

**The Research and Development Centre (RESDEC) of the University Of Agriculture,
Abeokuta, Nigeria - A Model Research Coordinating Effort in an African
University.**

By

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ABSTRACT

The University of Agriculture , Abeokuta, Nigeria was established in 1988. Within its short life, it has come to be rated as one of the best Universities in Nigeria. In the maiden and second Universities Research Fair organized by the National Universities Commission in Nigeria, the University of Agriculture, Abeokuta was rated in the first position as the best research University in Nigeria in 2004 and 2005. The major moving force to the success of the University in research is the Research and Development Centre (RESDEC) of the University. Funds for research were low but the University was focused in making research to be relevant to its mandate. Some constraints to the development of research in sub-Saharan Africa were highlighted. This report is focused on the vision, policies and management of research in the Centre which can serve as a model to many African Universities in view of the paucity of funds for research in the continent. Some of the strategies adopted by the centre to promote research include:

- Extra funding for research through internally generated revenues.
- Organization of training programme and Workshops that promote research –
- University matching grant for externally funded research
- Establishment of the Centre for International Cooperation and Linkages to support research collaboration and networking.
- Promotion of Annual Research Fair and local research extension festivals
- Collaboration with local industries and their involvement in the University activities.
- Special lecture series – Extended openly to any foreign researcher visiting the University
- Promoting active participation in national agricultural research networks
- Hosting of national research oriented meetings and conferences.
- Participation in national research fairs

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Research productivity which is the recognizable output of research is an important concern to the University. The responsibility for assessing the Institutional Research productivity is hinged on the government and the government agency for regulating higher education and factors that are considered include:

- (i) Relevance of research to local needs and developments
- (ii) Local impacts as testified by local end-users
- (iii) Students applications, quality and innovations
- (iv) Contributions to local and international Journals, books and other publications.

The conventional method of assessing research productivity by the number of publications is in use at the University of Agriculture. However, there are additional requirements for quality and relevance of publication which is usually ranked by at least two superiors, within the Faculty. A national exercise had been carried out by the National Universities Commission to rank local Journals and the ranking of the Journal affects the ranking of the publications. In addition to research journal publication, the University of Agriculture also introduce the assessment of research extension and the ability to attract external grants as criteria for assessing productivity, and the ratings of these equally assessed by at least two superiors in the faculty. The following suggestions were proffered for Promoting research productivity:

- Regular institutional staff research need analysis,
- Promotion of research leadership and management training programmes,
- Research environment, and infrastructural enhancement,
- Continuous Capacity Enhancement for researchers,
- Promotion of Linkages and Collaborations,
- Funding improvements,
- Research efforts recognition.

1. Introduction:

Research is strategically important for higher education and national development. The International Commission on Education for the 21st Century had earlier declared that “without higher education institutions and adequate research, no country can achieve real indigenous and durable development. Increasing knowledge through research has become an essential function of higher education for them to be relevant to the development. Research is strategically important in Universities, as it is necessary to facilitate good quality undergraduate and graduate training, help universities to motivate and empower its researchers and promote the training of future researchers.

Today, many African Universities have lost the capacity for doing sustainable research. Shabani (1995) noted that while many African countries recognize the importance of the role of research in the socio-economic development process, they failed to give required priority to the development of the various resources needed for research activities. It is

unfortunate to note that today, sub-Saharan Africa is the region which contributes the least to research funding in the world. Matos (1999) emphasized that without research universities will lose the capacity to offer first class graduate studies, the capacity to motivate and retain their best brains, the capacity to train the new generation of research fellows and scientists.

There are many constraints and challenges facing the development of research in Africa. Traore (2002) identified the constraints to include, lack of strategic vision in research, lack of infrastructures , poor research funding, poor remunerations for research staff among others. For a University to be committed to research in Africa, these constraints will need to be overcome

One of the African Universities that is committed to overcoming the constraints confronting research and researchers in Africa is the University of Agriculture Abeokuta. The University which was established as a specialized Agricultural university in 1988 has for the past two years running; the University has won the first place prize as the best research university in Nigeria. The moving force behind the research activities of the University is the Research and Development centre. This report is focused on the vision, policies and management of research in the Centre which can serve as a model to many African Universities in view of the paucity of funds for research in the continent.

2. The University of Agriculture, Abeokuta and the Research and Development Centre.

The University of Agriculture, Abeokuta is one of the three Agricultural Universities in Nigeria.. It was established in 1988, with a mandate for teaching, research and extension. The University major missions include:

- (i) Production of high level manpower in the fields of agriculture, veterinary medicine, sciences, engineering, environmental sciences and allied disciplines.
- (ii) The development of innovative agricultural research and development aimed at the modernization of Nigerian agriculture.

In 1990, the University approved the establishment of the Research and Development Centre, to carry out its research mandates. This was a departure from the practices in many Nigerian conventional universities where the mandates for research is devolved upon a Committee of the Senate.

In order to carry out its mandates, the Research and Development Centre formulated its Vision and Mission statements as follows:

(i) **Vision:**

The Research and Development Centre is committed to being the synergy and moving force of research in the University

(ii) **Mission:**

The Research and Development Centre will strengthen the research capacity of this University community by encouraging and promoting research that will meet the mandates of the University and promote intellectual and national development.

3. Research Management Structure:

A Research Policy Board and a Research and Development Management Committee were set up to give policy director and monitoring functions to the Centre respectively

The day-to-day management of the Centre is under the control of the Director of Centre. The Director of Research has some support Research Fellow with project management functions. In addition, there are some complementary administrative personnel who work together to fulfill the mandates and missions of Centre. All the academic and technical staff of the University constitutes the research personnel of the Centre.. As of date, there are over 400 academic and administrative personnel in the University who are involved in research.

4. Research Policy:

The University of Agriculture, Abeokuta , through the Research and Development Centre is committed to promoting researches related to the mandates of the University, which may fall into one or more of :

- (i) Basic or fundamental research
- (ii) Applied or practical research
- (iii) Adaptive or implementation research

However, six research programs, in line with the mandates of the University had been identified for the operations of the Research and Development Centre (RESDEC). These are:

- (i) Livestock Production and Improvement,
- (ii) Environmental Resources Management,
- (iii) Basic and Applied Sciences and Engineering,
- (iv) Crop and Soils research,
- (v) Agricultural Management, Socio-economic, Linguistic and Liberal Studies
- (vi) Food Processing , Food Preservation and Biotechnology

5. Funding Situation:

The funding for research is low and is in line with the general funding status of other universities in Nigeria. This is based on 5% of the recurrent grants from the Federal Government. Table 1 is a reflection of what the University receives from the government for research.

Table 1 : Government Funds for Research in the University from 1998 to 2003

Year	Funds Provided By Government For Research
1998	N700,000
1999	N900,000
2000	N1,250,000
2001	N1,050,000
2002	N760,205
2003	N970,770

Exchange rate : \$1 = N128

Table 1 is a reflection of the poor funding situation in many African countries. However, in order to promote research, the University has to put in some extra mechanisms for the sourcing of funds and promotion of research in the University. The resultant effect of the poor funding is that very few of the research personnel received support through the University system for their research activities.. This leads to frustration and is also a contributing factor to the problems of ‘brain-drain’ in many African Higher Education Institutions. In some places, efforts are made to ‘spread’ the meager research funds around to many of the researchers. Each researcher had access to only a meager amount of funds thus leading to poor researches with little or no depth.

The above situation necessitated the need for the Research and Development Centre of the University of Agriculture, Abeokuta to develop strategies for promoting research in the University.

6. Research Promotion Strategies:

(i) **New Mechanism for support to research projects:** In most African university systems, before research projects are supported, application has to be routed through a large number of administrative machineries, before being considered by a special committee of the Senate. The Research and Development Centre, though recognizing the import of these administrative machineries, in managing the meager funds, decide to develop other acceptable mechanisms. Clear cut research policies are formulated based on societal needs. This is order to ensure that research promotes development. The system of making regular calls for research proposals with definite guidelines was introduced. The staff of the University were free to respond directly to the Calls without necessarily going through the long administrative machineries of the past.

(ii) **Support for research through internally generated revenues.** The Makerere model (Court, 1999) was followed for getting additional funds for research internally. The major internal funds came in through commercial service units and educational consultancies in the system. Through this means, internally generated funds for research were more than those provided by the government.

(iii) **Training Programmes and Workshops that promote research:** One diminishing feature in Africa's research profile is the ageing of the research human resources. The deterioration that occurred in many Africa's HEI in the late 70's and early 80's had eroded the culture of mentoring in many of the institutions. There was need to redress the situation in order to promote research. The Research and Development Centre therefore embarked on the promotion of some Workshops and Seminars. Examples of such Workshops are :

- (a) Workshop on University Leadership and Management, targeted at Heads of and new Senior Lecturers in the University system
- (b) Writing Grant-Winning Proposals, targeted at new entrants into the University system

(iv) **University matching grant for externally funded research :** The University recognize the need to empower its staff to seek for international support for their research activities. As a way of promoting this, the University is committed to providing matching supports for staff and group of researchers in the University who are able to attract external research supports.

(v) **Centre for Linkages and International Cooperation: to support research collaboration and networking.** The University recognized the important roles that cooperation with other Institutions can play in its research activities The Centre for linkages and International Cooperation, though different from RESDEC, supports RESDEC activities by promoting linkages and supporting research networks. The Centre is involved in initiating and facilitating cooperation and bilateral agreements with both local and international Institutions. Such co operations, has helped to acquire equipment, books and other research materials while also facilitating academic mobility.

(v) **Promotion of Annual Research Fair.** The research and Development centre embarked on the promotion of an annual Research fair within the University. It is a forum to promote research and recognize outstanding researches and researchers within the University system. The Fair is also an opportunity to show-case the University to the community and through this facilitate community support for the University research.

(vi) **Collaboration with local industries and their involvement in the University activities.** The University as a matter of policy collaborates with local industrialists in some commercial industrial initiatives. Research consultancies are also promoted by the University with some multinational industries in the country. Funds generated for research through this avenue equally surpass the funds made available for research through government subventions.

(vii) **Special lectures series** – Extended openly to any foreign researcher visiting the University: the foreign scientists visiting the University to deliver research-based lectures. Some of the recent lectures delivered in the Series include :**Molecular Characterization of Mosquito Sensory Systems** (Dr. Ann Sodja , Wayne State University, Detroit, USA.); **Use of development instability as a measure of ecosystem stress** (Prof. Carl Freeman , Wayne State University, Detroit, USA.); **Response of growing pigs to energy and protein intake.** (Prof.(Dr).Andreas Sesembeth, University of Kuel, Germany); **Adaptation of Sahelian cattle to seasonally variable feed supply and feed quality.** (Dr.Eva Schecht, University of Hohenhien, Germany); **International Research Funding** (Dr. Ben Dadzi, DFID, Regional Coordinator for West Africa.).

The forum afford the university community to interact with some of these foreign experts and therefore promotes research collaboration.

(viii) **Promoting active participation in national agricultural research networks:** The Centre supports the university researchers in attending external scientific meetings and their involvements in national agricultural networks. The University is ‘conference-friendly’ as it welcomes every opportunity to offer its facilities to research organizations in and outside the country for hosting research-oriented meetings and conferences.

7. Research Productivity of the Centre :

Within the past ten years, the University has contributed over 2000 research articles to both local and international Journals. In addition, products of the University research are currently being used by local industries. Indeed, the University has been able to set up pilot plants for the commercialization of its research outcomes within the university.

For the past two years running, the University has participated in the national Universities research fair organized by the National Universities Commission and the University had been ranked first in both instances

8. How productivity is measured:

Research productivity which is the recognizable output of research is an important concern to the University. Research productivity measure helps in conceptualizing the benefits , relevance and acceptability of the university’ research for national. The responsibility for assessing the Institutional Research productivity is hinged on the government and the government agency for regulating higher education and factors that are considered include :

- (i) Relevance of research to local needs and developments
- (ii) Local impacts as testified by local end-users
- (iii) Students quality and innovations
- (iv) Contribution to Journals, books and other publications.

The individual researchers productivity is however done on a once in three years basis. The conventional method of assessing researchers productivity by the number of publications (Massy and Wilger, 1995) is in use at the University of Agriculture. However, there are additional requirements for quality and relevance of publication which is usually ranked by at least two superiors, within the Faculty. A national exercise had been carried out by the National Universities Commission to rank local Journals and the ranking of the Journal affects the ranking of the publications. In addition to research journal publication, the University of Agriculture also introduce the assessment of research extension and the ability to attract external grants as criteria for assessing productivity, and the ratings of these equally assessed by at least two superiors in the faculty.

9. **Conclusion : (Research and Research productivity promotion in Africa)**

Today, many African governments still need to be encouraged to recognize the importance of research for their national development. There is still no national research funding agencies or bodies in many African countries to the extent that most of the supports for research activities had been foreign-funded. The African Union has just launched the second decade of education for Africa. Some of the goals of this second decade that will enhance research productivity in the continent include:

- Strengthening the capacity of African intellectual property offices;
- Set up an African research fund for studies and research identified as crucial and strategic to Africa's development;
- Promote links and exchange of knowledge and resources between academia, industry, the public sector and communities, and increase public funding for research that meets industry needs;
- Promote the development of academic journals and virtual libraries, and promote African knowledge internationally;
- Invest more n training and Research and Development to build critical mass of scientists.

Apart from these continental efforts, institutions in Africa need to develop strategies for improving their research productivity. Some definite steps that can taken will involve the following:

- (i) Regular institutional staff research need analysis
- (ii) Promotion of research leadership and management training programmes
- (iii) Research environment, and infrastructural enhancement
- (iv) Capacity Enhancement for research

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