# International Research Journal in Information Resources and Knowledge Management - IRJIRKM

• Vol. 1 No. 1 May 2010

© Information Resources Management Department
Babcock University, ***May, 2010***

All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronics, mechanical, photocopying, recording or otherwise, without the prior written permission of the copyright holder.

**Published, May, 2010 by:**
**Information Resources Management Department**
**Babcock University**
**Ilishan Remo, Ogun State, Nigeria**

*Printed by:*
**EMAPHINE REPROGRAPHIC LTD.**
Somolu, Lagos
Tel: 01-8978072; 08023266681

## CONTENTS


- **Kaza, M. Gabriel and A. O. Adedokun**
  Analysis of Budgetary Allocation and Its Effect on the Acquisition of Information Resources in North-Western Ecologies of Nigeria: A Case of Agricultural Library, Ahmadu Bello University, Zaria ..... 1

- **Cynthia Mac Helms**
  Computers in Libraries 25th Annual Conference
  Hyatt Regency Crystal City, Arlingon, Virginia
  April 12-14, 2010..... 15

- **Augonus N. Uhegbu and Esther D. J. Okai**
  Decades of Actions: Investigating the Availability and Utilization of Internet Services by Women in Aba, Abia State, Nigeria..... 19

- **D. A. Babalola, Y. T. Babalola and M. E. Bassey**
  Determinants of Consumers' Preference for Information Sources for Food Safety: Evidence from Akwa Ibom State ..... 33

- **Yacob Haliso and Oluwatosin Okunfulure**
  Information Sources Utilization and Job Performance of Workers in MTN Ibadan, Nigeria ..... 42

- **Uloma D. Onuoha and Luke N. Onuoha**
  Trends in Investment Information Sourcing By Babcock University Employees..... 54

- **Chijioke F. Ugwuanyi, Roseline N. Okwor and Emmanuel C. Ezeji**
  Library Space and Place: Nature, Use and Impact on Academic Library ..... 68

- **Nnodimele O. Atulomah, Bola C. Atulomah and Nkechinyere G. Ukangwa**
  The Status and Utilisation of Health Records for Decision-Making at Primary Healthcare Centre in a Rural Community of Southwest Nigeria ..... 80

# Analysis of Budgetary Allocation and Its Effect on the Acquisition of Information Resources in North-Western Ecologies of Nigeria: A Case Study of Agricultural Library, Ahmadu Bello University, Zaria

**Gabriel M. Kasa* and A.O. Adedokun**
*Agricultural Library,*
*Institute for Agricultural Research,*
*Ahmadu Bello University, Zaria – Nigeria*
*kamaga2k@yahoo.com*

**Abstract**

This study was undertaken to ascertain the responsibility and statutory performance of the Agricultural Research Library, Institute for Agricultural Research, Ahmadu Bello University, Zaria, Nigeria. The study noted inconsistent budgetary allocation which affected processing, generation, maintenance and collection development of library. The study examined the effect of the budgetary allocation on (i) performance based on the organizational structure and the disbursement of funds for the generation and dissemination of information, (ii) the acquisition and collection development and, (iii) determine the effect of depleting information resources on agricultural development within the north-west ecologies of Nigeria. The result of the study revealed that for effective maintenance, generation, preservation and conservation of information resources necessary for the advancement of agriculture in the north western ecologies of Nigeria, there must be adequate and consistent funding.

**Keywords:** Agricultural development, Nigeria, budgetary allocation, funding, north-west, library

*Corresponding author

## Introduction

The intervention by government, private organizations, donor agencies and philanthropic individuals to salvage information repositories remains a debatable phenomenon till date especially in developing countries like Nigeria. Today, information repositories consist of print, electronic, audio

and visual information resources with the corresponding gadgets for processing, accessibility and use. In a related work, Nwafor (1990) foresaw the consequences of dearth of information resources as a result of poor budgetary allocation to information repositories in Nigeria and called for a state of emergency. A study by Damoah (1980) on library acquisition showed that gifts received surpassed those acquired through purchase.

The decline in funding till today remains a persistent problem in having a well-organized and responsive-information repository. The British Council, the American Association for Advancement of Science, the MacArthur Foundation, the Carnegie Incorporation, the United States Agency for International Development (USAID) and the World Bank, to mention but a few, have been facilitating and yielding good results at resources and infrastructural build-ups in the third world (Alegbeleye, 2002; Bozimo, 2005/2006; Ikpaahindi, 2006).

The Institute for Agricultural Research (IAR) is funded and monitored by the Agricultural Research Council of Nigeria, under the Federal Ministry of Agriculture and Water Resources with the aim of actualizing the millennium development goal (MDG) for food security and sustainability. The Institute was also affiliated to Ahmadu Bello University (ABU), Zaria in 1963, though established in 1922 as the research division of the Department of Agriculture for the then Northern Province of Nigeria. IAR remains the bed-rock of crop research and improvement in the savanna region of Nigeria (Tanimu & Ado, 2008).

IAR has joint ABU/IAR Departments of Agricultural Economics and Rural Sociology, Agricultural Engineering, Agronomy, Crop Protection, Plant Science and Soil Science after its affiliation with ABU in 1963. This implies that its research scientists have teaching and supervision responsibilities apart from their primary assignments of research and extension.

At present, there are 65 research staff, 110 technical staff and a total of 615 administrative and supporting staff. IAR and Faculty of Agriculture undertake joint implementation of research projects and postgraduate training in the University. The need for information resources for research and teaching cannot be overemphasized. The library's recognition as the intellectual heart of institutions' of higher learning and research need to be maintained. Ikpaahindi (2006) gave the true state of Nigeria Libraries and information centres when he argued for the monetization and commercialization of the electronic information in institutions. He pointed out that the historical trends of library situations changed for the worse in the 1980s when the Federal Government of Nigeria adopted the World Bank

Structural Adjustment programme, this affected funding of universities and research institutes adversely. This is because a lot of materials purchased by libraries have a substantial foreign exchange component while the structural adjustment programme adopted by the government resulted in the massive devaluation of the national currency. The consequences were that funds allocated to universities and research institutions could no longer meet their requirements, thereby affecting their information repositories because of its direct bearing on collection development.

The situation deteriorated to such a level that the Federal Government of Nigeria decided to make some interventions, such as the World Bank Federal Universities Development Sector Adjustment Credit, The Petroleum Special Trust Fund, National Education Materials Procurement Programme and the Education Tax Fund (Ikpaahindi, 2006).

**Problem Statement**

Insufficient or uncertain budgetary allocation has been reported to affect adversely dissemination, generation, storage and access to information required for agricultural advancement in Nigeria. Agricultural information remains the only productive source with the multiplicity and facts required by stakeholders to attain a common goal of agricultural sufficiency and security. The appropriate documentation and application of these numerous experiences to agricultural development have been adversely affected by funding, a requisite for the effective dissemination of information. Documentation enhances the harmonious relationship among researchers and farmers leading to the much desired progress and development. Limited funds allocated and released to universities and research institutes have obviously affected collection and development of information repositories, thereby limiting documentation and the accesses to current research materials and farmers' experiences. It has caused the progressive obsoleteness of the available information resources, thus thwarting agricultural progress and development.

Agricultural development in north-western Nigeria is directly influenced by the farmers' knowledge, while knowledge is information applied. The success of rural development, stability and successes of most development policies rest heavily on the information made available to farmers and researchers. Today, information has become the bedrock of every organisation towards attaining its set goals and objectives. It is imperative to develop the techniques and processes for achieving information availability, accessibility and use for the agricultural sector. Its attainment can salvage and re-position agriculture, while the implementation and sustainability of

this sector will depend on adequate and prompt funding. How uncertain and inadequate funding affects information dissemination forms the crux of this paper.

**Objectives of the Study**

i. To examine the organizational structure and funding pattern of the Institute for Agricultural Research for the past ten years
ii. To determine the level of acquisition and collection development of the agricultural library within the period
iii. To determine the effect of poor information repository to agricultural development in the North-west agricultural ecologies of Nigeria.

**Materials and Methods**

The research was conducted in the Agricultural Library of the Institute for Agricultural Research, Ahmadu Bello University, Zaria which was established to conduct research that would improve production in quality and quantity of agricultural products (Momoh, 1979).

The study covers a span of ten years, from 1999 to 2008. Data for the study were drawn from both primary and secondary sources. Primary data comprised the library records of all resource materials received as donations, exchange, direct purchase or received as interventions from numerous foundations and institutions within and outside the country. The secondary data sources were government budgetary allocations, institutes budgets for library development, collections and acquisition and related literatures.

**Results and Discussion**

***Organizational Structure and Funding***

The Institute has joint Ahmadu Bello University and Institute for Agricultural Research Departments. They are Agricultural Economics and Rural Sociology, Agricultural Engineering, Animal Science, Agronomy, Crop Protection, Plant Science and Soil Science. It is funded by Federal Ministry of Agriculture and Natural Resources. As a result of the Federal Governments' reorganization of National Agricultural Research Institutes (NARIs) in 1987, IAR was mandated to conduct research on:

(i) Genetic improvement of cowpea, cotton, groundnut, maize, sorghum, castor, sunflower, Artemisia and Jathropa.
(ii) Problems of production of all agricultural food crops grown in the north-west agricultural zone covering Kaduna, Kano, Jigawa, Katsina, Kebbi, Sokoto and Zamfara States. Particular problems to

address were (a) crops agronomy including cultivation, planting and harvesting methods; (b) adaptation of introduced and improved cultivars; (c) development and testing of pests and disease control measures; (d) farming systems including integration of livestock, tree crops and agro-forestry into production systems; (e) socio-economic problems of agricultural production; (f) soil management including problems of soil structure, soil fertility and soil stabilization; (g) irrigated crops production; (h) simple preservation, storage and processing in the rural settings; (i) design and fabrication of simple agricultural implements and equipment; (j) the Institute to carry out agricultural extension research liaison with relevant Federal and State Ministries, primary agricultural producers, industries and any other users of research results; (k) organize technical and vocational courses in agricultural crop production and related fields; (l) provide laboratory and other technical services to farmers, agro-based industries and others in need of these services; and (m) collaborate with other relevant research institutes and organizations in carrying out its mandate (Anonymous, 1996; Tanimu & Ado, 2008; Kasa, Nock, Hayatu & Gbaje, 2009).

The institute has three substations at Kadawa, Kano and Talata Mafara. Talata Mafara and Kadawa are located within large-scale irrigation schemes, namely, the Hadejia-Jama'are River Basin and the Sokoto Rima River Basin. They are used for research in irrigated agriculture and the Kano station serves for research in Sudan and Sahel savanna ecologies. Each research programme team is headed by a leader and the committee which the leader presides over comprises plant breeders, agronomists, soil scientists, crop protectionists, agricultural engineers, agricultural economists/rural sociologists and extension specialists (Tanimu & Ado, 2008).

**Table 1: Annual Approved and Budgetary Allocation to IAR (1999 – 2008)**

| Year | Capital | Personnel | Overhead | Total |
|---|---|---|---|---|
| 1999 | 10,400,000.00 | 101,267,868.03 | 10,642,488.03 | 122,310,356.06 |
| 2000 | 24,899,377.00 | 180,143,755.99 | 10,624,765.00 | 215,667,897.99 |
| 2001 | 12,988,109.07 | 245,584,468.00 | 11,866,999.98 | 270,439,577.05 |
| 2002 | 41,704,372.00 | 294,150,005.01 | 3,318,942.00 | 339,173,319.01 |
| 2003 | 4,603,903.08 | 274,828,980.00 | 2,528,958.00 | 281,961,841.08 |
| 2004 | 723,907.56 | 262,102,326.00 | 1,024,962.99 | 263,851,196.55 |
| 2005 | 61,250,257.00 | 319,398,508.00 | 1,846,011.98 | 382,494,776.98 |
| 2006 | 28,875,144.50 | 459,315,051.00 | 50,739,156.00 | 488,190,195.50 |
| 2007 | 21,000,000.00 | 424,186,289.00 | 63,071,868.00 | 508,258,157.00 |
| 2008 | 288,999,212.00 | 517,986,315.00 | 71,185,180.00 | 878,170,707.00 |
| Total | 495,444,282.21 | 3,078,963,566.03 | 184,996,204.00 | 3,750,518,024.22 |

*Source*: Tanimu & Ado, 2008.

In Table 1, overhead has the least budgetary allocation of N184,996,204.00 over the 10 years of this study when compared to capital and personnel. This consequently affected the library which is a service delivery organ of the institute. The table also shows that the decline in overhead costs was equally observed for capital expenditure from 2003 to 2007. The functionality of the library definitely must be maintained by regular funding of the institute if the need for agricultural productivity and breakthrough emphasized by government is to be actualized. The library can then facilitate the dissemination of information to research the farmers who are located at the bottom of IAR's information chain and for whom the Institute was established (Yayock, 1987 and Idachaba, 1996). Brader (1998) indicated only 2% investment in agricultural programme in developing countries, 0.5% is invested for research and dissemination of findings, and 90% budget goes to staff salaries.

The decline in capital budgetary allocations calls for great concern. The only way research findings could be disseminated to end-users is by making funds available for the procurement, processing and maintenance of these resources to fulfill the government policy on agricultural research institute. The institutes are not for revenue generation but to research into improved varieties of crops, breeds of livestock and relevant agricultural technologies.

**Acquisition and Collection Development of the Agricultural Library**

The library received most of her information resources from gifts and donations (see Table 2). The absence of any record for acquisition until 2005 is an indication that the library could not afford to purchase any new resource material. From 2002 there existed meaningful interventions which included the MacArthur and Carnegie Foundations which supported the repository with funds for its collection development. The Educational Trust Fund initiated by the government was supportive. Donations from individuals and corporate organizations and institutions were also helpful. Pertinent of mention are the following; Food and Fertilizer Technology Centre (FFTC), International Livestock Research Institute (ILRI), Inter-national Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Technical Centre for Agricultural and Rural Cooperation (CTA), International Institute of Tropical Agriculture (IITA), International Water Management Institute (IWMI), Federal Ministry of Water Resource (FMWR), Institute for Development Studies (IDS), Nigerian Natural Medicine Development Agency (NNMDA), Raw Materials Research and Development Council (RMRDC), Australian Centre for International Agricultural Research (ACIAR), Food and Agriculture Organization (FAO), Commonwealth Bureau of Soils (CBS), International Maize and Wheat Improvement Centre (CIMMYT), International Institute for Environment and Development (IIED), Japan International Research Centre for Agricultural Sciences (JIRCAS), Indian Council of Agricultural Research (ICAR), Netherlands, Royal Tropical Institute (KIT), International Atomic Energy Agency (IAEA), Asian Vegetable Research and Development Corporation (AVRDC), World Health Organization (WHO), (ICPC), Consultative Group on International Agricultural Research (CGIAR), Organization of African Unity/Scientific, Technical and Research Commission (OAU/STRC), International Development Research Centre (IDRC), International Board for Plant Genetic Resources (IPBGRI), Nigerian National Farming Systems Research Network (NNFSRN), International Programme on Chemical Safety (IPCS), National Strategic Food Research Department (NSFRD); The World Bank, NSPFS, National Agricultural Extension and Research Liaison Services (NAERLS), National Root Crop Research Institute (NRCRI), Departments within the Faculty of Agriculture and various research Programmes of the Institute.

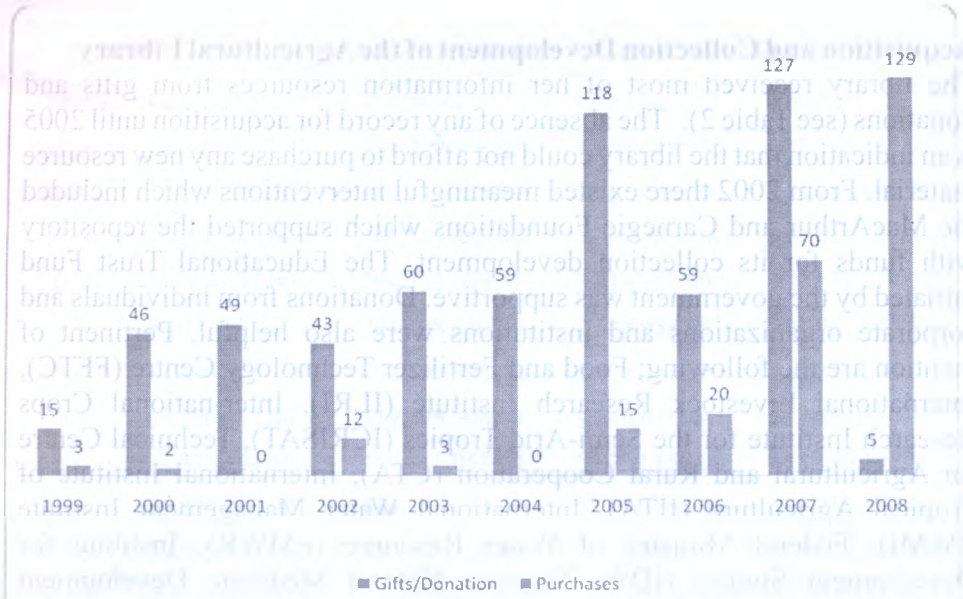



**Fig. 1:** Distribution of Resource materials in the collection development section of the Library

Figure 1 further reveals that only in 2008 could the library boast of having purchased resource materials. This emanated from the intervention of MacArthur and Carnegie Foundations. The library benefits from this intervention through the Collection Development Unit of the university main library, the Kashim Ibrahim Library. In 2004, the library was not able to purchase a single title for its collection development.

**Effect of Poor Agricultural Information Resources to Agricultural Development in the North-west Agricultural Ecologies of Nigeria**

The reasons for establishing agricultural research institutes are to continue with existing and new researches that would improve production in quality and quantity of agricultural products. These activities by scientists demand numerous scientific records (published and unpublished) (Momoh, 1979). This therefore implies that no development could exist in isolation. Manyong, Ikpi, Olayemi, Yusuf, Omonona, Okoruwa & Idachaba (2005) in a study on agriculture in Nigeria stated that information must be sourced to help identify gaps in knowledge. This study was able to identify that institutional funding mitigates the effects of poor information resource provisions in North-west agricultural ecologies of Nigeria which serve as the

major supplier of food to the citizenry and all agro-based industries of Nigeria.

The inability to supply improved technologies with proven facts from research has constrained food security, sustainability and sufficiency (Manyong *et al.*, 2005). Funding depletion has affected the consistency and hosting of the institute's MTRMs from which farmers' perceptions are adjudged and prevented on-the field assessment of problems needing solutions. Results from research cannot be attained because of inability of the researchers to proffer meaningful solutions to problems (Tanimu & Ado, 2008).

**Table 3: Factors enhancing the performance of agricultural development in North-western Nigeria in their order of importance**

| Factors | Ranking* |
|---|---|
| Access to inputs | 1 |
| High demand for products | 2 |
| Better extension services | 3 |
| Availability of cheap labour | 4 |
| Availability of raw materials | 1 |
| Availability of transport facilities | 1 |
| Good economic climate | 1 |
| Availability of qualitative input | 1 |
| Improved farming practices | 2 |
| Reduction in input prices | 3 |
| Availability of skilled manpower | 4 |
| Favourable agroclimatic environment | 4 |
| Government patronage | 1 |

*Sources:* Manyong *et al.* (2005) and Idachaba (2005)

*The rankings range from 1 to 4; 1= Most important, 2 = More important, 3 = Important, 4 = Less important. **Note**: the lower the value, the better.

Six factors were adjudged to be the key performance-enhancing factors for agricultural development in the north-western ecologies of Nigeria (see Table 3). These include access to inputs, availability of raw materials, availability of transport facilities, good economic climate, availability of qualitative input and government patronage. Factors ranked as second priorities include high demand for produce and improved farming practices. Third priority factors were better extension services and reduction in input prices. Lastly, fourth priority factors ranked include availability of cheap labour, availability of skilled manpower and favourable agroclimatic environment.

These factors are directly affected by lack of knowledge and access to information contributing to the poor acquisition of agricultural innovations and technology adoption. For instance, access to inputs, good economic climate, availability of qualitative input and government patronage are facilitated by the sustainable activities of stakeholders like agricultural research institutes, Agricultural Development Programmes and Agro-based private enterprises whose oversight functions include providing adequate information on different inputs to the ultimate users in the downstream and upstream segments of the agricultural sector.

The downstream activities which consist of transformation of agricultural products through value-added activities are constrained by insufficient information on processing and storage emanating from the state of poor infrastructure like the epileptic power supply and skewed distribution of available infrastructure (Manyong *et al.*, 2005).

**Table 4: Levels of Investment in Agriculture by three tiers of government in Nigeria from 1996 – 2000 (N million)**

| Year | Federal government | State government | Local government |
|---|---|---|---|
| 1996 | 8071.20 | 1105.40 | 229.20 |
| 1997 | 935.80 | 1142.60 | 295.30 |
| 1998 | 9812.60 | 2021.10 | 631.60 |
| 1999 | 15053.00 | 1826.50 | 566.60 |
| 2000 | 6998.60 | 4644.20 | 1608.70 |

*Source:* CBN (2000, 2001)

There was increase in the levels of agricultural investment by the three tiers of government in agriculture progressively by 13.5% between 1996 and 1997, 16.8% between 1997 and 1998 and 40% between 1998 and 1999; and a decline of 24% between 1999 and 2000 due to a sharp drop of about 53% in Federal Government investment (see Table 4). This continued through 2001 and 2005 (table 1). Table 4 also shows that the Federal Government investment accounted for a very high share of investment in agriculture which stood at 96% in 1996, 1997 and 1999; it was 79% in 1998 and relatively low at 53% in 2000. The epileptic funding of agriculture revealed by CBN (2000; 2001) showed the effect on the performance and development of agriculture, for instance, the investment declined with the Local Government with the largest downstream sectors by 2.4% in 1996 and 12.1% in 2000.

Figure 2 gives the graphical representation of total percentage distribution of the budgetary investment on agriculture by the three tiers of government. A total of ₦63,242.40 million was invested between 1996 to 2000.

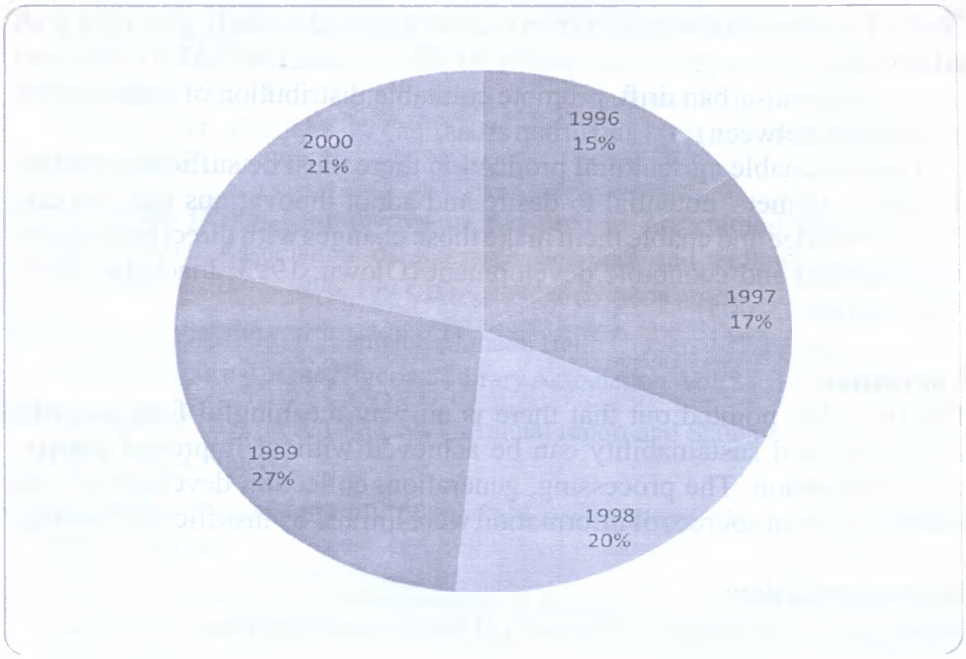



**Fig. 2:** Total percentage distribution of investment for three tiers of government in Nigeria (1996 – 2000) (N million)

The policy on agricultural research remains the development of improved and high yielding production materials and the development of appropriate technologies. Actualization is solely dependent on funding which among others ensures the provision of modern information technology. Funding also facilitates an effective collaboration between research institutes, universities and development of a strong outreach programme beginning with host communities. Disposition of agricultural libraries has saddled them with the responsibilities of reorganizing of information on a continuous basis for agricultural development through access, storage and preservation for retrospection. The overall benefits are the strengthening of agricultural data management and ease to disseminate information thereby enhancing capacity in policy analysis, socio-economic research, market information services, programme monitoring and evaluation. Agricultural library strengthens institutional capacity for coordinating data collection at all levels.

The effect of insufficient funding and adequate information has been discovered to be a menace to agricultural development in other ecologies in Nigeria resulting in pilferage, behavioural change, deviance, outright theft and complete departure from agricultural activities (Olowu, 1993; Odekina, 2009). The downstream agricultural sector when adequately provided with information will improve the quality of life of rural dwellers to stem and reverse the rural-urban drift, promote equitable distribution of public sector investments between rural and urban areas.

For sustainable agricultural production there must be sufficient funding to harness farmers' potential to desire and adopt innovations that increase their knowledge and enable them make those changes with direct bearings on socio-cultural and economic development (Olowu, 1993; Idachaba, 2005; Manyong *et al.*, 2005).

**Conclusion**

The study has pointed out that there is no way meaningful food security, sufficiency and sustainability can be achieved without improved agricultural information. The processing, generation, collection development and access to current sources of information were limited by insufficient funding.

**Recommendations**

In the light of the findings of the study, it is recommended that:

(1) The institute's organizational structure should be restructured, so that funding of the repository comes directly from the Ministry and not as it is currently lumped with capital/overhead allocations for the acquisition, maintenance and updating of information resources.
(2) The library's acquisition policy should maintain the initial use of acquisition agents. Selection should remain the responsibility of Agricultural Librarian with assistance from Programmes of the Institute, department in the Faculty of Agriculture and individual submissions.
(3) It is recommended that donor agencies be acknowledged for their contributions to the repository.
(4) The funds appropriated to the repository must be used in line with the mandate of the Institute for all acquisition and dissemination of information in the north-west ecologies of Nigeria to meet researchers' information needs and encourage farmers to adopt improved innovations for their socio-cultural and economic development.

## References

Alegbeleye, Bunmi (2002) Preservation and Conservation: Rational procedure, Trends and Benefits for Research and Scholarship. Being paper presented at the Seminar on Preservation for Posterity. Organized by the National Library of Nigeria and UNESCO. 4th – 5th June, pp. 10-11.

Anonymous (1996) "This is the Institute for Agricultural Research (IAR), Third Edition. T.O. Fadiji, T.T. Gefu and O.B. Adeniji (eds.). Publication and Information Unit, IAR, Samaru - Zaria.

Brader, Lukas (1998) Contribution of Research to Agricultural Development. International Association of Research Scholars and Fellows Symposium Perocedings 1995, 1996, 1997, IITA, Ibadan, Nigeria pp. 4-11.

Bozimo, O. (2005/2006) ICT and the Ahmadu Bello University Libraries. *Nigerian Libraries*. Journal of the Nigerian Library Association. Vol. 39: 1-20.

Central Bank of Nigeria (CBN) (2001) Annual report and Statement of Accounts. CBN, Abuja, Nigeria.

Central Bank of Nigeria (CBN) (2000) Statistical Bulletin, Vol. 11 No. 2. CBN, Abuja, Nigeria.

Damoah, J. (1990) Problems of acquisition in the Balme library since 1980; some solutions and their effectiveness. A project work presented to the Department of Library and Archival Studies, University of Ghana in Partial Fulfillment for the Award of Graduate Diploma in Library Studies, December, pp. 23.

Idachaba F.S. (2005) *"Rural Infrastructures in Nigeria: Basic Need of the Rural Majority"* Volume I: Main Report of study commissioned by the Federal Department of Rural Development. Ibadan University Press, pp. 69.

Idachaba, F.S. (1996) Instability of National Agricultural Research System in Sub-Saharan Africa: Lessons From Nigeria. *ISNAR Research Report* 13: 8-9.

Ikpaahindi, L.N. (2006) Prospects for monetization and commercialization of electronic information in institutions of higher learning in Nigeria. Paper presented at a workshop on Electronic Information Management held at National Root Crops Research Institute, Umudike, September 11 – 13th.

Kasa, M. Gabriel, Nock, I. Grace, Hayatu, Musa and Gbaje, S.E. (2009) Appraisal of Two Profile Based Indigenous Knowledge of Institute for Agricultural Research, Ahmadu Bello University, Zaria. *Jewel Journal of Librarianship Vol. 1 No. 1:* Pp.65-74. Published by the Nigerian Library Association, Gombe State Chapter.

Manyong, V.M., A. Ikpi, J.K. Olayemi, S.A. Yusuf, B.T. Omonona, V. Okoruwa and F.S. Idachaba (2005) Agriculture in Nigeria: Identifying opportunities for increased commercialization and investment. IITA, Nigeria, pp.159.

Momoh, Sidiku (1979) A Comparative Study of Readers' Services in the Libraries of National Veterinary Research Institute Vom and Institute for Agricultural Research, Ahmadu Bello University, Samaru - Zaria. A Research Project Presented to the Department of Library Science for the Award of the Degree of Bachelor of Library Science, ABU., Zaria.

Nwafor, B. (1990) Funding Third World University Libraries. In: Membrey, D.I. ed. Northing to Read. The Crisis of Document Provision in the Third World, Birmingham, International and Comparative Librarianship Group of the Library Association, pp. 36.

Odekina, F.O. (2009) An Assessment of Effects of Pilferage on Arable Crop Farmers in Idah Local Government Area of Kogi State, Nigeria. An Unpublished M.Sc. Thesis Submitted to Postgraduate School, Ahmadu Bello University, Zaria. pp. 59.

Olowu, T. A. (1993) P*ersuasion and Persuasion Strategies.* Paper Presented at the International Workshop on Applied Interpretational Communication Strategies for Agricultural Extension held at the University of Ibadan, 6th-8th November, 1993.

Tanimu, B.A. and S.G. Ado (2008) Budgetary Allocation, Internally Generated Revenue and the Funding of Agricultural Research Institutes: The Case of Institute for Agricultural Research, Samaru. An Invited Paper presented at the National Revenue Summit Organised by the Committee on Finance, House of Representatives, held at Ladi Kwali Conference Center, Sheraton Hotel and Towers Abuja, December 15-16, pp.10.

Yayock, J.Y. (1987) Institute for Agricultural Research, Samaru: Activities and Achievements. *Invited Lecture, Senior Executive Course No. 9, National Institute for Policy and Strategic Studies*, Kuru, Jos. 8 April, pp. 24.