PUBLISHING SCIENTIFIC & TECHNICAL JOURNALS IN SRI LANKA

Report of a National Survey

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NATURAL RESOURCES, ENERGY & SCIENCE AUTHORITY OF SRI LANKA

PUBLISHING

SCIENTIFIC & TECHNICAL JOURNALS

IN SRI LANKA

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1. INTRODUCTION

1.1 BACKGROUND

Publication is recognised universally as an integral part of scientific research, equally important as the planning and experimental aspects. One of the main channels for communicating new scientific findings is the primary research journal. The traditional primary journal which appeared for the first time in 1665, continues to hold a pivotal position in science communication, inspite of the many new and sophisticated channels available today. It seems very likely that scientific journals will continue to exist for quite some time inspite of new technology and increasing costs of production apparently threatening their survival.

The primary research journal serves several important functions. It provides for the scientist:-

* a means of establishing priority to a discovery and gives authenticity to the originality of his work.
* an accurate method of chronologically recording research findings.
* a mechanism for assessing the quality of his work through the refereeing system.
* a method of relating new knowledge to the body of existing scientific knowledge.
* a means of communicating and disseminating information and as a reference tool for subsequent researchers in the field.
* a medium for conveying prestige and recognition.

Journals can also provide for scientists from the developing countries, a means of communication with research workers and centres of scientific activity in other countries.

Scientific publications are recognised as one type of measure or indicator of the scope and level of scientific activity within a country or region. The nature and number of scientific publications produced within a country can serve as an index of national scientific output, just as

scientific and technical (S & T) manpower statistics are an indicator of the scientific capability of a particular country.

1.2 NATIONAL SCIENCE JOURNALS

The establishment of local journals has been identified as an indispensable element in the development of national science infrastructures.[1] A national journal reflects the quality of scientific work from a country, even if some of its best papers are published abroad. Many reasons contribute to the importance of national S & T journals, besides providing an outlet for the publication of local research. National journals give a stimulus, a sense of coherence, identity and purpose to local science, the ability to emphasize unique national attributes such as work on local ecosystems that are peculiar to that particular country and ensure that work on subjects specific to the country are not published in dispersed journals outside the country.

Scientists from the developing countries are often reluctant to publish their best papers in local journals because they feel that these have a poor circulation and do not reach international standards in publishing and production. National journals also tend to cover a broad spectrum of topics and thereby seldom reach a specialized reader group.

1.3 HISTORY OF S & T JOURNAL PUBLISHING IN SRI LANKA

Scientific journals were first published in Sri Lanka in the 19th century although scientific research had been carried out since the latter half of the 17th century. The first scientific journal to be produced in this country was the Medical Miscellany published in 1853. This was followed by the Tropical Agriculturist in 1881. The Research Institutes (Tea, Rubber and Coconut) played an important part in the development of scientific journalism in Sri Lanka, by publishing journals dealing with research conducted in the plantation sector.

The number of S & T journals published locally has increased considerably during the last 50 years. The University of Ceylon began publishing the Ceylon Journal of Science in 1942. The Sri Lanka Association for the Advancement of Science (SLAAS) has published its Proceedings

in abstract form since 1948. The National Science Council of Sri Lanka (now designated the Natural Resources, Energy and Science Authority, NARESA) initiated a multi-disciplinary, biannual primary journal the Journal of the National Science Council of Sri Lanka in 1973. The main aim of the journal was to provide Sri Lankan scientists with a medium for the dissemination of research results in all fields of science and technology.

1.4 PROBLEMS IN JOURNAL PUBLISHING

Inspite of the increase in numbers, journal production has been plagued by a number of serious problems. Many journals, though started with great ambitions, have failed to survive for even a few years. In the three year period between 1976 and 1979, eight journals have ceased to exist. Most publications have been sustained by the efforts of a dedicated group of scientists who face tremendous difficulties in trying to keep the journals alive.

There are several reasons for this. Local journals suffer through the lack of sufficient quality contributions as many Sri Lankan scientists prefer to publish in internationally known foreign journals. Not more than 25% of the total output of research carried out in the country is published in national journals.[2] In the opinion of the authors, the circulation of local journals is not wide enough and they are not available in many foreign countries. Authors also consider that there is more prestige and recognition involved in publication in well-known foreign journals. The other important parameters are time-lag between the receipt of a manuscript and its appearance in print and regularity of publication. While there is universal recognition of the importance of S & T journals as basic tools for research, the experience of many local publication units is that publishing is seldom recognised as priority activity and funds are made available grudgingly.

One of the major constraints in publishing S & T journals has been identified as the dearth of professionally trained editorial personnel.[3] Recognising the urgent need to upgrade the standard of S & T journals in Sri Lanka, NARESA organised a Seminar on 'Standards for Editing and Publishing Scientific Journals' in September 1983. The course which was

the first of its kind held in Sri Lanka, was aimed specifically at editors of primary research journals. Twenty editors participated in the seminar. The areas covered included:Organisation of material in scientific papers; Use of International Standards, Quantities, Units, Symbols and Terminology; Preparation of manuscripts; Roles and responsibilities of editors, authors & referees; modern printing technology and marketing and promotion. The seminar also aimed to provide a forum for editors to identify problems and constraints encountered in production and distribution and to discuss measures for improving the quality of scientific periodicals.

Some of the issues discussed at the seminar included:

(a) should editorial management be centralized (for example at NARESA) or decentralized?

(b) are there too many or too few journals for the size of the scientific community?

(c) is there overlap in some subject areas, while others may not be receiving any coverage at all ?

(d) are the present methods of distribution and promotion of journals effective?

(e) could new printing methods be used to hasten publication without undue financial strain?

Answers to these questions could not be provided in the absence of accurate data and statistics regarding the present status of S & T journal publishing within the country. The Seminar therefore recommended that "a survey be conducted to assess the current situation regarding the publishing of S & T journals in Sri Lanka".

Many of the problems faced by editors and publishers of S & T journals in this country are common to other developing countries as well. Most journals in the Third World are edited on a part-time basis by honorary editors, who in addition, have to handle all aspects of production, distribution and marketing.

The International Federation of Scientific Editors' Associations (IFSEA), since its establishment in 1978, has been concerned with improving the level of scientific editing, writing and publishing. IFSEA has estab-

lished a clear interest in upgrading and promoting science journal publishing in the less developed countries. In January 1984, IFSEA jointly with the International Development Research Centre (IDRC) held an International Workshop on the "Identification of Constraints to Improved Scholarly Publishing in Developing Countries" in Nairobi, Kenya. One of the recommendations made at the Workshop was that "as a prerequisite for action ..... detailed regional studies on the number, nature and present status of research publications be carried out".

It is therefore timely to examine more closely factors involved in the publication and production of S & T journals in Sri Lanka, to obtain accurate data and statistics of publishing activities and to identify existing problems and constraints.

This report is based on the findings of 2 surveys. The first survey was carried out between November 1984 and July 1985 and the second from January 1986 to March 1986. The document is divided into 4 sections:- the first sets forth the objectives of the survey, briefly describes the methodology used and includes the scope covered. The second section contains the findings of the survey and the third, an analysis of the survey findings. The last section includes the conclusions drawn from an analysis of the survey data and possible recommendations regarding measures to improve the present level of journal publishing.

The annexes contain the survey questionnaires and the list of journals surveyed with some detailed information regarding publishers, etc.

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2. CHARACTERISTICS OF THE SURVEY

2.1 OBJECTIVES

The main purpose of the overall study was to obtain basic data regarding S and T journal publishing activities in Sri Lanka, to examine trends in journal publishing and to identify the problems and constraints confronting editors and publishers. The survey is the first effort to obtain information in this field.

The specific objectives of the survey were to draw up a profile of the following:-

(a) General characteristics of local S and T journals - their history, ownership, frequency and language of publication.

(b) Subject coverage and content, use of international standards, inclusion of abstracts, indexes and advertisements.

(c) Circulation - both local and foreign, availability on exchange.

(d) Editorial structure - editors' training qualifications and experiences; Editorial Boards and their functions.

(e) Refereeing procedures - number and selection of referees evaluation of referees.

(f) Authorship - anonymity, rejection rates, major complaints regarding authors.

(g) Printing and Publishing Procedures - publication times, printing methods, copyright.

(h) Identification of major production problems.

(i) Financial aspects - sources of funding, availability free/ payment, remuneration for editors.

(j) Coverage in the Secondary Services.

It is hoped that the survey data would provide useful planning information to improve the current status and for the future growth of journal publishing activities in Sri Lanka.

2.2 SCOPE

Any attempt to estimate the number of current S and T journals encounters the difficulty of defining a scientific or technical journal. For the scope of the survey a scientific/technical journal was identified as a serial publication of a scholarly nature and specially directed towards the scientific community.

The most comprehensive listing of local S and T periodicals is the Sri Lanka Scientific and Technical Periodicals Directory published in 1976 by the National Science Council of Sri Lanka (now the Natural Resources, Energy and Science Authority, NARESA). The Directory lists 58 periodical titles pertaining to all fields of S and T and also includes the social sciences. A second edition of the Directory was published in 1978. A number of titles included in the earlier edition were not included since they had not been published since 1975. The titles included in the Directory however included several periodicals of a popular nature.

The Sri Lanka Science Index (SLSI) published quarterly by NARESA covers scientific and technical material published in local periodicals. The SLSI Vol.7 Nos. 3 & 4 July/Dec. '83 includes a list of 81 periodicals of which less than half can be considered to be of a scholarly nature.

Sixty-nine S & T periodicals are currently published in Sri Lanka. Of these, I compiled a list of 39 journals for the survey on the basis that they are essentially of a scholarly nature, carry scientific/technical papers, and are specifically directed towards the scientific community.

2.3 METHODOLOGY

The survey was carried out using the questionnaire method with some limited interviewing, where this was possible within the constraints of time and finance.

A 4-page questionnaire was designed (see Annex A) to investigate the characteristics and nature of current journal publishing activities keeping in mind the objectives outlined in Section 2.1. The questions

were relatively uncomplicated and could be answered with a check mark, number or a few words. Most questions also had a space for comments or answers not covered in the multiple choices provided.

The questionnaire with cover letter (Annex A) was sent to 39 editors/publishers in November 1984 and elicited response from 38 respondents giving a response rate of 92.3%. For some items, sample sizes were decreased because of incomplete responses. A second one-page questionnaire with cover letter (Annex B) was sent to the same group of 38 editors in January 1986 to investigate further financial aspects and coverage in the secondary services. A 100% response was received from the 38 editors.

The data collected from the 2 surveys were statistically analysed with the intention of providing a number of definite conclusions on the current situation of journal publishing activities in Sri Lanka.

3. SURVEY FINDINGS

A. GENERAL INFORMATION

1. International Standard Serial Number (ISSN)

Nine journals (23.6%) had an assigned ISSN.

2. Ownership

Table 1. Distribution of journals by ownership

Ownership	No. of journals	%
Government	8	21.1
Professional organisations and Learned societies	14	36.8
Universities	6	15.8
Research Institutes	10	26.3
Commercial	-	-
Total	38	100.0

The survey revealed that the largest number 14 (36.8%) are produced by professional organizations and learned societies. Ten journals (26.3%) are produced by the Research Institutes. Eight (21.1%) are government sponsored. Six (15.8%) are produced by the universities. No scientific journals are produced on a commercial basis.

3. Frequency

Table 2. Frequency of issue of journals

Frequency	No. of journals
Weekly	—
Monthly	—
Quarterly	6
Biannual	15
Annual	13
Irregular	3
Not stated (N.S.)	1
Total	38

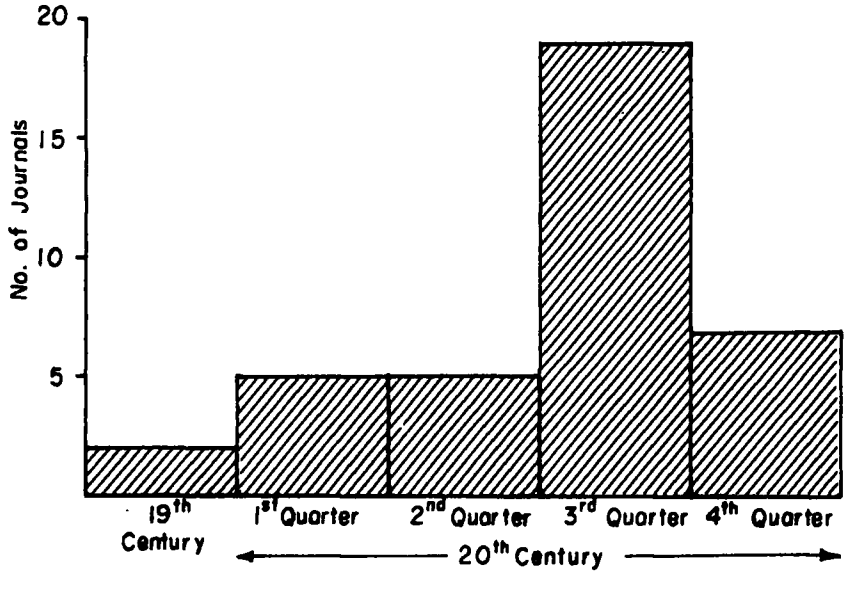
The majority of journals are published biannually (15) and annually (13). Six are published quarterly. Three journals appear at irregular intervals.

There are no weekly or monthly scientific journals.

4. **History**

Table 3. Period of commencement of journals

Period of commencement	No.of journals
< 1900	2
1900 - 1924	5
1925 - 1949	5
1950 - 1974	19
1975 onwards	7
Total	38



The first journal, the Tropical Agriculturist appeared in 1881, followed by the Ceylon Medical Journal in 1887. Fifty per cent of the current journals commenced publication during the period 1950 - 1974.

4.1 Interruptions in publication

Table 4. Interruptions in publication

Interruptions	No. of journals
No interruptions	26
1 - 2 years	6
3 - 4 years	3
4 yrs & over	3
Total	38

About one-third of the journals reported interruptions in publication.

5. **Language**

Table 5. Language of publication

Language of publication	No. of journals
English	38
Sinhala	2 (included with English articles)
Tamil	1 (abstracts only included in English journal)

All the journals are published in English. One journal carried articles in Sinhala together with English articles. The Journal of the National Science Council published in English includes abstracts in Sinhala and Tamil.

B. CONTENTS

1. Subject coverage of journals

Table 6(1) Distribution of journals by discipline

Discipline	No. of journals	%
Medicine	10	26.3
Biological Sciences	4	10.5
Physical Sciences	4	10.5
Engineering	2	2.6
Agricultural Sciences	13	31.6
Combined Sciences	5	18.5
Total	38	100.0

In keeping with the general orientation of journals towards local research priorities, it is not surprising to find that there are more titles dealing with applied than basic research. The most number of journals 13(31.6%) are published in the agricultural sciences, followed by 10 journals (26.3%) in medicine. Four journals (10.5%) are in the biological sciences, four in physical sciences and two in engineering. Five journals are multidisciplinary.

2. Enforcement of Internationally accepted standards

Table 6(2) Enforcement of standards

Standards	No. of journals
Yes	21
No	17
Total	38

Seventeen journals (44.7%) do not enforce adherence to internationally accepted standards.

3. Type of article published in S & T journals

Table 6(3) Types of article published

Type of article	No. of journals
(a) Original research	30
(b) Technical reports	18
(c) Reviews	27
(d) Statistical data	9
(e) Short communications	18
(f) abstracts	18
(g) Other (News, letters, etc.)	3

Thirty of the 38 journals publish original research findings and 27 include reviews. About half include technical reports and short communications. Only 18 journals carry abstracts. Statistical data are included in 9 journals.

4. Abstracts, Indexes and Advertisements

Table 6(4) Inclusion of abstracts, indexes and advertisements

Contents	No. of journals
Abstracts	18
Indexes	14
Advertisements	18

Abstracts are included in 18 journals (47.3%) and indexes in 14 journals (36.8%). Advertisements are also included in 18 journals.

5. Article/Journal Ratio

Table 6(5) Number of articles per journal

No. of articles	No. of Journals
< 4	4
4 - 7	14
8 -11	8
12 & more	7
Not stated	5
Total	38

Most journals carry 4 to 7 articles.

C. CIRCULATION - Sales and Exchanges

1. No. of copies circulated

Table 7(1) Circulation of journals

No. of copies distributed	No. of journals
< 250	8
250 - 499	13
500 - 999	6
1000 & over	10
N.S.	1
Total	38

Ten of the 38 journals have a circulation of over 1000 copies. Most journals distribute between 250 and 500 copies. The circulation of 8 journals are below 250 copies.

2. Foreign Subscriptions and sales

Table 7(2) Percentage of Foreign subscribers

% of Foreign Sales & subscriptions	No. of journals
Nil	13
< 5%	12
5 - 9%	6
10 - 24%	3
25% and over	4
Total	38

Nearly one-third of the journals have no foreign sales or subscribers. Twelve journals (31.5%) have less than 5% foreign sales. Only 4 journals (10.5%) have over 25% foreign subscribers.

3. Exchanges

Table 7(3) Foreign and local exchanges

Exchanges	No. of journals
Nil	8
Local only	-
Foreign	5
Local & Foreign	25
Total	38

In general, around 20% of the journals have no exchanges at all. Of the remainder, 5 journals exchange only with foreign periodicals and 25 have both local and foreign exchange agreements.

D. EDITORIAL STRUCTURE

1. Editor

1.1 Academic qualifications/Occupation

Table 8(1) Occupation and Qualifications of Editors

Occupation	Non-graduates	Graduates	Post-graduate	Total
Part-time	1	3	32	36
Full-time	-	1	1	2
	1	4	33	38

Only 2 editors work full-time. Thirty-six editors (94.7%) work on a part-time basis. Most of the editors (86.8%) have post-graduate qualifications. Actually many editors are senior scientists, engineers or doctors who often have to carry out administrative duties in addition to research and/or teaching.

1.2 Training and experience

Table 8(2) Training of editors

Training	No. of editors
Yes	8
No	30
Total	38

Only eight journals of the total 38 have editors who have received any kind of training in editing.

Table 8(3) Years of experience of editors

No. of years of experience	No. of editors
Nil	11
1 - 4	13
5 - 9	1
10 & over	13
Total	38

Nearly one-third of the editors have no experience. Thirteen editors (34.2%) have less than 4 years' experience. The large percentage of editors (63.1%) with little or no experience is due to the high turn-over and the constant change in editorial management of most journals.

2. Editorial Board

2.1 Existence of Editorial Boards

Table 8(4) Number of journals which have an Editorial Board

Editorial Board	No. of journals
+	30
-	8
Total	38

Thirty of the 38 journals have editorial boards.

2.2 Editorial Board - Number of members

Table 8(5) Composition of Editorial Board of Journals

No. of persons	No. of journals
Nil	8
1 - 4	9
5 - 9	15
10 & over	3
N.S.	3
Total	38

Most editorial boards are composed of 5 to 9 members.

2.3 Functions of Editorial Boards

Table 8(6) Functions performed by editorial boards

Function	No. of journals
(a) Selection of referees	15
(b) Refereeing	16
(c) Recommendation re acceptance	22

The main function of Editorial Boards is recommending acceptance of articles and to a lesser extent refereeing and selection of referees.

E. REFEREEING PROCEDURES

1 Refereeing practice

Table 9(1) Use of referees

Refereeing practised	No. of journals
+	27
-	11
Total	38

Seventy one percent of the journals have their articles refereed.

2. Number of referees

Table 9(2) Number of referees per article

Number of referees	No. of journals
One	17
two	10
Total	27

Of the journals that practise refereeing, 17 have their articles refereed by only 1 referee. Only 26.3% of the total number of journals have their articles refereed by 2 referees.

3. Selection of referees

Table 9(3) Method of selection of referees

Method of selection	No. of journals
Panel only	8
Editor only	8
Editorial Board only	6
Editor + Editorial Board	4
Panel + Editor + Editorial Board	1

4. Anonymity of referees

Table 9(4) Journals which keep referees anonymous

Practice of Anonymity	No. of journals
+	22
-	5
Total	27

5. Periodic evaluation of referees

Table 9(5) Journals which evaluate referees periodically

Evaluation	No. of journals
+	5
-	22

Only 5 journals have their referees evaluated.

6. Time-limit for refereeing

Table 9(6) Imposition of Time-limit for refereeing

Time-limit imposed for refereeing	No. of journals
+	13
-	14
Total	27

7. **Refereeing Time**

Table 9(7) Time taken for refereeing articles

Refereeing Time	Number of journals
3 weeks	10
4 - 8 weeks	11
2 months	3
N.S.	3
Total	27

F. AUTHORSHIP

1. **Anonymity of author**

Table 10(1) Journals which keep authors anonymous from referees

Anonymity of author	Number of journals
Yes	12
No	26
Total	38

2. **Number of papers submitted for publication/year**

Table 10(2) No. of papers received for publication annually

Number of papers	Number of journals
< 10	5
10 - 19	8
20 - 29	7
30 & over	6
N.S.	12
Total	38

Most journals receive between 10 to 19 papers per annum for possible publication.

3. Rejection rates

Table 10(3) Rejection rates of journals

Rejection rate %	Number of journals
Nil	7
1 - 9%	23
10% & over	8
Total	38

Seven journals do not reject any papers. For most, the rejection rate is less than 10%.

4. Major complaints regarding authors

Table 10(4) Major complaints against authors of papers

Complaint	Number of journals
1. Presentation of material	12
2. Language	8
3. References not checked	9
4. Lack of adherence to International Standards	17
5. Poor quality of illustrations	11

The major complaint against authors (17) is regarding a lack of adherence to international standards and next poor presentation of material in scientific papers (12).

G. PRINTING AND PUBLISHING PROCEDURES

1. Choice of printer

Fifteen journals reported that their choice of printer varies each year mainly because the printer is selected by calling for quotations, and entrusting the printing to the cheapest bidder.

2. Printing time -(time between acceptance and publication)

Table 11(1) Printing time of journals

Time taken	No. of journals
Variable	1
1 - 2 months	8
3 - 5 months	6
6 -11 months	7
12 months & over	4
N.S.	12
Total	38

3. Computer - aided type setting

Of the 38 journals surveyed only 2 journals used computer-aided typesetting methods

4. Copyright transfer

Table 11(2) Journals which request copyright transfer for their articles

Copyright transfer	No. of journals
Yes	12
No	26
Total	38

Only 12 journals (31%) requested copyright transfer

H. MAIN PROBLEMS FACED IN PRODUCING JOURNALS

Table 12. Production Problems of Journals

1. Lack of quality contributions	22
2. Delays by referees	7
3. Delay by printer	23
4. Lack of suitable press	15
5. Financial constraints	18
6. Poor circulation	8
7. Editing difficulties	3

The main problem facing 23 of the 38 journals is the delay in printing. Another major limitation is the lack of quality contributions. Financial constraints affect 18 journals (47.3%).

I. FINANCIAL ASPECTS

1. Sources of funding

Table 13(1) Sources of funding for journals

Funding source	No. of journals
Parent Institution	27
Sales & Subscriptions	21
Advertisements	17
Donations, etc.	7

Twenty-seven journals (71.0%) are funded by the parent institution.

2. Distribution

Table 13(2) Availability Free/on Payment

Availability	No. of journals
Free	10
Free to members only	7
On payment	21
Total	38

Ten journals (25.7%) are distributed free.

3. Remuneration for Editing

Table 13(3) Payment to Editors

Payment	No. of Journals
Yes	2
No	36
Total	38

Thirty six editors (94.7%) received no payment for editing.

J. COVERAGE IN SECONDARY SERVICES

Table 14. Coverage of Journals by the Secondary Services

Coverage	No. of Journals
Yes	14
No	24
Total	38

Twenty four journals (63.1%) are not covered by the secondary services. Of the 14 journals that are included in abstracting/indexing services, 7 journals are covered by only one secondary service.

4. ANALYSIS OF THE SURVEY FINDINGS

A. GENERAL INFORMATION

1. Age of Journals

Table 15(1a) Period of commencement of publication by discipline

Period of Commencement	Discipline						Total
	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	
Pre - 1900	1	-	-	-	1	-	2
1900 - 1924	1	-	-	1	2	1	5
1925 - 1949	1	2	-	-	1	1	5
1950 - 1974	6	1	2	1	6	3	19
1975 - onwards	1	1	2	-	3	-	7
Total	10	4	4	2	13	5	38

The oldest journals are in the medical and agricultural sciences. Journals in the physical sciences are of comparatively recent origin and have started much later than those in other disciplines.

Table 15(1b) Period of commencement of publication by ownership

Period of Commencement	Ownership				Total
	Govt.	Prof. Ass/ Learned Soc.	Univ.	Res. Inst.	
Pre 1900	-	1	-	1	2
1900 - 1924	1	1	1	2	5
1925 - 1949	-	3	1	1	5
1950 - 1974	5	7	3	4	19
1975 onwards	2	2	1	2	7
Total	8	14	6	10	38

Of the current journals surveyed, the first ones were published by the research institutes (1881) and professional associations (1887). The first government journal, Spolia Zeylanica, was published in 1904 by

the Department of National Museums. The Ceylon Journal of Medical Science initiated in 1924 was the first journal published by the Universities. The number of journals produced by all the different types of publishers increased greatly during the period 1950 to 1974.

2. Frequency of issue

Table 15(2a) Frequency of issue by ownership

Frequency	Ownership				Total
	Govt.	Prof. Ass/ Learned Soc.	Univ.	Res Inst.	
Quarterly	3	2	-	1	6
Biannual	3	2	3	7	15
Annual	2	8	2	1	13
Irregular	-	1	1	1	3
Not stated	-	1	-	-	1
Total	8	14	6	10	38

Journals produced by government departments appear relatively more often as quarterlies and biannuals; journals of research institutes are mostly biannuals. Those of professional associations and learned societies are mostly annuals. This is really not surprising as they do not receive the governmental or institutional funding available to the others.

Table 15(2b) Frequency of issue by discipline

Frequency	Discipline						Total
	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	
Quarterly	2	-	1	1	2	-	6
Biannual	2	2	2	-	7	2	15
Annual	6	1	-	1	3	2	13
Irregular	-	-	1	-	1	1	3
N.S.	-	1	-	-	-	-	1
Total	10	4	4	2	13	5	38

Medical journals are mostly annuals, while agricultural journals are issued more frequently as biannuals.

3. Interruptions in production

Table 15(3a) Interruptions in issue by discipline

Length of interruption	Discipline						Total
	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	
No Interrup.	7	1	3	-	12	3	26
1 - 2 yrs.	1	1	1	1	1	1	6
3 - 4 yrs.	-	2	-	1	-	-	3
4 yrs. & over	2	-	-	-	-	1	3
Total	10	4	4	2	13	5	38

Twelve out of the 38 journals reported interruptions in issues. Interruptions were least in the case of agricultural journals and relatively more in the case of biol. sci. journals.

Table 15(3b) Interruption in issue by ownership

Length of interruption	Ownership				Total
	Govt.	Prof. Ass/Learned Soc.	Univ.	Res. Inst.	
No interruption	7	10	1	8	26
1 - 2 yrs	1	1	3	1	6
3 - 4 yrs.	-	1	1	1	3
4 yrs. & over	-	2	1	-	3
Total	8	14	6	10	38

Interruptions have occured to a high degree among journals from Universities and also to a certain extent among journals of professional associations and learned societies. Interruptions have been minimal among Government owned journals and among journals of research institutes.

B. CONTENT

1. Enforcement of standard systems of units (SI)

Table 16(1a) Enforcement of standards by discipline

Enforcement	Discipline						Total
	Med.	Biol.	Phys.	Eng.	Agric.	Comb.	
+	3	3	3	2	6	4	21
-	7	1	1	-	7	1	17
Total	10	4	4	2	13	5	38

Only 21 of the 38 journals enforce the SI system of units. Enforcement of the SI system of units is more prevalent in combined sci, eng, phys, biol. journals & least in medical journals.

Table 16(1b) Enforcement of standards by trained editor

Enforcement	Trained editor	Untrained editor	Total
+	5	16	21
-	3	14	17
Total	8	30	38

Journals with trained editors enforce the use of SI units more than those with untrained editors.

2. Article/Journal ratio

Table 16(2) Number of articles per issue by discipline

Journal/Article ratio	Discipline						Total
	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	
< 4	2	1	1	-	-	-	4
4 - 7	3	1	2	2	6	-	14
8 - 11	3	1	1	-	3	-	8
12 & more	1	1	-	-	2	3	7
N.S.	1	-	-	-	2	2	5
Total	10	4	4	2	13	5	38

The most number of articles per issue are in the journals of combined sci. and agriculture and to a certain extent in medicine. The lowest ratio is in physical sci. and engineering.

3. Abstracting

Table 16(3a) Abstracting by Discipline

Inclusion of Abstracts	Discipline						Total
	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	
+	5	3	1	-	7	2	18
-	5	1	3	2	6	3	20
Total	10	4	4	2	13	5	38

Less than half the journals carry abstracts. Abstracts are included mostly in the biology journals (75%). Only 25% of the physical science journals include abstracts. The engineering journals do not include abstracts.

Table 16(3b) Abstracting by trained editors

Abstracting	Trained Editor	Untrained Editor	Total
+	5	13	18
-	3	17	20
Total	8	30	38

Journals with trained editors include abstracts more than those with untrained editors.

4. Indexing

Table 16(4a) Indexing by discipline

Inclusion of Index	Discipline						Total
	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	
+	6	2	0	0	3	3	14
-	4	2	4	2	10	2	24
Total	10	4	4	2	13	5	38

Just over one-third of the journals include indexes. Medical, Combined Science and Biology journals index their articles. Physical science and engineering journals do not includes indexes at all.

Table 16(4b) Indexing by trained editors

Indexing	Trained editor	Untrained editor	Total
+	2	12	14
-	6	18	24
Total	8	30	38

The presence of trained editors does not necessarily ensure a higher rate of indexing.

5. Advertisements

Table 16(5a) The inclusion of advertisements by discipline

Advertisements	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
+	7	2	3	1	5	0	18
-	3	2	1	1	8	5	20
Total	10	4	4	2	13	5	38

The practice of including advertisements is greater in medical and physical science journals and least in combined science journals.

Table 16(5b) The inclusion of advertisements by training of editor

Advertisements	Trained Editor	Untrained Editor	Total
+	2	16	18
-	6	14	20
Total	8	30	38

Untrained editors tend to include advertisements in their journals more than trained ones.

Table 16(5c) The inclusion of advertisements by financial constraints

Advertisements	Financial constraints		Total
	Yes	No	
+	9	9	18
-	9	11	20
Total	18	20	38

Journals with financial problems have a slightly higher tendency to include advertisements.

C. CIRCULATION - SUBSCRIPTIONS AND EXCHANGES

1. Circulation figures

Table 17(1) No. of copies circulated by discipline

Circulation	Discipline						Total
	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	
< 250	5	2	-	-	1	-	8
250 - 499	3	-	1	-	6	3	13
500 - 999	-	-	3	-	2	1	6
1000 & over	2	1	-	2	4	1	10
N.S.	-	1	-	-	-	-	1
Total	10	4	4	2	13	5	38

Circulation figures are highest for engineering journals and lowest for biological science and medical journals. Eighty per cent of the medical journals have a circulation of less than 500 copies and 60% of the combined science journals also have circulation of less than 500 copies.

2. Foreign Subscribers

Table 17(2) Foreign subscribers by discipline

Foreign Subscribers	Discipline						Total
	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	
Nil	7	1	3	-	2	-	13
< 5	3	1	-	2	4	2	12
5 - 9	-	1	1	-	3	1	6
10 - 24	-	-	-	-	2	1	3
25 & over	-	1		-	2	1	4
Total	10	4	4	2	13	5	38

The number of foreign subscribers are highest for combined science and agric. science journals and least for medical and physical sciences.

3. Exchanges

Table 17(3) Exchanges (Local and Foreign) by discipline

Exchanges	Discipline						Total
	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	
Nil	4	-	2	-	2	-	8
Local	-	-	-	-	-	-	-
Foreign	1	1	2	-	1	-	5
Local & Foreign	5	3	-	2	8	5	25
Total	10	4	4	2	13	5	38

Combined science, biological science and engineering journals have relatively more exchanges.

D. EDITORIAL STRUCTURE

1. Editor

Table 18(1) Trained editors by discipline

Trained editor	Discipline						Total
	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	
+	-	1	-	-	5	2	8
-	10	3	4	2	8	3	30
Total	10	4	4	2	13	5	38

Editors who have received training are available in the combined and agricultural sciences only. No training has been received at all by editors in the fields of medicine, physical science and engineering.

Table 18(2) Trained editors by experience

Training	Experience			Total
	Nil	<10 yrs	10 yrs & over	
Trained	-	2	6	8
Untrained	11	12	7	30
Total	11	14	13	38

A higher proportion (46.1%) of the editors with more than 10 years experience have been trained.

Table 18(3) Trained editor by age of journal

	Pre-1950	Post-1950	Total
Trained	2	6	8
Untrained	10	20	30
Total	12	26	38

A somewhat higher proportion (23.0%) of the more recent journals have trained editors compared to those editing pre-1950 journals (16.6%).

Table 18(4) Trained editors by number of foreign subscribers

% Foreign subscribers	Trained	Untrained	Total
Nil	2	11	13
1 - 9%	4	14	8
10% & over	2	5	7
Total	8	30	38

Journals with trained editors have more foreign subscribers. The trained editors are more conscious of the necessity of promoting foreign sales and also the journals are of a better quality.

Table 18(5) Experience of editor by discipline

Experience	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Nil	4	-	2	2	2	1	11
1 - 4 years	4	3	2	-	2	2	13
5 - 9 years	-	-	-	-	1	-	1
10 years & over	2	1	-	-	8	2	13
Total	10	4	4	2	13	5	38

In nearly one-third of the journals the editors have hardly any experience worth recording. Another one-third have less than 5 years experience. The remainder have over 10 yrs. experience and this latter group mostly edit agricultural journals. Editors of engineering and physical science journals have very little editing experience.

2. Editorial Board

Table 19(1a) Existence and size of Editorial Board by discipline

No. of members Ed. Bd.	Discipline						
	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	
Nil	1	1	2	-	3	1	8
1 - 4	7	1	-	-	1	-	9
5 - 9	1	2	1	1	6	4	15
10 & over	-	-	1	-	2	1	3
N.S.	1	-	-	1	1	-	3
Total	10	4	4	2	13	5	38

The number of members per Editorial Board is greater in combined science and agriculture (approx. 5 - 9 members) and least in medicine (mostly 1 - 4 members).

Table 19(1b) Existence and size of Ed. Bds. by trained editor

Editorial Board	Editors	
	Trained	Untrained
Nil	2	9
1 - 4	-	9
5 - 9	4	10
10 & over	2	2
Total	8	30

The existence of Ed. Bds. and their size are higher among those journals which have trained editors.

Table 19(2) Functions of Ed. Bds. by discipline

Functions	Med.	Biol.	Phy.*	Eng.	Agric.	Comb.	Total
Selection of referee, Refereeing & Acceptance	5	2	-	-	3	4	14
Refereeing only	-	-	-	-	1	-	1
Acceptance only	2	1	1	1	3	-	8
Selection & refereeing	-	-	-	-	1	-	1
Selection & Acceptance	-	-	-	1	1	-	2
Refereeing & "	1	-	-	-	1	-	2
Total	8	3	1	2	10	4	28

* one not stated

In combined sciences and medicine in particular, Ed. Bds perform all 3 functions. i.e. refereeing, selection of referee and recommendations re acceptance.

E. REFEREEING PROCEDURES

1. Use of referees

Table 20(1a) Use of referees by discipline

Articles Refereed	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Yes	9	3	1	2	9	3	27
No	1	1	3	-	4	2	11
Total	10	4	4	2	13	5	38

Refereeing of articles is practised mostly among medical journals and least in physical science journals.

Table 20(1b) Use of referees by trained editors

Articles Refereed	Editor		Total
	Trained	Untrained	
Yes	7	20	27
No	1	10	11
Total	8	30	38

The practise of appointing referees is significantly more prevalent among journals with trained editors.

Table 20(2a) No. of referees per article by discipline

Referees	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
One	7	3	1	1	5	-	17
Two	2	-	-	1	4	3	10
Total	9	3	1	2	9	3	27

Multiple refereeing is used most in combined science journals and least in biological science and physical science journals. Seven of the nine medical journals, too, have their articles assessed by one referee.

Table 20(2b) No. of referees per article by trained editors

No. of referees per article	Editor		Total
	Trained	Untrained	
One	2	15	17
Two	5	5	10
	7	20	27

The practise of appointing 2 referees per article is significantly more prevalent among journals with trained editors.

Table 20(3a) Selection of referees by discipline

Method of Selection	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Panel only	1	-	2	-	4	1	8
Editor only	3	1	2	1	1	-	8
Ed. Bd. only	1	2	-	-	2	1	6
Ed. + Ed. Bd.	1	-	-	-	2	1	4
Panel + Ed. + Ed. Bd.	1	-	-	-	-	-	1
NS	3	1	-	-	3	4	11
Total	10	4	4	1	12	5	38

Selection of referees from a panel of referees is mostly practised in agricultural science journals, by the Editor, mostly in medicine.

Table 20(3b) Selection of referees by trained editors

Method of Selection	Editors	
	Trained	Untrained
Panel only	-	8
Editor only	-	8
Ed. Bd. only	3	3
Ed.+ Ed. Bd.	1	3
Panel + Ed. + Bd.	1	-
N.S.	3	8
Total	8	30

In the case of journals with trained editors, there is more collective responsibility in the selection of referees.

Table 20(4a) Anonymity of referees by discipline

Annonymity of referee	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Yes	6	3	-	2	6	5	22
No	4	1	4	-	7	-	16
Total	10	4	4	2	13	5	38

Anonymity of referees is practised mostly in combined science journals least in physical science journals.

Table 20(4b) Anonymity of referees by trained editors

Anonymity of referee	Editor		Total
	Trained	Untrained	
Anon	6	16	22
No	2	14	16
Total	8	30	38

Keeping referees anonymous is practised more in the case of journals with trained editors.

Table 20(4c) Anonymity of referee by major complaints.

(i) Presentation

Complaints	Anonymous	Not anonymous
Yes	10	2
No	12	14
Total	22	16

More complaints when the referee is anonymous to a high degree.

(ii)Language

Complaints	Anonymous	Not anonymous
Yes	5	3
No	17	13
Total	22	16

More complaints when referee is anonymous to a slight degree

(iii) References not checked

Complaints	Anonymous	Not anonymous
Yes	9	0
No	13	16
Total	22	16

More complaints when referee is anonymous to a high degree.

(iv) Lack of Adherence to International Standards

Complaints	Anonymous	Not anonymous
Yes	13	3
No	9	13
Total	22	16

More complaints when referee is anonymous to a high degree.

(v) Illustrations

Complaints	Anonymous	Not anonymous
Yes	8	3
No	14	13
Total	22	16

More complaints when referree is anonymous to a fairly high degree.

F. AUTHORSHIP

1. Number of papers received for publication per annum.

Table 21(1a) Number of papers received per annum by discipline

No. of papers	Med.	Biol.	Phys.	Eng.	Agric.	Comb.	Total
	3	-	-	1	1	-	5
10 - 19	2	-	-	-	6	-	8
20 - 29	-	2	-	-	4	1	7
30 & over	1	1	-	-	2	2	6
N.S.	4	1	4	1	-	2	12
Total	10	4	4	2	13	5	38

Number of papers received per annum for publication is greatest in combined science journals and least in medicine.

Table 21(1b) Number of papers per annum by trained editors

No. of papers	Editor	
	trained	untrained
1 - 9	1	4
10 - 19	3	5
20 & over	4	9
N.S.		12
Total	8	30

Journals with trained editors receive a greater number of papers per annum.

2. Anonymity of author

Table 21(2a) Anonymity of author by discipline

Anonymity	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Yes	1	3	-	-	5	3	12
No	9	1	4	2	8	2	26
Total	10	4	4	2	13	5	38

Anonymity of author is maintained most in combined science and biological science journals, least in physical science, engineering and medical journals.

Table 21(2b) Anonymity of author by trained editors

Author Anonymous	Editor		Total
	Trained	Untrained	
Yes	6	6	12
No	2	24	26
Total	8	30	38

More trained editors keep the authors name anonymous from the referees.

3. Rejection Rates

Table 21(3a) Rejection Rate by Discipline

Rejection Rate (%)	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Nil	-	1	4	1	1	-	7
1 - 9 %	8	1	-	1	10	3	23
10% & over	2	2	-	-	2	2	8
Total	10	4	4	2	13	5	38

Rejection of papers is least in physical science and engineering and most in combined science, medicine and agriculture.

Table 21(3b) Rejection Rate by trained editor

Rejection Rate %	Editor		Total
	Trained	Untrained	
Nil	1	6	7
1 - 9%	5	18	23
10% & over	2	6	8
Total	8	30	38

Trained editors tend to reject papers more (87.5%) than untrained ones.

4. Major complaints regarding authors

Table 22 (1) Complaints regarding authors by discipline

a) Presentation of material

Complaints	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Yes	5	-	-	1	4	2	12
No	5	4	4	1	9	3	26
Total	10	4	4	2	13	5	38

b) Language

Complaints	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Yes	2	1	-	-	3	2	8
No	8	3	4	2	10	3	30
Total	10	4	4	2	13	5	38

(c) References not checked

Complaints	Med.	Biol.	Phys.	Eng.	Agric.	Comb.	Total
Yes	4	1	-	-	2	2	9
No	6	3	4	2	11	3	29
Total	10	4	4	2	13	5	38

(d) Lack of adherence to International Standards

Complaints	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Yes	4	1	1	1	6	4	17
No	6	3	3	1	7	1	21
Total	10	4	4	2	13	5	38

(e) Poor illustrations

Complaints	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Yes	5	-	1	-	3	2	11
No	5	4	3	2	10	3	27
Total	10	4	4	2	13	5	38

Interpretations of complaints regarding authors by discipline.

(a) Presentation of material

Poor presentation of results is the main complaint (over 50%) among combined science and medical journals and is mentioned least in biological science and physical science.

(b) Language

Language problems are most prevalent among combined science journals and understandably least in physical science journals.

(c) Complaints of references not being checked are more in combined science and medical journals and hardly any in physical science journals.

(d) Lack of adherence to International Standards.

The complaint regarding lack of adherence to International Standards occurs to a high degree in combined science journals and least in physical science and biological science.

(e) Poor illustrations

Complaints of poor illustrations come mostly from medical journals and least from biological science journals.

Generally the major complaint (16 out of 38) is regarding adherence to International Standards, secondly, (12 out of 38) regarding presentation and thirdly (11 out of 38) regarding poor illustrations. Complaints regarding incomplete references and language are the least mentioned (9 and 8 respectively).

Table 22(2) Complaints regarding authors by the number of referees

(a) Presentation by referees

	No. of referees			
Complaints	0	1	2	Total
Yes	1	5	6	12
No	10	12	4	26
Total	11	17	10	38

(b) Language

	No. of referees			
Complaints				Total
	0	1	2	
Yes	2	2	4	8
No	9	15	6	30
Total	11	17	10	38

(c) References not checked

Complaints	No. of referees 0	1	2	Total
Yes	0	4	5	9
No	11	13	5	29
Total	11	17	10	38

(d) Lack of adherence to Int. Stds.

Complaints	No. of referees 0	1	2	Total
Yes	3	7	6	16
No	8	10	4	22
Total	11	17	10	38

(e) Poor illustrations

Complaints	No. of referees 0	1	2	Total
Yes	2	4	5	11
No	9	13	5	27
Total	11	17	10	38

Interpretations

The relationship between of refereeing and of the number of referees used in identifying complaints regarding authors is seen in the following order:-

1. Lack of adherence to International Standards
2. Presentation
3. Illustrations
4. References
5. Language

G. PRINTING AND PUBLISHING PROCEDURES

1. Printing time

Table 23 (1a) Printing time by discipline

Printing Time	Med	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Variable	-	-	-	-	1	-	1
1 - 2 m	2	-	-	2	4	-	8
3 - 5 m	1	1	1	-	3	-	6
6 - 11m	1	2	1	-	3	-	7
12m & over	-	1	-	-	1	2	4
N.S.	6	-	2	-	1	3	12
Total	10	4	4	2	13	5	38

Printing time is longest for combined science journals.

Table 23 (1b) Printing time by Ownership

Printing Time	Govt.	Prof/ Ass/Learned Soc.	Univ.	Research	Total
Variable	-	-	-	1	1
1 - 2 m	2	4	-	2	8
3 - 5 m	-	3	-	3	6
6 - 11m	2	1	1	3	7
12m & over	1	-	3	-	4
N.S.	3	6	2	1	12
Total	8	14	6	10	38

Printing time is longest for university journals and shortest for journals belonging to professional societies.

Table 23 (1c) Printing Time by Editor's training

Printing Time	Editor Trained	Untrained	Total
Variable	-	1	1
1 - 2 m	6	2	8
3 - 5 m	1	5	6
6 - 11m	-	7	7
12 m & over	-	4	4
N.S.	1	11	12
Total	8	30	38

Printing time is significantly shorter in the case of journals with trained editors.

H. MAIN PRODUCTION DIFFICULTIES

Table 24(1a) Lack of contributions

Lack of contributions	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Yes	9	1	1	2	8	1	22
No	1	3	3	-	5	4	16
Total	10	4	4	2	13	5	38

Over 50% of the journals (22 out of 38) complain about lack of quality contributions - especially the Medical journals and least by biological and physical science journals.

Table 24 (1b) Delays in refereeing

Delay	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Yes	-	1	-	-	3	3	7
No	10	3	4	2	10	2	31
Total	10	4	4	2	13	5	38

Only 7 out of 38 journals complain of delays be referees and these were confirmed mostly to the combined science journals.

Table 24 (1c) Delays in printing

Delay	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Yes	6	3	2	1	7	4	23
No	4	1	2	1	6	1	15
Total	10	4	4	2	13	5	38

Delay by printers is relatively a major problem. 23 out of 38 journals are faced with this problem. This complaint comes mostly from the combined science and medical journals.

Table 24 (1d) Lack of suitable Press

Lack of press	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Yes	4	2	2	-	4	3	15
No	6	2	2	2	9	2	23
Total	10	4	4	2	13	5	38

Fifteen of the 38 journals complain about the lack of a suitable press. Such complaints are not apparently confined to a particular discipline but are common to all.

Table 24 (1e) Financial Constraints

Constraint	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Yes	5	3	3	-	4	3	18
No	5	1	1	2	9	2	20
Total	10	4	4	2	13	5	38

Nearly half the journals complain of financial constraints. This complaint was less so in agricultural and engineering journals.

Table 24(1f) Poor Circulation

Poor Circulation	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Yes	3	-	1	-	3	1	8
No	7	4	3	2	10	4	30
Total	10	4	4	2	13	5	38

Only 8 out of the 38 journals complain of poor circulation and these are mostly confined to medicine and agriculture.

Table 24 (2) Financial constraints by ownership

Financial Constraint	Govt.	Prof. Ass/ Learned Soc.	Univ.	Res. Inst.	Total
+	3	7	6	2	18
-	5	7	0	8	20
Total	8	14	6	10	38

All journals from the universities complained of financial constraints. Journals of research institutes had apparently the least financial problems.

I. FINANCIAL ASPECTS, FUNDING SOURCES AND DISTRIBUTION

1. Subscriptions/Sales

Table 25(1a) Availability on payment/free by circulation

Circulation	Free	Subscription/ Sales	Members only	Total
<250	3	4	1	8
<500	3	8	2	13
<1000	2	4	-	6
1000+	2	4	4	10
N.S.	-	1	-	1
Total	10	21	7	38

26% of the journals distribute free issues, 55% on payment and the rest (19%) distribute complimentary issues to members only.

Table 25(1b) Availability/payment/free by discipline

	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Free	4	-	2	-	2	2	10
Subscriptions/Sales	3	3	2	-	10	3	21
Free to members only	3	1	-	2	1	-	7
Total	10	4	4	2	13	5	38

Both engineering journals restrict complimentary issues to members only. Among medical journals too the restriction of issues to members only is practised.

Agricultural, biological and combined science journals are more in the practice of distributing issues on payment.

2. Frequency by source of Funding

Table 25(2) Frequency of issue of journal by source of funding

Source of Funding	Quarterly	Biannual	Annual	Irregular	N.S.	Total
Parent Inst. only	3	4	3	-	-	10
Sales only	-	-	-	-	-	-
Advertisements only	-	1	1	-	-	2
Donations only	-	-	3	-	-	3
Parent Inst + Sales	1	6	-	-	-	7
Parent Inst.+ Advert.	-	-	2	-	-	2
Parent Inst.+ Donations	-	-	1	1	-	2
Sales + Advert.	1	-	2	2	-	5
Sales + Donations	-	-	-	-	-	-
Parent inst.+ sales+adverts.	1	3	-	-	-	4
Sales+advert.+donations	-	-	1	-	-	1
Parent Inst.+Sales+Adverts. + Donations	-	1	-	-	1	2
Total	6	15	13	3	1	38

Twenty-seven out of the 38 journals are funded by the parent bodies. Of these 10 are funded fully by the parent body; 7 by the parent body and sales, 2 by parent body and advertisements, 2 by parent body and donations, 4 by the parent body and income from sales and advertisements and 2 by income from all four sources.

Not a single journal is funded by sales only.

Table 25(3) The parent institution as the source of funding

Source of Funding	Quarterly	Biannual	Annual	Irregular	Total
Parent Institution + other	5	15	6	1	27
Others	1	1	7	2	11
Total	6	16	13	3	38

The frequency of issue is greater when the parent body is the source of funding.

J. COVERAGE IN SECONDARY SERVICES

Table 26(1) Coverage in Secondary Services by Trained Editor

Coverage in secondary services	Trained Editor	Untrained Editor	Total
Yes	4	10	14
No	4	20	24
Total	8	30	38

Journals with trained editors have better coverage in the secondary services.

Table 26(2) Coverage in Secondary Services by Ownership

Coverage	Govt.	Prof. Ass/ Learned Soc.	Univ.	Research	Total
Yes	3	3	4	4	14
No	5	11	2	6	24
Total	8	14	6	10	38

A greater number of University, Research and Government journals are covered by the secondary services - least coverage is received by journals of professional bodies and learned societies.

Table 26(3) Coverage in Secondary Services by Discipline

Coverage	Med.	Biol.	Phy.	Eng.	Agric.	Comb.	Total
Yes	1	3	-	-	6	4	14
No	9	1	4	2	7	1	24
Total	10	4	4	2	13	5	38

Only 14(36.8%) out of 38 Sri Lankan journals are covered by the secondary services, Only one of the 10 medical journals are included in the secondary services, Biological, Agricultural and Combined science journals are comparatively well represented.

Physical science and engineering journals are not included at all in the secondary services.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 From the data collected and analysed in the previous chapters, it is possible to set down the following findings, to identify problems associated with the production, control and circulation of S & T journals in Sri Lanka and to propose some solutions to improve the current situation.

(a) GENERAL INFORMATION

The findings of the survey revealed that of the 38 journals studied only 9 (23.6%) had an assigned International Standard Serial Number (ISSN). The ISSN is unique and identifies the journal title and is mainly used by computerized services. The ISSN is one of the features of the biblid or bibliographic strip of the journal which facilitates the inclusion of a journal in international databases. Editors should therefore be particularly careful that every journal contains the ISSN to ensure coverage of journals in the secondary services and databases.

The largest number of journals (14) are produced by professional organisations and learned societies followed by the research institutes which produce 10 journals. /Table1/.The fact that no S & T journals are produced on a commercial basis is not surprising as the publishing of S & T journals is not a commercially viable venture in Sri Lanka.

The first S & T journals were published by the professional associations and learned societies followed by the research institutes /Table 15(1b)/. Fifty per cent of the current journals commenced publication during the period 1950-1974. The sudden increase in the number of journals published during this period /Tables 3; 15(1a);15(1b)/ reflects the expanding university structure, the increase in the number of post-graduate Institutes and expansion of research activities in the country, during this time. The increase is mostly in the number of medical and agricultural journals. /Table 15(1a)/.

The majority of the journals are published biannually (15) and annually (13) /Table 2/. Government departments seem to be most successful in producing relatively quicker publications followed by the research institutes which produce mostly bi-annuals /Table 15(2a)/. Three journals which appear at irregular intervals are obviously struggling to survive.

The difficulties of producing journals at fairly frequent intervals is reflected in the lack of weekly or monthly publications and the few (6) quarterly ones.

The survey points out the need for a monthly or bimonthly periodical for quick publication of brief research communications.

Interruptions in publication are a sign of serious problems in production. About one-third of the journals surveyed reported interruptions in publication /Table 4/, the greatest frequency being for University journals and to a lesser extent among journals of professional associations /Table 15(3b)/. Interruptions were also shown to be the least for agricultural journals /Table 15(3a)/.

All the S & T journals surveyed are published in English (Table 5), Although one carried articles in Sinhala and another included abstracts in Sinhala and Tamil. There are no primary research journals published in the national languages. English language publications have immediate access to an international readership and to the largest markets. The use of English gives those S & T journals using it as a medium of communication an immediate advantage.

(b) CONTENT

As to be expected from the research objectives and goals of a developing country, more journals published in Sri Lanka deal with applied than basic research /Table 6(1)/. The greatest number of journals (13) are published in the agricultural sciences followed by 10 in medical science. The least number (2) is in engineering.

Neglect to adhere to internationally accepted standards result in journals of substandard quality. Seventeen of the journals surveyed (44.7%) do not enforce adherence to the standard system of units (SI) /Tables 6(2), 16(1a), 16(1b)/. The lack of adherence to international standards was greatest among medical journals /Table 16(1a)/. Journals with trained editors enforce the use of SI units more than others /Table 16(1b)/.

Thirty of the 38 journals surveyed publish original research findings and 27 include reviews /Table 6(3)/. Only 9 carry statistical data. The survey draws attention to the lack of abstracting periodicals and to those dealing with the organisational and sociological problems of science.

Most journals seem to carry 4 to 7 articles per issue /Table 6(5)/. The article/journal ratio is highest in agricultural journals and in combined science journals /Table 16(2)/.

The physical science and engineering journals have a low article/journal ratio. Together with the small number of physical science and engineering journals published /Table 6(1)/ this reveals a marked difficulty in obtaining quality articles in these subject fields. This may be due to the fact that research in these areas deals with problems of international interest (in contrast to those in the bio-medical fields) and are more frequently published in foreign journals. Also the difficulties of conducting research due to the higher cost of equipment and materials in these subject areas could result in a lower research output.

The survey draws attention to the overall low article/journal ratio which demonstrates that there is a lack of quality manuscripts. This situation does indicate that the number of local journals published should not increase too rapidly as it would only aggravate the already adverse situation with regard to the availability of quality articles for publication.

Abstracts are included only in 47.3% of the journals and indexes in 36.8% /Table 6(4)/. Abstracts are found mostly in biology journals

(75%) and least in the physical science journals (25%). The engineering journals do not carry abstracts. /Table 16(3a)/.

The inclusion of abstracts and indexes facilitates the dissemination of scientific information through the secondary services and are invaluable for retrieval purposes. Therefore it is essential that editors pay greater attention to the provision of indexes and abstracts. Journals with trained editors are shown to include abstracts more than journals produced by non-trained personnel /Table 16(3b)/. The absence of abstracts & indexes is chiefly due to lack of time and may also be due to a lack of skill in indexing and clearly demonstrates the need for full-time, qualified editors.

The practise of including advertisements is greater in medical journals and in physical science journals /Table 16(5a)/. Journals with financial problems have a slightly higher tendency to include advertisements /Table 16(5c)/. Untrained editors, too, tend to include advertisements more than trained ones /Tables 16(5b)/.

(c) CIRCULATION

Distribution and circulation are probably the weakest links in the entire process. Only 10 journals have a circulation of over 1000 copies. The majority have a circulation between 250 and 500 copies, while 8 journals circulate less than 250 copies. /Table 7(1)/. Although circulation figures are highest for engineering journals /Table 17(1)/ these cannot be considered because both engineering journals are issued free to members /Table 25(1b)/. Eighty per cent of the medical journals have a circulation less than 500 copies.

Foreign subscribers to local journals are very scarce. Nearly one-third of the journals have no foreign sales or subscribers /Table 7(2)/. Only 4 journals have over 25% foreign subscribers. The number of foreign subscribers are higher for combined science and agricultural journals and are least for medical and physical science journals /Table 17(2)/.

Exchange of journals between local and foreign publishers is one method of ensuring the acquisition of much needed journals without utilising foreign exchange. But exchange agreements are not utilized by many journals. Only 25 carry out both local and foreign exchanges while 5 exchange only with foreign periodicals [Table 7(3)]. It is apparent that foreign markets and exchanges have not been fully investigated or utilized.

Probably the most common defect is the failure to advertise, i.e. to bring the journal to the attention of potential users through the secondary services. Most rely on the professional grapevine. In the majority of cases, the distribution of journals is the responsibility of the already over-burdened editor. Without wider circulation and distribution, the print run of the journals is restricted, resulting in high unit costs.

(d) EDITORIAL STRUCTURE

The role of the editor of a scientific journal is very much more complicated in the Third World countries than in the developed world. As the editor of a local journal is frequently the entire staff, his/her functions involve soliciting for contributions, editing, graphic presentation (layout) publishing,selection of printer and distribution, as well as a number of other processing details. Most publishers cannot afford to engage a full-time editor. Of the editors of the journals, 36 editors (94.7%) received no remuneration for editing [Table 13(3)]. Only 2 editors stated that they practise full-time editing.

Most of the editors (86.8%) have post-graduate qualifications. They are generally full-time professional scientists who have to find time in already over-crowded schedules to edit their publications. Only a few editors (8) however have had any training experience [Table 8(2)] and these are mainly in the agricultural sciences and combined science journals [Table 18(1)]. The survey reveals the total lack of training of editors in medical, engineering and physical science journals [Table 18(1)]. A somewhat higher proportion of the

more recent journals have trained editors compared to those editing pre - 1950 journals /Table 18(3)/.

The lack of on-the-job experience is also revealed by the survey - /Table 8(3)/. Nearly one-third (63.1%) of the editors have had little or no experience. Thirteen editors (34.22%) have less than a year's experience. This is due to frequency of change of editors of most journals which is obviously detrimental to maintaining continuity of standards of the journal. A higher proportion of the editors with more than 10 years experience have been trained /Table 18(2)/. The agricultural journals seems to fare best with more trained and experienced editors, resulting in their general higher standards regarding distribution, foreign sales, etc. Editors of engineering and physical science journals have hardly any experience.

As almost all the editors work only part-time and on a voluntary basis, it is not difficult to understand why such journals are often issued late. The qualifications of an editor should also be considered carefully. In addition to a scientific background, the editor should possess technical know how of designing, layout and typefaces. Good layout and typography are just as essential as correct usage of language,etc. and can make the difference between a poorly produced journal and a professionally produced one. One of the most problematic aspects of the editor's role is therefore the lack of technical training. The resulting improvements in editing could well justify the expenditure on such training.

Most of the journals (30) have Editorial Boards /Table 8(4)/. The number of members per Editorial Board is greater in combined science and agriculture (5-9 members) and least in medicine (1-4 members) /Table 19 1(a)/. The existence of Editorial Boards and their size are higher among journals with trained editors /Table 19 1(b)/.

The main function of Editorial Boards seem to be recommending acceptance of articles /Table 8(6)/. Editorial Boards of medical and combined science journals perform 3 functions:- refereeing, selection of referees and recommendations re acceptance /Table 19 2(b)/.

(e) REFEREEING PROCEDURES

The standard of any scientific journal ultimately rests on the quality of its refereeing system, and all reputed journals maintain a high standard of evaluation. This generally entails evaluation by two authorities on the subject of the paper. In a small scientific community, as in Sri Lanka, it is often difficult to find 2 experts in a specialised subject area who can give an impartial assessment.

Twenty-seven journals (71%) have their articles refereed /Table 9(1)/ but of these only 10 journals have their articles refereed by 2 referees /Table 9(2)/. Refereeing is practised mostly by medical journals and least in physical science /Table 20 (1a)/. The practise of appointing referees is significantly more prevalent among journals with trained editors /Table 20 (1b)/. Also, the practise of appointing 2 referees per article is significantly more prevalent among journals with trained editors /Table 20 (2b)/.

Referees are selected by the editor only for 8 journals and from a panel of referees for 8 journals. /Table 9(3)/. Selection of referees from a panel is mostly practised by agriculture journals and by the editor mainly for medical journals. /Table 20 (3a)/. For the rest, the selection of referee is a collective responsibility of editor, editorial board and a panel. There is more collective responsibility in the selection of referees in journals with trained editors /Table 20 (3b)/ showing greater care in the choice of referees.

Anonymity of referees is practised mostly among combined science journals /Table 20(4 a)/. A striking correlation between anonymous referees and complaints regarding authors is apparent from the survey data /Table 20 (4c)/. With respect to all the major complaints regarding authors i.e. presentation, language, unchecked references, lack of adherence to international standards and illustrations, the number of complaints were greater when the referees' names were kept anonymous. Anonymity therefore seems to have a definite uninhibited effect on the referee.

(f) AUTHORSHIP

Many journals are published irregularly or have suspended publication due to lack of material. The problem can often be traced to the proliferation of journals in certain subject areas which tend to compete with each other for the few available articles. The survey therefore attempted to investigate the problem of the availability of articles for publication in the local S & T journals.

The survey findings revealed that most journals receive between 10-19 papers per annum for publication /Table 10(2)/, the number of papers/annum being greatest in combined science and least in medicine. Considering the comparatively large number of medical journals, this may point to the possibility of there being too many medical periodicals being published at present. /Table 21 (1a)/. Journals with trained editors receive a greater number of papers/annum /Table 21 (1b)/ possibly due to a better quality production.

Twelve journals keep the author's name anonymous from the referee /Table 10(1)/. Anonymity of author is maintained most in combined science and biological science journals, least in physical science, engineering and medical journals /Table 21 (2a)/. Trained editors keep the author's name anonymous from the referee more than untrained ones /Table 21(2b)/.

Seven journals do not reject any papers. For the majority (23 journals) the rejection rate is 1 - 9% /Table 10(3)/. Rejection of papers occurs least in physical science and engineering journals and most in combined science, medicine and agriculture /Table 21 (3a)/. This again possibly demonstrates the paucity of papers in physical science and engineering. Trained editors tend to reject papers more (87.5%) than untrained ones /Table 21(3b)/.

The major complaint editors make regarding authors is negligence to adhere to international standards and next, poor presentation of material. Poor presentation of material is the major complaint against authors of over 50% of the combined science and medical journals. Thirdly, poor illustrations. /Table 10(4), Table 22(1)/.

Complaints regarding poor illustrations come mostly from medical journals. Language problems are understandably least in physical science journals but are most prevalent in combined science journals.

The complaints against authors by editors are more marked when papers are refereed by 2 persons /Table 22(2)7 as opposed to non-refereed or papers refereed by one person.

Twenty-two of the 38 respondents mention that obtaining suitable articles of good quality is a major problem. Many scientists prefer to publish their better articles in foreign journals. Local journals would however have less difficulty in attracting suitable contributions if their standards are raised and if the visibility of the journals is increased. The complaints made by editors against authors demonstrates the vital need for training of authors in the correct presentation of material in scientific papers, in the preparation of good illustrations, adherence to international standards, etc.

(g) PRINTING AND PUBLISHING PROCEDURES

In many developing countries, like Sri Lanka, a major cause of the delay of publication of journals can be quite easily traced to the shortage of reliable and well-equipped printing establishments. Only a few printing firms in Sri Lanka have the facilities and the skilled personnel to undertake the printing of S & T journals, especially setting mathematical papers and the precision required for fine-grain high quality photography. Local printers are generally not geared towards quality printing and possess a very limited range of type-faces. Since the better printers are scarce, they tend to be over-loaded with work. In cases where printers are selected by the tender system, the job is invariably entrusted each year to the lowest bidder. Where a different printer is selected annually, there is also the problem of trying to maintain a standard format.

Fifteen journals reported that their choice of printer varies, mainly because the printer is selected by calling for quotations and entrusting the job to the lowest bidder. This system results in the choice of the cheapest and often inefficient printer.

Printing time for most journals is 6 - 11 months /Table 11(1)/ but it was difficult to draw any conclusions as 12 journals did not state their printing time, Printing time seems to be longest for combined science journals /Table 23(1a)/ and for those owned by universities /Table 23 (1b)/. Printing time is significantly shorter in the case of journals with trained editors /Table 23(1c)/.

In an attempt to reduce problems in printing S & T journals, NARESA has set up a Printing Division equipped with an IBM composer type-setter and Heidelberg offset printer. The Journal of the National Science Council of Sri Lanka is now being composed and printed in - house. NARESA extends its services to print other scientific publications as well. Of the 38 journals surveyed only 2 journals used computer-aided typesetting methods. Production methods are rapidly and continually improved by the use of modern techniques and the production of local S & T journals could benefit greatly by introduction of these methods. However most publishers e.g. professional associations and learned societies are too small to take advantage of new technologies because of the high level of investment required.

(h) MAIN PROBLEMS FACED IN PRODUCTION

The main problem faced by 23 of the 38 journals is the delay in printing /Table 12/. The next constraint for over 50% of the journals is the lack of quality contributions. Ninety per cent of the medical journals are affected by this problem /Table 24(1a)/. Nearly 50% the journals complain of financial problems but less so by agricultural and engineering journals /Table 24(1e)/. All journals produced by the Universities complained of financial difficulties. Journals of research units had apparently the least financial problems /Table 24(2)/.

(i) FINANCIAL ASPECTS. FUNDING SOURCES AND DISTRIBUTION

Financial problems affect practically all the journals. The survey therefore attempted to collect data on sources of funding for the local S & T journals. The majority of S & T journals obtain funds from one or more of the following sources:-

(1) the parent institution

(2) the sale of the journal

(3) advertisements

(4) donations

The findings revealed that 27 journals (71.0%) are funded by the parent institution /Table 13(1)/. Of these, 10 are funded entirely by the parent body, the costs of others are supplemented by sales, advertisements and donations. The survey data showed that not a single journal is funded entirely by sales /Table 25(2)/. The frequency of issue is greater when the parent body is the source of funding /Table 25(3)/.

Since the funding sources are seldom adequate or assured and considering the rising costs of printing and paper it is not surprising that publication delays inevitably result. The need for a market-dependent rather than subsidy dependent basis for publishing journals is apparent. Unfortunately most small societies, professional associations, etc., have no funds or facilities available for market research, publicity or promotional activities. There is a tendency (common to many Third World countries) to establish journals which are almost inevitably limited in circulation to the sponsoring institution and its mailing lists or to the members of a professional association or learned society.

The survey revealed that 10 journals are distributed free /Table 13(2)/. The circulation of these journals varies: 3 less than 250 copies; 3 less than 500 copies; 2 less than 1000 copies and 2 journals over 1000 copies /Table 25(1a)/.

Only 4 journals distributed on payment have a circulation of over 1000 copies and 4 others on payment have a circulation between 500 and 1000 copies. Agricultural, biology and combined science journals are distributed on payment, while 2 of the 4 physical science journals are distributed free. The engineering journals are distributed free to members /Table 25(1b)/. Therefore of the 38 journals surveyed, only 8 journals distributed on payment have a circulation of over 500 copies.

(j) COVERAGE IN THE SECONDARY SERVICES

The survey attempted to investigate details regarding the coverage received by local S & T journals in secondary information services. The findings revealed that 63.1% of the local journals are not covered by the secondary information services. Of the 14 journals that are included, 7 journals are covered only by one secondary service (Table 14). Fifty per cent of the Journals with trained editors receive coverage while only 33.3% of journals with untrained editors enter the secondary services. Of the 10 medical journals published only one is covered by a secondary service. Physical science and engineering journals are not included in the abstracting/indexing services [Table 26(3)].

The proper dissemination of publications to ensure coverage by the secondary services is an essential complimentary activity to their production. Coverage by abstracting and indexing secondary services ensures the wide visibility of the journal even if the circulation itself is limited to a few hundred copies. Therefore it is the editor's/publisher's responsibility to ensure that the journal is sent promptly to the relevant abstracting and indexing services and incorporated into the appropriate databases. Much original research carried out in developing countries, such as Sri Lanka, is not widely known because of the lack of bibliographical control and inefficient and unorganized distribution.

5.2 RECOMMENDATIONS

Based on the findings of the survey, the following recommendations are suggested to improve the present level of S & T journal publishing in Sri Lanka.

1. Editors should be particularly careful to ensure that all published papers contain the standard mechanisms included in the bibliographic strip or biblid, in order to facilitate the inclusion of the journal in the secondary services. The bibliographic strip includes the abbreviated title of the journal, volumne number, issue number, year of publication, number of the first text page in the issue, number of the last text page in the issue and the journal's ISSN.
2. The editor/publisher should ensure the regular production of indexes to the contents of S & T journals.
3. The publication of a monthly or bimonthly periodical for the quick dissemination of brief research communications.
4. The need for full-time, professionally trained personnel to work as editors of S & T journals should be recognised.
5. The professional status of the scientific editor should be recognised by providing remuneration for their services and by providing career opportunities parallel to those of their scientific counterparts.
6. Training courses and workshops should be provided to educate editors on all aspects of journal production. Emphasis should be laid on providing technical training.
7. As there is an urgent need for a more vigorous elimination of sub-standard contributions, a consistently high-level of reviewing and refereeing should be enforced. Every paper submitted for publication should be reviewed by two independent referees. In areas where local referees are not available, the refereeing of papers by foreign referees should be encouraged.
8. Editors should evaluate the performance of referees periodically. They should aim to achieve consistency in the standards used to judge papers for e.g. by using an explicit set of evaluation criteria.
9. Training courses and workshops should be provided to educate authors in the correct presentation of materials for publication

and for improving writing skills. The submission of material in the correct form would facilitate editing and processing to a great extent.

10. Editors/publishers should aim for a more enlightened selection of printers without being entirely rivetted by cost analysis.
11. The introduction and development of newer and faster methods of printing and production should be sought. In the long run, the introduction of new technologies such as computer type-setting could be financially preferable to the older methods used by most journals.
12. A study should be made of the marketing and distribution problems of journals. This would lead to a better identification of markets for improved distribution, both locally and abroad.
13. Considering the limited print-runs and poor circulation of the existing journals in some subject areas e.g. medicine, further increases in the number of journals is not advisable without considering several factors. The decision to start a new journal should be based on very solid facts concerning need, contributions, costs and future outlays. A careful and realistic survey study to establish whether a new journal can survive should be carried out prior to starting any new local S & T journal.
14. Considering the financial problems which affect most local journals, an examination of possible sources of subsidy should be made.
15. Publication costs could be drastically reduced by good preparation of manuscripts and illustrations.
16. Financial problems could perhaps be overcome if publishers pool their resources to set up common facilities which could provide editorial, sales and distribution, and other services.
17. The dissemination, regionally and internationally of information on the existence of local S & T journals with addresses, is one possible way of improving sales and circulation.
18. It should be the editor's/publisher's responsibility to ensure that his journal is sent promptly to the relevant abstracting and indexing organisations and that information regarding them in. incorporated into the appropriate data bases. This would help to place work done and published in Sri Lanka into the mainstream of science communication and would also generate

wider interest in local scientific journals.

The proper dissemination of S & T journals must be an essential complimentary activity to their production. The essential point of bibliographical control at source as the way to secure greater visibility for local S & T journals does not at present receive the emphasis which is needed.

ANNEX A

SURVEY OF SCIENTIFIC & TECHNICAL JOURNAL PUBLISHING IN SRI LANKA

A. GENERAL INFORMATION

1. Title of Journal .....

   1.1 Abbreviated title .....

   1.2 ISSN .....

2. Ownership

   (a) Govt. owned /__/ (d) Research Institute /__/

   (b) Professional organisation /__/ (e) Other (Please specify)

   (c) University /__/ .....

   2.1 Address of issuing organisation :-

   .....

   .....

   ..... Tel. no: .....

3. Frequency

   (a) Weekly /__/

   (b) Monthly /__/

   (c) Quarterly /__/

   (d) Bi-annual /__/

   (e) Other .....

4. History

   4.1 Beginning year .....

   4.2 Interruptions Yes /__/ No /__/

   If Yes, from ..... to .....

   4.3 Predecessor titles (if any) .....

   4.4 Latest issue .....

5. Language

   Sinhala /__/

   Tamil /__/

   English /__/

B. CONTENTS

1. Major discipline covered:

   MEDICINE /__/ AGRICULTURE /__/

   BIOLOGY /__/ EARTH SCIENCES /__/

   PHYSICAL SCIENCES /__/ OTHER (Please specify) .....

   ENGINEERING /__/

2. Do you enforce the usage of the S.I. system of units Yes /__/ No /__/

3. Type of articles

(a) Original research results /__/
(b) Technical reports /__/
(c) Reviews /__/
(d) Statistiaal data /__/
(e) Short communications /__/
(f) Abstracts /__/
(g) Other (Please specify) .....

2.1 Are abstracts included Yes /__/ No /__/
2.2 Are indexes included Yes /__/ No /__/
2.3 Are advertisements " Yes /__/ No /__/
2.4 Approx. no: of articles per issue .....

C. CIRCULATION

1. (a) < 250 circulation /__/
(b) 250 - 500 /__/
(c) 500 - 1000 /__/
(d) > 1000 /__/

2. Foreign subscribers Yes /__/ No /__/

If Yes, (a) < 5% /__/
(b) 5 - 10 % /__/
(c) 10 - 25% /__/
(d) > 25% /__/

3. Exchanges Yes /__/ No /__/

If Yes, Local /__/
Foreign /__/

D. EDITORIAL STRUCTURE

1. Name of Editor/Editors .....

1.1 Full-time /__/
Part-time /__/
1.2 Academic Qualifications .....
1.3 Training in Science Editing Yes /__/ No /__/
1.4 Years of editing experience .....

2. Do you have an Editorial Board Yes /__/ No /__/

If yes, No. of members .....

2.1 Functions of Editorial Board

(a) Selection of referees /__/

(b) Refereeing /__/

(c) Recommendations re acceptance /__/

(d) Other .....

E. REFEREEING PROCEDURES

1. Are your journal articles refereed Yes /__/ No /__/

2. If yes, No. of referees per article (a) One .....

(b) Two .....

(c) More than two .....

3. Selection of referees

(a) From panel of referees /__/

(b) Editor /__/

(c) Editorial Board /__/

(d) Other .....

4. In the event of conflicting referees recommendations who ultimately decides for acceptance or rejection .....

5. Are referees paid Yes /__/ No /__/

If No, is any other compensation or acknowledgement made

.....

.....

6. Are referees anonymous Yes /__/ No /__/

7. Are referees evaluated periodically Yes /__/ No /__/

8. Is there a time-limit for refereeing Yes /__/ No /__/

9. Average time for refereeing a paper .....

F. AUTHORSHIP

1. Are authors named deleted before refereeing .....

2. No. of papers received for publication annually .....

3. % of rejection (a) < 10% /__/

(b) 10 - 25% /__/

(c) 25 - 50% /__/

(d)>50% /__/

4. Major complaints

(a) Poor presentation of results /__/

(b) Language problems /__/

(c) References not checked /__/

(d) Lack of adherence of international standards /__/

(e) Poor quality of illustrations & diagrams /__/

(f) Other (please specify) .....

G. PRINTING AND PUBLISHING PROCEDURES

1. Name of printer .....

2. Time between acceptance and publication .....

3. Are word-processing techniques used for producing your journal

Yes /__/ No /__/

4. Do you request copyright transfer Yes /__/ No /__/

H. MISCELLANEOUS

What are your main difficulties in producing your journal?

(Check as many as apply)

(a) Lack of quality contributions /__/

(b) Delays by referees /__/

(c) Delay by printers /__/

(d) Lack of suitable printing press /__/

(e) Financial constraints /__/

(f) Poor circulation /__/

(g) Editing difficulties /__/

....

Date Signature

.....

Designation

Please return to:-

Mrs. Nimala Amarasuriya,
Assistant Director (Publications).
Natural Resources, Energy & Science
Authority of Sri Lanka,
47/5, Maitland Place,
Colombo 7.

NATIONAL SURVEY OF SCIENTIFIC & TECHNICAL JOURNAL PUBLISHING

Name of the journal: .....

1. FINANCIAL ASPECTS

1.1 Sources of funding for production of Journal

	Yes	No
(a) Parent Institution	☐	☐
(b) Subscription & Sales	☐	☐
(c) Advertisements	☐	☐
(d) Other (please explain)	.....	

1.2 Distribution and marketing

	Yes	No
(a) Free distribution only	☐	☐
(b) On payment	☐	☐

If on payment,

(i) Local subscription price (latest) .....

(ii) Foreign subscription price (latest) .....

2. EDITORIAL STRUCTURE

	Yes	No
Payment is made for editing	☐	☐

3. COVERAGE IN SECONDARY SERVICES

Is your publication included in international abstracting or indexing service eg. Chemical Abstracts.

Yes	No
☐	☐

If yes, please name .....
.....
.....

Thank you for taking the time to complete this survey.

....

Date Signature

Please mail the completed form to: .....

Designation

Mrs. Nimala Amarasuriya
Assistant Director (Publications)
Natural Resources, Energy & Science Authority,
47/5, Maitland Place, Colombo 7.

NAME OF JOURNAL

ANNEX B - LIST OF JOURNALS SURVEYED

1. Animal Production and Health Bulletin
2. The Ceylon Journal of Child Health
3. Ceylon Journal of Medical Sciences
4. Ceylon Journal of Science (Biological Sciences)
5. Ceylon Medical Journal
6. Chemistry in Sri Lanka
7. Coconut Bulletin
8. Cocos
9. The General Dental Practitioner
10. Engineer
11. Jaffna Medical Journal
12. Journal of the Ceylon College of Physicians
13. Journal of the National Aquatic Resources Agency
14. Journal of the National Institute of Plantation Management
15. Journal of the National Science Council of Sri Lanka
16. Journal of the Rubber Research Institute of Sri Lanka
17. Journal of the Soil Science Society of Sri Lanka
18. Journal of the Sri Lanka College of Surgeons
19. Krushi
20. Loris
21. Nuclear News
22. Phyta
23. Prescriber
24. Proceedings, Sri Lanka Association for the Advancement of Science
25. Rubber Research Institute of Sri Lanka Bulletin
26. Sigma
27. Spoila Zeylanica
28. Sri Lanka Dental Journal
29. Sri Lanka Forester
30. Sri Lanka Journal of Agrarian Studies
31. Sri Lanka Journal of Agricultural Sciences
32. Sri Lanka Journal of Obstetrics and Gynaecology
33. Sri Lanka Veterinary Journal
34. Standard News
35. Tea Quarterly
36. Transactions of the Institution of Engineers, Sri Lanka
37. Tropical Agriculturist
38. Vidyodaya Journal of Arts, Science and Letters