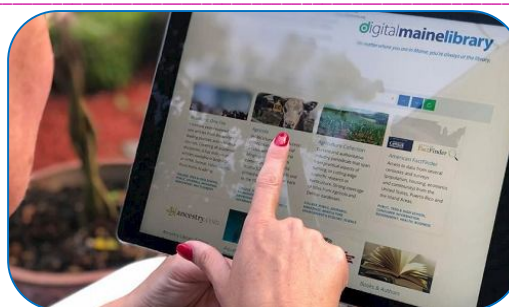## UTILIZATION OF ELECTRONIC RESOURCES BY THE RESEARCHERS OF UNIVERSITY OF AGRICULTURAL SCIENCES, DHARWAD: A STUDY

Girimallesh H. N.
Department of Library and Information Sciences,
Karnatak University, Dharwad, India.

ABSTRACT:
        The current study was conducted to assess the usage of electronic resources by researcher scholars and scientists of University of Agricultural Sciences, Dharwad and to verify how electronic resources are helpful to agricultural researchers. The study was carried out through a structured questionnaire by taking representative sample of researcher scholars and scientists. The results revealed the electronic are quite useful to agricultural scientists and these are good alternatives compared conventional print resources or hard copies. Digitalization of agricultural university libraries is quite useful for dissemination of knowledge among agricultural scientists.

KEYWORDS*: Agricultural Sciences, Electronic resources, Researchers, Scientists, University of Agricultural Sciences .*

1.INTRODUCTION:

        Advancement in the area Information and Communication Technologies (ICT) and their usages in the libraries of universities and research organizations have led to proper and speedy dissemination of knowledge. ICT utilization has brought about revolution in the proper collection, processing, storage, retrieval and communication of knowledge, literature and information by the libraries (Kumar and Kumar, 2010; Tripathi and Jeevan, 2013). Electronic resources such as electronic journals (e-journals), electronic books (e-books), and electronic databases (e-databases) are three major categories e-resources of major libraries in higher education and research institutes. Majority of the universities and institutes are now equipping with e-resources and agricultural universities in India are reorganizing themselves in this direction.

1.1.   Need for the study

        Agricultural universities and research institutes are having the responsibilities to promote teaching, learning, research and extension activities in the area agricultural sciences. University of Agricultural Sciences, Dharwad (UAS, Dharwad) is one of the oldest agricultural universities in Karnataka which is involved in teaching undergraduate, post-graduate, diploma, doctoral and post-doctoral courses in the field agriculture, horticulture, forestry and other areas. It also established famous research and extension centers such as Institute of Agri-Biotechnology, Agri-Business and Export Knowledge Center, Institute of Organic Farming, Seed Unit, Pesticide Residue Testing and Quality Laboratory, Hi-Tech Horticulture Unit to do research and to propagate research outcomes among the forming communities. In the background of this, UAS, Dharwad was chosen to evaluate the impact of e-resources among the agricultural researchers/ scientists.

_____

1.2.   Objectives of the study

i) To examine the awareness of e-resources among agricultural researchers

ii) To analyze how e-resources are utilized by agricultural researchers to carry out research and involve in extension activities

iii) To assess the problems faced by the agricultural researchers in accessing and utilization of e-resources

iv) To find out the ways and means for improving the collection of e-resources in agricultural university libraries

2. METHODOLOGY

Agricultural research scholars and scientists were the target population in the current study. The survey has been conducted by using questionnaire to collect the data in order to achieve the above mentioned objectives. Questionnaire was distributed among 200 agricultural research scholars and scientists of UAS, Dharwad and out of 200 questionnaires supplied 160 respondents who thoroughly answered varied quires data was used for analysis.

3. ANALYSIS AND INTERPRETATION

3.1. Gender wise distribution

The gender wise distribution of respondents is given in Table 1, of the total 160 correspondents surveyed 110 (68.75%) were male and 50 (41.25%) were female respondents. The data suggest that majority of agricultural researchers were male dominant community and this might be due to agricultural research is mostly field oriented than laboratory oriented.

Table 1 Gender wise population of respondents

Gender	Respondents	Percentage
Male	110	68.75%
Female	50	31.25%
Total	160	100.00%

3.2. Access to required information

The data on how agricultural researchers acquiring the literature and information are presented in Table 2. The data reveals that 82 (57.25%) respondents obtain the required information by consulting book and journals followed by 66 (41.25%) of researchers consult e-resources, 12 (7.5%) through reference quires.

Table 2 Access to required information

Access to information	Respondents	Percentage
Consultation of books and journals	82	57.25%
Consultation of e-resources	66	41.25%
Through reference quires	12	7.50%
Total	160	100.00%

3.3. Use of library services

The data obtained by the respondents on use of library services is given in Table 3. About 104 (65.00%) respondents use online resources in the library or library facilitated online resources at the department where they are working, 44 (27.5%), 44 (27.50%) use hard copies (print journals and books) and 12 (7.5%) use reprographic services available in the library.

_____

_____

Table 3 Use of library services

Use of library services	Respondents	Percentage
Online resources provided in the library or at the department where researchers are working	104	65.00%
Reference services	44	27.50%
Reprographic services	12	7.5%
Total	160	100.00%

3.4. Frequency of use of e-resources

Data on usage of e-resources by respondents is presented Table 4. Seventy six (47.50%) respondents are of the opinion that they use the e-resources for their research once in a month, 32 (20.00%) use once in fortnight, 18 (11.25%) use once in a every week, followed by 12 (7.50%) respondents use 2-3 times in a week, 42 (26.25%) use every day. E-resource usage trend by the respondents shows that e-resources are quite helpful for their research work.

Table 4 Frequency of use of e-resources

Frequency of use of E-resources	Respondents	Percentage
Everyday	42	26.25%
2-3 times in a week	12	7.50%
Once a week	18	11.25%
Once a fortnight	32	20.00%
Once a month	76	47.50%
Total	160	100%

3.5. Types of e-resources chosen by respondents to locate information

It was known from the analysis that 88 (55%) of the respondents use e-journals to access the information, whereas, 46 (28.75%) of the respondents are using e-books for accessing the information, 6 (3.75%) respondents use e-theses and dissertation, and e-database respectively. Similarly, 12 (7.05%) and 2 (1.25%) of the respondents prefer use e-magazine and newspaper, and e-content respectively (Table 5).

Table 5 Types of e-resources used by respondents to locate information

Types of e-resources used to locate information	Respondents	Percentage
E-journals	88	55.00%
E-books	46	28.75%
E-theses and dissertation	6	3.75%
E-database	6	3.75%
E-content	2	1.25%
E-magazine and news paper	12	7.05%
Total	160	100%

3.6. Place chosen to access e-resources

Table 6 presents the data on places chosen by respondents to access e-resources. 124 (77.50%) use e-resources in department, 20 (12.50%) use e-resources in the library, 16 (10.00%) prefer to use e-resources in cyber café to access retrieve information.

_____

_____

Table 6 Place of access of e-resources

Place of access of e-recourses	Respondents	Percentage
Library	20	12.50%
Department/place of working	124	77.50%
Cyber cafe	16	10.00%
Total	160	100%

3.7. Purpose of using e-resources

Ninety four (58.75%) respondents opined that they use e-resources for their research activities i.e., planning, execution, and presentation of data and writing research articles, 40 (25.00%) of the respondent use e-resources for finding relevant information in their area of research or specialization, 16 (10.00%) and 10 (6.25%) respondents use the e-resources for updating their subject knowledge and for getting authentic information on the subject (Table 7).

Table 7 Purpose of using e-resources

Purpose of using e-resources	Respondents	Percentage
For research activities	94	58.75%
For finding relevant information in their area of research or specialization	40	25.00%
For updating subject information/knowledge	16	10.00%
For obtaining authentic information	10	6.25%
Total	160	100%

3.8. Search fields used to access e-resources

It is evident from the data that, researchers used varied search fields such author/s, keyword/s, subject, date of publication, title of the articles and abstract/s to access information from e-resources (Table 8). Survey reveals that, 26 (16.25%) of the respondents use author/s as field of resource search, 44 (27.50%) respondents use keyword/s as field of resources search, 38 (23.75%) use subject as field of resource search. Similarly, 4 (5.00%), 30 (18.75%) and 14 (8.75%) of the respondents use date or year publication, title of article and abstract as search filed to accessing information via e-resources.

Table 8 Search fields used by respondents to access e-resources

Search fields used by respondents to access e-resources	Respondents	Percentage
Author	26	16.25%
Keyword/s	44	27.50%
Subject	38	23.75%
Date or year of publication	4	5.00%
Title of article/s	30	18.75%
Abstract	14	8.75%
Total	160	100%

3.9. Problems faced by the respondents while accessing e-resources

Respondents were interrogated to give their opinion on problems faced by them while accessing e-resources and the data is presented Table 9. Ninety six (60.00%) of respondents faced delay in accessing the relevant information due lower internet speed, 40 (25.00%) of respondents

_____

_____

experienced difficulty in accessing relevant information, 24 (15.00%) of respondents perceived lack proper information technology knowledge to access the information using e-resources.

Table 9 Problems faced by the respondents while accessing e-resources

Problems faced by respondents	Respondents	Percentage
Slow internet speed	96	60.00%
Difficulty in finding relevant information	40	25.00%
Lack of information technology knowledge	24	15.00%
Total	160	100.00%

3.10. Benefits of e-resources over print resources

The results on benefits of e-resources over print resources by agricultural researchers are presented in Table 10. Sixty (37.50%) respondents opined that e-resources are time saving, whereas, 42 (26.25%) respondents agree that e-resources provide more information, and 36 (22.50%) respondents indicated that e-resources are quite easy to use, followed by 22 (13.75%) of respondents opined e-resources are more useful.

Table 10 Benefits of e-resources over print resources

Benefits of e-resources over print resources	Respondents	Percentage
Time saving	60	37.50%
Easy to use	36	22.50%
More information	42	26.25.%
More useful or preferred	22	13.75%
Total	160	100.00%

3.11. Opinion about e-resources

The data presented in Table 11 indicates that, 116 (72.50%) of the respondents felt that e-resources are useful for their research activities, 32 (20.00%) respondents opined e-resources are excellent for obtaining information sources, 12 (7.50%) of respondents gave average as response on e-resources usage.

Table 11 Opinion about usefulness of e-resources

Opinion about usefulness of e-resources	Respondents	Percentage
Excellent	32	20.00%
Good	116	72.50%
Average	12	7.50%
Total	160	100.00%

4. FINDINGS OF THE STUDY

This survey data reveals that majority of researchers i.e., 57.25% of University of Agricultural Sciences, Dharwad are using books or journals to get the relevant information in their field and 41.25% are e-resources. Considerable members (65.00%) are utilizing online resources provided in the library or at their departments and 27. 50% are employing reference services. Significant numbers of researchers are (47.50%) are using e-resources once in a month, followed by 20.00% are using once in fortnight and 26.25% are using every day. More number of agricultural researchers is using e-books

_____

_____

(55.00%) and e-journals (28.75%). Good numbers of researchers prefer to use e-resources their department or place of working (77.50%) and 12.50% are consulting library to access e-resources. 58.75% of researchers utilize e-resources for their research work and 25.00% are using e-resources for finding relevant information in their area of specialization. Majority of researchers use Keyword as search field (27.50%), followed by subject as search field to the information from e-resources.

Problems faced by agricultural researchers to access e-resources are slow internet speed (60.00%). 37.50% respondents opine that e-resources are time saving and 22.50% felt that e-resources are easy to utilize the information. 72.50% of researchers are opined the usefulness of e-resources to get information and utilize the information in their research activities. The current survey opinion of agricultural scientists also corroborates with the opinion of medical (Farahi and Gandhi, 2011) researchers. Similar to the present findings Hadagali and Kumbar (2011), Husaain and Ansari (2010) conducted survey and their results also support the usefulness of e-resources in academics and research.

5. RECOMMENDATIONS AND CONCLUSION

It is evident from the current study that e-resources should be integral part of University and college libraries and are useful in accessing information. It is recommended the authorities of University of agricultural sciences to facilitate high-speed computer terminals at university library, departments, and research institutes. The library web page should be designed in such a way that it should provide information and guidelines for utilization of e-resources. University library personnel should conduct short term training course on ways, means and procedures to access e-resources.

REFERENCES

Farahi, M.T. & Ansari, M.M.A. (2010). Utilization of e-information resources in medical colleges: A case study. SRELS Journal of Information Management, 48: 281-288

Hadagali, G.S. & Kumbar, B.D. (2011). Use of electronic resources in university libraries of Karnataka state. Information Studies, 17: 211-224.

Hussain, A. & Ansari, M.M.A. (2010). User perception of usability of e-resources at IMT, Gaziabad: A case study. Gyanakosh: The Journal of Library and Information Management, 1: 31-47.

Manorama Tripathi & Jeevan, V.K.J. (2013). A selective review of research on e-resources usage in academic libraries. Library Review, 62: 134-156.

Sampth Kumar, P.T. & Kumar, G.T. (2010). Perception and usage of e-resources and internet by Indian academics. The Electronic Library, 28: 137-156.

_____