

COGNITION OF INFORMATION SEEKING BEHAVIOUR OF SCIENTISTS OF ICAR REGIONAL CENTRES OF NORTHEAST INDIA: AN OUTLOOK

MONITA CHOUDHURY¹ & MUKUT SARMAH²

¹Research Scholar, Department of Library and Information Science, Assam University, Assam, India

²Assistant Professor, Department of Library and Information Science, Assam University, Assam, India

ABSTRACT

Purpose – The main purpose of the paper is to find out information seeking behaviour of the agricultural scientists working in the regional centres under ICAR Research Complex for NEH Region, Barapani, Meghalaya. Based on the results of the study, this paper will seek to identify the information needs, information seeking behaviour and also different types of constraints while accessing information by scientists of agriculture field.

Design/Methodology/Approach – A well designed questionnaire was distributed amongst the scientists as a data collection tool along with observations and informal interviews. Overall 79 questionnaires were distributed, out of which 56 questionnaires received back with response rate of (71%). First, they were asked to state their library visit pattern, next purpose of library visit, methods of seeking information and problems while accessing information from the library.

Findings – The study revealed that scientists used to visit not very often to their centre libraries. They mostly visit the library for consulting reference sources and certain extent for getting books issued and returned. It is also discovered that they seek information generally from other sources including their personnel collection and discussing with experts in their field and to some extent discussing with their colleagues outside the organisation. They were not satisfied with their library collections which are not adequate at all and it is also found that while seeking information they have to face different types of difficulties like lack of reading materials, non-cooperation from library staff etc. in their respective institutes. The study findings emphasized the needs to continue accessing and understanding their specific needs to find innovative solutions to gratify the agricultural community.

Originality/value – This study sincerely explores the information-seeking behaviour of scientists in agriculture regional centres under ICAR in northeast region. It also ascertains the realistic situation and the outcome which can be used for redesign the libraries including its sources and services to please the users in the agricultural field.

KEYWORDS: ICAR, Information, Information Seeking Behaviour, Regional Centres, Scientists

INTRODUCTION

Information has been described by Uttor (1999), as data that has been subjected to some processing functions capable of answering user's query, be it recorded, summarized, or simply collected that would help decision making. Information is a main concern in this information era. The real challenge of this period is not creating information or keeping information, but getting people to use information properly. There is a worldwide theory that man was natural unaware and must intensely seek facts. Information seeking behaviour is a comprehensive word covering the behaviours of characters to coherent their information wants, seek, calculate, select, and make use of that information. Information

seeking behaviour is the purposive search for information as a result of a requirement to fulfil some objectives. In the agricultural field, agriculture is the backbone of agricultural growth in the country, demands timely dissemination of knowledge being generated and updated across the globe from time to time. Information use by the agricultural scientists is, however, encouraged mostly by academic or research works and their needs come across through the use of information resources such as books, journals, public and private sector documents of all types, and also the outcomes of research made accessible in print and electronic formats. Since, the prompt changes in information delivery in the 21st Century by way of computerized access, digitized information formats, and the excess of resources on the Internet, the significance of information seeking and allied behaviour of the seeker cannot be overstated. Research on information use, information seeking has been undertaken as a long time. But particularly in Northeast India not much research is stated particularly in the sector of agricultural sciences hence, the present study attempts to examine the various issues related to the study such as information use, information seeking, difficulties faced by agricultural scientists of Indian Council of Agricultural Research (ICAR) centres of north eastern region, which provide assistance to the agricultural libraries and librarians of the respective centres to restructure their library collections and services in more logic or in a rationale way.

INDIAN COUNCIL OF AGRICULTURE RESEARCH (ICAR) RESEARCH COMPLEX FOR NEH REGION, BARAPANI, MEGHALAYA

ICAR Research Complex for North Eastern Hill Region was established in the year 1975 by the Indian Council of Agricultural Research to make available an adequate research base for supporting agricultural development in the North Eastern hill region of the country. It is the first institute of its kind setup by ICAR which having multidisciplinary approach in serving seven hill states of the region in ten divisions of agriculture and allied sciences which encompass 16 major disciplines to cater to the research needs of the tribal areas of NEH Region including Sikkim. The Headquarters of this Institute is located at Barapani (Meghalaya) while its regional centres are located at Basar (Arunachal Pradesh), Imphal (Manipur), Kolasib (Mizoram), Jharnapani (Nagaland), Lembucherra (Tripura) and Gangtok (Sikkim). The Institute has a very strong extension network programme for all the north eastern states through 15 KVKs attached to different centres for providing on/off campus training to the practising farmers, school drop outs and farm women in the field of agriculture and allied sectors. A number of competitive projects such as NAIP, NICRA, NHB, DBT and DST supported programme, TSP, KIRAN, NFBSFARA (National fund for basic, strategic and frontier application research in agriculture) etc. are operational in the region. The premeditated and frontline research on climate change adaptation and mitigation under NICRA is a major research thrust area of the institute. There are 14 AICRPs, 5 network and 15 collaborative projects in operation. The institute has strong link with other ICAR Institutes and Universities within the region and outside the region as well with International organizations like IRRI, ICRISAT, ILRI, and IWMI

PURPOSE OF THE STUDY

The study undertaken to explore the agricultural information use, information seeking behaviour and level of difficulties faced by the scientists working in Indian Council of Agricultural Research (ICAR) therefore on the basis of the study, requirement balanced collection could be developed by the agricultural libraries to come across the information needs of their patrons carefully and efficiently.

Research Questions

- What is their frequency and purpose of library visit?

- How do they manage to get the material of their interest from the library?
- Do they face any difficulty to access information?

SCOPE OF THE STUDY

ICAR inaugurated as the Imperial Council of Agricultural Research, an autonomous body (a registered society) in 1929 under the Societies Registration Act 1860 in enactment of report of the Royal Commission on Agriculture. Under ICAR Research NEH Region there are 6 regional centres located in all eight states of northeast viz. Sikkim, Nagaland, Manipur, Arunachal Pradesh, Tripura, Mizoram, Meghalaya and Assam. All these regional centres were taken as scope of the study which is as follows-

- ICAR Research Complex for NEH region, Nagaland Centre, Jharnapani , Nagaland
- ICAR Research Complex for NEH Region, Mizoram Centre, Kolasib, Mizoram
- ICAR Research Complex for NEH Region, Arunachal Pradesh Centre, Basar, Arunachal Pradesh
- ICAR Research Complex for NEH Region, *Sikkim* Centre, Tadong, Gangtok
- ICAR Research Complex for NEH Region, Lembucherra, Tripura Centre, Tripura
- ICAR Research Complex for NEH Region, Manipur Centre, Lamphelpat, Imphal

METHODOLOGY

The main populations in this study were agricultural scientists working in ICAR Institute and centre of Nagaland. Total of 79 questionnaires with open and close-ended questionnaire on information seeking behaviour of agricultural scientists were distributed randomly to the respondents. Out of 79, total 56 filled in questionnaires were returned by the users with the overall response rate 71 %. Twenty three (23) questionnaires were not received back. The data gained from the responses were analysed to recognise agricultural scientist's information needs, information seeking behaviour and different information sources for updating themselves in their different fields of research.

FINDINGS

This section presents the findings from the survey. On the basis of filled up questionnaires the data has been analyzed and inferences were made based on standard statistical techniques. All the results have been presented in the form of tables and diagrams to make the data picture clear.

Responses Received from the Respondents

Table 1 shows the response rate. A total of 79 questionnaires were distributed to the respondents, out of which 56 questionnaires duly filled by the respondents were received back. The overall response is 71% i.e. N = 56.

Table 1: Responses Received from the Respondents (N=56)

Sl. No.	Questionnaire	Nos.	Percentage (%)
1.	Received	56	71
2.	Not Received	23	29
	Total Distributed	79	100

Age Wise Distribution of Respondents

Table 2 shows that majority of (41.1%) respondents belongs to the age group of below 36 years, which is followed by (30.4 %) respondents belongs to the age group of 36-45 years, (19.6 %) respondents belongs to the age group of 46-55 years, whereas (8.9%) respondents belongs to age group above 56 years.

Table 2: Age Wise Distribution of Respondents (N=56)

Sl. No.	Age Group	Frequency	Percentage (%)
1.	Below 36	23	41.1
2.	36-45	17	30.4
3.	46-55	11	19.6
4.	Above 56	5	8.9
	Total	56	100

Sex Wise Distribution of Respondents

Table 3 represents the sex-wise distribution of respondents, which reveals that out of 56 respondents, the male respondents are (71.4%) and that of female respondents are (28.6%).

Table 3: Sex Wise Distribution of Respondents (N=56)

Sl. No.	Sex	Frequency	Percentage (%)
1.	Male	40	71.4
2.	Female	16	28.6
	Total	56	100

Category Wise Distribution of Respondents

Table 4 reveals that out of 56 respondents, majority of (50 %) of them belongs to the category of Scientist/Assistant Professor which is followed by (30.4%) respondents belongs to the category of Senior Scientist/ Associate Professor and (19.6 %) respondents belongs to the category of Principle Scientist/ Professor.

Table 4: Category Wise Distribution of Respondents (N=56)

Sl. No.	Category	Frequency	Percentage (%)
1.	Principle Scientist /Professor	11	19.6
2.	Senior Scientist /Associate Professor	17	30.4
3.	Scientist/Assistant Professor	28	50.0
	Total	56	100

Library Visit Pattern

Table 5 indicates that out of 56 respondents about (44.6%) respondents visits library once a week, which is followed by (30.4%) respondents used to visit the library once a month, (16.1%) respondents who visits the library on daily basis, (8.9%) respondents rarely visits library, whereas not a single respondents used to visit the library on never basis.

Table 5: Library Visit Pattern (N=56)

Sl. No.	Visit	Frequency	Percentage (%)
1.	Daily	9	16.1
2.	Once a week	25	44.6
3.	Once a month	17	30.4
4.	Rarely	5	8.9
5.	Never	0	0.0
	Total	56	100

Purpose of Library Visit

Table 6 indicates that out of 56 respondents majority of (30.4 %) respondents visits library for consulting reference books, which is followed by (25%) respondents visits library for issuing and returning of books, (17.9%) respondents visits library for reading journals, (19.6%) respondents visits the library for other purposes, (7.1%) respondents visits the library for preparing research, whereas not a single using e-resources and also for updating knowledge.

Table 6: Purpose of Library Visit (N=56)

Sl. No.	Purpose of Visit	Frequency	Percentage (%)
1.	Preparing Research	4	7.1
2.	Consultation of Reference Books	17	30.4
3.	Get Books Issued/Returned	14	25.0
4.	Using e-resources	0	0.0
5.	Reading journals	10	17.9
6.	For updating knowledge	0	0.0
7.	Others	11	19.6
	Total	56	100

Methods of Seeking Information

Table 7 reveals that majority of (33.9%) respondents seek information from other sources, followed by (25%) respondents seek information from discussion with experts in the field, (19.6%) respondents seek information from discussion with colleagues elsewhere, (16.1%) respondents seek information from discussion with colleagues within the organisation , (5.4%) respondents seek information by visiting library/information centres, whereas not a single respondents seek information from discussion with library staff.

Table 7: Methods of Seeking Information (N=56)

Sl. No.	Methods of Seeking Information	Frequency	Percentage (%)
1.	Visit library/ information centres	3	5.4
2.	Discussion with colleagues within the organisation	9	16.1
3.	Discussion with experts in the field	14	25.0
4.	Discussion with library staff	0	0.0

5.	Discussion with colleagues elsewhere	11	19.6
6.	Others	19	33.9
Total		56	100

Adequacy of Library Resources

Table 8 shows that, a response rate as high as (69.6%) is of opinion that library collections in the Centre library is not adequate at all, (30.4%) respondents found library collections are partially adequate, whereas not a single respondents found library collections are adequate.

Table 8: Adequacy of Library Resources (N=56)

Sl. No.	Reading Materials	Frequency	Percentage (%)
1.	Adequate	0	0.0
2.	Partially Adequate	17	30.4
3.	Not Adequate to all	39	69.6
Total		56	100

Problems of Seeking Information from the Library

Table 9 indicates the different types of problems while seeking information from the library, in which majority of (39.3%) respondents facing other problems like internet, financial limitations etc., followed by (25%) respondents facing problem like lack of reading materials to 'great extent' in the library, (19.6%) respondents facing problem like lack of access to all the information, (16.1%) respondents found facing problem like lack of time, whereas it is also found that not a single respondent showed lack of knowledge of information source and lack of knowledge in use of library services.

Table 9: Problems of Seeking Information from the Library (N=56)

Sl. No.	Types of Difficulties	Frequency	Percentage (%)
1.	Lack of time	9	16.1
2.	Lack of access to all the information	11	19.6
3.	Lack of knowledge of information source	0	0.0
4.	Lack of knowledge in use of library services	0	0.0
5.	Lack of reading materials	14	25.0
6.	Others	22	39.3
Total		56	100

CONCLUSIONS AND SUGGESTIONS

The present study contributes the clear picture of information seeking behaviour of agricultural scientists working in the different regional centres under ICAR Research Complex for NEH Region, Barapani, and Meghalaya. It indicates that majority of agricultural scientists used to visit their library once a month and main purpose of their library visit is for consulting the reference books, getting books issued / returned and to some extent reading journals. Scientists sought information mainly from other sources including internet, online access and to some extent discussion with colleagues in the field. Library collections of both the institute and centre found to be mostly not adequate at all and it is also clear that nobody found the collection fully adequate. Most of the agricultural scientists facing problems like lack of reading

materials in the library, lack of accessing information, others like internet, access of journals etc. The findings of the study highlighted that there is a requirement to make an outline for effective or better utilization of library sources and services of these libraries.

Some suggestions which have been received from the agricultural scientists are given here under with enlightened remedial steps are as follows: (i) Necessary to develop the collection of the library by keeping in view the information needs of agricultural scientists (ii) Providing interlibrary loan facility (iii) Display of reading materials according to subject wise (iv) Digitization of libraries and its resources and services so that the users can able to position in competitive world (v) Preservation of old issues of journals and reference book after proper binding and labelling (vi) Encourage the staff of the ICAR Libraries to provide regular or organised Orientation programme to the agricultural scientists in order to overcome the difficulties faced by them in the use of information available in their respective libraries (vii) Working hours of the library should to be increased (viii) Library should appoint professional library staff (ix) Increasing speed of internet with computer facility etc.

Though, the agricultural scientists agree that library is the central base of any Institute. For additional utilisation and accepting the appropriate ethics of library in today's information world, the special libraries of these institutes and centres must firstly digitized and assemble the most adequate materials which satisfy the users of those libraries. Information seeking behaviour varies from discipline to discipline. After applying some recommendations library system of these respective ICAR regional centres might be capable of managing the multifaceted information needs of their agricultural users.

REFERENCES

1. Acheampong, L. D., & Dzandu, M. D. (2012). Access to and use of information centres among scientists at Council for Scientific and Industrial Research-Crops Research Institute, Kumasi, Ghana. *Library Philosophy and Practice*, 5(1), 38-46.
2. Arinola, A.A., & Adio, G. (2012). Information needs and information-seeking behaviour of agricultural students at LAUTECH, Ogbomosho. Retrived from <http://unllib.unl.edu/LPP/PNLA%20Quarterly/adio-arinola76-3.htm>.
3. Biradar, B. S. (1990). Pattern of information use by Indian surgical scientists: A citation study. *Annals of library Science and Documentation*, 37(4), 42-133.
4. Chakraborty, G. (2003). Information needs and the seeking behaviour of the agricultural scientists of Delhi Agricultural Institute. *Library Herald*, 44(1), 50-62.
5. Chitrani, G. (2006). Information needs and information seeking behaviour of environmental scientists in universities in Sri Lanka: major issues and concerns. *Journal of the University Librarians Association of Sri Lanka*, 10, 19-28. Retrived from <http://www.sljol.info/index.php/JULA/article/viewFile/315/358>.
6. Kumar, D. (2010). An analytical study of information seeking-behaviour among agricultural scientists in Sardar Vallabhbhai Patel University of Agriculture and Technology. *International Journal of Library and Information Science*, 2(8), 164-168.
7. Mahapatra, R. K. (2012). Digital content creation and management in Agricultural Libraries in India: issues and trends. *DESIDOC Journal of Library & Information Technology*, 30(1), 31-37.

8. Mokhtari, H. (2014). A quantitative survey on the influence of students' epistemic beliefs on their general information seeking behaviour. *A Journal of Academic Librarianship*, 40(3-4), 259-263.
9. Prakasan, P.M. (2013). Information Needs and Use of Healthcare Professionals: International Perspective. *DESIDOC Journal of Library & Information Technology*, 33(6), 465-473.
Retrieved from <http://publications.drdo.gov.in/ojs/index.php/djlit/article/view/5490>
10. Sakia, M. & Gohain, A. (2013). Use and user's satisfaction in library resources and services: a study in Tezpur University (India). *International Journal of Library and Information Science*, 5(6), 167-175.
11. Salaam, M.O., & Aderibigbe, N.A. (2007). Awareness and utilization of the essential electronic agricultural library by academic staff: a case study of university of agriculture, Abeokuta, Nigeria. Retrieved from <http://www.white-clouds.com/iclc/cliej/cl30SA.pdf>.
12. Singh, K.P. & Satija, M.P. (2007). Information Seeking Behaviour of Agricultural Scientist with particular reference to their information seeking strategies. *Annals of Library and Information Studies*, 54,213-220.
Retrieved from <http://nopr.niscair.res.in/bitstream/123456789/3240/1/ALIS%2054%284%29%20213-220.pdf>
13. Zawawi, S., & Majid, S. (2001). The information needs and seeking behaviour of the IMR Biomedical scientists. *Malaysian Journal of Library and Information Science*, 5(1), 25-41.
Retrieved from <http://majlis.fsktm.um.edu.my/document.aspx?filename=166.pdf>
14. <http://icar.org.in/en/node/6609>(19 December, 2015)
15. http://en.wikipedia.org/wiki/Indian_Council_of_Agricultural_Research (24 December, 2015).
16. www.icar.org.in (20December, 2015).
17. <http://www.icarneh.ernet.in/>(26 December, 2015).