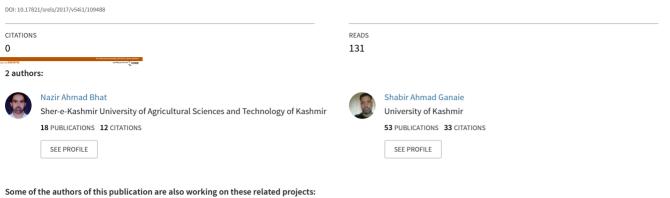
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## Impact of Availability of E-Resources on User Satisfaction in Agricultural Libraries of Northern India

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Project Usage and Impact of E-Resources View project

## Impact of Availability of E-Resources on User Satisfaction in Agricultural Libraries of Northern India

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#### Abstract

The main objectives of the study were to assess the level of user satisfaction with regard to the following types of Electronic Information Resources (EIRs) relevant to agriculture and allied disciplines, viz. Indexing and Abstracting (I&A) Databases; e-Journals; e-Books; and e-Theses. Seven universities were surveyed using a questionnaire for collecting data. The investigator used telephonic and e-mail communication and had a face-to-face interaction with respondents to substantiate the responses and remove ambiguities. The level of users' satisfaction has been measured using a five point Likert scale. A great majority of respondents are satisfied about the availability of e-abstract databases (87.92%) and e-journals (89.67%). Despite the fact that only three of the surveyed libraries are found to subscribe to a single e-book collection of 600 titles, surprisingly a good percentage of the library users (69.08%) are satisfied with the availability of e-books. Same is the case with e-theses, whereof the majority of respondents (60.33%) are satisfied, despite the fact that only one e-theses database that too only of Indian coverage i.e., KrishiPrabha is made available to users.

Keywords: Electronic Sources of Information (ESI), e-Books, e-Journals, e-Theses, I&A Databases, User Satisfaction

#### 1. Introduction

Electronic Information Resources (EIRs) have begun to have a great impact on libraries. These have started to change the functioning of libraries, especially in higher education institutions across the world.

#### 2. Review of Literature

Some studies have been reported on the use of EIR.

Madhusudhan (2010) found that the research Scholars at Kurukshetra University are highly satisfied about the availability of EIRs. Thanuskodi (2011) observed that majority of respondents (83.07%) in the Library of Madurai Kamaraj University, Madras, were highly (39.23%), moderately (22.30%) and just (21.54%) satisfied about the availability of & access to e-resources. Kumar & Singh (2011) also observed that all the respondents (100%) of their study were satisfied with the quality of e-information. So far as the respondents from HKBK College of Engineering are concerned the majority (96.67%) of them were satisfied about the availability of electronic resources (Mulla, 2011). In their study Bhatt & Rana (2011) revealed that though some problems were faced by engineering academics of Rajasthan in using e-resources, the majority of users (67.50%) were quite satisfied with their availability and use. Dhanavandan, Esmail & Nagarajan (2012) report that 82% of the respondents are satisfied with the quality and quantity of e-resources; however they were a bit dissatisfied with accessibility, searchability and downloadability. So far as the students and faculty members of selected engineering, medical and management colleges of

Bangalore City are concerned the majority (77.33%) agree that the information needed for research is now much more available than in the print era (Kumar & Kumar, 2010). In their study Santhi and Jeyachitra (2014) concluded: "most of the respondents (66%) are satisfied with using e-resources" (p. 237). The study conducted by Jeyaprakash & Nirmala (2014) reveals that at an average 88% of respondents were satisfied about availability of e-resources. Tyagi (2010) in his study found that all the library users in IIT Roorkee were satisfied with regard to access of Electronic Information Sources (EISs), among whom 85% were highly satisfied and the remaining 15% were satisfied at moderate or average level. Kannappanavar & Swamy (2010) found that majority of users in agricultural university libraries in South India are dissatisfied with CD-ROM databases (47.70%), e-books (85.25%), e-journals (85.35%), as they declare them moderately and highly inadequate. It has also been observed that the majority of students and researchers of Faculty of Arts, Annamalai University were not satisfied with quantity (60%) & relevance (48.33%) of available e-resources (Thanuskodi, 2012).

#### 3. Statement of Problem

The I&A databases such as CABI Abstracts, AGRIS, AGRICOLA, Food Science and Technology Abstracts have been subscribed to in CD form since 1970s and are available now through online mode. So far as the books are concerned most are available in print form; CAB e-Books is one e-Book collection commonly available across northern India. However, the situation with regard to availability of e-Journals has dramatically changed as these libraries are able to provide full text access to a large number of journals (+3000) through Consortium for Electronic Resources in Agriculture (CeRA). All agricultural libraries provide access to full text of Indian Agricultural Doctoral Dissertations through 'KrishiPrabha', the free of cost e-theses repository (Bhat, 2016). Considerable amount of information is thus available in electronic form to agricultural library users in India. The study in hand is an attempt to see what proportion of users is satisfied with the availability of major types of e-resources and what is the level of user satisfaction.

## 4. Objectives

The main objective of the study has been to assess the level of user satisfaction with regard to the following types of electronic information resources (EIRs) relevant to agriculture and allied disciplines:

- Indexing and Abstracting (I&A) Databases.
- e-Journals.
- e-Books.
- e-Theses.

### 5. Scope

Four out of seven states of northern India, viz. Delhi, Himachal Pradesh (HP), Jammu & Kashmir (J&K) and Punjab have been selected for this study. Seven well established agricultural universities/deemed to be universities have been considered. These are: 1. Indian Agricultural Research Institute (IARI), New Delhi; 2. Chowdhury Sarwan Kumar Himachal Pradesh Krishi Vishvavidyalaya (CSKHPKV), Himachal Pradesh; 3. Dr. Y.S. Parmar University of Horticulture and Forestry (DYSPUH&F), Himachal Pradesh; 4. Sher-e-Kashmir University of Agricultural Science & Technology of Jammu (SKUAST-J), Jammu & Kashmir; 5. Sher-e-Kashmir University of Agricultural Science & Technology of Kashmir (SKUAST-K), Jammu & Kashmir; 6. Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana (GADVASU), Punjab; and 7. Punjab Agricultural University (PAU), Punjab. Response of only three categories of users, viz. Scientists (Faculty Members), PhD Scholars and Masters' degree students has been collected and analyzed.

### 6. Methodology

A survey was conducted using questionnaire as the data collection tool. A five point Likert scale has been used to measure the level of satisfaction of users. The investigator also interacted with the respondents through telephone and also availed of the e-mail service for ascertaining timely response and clearing the doubts about the collected responses. The data collected has been processed using Statistical Package for Social Sciences (SPSS). In order to convert the data into meaningful information and draw necessary inferences on scientific grounds the data about each entity was codified into meaningful numerical and alphabetical codes.

## 7. Data Analysis and Interpretation

To assess the level of satisfaction of users about availability of e-resources, the respondents were asked to express their opinion about the adequacy or inadequacy of four types of electronic information resources. Response of users in this context is presented in Table 1.

Scale =>		1	2	3	4	5	Statistics		s
S. No.	e-Resource	Highly Inadequate	Moderately Inadequate	Neutral	Moderately Adequate	Highly Adequate	Mean $(\overline{\mathbf{X}})$	SD (σ)	% $\overline{\mathbf{x}}$ Sq.
(a)	I&A Databases	$21~(1.75)^{*}$	58 (4.83)	66 (5.50)	380 (31.67)	675 (56.25)	4.36	0.92	87.20
(b)	e-Journals	18 (1.50)	62 (5.17)	44 (3.67)	475 (39.58)	601 (50.08)	4.32	0.88	86.40
(c)	e-Books	53 (4.42)	215 (17.92)	103 (8.58)	460 (38.33)	369 (30.75)	3.73	1.20	74.60
(d)	e-Theses	70 (5.83	282 (23.50)	124 (10.33)	342 (31.83)	342 (28.50)	3.54	1.28	70.80
Average							3.99	1.07	79.75

**Table 1.** Impact of availability of EIRs on user satisfaction (n = 1200)

\*Figures within parentheses indicate percentage

The data thus collected is analyzed under four subheadings as follows:

#### 7.1 Satisfaction about Availability of I&A Databases

Table 1 show that *majority* of respondents (87.92%) are *satisfied* about the availability of *I&A databases*, as 56.25% assess them as highly adequate and some 31.67% consider them as moderately adequate. The percentage of respondents who feel *dissatisfied* (6.58%) about I&A databases is *quite negligible*. It is statistically observed that the degree of satisfaction is above moderate level ( $\overline{x}$  =4.36).

## 7.2 Satisfaction about Availability of e-Journals

It is clear from Table 1 that majority of respondents (89.67%) are satisfied about e-journals, as 50.08% of them consider the e-journals available to them as highly adequate and 39.58% consider them as moderately adequate. Once again the percentage of respondents who are dissatisfied (6.92%) is quite negligible. The statistical observation also supports the fact that users are satisfied with e-journals above moderate level ( $\overline{x} = 4.32$ ).

#### 7.3 Satisfaction about Availability of e-Books

So far as the e-books are concerned majority of respondents (69.08%) are satisfied, with 30.75% of them being highly satisfied and 38.33% moderately satisfied. A considerable percentage of respondents are dissatisfied (22.34%) about this resource. The overall satisfaction level for this source of information is not of desirable magnitude, as the mean value is even below moderate level ( $\frac{1}{x} = 3.73$ ).

# 7.4 Satisfaction about Availability of e-Theses

Almost similar facts are available about e-theses, where majority of respondents (60.33%) are satisfied with the

availability of e-theses, as 31.83% of them are moderately satisfied and 28.50% are highly satisfied. However many users are dissatisfied (29.33%) about the availability of e-theses ( $\overline{x}$  =3.54).

Table 1 indicates that users are moderately satisfied  $(\bar{x} = 3.99)$  about the availability of e-resources. The satisfaction level is well above the moderate level in case of two e-resources viz. I &A databases  $(\bar{x} = 4.36)$  and e-journals  $(\bar{x} = 4.32)$ , whereas it is low (or just approaching to the moderate level) in case of e-books  $(\bar{x} = 3.74)$  and e-theses  $(\bar{x} = 3.54)$ .

### 8. Findings and Discussion

It is observed through data analysis that the majority of respondents are satisfied about the availability of indexing & abstracting (I&A) databases (87.92%), and e-journals (89.67%). It is further observed that the level of satisfaction is above moderate level for both I&A databases ( $\overline{x}$  =4.36) and e-journals ( $\overline{x}$  =4.32) (Table 1).

It is surprising to see that a good percentage of the library users (69.08%) in north Indian agricultural universities are satisfied about the availability of e-books and that their satisfaction level is approaching moderate level ( $\bar{x} = 3.73$ ). Surprising in the sense that only three of the surveyed libraries are found to subscribe to a single e-book collection that is 'CAB e-Books' and users consider it sufficient. Probably the user expectation is not yet high enough to deem a single e-book collection with 650 e-books as insufficient.

Same is the case with e-theses, where majority of respondents (60.33%) are satisfied and the level of satisfaction is approaching the moderate level ( $\overline{x} = 3.99$ ), despite the fact that only one e-theses database that too only with Indian coverage i.e. KrishiPrabha is made available to users. It is again understood that either the user expectation with regard to requirement of e-theses is low or that the users have not revealed their opinion seriously (Table 1).

## 9. Conclusion

It is concluded from the survey that majority of users in north Indian agricultural libraries are satisfied about the availability of e-resources, despite the fact that I&A Databases, e-Books and e-Theses are not quite adequate to meet out their requirements. It is thus presumed that the user expectation, about the availability of e-resources in the libraries under scope of present study, is low.

### 10. Suggestions

The libraries should endeavour not only to maintain the present level of satisfaction among users, but should also take measures to satisfy the unsatisfied users (10%-13%). It is also deemed very much important that I&A databases and e-journal collections be further strengthened both quantitatively as well as qualitatively to take the level of satisfaction from existing moderate level of 4 to the highest level of 5 on the Likert scale. In order to change the level of learning, teaching and research in India, the authorities need to subscribe to more e-journals with high impact factor, procure e-book collections from reputed publishers of high standard & international scope and need to subscribe e-theses collection of developed countries with rich agricultural information base like that of USA, Australia, Netherlands, and the like.

### 11. References

- Anas, M., Iqbal, J. & Ahmad, P. (2014). Impact of automation on library services in selected management institutes at Aligarh: A survey. The Electronic Library. 32(3), 296–307. Available from: https://doi.org/10.1108/EL-11-2011-0157
- Bhat, I. & Mudhol, M. V. (2014). Use of e-resources by faculty members and students of Sher-e-Kashmir Institute of Medical Science (SKIMS). DESIDOC Journal of Library and Information Technology. 34(1), 28–34. Available from: https://doi.org/10.14429/djlit.34.5943

- 3. Bhat, N. A. (2016). Electronic resources in agricultural libraries of northern India: Usage and impact. (Unpublished doctoral dissertation). The University of Kashmir, J&K, India.
- Bhatt, S. & Rana, M. S., (2011). E-information usage among engineering academics in India with special reference to Rajasthan State. Library Hi Tech. 29(3). 496–511. DOI: 10.1108/0737 8831111174440.
- 5. Dhanavandan, S., Esmail, S. M. & Nagarajan, M. (2012). Use of electronic resources at Krishnasamy College of Engineering and Technology Library, Cuddalore. Library Philosophy and Practice (e-journal), Paper 698.
- Kannappanavar, B. U. & Swamy, H. M. (2010). User perception of library and information services in agricultural science universities in South India: An evaluative study. Library Philosophy and Practice (e-journal). Paper 353.
- Kumar, B. T. S. & Kumar, G. T. (2010). Perception and usage of e-resources and the internet by Indian academics. The Electronic Library, 28(1): 137–156. Available from: https:// doi.org/10.1108/02640471011023432
- 8. Madhusudhan, M. (2010). Use of electronic resources by research scholars of Kurukshetra University. The Electronic Library. 28(4): 492–506. DOI: 10.1108/0264047 1011033684.
- Mohamed Haneefa, K. (2005). Electronic information resources in the special libraries of Kerala. Kelpro Bulletin. 9(1-2): 53-8.
- Mulla, K. R. (2011). Use of electronic resources by faculty members in HKBK College of Engineering: A survey. Library Philosophy and Practice, (e-journal). Paper 593.
- Thanuskodi, S. (2011). Usage of electronic resources at Dr T. P. M. Library, Madurai Kamaraj University: A case study. DESIDOC Journal of Library and Information Technology. 31(6): 437–445. Available from: https://doi.org/10.14429/ djlit.31.6.1318
- Thanuskodi, S. (2012). Collection development practices in selected engineering college libraries in Tamil Nadu, India: A survey. International Journal of Opinion in Physical Sciences. 1(1): 11–16.
- Tyagi, S. (2012). Use of electronic information resources at the Indian Pharmacopoeia Commission. DESIDOC Journal of Library and Information Technology. 32(2): 171–178. Available from: https://doi.org/10.14429/djlit.32.2.1604