

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

2022

Library Use for Agricultural Research by Undergraduate Students of the Faculty of Agriculture, Forestry and Wildlife Resources Management, University Of Calabar, Nigeria

Friday O. Idiku

University of Calabar, Nigeria, idikuf@gmail.com

Oliver Effiong Ntui

Cross River State College of Education, olyntui24@gmail.com

Dorathy Aje Iyama

University of Calabar, Nigeria

Love Eyo Abu

Cross River University of Technology Obubra

Dorcas Okaja Ochang

University of Calabar, Nigeria

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Agricultural Economics Commons](#), [Agricultural Education Commons](#), and the [Scholarly Communication Commons](#)

Idiku, Friday O.; Ntui, Oliver Effiong; Iyama, Dorathy Aje; Abu, Love Eyo; and Ochang, Dorcas Okaja, "Library Use for Agricultural Research by Undergraduate Students of the Faculty of Agriculture, Forestry and Wildlife Resources Management, University Of Calabar, Nigeria" (2022). *Library Philosophy and Practice (e-journal)*. 6925.

<https://digitalcommons.unl.edu/libphilprac/6925>

Introduction

Agricultural research libraries play an important role in providing the right direction to the agricultural, economic, scientific and technological development of a nation. In this time where the Federal Government of Nigeria is bent on improving agricultural productivity in the country, it is therefore pertinent to unveil the role of library in supporting agricultural research among students of tertiary institutions, by assessing the role of the University of Calabar library in enhancing agricultural research among students of the faculty of Agriculture, Forestry and Wildlife Resource Management. A library is considered to be the nucleus for any research activity and an essential ingredient for viable research system. It provides an account of previous intellectual endeavors and functions as a breeding ground for new concepts and ideas (Majid, Tamara and Anwar, 1999). The resources and facilities in the library can serve as a yardstick for measuring the capacity and sophistication of research of an S & T (Science and Technology) institution (Gooch, 1994). The agricultural research libraries are organizational mechanism designed essentially to link groups of students, lecturers, researchers and scientists that are committed to sharing information on working together to solve agricultural and scientific problems and to use existing resources. Halis (1995), referred to agricultural research libraries as all libraries/information centers established under the auspices of agricultural research institutes including universities of agriculture's set aside for the use of students of agriculture, as an integral component of an effective research system. The library plays a vital role in the improvement of scientific and technological research which has wide application in agriculture and then accelerating the innovation. Information is a resource of enormous importance for agricultural, economic, social and scientific development. The economies of most developing countries are agriculture-based and the free flow of information can play a decisive role in the improvement of this sector (Majid *et. al.*, 1999). Access to timely and accurate information can

help policy and decision makers to make correct decision. On the other hand, decisions based on inaccurate, irrelevant, inadequate and obsolete information could be disastrous (Wasserman, 1991). Several studies have revealed the potential of the internet to all aspects of human development. More so, agricultural development is important for all national transformation and increase in food security and to achieve this, farmers, researchers and extension workers are required to be well informed (Idiku *et al*, 2021). Similarly agricultural research plays a crucial role in enhancing agricultural productivity through using innovative and sophisticated techniques for developing high-yielding crop varieties, controlling pests and diseases and improving animal production and management etc. as well equipped laboratories and field facilities are indispensable to carry out agricultural research, well-developed libraries act as eyes or path finders for researchers and provide them the inspiration to venture into new areas of research. An ineffective library, on the other hand may lead to low quality or duplication of research thus resulting in waste of financial materials and human resources (Leckie, Pettigrew and Sylrain, 1996).

According to Hillsborough, (2014), library cards are provided to students to facilitate borrowing of materials and tracking of items requested, checked out, returned, overdue, and to access or check out electronic resources online. Additionally, library cards are provided to facilitate access to the internet and electronic library resources using the library's time management software and remote authentication software. Rigorous verification of identity and payment of school charges are necessary conditions for registration process to ensure that accurate borrower's information is maintained due to the potential financial obligation upon students. A large body of research has in recent years highlighted activities in many universities to enhance opportunities for students to engage directly in research, so becoming creators of research content themselves. Agriculture is

the largest contributor to the economic well-being of most Nigerians. For the agriculture sector to continue to grow, research-based knowledge of the existing agricultural practices, the potential of the sector, the approach for transforming the sector, and the impact of the transformation on the economy, sector, and population is needed. Technology especially has now a deep-rooted effect on the activities surrounding information and communications which are very important for sustainable development (Idiku *et al.*, 2020). Research-based evidence is important to guide decisions that affect Nigeria's agricultural sector and her people. The quality and effectiveness of policy-making depend to a large extent on the quality of knowledge on which decisions are based (Hovland, 2003). Policy decisions could be shaped by the political, institutional, and cultural environments in which information and knowledge are produced, disseminated, and exchanged among stakeholders. Digital tools and other electronic technologies are changing the economies of nations, societies and people's lives. Information has become a valuable commodity in the global world where nations that have acquired the necessary ICT infrastructures have been moving rapidly into the post-industrial information-based economy (Idiku *et al.*, 2015). According to Carden (2004), research findings may not have immediate and direct influence on decisions, but over time, their impact can be seen more clearly. The release of a research report represents an occasion for collective discussion and perhaps reconsideration of the issues raised by the report. Thus, understanding how knowledge and information are produced and disseminated, and how policymakers use it, should be an essential piece of agriculture policy and development strategy. An effective National Agricultural Research System (NARS) is required for high quality research. The NARS researchers need to have access to recent, high quality literature, methodology, and data; and the capacity to use this information analytically to lay a solid foundation for research applicable to Nigeria's agriculture sector. In

addition, other stakeholders in the agriculture industry, such as policymakers, educators, students, development partners, members of the private sector, and extension personnel, need high quality, relevant, and timely agricultural information to make good strategic decisions (Popoola, 2008). Evidence-based policymaking relies on findings that emerge from research and analysis.

The availability of information and data is the foundation for policy advice (Carden 2004), but developing countries lack access to existing knowledge and data fundamental to drawing reliable conclusions from research. Without a strong information management system, policy arguments are less likely to be effective. Therefore, it's important to understand the relationship between knowledge and decision making. New agriculture research, policy decisions, and program implementation rely on existing knowledge to guide the research topic and process, and provide background information for policy decisions and input into implementing programs. Existing knowledge can be provided orally, dramatically, or in printed form. Although oral and dramatic presentation of knowledge can be passed down through history, its timely availability and access may impede it from being retrieved, and therefore, written knowledge needs to widely shared and easily accessible. Libraries receive their publications and other information resources through direct purchase, contribution, and/or programs that aim to strengthen libraries.

The management of digital assets presents new challenges to the academic library community in terms of administering complex hardware and software, but mass digitization has not changed the fundamentals of library services. The ephemeral nature of digital items will require more expense and staff attention in meeting presentation commitments, but the relationship of user needs to item selection and organization remains essential. The complexities involved in supervising intricate information systems optimized to meet specialized user needs requires a

strategic approach to management that takes into account the role of digitized collections within the larger contexts of the library and parent organization (Curren and Moss, 2010). Guiding users to the items most suited to their information needs becomes a very different task as service points become more remote, but the digital environment brings with it increase possibilities to meet the traditional goal of providing personalized services to every user (Turock and Friedrich, 2010). New tools require new skills for effective use, but an expanded toolkit will enable information professionals to be effective at meeting the challenges of digitized collections. Dalbello, (2011), provided extensive discussion of the purpose of digitized cultural collections through her thorough intellectual history of digital humanities. She referred to such collections as electronic campfires, noting how digital collections inspire global interdisciplinary collaboration among researchers interested in a given time period, mode of expression, or method of enquiry. Dalbello (2011) explored the possibility that such collections might stimulate a revitalization of cultural studies despite diminishing institutional support for the humanities by inspiring a new wave of interest from students and faculty. Sternfeld (2011) explored the purpose of digitized collections in the humanities through an evaluation of the uses of digital archives of historical materials. He noted that the growing trend of collaboration across in historical research, in particular citing a joint study of researcher from Harvard, MIT, and Google, who performed a quantitative textual analysis of 5million works published between 1800 and 2000 (approximately 4% of all literature ever published) for which adequate metadata was available. The global library partnership for agricultural research includes the following:

National Agricultural Libraries (Nal): NAL regularly cooperates with other libraries, organization and private industries to enhance access to agricultural information, such partnerships are critical to the successful development of NAL's programme and services.

Agricultural Network Centre (Agnic): This global alliance joins the National Agricultural Library (NAL) with land-grant universities and other agricultural organizations to provide access to web-based agricultural information with partners maintaining web-sites and provide reference services in specific subject areas. Their collaboration shared technology and standards, cuts costs while effectively meeting local, national and international needs for quality agricultural information

Agricultural Library Network (AGLINET): This is a voluntary Network that brings together large international agricultural libraries in service to each other which NAL is a member.

Association of Research Libraries (ARL): As a member of the association, NAL works with the largest research libraries in North America to develop standards for assessing library services and to perform research on the trend and influence affecting these libraries.

CENDI: This group brings together senior scientific and technological information managers from a variety of government agencies to improve the productivity of federal science and technology based programme

Cooperative Agreement (CA): NAL and its information centers regularly enter into cooperative agreements with other federated agencies, colleges and universities, or other organizations and institutions to perform research, enhance programme, develop information products or support service. These collaboration reaches across the full range of agricultural topics, including nutrition, food safety, invasive species, alternative farming and more of such agreement include the organic root database and the University of Maryland's Dietetic Internship Programme.

Digitop: This digital desktop library brings published information about agriculture and its related sciences to USDA (United States Department of Agriculture) employees, whether in the field or at the office, 24hours a day. NAL provides this vital online resources using combined funding from USDA agencies and selects resources with those agencies in mind, gaining licenses to key databases for researchers, economists, administrators and analysts. *The*

Essential Electronic of Agricultural Library (TEEAL): Is a digital collection of research journals for agriculture and related sciences. Researchers, students, faculties and librarians can discover thousands of full – text PDF articles. *Access to Global Online Research in Agriculture (AGORA)*: is a programme set up by the food and agriculture Organization of the UN (FAO) together with major publishers, enables developing countries to gain access to outstanding digital library collection in fields of Food, Agriculture, environmental sciences and related social sciences. *AgEcon Search*: provide full-text journal articles, working papers, and conference papers in agricultural, resources, environmental, consumer, and other related areas of applied economics. Others listed thus are;

- International Association of Agricultural information Specialists – IAALD
- Land Grant Libraries – LGL
- Livestock and poultry environment learning Center - LPELC
- National Agricultural Law Center – NALC
- Online Computer Library Center – OCLC
- National Virtual Library of Nigeria
- Online Access to Research in the Environment, (OARE)
- African Journals online (AJOL)
- Directory of Open Access Journal
- Food Security and Food Policy Information Portal for Africa
- JSTOR
- Union catalog of serials in International Agricultural Research Centers (IARCs)
- Google Scholar
- HINARI
- AGRICOLA
- AGRIS/CARIS Information Center. (FAO agriculture database). All which have collaboration with NAL and other groups.

Libraries are the “hearts” of their universities. To fulfill their mission of supporting the educational objectives of their parent bodies, which include teaching, learning and cultural development, the libraries had to develop and maintain standard books, journals, and

audiovisuals collections and services. University libraries have problems even in maintaining core collections because of lack of fund and high inflation. Ochugwu, 2007 had classified the issue explaining the ineffective performance of libraries in Nigeria which could also be applied to agricultural libraries in two basic headings. These are internalities and externalities. The internalities are those unresolved problems that are internal to the library profession while the external are those outside forces that hinder effective library and information delivery. Nigeria educational institutions face the challenge of globalization and information age for the transformation of the academic system from the traditional role of teaching, learning, research and development to those driven by the information technology, which is the latest revolution changing all aspect of human endeavour (Ogunsola and Oluwasanmi, 2002). Therefore, the library focuses on students learning as an important outcome of library programs. However, many libraries are embracing the challenge of finding ways to better understand what impact they are having on students' research and their education (Barbara, 1998). Although several studies conducted in the area of library use, none of them have been conducted in the University of Calabar, hence, the need to fill the research gap by ascertaining the role of the university of Calabar library in agricultural research by undergraduate students in the Faculty of Agriculture, Forestry and Wildlife Resources Management. Therefore, the general objective of the study was to determine the use of the University of Calabar library for agricultural research by students of the Faculty of Agriculture, Forestry and Wildlife Resources Management. The specific objectives include to identify the number of students of the Faculty of Agriculture who registered with the University of Calabar library for the 2020/2021 academic session, identify the purpose of library use by students, assess the material and electronic resources available in the University

of Calabar library for use by students and determine the constraints to library use by students in the Faculty.

Materials and Method

The research was carried out in the University of Calabar, Calabar Nigeria focusing on the school library and the undergraduates students of the Faculty of Agriculture, Forestry and Wildlife Resources Management. The University of Calabar, Cross River State has a coordinate of 4°57'N 8°19'E / 4.95°N, a total area of 233 sq meters and an elevation of 32m. The University of Calabar library has a seating capacity of 3000 readers, 150, 000 volume of books, over 9000 volumes of bound and unbound journals; the current journals volume is 14, 322, an e- library consisting of 75 computers with internet connectivity; a staff strength of about 207. It is also equipped with an National Universities Commission Data Base (NUCDB)/UNICAL wifi. The Faculty of Agriculture, Forestry and Wildlife Resources Management is located at the main campus of the university with eight Departments comprising Agricultural Economics, Agricultural Extension and Rural Sociology, Animal Science, Crop Science, Food Science and Technology, Forestry and Wildlife Resources Management, Fisheries and Aquaculture and Soil Science. The population of the study comprises all undergraduate students of the Faculty of Agriculture, Forestry and Wildlife Resources Management, University of Calabar. A stratified random sampling procedure was used to select according to Departments and level of studies from years one-five (1-5) with a total of 250 students as sample size. Data obtained were analyzed using simple frequency and percentage.

Results and Discussion

Table 1: Distribution of respondents on sex, registration and renewal and reasons for Registration/Non Registration

Variables	Frequency	Percentage
Sex		
Male	150	60
Female	100	40
Library Registration		
Yes	60	24
No	190	76
Renewal of Registration		
Yes	30	12
No	220	88
Reasons for non registration/renewal		
Too much protocol for registration/renewals in the library	50	20
I do not have the time	40	16
Lack of awareness/orientation	140	56
Library is too far from the Faculty	15	6
Tight schedule in school	5	2
Total	250	100

Source: Field survey 2021

The result of Table 1 shows that majority of the respondents are male 60%, those that registered in the library accounts for only a partly 24% as against non registered members recording 74% and 88% of respondents never renewed their registration with the library in subsequent years while their major reasons for non registration/renewal was lack of awareness/ orientation 56% followed by too much protocol for registration and renewal in the library 20%. The result supports the findings that the complexities involved in supervising intricate information systems optimized to meet specialized user needs requires a strategic approach to management that takes into account the role of digitized collections within the larger contexts of the library and parent organization (Curral and Moss, 2010). On the other hands, according to Hillsborough, (2014), library cards are provided to students to facilitate borrowing of materials and tracking of items

requested, checked out, returned, overdue, and to access or check out electronic resources online, hence, a necessity and not too much protocol.

Table 2: Distribution of respondents based on purpose of using the library

Purpose	Frequency	Percentage
General Reading	30	12
Preparation for exam	150	60
Research purpose	50	20
Checking latest collections	20	8
Total	250	100

Source: Field survey 2021

The result of Table 2 indicates that the major purpose of using the library by respondents was mostly during preparation for examination accounting for 60%, followed by research purpose 20% and general reading 12%. This has become the attitude of most students these days as they patronize the library only during the period of preparing for examinations and once that is over, they forget the library. It means that the purpose of the library as the nucleus for any research activity and an essential ingredient for viable research system is defeated. The result is contrary to the findings of Majid, Tamara and Anwar, (1999) and Gooch, (1994) that library provide account of previous intellectual endeavors and functions as a breeding ground for new concepts and ideas while the resources and facilities in the library can serve as a yardstick for measuring the capacity and sophistication of research of a Science and Technology (S & T) institution. There is therefore need to use the library because the agricultural research libraries link groups of students, lecturers, researchers and scientists that are committed to sharing information on working together to solve agricultural and scientific problems and to use existing resources.

Table 3: Distribution based on Materials/electronic resources available in the library

Material/Electronic resources	Frequency	Percentage
Prints/Books	160	64
Audiovisuals	5	2
Online Resources	75	30
Internet facility	10	4
Total	250	100

Source: Field survey 2021

Table 3 results shows that print and book materials recorded 64% and online resources like Agora and others 30% whereas internet facility and audiovisual materials were 4% and 2% respectively. In other words, prints and books materials remains the other of the day but there is a great need for online resources based on the current trends. The results therefore contradict the findings of Guiding users to the items most suited to their information needs becomes a very different task as service points become more remote, but the digital environment brings with it increase possibilities to meet the traditional goal of providing personalized services to every user (Turock and Friedrich, 2010, Dalbello, 2011).

Table 4 Distribution of respondents on constraints to library use

Constraints to library use	Frequency	Percentage
I do not find the materials that I need in library	80	32
Inadequate cataloging	20	8
Information on specific contents is difficult	120	48
Inadequate power supply	20	8
Inadequate space	5	2
Library rules/regulations	5	2
Total	250	100

Source: Field survey 2021

Table 4 shows the various constraints that students face in the library and the highest of all the constraints was on the difficulty of getting information on specific contents 48%, followed by not finding the materials needed in the library. Others include inadequate cataloging and inadequate power supply 20% respectively. Most of the time it is actually very difficult to get

accurate materials in the library without guidance and direction of library staff as many student are not well vexed with the working of the library system. This result goes a long way to confirm the findings of Ochugwu (2007) on issues the lead to ineffective performance of the library for use by stakeholders including students.

Conclusion and Recommendation

In conclusion, undergraduate students of the Faculty of Agriculture, Forestry and Wildlife Resources Management, University of Calabar rarely patronize the library services except during preparation for examination while their greatest constraints was the difficulty of getting information on specific contents. There is an urgent need for awareness campaign and orientation on library use and provision of a well catalogue library for easy access to research materials.

References

- Barbara F. (1998). What do they Know? *Assessing the Library's contribution to Student Learning. Library Issues, 19(1)*.
- Carden, F. (2004). Issues in assessing the policy influence of research. *International Social Science Journal 179:135-151*.
- Curral, J. E. P and Moss, M. (2010). Digital asset management. *In M. J. Bates (Ed.), Encyclopedia of Library and Information Science (3rd ed., pp. 1528 – 1538)*. doi:10.1081/E – ELIS3 – 120044289.
- Dalbello, M. (2011). A genealogy of digital humanities. *Journal of Documentation, 67(3)*, 480 – 506. doi:10.1108/002204 11111124550.
- Gooch, P. (1994). Information flows in agricultural research in Vietnam: Status and Prospects. *IAALD Quarterly Bulletin 39(4):312-18*
- Halis, S H. (1995). Agricultural libraries and food production in Nigeria: problem and prospects. *Nigerian Libraries. 21(1): 51 –58*.
- Hillsborough county LS, (2013). Department of library services policies and procedures manual : *Library Card Registration and Renewals 1(5): 1 – 10*.

- Hovland, I. (2003). Communication of research for poverty reduction: A literature review. *Working Paper 227. London: Overseas Development Institute.*
- Idiku, F. O, Ofem, N I, Jimmy I. B, Amadi, C, C and Undiandeye, U.C. (2015). Enhancing Fish Farming With the Use of Mobile Phones by Fish Farmers in Calabar Metropolis, Nigeria. *Journal of Educational Policy and Entrepreneurial Research (JEPER)* 2, (9): 227-239
- Idiku, F O.; Ogbonna, K I; Ogar, P O; and David, G M, (2020). Weather Information Needs of Displaced Artisanal Fishermen in Bakassi Penninsula Nigeria. *Library Philosophy and Practice (e-journal)*. 4134. <https://digitalcommons.unl.edu/libphilprac/4134>
- Idiku, F O.; Eta, H C and Elemi, G F (2021), Utilization of New Media for Agricultural Information by Farmers in South-South Nigeria. *Library Philosophy and Practice (e-journal)*. 6449. <https://digitalcommons.unl.edu/libphilprac/6449>
- Leckie, G. L., Pettigrew, K. C. and Sylrain, C. (1996). Modeling the information seeking of professionals: *A general model derived from research on engineers, health care professionals, and Lawyers Library quarterly*66(2):161-93
- Majid S., Tamara S. E and Anwar M. A. (1999). Library use pattern in Malaysian. *Agricultural Scientist*, 49:225 – 235.
- Ochugwu, M. G. (2007). *Libraries service delivery at the staff conference and AGM of Nigerian Library Association Benue State chapter 8 – 9 August.*
- Ogunsola, L. A, and Oluwasanmi, H. (2002). Nigeria University Libraries and the challenges of Globalization: The way forward. Obafemi Awolowo University Ile – Ife, Nigeria.
- Popoola, S .O. (2008). Faculty awareness and use of library information products and services in Nigerian universities. *Malaysian Journal of Library & Information Science* 13 (1): 91-102.
- Sternfeld, J. (2011). Archival theory and digital histonography: *Selection, Search and Metadata as archival processes for assessing historical contextualization. The American Archivists*, 74(2): 544 – 575.
- Turock, B. J., and Friedrich, G. W. (2010). Access in a digital age. In M. J. Bates (Ed.) *Encyclopedia of Library and Information Sciences (3rd Ed., pp. 23 – 33)*. doi: 10. 1081/E – ELIS 3 – 120043096.
- Wasserman, P. (1991). Information transfer in Science and Technology: *An overview. Asian Libraries* 1(2):27-28

