

## Use of Internet and Electronic Resources for Agricultural Science Information: A Case Study

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**Abstract:** The internet has emerged as the most powerful medium for storage and retrieval of information. Since past few years free online information sources like e-journals, e-books, e-data-bases have increased considerably. The traditional library systems are going to transform into digital library systems. Information-seeking is important for students of agricultural sciences who have access to many dedicated electronic resources. Internet and CD-ROM were the most frequently used IT-based sources and facilities. Results of the present study show that majority of the students does not have own personal computer or laptop. Study reveals that the majority of the respondents (57.28%) feel that the internet and electronic resources cannot replace the print resources.

**Key words:** Internet, e-journal, database, agricultural sciences, user education, India

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### INTRODUCTION

The growth of internet and proliferation of technology has widened the scope of correspondence. You might be aware that an ordinary hand-written letter takes a long journey through buses, trains etc., and despite the hard work done by postal department gets delivered within 3-4 days. But with the advent of new means, IT, especially e-mails the situation have become changed.

Now even official communication are done using emails and delay in communication has reduced if not almost removed. Another aspect is of less dependency on the telephone. Many business concerns used the e-mail to communicate and correspond to get through at the time of last strike by the employees of Telephone Department. The user-librarian interaction is changing. The librarians are at the doorstep of IT; they can transfer the data among researchers and faculties using latest communication method of e-mail. Librarians can join some e-group.

The library can have its own portal or web site and can provide webOpac or catalogues online. As a result, a librarian can boast of his library facilities and project himself as an Information Manager. In addition to all this, much government information can be downloaded from various government agencies web sites and their contact details, terms, policies can be known and circulated.

The most rapidly changing pervasive and publicized aspects of library and information studies are the electronic resources. In a relatively short period of the time, electronic resource have expanded from a few dozen

computerized bibliographies databases to include the overwhelming information available on the internet use of electronic resource has moved from accessing online databases with a dumb terminal to surfing the world wide web with a high speed multimedia personal computer that has more power than the early main frame computers.

The complexity of electronic resource has grown to comprise of library online catalogue list of CD-ROM, online journals, database, newspapers, reference materials, open access journals, e-books, major publishers and online bookshops amounting to the electronic resource is not easy or so it appears, at the same time there is a pressing need for guidance in the use of such resources.

It is changing the way agricultural sciences professionals obtain information. They use the internet and electronic resources to do things like accessing agricultural records. Faculties and students also depend more and more on the internet. Agricultural product information, continuing education resources, online supply catalogs and reference information have made internet increasingly popular in agriculture. The present study is an attempt to examine the role of the Internet and electronic resources in agricultural colleges of Tamil Nadu, India.

**Literature review:** Parameshwar and Patil (2009)'s study highlights a large portion of user population in the university are aware about the internet but they do not know all its techniques and applications. Further, a few users of the university still have no knowledge about the internet and related applications. For this purpose, there

is need for effective use education, to develop awareness and knowledge of the users. More efforts by librarian at Gulbarga University are needed to educate users to effectively use the internet and its techniques and applications.

Agarwal and Dave (2009) have studied the use of internet by the scientists and research fellows of Central Arid Zone Research Institute, Jodhpur (Rajasthan) was assessed on the basis of the results of a questionnaire survey in CAZRI, Jodhpur. Further, it also attempts to assess the frequency of use, location where used search engine accessed; purpose of use etc. The study revealed that the respondents accessed google search frequently (100%) followed by Yahoo (85.29%). It is also observed that equally (97.06%) respondents use the internet for education and research. The strong desire of respondents is that the library initiate various functions and services like e-portals, on-line information, abstracts retrieval along with internet.

Biradar (2008) reports the results of a study exploring university students' and teachers' use of search engines for retrieval of scholarly information. The main objectives are to examine the use of search engines, use of popular search engines, factors influenced on search engines' use, use of search strategy for information retrieval and also to know the methods of learning search strategy by students and faculties in the university environment. Results of the present study show that 100% of the students and 97.91% of faculties use search engines for retrieval of information on the internet. Goggle and Yahoo receive the highest overall ratings. The study reveals that majority of the respondents take help from their friends and use help messages of search engines to learn the search strategy.

Ajuwon (2006) has conducted a study of the physicians' use of the internet for health information for patient care at the University College Hospital (UCH) Ibadan, Nigeria. The findings revealed that 98% of the respondents have used the internet. A majority (76%) access the internet at cyber cafes. About 90% have reported that they had obtained information from the internet for patient care; of this number, 76.2% have searched the database.

Kumar and Kaur (2006) report on the results of a survey of internet use which also provides information about the benefits of internet vs. print documents. Panda and Sahu have conducted a study of the engineering colleges of Orissa. The study reveals that a majority of the colleges use the internet to provide online demonstrations has conducted a case study of internet usage in Nigeria with a particular reference to Obafemi Awolowo University, Ile-Ife. The study reveals that the respondents

use the internet to access research materials and for email. The study concludes that the use of internet for academic activities would improve significantly with more access in departments. Igun examines levels of internet skill and how the internet has its influence on research. The study finds that the internet skills are low and that the internet has no significant influence because the university does not have a functional and comprehensive internet in the university-wide information system.

Chestnutt and Reynolds (2006) have conducted a study of 457 dentists in Wales to identify how patient information on the internet has influences the delivery of oral care and the use practitioners make of the internet. About 39% of respondents have agreed that information gained from the internet had led to patients demanding inappropriate care.

Asemi (2005) has done a case study at the Medical Sciences University of Isfahan (MUI), Iran. The results of the study show that all the respondents use the internet frequently because all faculties have an internet connection. It reveals that the researchers of the university have been getting quality health information and patient care through the internet. About 55% of respondents search for scientific health information through the internet because the university library provides access to databases and online journals to students and staff.

**Objectives of the study:** The objective of this study was to analyze the patterns of use of internet and electronic resources, the internet skills of the agricultural students and problems faced by them while using the internet and electronic resources. Investigate whether the internet can replace the library.

## **MATERIALS AND METHODS**

The present study is confined to the final year students of Agriculture University, Coimbatore. A total number of 120 questionnaires (consisting of 15 questions) were distributed to the students. Of these, 110 respondents filled and returned the questionnaires. The over all response rate of the survey was 91.66%. The responses were analysed for frequencies, percentages and cross tabulation to organize the data for further analysis.

**Profile of respondents:** It is clear from Table 1, 69.09% of the respondents are 21-25 age group, remaining 30.91% belongs to 26-30 age group. Table 2 shows 82 (74.54 %) of respondents were male while 28 (25.46 %) were female.

Table 1: Age of respondents

Age range	Number	Percentage
21-25	76	69.09
26-30	34	30.91
Total	110	100.00

Table 2: Responses by gender

Gender	Number	Percentage
Male	82	74.54
Female	28	25.46
Total	110	100.00

Table 3: Experience of internet use

Years of experience	Number	Percentage
1-3 years	66	60.00
3-5 years	32	29.09
5 years and above	12	10.91
Total	110	100.00

Table 4: Internet skill rating

Rating	Number	Percentage
Expert	13	11.82
Average	67	60.91
Below average	30	27.27
Total	110	100

Table 5: Internet skill learning method

Method	Number	Percentage
Training from the college	61	55.45
Self study/instruction	17	15.45
From friends	23	20.91
External sources	9	8.19
Total	110	100.00

**Use of internet and e-resources:** Table 3 shows that on an average majority of the respondents have ranged 1-5 years experience of internet use. Only 10.91% have <5years of experience of internet use.

The respondents were asked to indicate their skill of internet literacy. It is evident from Table 4 that majority of the respondents (60.91%) have an average level of Internet skill. About 27.27% of the respondents reported that they have below average level of internet skill. Only 11.82% admitted that they are expert in internet skill.

Table 5 shows more than half acquired their internet skill through training from the college, 15.45% learned from self study, 20.91% learned from friends. Only 8.19% acquired skills from external sources.

Table 6 highlights the location from where the internet and electronic resources are mostly accessed by the agriculture students. A majority of the respondents i.e., 79.09% access the internet from the college while 13.63% also access from café. Another 7.28% access internet from home. In response to the question how frequently do you use Internet? The respondents have responded in different ways (Table 7). Majority of students used internet weekly (52.73%), daily (20 %) and weekly twice (18.18%). Only few students (9.09%) used internet monthly.

Table 8 indicates the use of internet services and electronic resources. The use of e-resources and internet

Table 6: Place of internet access

Location	Number	Percentage
College	87	79.09
Café	15	13.63
Home	8	7.28
Total	110	100.00

Table 7: Internet use frequency

Duration	Number	Percentage
Daily	22	20.00
Weekly twice	20	18.18
Weekly	58	52.73
Monthly	10	9.09
Total	110	100.00

Table 8: Most frequently used internet and e-resources

Services	Number	Percentage
E-mail	17	15.45
E-journals	27	24.54
E-books	18	16.36
E-databases	38	34.55
DVD/CD-ROMs	10	9.10
Total	110	100.00

Table 9: Problems of internet use

Problems	Number	Percentage
Slow internet access speed	45	40.91
Longtime to view/download	27	24.55
Difficulty in finding relevant information	21	19.09
Internet connectivity always off	17	15.45
Total	110	100.00

Table 10: Level of satisfaction

Satisfaction level	Number	Percentage
Fully satisfied	37	33.64
Average satisfied	21	19.09
Least satisfied	17	15.45
No comment	35	31.82
Total	110	100.00

services in order of preference is 34.55% e-databases, 24.54% e-journals, 16.36% e-books, 15.45% e-mail and 9.10% DVD/CD-ROMS.

Table 9 shows problems faced by the users in surfing. About 40.91% of the respondents find slow Internet access speed, 24.55% of the respondents find longtime to view/download web pages, 19.09% of the respondents find it difficult to get the relevant information from the Internet. About 15.45% of the respondents also reported that Internet connectivity always off.

Table 10 opinion about the library services show the following facts. Only 33.64% of respondents were fully satisfied, 19.09% of the respondents average satisfied, 15.45% of respondents least satisfied and 31.82% of respondents no comment.

A majority of the respondents (57.28%) feel that the internet and electronic resources cannot replace the print resources. Only 42.72% of the respondents feel that internet and electronic resources can replace print resources because they find it difficult to get the relevant information on the internet (Table 11).

Table 11: Do you think internet and e-resources can replace the print resources

Variables	Number	Percentage
Yes	47	42.72
No	63	57.28
Total	110	100.00

Table 12: Respondents having own personal computer or laptop

Variables	Number	Percentage
Yes	27	24.54
No	83	75.46
Total	110	100.00

The study revealed that (75.46%) majority of the students does not have own personal computer or laptop. Only 24.54% of the students under study have their own personal computer or laptops (Table 12).

### CONCLUSION

Library and information centres are playing a crucial role in the growth and development of the nation directly/indirectly by providing better services to the members of the society.

The fast growth of information and communication technology and particularly the internet has changed traditional methods of research, storage, retrieval and communication of information. Now a days, internet has emerged as the most powerful medium for storage and retrieval of information. Electronic resources have become the vital part of human life in the 21st century. It is important that agriculture college library maintain the e-library with all necessary technology for the effective use of agricultural information.

A large portion of agricultural students in the Coimbatore are aware about the e-resources but they do not know all its techniques and applications. Further, a few agricultural students of coimbatore still have no knowledge about the e-resources and related applications. For this purpose, there is need for effective user education, to develop awareness and knowledge of the agricultural students.

### RECOMMENDATIONS

Based on the findings of the study, the following suggestions are put forward to improve the use of the internet and electronic resources among the agricultural students:

- The internet and allied technologies should be included in the curriculum of agricultural studies
- Libraries of agricultural colleges should subscribe more e-journals and e-databases
- Some orientation training programmes should be organized by the colleges at regular intervals so that the maximum users can improve their excellence or proficiency in the use of the Internet for academic purposes
- The qualified IT staff should be appointed to provide the expert guidance to users about e-resources and internet
- Efforts should be made to increase the speed of the internet access and shorten the time it take to view and download web pages

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