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## Information Needs and Information Seeking Behaviour of Academics in College of Agriculture and Environmental Sciences, Haramaya University, Ethiopia

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### Abstract:

*Information is one of major resources in higher education institutions. Without information it is difficult to undertake the teaching and learning activities. This study was conducted in Haramaya university, Ethiopia. The population of this study is the faculty from College of Agriculture and Environmental Sciences. Survey method was followed with a structured questionnaire administered to gather information. Simple random sampling method was used to select the samples. The objectives of this study were to find the sources and methods used by the faculty of agriculture and Environmental Sciences to meet their information needs, to investigate the influence of Information Communication Technology in the information gathering process, to find out the purpose of seeking information and also to find out the problems faced in seeking information. Findings revealed that academics mainly depends on internet for information and at the same time books/monographs are also preferred sources. Electronic and digital material is the preferred format. ICT has changed the information seeking habits of the academics.*

**Key words:** Information seeking behaviour, Information need, Information use, Information gathering, Agriculture academics and information need, Haramaya University.

## **Introduction**

Information is nothing but processed data. It is an important element in any type of decision making and problem solving. Information helps to reduce uncertainty. According to Faibisoff, and Ely (1976) “Information is a symbol or set of symbols which has a potential for meaning”. In this knowledge era one cannot live without information. This is very much true in the case of teaching and learning environment. Teachers need to have information in their subject field to teach, to guide, to update their knowledge, to prepare research articles etc. Information can be considered as a crucial material for innovation and development.

## **Background of the study**

College of Agriculture and Environmental Sciences is part and parcel of Haramaya University. It was established in 1954. The then Alemaya College of Agriculture functioned as a chartered member of the Addis Ababa University until May 27, 1985 until it became a full-fledged University of Agriculture. Later on the University of agriculture was upgraded to a multi-disciplinary university in 1996 and it was renamed as Alemaya University. In 2006 the name was changed to Haramaya University. At present the College of Agriculture is known as College of Agriculture and Environmental Sciences.

According to the 2013 statistics, College of Agriculture has 170 teaching staff. The College is supporting the economy by undertaking number of researches. Agriculture is the backbone of Ethiopia as it contributes half of Gross domestic Product (GDP), 83.9% export and 80% employment.

## **Statement of the Problem**

In the modern era information is considered as one of the key factors of production and without information no activities can be undertaken. Especially in the field of teaching and learning one cannot think work without information. The academics in College of Agriculture and Environmental Sciences need information that too recent information to teach, to conduct researches, to prepare/ equip themselves with various activities as part of teaching and learning. It is essential to find out their needs and where do they look for information? This knowledge will help the University library to acquire and disseminate right information to meet the needs of academics. Knowledge about the information needs and information-seeking behaviour of users is very important for library collection development, improving facilities and services to meet the information needs of users efficiently and effectively. Review of the related literature shows that no comprehensive study have been conducted on the information needs and information-seeking behaviour of agricultural faculty members at the Haramaya University.

## **Objectives of the study**

Following are the objectives of the study:

- To investigate the methods and sources used by agricultural instructors in Haramaya University to acquire required information.
- To study the purpose of their information-seeking.
- To see the influence of Information Communication Technology on information gathering process.
- To find out the problems faced by faculty members in seeking information.

## **Literature Review**

Information needs and information seeking behaviour of Malaysian agricultural scientists were studied by Majid *et al.* (2000:145). It was found that research scientists spent 16% of their office time on reading and literature searching, whereas academicians spent 9.3% of their time for this purpose. Their study also revealed that scientists preferred using primary sources of information, particularly journal and review articles. Informal communication with professional colleagues was also considered important for exchanging current research information. A study about the information needs and seeking behaviour of health professionals in Malaysia revealed that biomedical scientists use different information sources to satisfy their information needs. At the same time those who are involved in research work considered journal articles as the most preferred information source (Zawawi and Majid, 2001).

Another study conducted in an agricultural institute, Northern India by Lalotra and Gupta (2010:113) indicated that users mainly access information sources like books followed by general web sources, printed journals, and electronic journals. The least accessed information sources are open access journals. Majority of visitors accessing books are students whereas research scholars and others prioritize general web resources, printed journals, electronic journals and open access journals as well as books. In spite of internet and googlisation of information process, users are still fond of printed materials and web resources as well.

Dulle *et al.* (2001:187) conducted a survey to assess the information needs and requirements of the agricultural research workers in Tanzania. The findings of the study indicated that resources in the libraries and information centres are inadequate and does not meet the needs of agricultural workers. Oladele (2006) conducted a study on 'information seeking and utilization among agricultural

researchers in Nigeria'. The study demonstrates the level of awareness and use of agricultural information sources among researchers in Nigeria. The empirical findings have shown the deprivation of researchers not having enough information to take a wise decision as against the researchers being over loaded with information, which implies a situation where researchers have too much information and are unable to pick out the right bits. The policy implication of the findings have stated that to improve the performance of agricultural researchers, the provision of information sources as well as the facilities to enhance their use, is very important in research institutes. Specific training needs of the researchers to seek for appropriate information from different sources should also be identified as a skill-gap.

Singh and Satija (2007:213) discussed the findings of various strategy procedures adopted by agricultural scientists in meeting their information requirements. The survey result showed that agricultural scientists have expressed great dependence in meeting their information requirements in their institutional library/ information center. The library/information center is the most preferred source (72.05%) for the respondents, for all categories of agricultural scientists. On the other hand, for accessing information, agricultural scientists highly depend on library collections, followed by personal collections of their supervisors and colleagues.

Kumar (2010:164) examined the information seeking behaviour of agricultural scientists in Sardar Vallabhbhai Patel University of Agriculture and Technology, India. It revealed that majority of agricultural scientists seek information for general awareness and new knowledge, class room lectures, professional interest and research work information. It is also revealed that majority of the respondents frequently used journals, textbook/ monographs, research reports and thesis/dissertations as a formal information source.

Singh (2012) mentioned that the agricultural scientists uses information sources such as databases, journals, books, research reports, monographs etc., and also conversation with colleagues and experts, and attending lectures, conferences, seminars etc.

## **Methodology**

The study used survey research strategy. Questionnaire was used to gather information from the agricultural faculty in Haramaya University. The total population of the study was 170 faculty members. Simple random sampling method was used for the selection of the sample. Thirty four questionnaires were personally distributed among the sample of the study by the researcher. The collected data were analyzed quantitatively and qualitatively by using frequency and percentage method.

## **Data Analysis and Discussion**

### **Demographics**

Of 34 respondents, 33(97.06%) were male and 1 (2.94%) female. While 2 (5.88%) were Professors, 1 (2.94%)Associate professor, 9 (29.47%) Assistant professors, 19 (55.88%) Lecturers and remaining 3 (8.82%) were Graduate Assistants.

Frequency distribution of respondents' age showed that 16 (47.06%) were of 21-30, 11 (32.35%) 31-40 and 7 (20.59%) were 41 and above.

Among the respondents 12 (35.29%) have PhD, 19 (55.88%) Masters degree and 3(8.82%) with Bachelors degree.

Frequency Distribution of respondents' (N=34) experience shows that 14 (41.18%) have up to 5 years, 9 (29.47%) have 6 to 10 years experience, 4 (11.76%) have 11 to 15 years and 7 (20.59%) have more than 16 years experience.

The respondents' were asked for the reasons for seeking information and they were free to choose more than one choice.

**Table 1: Reasons for seeking information**

Purpose for seeking information	Frequency and percentage
For lecture preparation	32 (94.12%)
To improve personal competencies	29 (85.29%)
Conversing with co-workers and other experts in the institution	25 (73.53%)
Reading articles in related area of teaching	34 (100%)

It is evident from the above table that 34 (cent percent) of the respondents seek for information to read articles. Majority of the respondents seek information for lecture preparation, to improve personal competencies and also to converse with co-workers and other experts in the institution.

### **Place of seeking information**

From where do the respondents seek information. The responses of the respondents are given in the table below.

**Table 2: Location from which information sought**

Place from which information sought	Frequency and percentage
From university library	27 (79.41%)
From colleagues	25 (73.53%)
Through purchase/personal collection	15 (44.12%)
Other	30 (88.24%)

Table 2 reveals that 27 (79.41%) of the respondents seek information from the university library. Whereas 25 (73.53%) also gather information from colleagues and only less than half of the respondents make use of their personal collection. The respondents were asked if they look for information in any other area. For which 30 (88.24%) mentioned that they make use of internet.

### **Preference of information sources**

Academics make use of variety of sources to get information. The respondents response for their preference of information sources are shown in the table below.

**Table 3: Preferred Information sources**

Information sources	Frequency and percentage
Books/Monographs	26 (76.47%)
Reference Sources (Encyclopedias, dictionaries, handbooks etc..)	9 (26.47%)
Face to face discussion with colleagues/friends	12 (35.29%)

It is clearly shown that most preferred information source were books/monographs (76.47%) and least preferred were reference sources (26.47%) and face to face discussions with colleagues/friends (35.29%). As the teaching staff seek for information for the purpose of teaching the main source from which they sought information were books or monographs.

### **Language Preference**

The official language in Ethiopia is Amharic so the respondents were asked to mention their language preference while seeking information.

**Table 4: Language in which information sought.**

Language	Frequency and percentage
Amharic	5 (14.71%)
English	34 (100%)
Any other	3 (8.82%)

Table 4 reveals that all of the respondents preferred English language and only very few preferred Amharic. For the open-ended question any other only 3 respondents mentioned they look for information in Oromo language. As the information which is found in the library as well as in internet mostly in English the academics in agriculture prefer this language than other.

## Preference of Format

At present information is found in different formats the respondents were asked about their preferences of format.

**Table 5: Most preferred Format**

Formats	Most preferred	Preferred	Less Preferred	Total
Electronic & Digital material	26 (76.47%)	6 (17.65%)	2 (5.88%)	34 (100%)
Printed material	18 (52.94%)	14 (41.18%)	2 (5.88%)	34 (100%)
Audio/Visual material	16 (47.06)	14 (41.18%)	4 (11.76%)	34 (100%)

It is clear from the above table that most preferred format for agricultural faculty was electronic and digital material format followed by printed material and audio/visual material format 52.94% and 47.06% respectively. In modern digitalized era it is common that the academicians prefer electronic and digital materials than other formats.

## Opinion regarding the role of libraries/information centers

The respondents were asked for their opinion regarding the fulfillment of their information needs by the libraries/information centers as well as the influence of information communication technology (ICT) in their information seeking and gathering habits. The results are shown in Table 6 and 7.

**Table 6: Fulfillment of information needs by libraries/information centers**

Extent of information need fulfillment by libraries/information centers.	Frequency and percentage
To great extent	12 (35.29%)
Some extent	22 (64.71%)
Not at all	-

Table 6 depicts that libraries/information centers fulfill the information needs of faculty of agriculture in Haramaya University some extent (64.74%). Only 35.29% of the respondents feels that the libraries/information centers fulfill their information need to a great extent. It shows that there is a need for the university library to improve its information services to the faculty of agriculture.

**Table 7: Influence of ICT on information seeking and gathering habits.**

ICT completely changed the information seeking and gathering habits.	Frequency and percentage
To great extent	18 (52.94%)
Some extent	14 (41.18%)
Not at all	2 (5.88%)

It is good to know the influence of ICT on information seeking and gathering habits of agricultural faculty. According to 18 (52.94%) ICT has made changes in their information seeking and gathering habits to a great extent. Whereas 2 (5.88%) feel that it did not make any changes in their seeking and gathering habits. This information go in line with the information given in Table 2, where 30 (88.24%) mentioned that they use internet for seeking information.

### **Types of ICT used by the faculty of agriculture**

As the respondents mentioned that they were using ICT it is better to know the types of ICT used. Respondents were free to select more than one choice.

**Table 8: ICT infrastructure used**

Types of ICT	Frequency and percentage
Atmospheric communication/Radio	10 (29.41%)
Telephone	10 (29.41%)
Internet search engines and web sites	34 (100%)
E-mail	30 (88.24%)
Chatting	8 (23.53%)
Teleconferencing	1 (2.94%)

Table 8 reveals that internet search engines and web sites are used by cent percentage of the respondents followed by E-mail is made use of. Other types of ICT are used by only few of the respondents.

### **Impact of ICT on information gathering process**

Respondents opinion were sought regarding the impact of ICT on information gathering to know did ICT made information gathering process easier or difficult. The result is shown in Table 9.

**Table 9: ICT and information gathering process**

ICT made information gathering	Frequency and percentage
Easier	32 (94.12%)
More difficult	1 (2.94%)
Much more Difficult	1 (2.94%)
About the same	-

Majority of the respondents (94.12%) responded that ICT made the information gathering process easier.

### **Most used search engine**

In this Information Technology era people depends on search engines to find information. The faculty of agriculture in HU were asked which search engines they use most. The result is given in the following table.

**Table 10: Search engine used in searching information**

Search engines used	Frequency and percentage
Google	34 (100%)
Yahoo	4 (11.76%)
MSN	2 (5.88%)
Alta Vista	-
Any other	1 (2.94%)

Table 10 clearly shows that cent percentage of the respondents from the agricultural faculty make use of Google search engine

to find information. For any other only one respondent answered as Google scholar.

### **Formal training in searching information**

As it is necessary to have training in information searching due to the integration and use of ICT the respondents were asked did they receive any training in information searching or not.

**Table 11: Training in searching information**

Formal training in searching for information	Frequency and percentage
Yes	14 (41.18%)
No	18 (52.94%)
Missing	2 (5.88%)

It is clear from the above table that more than half of the respondents did not receive any training in searching information.

### **Problems faced by the respondents while seeking information**

As the users find it difficult to search information due to various reasons the respondents were asked to give their opinion regarding the problems faced.

**Table 12: Problems in seeking information**

Problems faced	Always	Frequently	Sometimes	Seldom	Never
Lack of computer hardware and software	4 (11.76%)	5 (14.71%)	6 (17.65%)	8(23.53%)	<b>11(32.35%)</b>
Information scattered in too many sources	2(5.88%)	<b>12(35.29%)</b>	10 (29.41%)	9(26.47%)	1(2.94%)
Lack of time for searching	-	5(14.71%)	<b>12(35.29%)</b>	10(29.41%)	7(20.59%)
Required material is not available	2 (5.88%)	10(29.41%)	<b>15(44.12%)</b>	6 (17.65%)	1 (2.94%)
Lack of training or help in using IT resources	<b>9 (26.47%)</b>	6(17.65%)	8(23.53%)	<b>9(26.47%)</b>	2(5.88%)

Through an open ended question the respondents were asked to give suggestions to improve the university library facilities in HU. Main suggestions are :

- To provide uninterrupted internet connection.
- To increase the number of computers in the library.
- Continuous maintenance of the computers should be done in the library.
- Make available the latest e-journals and full text articles to the students, staffs and researchers from the library
- Digitalized materials as well as the e-journal articles should be well organized to have easy access from anywhere in the campus. And also number of e-journals should be increased.
- The library staff should be trained to locate and provide the right information to the right users at the right time.
- There is a need to increase the number of copies in proportion to the number of students.
- Provide information literacy training to the academic and supportive staffs in the university.
- Many number of books kept in the book store should be organized well to have easy access and save the time of the users.
- Readers tickets should be organized well in the circulation section to serve the user community well.
- Library should try to digitalize the materials and also university network should be strengthened so that information can be accessed from the library 24/7 hours in the campus as well as outside the campus at the click of a mouse.
- There should be separate reading area for teaching staff in the library.

## **Findings and Discussion**

The faculty of Agriculture and Environmental sciences in Haramaya University seek for information mainly to read articles in related area of teaching and research and also for lecture preparation.

Majority of the respondents sought information from internet and at the same time books/monographs are the most preferred source for information. English is the preferred language for the information seeking and gathering .

Electronic and digital material is the preferred format and the respondents requested the library improve access to e-resources.

Integration of ICT changed the information seeking and gathering to a great extent and internet and e-mail are used much by the agricultural faculty for information access and exchange.

Google is the most used search engine.

More than half of the respondents feel that they lack information literacy training in accessing and using information from internet.

Information scattering and also lack of information literacy skill are the main problems faced by the agricultural faculty in HU.

## **Recommendations**

Based on the findings following recommendations are made.

- Library collection should be improved to meet the information needs of users
- Library should focus to digitalize its materials and provide better access through network.
- It should subscribe more e-journals and other open access journal articles to meet the information needs of the users.

- Information both printed and electronic should be organized well for easy retrieval and dissemination.
- Broadband network and Wifi should be provided so that users can access information quickly.
- Library should provide separate reading area to the teaching staff.
- Indexing service will be helpful for the users to locate the scattered information in different subject fields.

## **Conclusions**

Information need and information seeking behaviour studies help the libraries for collection development and also to provide better services to its users. Libraries are the backbone of any educational institution especially in higher education. Libraries are liable to give access to current information to support the curriculum of the college. Even in the modern networked world libraries are the major source of information in teaching and learning environment.

## **REFERENCES**

- Dulle FW, Lwehabura MJF, Mulimila RT and Matovelo DS. Researcher's perspective on agricultural libraries as information sources in Tanzania. *Library Review*, 50(2001) 4: 187-192. Accessed April, 5 2014. <http://www.emeraldinsight.com/10.1108/00242530110390613>.
- Faibisoff, Sylvia G and Ely, Donald P. Information and information needs. *Information Reports and Bibliographies*, 5 (1976) 5. Accessed April 5, 2014. [http://faculty.washington.edu/harryb/courses/INFO310/f\\_aibisoff\\_ely.pdf](http://faculty.washington.edu/harryb/courses/INFO310/f_aibisoff_ely.pdf).

- Kumar, Devendra. 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 (2010) 8: 164-168. Accessed April 9, 2014. <http://www.academicjournals.org/ijlis>.
- Lalotra, Seema and Gupta, Sangita. Information needs and expectations in digital era: a study of select agricultural institutes in northern India. *Trends in Information Management*, 6(2010) 2:113-124. Accessed April 2, 2014. <http://ojs.uok.edu.in/ojs/index.php/crdr/article/view/4>.
- Majid, Shaheen; Anwar, Mumtaz Ali and Eisenschitz, Tamara S. Information needs and information seeking behavior of Agricultural scientists in Malaysia. *Library and Information Science Research*, 22 (2000) 2: 145-163. Accessed April 5, 2014 [http://dx.doi.org/10.1016/S0740-8188\(99\)00051-1](http://dx.doi.org/10.1016/S0740-8188(99)00051-1).
- Oladele IOI. Information seeking and utilization among agricultural researchers in Nigeria, (2006). Accessed April 5, 2014. [http://www.afita.org/files/web\\_structure/20110126174028\\_862349/20110126174028\\_862349\\_21.pdf](http://www.afita.org/files/web_structure/20110126174028_862349/20110126174028_862349_21.pdf).
- Singh, K P. Information use, satisfaction and difficulties: a case study of agricultural scientists in India. *Library Philosophy and Practice(e-journal)*, (2012). Accessed April 16, 2014. <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1777&context=libphilprac>.
- Singh KP, Satija MP. Information seeking behaviour of agricultural scientists with particular reference to their information seeking strategies: Sardar Vallabhbhai Patel University of Agriculture. *Annals of Library and Information Studies*, 54 (2007) 4: 213-220. Accessed April 5, 2014. <http://www.svbpmeerut.ac.in>.

Zawawi, Salina and Majid, Shaheen.. The information needs and seeking behaviour of the IMR Biomedical scientists. *Malaysian Journal of Library and Information Science*, 5 (2001)1: 25-41. Accessed April 5, 2014 <http://majlis.fsktm.um.edu.my/document.aspx?filename=166.pdf>.