

Information Needs and Use Pattern of Rubber Scientists

Accamma C. Korah

Rubber Research Institute of India, Kottayam-9

and

G. Devarajan

Department of Library and Information Science

Thiruvananthapuram-34.

A study was conducted on the information needs and use pattern of scientists utilising literature on rubber at the Rubber Research Institute of India. Questionnaire method was followed which covered 78% of the scientists and technologists of the Rubber Board. Use pattern of different types of materials, adequacy of library collection and services, information strategy and related aspects were examined. The observations indicate that there is a need to expand the library services in areas like procurement of journals in foreign languages, bridging of gaps in titles, organising user education programmes and build up of dissertations/theses and also introduction of modern service gadgets.

0 INTRODUCTION

Progress of modern society depends, a great deal, upon the provision of the right kind of information in the right form at the right time. As information is valuable, it must be put to proper use. In order to serve the users efficiently and effectively, one must ascertain the needs of users in terms of information requirements.

Special libraries have been recognized to be the information disseminators of scientific and technological development. The functions of the special library are to select, evaluate, organize, and disseminate specialized information as soon as they are available. In a special library, the needs of the users vary according to the nature and

levels of specialisation. Systematically ascertaining the needs of the users is therefore a key element. Therefore understanding the information needs as well as use pattern and making available the information to the users appropriately are very essential.

Librarians are becoming increasingly aware of the needs to study users as a means of making more informed decisions about library services. Such studies seem more relevant when precious library budgets have to be stretched as far as they could be. User studies have now been well accepted and are performed by various methods. There is considerable accumulation of literature in user studies and more and more

is being generated. The main objectives of user study are:—

1. To judge the limitations of library system and services.
2. To exploit resources at the least expenses of money, time and energy.
3. To enhance the quality of acquisition and collection.
4. To improve the science communication system.

1 RELEVANCE OF THE STUDY

The Rubber Research Institute of India (RRII) — the Research department of the Rubber Board — was established in 1955 at Kottayam. There are two experiment stations attached to the institute, one at its headquarters and the other Central Experiment Station at Chethackal, fifty km. away. The institute has Regional Research Stations in Tripura, Assam, Meghalaya, Maharashtra, Orissa, Madhya Pradesh, Tamil Nadu, Karnataka and Mizoram. The institute has a Library and Documentation Centre at its Headquarters, with a collection of 34645 volumes of books and bound journals covering the various subjects of interest to the organisation. The library maintains a fairly good stock of standards, preprints/reprints, photocopies, microforms and other documents, and receives around five hundred periodicals. As part of documentation and information services, the library issues information bulletins like documentation lists, Rubber alerts. Recent Additions, newscipping services, SDI services etc. The library also arranges to procure translation of articles and photocopies from other institutes. The library has a reprographic unit. Facilities and services of the library are also extended to planters, manu-

facturers and others connected with the industry and to students, research workers etc. of outside institutions.

No research organization can claim to promote research without the provision of adequate and well balanced collection of books and periodicals related to the research needs of the scientists and also without rendering a prompt and effective service to its research scholars. This paper gives a study of the information needs and use pattern of the scientists of the Rubber Research Institute of India. Among the scientists in the field of rubber research in India user studies, to understand their information needs and ascertain the use pattern, have not been conducted so far.

2 OBJECTIVES

The study was aimed at:

- i) examining the users' approaches to information sources;
- ii) ascertaining the adequacy of collection and library services;
- iii) examining the nature of search for current information;
- iv) identifying the users' approaches to sources that are published in foreign languages;
- v) understanding the search strategy for obtaining references and
- vi) understanding the users' awareness of services generated by the RRII.

3 METHODOLOGY

The study was conducted using the questionnaire method and data were collected from 64 scientists. Different variables viz language, types of information sources, na-

ture of the collection, search strategy etc. were taken into account for the analysis and interpretation of the data. In this study the users of the library refers only to research workers in this Institute.

4 OBSERVATIONS

4.1 Use pattern of foreign language materials

Out of the 64 respondents, 11 scientists have knowledge in French language and 5 each in German and Russian.

TABLE 1 Foreign Language Knowledge

| Sl No. | Language | No. of Scientists | % | Rank |
|--------|----------|-------------------|-------|------|
| 1 | French | 11 | 17.18 | I |
| 2 | German | 5 | 7.81 | II |
| 3 | Russian | 5 | 7.81 | II |

In other words, 32.81% of the scientists have knowledge of a foreign language other than English. Moreover, 25 other respondents had a preference to scan journals in Chinese, Indonesian, French and Spanish

languages. However, their requirement had to be met through translation services as detailed abstracts seldom accompany the titles.

4.2 Use pattern of different types of information sources

The data helped in arriving at a conclusion about scientists' exposure to sources of information and their choice. Major sources of information to scientists are books, reference books, periodicals, back volumes of periodicals, indexing/abstracting and reviewing periodicals, patents, standards, dissertations/theses, technical reports, reprints and photocopies, bibliographies, informal sources and formal sources. Of the 13 sources, scientists prefer to consult current periodicals as the most important source of information. The second and third preferences are back volumes of periodicals and books, respectively.

4.3 Adequacy of collection

The summary (Table 2) given below indicates the adequacy of collection in the library.

TABLE 2 Adequacy of collection

| Sl. No. | Documents | Adequate | Partially adequate | Inadequate |
|---------|--|----------|--------------------|------------|
| | | % | % | % |
| a | Books | 50.00 | 39.06 | 10.94 |
| b | Reference books | 48.44 | 43.75 | 7.81 |
| c | Current periodicals | 59.37 | 25.00 | 15.63 |
| d | Back volumes of periodicals | 20.31 | 46.88 | 32.81 |
| e | Indexing/abstracting reviewing periodicals | 37.50 | 46.88 | 15.62 |
| f | Technical reports | 15.63 | 65.62 | 18.75 |
| g | Conferences/seminar proceedings | 25.00 | 46.87 | 28.13 |
| h | Patents and standards | 25.00 | 47.73 | 27.27 |
| i | Dissertations/theses | 1.64 | 21.31 | 77.05 |
| j | Reprints and photocopies | 16.39 | 44.26 | 39.35 |
| k | Bibliographies | 21.88 | 53.12 | 25.00 |

The data indicate the percentage of respondents in each category of documents available in the library. The analysis shows that for 40.63% users current periodicals and for 50% users books are not adequate enough to satisfy the requirement pertaining to their research work. A high percentage of inadequacy is felt in the case of dissertations/theses.

4.4 Search for current information

The following table gives the use pattern of current information by the rubber scientists.

TABLE 3 *Current information search*

| Sl. No. | Sources | No. of scientists | % |
|---------|--|-------------------|-------|
| a | Institute's current awareness services | 2 | 3.13 |
| b | Current periodicals | 49 | 76.56 |
| c | Indexing and abstracting periodicals | 9 | 14.06 |
| d | Discussions | .. | .. |
| e | Conferences | 1 | 1.56 |
| f | Seminars | .. | .. |
| g | Correspondence | 2 | 3.13 |
| h | Book trade catalogues and announcement bulletins | 1 | 1.56 |

The table reveals that 76.56% scientists consult primary periodicals to keep abreast of current developments in their field of study. Their second source for current information is indexing/abstracting periodicals. Current awareness service bulletin and correspondence among scientists constituted their third choices.

4.5 Search strategy

The search strategy followed by scientists for obtaining references about a specific topic is given in table 4.

TABLE 4 *Search strategy for obtaining references*

| Sl. No. | Search Method | No. of scientists | % | Rank |
|---------|---|-------------------|-------|------|
| a | By scanning through the issues in the Library | 44 | 72.13 | I |
| b | Through indexing/abstracting or reviewing periodicals | 10 | 16.39 | II |
| c | Through local documentation list prepared and circulated by the library | 7 | 11.48 | III |

On examining the search strategy of scientists for obtaining references, 72.13 percent users expressed that they obtain information by scanning through the various issues of periodicals directly. 16.39 percent of users obtain information through indexing/abstracting or reviewing periodicals whereas 11.48 percent of users get their information through local documentation lists prepared and circulated by the library.

From the above data it is clear that the documentation lists produced by the library are not utilized by the scientists at the desired level. Apparently there is an apprehension that the documentation lists do not cover all periodicals. Naturally the coverage is restricted to periodicals received in the library. Even in the journals covered, only abstracts/titles directly related to rubber are included. In science and technology which is dynamic and progressing very rapidly, wider coverage in related crops/aspects is vital. However extraordinary growth in the number of technical and scientific publications makes it almost impossible for even specialized libraries to include complete titles/abstracts of all journals in any subject, in the documentation list. This can be accomplished partly by circulating the contents page of the relevant

periodicals in the form of photocopies and partly by user education programmes. Simultaneously improvements in the documentation lists can also be attempted to cover the complete range of journals available and to incorporate titles in connected fields.

4.6 Use habits of services

The following table (Table 5) provides the use habits of services generated from the library.

TABLE 5 Use habits of library services

| Sl. No. | Services | No. of scientists | % | Rank |
|---------|-------------------------------|-------------------|-------|------|
| a | Fact finding service | 8 | 4.9 | VI |
| b | Referral service | 21 | 12.80 | IV |
| c | Latest addition list of books | 36 | 22.00 | II |
| d | Reprography services | 49 | 30.06 | I |
| e | Interlibrary lending service | 3 | 1.80 | VII |
| f | Newspaper clipping service | 21 | 12.80 | IV |
| g | Current content service | 25 | 15.30 | III |
| h | SDI service | 1 | 0.61 | VIII |
| i | Translation service | 15 | 9.20 | V |

The data reveals that 30.06 percent of scientists utilize reprographic services. The second familiar service utilized by the scientists is latest addition list of books generated by the RRII library. Current contents service attracts the users as their third familiar service. SDI service is the least familiar one among scientists.

5 SUGGESTIONS AND CONCLUSION

The following conclusions/suggestions emerge from the study :

- i) Use of journals in foreign languages other than English is comparatively less. At the same time scientists are aware that valuable literature are available in such journals. To meet this demand local translation services can be attempted.
- ii) Higher priority assigned to periodicals iustified by the findings and it must be continued. As periodical literature deserves greater importance, existing gaps in certain titles are to be filled up.
- ii) It is found that the secondary periodicals are underutilized. For the effective utilization of these time saving tools, user education programmes may be organised.
- iv) The documentation centre has the greatest responsibility in the quick dissemination of information between the author and the user. The effective utilization of published information can remarkably be enhanced by the circulation of 'Current Contents'.
- v) Inadequacy of documents is felt in the area of dissertations/theses. Acquisitions of these types of materials are to be improved to satisfy the needs of the scientists.
- vi) It is found that the present system of services provided to the rubber scientists by the RRII library is inadequate. Introduction of sophisticated services by using modern gadgets like computers is a timely demand. Such services can have maximum exploitation of re-

sources for scientific and technological advancements.

- vii) The institute has a leading role to play in improving the bibliographical organization of literature. The prospective librarians have to act as filters between recorded knowledge and the users in an effort to provide improved quality of services to the clientele. The study carries wider implications to the over all design and improvement of library services.

ACKNOWLEDGEMENT

The first author is grateful to Dr. M. R. See huraj, Director, Rubber Research Institute of India for permission for publication of this paper and also to Dr. A. O. N. Panikkar, Joint Director for his keen interest

in going through the draft, valuable suggestions and encouragement.

REFERENCES

1. BARNES, R C M. Information use studies. Part 2. Comparison of some recent surveys. *Journal of Documentation*. 21(3); 1965; 169-176.
2. BRITAIN, J M. Information and its uses. Bath: Bath University Press; 1970.
3. CRANE, Diana. Information needs and uses. *Annual Review of Information Science and Technology*. 6; 1971; 3-39.
4. FISHENDEN, R M. Information use studies. Part 1. Past results and future needs. *Journal of Documentation*. 21(3); 1965; 163-168.
5. GUHA, B. Documentation and information. Calcutta; World Press; 1978.
6. LIPETZ, Ben-Ami. Information needs and uses. *Annual Review of Information Science and Technology*. 5; 1970; 3-32.
7. WOOD, D N. Discovering the user and his information needs. *ASLIB Proceedings*. 21(7); 1969; 262-270.