

**AGRICULTURAL RESEARCH IN NIGERIA:  
THE ROLE OF THE NIGERIAN STORED PRODUCTS RESEARCH  
INSTITUTE LIBRARY(NSPRI)**

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**Abstract**

The management of the library of NSPRI, a post harvest research institute allowed both internal and external users to access the information resources in the library. The usage of the library by five hundred and thirty (530) external users and their perception of the operation of the library from the year 2001– 2005 was x- rayed in this write-up. The external users were mainly from tertiary institutions around the city. However, some of the users came from a distance that is over 1000 kilometers to the location of the library. This shows that distance is not a barrier to information seekers. The study revealed that students from the University of Ilorin consistently dominated the usage of the library and that literatures relating to agricultural crops, presently being boosted for increase in production by the Nigerian government were consulted most. Recommendations were made towards improving the services of the library and making it more conducive for use, so that users can continue to benefit from the collections and the Institute shall through that continue to contribute to reduction of post harvest loss of agricultural crops in Nigeria.

Key Words: Agricultural Information, Nigerian Stored Products Research Institute (NSPRI), Special Library.

**Introduction**

The Nigerian Stored Products Research Institute (NSPRI) was established in 1948 as West African Stored Products Research Unit (WASPRU). It became NSPRI after Nigeria attained independence in the year 1960. The national mandate of the Institute required that it should carry out research into bulk storage problem of export commodities and local food crops. Based on this national mandate, the Institute has a collection of research staff that includes research scientists and laboratory technologists in various disciplines relating to post harvest. These groups of staff work



extensively to develop technologies that will solve or reduce post harvest losses of agricultural crops. To effectively accomplish this task, a library was established with relevant information materials, information delivery equipment and personnel to organize and disseminate information appropriately.

### **The NSPRI Library**

Though, the Institute has five functioning sub-stations for research work, its library is located at her headquarters in Ilorin, the state capital of Kwara State, Nigeria. The library acquires, published and unpublished literatures in post-harvest. Some of the information items that formed the collection include books, journals, newspapers' clippings and audiovisuals. These collections covered different areas of post harvest, which include entomological studies, food analysis and food packaging. Others are microbiological studies, agricultural extension, agricultural economics and marketing. The Institute's library also has rare materials that contain results of research findings by staff of the Institute. These set of collections are always in high demand because they centred on particular food problems. The library also has some reference materials to meet the information needs of research officers.

The usage of the library is for both internal and external users. While the internal users are requested to renew their membership yearly, the external users complete a form designed by the library management each time they intend using the library, hence, they are not permanently registered as users. The external users are required to give the following information: name, address, occupation, area(s) where information is desired, level of satisfaction and advice for the library management. This form is usually kept as a valuable document for evaluation of the library's operations.

### **Objectives of the Study**

This study is carried out with the following objectives in mind:

- (a) To examine how the external users have used the library
- (b) To determine the area of information mostly requested by external users.
- (c) To examine the level of satisfaction of the external users.

### **Literature Review**

Information is facts and opinions provided and received during the course of daily life (Powell 2003). Information is usually obtained from different sources. These include mass media, archives, electronic data, human beings and libraries.



The Encyclopedia Britannica revealed that information had been an essential ingredient that man has recognized as an important agent of development. It explains further that since 20<sup>th</sup> century, information has acquired two major utilization connotations. On one hand, it is considered an economic resource, somewhat at par with other resources, such as, labour, material and capital.

The second perception of information is that it is an economic commodity which helps to stimulate the worldwide economic growth. The versatility of information has contributed to its being needed by virtually every human being and it is usually sought for from different sources based on the needs of individuals.

The library according to Aguolu (2002) is a social institution, created to conserve knowledge, preserve the cultural heritage, provide information, under-gird and underpin education and research. These attributes made libraries to be the foyer of living ideas, which made it to be extensively used by researchers, academics, students and industrialists as a source of obtaining information. The patronage of the NSPRI library by external users has been impressive over the years and the Institute has continually created an environment that is good for the use of the library, because it is viewed as part of the ways the institute can contribute to national development. These being the case, external users on presentation of their identity cards are allowed into the library and are given opportunity to access any publication accessioned in the library.

### **Methodology and Data Analysis**

The library in this study keep many records among which is the record of users. The record of users is kept in two separate documents; the external users, and the internal users. The record for internal users comprises mainly of research staff and other categories of staff in the institute. These records are kept to determine the usage of the library by the staff and also to identify their information needs.

Over the years, the library has continually welcomed external users from different parts of Nigeria and from different areas of human endeavor. The library staff also accords much attention to all the external users, once they have been registered at the circulation desk. Each of the external users is made to give the following information about him/her before being allowed into the library. The information includes:

- (a) Full name
- (b) Arrival time
- (c) Address
- (d) Area where information is being sought
- (e) Level of satisfaction



- (f) Problem(s) encountered
- (g) Advise to the library
- (h) Time out

The external users give information for (e) to (h) when they are leaving the library. The (e) column in the form is graduated into different levels of satisfaction, which are: satisfied, very satisfied and unsatisfied.

The head of the circulation section files the completed forms by the external users, while the head of the library scrutinizes these forms at intervals to note any adverse comments or good remarks expressed by the external users.

The registration records of the external users for 2001-2005, which this study covers is used as the sources of data analyzed for this study.

**Table 1: Library usage by External users from 2001-2005**

Year	Sex		Total
	Female	Male	
2001	41	78	119
2002	27	103	130
2003	26	76	102
2004	09	95	104
2005	14	61	75
Total	117	413	530

The table shows that for the period covered by the study, 530 external users visited the library. The number is distributed into 117 female, which is 22.1% and 413 male, which is 77.9%. The library has more male external users than female. This could be due to the general enrolment in schools in Nigeria, where male students greatly outnumber the female students. This is more glaring in science classes. Since the library stock items on post harvest, which embraces different areas of natural science, the wide gap between male and female external users may not be too amazing. The Federal Government of Nigeria is already correcting this by injecting 6.7 billion naira into girls' education project in year 2004 as contained in Central Bank of Nigeria annual report of 2004.

Also from table 1, decline of users can be noticed. This was glaring from 2003 to 2005. The incessant closures of some of the public tertiary institutions at some period of time covered by this study due to either industrial action by the lecturers or students' riot could be responsible for the



decline in the number of users. The education sector reports of the Central Bank of Nigeria (2004) confirmed these and recognized it as constraints to the improvement of education programmes in Year 2004.

**Table II a.-e Shows the organization where external users come from**

Year	No of Users	Address	%
2001	15	Federal University of Technology, Minna	12.61
	65	University of Ilorin	54.62
	05	Ladoke Akintola University of Technology, Ogbomosho	4.20
	09	Kwara State Polytechnic, Ilorin	7.56
	05	College of Education, Ilorin	4.20
	02	Delta State University, Abraka	1.68
	02	Obafemi Awolowo University, Ile-Ife	1.68
	04	University of Agriculture, Abeokuta	3.36
	07	National Center for Agriculture Mechanization, Ilorin	5.88
	03	Cashew nut Processing Centre, Ilorin	2.52
	02	Nigeria Army School of Education, Ilorin	1.68
<b>Total</b>	<b>119</b>		<b>100</b>

**Table II b.**

2002	59	University of Ilorin	45.39
	15	Kwara State Polytechnic, Ilorin	11.54
	13	College of Education	10
	03	University of Ibadan	2.31
	09	Polytechnic Ibadan	6.92
	04	Federal University of Technology, Minna	3.08
	01	Federal Polytechnic Adamawa	0.77
	06	College of Agriculture Mokwa	4.62
	01	University of Uyo	0.77
	14	Ladoke Akintola University of Technology	10.77
	02	National Center for Agricultural Mechanization, Ilorin	1.54
	3	Cassava Processing Center, Ilorin	2.31
<b>Total</b>	<b>130</b>		<b>100</b>



**Table II c.**

Year	No. of Users	Address	%
2003	03	Federal University of Technology, Akure	2.94
	17	Ladoke Akintola University of Tech. Ogbomosho	16.67
	58	University of Ilorin	56.86
	04	Federal Polytechnic, Offa	3.92
	12	Kwara State Polytechnic, Ilorin	11.77
	04	Kaduna Polytechnic, Kaduna	3.92
	02	College of Agriculture Mokwa	1.96
	02	NGO for Cassava Processing Ilorin	1.96
Total	102		100

**Table II d.**

Year	No of Users	Address	%
2004	48	University of Ilorin	46.15
	05	University of Ibadan	4.80
	13	Ladoke Akintola University of Technology	12.5
	03	University of Agriculture Abeokuta	2.88
	11	Kwara State Polytechnic Ilorin	10.5
	09	Federal Polytechnic Offa	8.65
	06	College of Education, Ilorin	5.77
	06	National Center for Agricultural Mechanization	5.77
	03	Palm oil processing NGO, Ilorin	2.88
Total	104		100

**Table e.**

Year	No. of Users	Address	%
2005	42	University of Ilorin	60
	02	College of Agriculture Mokwa	2.86
	08	Ladoke Akintola University of Technology	11.43
	06	Federal University of Technology Minna	8.57
	07	Federal Polytechnic Offa	10
	05	National Center for Agricultural Mechanization	7.14
Total	75		100



From the five tables, (tables a-e), it is evident that the greatest number of the external users of the library are students of higher Institutions. Among the many tertiary institutions around the city, the University of Ilorin consistently dominated the table as the institution with the highest number of external users throughout the five years under study.

It also revealed that information seekers do not see distance as a barrier, as many of the tertiary institutions where the external users came from are within 55 kilometers to the location of the library. However, the record shows that there are some users who came from far distances, which fall within the range of 135-1,319 kilometers.

For example Ile-Ife, Abeokuta, Minna, Abraka, Uyo and Yola are 135, 238, 432, 532, 865 and 1,319 kilometers respectively to Ilorin where the library is located.

### **INFORMATION AREAS COVERED BY THE LIBRARY**

Year	Storage Structure	Grains	Tree Crops	Tuber	General Storage	Fruits & Vegetables	Fish & Meat	Extension, Marketing and Agric. Economics	Total
2001	18	35	25	35	22	23	12	18	188
2002	08	28	45	31	10	31	10	07	170
2003	15	25	43	33	8	26	8	03	161
2004	21	41	31	45	06	17	-	03	164
2005	06	23	18	29	5	15	06	05	106

**Table III: Distribution of information sought by external users 2001-2005.**

This table shows the post harvest areas where information was sought by this group of users. It could be noted that information was sought across all the areas of post harvest and a user sought information in more than one area. For example a user during a particular visit could request for information on processing of grain, tuber, fruits and vegetable.

The table shows that information on grains; tree crops, tubers, fruit and vegetable were the most sought. This could be attributed to continuous increase in production, which these crops witnessed over the years in Nigeria. For example, the Central Bank of Nigeria 2004 report on agricultural production shows an increase in production of grains, tubers, and major tree crops. The output of maize, millet, sorghum and rice rose by 10.0, 6.1, 5.6 and 5.5 percent respectively over the recorded level in 2003. Also, the cassava, yams, beans, potatoes and coco-yams output increased by 3.0, 6.5, 3.0, 2.4 and 2.1 percent respectively in 2004. The output of cash crop (tree



crops) rose by 8.7 percent. The least sought information by the external users was information on fish and meat. The reason for this could be linked to the fact that meat is purchased by Nigerians mostly on the basis of immediate need and any excess at domestic level is usually kept in the refrigerator. Also at commercial level, the refrigerator has been popularly adopted for storage of fish and meat, hence, the search for storage method for meat and fish does not attract as much attention as crops that are massively produced.

**Table IV: Level of Satisfaction**

This table indicates the level of satisfaction of the external users based on the relevant information that they obtained in the library during their visit.

**Table 1V**

Year	Satisfied		Very Satisfied		Unsatisfied		Not Indicated	
	No	%	No	%	No	%	No	%
2001	53	44.5	48	40.3	16	13.4	2	1.6
2002	73	56.1	39	30	18	13.8	-	-
2003	75	73.3	16	15.6	8	7.8	3	2.9
2004	69	66.3	21	20.1	14	13.46	-	-
2005	69	69.3	18	24	05	6.6	-	-

The level of satisfaction in obtaining the desired information shows how the library collections have assisted the users. A total of 142 users indicated that they were "very satisfied" representing 26.7% of the total external users from 2001 – 2005. Those that indicated "satisfied" were 322, representing 60.7% of the total users, while 61 external users indicated "not satisfied" representing 11.5% of the total number of external users. The collection in the library could be said to have performed above average to this group of users considering the percentage of very satisfied and satisfied external users in the period covered by this study.

**Table V: Advice to the Library Management.**

The following table shows the nature of remarks given by the external users on some management operations of the library.



Year	Satisfied with Library Staff Performance	Not Satisfied with Library Staff Performance	Need to Improve Library Condition	Need to Improve Service Delivery	No Advice
	No. : %	No. : %	No. : %	No. : %	No. : %
2001	24 : 20.1	6 : 5.0	63 : 52.9	22 : 18.4	04 : 3.3
2002	39 : 30	8 : 6.1	72 : 55.3	9 : 6.9	2 : 1.5
2003	46 : 45.0	7 : 6.8	47 : 46.0	2 : 1.9	- : -
2004	31 : 29.8	17 : 16.3	46 : 44.2	10 : 9.6	- : -
2005	32 : 42.6	8 : 10.6	29 : 38.6	3 : 4	3 : 4

The table shows the perception of external users about the staff of the library. Some of the external users expressed satisfaction with the interaction they had with the staff of the library. However, the main focus of the external users is on the need to improve the condition of the library. From observations, their comments are borne out of incessant power outage, which Nigeria still suffers from, and which affects many operations of the Institute, including the library. It is obvious that the library becomes hot when there is power outage and the air conditioners cannot be used. Similarly photocopy machine in the library can not be operated without electricity hence most external users can not make copies of needed materials. Besides, the library management does not allow users to leave the library with the publications, thereby causing inconveniences to users. Sometimes some users pay for the photocopy of the materials pending when there is electricity supply. This arrangement cost them more in terms of money and time, most especially, as many of the users are students who cover long distances from their various schools before they can return to collect the photocopied materials.

This predicament shows what most information seekers, especially, students and researchers go through to get required information in Nigeria. It is then very important that education, science and technology policy makers and international partners in the development of this important sector of the economy should execute programmes that will improve availability and accessibility of information to students and researchers.

### **Recommendations**

Based on the findings gathered from the data analyzed; the following recommendations are made. The decision of the management of NSPRI to allow non-staff of the Institute to use some of the institute's facilities including the library is a good decision. This has enhanced the sharing of information and knowledge which has impacted positively on national development. However, Information Technology development is required to



further facilitate resource sharing in the library.

The stakeholders of the Nigerian Education sector need to consistently create an environment that will discourage abrupt closure of learning institutions, as this adversely affects national development efforts.

It is important that the management of the Institute should continually improve the collections and facilities in the library, so as to enable the library to attract more external users. Increase in the utilization of NSPRI library could result in the increase of agricultural activities which is part of the millennium goal of Nigeria. It is also recommended that the library should be provided with standby generator, to support services provided in the library as well as facilitate the automation of the library and information services. The management of the Institute should continue to motivate the library staff to sustain their good performance.

### **Conclusion**

This work has shown how important daily record keeping could be used to appraise and improve a library. It has also revealed the support the library is giving to students and other information seekers in the area of agriculture, particularly in post harvest. This, no doubt, will contribute to the students' performance in their various schools. The impact of accessibility to desired information in post harvest technology by these users would also go a long way in reducing post harvest loss of agricultural crops in Nigeria.

Also, it has shown that libraries can effectively be used by organizations as a way of contributing their quota to national development, hence authorities in different organizations in Nigeria and other parts of the world, should invest in the development of their libraries, to enable researchers have access to adequate and relevant information for technological development.