

Full Length Research Paper

An analytical study of information seeking-behaviour among agricultural scientists in Sardar Vallabhbhai Patel University of Agriculture and Technology

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The paper focuses on the analytical study of information-seeking behavior among agricultural scientists in Sardar Vallabhbhai Patel University of Agriculture and Technology, India. Their preferences regarding various formats of information sources (formal, informal and electronic information sources) have been explored through quantitative survey. This study employed a structured questionnaire which was distributed to scientists in various teaching and research departments of the Sardar Vallabhbhai Patel University of Agriculture and Technology, as selected for the study.

Key words: Agricultural scientists, information need, information seeking-behaviour, Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut, Uttar Pradesh, India.

INTRODUCTION

Information seeking-behaviour, which involves personal reasons for seeking information, is a kind of information which is being sought and the ways and sources with which needed information is being sought (Leckie et al., 1996). It is expressed in various forms, that is, from reading printed material to research and experimentation. Scholars, students and faculties actively seek current information from the various media available in libraries, for example, encyclopedias, journals and more currently, electronic media. Abels (2005) mentioned that the frequency of use of the internet in 1998 to 2000 had greatly increased. At the same time, expenditures on monographs showed steady increase.

Information seeking behaviour is an area of active interest among librarians and information scientists. It results from the recognition of some need perceived by the user, who as a consequence makes use of formal systems such as libraries, information centres, on-line services or some other persons, in order to satisfy the perceived need.

The librarian should be aware of what kind of information is being sought and how it can be obtained. Due to the rapidly escalating cost of purchasing and archiving printed scholarly journals and electronic media, the library

has the responsibility to provide and maintain efficient services.

Previous studies

Anwar and Eisenchitz (2000) found that information needs and information seeking behaviour of Malaysian agricultural scientists have revealed that, research scientists spend 16% of their office time reading the literature. The literature search, as compared with 9.3% spent by academicians, also revealed that agricultural scientists preferred using primary sources of information particularly journals and research review reports. Dulle et al. (2001) conducted a survey to assess the information needs and requirements of the agricultural research workers in Tanzania. The finding of the study indicates that resources in the libraries and information centres are inadequate and does not meet the needs of agricultural workers.

The study further suggested that the agricultural information services rendered by the libraries and information centres should be improved up to the level of the agricultural scientists' need. Oladele (2006) conducted

Table 1. Size of the sample.

The total number of agricultural scientists working in Sardar Vallabhbhai Patel University of Agriculture and Technology	No. of agricultural scientists covered in this study	%
98	60	61.23

Table 2. Purpose for seeking information.

Information used	No. of agricultural scientists	%	Rank
General awareness of new knowledge	53	88.33	1
To prepare for class room lecture	47	78.33	2
Professional interest	42	70	3
Research work, etc.	36	60	4
To meet the need of promotional opportunities	30	50	5
Publishing book/article etc.	27	45	6
Participating in the seminar/conference, etc.	21	35	7

a study on 'information seeking and utilization among agricultural researchers in Nigeria'. The study demonstrates the level of awareness and use of agricultural information sources among researchers in Nigeria. The empirical findings have shown the deprivation of researchers not having enough information to take a wise decision as against the researchers being over loaded with information, which implies a situation where researchers have too much information and are unable to pick out the right bits. The policy implication of the findings have stated that to improve the performance of agricultural researchers, the provision of information sources as well as the facilities to enhance their use, is very important in research institutes. Specific training needs of the researchers to seek for appropriate information from different sources should also be identified as a skill-gap. Singh and Satija (2007) discuss the findings of various strategy procedures adopted by agricultural scientists in meeting their information requirements. The agricultural scientists were asked to rank the information sources on the basis of priority, in the order I, II and III.

The survey result shows that agricultural scientists have expressed great dependence in meeting their information requirements in their institutional library/information center. The library/information center is the most preferred source (72.05%) for the respondents, for all categories of agricultural scientists. On the other hand, for accessing information, agricultural scientists highly depend on library collections, followed by personal collections of their supervisors and colleagues.

Objectives of the study

The major objectives of the study are to find out:

1. The types of information needs.
2. The purposes of information seeking behaviour.
3. The use of various formal and electronic sources of information and methods used in locating them.

RESEARCH METHODOLOGY

Keeping in view the objectives of the study, a structured questionnaire was designed on the basis of previous studies and distributed for the data required for the purpose. This preliminary study was limited to the survey of agricultural scientists working in Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut, Uttar Pradesh, India. There are 98 agricultural scientists in the university, out of which 60 (61.23%) are covered by the random sampling method used in this selected study. The data analysis and interpretation is based on the response of 60 agricultural scientists belonging to the various teaching and research departments of Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut, Uttar Pradesh, India.

Data analysis and interpretations

The sample population had 60 agricultural scientists (Table 1). Table 2 revealed that the purpose of seeking information for general awareness of new knowledge (83.33%) has been identified to be the maximum, by the agricultural scientists. For preparing class room lectures, the respondent placed the second order of rank as 78.33%, while professional interest (70%), for research work (60%), to meet the need of promotional opportunities (50%), publishing book/article, etc. (45%) and for participating in the seminar/conference, etc. (35%) secured the rank of 3 to 7 respectively, in the order of ranking.

As showed in Table 3, it is seen that the current information has been identified to be the maximum used type by the agricultural scientists and it occupies the first rank. R and D (research and development) information are next in the order of rank, that is 80%, followed by factual information (60%), statistical information (50%), conceptual information (40%), retrospective information (25%), and socio-economic information (10%) respectively, placed in the

Table 3. Types of information used.

Information used	No. of agricultural scientists	%	Rank
Current information	51	85	1
R and D information	48	80	2
Factual information	36	60	3
Statistical information	30	50	4
Conceptual information	24	40	5
Retrospective information	15	25	6
Socio-economic information	6	10	7

Table 4. Use of formal information sources.

Formal information sources	No. of agricultural scientists	%	Rank
Journals	60	100	1
Text books/monographs	38	63.33	2
Thesis/dissertation	34	56.67	3
Indexing/abstracting journals	27	45	4
Conference and seminars proceeding	21	35	5
Yearbook/hand book	19	31.67	6
Patents	12	20	7
Encyclopedia/dictionary	5	8.33	8

Table 5. Use of electronic information sources.

Electronic information resources	No. of agricultural scientists	%	Rank
Internet services/resources	60	100	1
E-mail	60	100	2
E-journals	48	80	3
Online databases	15	25	4
E-book	7	11.67	5

second to seventh position in the ranked order.

Table 4 reveals that journals have been reported to be proffered formal sources by the agricultural scientists (100%) and hence occupies the first rank, followed by textbook/monographs (63.33%), thesis/dissertations (56.67%), indexing/abstracting journals (45%), conference/seminar proceedings (35%), yearbook/handbook (31.67%), patents (20%) and encyclopaedia/dictionary (8.33%) used as a formal information source and have been ranked in the second to eight position respectively, in the ranked order.

Table 5 indicated that internet and e-mail services have been identified to be the most widely used electronic source of information by the agricultural scientists (100%) and are therefore placed in the first rank, followed by e-journals (80%), online databases (25%) and e-books 11.67%, which is ranked second to fifth respectively, in the order of ranking.

For methods of locating references, Table 6 shows the location method of references by agricultural scientists. Citation at the end of journal articles (80%) have received the highest rank for locating references, followed by consulting library staff (65%), retrospectives searching of indexing/abstracting tools (55%), personal communication (45%), citation at the end of book chapters (30%) and browsing older volumes (20%) as first to six ranks in the ranked order, as a method of checking references.

Table 7 shows that a majority of 95% agricultural scientists visit the library for the need of information, whereas Table 8 reflects that just 15% of agricultural scientists visit the library daily. As such, 35% of the agricultural scientists visit the library once in a week, 40% come to the library fortnightly and 10% avail the library facility occasionally for the need of information.

Table 9 reflects that only 20% of agricultural scientists are fully satisfied with the library resources and services, 55% are partially satisfied, 10% are least satisfied and 15% are not satisfied with library resources and services made available in the library under study.

SUMMARY OF THE FINDINGS

The result of the present study revealed that the majority of agricultural scientists seek information for general awareness and new knowledge, class room lectures, professional interest and research work. The result of the present study reveals that majority of the respondents prefer current information, R and D and factual

Table 6. Methods of locating references.

Methods	No. of agricultural scientists	%	Rank
Citation at the end of journal articles	48	80	1
Consulting library staff	39	65	2
Retrospective searching of indexing/abstracting tools	33	55	3
Personal communication	27	45	4
Citation at the end of books' chapters	18	30	5
Browsing older volumes	12	20	6

Table 7. Going to the library for the needed information.

Details	No. of agricultural scientists	%
Yes	57	95
No	3	5
Total	60	100

Table 8. Frequency of visit to the library for needed information.

Details	No. of agricultural scientists	%
Daily	9	15
Once in a week	21	35
Fortnightly	24	40
Occasionally	6	10
Total	60	100

Table 9. Satisfaction about library resources and services.

Satisfaction	No. of agricultural scientists	%
Fully satisfied	12	20
Partially satisfied	33	55
Least satisfied	6	10
Not satisfied	9	15
Total	60	100

information. It is also revealed that majority of the respondents frequently used journals, textbook/monographs, research reports and thesis/dissertations as a formal information source.

More so, the findings of the study highlight that majority of respondents use internet, e-mail services and e-journals as an electronic information sources. The inferences suggest that majority of respondents consult library staff to locate the information and retrospectives searching of indexing/abstracting tools. It is observed that most of the agricultural scientists visit the library only for the purpose of getting their desired information.

The outcomes of the study show that a maximum number of agricultural scientists avail the library facility, fortnightly. It is very alarming that only few scientists are fully satisfied with the resources and services of the library that ultimately has to be improved.

CONCLUSIONS AND SUGGESTIONS

The various categories of agricultural scientists engaged in agricultural development and food production required different types of information at the right time in order to

make the right decision. The scientists of agricultural science in this study are uniform in their preference for journals, internet resources and services as the most important sources of information in their teaching and research purposes. The agricultural scientists are really people who shoulder the responsibility of nation building by exercising their efforts in creating new information, owing to the importance of such elite community as users of the library. As such, orientation programmes should be organized for them so that variety of library resources could have optional use.

However, in order to come up to the needs of agricultural scientists, librarians need to understand thoroughly their needs and the ways they consult the library. The results of this study revealed that respondents visited the library for searching the required information. Majority of the respondents, who considered the location of their library convenient to them, reported visiting it more frequently.

The library of Sardar Vallabhbhai Patel University of Agriculture and Technology should mount strategic awareness services which will showcase their library collection, thereby bringing to the notice of agricultural scientists various sources of information that are available and can thus be consulted. The librarian should come forward to understand the actual need and exact field of interest that the agricultural scientists have their priority and to reform the library resources making the collection more purposeful and need base, which in fact, will bring immense benefit to the agricultural scientists of the university.

The study indicates that the agricultural scientists are much diversified in the information they seek, the sources they access and the use they make of the information. It is difficult to maintain support for the idea of a single mode of formal information sources. However, the scientific journals have been ranked first for obtaining specific information and keeping up-to-date information, while it has been ranked second with regard to acquiring background information.

The preferences agricultural scientists have for these sources vary with the characteristics of the individual agricultural scientist, nature of information needed, personal knowledge of sources and their accessibility.

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