INFORMATION BEHAVIOUR OF CROP FARMERS IN ILORIN METROPOLIS, KWARA STATE, NIGERIA

[1] ADEWARA J. O, [2]SOYEMI, O. D., [3]ADEYI, M. A. & [4]OYEWUMI, F. A.

[1,3]Library Departments, University of Ilorin, Ilorin, Nigeria.
[2]Department of Information Resource Management, School of Management Sciences, Babcock University, Ileshan-Remo, Ogun State.
seyi4u04@yahoo.com, soyemiopeyemi@gmail.com, adeyi.ma@unilorin.edu.ng, ofayobami@unilorin.edu.ng

Abstract

The study employed survey research design. The population of the study comprised of 13,383 crop farmers. A multi-stage sampling technique and Yamane (1967) formula was used to sample 400 crop farmers Data was collected using a researcher-structured questionnaire with 5 Likert scale response format. It was face and item validated by three research experts from Department of Information Resources Management (IRM) and Agriculture and Industrial Technology. Using Cronbach's Alpha method of internal consistency reliability, co-efficient of 0.88 (Information need), 0.81 (information seeking), and 0.84 (information retrieval) were obtained. Data obtained was analyzed with descriptive statistics of frequency counts, percentage, to answer the research questions generated for the study. The findings of the study revealed that chief of the information needed by crop farmers' were on agricultural credit/loan while they had a positive information seeking behavior as well as had a rich collection of information retrieval methods with media (radio and television) being the most used. It was recommended that Government should made provision for agricultural loan for farmers as it constitute the major factor that could enhance their level of productivity intensifying the use radio and television media to constantly disseminate agricultural information to crop farmers among others.

Keywords: *Agricultural Information; Crop farmers; Information Seeking Behavior, Information need; Information seeking; Information retrieval.*

Introduction

Crop farming is an important aspect of agriculture in most countries of the world. In fact, there is likelihood that crop production is older than human civilization and its essential features have remained almost unchanged since the dawn of history. In the past decades, most Nigerian farmers merely engage in subsistence farming to provide food for their family while very little of their produce is made available for market sale. However, in recent years, growth in agricultural output in Nigeria has no doubt been on the rise as farmers are stepping away from subsistence agriculture to embrace modern civilization and investing in large scale farming and ultimately increasing agricultural products. Although, studies have shown that 70 percent of Nigeria's agricultural output comes from peasant farmers who reside in the rural areas. However, in recent times, bank lending to agricultural sector has significantly contributed to real growth in agricultural output in Nigeria (Egwu, 2016).

Informationon is an important resource for individual growth and survival, it plays a significant role in enlightening people, improving their standard of living, participating in decision making processes and making informed decision (Adekanye, 2014). Buttressing this, Abdullahi, Osahon, and Solanke (2015) stated that information has become an essential tool for competitive advantage, both at the individual, organization, societal and national level and therefore; information is needed to be able to take a right decision and reduce uncertainty. Information behaviour is the totality of human behavior in relation to sources and channels of information, including both active and passive information seeking, and use (Wilson, 2000). Thus, it includes direct communication with others, as well as the passive reception of information without any intention to act on the information given. According to Wilson's (1999) model, information behaviour is a wide concept in an individuals' life world. Within it is information seeking: the purposeful act of looking for information to

meet a need, solve a problem or increase understanding. Within information seeking is information retrieval: which is the seeking of definite information within some kind of information system (Wilson, 1999). Therefore, the two main components of information behaviour are information seeking and information retrieval (Bawden & Robinson, 2015).

Information need is the desire to acquire new knowledge or facts. Buttressing the aforementioned was Emmanuel (2012) who stressed that, information need is purposive in nature and is a consequence of behaviour to satisfy some goals. Information is an important resource for individual growth and survival. Yusuf (2012) explained that the progress of modern societies as well as individuals depends a great deal upon the provision of the right kind of information, in the right form and at the right time. However, according to Bawdenand Robinson (2015), it is not just a simple concept but information needs of individuals differ and most times are linked with the individual's work activities. Consequently, agricultural information needs of farmers are closely connected with their farming activities.

Visakhi and Srivastava (2002) divided information needs of the farmers into six groups: Agricultural inputs: Farmers need information about improved variety of seeds; Field acquisition: Farmers are required to know the different types of schemes, subsidies; pesticides, agricultural equipment, weather conditions, harvest and postharvest technology; Agricultural credit: Farmers need information about credit facilities, terms of loans; Agricultural technology: Farmers should be fed with information about innovative technology in their farming; Agricultural marketing: Day to day market trend on price of different variety of crops are necessary for the farmers; Food technology: Information on postharvest food technology is needed by the farmers to get optimum benefit out of their crop. Nonetheless, it is still insufficient to limit development effort to just understanding farmers' information needs. Researchers need to explore other aspect of farmers' information behaviour: information seeking and sources for information retrieval, as this will give a better understanding of how agricultural information can be disseminated more efficiently and hence, further enhance the development of better intervention programs.

Information seeking, at times referred to as information seeking behaviour is an individual's way and manner of gathering and sourcing for information for personal use, knowledge updating and development (Igwe, 2012). According to Yusuf (2012), information seeking behaviour is the complex pattern of actions and interactions that people engage in when seeking information of whatever kind and for whatever purpose. The type of seeking strategy adopted by a user depends on the users' choice from available alternative ways of seeking for a particular need. The information seeking strategies adopted by an individual have been grouped into browsing and monitoring (Ford, 2015). Browsing entails an undirected but active search in order to find information while monitoring is directed but a passive search for information. Wilson (1999) however, described individuals' search pattern and behaviour as passive attention, passive search, active search and ongoing search.

Information retrieval on the other hand, is the design, evaluation and use of information systems. It is also described as the end result of information seeking (Ford, 2015). The main difference between information seeking and retrieval is that the information seeking deals with behaviour and performance of a system while information retrieval deals with behaviour and the performance of a person. Hill (2009) carried out a study of farmers' information seeking behaviour concerning the type of information sought and the sources of information used. It was discovered that farmers as individuals have their favoured information sources which include interpersonal information, internet, and written information as well as communication networks.

The role of agriculture in the development and growth of the Nigerian economy is shown in its contribution to the total food supply in the country. According to CBN (2010), the rate of increase in food production of 2.5 percent per annum does not keep pace with the annual population growth rate of 2.8 percent per annum in Nigeria. Fakiyesi (2001) maintained that Nigeria's domestic food supply has been far short of the need of the population that has significantly affected citizens' quality of life. Over the period 2007–2010, prices of food items were more volatile than they had been for decades and the experience in the last two years has further affected quality of life of people severely

due to economic recession in Nigeria. This situation is bad for farmers and even worse for consumers, especially the poor, who are unable to afford basic food (Sasson, 2012). Relevant agricultural information is germane for sustainable agricultural practices in the states hence; the current study examines information behaviour of crop farmers in Ilorin metropolis of Kwara State, Nigeria while providing answers to the following research questions:

1. What are the information needs of crop farmers in Ilorin, Kwara State?
2. What is the information seeking behaviour of crop farmers in Ilorin, Kwara State?
3. What are the information retrieval methods used by crop farmers in Ilorin, Kwara State?

Methodology

The design adopted for the study was a survey research design. This was deemed appropriate as it has a wide scope which allows primary data to be obtained from large population that is geographically spread such as those meant for this research. The population of the study was all crop farmers in Ilorin metropolis of Kwara state while the target population comprised of 13,383registered crop farmers with 4,862, 2,786 and 5,735 crop farmers in Ilorin East, Ilorin South and Ilorin West Local Government Areas respectively; in Kwara State. A multi-stage sampling technique was used to draw the sample of the study. In the first stage, Yamane (1967) formula was used to determining the study's sample of 400 crop farmers from the population size in the study areas. At the second stage, a proportionate sampling technique was used to drawn145 (36%) from Ilorin East, 83 (21%) from Ilorin South and 172 (43%) from Ilorin West to make 400 crop farmers.

The instrument for data collection is a researcher-structured questionnaire titled "Information Behavior and Quality of Life Questionnaire (IBQOF)". The questionnaire was divided into two main sections (A and B). Section A examined the demographic information of the participating farmers. Section B examined information behaviour of crop farmers. It comprised questions on information need, seeking behaviour, and retrieval. All the items in this section follow a 5 points

likert type scale. The questionnaire was given to experts in Information Resources Management (IRM) and Agriculture and Industrial Technology for face validity while its reliability was establishedusing Cronbach's' alpha test of internal consistency. A Cronbach's alpha of 0.88, 0.81, and 0.84 for each of the three sub-sections in sections B. The validated questionnaire was administered to participants who were briefed about the purpose of the survey. Responses obtained were analyzed using descriptive statistics such as frequency count and percentage with the aid of Statistical Package for the Social Sciences (SPSS), version 20.0.

Results

Research Question One: *What are the information needs of crop farmers in Ilorin, Kwara State?*

Table 1: Information Needs of Crop Farmers in Ilorin, Kwara State

Information needs of Crop Farmers	Highly needed Freq.(%)	Needed Freq.(%)	Moderately needed Freq.(%)	Rarely needed Freq.(%)	Not needed Freq.(%)
Information on agricultural credit/loan	276(69)	56(14)	20(5)	14(3.5)	34(8.5)
Information on fertilizer application on land and crops	181(41.2)	97(24.2)	66(16.5)	32(8.0)	24(6.0)
Information on modern storage methods	164(41.0)	147(36.8)	42(10.5)	25(6.2)	22(5.5)
Information on land preparation and new seeds planting method	149(37.2)	133(33.2)	84(21.0)	24(6.0)	10(2.5)
Information on weather condition and irrigation during dry season	169(42.2)	112(28.0)	82(20.5)	26(6.5)	11(2.8)
Information on processing methods and post-harvest management techniques	184(46.0)	101(25.2)	72(18.0)	37(9.2)	6(1.5)
Information on new agriculture equipment and harvesting methods	175(43.8)	123(30.8)	51(12.8)	29(7.2)	22(5.5)

Table 1 shows that 276(69%) crop farmers highly needed information on agricultural credit/loan, 181(41.2%) on application of fertilizer on land and crops, 164(41.0%) on modern storage methods, 149(37.2%) on land preparation and new seeds planting methods, 169(42.2%) on weather condition and irrigation during dry season, 184(46.0%) on processing methods and post-harvest management techniques and 175(43.8%) on new agricultural equipment and harvesting methods. The result of analysis shows that majority of crop farmers mostly needed information on agriculture credit and loans in Kwara State.

Research Question Two: *What is the information seeking behaviour of crop farmers in Ilorin, Kwara State?*

Table 2: Information Seeking Behavior of Crop Farmers in Ilorin, Kwara State

Information Seeking Behavior	Frequency	Percent (%)
Positive	247	61.8
Negative	153	38.2
Total	400	100.0

Table 2 shows that 247(61.9%) of the crop farmers had a positive Information Seeking Behavior while 153(38.3%) of crop farmers had a negative Information Seeking Behavior. This connotes that most of the crop farmers were positively disposed to seeking information through browsing the internet for information on new seeds, from family and friends to get information on new agricultural equipment, reading of newspapers and magazines to get the information on crop farming, listening to program on radio and other media in order to get information on crop farming, visit to libraries and information centers to read books that are related to crop farming, from farmers' unions/cooperative and other experience farmers for information on agricultural credit/loan, from village square meetings for information on crop farming, watching documented film/slide Projection on crop farming, the use of cell phones to get information from friends and loved ones on crop farming as well as by consulting non-governmental Organizations and financial institutions for agricultural credit/loan.

Research Question Three: *What are the information retrieval methods used by crop farmers in Ilorin, Kwara State?*

Table 3: Information retrieval methods used by crop farmers

Items on information retrieval methods	In Use Freq.(%)	Not in Use Freq.(%)
Library Search	316(79.0)	84(21.0)
Media search (radio, TV and etc.)	318(79.5)	82(20.5)
Internet search using search engines such as Google, Wikipedia to retrieve information needed on crop farming	282(70.5)	118(29.5)
Library OPAC	293(73.2)	107(26.8)
Cooperative banks on crop marketing	278(69.5)	122(30.5)
Local databases search	309(77.2)	91(22.8)
Information retrieval software (database management system, text oriented database management system, document retrieval systems).	296(74.0)	104(26.0)
Bibliographic databases	242(60.5)	158(39.5)
Cooperative information network	261(65.2)	139(34.8)
Large document collection that deals with storage, organization, management and retrieval of information with a view to find better methods of crop farming	265(66.2)	135(33.8)

Table 3 shows that 316(79.0%) of the respondents used documents relevant to crop farming from a large collection of documents in the library, 318(79.5%) carefully listened to radio, TV and other media to retrieve relevant agricultural information on crop farming, 282(70.5%) could searched the internet and other online search engines such as Google, Wikipedia to retrieve information needed on crop farming, 293(73.2%) used using library OPAC to search for information on crop farming, 278(69.5%) used Cooperative banks for search of crop marketing information, 309(77.2%) used Local databases search, 296(74.0%) used Information retrieval software such as database management system, text oriented database management system, document retrieval systems, 242(60.5%) and 261(65.2%) used Bibliographic databases and Cooperative information network to retrieval agricultural information respectively while, 265(66.2%) used large document collection that deals with storage, organization, management and retrieval of information with a view to find better methods of crop farming. These results imply that though, crop farmers had a rich collection of information retrieval methods, media search (radio, TV and etc.) was the mostly used information retrieval methods by crop farmers in Ilorin Metropolis of Kwara State.

Discussion of Findings

This study examined the information behaviour of crop farmers in Ilorin metropolis of Kwara State, Nigeria. As regards information needs of the crop farmers; finding revealed that top among the highly needed information by crop farmers includes information on agricultural credit/loan, followed by information on modern storage facilities. Others include post-harvest management techniques, information on weather condition and irrigation during dry season, information on modern storage methods, information on land preparation and new seeds planting method, and information on fertilizer application on land and crops.As shown in this study, the most sorted information by crop farmers in Kwara state was information on sources of agricultural loan/credit. This is not in line with the study of Soyemi (2014) who reported that women showed preference for information on farm management and income generation rather than the crop-based information. This denote that fund constitute a major factor that influences the information seeking behavior of crops farmers. As regards crop farmers' information seeking, the findings show that crop farmers were positively disposed to seeking information through a variety of sources some of which were browsing the internet, family and friends, newspapers and magazines radio and other media programmes, libraries and information centers, farmers' unions/cooperative and other experience farmers, from village square meetings, documented film/slide Projection among others. Findings from this study is divergent to that of MohdShuib, Abdullah and Ismail (2010) who studied the use of information retrieval tools in Uganda, the result of their study showed that their respondents had difficulties in finding information that was suitable to their needs using available information retrieval tools. As regards information retrieval methods of crop farmers in Ilorin, Kwara State, the findings of this study shows that though, crop farmers had a rich collection of information retrieval methods, media search (radio, TV and etc.) was the mostly used information retrieval methods by crop farmers in Ilorin Metropolis of Kwara State.

Conclusion and Recommendations

The information needed mostly by crop farmers' was on agricultural credit/loan while they were positively disposed to seeking information through a variety of sources. In addition, media search (radio, TV and etc.) was the mostly used information retrieval methods. Based on the findings of this study, the following are suggested recommendations:

1. Government should made provision for agricultural loan for farmers as it constitute the major factor that could enhance their level of productivity.
2. Agricultural information providing institutions should ensure continues availability of information in the area of agricultural credit/loan, processing methods and post-harvest management techniques, weather condition and irrigation during dry season, modern storage methods, land preparation and new seeds planting method, and fertilizer application on land and crops.
3. The government should intensify the use radio and television media to constantly disseminate agricultural information to crop farmers.

References

Abdullahi, A. O., Osahon, I. M., & Solanke, E. O. (2015). Assessment of information needs and seeking behaviour of undergraduates in university of Ilorin, Ilorin, Nigeria.*Assessment, 5*(4).

Achugbue, E. I., & Anie, S. O. (2011). ICTs and information needs of rural female farmers in Delta State, Nigeria. *Library Philosophy and Practice*, Paper 448.

Adekanye, A. E. (2014). Information needs, utilization and socio-economic empowerment of textile market women in Southern Nigeria. *Library Philosophy and Practice (e-journal)*, Paper 1903.

Bawden, D., & Robinson, L. (2015). Introduction to information science. *Facet Publishing.*188-189.

Central Bank of Nigeria (CBN) (2010).*Economic and financial review*, 36(1):8-12.

Egwu, P.N. (2016). Impact of agricultural financing on agricultural output, economic growth andpoverty alleviation in Nigeria. *Journal of Biology, Agriculture and Healthcare*. Vol.6, No.2

Emmanuel, H. (2012).*Information needs and information seeking behaviour of rural farmers in Okpokwu local government area of benue state of Nigeria.* (Master of library and information science). Retrieved from http://www.unn.edu.ng/publications/files/images/HELEN%20EMMANUEL.pdf Wilson, T. D. (1999). Models in information behaviour research. *Journal of documentation, 55*(3), 249-270.

Fakiyesi, O. M. (2001). Encouraging growthtoreducepoverty in Nigeria: In C.B.N: *Nigerian Economic and Financial Review*: 39(2):61-91.

Ford, N. (2015). *Introduction to information behaviour*. Facet Publishing, 50-53.

Hill, M. (2009). Using farmer's information seeking behaviour to inform the design of extension. *Extension Farming Systems Journal, 5*(2), 121.

Igwe, K. N. (2012).*LIS 311 Introduction to information science*. Offa: Department of Library and Information Science, Federal Polytechnic, Offa.

MohdShuib, N., Abdullah, N., &Ismail M. (2010).The use of information retrieval tools: A study of computer science postgraduate students. *2010 International Conference on Science and Social Research (CSSR), Kuala Lumpur,* Malaysia.

Sasson, A. (2012). A special report on feeding the world: The 9 billion-people question. *The Economist*. 2012.8-11.

Solano, C., Leon, H., Perez, E., & Herrero, M. (2003). The role of personal information sources on the decision-making process of Costa Rican dairy farmers. *Agricultural Systems, 76*(1), 3-18.

Soyemi, O. D. (2014). *Women farmers' agricultural information need and search behaviour in North Central Nigeria.International Academic Conference list.* Vol. 4, No 8.www.iiste.org

Visakhi, P., & Srivastava, S. S. (2002). *Agricultural libraries vis-a-vis community information service in Indian context IASLIC, 47*(3), 171-177.

Wilson, T. D. (1999). Models in information behaviour research. *Journal of documentation, 55*(3), 249-270.

Wilson, T. D. (2000). Recent trends in user studies: action research and qualitative methods. *Information Research, 5*, 5-3.

Yusuf, T. I. (2012). Information needs, sources and information seeking behaviour of women artisans in Offa Metropolis. *Library Philosophy and Practice (e-journal)* [Online], Paper 1201. Available at http://digitalcommons.unl.edu/libphilprac.