

RESEARCH OUTPUT OF LIBRARIANS IN AGRICULTURAL RESEARCH INSTITUTES IN NIGERIA, 2003-2008

Olalekan A. Adekunjo
Kenneth Dike Library
University of Ibadan
Ibadan, Oyo State, Nigeria
Blessing_adekunjo@yahoo.com

Priscilla E. Ikhioya
Ambrose Alli University
Ekpoma, Edo State, Nigeria

and

Susan A. Tomomowo-Ayodele
Kenneth Dike Library
University of Ibadan
Ibadan, Oyo State, Nigeria

ABSTRACT

This study investigated the research output of librarians in Agricultural Research Institutes (ARI) in Nigeria between 2003-2008 with special reference to Oyo and Edo States. A survey research design was employed and the instruments used for data collection were questionnaire and interviews. 20 out of the 22 librarians in the selected Agricultural Research Institutes completed the questionnaire, thus giving a response rate of 90.91%. Simple percentages, pie chart as well as bar charts were used for the presentation of the data collected. Some of the major findings of the study include the following: the more experienced librarians published more than their other less experienced colleagues; publication output was the least used criterion for the promotion of librarians in the Agricultural Research Institutes, and the major challenge to librarians was lack of funds to support research activities. In the light of these findings, some recommendations were proffered to enhance the research output of the librarians. Among these include: that publication should be regarded as a vital criterion for promotion of librarians; librarians should be encouraged to conduct research and publish their findings since research is the focus of their institutes; and librarians should be assisted to attract grant for their research activities.

Keywords: Agricultural Research Institutes, Nigeria; Librarians, Research Output; Publication Output

INTRODUCTION

Research as a concept has been defined by various scholars in deferent fields of endeavours. In the general sense, it is regarded as a carefully planned and executed enquiry based on application of scientific methods. Its objectives are to discover something new, develop new

the other hand, is a systematic process of studying all the methods involved in the acquisition, processing, organization, preservation and dissemination of information and services to library patrons which they harness to develop themselves and the nation at large.

The term research has been defined by scholars in different disciplines to suit their own whims. For instance, Franchezzo (1998) as quoted by Ifidon and Ifidon (2007) defined research as:

Man's systematic and empirical investigation into existing but hidden elements in nature with a view of unearthing, restructuring and explaining such elements for the purpose of development. Specifically, it is a human activity whereby answers are sought, with as great an approximation of truth and accuracy as human knowledge makes possible, to basic or fundamental questions concerning the phenomena of the universe. (pg:15)

However, to individuals like Aina (2002), research is the systematic and objective analysis and recording of controlled observations that may lead to the development of generalizations, principles, theories resulting in prediction and ultimate control of many events that may be consequences or causes of specific activities. According to Era (2010), all research output must meet this definition of research: 'The creation of new knowledge and/or the use of existing knowledge in a new and creative way so as to generate new concepts, methodologies and understandings. This could include synthesis and analysis of previous research to the extent that it is new and creative. The format of research output could be a volume of proceedings, a special edition of a journal, a book or monograph, CD-ROM or DVD, or on a conference or organizational website.

Based on the foregoing, research in librarianship should not be toyed with or conducted without focus. It must follow a systematic procedure in order to arrive at a valid, reliable and acceptable conclusion. Such research should not be for the sake of library development alone, but for the overall development of the nation. This is because results of every research conducted and codified must find their way into the library where such information resources can be housed and utilized by scholars and researchers who need it (Adewumi, 2003). The results are usually reported in a primary source or in a monograph by the

researcher(s) who conducted the study (Reltz, 2004).

Librarianship research is the research conducted by an investigator in librarianship for the purpose of promoting librarianship education, practices, administration, etc. At the moment, librarianship as a profession has attained sophisticated dimensions as a result of modern technologies. Librarians now talk about information technology, computerization of library systems, archival practices and administration, to mention but a few examples. With this development, librarianship research is fast growing into a body of theories and research findings.

The complexities of the administration of library and information systems now generally force many decisions to have important scientific and technological components, even though these might not always be perceived clearly by the persons who are making the decisions. These complexities imply that librarians must get involved in scientific research in their profession. But what is scientific research in librarianship? Alkaleri (1999) stated that it is a process by which librarians can acquire more accurate knowledge and understanding of libraries and librarianship. Edom (2006) stated that research must follow a systematic procedure in order to arrive at a valid, reliable and acceptable conclusion. Such research is not for library development alone, but for the overall development of the nation. This is because the results of every research conducted and codified must be publicized through the library where the information resources can be disseminated and utilized by scholars and researchers who need it. Oduwole and Ikhizama (2007) further stressed that librarians are required to do research in their profession to remain focused and relevant.

To assist in the realization of the mandates of these specialized research institutes, libraries form an essential part of their operations. The libraries collect, process, store and disseminate information relevant to their organizations' interest and objectives. The role of agricultural research libraries in the provision of agricultural related information is very important. Agricultural Institute libraries have the role of supplying both current and retrospective information from the ever-increasing volumes of agricultural information to enable the researchers produce quality research (Obasuyi, 2006). Similarly, Nkoye (2008) postulates that librarians are expected to provide value-added services by carrying out searches across a range of information resources, download results, analyze and repackage information to suit the users' needs.

Research, according to Aina (2002), is generally a complex process that is besieged with a lot of obstacles. The ability to surmount the obstacles can be considered to be the core of research. Quite often, people have entered librarianship with hardly any academic background beyond post-secondary diplomas, while others became librarians after the acquisition of a first degree. In either case, majority do not advance beyond the acquisition of a master's degree.

Aina and Adedigba (1995) are of the view that there are inadequate numbers of well trained agricultural information specialists which makes it impossible for libraries and documentation centers to perform the functions expected of them. This is due to the fact that there is yet no school in Africa where agricultural information specialist can be trained while majority of the personnel manning agricultural libraries and documentation centers lack sufficient agriculture or related science subject background. Libraries were also established in the Agricultural Research Institutes to support the effort of agricultural research scientists' toward discovering improved food varieties and livestock breeds. Another objective of setting up these libraries is to acquire, process and make available materials pertinent to the research and training activities of the institutes through various means including reference and current awareness services (Adedigba and Lawani, 1995). According to Chukwu (1991), librarians in Agricultural Research Institutes have research responsibilities. This is due to the fact that the operations in the library readily lend themselves into scientific investigation, constant review, improvement and innovation. It is therefore necessary that they should conduct research into various aspects of library and information services in order to provide efficient and effective library and information services.

This study was therefore conceived to assess the situation with librarians in the Agricultural Research Institutes in Nigeria and to determine whether or not they are publishing like their counterparts in the universities. In order to do justice to this research work, the authors formulated the following research questions

RESEARCH QUESTIONS

The following research questions were addressed in this study:

- (i) What is the nature of research outputs of librarians in Agricultural Research Institutes between 2003 and 2008?
- (ii) What is the place of research publication as criterion for

- promotion in the selected Agricultural Research Institutes?
- (iii) What are the problems associated with research in agricultural research institutes?
- (iv) How can the Research output of librarians in Agricultural Research Institutes be enhanced?

METHODOLOGY

The research design employed in this study was the survey design method. The population of the study comprises 22 librarians of the selected agricultural research institutes. The sample therefore consists of the total number of the librarians in the selected Agricultural Institute. This is further analysed in Table I.

**TABLE I:
STUDY POPULATION**

S/No.	Libraries	No. of Librarians	Location
1.	International Institute for Tropical Agriculture (IITA)	4	Ibadan, Oyo State
2.	Institute of Agricultural Research and Training (IAR&T) Obafemi Awolowo University	4	Ibadan, Oyo State
3.	National Cereal Research Institute of Nigeria (NCRI)	2	Ibadan, Oyo State
4.	National Horticultural Research of Nigeria (NIHORT)	5	Ibadan, Oyo State
5.	Forestry Research Institute of Nigeria (FRIN)	3	Ibadan, Oyo State
6.	Rubber Research Institute of Nigeria (RRIN)	2	Benin City, Edo State
7.	National Institute For Oil Palm Research (NIFOR)	2	Benin City, Edo State
Total		22	

Twenty two (22) copies of the questionnaire (100% of the population) were distributed to the librarians in the seven selected Agricultural Research Institutes. That is, 5 Agricultural Research Institutes in Ibadan, Oyo State and 2 in Benin City, Edo State. The researchers personally administered the questionnaire to the respondents. Out of the 22 copies of the questionnaire administered, 20 (90.91%) were returned to the

researchers and found useable at the end of the exercise. The data collected from the study were analyzed using frequency counts and simple percentages.

FINDINGS

The data generated from the study was presented and analyzed using descriptive statistics. Frequency tables, percentages, mean and standard deviation were the statistical tools used for the analysis.

**TABLE II:
SEX OF RESPONDENTS**

Sex	No of Respondents	%
Female	12	60
Male	8	40
Total	20	100

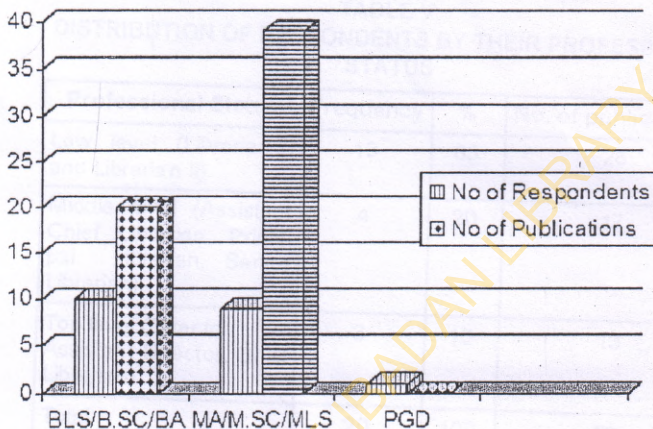
Table II shows that out of the 20 respondents 12 (60%) were female, while 8(40%) were male. This implies that there are more female Librarians in Agricultural Research Libraries in Nigeria than their male counterpart.

**TABLE III:
RESPONDENTS' DISTRIBUTION ACCORDING TO ACADEMIC
QUALIFICATION**

Qualification	No of Respondents	%	No. of publications
BLS/B.Sc/B.A.	10	50	20
M.A/M.SC/MLS	9	40	38
P.GD	1	10	-
Total	20	100	58

In Table III, the response rate shows that 10 (50%) of the respondents have BLS/B.SC/B.A., 9 (40%) of the respondents have M.A/M.SC/MLS while 1 (10%) of the respondents has P.G.D in Library Science. The table clearly shows that librarians with Master degree publish more with 38 publications; first degree holders have 20 publications while the post graduate diploma holder has no publication. This result was further illustrated in Figure 1 below.

FIGURE I:
BAR CHART SHOWING RESEARCH OUTPUTS BASED ON
ACADEMIC QUALIFICATIONS OF LIBRARIANS



From Figure I above, it could be seen clearly that librarians with master's qualifications conduct more research than those in the other categories hence the highest research outputs as indicated in the figure. On the other hand, the librarian with post graduate diploma who constituted the least group from this survey, is yet to have any publication.

TABLE IV:
RESPONDENTS' DISTRIBUTION BASED ON WORK EXPERIENCE

Years of experience	No. of Respondents	%	No. of Publications
Over 20 years	9	45	28
1-10 years	7	35	20
11-20 years	4	20	10
Total	20	100	58

With respect to librarians' working experience, the analysis shows that majority of the librarians were experienced on the job as they had put in many years in the practice of librarianship. 9 (45%) have over 20 years

experience, 7 (35%) have between 1-10 years experience while 4 (20%) were in the range of 11-20 years of experience. The table also shows that librarians with over 20 years of experience have more research publications than the other categories.

**TABLE V:
DISTRIBUTION OF RESPONDENTS BY THEIR PROFESSIONAL
STATUS**

Professional Status	Frequency	%	No. of publications
Low level (Librarian I and Librarian II)	13	65	28
Middle level (Assistant Chief Librarian, Principal Librarian, Senior Librarian)	4	20	17
Top level (Director, Assistant Director, Chief Librarian)	3	15	13
Total	20	100	58

The distribution of respondents by their professional status reveals that the low level librarians were 13 (65%), middle level librarians were 4 (20%) while the top level librarians were 3 (15%). The table therefore reveals that librarians in the lower level cadre constitute the majority in Agricultural Research Institutes.

**TABLE VI:
RESEARCH OUTPUT OF LIBRARIANS
BETWEEN 2003 – 2008**

No. of Publications	Frequency	%
0	1	5
1-5	18	90
6-10	-	-
11-15	1	5
Total	20	100

Table VI shows the research output of librarians between 2003 and 2008. 18 (90%) of the respondents have 1-5 papers, 1(5%) of the

respondents have not done any research, while 1 (5%) of the respondents has 12 research publications. The implication of this result shows that librarians in Agricultural Research Institutes do not contribute meaningfully to knowledge creation.

TABLE VII: DISTRIBUTION OF RESPONDENTS BY THEIR AREAS OF RESEARCH

Categories	Frequency	%
Information Management	8	40
Agricultural Information	7	35
Preservation of Library Materials	4	20
Bibliographic Compilation	1	5
Total	20	100

Table VII shows the research areas on which the librarians have published. The most common area of research is Information Management 8(40%) and Agricultural Information 7(35%). Other areas include Preservation of Library Resources 4 (20%) and Bibliographic Compilations 1(5%). Further analysis of this result is shown in Figure 2 below.

**FIGURE 2:
RESPONDENTS' AREAS OF RESEARCH**

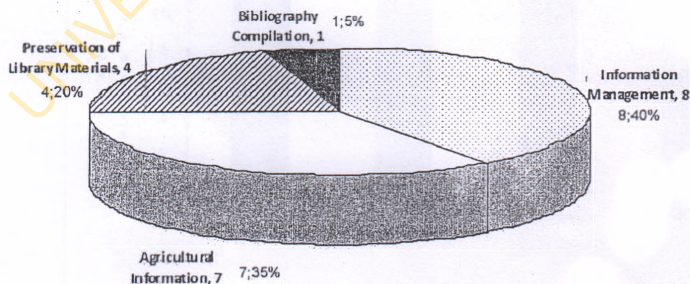


Figure 2 is a pie chart showing the respondents areas of research in

which information management has the largest sector while bibliographic compilation has the smallest sector. The implication of this is that more of the researches carried out by the librarians in Agricultural Research Institutes are tilted towards information management in those research institutes.

TABLE VIII:
PLACE OF PUBLICATION AS CRITERIA FOR PROMOTION

Criteria For Promotion	No. of Respondents	%
Number of years	11	55
Professional/ Academic qualification	11	55
Job performance	11	55
Number of Publication	7	35

In Table VIII, a list of criteria was given and the respondents were asked to tick as many as possible that applied to their promotion. Numbers of years on the job, professional/academic qualification and job performance were ranked highest with 55% each. Research output in terms of number of publications was ranked least with 35%. This is further presented in Figure 3.

FIGURE 3:
CHART SHOWING CRITERIA FOR PROMOTION

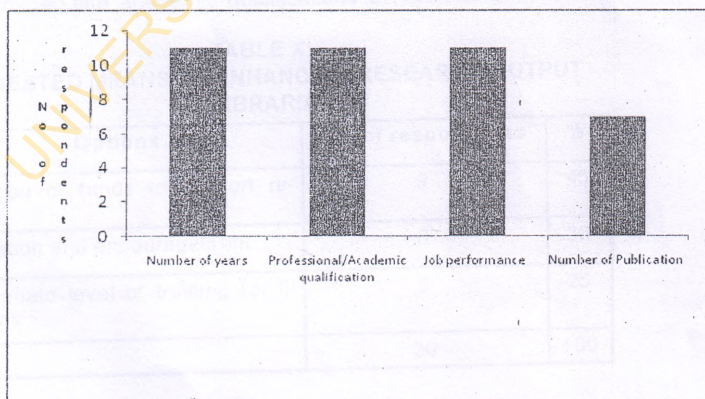


Figure 3 indicates that publications ranked least thereby lending credence to the fact that research publication is the least used criterion for promoting librarians in the agricultural research institutes.

**TABLE IX:
PROBLEMS FACING RESEARCH OUTPUT OF LIBRARIANS**

Option	No. of respondents	%
Inadequate funding of research	8	40
Poor information and communication infrastructure	5	25
Inadequate outlets for reporting research findings	4	20
Inadequate academic qualifications	2	10
Workload	1	5
Total	20	100

Table IX shows that inadequate funding (8 or 40%) was the greatest problem confronting librarians in carrying out research. Other problems identified include poor information and communication technology infrastructure 5(25%), inadequate outlets for reporting research findings 4 (20%), inadequate academic qualifications 2 (10%) and workload 1 (5%).

**TABLE X:
SUGGESTED MEANS OF ENHANCING RESEARCH OUTPUT OF LIBRARIANS**

Options	No. of respondents	%
Provision of funds to support research	9	45
Motivation and encouragement	6	30
Appropriate level of training for librarians	5	25
Total	20	100

Table X shows that provision of funds to support research was the major means of enhancing research output of librarians (9 or 45%). Moreover, 6 (30%) of the respondents were of the view that motivation and encouragement of librarians to carry out research is the right mean to enhance librarians' research output. 5 (25%) of the respondents suggested that appropriate level of training should be given to librarians.

DISCUSSION OF FINDINGS

From the foregoing findings on the research outputs of librarians in agricultural research institutes, a number of issues were revealed. These are discussed below.

From the findings, it is evident that there is a positive relationship between the years of experience of librarians' in Agricultural Research Institutes and their publication output. The librarians with more years of experience had published more than their colleagues. For the promotion of librarians in agricultural research institutes in Nigeria, little or no emphasis was placed on research output. This corresponds with the opinion of Aina and Adedigba (1995) who were of the view that there are inadequate number of well trained agricultural information specialist which makes it almost impossible for agricultural libraries and documentation centres to effectively perform the functions expected of them. It was revealed in this study that publication was the least used criterion in the promotion of librarians in Agricultural Research Institutes. This finding contradicts the opinions of Oduwole and Ikhizama (2007) who stated that librarians agricultural institutions are required to do research in their profession in order to remain focused and relevant.

A lot of problems were identified as factors hindering the research endeavours of librarians in Agricultural Research Institutes. Chief among these problems is inadequate funding of research. Librarians in research institutes fund their research from their personal incomes. This has reduced the level of their research endeavours. Other problems identified are low academic qualifications of the librarians.

Most librarians in Agricultural Research Institutes are not exposed to the use of ICT. This could be as a result of lack of ICT knowledge, lack of ICT infrastructure and the unwillingness of traditional librarians to adapt to the ICT trend among others. This is not supposed to be so as Nkoye (2008) opines that librarians are expected to provide value-added services by carrying out searches across a range of information resources, download results, analyze and repackage information to suit the users' needs

CONCLUSION

Librarianship is a service-oriented profession and the library is a service organization that seeks to render information services to patrons at all cost. It is an indisputable fact that research often sharpens skills and broadens perspectives for the daily services provided. The realization of this fact in agricultural research institutes environment should in itself be a motivating factor to publish.

As shown in the study, some of the pressing problems hampering research output of librarians are lack of financial support, poor information and communication technology, inadequate outlet for reporting research findings, inadequate academic qualification and work overload. Librarians are therefore encouraged to acquire higher degrees such as Ph.D, as this will improve their research capabilities, especially those in agricultural research institutes in Nigeria.

RECOMMENDATIONS

Guided by the findings of this study, the researchers wish to proffer the following recommendations for consideration:

- Current research trends which generally tend to support intra and inter-disciplinary collaborative approach to research should be encouraged among librarians. This will help to develop the requisite skills to conduct library research, gain knowledge of research methods and statistical analysis.
- ICT infrastructure as well as training should be made available in agricultural research institutes. This will enhance research productivity.
- Publications should be given priority attention during promotion exercise as this will motivate the librarians to carry out research, publish and contribute to knowledge.
- The more experienced librarians should see the need to mentor the younger ones on how to improve on their research activities as this will go a long way to enhance the level of research output in the agricultural institutions
- Parent organizations should endeavour to make grants available to librarians to conduct research in their respective institutions.

REFERENCES

- Adedigba, Y. A. and Lawani, S. M. (1995) The International Institute of Tropical Agriculture (IITA) Library and Documentation Centre. [In] **Agricultural Information**. Edited By Aina, L.O, Kànikì, A.M, And Ojiambo, J.B. Ibadan: Third World Information Service.
- Adewumi, C.O.B. (2003) "Information Seeking Habits and Needs of Agricultural Research Scientists in Ibadan Metropolis". *Gateway Library Journal* 6(1)34-43
- Alkaleri, U.A (1999) **Fundamentals of Research**. Kaduna: Institutes of Management Consultants.
- Aina, L.O (2002) **Research Information Science: An African Perspective**. Ibadan: Stirling – Horden Publishers.
- Aina, L. O. and Adedigba, Y. A. (1995) The Development of Agricultural Information in Nigeria. In Aina, L. O.; Kaniki, A. M, and Ojiambo, J. B., (Eds). **Agricultural Information in Africa**. Ibadan: Third World Information Service
- Ayo, O. (2004) **Basics of Librarianship: Theory and Practice: A Guide for Beginners**. Lagos: Omega Publisher.
- Chukwu, O. C. (1991) "Academic Librarian in the Nigerian University System": A Status Appraisal. *Library Bulletin: Nigeria University Library System* 3(1&2). 1-34.
- Edom, B.O. (2006) "The Role of Library and Information Science Research in National Development". *Communicate: Journal of Library and Information Science* 8(2). 29-38.
- ERA (Eligible Research Output) (2010) **Definition of Research**. Flinders University http://www.flinders.edu.au/research/era/era_eligibility.cfm. (Accessed 2010 October 20).
- Ifidon, S. E. and Ifidon, E. I. (2007) **Basic Principles of Research Methods**. Benin City: Goodnews Express Communications.
- Ishola, S. A. (1993) Funding Agricultural Research. **Proceedings of The National Agricultural Research Project on National Agricultural Research Strategy Plan for Nigeria**. The National Agricultural Research Project.
- Nkoye, F. (2008) The Digital Age: Changes and Challenges to Librarians in Nigerian University Library. *Delta Library Journal*, 2(1&2). 48-57.
- Nworgu, B.G. (1991) **Education Research: Basic Issues and Methodology**. Owerri: Wisdom Publishers Ltd.
- Obasuyi, L. (2006) "The Impact of Computer and Internet Applications on National Agricultural and Research Institutes' (NARI'S) Library Service". *Gateway Library Journal* 9(1). 25-27

- Oduwole, A. A. and Ikhizama, B. O. (2007) "Research Output of Librarians in Nigerian Agricultural Research Institutes". *Nigeria Libraries: Journal of Nigerian Library Association* 40(1&2). 27-53.
- Okigbo, B.N. (1993) Agricultural Research Policies, Objectives and Priorities: A Critical Review. [In] *Proceedings of the National Agricultural Research Plan for Nigeria*. Ibadan: National Research Project.
- Osuala, E.O. (1993) *Introduction to Research Methodology*. Onitsha: African Publishers.
- Shaib, B. (1997) *Nigeria: National Agricultural Research Strategy Plan: 1996-2010*. Abuja: Federal Ministry of Agriculture and National Resources.
- Reltz, J.M. (2004) *Dictionary of Library and Information Science*. Westport: Libraries Unlimited.

UNIVERSITY OF IBADAN LIBRARY