f.

325,658.04
325,180.56

SCHEDULE OF EXPENDITURE FROM OTHER SOURCES

For the 15 months
ended 31.12.72

Rs.	cts.		Rs.	cts.	Rs.	cts.
		<u>Man and the Biosphere</u>				
		Research Studentships	15,700.00			
		Research Grants	14,079.50			
		Research Project RG/72/12	<u>843.75</u>			
49,108.00				30,623.25		
1,359.00		<u>Manpower and Expenditure</u>		-	-	
-	-	<u>Survey of Raw Materials</u>		1,560.00		
5,000.00		<u>Unesco Early Evolution of Life</u>		-	-	
-	-	<u>Miscellaneous</u>				
10.00		Bank charges	45.53			
-	-	Suspense A/c.	.16			
-	-	Provision for Depreciation	<u>187.50</u>			
				<u>233.19</u>		
<u>55,477.00</u>		<u>Total Expenditure</u>			<u>32,416.44</u>	

NATIONAL SCIENCE COUNCIL OF SRI LANKA
BALANCE SHEET AS AT 31ST DECEMBER, 1973

	Rs.	cts.	Cost as at 01.01.1973	Rs.	cts.	Additions during the year	Rs.	cts.	Accumulated Depreciation at 31.12.73	Rs.	cts.	Net Balance as at 31.12.73
For the 15 months ended 31.12.72												
Fixed Assets												
Buildings	-	-	-	62,674	15		2,089	13		60,585	02	
Office equipment & Furniture	85,593		100,843	65		71,808	00		27,108	38		145,543
Motor Car	39,869		39,869	42		30,567	90*		2,347	91		68,089
Bicycle	253		336	75		456	50		144	29		648
Sports Equipment	-		-			1,504	00		75	20		1,428
Accessories & Miscellaneous	-		-			9,734	62		438	34		9,296
Library	19,439		19,439	03		6,323	55**		-	-		25,762
			160,488	85		183,068	72		32,203	25		311,354
Telephone Installation of D.P.	145,154											11,026
National Emblem	11,026											451
Current Assets												
Stocks - Stationery	-		-			8,564	67					
Art Paper	-		-			4,427	05					
Consumables & Stores	-		-			1,036	67					
Journal Vol. 1 No.1	-		-			3,643	70					
Reprints	-		-			142	50					
	156,180											322,832
										17,814	59	322,832
												335

Balance o/f

* Rs. 30,567.90 represents an increase in payment in 1973 for Motor Car 6 Sri 4313. The first payment of Rs. 39,869.42 was made on 6th August 1972.

** Rs. 6,323.55 includes an amount of Rs. 663.50 being Goodwill on Exchanges of the Journal of the National Science Council of Sri Lanka Vol. 1 No.1

For the 15 months
ended 31.12.72
156,180

	Rs.	cts.	Rs.	cts.	Rs.	cts.
Balance b/f						
Debtors - Distress loans to staff			18,066.20			
Festival Advance			300.00			
Bicycle Loans			1,500.00			
					19,946.20	
<u>Payments</u> - Central Bank Bulletin			20.00			
Insurance Corporation of Ceylon			715.37			
Registrar of Motor Vehicles			57.50			
Post Master General			990.90			
Telephone			1,545.00			
Lake House			180.83			
Government Publication Bureau			1,500.00			
Felix Pereira & Son			100.00			
Telephone			430.00			
Treasury			94,860.00			
Amount to be transferred to Treasury deposit			100,000.00			
					196,890.00	
<u>Cash in hand and at Bank</u> - Petty Cash	200		350.00			
	242		22.20			
Monies to be banked			63,369.60			
Bank					63,741.80	
						302,002.19
						624,834.54

406,088

OTHER SOURCES

BALANCE SHEET AS AT 31ST DECEMBER 1973

For the 15 months ended 31.12.72

	Cost	Ac. Depreciation	Net Balance
	Rs. cts.	Rs. cts.	Rs. cts.
Fixed Assets:			
Office Equipment & Furniture	1,875.00	187.50	1,687.50
	<u>1,875.00</u>	<u>187.50</u>	<u>1,687.50</u>

Current Assets:

Bank Balance	62,019.06
	<u>63,706.56</u>

Represented by:

Man & the Biosphere Grant	92,482.00	
Less: Expenditure	<u>30,623.25</u>	61,858.75

Survey of Raw Materials

	2,000.00	
Less: Expenditure	<u>1,560.00</u>	440.00

Manpower & Expenditure:

	3,000.00	
Less: Expenditure	<u>1,359.00</u>	1,641.00
	1,641.00	63,939.75

Less: Other Expenses

Bank Charges	45.53
Expense A/c.	.16
Provision for Depreciation	<u>187.50</u>

233.19

63,706.56

Chairman
National Science Council

Secretary General
National Science Council

NATIONAL SCIENCE COUNCIL OF SRI LANKA
JOURNAL TRADING & PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31ST DECEMBER 1973

	Rs.	cts.	Rs.	cts.
Sales Exchanges & Complimentaries				
Less: Expenditure on Production	5,982.	50		
Purchase of Art Paper	2,785.	40		
Cost of Printing Journal and Reprints	35.	00		
Cost of Designing Journal Covers	8,802.	90		
Cost of Exchanges and Complimentaries	398.	40		
Add: Postage	464.	60	9,665.	90
Less: Stocks as at 31st December, 1973				
Art Papers	4,427.	05		
Journal	3,643.	70		
Reprints	142.	50	8,213.	25
Goodwill on Sale and Exchanges of Journal transferred to Library Account.			1,452.	65
			663.	50
			=====	=====

CERTIFICATE OF THE AUDITOR GENERAL

The accounts of the National Science Council for the year ended 31st December 1973 were audited under my direction in pursuance of Section 90(1) of the Constitution of Sri Lanka read in conjunction with Section 13(1) of the Finance Act, No.38 of 1971.

My observations on these accounts which should be published in terms of Section 14(2)(c) of the Finance Act, No. 38 of 1971 are contained in my report of even date addressed to the Chairman of the Corporation/Board.

Auditor General

AUDIT OFFICE

COLOMBO 7.

31st December 1974.

My No: C-18/NSC/73

Auditor General's Department
Torrington Square,
Colombo 7.
1974.09.20

The Chairman,
National Science Council of Sri Lanka.

The Audit Report on the Accounts of the National Science Council
for the year ended December 31, 1973

The accounts of the National Science Council for the year ended December, 31 1973 were audited under my directions in pursuance of Sec. 90(1) of the Constitution of Sri Lanka read in conjunction with Sec. 13(1) of the Finance Act No. 38 of 1971.

My report in terms of Sec. 14(2) (c) of the Finance Act is as follows:

1. Accounts

1.1 Financial Results

The excess of expenditure over income for the year ended December 31, 1973 amounted to Rs. 357,597 as against Rs. 301,440 for the year ended December 31, 1972. The sum of Rs. 357,597 is comprised of the net total expenditure of Rs. 325,181 from the Council funds and Rs. 32,416 spent from other sources. Other sources is comprised of funds granted by foreign and local organizations and Ministries through the Ministry of Industries and Scientific Affairs for special research projects.

The only items of income of the Council for the year under review were miscellaneous incomes amounting to Rs. 477 and sales exchanges and complementaries of Journal amounting to Rs. 789.

Journal Trading & Profit & Loss Account

A separate Trading & Profit and Loss account had been prepared in respect of the National Science Council Journal Volume I No. I printed and published during the year under review. The excess of expenditure over income in respect of the printing and publication of the Journal amounting to Rs. 663 had been capitalised as Goodwill on exchange of Journals and transferred to Library Account.

A comparison of the income and expenditure figures for the years ended December 31, 1972 and 1973 is shown below:

	<u>Year ended</u> <u>Dec. 31, 1973</u> Rs.	<u>Year ended</u> <u>Dec. 31, 1972</u> Rs.
<u>Expenditure:</u>		
Council Expenditure	63,859	48,480
Staff Emoluments	194,797	141,129
Office Administration	67,002	59,054
Other Expenses	<u>32,416</u>	<u>55,477</u>
	<u>358,074</u>	<u>304,140</u>
<u>Income:</u>		
Miscellaneous	477	-
Rent Received	-	<u>2,700</u>
	<u>477</u>	<u>2,700</u>

Other expenses referred to above comprised the total expenditure incurred from funds received by the Council under the heading - Other Sources.

1.2 Financial Structure

The financial structure of the Council as at December 31, 1973 and December 31, 1972 is shown below:

	<u>Dec. 31, 1973</u>	<u>Dec. 31, 1972</u>
	Rs.	Rs.
<u>Resources:</u>		
National Science Council Fund	927,673	651,136
Less Excess of Expenditure	<u>325,181</u>	<u>245,963</u>
	602,492	405,173
Other sources	96,123	132,850
Less Excess of Expenditure	<u>32,416</u>	<u>55,477</u>
	<u>63,707</u>	<u>77,373</u>
	<u>666,199</u>	<u>482,546</u>
<u>Investments:</u>		
Fixed Assets-National Science Council Funds	322,832	156,180
Add. Net Current Assets-National Science Council Funds	<u>279,660</u>	<u>248,993</u>
	602,492	405,173
Fixed Assets-Other Sources	1,688	1,875
Add. Net Current Assets-Other Sources	<u>62,019</u>	<u>75,498</u>
	<u>63,707</u>	<u>77,373</u>
	<u>666,199</u>	<u>482,546</u>

1.3 Comments on Financial Results and Financial Structure

1.3.1 Consistency and Principles

(a) Publication of Journal Vol. (1) No. (1)

A separate Trading & Profit and Loss Account had been prepared for this first issue of the Journal where an income item of Rs. 789 is shown.

This is comprised of the following items:

	Rs.
Sales Vol. 1 No. 1	196
Payments in advance for future issues	195
Value of exchanges & complementaries	<u>398</u>
	<u>789</u>

A prepayment of Rs. 195 for the next issue of the Journal had been treated as an income in respect of this issue. This had resulted in a reduction in the excess of expenditure over income from Rs. 859 to Rs. 664.

The excess of expenditure over income of Rs 664 had not been written off the general income and expenditure account but had been capitalised and transferred to Library account as value of exchanges and complementaries, received in return from other Institutions. But an actual valuation of the Journals received in exchange had not been done by the Council during the period under review.

(b) Unsold copies of the Journal

Out of the 1000 copies of the first issue of the Journal only 126 copies had been disposed of up to December 31, 1973 leaving a balance of 874 copies in stock. These have been valued at cost and brought into account, at Rs. 3644. In view of the very slow movement of these copies the ~~salable~~ value of this stock should be very much lower than the book value. Thus the excess of expenditure on this issue had been under estimated in the accounts.

In spite of the slow rate of disposal of the Council Journal, 1000 copies of the Volume (1) No.(2) had also been printed during 1974 at a cost of Rs. 10,917 out of which 366 copies are left unsold as at August 31, 1974.

In the light of the above facts, the Council should review the number of copies to be printed in its future issues in order to exercise economy in the use of Council funds.

1.3.2 Computation and Book Keeping

(a) Books of Account

The practice of maintaining two sets of accounting records and two bank accounts for the National Science Council Funds and other grants respectively has been continued during the year under review as well. The final accounts presented had accordingly been split up into two sets. An amalgamation of the two sets of books and maintenance of one bank account will facilitate to give more clear picture of the financial position of the Council and would result in economy in the use of stationery.

(b) Cash Balance and Bank Reconciliation

The Bank Balance as per Cash Book (No. 1 account) on December 31, 1973 was Rs. 63,370. But two cheques returned by payees amounting to Rs. 1,600 during the year had not been entered on the Cash Book and as a result the Cash Book balance had been understated and the excess of expenditure over income overstated by that amount.

The Bank Reconciliation statement for December 1973 submitted to audit was found to contain wrong entries.

(c) Use of a Receipt Book

A proper receipt book had not been used by the Council for receipts of cash for the sale of the Journal and other sundry receipts.

(d) Travelling Claims

It was revealed that some travelling claims submitted by the Research Grantees had been paid without an internal check or the payment being authorized by an officer of the Council.

(e) National Science Council Building

The Council building at Maitland Place handed over by the Ministry of Industries and Scientific Affairs had not been vested in the Council up to December 31, 1973 and therefore

its value did not appear in the Balance Sheet as at that date. However, Rs. 62,674 appearing in the Balance Sheet under the heading, 'Buildings' represented the value of garages, roadways and partitioning built by the Council.

The Ground Floor of this building is occupied by the Atomic Energy Authority free of rent.

(f) Council Library

A system of valuing Journals received in exchange for the Council Journals had not been introduced and therefore the value of exchanges and complimentaries received for the year ended December 31, 1973 is assumed to be the value of Journals sent in the form of exchanges and complimentaries to other institutions.

(g) Depreciation of Fixed Assets

All items of fixed assets had been depreciated at 10% per annum.

(h) Sundry Expenses

The Sundry Expenses figure of Rs. 5743 includes Rs. 2769/= spent on shifting the office from Horton Place to Maitland Place. A break up of shifting expenses showed that Rs. 163 had been spent on purchase of garden tools and implements but erroneously treated as shifting expenses.

2. Systems and Controls

2.1 Financial Controls

It was revealed that proper financial controls had not been exercised during the year under review. Instances where the same officer was responsible for authorizing, receiving and spending certain amounts of money were observed in audit.

2.2 Internal Check

There had been no system of internal check of the claims made for reimbursement of expenses. Instances were noted where the claimant and the recipient were two different officers in respect of the same payment.