



**Use of Access to Global Online Research in Agriculture (Agora) Among Lecturers in
Federal Universities in South-South, Nigeria.**

Dr (Mrs) Mary Ebele Idahosa (CLN)
midahosa@biu.edu.ng
Acting UL Benson Idahosa University Library
07035533002

&

Florence Omisi Aiya
faiya@biu.edu.ng
Benson Idahosa University Library
07032963804

Abstract

This study investigated the use of Access to Global Online Research in Agriculture (AGORA) among lecturers in the Faculty of Agriculture in Federal Universities in South-South, Nigeria. AGORA, a Research4Life program, provides access to scholarly journals and databases that support agricultural teaching and research. The study focused on the frequency of use, variations based on academic rank, and barriers to utilization. Data revealed that lecturers used AGORA “more often,” especially for research, literature searches, updating knowledge, and lecture preparation. Senior lecturers reported significantly higher usage than junior lecturers, reflecting their greater research involvement. Despite its availability, challenges such as poor internet connectivity, erratic power supply, lack of training, and heavy workloads hinder optimal utilization. The study concludes that AGORA is a valuable academic resource, but infrastructural and institutional limitations reduce its effectiveness. It recommends improved ICT facilities, regular training, increased awareness, and workload adjustments to enhance lecturers’ access and effective use of AGORA for teaching and research in agricultural sciences.

Keywords: AGORA database, Access to Global Online Research in Agriculture, Lecturers, Faculty of Agriculture, utilization,

Introduction

Internet services and online access to information resources have become useful tools that facilitate effective and efficient conduct of academic activities. Such academic activities include, among others, teaching, learning, research, publishing, collaboration, and communication among lecturers in today’s post-modern world. In the phase of recent advancements in technology, specifically in Information and Communications Technology (ICT), information can be made accessible either through portable media or online access via the internet. Hence, online access to information resources has become an invaluable tool for teaching, research, and other creative output among lecturers. Online access to information



resources has become inevitable for lecturers in all fields of study. Abubakar and Akor (2017), however, noted that lecturers, especially those in the field of agriculture, appear to always need online access to information resources, owing to the diverse nature of information peculiar to the various areas of agriculture and the ever-growing needs for its products.

Online access to Information Resources (OIRs) is information sources that are made available electronically, such as subject-specific research guides, non-online indexes, electronic books and texts, electronic journals, and databases (Ternenge and Kashimana, 2019). Both print and online materials are being added to the library's collection of teaching, learning, and research tools. In addition, many institutions are working around the clock to ensure access to the millions of papers published online each year as a result of the exponential proliferation of knowledge and information (Ugwuany, Eze, Obi, and Ugwuanyi 2013). However, university libraries are under a lot of pressure to give these materials to their faculty members due to a lack of funding (Orsu and Ugwu, 2017). The lecturers in the Faculty of Agricultural Science use mostly the AGORA database to carry out their teaching and research in the field of Agricultural Science.

Agriculture as a discipline in the university includes the study of plants, soil, animals, and the practice of cultivating natural resources to sustain human life and provide economic gain. Agriculture plays a chief role in the economy of every nation, and it is considered to be the backbone of the economic system for developing countries (Lawal, 2021). For decades, agriculture has been related to the production of vital food crops. The present era of farming contains dairy, fruit, forestry, poultry, beekeeping, and many others. Thus, agriculture as a field of discipline is considered an indispensable part of any nation's educational goals.

AGORA is one of the databases hosted on the online meta-database called Research4Life (Omumu, Chenube, and Alordiah, 2022). Research4Life is a public-private alliance involving the World Health Organisation (WHO), Food and Agriculture Organization (FAO), United Nations Environmental Programme (UNEP), World Intellectual Property Organization (WIPO), International Labour Organization (ILO), Cornell and Yale Universities, and up to 200 individual publishers. Research4Life is described by the World Health Organisation (WHO, 2023) as the collective name for the five programs, namely: HINARI, AGORA, OARE, ARDI, and GOALI. Its goal is that researchers working in eligible institutions will be given free or low-cost access to academic and professional peer-reviewed research journals, books, and other resources.



Most university Agricultural Science lecturers in Federal Universities in South-South, Nigeria, notwithstanding the low-cost subscriptions to AGORA through their libraries, still do not widely use the database for effective output. Nnatu, Aghauche, and Nwankwo (2021) assert that university instructors have difficulties related to internet connectivity and time constraints resulting from demanding academic responsibilities, as impediments to their use of the database.

Use is the process of putting something into practice, in the sense of using its potential in a useful way (Ibrahim and Usman, 2023). To put it another way, the term, according to McAbee (2021), refers to the act of making use of something or the process of making use of it efficiently. The actual application of an information system is what is meant by the term "use." Although studies exploring the knowledge and use by lecturers of electronic databases abound in the literature, little is known about lecturers in Agricultural Science as regards their current knowledge and use of AGORA in Federal Universities in South-South Nigeria.

Despite the availability of AGORA, utilization by lecturers varies and is influenced by multiple factors, including awareness, digital literacy, technological infrastructure, and institutional policies. The South-South region of Nigeria, with its agricultural economic base and several federal universities, presents a relevant context to evaluate lecturers' engagement with AGORA. This study seeks to assess the frequencies of utilization variations based on academic rank and barriers to utilization.

Objective

- 1 Frequency of use of AGORA database by lecturers in the Faculty of Agriculture in Federal Universities in South-South, Nigeria
- 2 Frequency of use of AGORA database by lecturers in the Faculty of Agriculture in Federal Universities in South-South, Nigeria, based on their rank

Statement of the Problem

A lot of online databases are available for access by lecturers, and one of the most advanced for those in Agriculture is AGORA. Hence, University libraries in federal institutions in South-South, Nigeria, often subscribe to AGORA. This is to ensure smooth access to databases by lecturers and students in Agriculture, as well as the entire university community. Despite the level of subscription done by most Nigerian Universities and the provision of access through university libraries and repositories, lecturers do not utilize the database to get acquainted with



its use. Although available literature has shown that the use of online databases such as AGORA differs among senior and junior, male and female university staff. However, access to AGORA has been proven to be an inevitable tool for creative output by Agricultural Science lecturers. The need arises, therefore to investigate the lecturers' use of AGORA database in the Faculty of Agriculture in Federal Universities in South-South, Nigeria

Hypotheses

1. There is no significant difference in the mean ratings of senior and junior lecturers on their frequency of use of the AGORA database in Federal Universities in South-South Nigeria.

Literature Review

Online access to research in Agriculture (AGORA)

Electronic information resource (EIR) usage among academic staff in Nigerian universities has been the focus of several studies. In the South-South zone, research shows that AGORA and similar platforms are generally available via university libraries, but usage is uneven. A survey indicated that 36% of lecturers use AGORA 2-3 times per month, while 28% use it 2-3 times per week, suggesting moderate engagement.

AGORA is one of the databases hosted on the online meta-database called Research4Life (Omumu, Chenube, and Alordiah, 2022). Research4Life is a public-private alliance involving the World Health Organization (WHO), the Food and Agriculture Organization (FAO), the United Nations Environment Programme (UNEP), the World Intellectual Property Organization (WIPO), the International Labour Organization (ILO), Cornell and Yale Universities, and up to 200 individual publishers. Its goal is that researchers working in eligible institutions will be given free or low-cost access to academic and professional peer-reviewed research journals, books, and other resources. Additionally, they will receive assistance in developing the skills necessary to play an equal role in the research communication ecosystem. The overall objective, according to Velmurugan (2016), is to narrow the gap in scientific knowledge that exists between low-income and middle-income countries. Access to AGORA, for instance, is offered completely free of charge to institutions located in nations that are on the United Nations' list of Least Developed Countries (LDCs), as well as in those nations. Institutions in the majority of nations that do not satisfy at least one of the aforementioned criteria are required to pay a nominal fee.



Access to Global Online Research in Agriculture (AGORA) was established in 2003 and is currently handled by the Food and Agriculture Organization (FAO), in collaboration with Cornell University and approximately 50 to 60 different publishers. AGORA gives users access to thousands of journals, e-books, and other information resources that are housed in public institutions all over the world. These resources cover the fields of agriculture, fisheries, food, nutrition, veterinary science, and other related areas of the biological, environmental, and social sciences. In the researcher's understanding, AGORA is an online database created specifically to help lecturers in Agriculture in developed and developing nations access important academic and research materials that could enhance their academic works. It is a database that provides easy access to high-quality materials that may have accessibility restrictions, having been made available under Creative Commons by well-meaning organizations

The Use of AGORA among Lecturers

Adekunle (2021) carried out a study on the assessment of the use of electronic databases by academic staff at Bowen University, Nigeria. The results show that the majority of the academic staff were aware of available e-databases and used them to improve teaching delivery and research output. Challenges encountered include inadequate time and an overwhelming workload. The study concludes by recommending a drastic reduction in workload, increasing bandwidth, hotspots, and entrenching customer-friendly policies in the library.

Emmasiegbu and Anaehobi (2021) carried out a study on the challenges to the use of electronic databases by lecturers in government-owned University libraries in Anambra State, Nigeria. Two research questions and two null hypotheses guided the study. The findings of the study indicated that the lecturers accepted that they use EBSCO Host, AJOL, JSTOR, HINARI, AGORA, OARE, DOAJ, DATAD, EBRARY, and Web of Science. The 2 most top challenges are: Lack of user education and guidance on the use of databases, and slow internet connectivity. Based on the findings, it was recommended, among others, that greater publicity should be provided for lecturers and that improvement in the internet connectivity is guaranteed.

Azubuikwe, Ekere, and Orsu (2021) carried out a study on the awareness and utilization of electronic databases for scholarly research by Faculty of Education lecturers in Federal universities in the South-East, Nigeria. Findings from the study revealed that Faculty of Education lecturers are aware of the electronic databases highlighted in the study, and the electronic databases listed are utilized by Faculty of Education lecturers for scholarly research.



The study identified erratic power, shaky network, indifference, know-how deficit, and poor computer literacy as hiccups of awareness and utilization of electronic databases for scholarly research. The study recommends that institutional heads and management should be sensitized on the need and importance of subscribing to relevant databases; and training and Re-training of lecturers, as well as library staff, should be constant among others.

Ugonna (2022) carried out a study on the utilization of electronic resources for teaching and research among lecturers in the University of Nigeria, Nsukka. The findings showed that the most utilized is the e-journal (45%), followed by the e-books (39.72%). The most utilized search engines were Google (50%) and Yahoo (32.22%). The major challenges in the utilization of e- resources within the institution include coping with too much information (46.76%) and restriction of access to some resources (28.89%). It was recommended, among other things, that there is a need for the University of Nigeria Nsukka, management organize workshops, seminars, and lectures to train lecturers on how to use the various search engines.

Oghenetega (2022) carried out a study on the usage of electronic academic database resources among lecturers and postgraduate students in Western Delta Universities (WDU), Oghara, and Delta State. The findings showed that there was a high level of awareness of the electronic academic database by the lecturers and postgraduate students, and they equally made use of it.

Barriers to the Use of AGORA Database by Lecturers

Several studies have examined the barriers that lecturers in Nigerian universities face in using electronic databases, including AGORA (Access to Global Online Research in Agriculture). These challenges are often centered on technological, educational, and infrastructural issues.

Research conducted by Aghauche & Nwankwo, (2021) indicates that slow internet connectivity and inconsistent power supply are among the primary barriers hindering effective use of electronic databases by lecturers in Nigerian universities. Anaehobi & Emmasiegbu (2021). A study conducted in government-owned universities in Anambra State identified slow internet speed as the most significant constraint for database use, which affects the ability to retrieve and download relevant academic materials efficiently.

Another major barrier is the lack of user education and training on how to navigate and utilize electronic databases effectively. Lecturers often report difficulties in terms of search techniques and using database features optimally. This lack of guidance reduces their confidence and frequency in using AGORA and other online resources (Azubuike et al., 2021). Studies at Delta State University found that without regular training sessions and workshops, academic staff



struggle to maximize the benefits of these databases. Academic librarians have been recommended to offer regular user education to bridge this gap (Azubuike et al., 2021; Anaehobi & Emmasiegbu, 2021).

Methodology

This study adopted a descriptive survey research design to investigate the use of the AGORA database among lecturers in the Faculties of Agriculture in Federal Universities in South-South, Nigeria. The population comprised all academic staff in these faculties, stratified by rank to allow comparative analysis. A purposive sampling technique was used to ensure adequate representation across the selected universities.

Data were collected using a structured questionnaire divided into four sections: demographic information, frequency of AGORA use, usage by academic rank, and barriers to utilization. Items were measured on a four-point Likert scale ranging from Very Much Often (4) to seldom (1). The instrument was subjected to expert review for content validity, while reliability was established through a pilot test outside the study area, yielding a Cronbach’s Alpha coefficient of 0.82.

The questionnaires were administered both physically and electronically to maximize response rates. Data collected were analyzed using descriptive statistics (mean and standard deviation) to answer the research questions, while an independent samples *t-test* was employed to test the null hypothesis at a 0.05 level of significance. A decision mean of 2.50 was used as the benchmark for interpreting responses.

Analyses

Research Question 1: What is the frequency of use of the AGORA database by lecturers in the Faculty of Agriculture in Federal Universities in South-South, Nigeria?

Table 1: Frequency of Use of AGORA Database by Lecturers in the Faculty of Agriculture in Federal Universities

S/N	Items	Mean	Decision
1	To support my teaching activities	2.50	Often
2	For administrative purposes	2.23	Often
3	For Literature search	2.47	Often
4	To search for new information	2.50	Often
5	When I need to access full-text articles	2.84	Often
6	To read abstracts and bibliographic citations	2.39	Often
7	To support my research work	3.03	Much often
8	For lecture preparation	2.39	Often
9	To update my knowledge	3.39	Much often



10	To provide extensive links to additional resources related to the contents that intrigue me	3.09	Much often
11	To support my study activities	3.42	Much often
12	For my administrative duties	1.47	Seldom
13	When establishing a gap in the literature	3.10	Much often
14	When I need new information in my field	3.18	Much often
15	When I need to access articles on novel phenomena	3.44	Much often
16	To read about patterns of new findings that deviate from the status quo	3.16	Much often
17	To search for in-depth knowledge in a new field of discovery	3.19	Much often
18	To prepare an evaluation of the topics taught	2.42	Often
19	To guide students during their literature search	2.47	Often
	Grand mean	2.8	

Table 1 shows that the grand mean is 2.84, which falls within the range of values of 2.50 – 3.49 (more often), indicating that the lecturers in the Faculty of Agriculture in Federal Universities in South-South, Nigeria, use the AGORA database more often. Thus, the frequency of use of the AGORA database among lecturers in the Faculty of Agriculture in Federal Universities is ‘much often’.

Research Question 2: What is the frequency of use of the AGORA database by lecturers in the Faculty of Agriculture in Federal Universities in South-South, Nigeria, based on their rank?

Table 2: Frequency of Use of AGORA Database by Lecturers in the Faculty of Agriculture in Federal Universities

S/N	Items: I use Agora	Senior		Junior	
		Mean	Decision	Mean	Decision
1	To support my teaching activities	2.29	Often	2.28	Often
2	For administrative purposes	2.18	Often	2.28	Often
3	For Literature search	2.42	Often	2.23	Often
4	To search for new information	2.47	Often	2.21	Often
5	When I need to access full-text articles	2.10	Often	2.29	Often
6	To read abstracts and bibliographic citations	2.18	Often	2.24	Often
7	To support my research work	3.18	Much often	3.23	Very much often
8	For lecture preparation	2.6	Often	2.22	Often
9	To update my knowledge	3.68	Very much often	3.26	Much often
10	To provide extensive links to additional resources related to the contents that intrigue me	3.81	Very much often	3.24	Much often
11	To support my study activities	2.69	Much often	2.28	Often
12	For my administrative duties	2.66	Much often	2.28	Often
13	When establishing a gap in the literature	3.67	Very much often	3.23	Much often



14	When I need new information in my field	3.74	Very much often	3.21	Much often
15	When I need to access articles on novel phenomena	3.58	Very much often	3.29	Much often
16	To read about patterns of new findings that deviate from the status quo	3.68	Very much often	3.24	Much often
17	To search for in-depth knowledge in a new field of discovery	3.62	Very much often	3.23	Much often
18	To prepare an evaluation of the topics taught	3.70	Very much often	3.27	Much often
19	To guide students during their literature search	2.71	Much often	2.26	Often
Grand Mean		3.0		2.7	

Table 2: further shows that senior lecturers have an average mean response rating of 3.0, which falls within the range of values of 2.50 – 3.49 (most often), and use AGORA more often. Again, the junior lecturers have an average mean response rating of 2.7, which falls within the range of values of 2.50 – 3.49 (often), use AGORA often. This implies that both senior and junior lecturers in the Faculty of Agriculture in Federal Universities in South-South, Nigeria, use AGORA often. The disparities in the frequency of use of the AGORA database by both the senior and junior lecturers are shown in Figure 2.

Frequency of Use of AGORA Database by Senior and Junior Agriculture lecturers

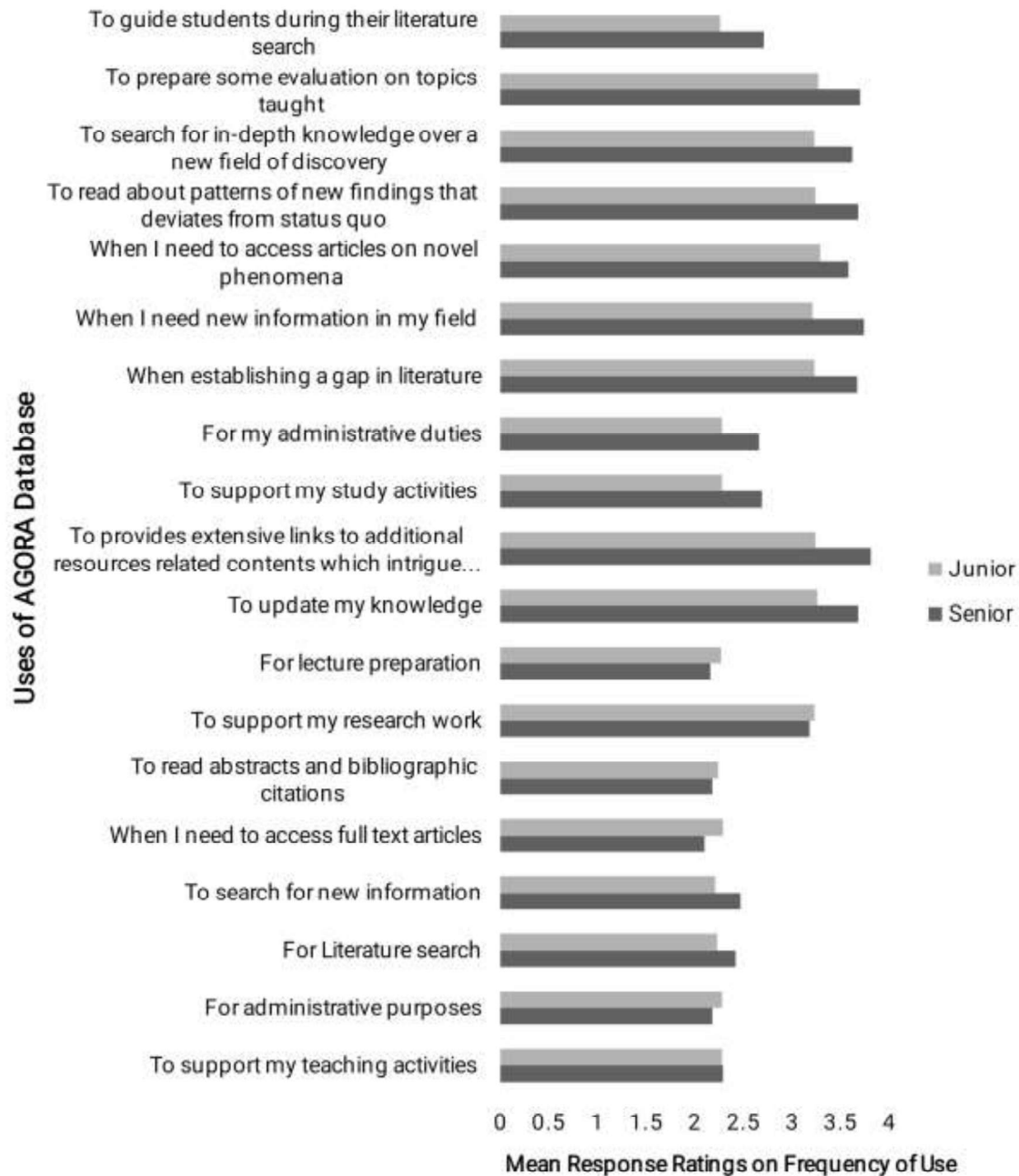


Figure 3: Bar Chart Showing Mean Response Ratings of the Senior and Junior Faculty of Agriculture Lecturers on Their Frequency of Use of the AGORA Database



Test of Hypotheses

Hypothesis 1: There is no significant difference in the mean ratings of senior and junior lecturers on their frequency of use of the AGORA database in Federal Universities in South-South Nigeria.

Table: Summary of t-test Analysis significance of difference in the Mean Achievement Scores of Senior and Junior Lecturers on Knowledge of AGORA

Rank	N	Mean	SD	Df	t	P-value	Decision
Senior	59	2.97	0.67	18	4.340	0.000	Sig.
Junior	108	2.73	0.51				

In the table, the t-calculated value is 4.340 while the P-value is 0.000. At a 0.05 level of significance and 18 degrees of freedom, the P-value is less than 0.05 and therefore the null hypothesis is rejected. The Researcher then concludes that there is a significant difference in the mean ratings of senior and junior lecturers on their frequency of use of the AGORA database in Federal Universities in South-South Nigeria.

Discussion of Results

The study found that lecturers in the Faculty of Agriculture in Federal Universities in South-South Nigeria use the AGORA database quite frequently, with an overall mean frequency rating indicating "much often" usage. This shows that lecturers recognize the value of AGORA in supporting their teaching, research, and knowledge updating activities. Senior lecturers tend to use AGORA slightly more often than junior lecturers, a statistically significant difference. This may be because senior lecturers have longer experience and more research responsibilities, which require greater use of scholarly resources.

These results align with previous research showing that lecturers are aware of AGORA and similar electronic databases and use them to enhance their academic work, but usage levels vary among individuals based on factors like academic rank (Adekunle, 2021; Emmasiegbe & Anaehobi, 2021). However, the use of AGORA is not without challenges. Key barriers such as slow internet connectivity, inconsistent power supply, lack of sufficient training and guidance in using electronic databases, and access issues with login credentials have been widely reported (Anaehobi & Emmasiegbe, 2021; Azubuikwe et al., 2021). These infrastructural and knowledge gaps hinder the maximum utilization of AGORA by lecturers despite its availability.



Furthermore, time constraints due to heavy workloads limit lecturers' ability to explore and use AGORA fully (Nnatu, Aghauche & Nwankwo, 2021). This is consistent with other findings that note academic responsibilities and limited ICT support as significant barriers to electronic database use in Nigerian universities.

Recommendations

Based on the findings, the following recommendations are made to enhance the use of the AGORA database by lecturers:

1. **Improve ICT Infrastructure:** Universities should invest in stable and high-speed internet access and reliable power supply to ensure uninterrupted access to AGORA and other electronic resources.
2. **Regular Training and Workshops:** Academic libraries should regularly organize practical training programs to improve lecturers' skills in navigating AGORA and other databases. This will increase confidence and effective utilization of available resources.
3. **Increase Awareness and Motivation:** University management and librarians should create awareness campaigns highlighting the benefits of AGORA for teaching and research. Encouraging lecturers to integrate AGORA materials into their coursework will also boost usage.
4. **Provide Adequate Access Credentials:** Institutions must ensure that all eligible lecturers have seamless access to login credentials for AGORA, minimizing access frustration.
5. **Manage Workload to Facilitate Research:** Academic administrators should consider workload management strategies to allow lecturers sufficient time to engage deeply with databases like AGORA.

Conclusion

The study concludes that while the AGORA database is frequently used by lecturers in Federal Universities' Faculty of Agriculture in South-South Nigeria, its utilization is influenced by several factors, including academic rank, with senior lecturers using it more often than their junior counterparts. Despite availability, usage is challenged by infrastructural issues such as slow internet and power outages, as well as a lack of adequate training and institutional support.

Addressing these challenges through improved infrastructure, targeted training, and institutional policies facilitating easier access and encouraging utilization will significantly



enhance the academic productivity of lecturers. This will ultimately contribute to improved research outputs and quality teaching in agricultural sciences across universities in the region.

References

- Abubakar, B. M. and Akor, M. (2017). *Availability and Utilization of Electronic Information Databases for Research by Agricultural Scientists in Federal University Libraries in North Central Nigeria*. 1600 Retrieved from on 11/02/2023
- Adekunle, P.A. (2021). An assessment of the use of electronic databases by academic staff, Bowen University, Nigeria. *International Journal of Library and Information Services*, 10(2), 1-15.
- Azubuikwe, F., Ekere, F.C. & Orsu, N. (2021). *Awareness and utilization of electronic databases for scholarly research by Faculty of education lecturers in federal universities in South East, Nigeria*. Retrieved from on 03/07/2023 Article 5797
- Emmasiegbe, M. and Anaehobi, S. E. (2021). Challenges to the use of electronic databases by lecturers in government-owned University libraries in Anambra State, Nigeria. *Library Philosophy and Practice (e-journal)*, 1(1), 1-17.
- Ibrahim, H. and Usman, M.A. (2023). Utilization of information and communication technology (ict) for teaching and learning of science and technical subjects in senior science and technical colleges for sustainable economic development in North-Eastern geopolitical zone of Nigeria. *International Journal of Innovative Information Systems & Technology Research*, 11(1), 41-53.
- Lawal, M.T. (2021). *Awareness, availability and utilization of databases among undergraduate students of federal university of agriculture Makurdi Benue State*. Retrieved from digitalcommons.unl.edu/libphilprac on 11/02/2023. Article 5109
- McAbee, J. (2021). *Why utilization plays a big role in understanding performance*. Retrieved from <https://www.wrike.com/blog/understanding-utilization-project-understanding-performance/>
- Nnatu, A.U., Aghauche, E.E. and Nwankwo, T.V. (2021). Lecturer's level of knowledge and challenges to the use of online access to research in environmental (OARE) database in Federal Universities in South East, Nigeria. *Review of Information Science and Technology*, 7, 12-31.
- Oghenetega, I. (2022). Usage of electronic academic database resources among lecturers and postgraduate students in Western Delta Universities, Oghara, Delta State. *Library Philosophy and Practice (e-journal)*, 7(3), 2-14.



- Omumu, F.C., Chenube, O. and Alordiah, C.O. (2022). Low utilization of online research resources by lecturers: Causes and remedies. *Information and Knowledge Management*, 14(4), 1-7.
- Orsu, E. N., & Ugwu, C. I. (2017). Challenges of utilization of online information resources by undergraduate students: Implications for information services. *Library Philosophy and Practice*, 16(1), 1-30.
- Ternenge, T. S. and Kashimana, F. (2019). Availability, accessibility, and use of electronic resources for research by students in Francis Sulemanu Idachaba Library University of Agriculture, Makurdi. *Library of Philosophy and Practice*. (e.journal) 2352. Retrieved June 15, 2021
- Ugonna, B. F. (2022). Utilization of electronic resources for teaching and research among lecturers in University of Nigeria, Nsukka. *Library Philosophy and Practice* *Library Philosophy & Practice*
- Ugwuanyi, A., Eze, M. E., Obi, I. C., & Ugwuanyi, E. I. (2013). Open access to knowledge: Perception of librarians in colleges of education in South-East Nigeria. *Journal of Educational and Social Research*, 3(4), 29–35. <https://doi.org/10.5901/jesr.2013.v3n4p29>
- Velmurugan, C. (2016). Awareness and utilization of e-resources by faculty members with special reference to an engineering college, Chennai, Tamil Nadu, India – A case study. *International Journal of Library and Information Studies*, 6(3), 67–73.