# Assessment of user preference to information resources in agricultural libraries in north India

Nazir Ahmad Bhat<sup>a</sup> and Shabir Ahmad Ganai<sup>b</sup>

<sup>a</sup>Assistant Librarian, Central Library, Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir-190025, Jammu and Kashmir, E-mail: mbhatnazeerahmad@gmail.com

<sup>b</sup>Associate Professor, Department of Library and Information Science, The University of Kashmir, Srinagar-190006, Jammu and Kashmir, E-mail:shabir311@rediffmail.com

Received: 12 April 2017; revised: 30 May 2018; accepted: 31 May 2018

Through a survey, this study assesses the preference of users with regard to print and electronic information resources in agricultural libraries of north India and to identify the preferred mode of access thereof. The required data were collected, employing questionnaires and through telephonic surveys. Statistical Package for Social Science (SPSS) was used for analysing the data. The level of association between the user preference and the corresponding variable was derived through Chi Squared ( $\chi^2$ ) Test. It is found that the users of agricultural libraries in north India use information resources almost equally both in print and electronic forms, although online resources are favored over print as they are 'easy to search and retrieve', 'easy and quick to access' and 'more up-to-date' than their print counterparts.

Keywords: Electronic Information Resources (EIRs); Information source; User preference; Information access

#### Introduction

India is popularly considered to comprise of five geographical zones i.e. east, west, north, south, and central India. North India comprise of seven states, viz., Delhi, Haryana, Himachal Pradesh, J&K, Punjab, Uttarakhand and Uttar Pradesh. Thirteen, state agricultural universities and 03 deemed to be universities exist in northern India. Uttar Pradesh being the largest state in north India, both in terms of area and population, has maximum number of six agricultural universities (05). There are agricultural universities each in three states viz., Himachal Pradesh (02), Jammu & Kashmir (02) and Punjab (02), whereas only one agricultural university each exist in Haryana (01), and Uttarakhand (01). Indian Agricultural Research Institute (IARI), New Delhi, National Dairy Research Institute, Karnal (Haryana) and Indian Veterinary Research Institute, Bareilly (Uttar Pradesh) have the status of Deemed to be Universities. As for age of these universities, IARI is the oldest university established in 1905, while Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana (Punjab) is the youngest university established in 2005.

The present study endeavours to assess the preference of users with regard to two formats of information resources viz., electronic and print information resources.

#### **Review of literature**

A study conducted at Cochin University of Science and Technology revealed that there is a high demand for e-resources (67.00%). Another study showed that almost all Indian pharmacopoeia scientists and associates used e-journals (100%), online database (100%), CD-ROM databases (100%), subject specific information websites (89%), e-books (79%) and other Internet based e-resources. A study at the University of Lagos showed that majority of lecturers (90.6%) and research scholars (80.0%) used e-journals, and e-books were not as popular among the users. Raza and Upadhay reported that 68.8% of the respondents preferred to use electronic journals as compared to 31.2% who preferred to use print journals. Similar findings were found in other studies as well. Similar

Although most studies have clearly found the increasing usage of electronic information resources,

there are studies that have found the preference of print over electronic information resources (EIRs). While studying the attitude of research scholars towards usage of electronic information resources in university libraries of Karnataka, it was found that majority of research scholars prefer print resources (58.12%), as compared to electronic resources (41.88%). The findings of another study reveal that 45% of users prefer printed journals, 31% of them prefer online journals, and 24% wish to access both printed and electronic forms of journals. 10

It is evident from the literature reviewed that the use of e-resources is gaining momentum in India and a good number of research studies have reported that majority of users prefer to use the information in electronic form. However, specific studies on user preference in agricultural libraries of northern India have not been conducted. So a need is felt to enrich the literature by conducting a study in this domain.

# **Objectives of the study**

- To assess the preference of users with regard to the two formats of information resources:
- To explore the mode of access through which the users prefer to access EIRs; and
- To identify the reasons for which the users prefer EIRs over that of PIRs.

## Scope

The study has been conducted across seven agricultural libraries of northern India belonging to four states, viz. Delhi (1 university), Himachal Pradesh (2 universities), Jammu & Kashmir (2 universities) and Punjab (2 universities).

## Methodology

A questionnaire survey was conducted across the universities under study during 2015. The number of library users in these universities was worked out and a standard sample size of 1200 users was determined with the help of Krejcie & Morgan table. A total number of 1500 questionnaires were distributed among faculty members, masters' degree students and research scholars proportionately, out of which 1275 users returned back the filled-in questionnaires, leading to a response rate of 85%. On scrutinizing the questionnaires, it was found that 1200 questionnaires

were complete in all respects. Personal interactions and telephonic/e-mail communications were also had with some users to clarify doubts and remove ambiguities in the responses. Statistical Package for Social Science (SPSS) was used to carry out the data analysis whereof the level of significance of facts and the association between constants and the variables under study was derived with the help of Chi Squared ( $\chi^2$ ) Test.

## **Analysis**

Three essential aspects related to use of two formats of e-resources were investigated and the data is accordingly analysed under following three subheadings:

- Preferred format;
- Preferred mode of access; and
- Reasons for preference of EIRs

#### Preferred format

The data about the user preference with respect to two formats of information resources, viz. print and electronic, is presented in Table 1.

Table 1—Preference regarding format of information source				
Sl. no.	Format preferred	Frequency (Percent)		
1	Print	125 (10.40)*		
2	Electronic	174 (14.50)		
3	Both Print and Electronic	901 (75.10)		
	Total	1200 (100)		
χ2=944.25; df=2; p-value <0.01				

It is evident from Table 1 that majority of respondents (75.10%) prefer to use information resources both in print and electronic format, whereas the print only format proves to be least preferred format (10.40%).

#### Preferred mode of access

E-resources provide the users with an opportunity to access and use the information in different modes, like that of online, offline or both. The mode of access preferred by the users is presented in Table 2 which reveals that almost an equal percentage of users prefer to access the resources either through online only (47.30%) or both online and offline (48.50%) modes

Table 2—Preference regarding mode of access				
Sl. no.	Mode of access	Frequency (Percent)		
1	Online	568 (47.30)*		
2	Offline	050 (04.20)		
3	Both Online and Offline	582 (48.50)		
	Total	1200 (100)		
$\chi 2=459.92; df=2; p$ -value < 0.01				

and that a small percentage (4.20%) prefer the offline only mode. This implies that majority (95.80%) of users in the select libraries prefer to access the eresources through online mode as compared to 52.70% of users who still prefer to use them through offline mode. The statistical observation substantiates the fact that a significant difference with regard to preferred mode of access exists among users (p<0.01).

# Reasons for preference of EIRs

In order to determine the most influential factor(s) responsible for preference of electronic form of information, a close ended question with nine options was posed to the users. The data collected from respondents in this regard is given in Table 3.

From Table 3 it is evident that the factor 'easy to search and retrieve' is the most influential factor as indicated by 62.34% of users. Other two factors namely 'easy and fast to access' (47.08%) and 'being more up-to-date' (43.29%) rank at numbers 2 and 3 respectively. Other factors also appear to be influential though of less intensity as marked out by 30-40 percent of users. The p-value derived implies that there is statistically a significant difference in opinion of users with regard to reasons of preference about use of e-resources (p<0.01).

## Findings and discussion

It is found that the users of north Indian agricultural libraries prefer to use information resources almost equally both in print (85.50%) and electronic (89.60%) forms with a slight difference in the proportion (Table 2). This finding resembles the findings of Bhatt and Rana<sup>6</sup>, Kumar and Kumar<sup>8</sup> and Thanuskodi<sup>7</sup>, who in their studies explored that the majority of academicians still prefer to use both print and electronic forms of information equally. However, the literature surveyed by the investigator conveys that majority of users in India prefer to use

Table 3—Reasons for preference of e-resources (n=1134)				
Sl. no.	Reason of preference	Frequency (Percent)	Rank	
1.	Easy to search/retrieve	707* (62.34)	1	
2.	Fast to access	534 (47.08)**	2	
3.	More up-to-date	491 (43.29)	3	
4.	Easy to use	465 (41.00)	4	
5.	Easy to keep	415 (36.60)	5	
6.	Easy to download	376 (33.15)	6	
7.	Portable	374 (32.98)	7	
8.	Highly available	368 (32.45)	8	
9.	Economical	364 (32.09)	9	
$\chi^2$ =222.89; df=8; p<0.01				

<sup>\*</sup>Respondents were asked to tick more than one option

the electronic form of information resources in comparison to the print form.<sup>1-2,5</sup> Clearly, electronic form of information resource is going to be the most preferred or the only choice among the two formats in future.

As indicated by 95.80% of users the online mode of access proves to be the most popular mode of access among users of north Indian agricultural libraries (Table 2). Munnolli<sup>11</sup> and Swain & Panda<sup>12</sup> through their findings also substantiate that the library patrons in India prefer to use online mode of eresources than that of offline.

Multiple factors are responsible for the popularity of e-resources among library patrons. Findings of the present study reveal that the reasons, viz. 'easy to search and retrieve' (62.34%), 'easy and fast to access' (47.08%) and 'being more up-to-date' (43.29%) are observed to be the most influential reasons for which the users prefer to use e-resources over their print counterparts (Table 3). This finding is similar to the findings of a good number of research studies which adjudged these three factors as highly responsible for preference of e-resources over that of their print counterparts. <sup>6-8,13</sup>

## Conclusion

So far as the preference of users with regard to two formats of information resources is concerned, the choice of users across north Indian agricultural libraries does not vary from the choice of users belonging to other domains of academics across the country, as majority of them yet prefer to use both

<sup>\*\*</sup> Figures in parentheses indicate percentage

print and electronic forms of information equally. The electronic form of information is fast emerging as a preferred format of access and use and the online mode of access is the most preferred mode of access in this regard.

The fact that PIRs and EIRs are still used by almost an equal proportion of users necessitates the Indian agricultural libraries that they should treat print and electronic forms equally at the time of allocating the budget and acquiring the information resources. But these libraries need to prepare themselves to meet the challenges posed by digital information landscape and changing information seeking behaviour of library users. In view of the inclination of users towards the online mode of access, the libraries need to take every possible step to ensure that all of its e-resources are accessible through online mode and that a prompt access is provided to the online type of e-resources subscribed by them.

#### References

- Archana S N and Padmakumar P K, Use of online information resources for knowledge organization in library and information centres: a case study of CUSAT, *DESIDOC Journal of Library and Information Technology*, 31 (1) (2011) 19-24.
- Tyagi S, Use of electronic information resources at the Indian Pharmacopoeia Commission, DESIDOC Journal of Library & Information Technology, 32 (2) (2012) 171-178.
- 3. Egberongbe H S, Use and impact of electronic resources at the university of Lagos, *Library Philosophy and Practice* (e-

- journal) (2011), Paper 472. Retrieved August 17, 2015 from https://digitalcommons.unl.edu/libphilprac/472/
- Raza M M and Upadhyay A K, Usage of e-journals by researchers in Aligarh Muslim University: a case study, *International Information & Library Review*, 38 (3) (2006) 170-79.
- Singh H and Sharma C, Evaluation of e-resources usage in Swami Devi Dyal Hospital and Dental College, e-Library Science Research Journal, 1 (8) (2013) 1–10.
- Bhatt S and Rana M S, E-information usage among engineering academics in India with special reference to Rajasthan State, *Library Hi Tech*, 29 (3) (2011) 496-511.
- Thanuskodi S, Usage of electronic resources at Dr T. P. M. Library, Madurai Kamaraj University: a case study, DESIDOC Journal of Library & Information Technology, 31 (6) (2011) 437-445.
- 8. Kumar B T S and Kumar G T, Perception and usage of eresources and the internet by Indian academics, *The Electronic Library*, 28 (1) (2010) 137-156.
- Gowda V and Shivalingaiah D, Attitude of research scholars towards usage of electronic information resources: a survey of university libraries in Karnataka, *Annals of Library and Information Studies*, 56 (3) (2009) 184-191.
- Ali P M N and Nisha F, Use of e-journals among research scholars at Central Science Library, University of Delhi, Collection Building, 30 (1) (2011) 53-60.
- Munnolli S S, Harnessing the online resources: a case study of ScienceDirect in India, *The International Information & Library Review*, 37 (2005) 353-363.
- 12. Swain D K and Panda K C, Use of electronic resources in business school libraries of an Indian state, *The Electronic Library*, 27 (1) (2009) 74-85.
- McClamroch J, The transition from print to electronic journals: a study of college and university libraries in Indiana, Evidence Based Library and Information Practice, 6 (3) (2011) 40-52.