

THE POTENTIAL OF RESEARCH AS A SOURCE OF FUND IN NORTHWESTUNIVERSITY

By

NABEGU,A and NAIBBI, A

**Presentation by the Directorate of Academic
Planning**

Northwest University, Kano

DATE 10/4/17

INTRODUCTION

- Research is one of the three core functions of a university (teaching, research and community service).
- Most important of the three - makes teaching current and provides services to the community
- Vital to development :
Translates skills for economic activities, shapes and transforms society; national strategies
- Provides the environment for innovations
- Applications enhances production of goods services, creating indigenous science and technology

IT IS OFTEN ARGUED THAT FUND LIMITATION IS THE VANE OF RESEARCH, BUT RESEARCH CAN BE A MAJOR SOURCE OF FUND

Sources of Research Fund?

Funds for research can come from:

- Public/ Government (All levels)
- Private /Foundations/ Endowments
- Commercial/Science/Technology Parks
- International Organizations - UNICEF, UNDP, UNPF, NEPAD, UNESCO, IDB etc.



Types of Public/Government Research

- Commissioned Research
- Consultancy

Why Government fund research

- Governments fund research to satisfy the social responsibilities of transferring knowledge to development

What do Governments want from Research?

Government expectations include:

- (a) Enhancing the image of the universities
- (b) To harness external grants
- (c) National development for example, in Nigeria, it includes:

- Poverty alleviation and Rural Development
- Youth employment/skills
- Taxation
- Economic diversification
- Agriculture Value chain
- Gender, Girl child education
- HIV/AIDS, malaria
- ICT
- Municipal Waste Management
- Water resource conservation
- Water supply systems
- Urban infrastructure

Types of Funding from the Private Sector include:

- Consultancy
- Commissioned research
- Licensing of intellectual property (IP)
- Prizes for Invention
- Grants
- Individual Donation

Science, Technology and Commercial Parks

- A collaboration between university and Private Sector
- Parks is a site where commercial and manufacturing enterprises can set up shop
- Access to the expertise and technologies invented in the University
- Costs is offset through the partnerships
- A detailed feasibility study is carried
- Developed in stages to maximize benefits

ENDOWMNET



- The following Tables show Endowments of some American Universities.....
- These are the Universities we are expected to compete with
- Try to get such data from Nigerian universities.....

Top American Research Universities

	Private \$000	2010 Federal \$000	Endowment \$000
Columbia University	770,888	561,531	7,789,578
M. I.T	646,222	451,050	9,712,628
Stanford University	810,300	576,553	1,650,260
Pennsylvania	793,523	626,816	6,582,029
Harvard University	561,703	467,237	31,728,080
Duke University	980,514	513,469	574,737
California - Los Angeles	899,677	522,423	264,041

Top American Research Universities

	Private \$000	2010 Federal \$000	Endowment \$000
Michigan – Ann Arbor	1,128,686	729,779	7,834,752
Yale University	621,125	4,750,101	19,374,000
California – Berkeley	659,572	303,201	2,937,250
Washington – Seattle	995,036	809,433	2,154,494
Wisconsin – Madison	940,286	522,473	2,066,958
Johns Hopkins University	1,997,252	1,731,818	2,598,467
Northwestern University	554,228	356,193	7,182,745

Top American Research Universities

	Private \$000	2010 Federal \$000	Endowment \$000
Southern California	574,366	402,372	3,517,173
Minnesota - Twin Cities	764,916	420,102	2,503,305
N. Carolina - Chapel Hill	746,828	541,910	2,260,970
Cornell university	486,150	290,640	3,960,058
University of Chicago	432,943	248,537	6,575,126
Ohio State – Columbus	719,574	384,633	2,120,714
Washington - St. Louis	693,749	466,993	5,280,143

Top American Research Universities

	Private \$000	2010 Federal \$000	Endowment \$000
Pennsylvania State - Park	674,763	410,238	1,276,602
California - San Diego	937,982	578,889	568,697
University of Texas – Austin	531,412	331,439	7,441,482
Pittsburgh – Pittsburgh	806,014	581,148	2,527,398
Vanderbilt University	478,345	377,185	3,414,514
Princeton University	231,862	149,164	17,109,508
Emory University	498,309	336,948	5,400,367

Top American Research Universities

	Private \$000	2010 Federal \$000	Endowment \$000
Georgia I.T	611,226	370,532	1,619,718
New York University	343,762	250,006	2,827,000
Texas A&M University	666,516	276,977	6,328,932
University of Florida	636,607	269,765	1,295,313
Illinois – Urban Champaign	493,386	294,236	1,132,626
California - Davis	669,282	329,041	731,284
California I. T	359,245	325,751	1,772,369

Top American Research Universities

	Private \$000	2010 Federal \$000	Endowment \$000
Purdue West Lafayette	669,282	329,041	731,284
Dartmouth College	359,245	325,751	1,772,369
University of Notre Dame	477,145	221,679	2,001,601
Rice University	193,608	117,909	3,413,406
Maryland - College Park	104,288	61,645	6,259,598
University of Virginia	97,288	69,176	4,451,452
Boston University	440,556	293,835	417,452

Top American Research Universities

	Private \$000	2010 Federal \$000	Endowment \$000
Brown University	271,843	224,607	4,760,515
Colorado – Boulder	201,116	120,749	2,496,926
California – Santa B	217,952	127,696	222,018
Arizona State University	335,983	282,008	447,211

Benefits of University/Private Sector

Collaboration in research

- Helps commercialization of research
- Helps to reward, retain and assist lecturers
- Generates income for education.
- Helps form closer ties to industries
- Promotes economic growth; establishment of new companies; existing companies expand

Prerequisites for attracting Funds

Research Policy - a component of Strategic Plan to address :

- Research Priorities
- Research support Institution – systems ; governance; networks
- Adequate resources for research
- Expertise to support research
- Intellectual property rights registration office
- Marketing/advertising the University
- Facilities based on needs
- Research culture
- Skill for entrepreneurship and innovation Conversion of research outputs to marketable products
- Dissemination of the results - PUBLISH

- **PUBLISHING YOUR RESEARCH RESULT**

- The following are universal norms that must be present in all high quality publication outlets:

- Journals with Impact/ Eugene factor

- The impact factor is a measure of citations to articles

- Indexing - (ISI) Thomson Reuters, SCI, Scopus , ESSEC etc.

- H Index (or H factor)

- Immediacy index

- **Index measures both the productivity and impact of the published work**

- **Journal Categories**

- **Q1 (3.5-4)**

- Journal with Impact factor that is in the top 25 percentile ranking based on the impact factor within the subject, or sub-disciplinary category

- **Q2 (3.0-3.4)**

- Journal with Impact factor that falls in the average/middle 50 percentile ranking based on the impact factor

- **Q3 (2.5-2.9)**

- Journal with Impact factor that falls in the lower 25 percentile ranking based on the impact factor

- **Q4 (2. 2.4)** Journal with Impact factor that falls in the lower 10 percentile ranking based on the impact factor

OPEN ACCESS JOURNALS

- Open Access Journals with the following characteristics are GOOD:
- Belonging to academic institutions (universities, well-known research centers, scientific associations)
- With an ISSN in Nigeria ISBN
- With at least 6 years history of ongoing publishing;
- Peer-reviewed
- With an independent editorial board
- With a consensus that the journal is top in the field.

Problems of Research

- Research outputs do not get beyond University campuses and journals.
- Research outputs not developed for practical application
- Inability to replace archaic facilities
- Brain Drain - One tobacco company proudly advertised that “the best chairs in some of the world’s best universities are reserved for Nigerians”!
- Few senior staff with research experience
- Lack of marketing Expertise
- ‘Hostile’ environment
- Early Nigerian researcher study abroad
- Lack of research focus
- Preponderance of theoretical research
- Lack of Research in public and private sector
- Lack of cooperation between universities and industry
- Postgraduate studies now an adventure before a job comes

Cont ...

Age – Research requires Experience

- Oxford - 1067
- Cambridge - 1208
- St. Andrews - 1412
- Harvard - 1636
- Ibadan - 1948
- Ilorin - 1975
- Bayero - 1980
- KUST - 2001
- Northwest - 2012

Cont ...

- Absence of a research culture
- You can have all
 - bricks and mortar,
 - salaries and staff,
 - facilities and resources...
- Research Culture manifests when ...
 - People talk to each other; share intellectual curiosity
 - Willing to debate research question via regular faculty and departmental seminars
 - Support and collaborate with colleagues
 - Support for upcoming scholars by seniors

Cont ...

- Publications - citations, views, downloads
- Team work on projects and grant proposals
- Organising conferences at all levels
- Balance between research, consultancy, teaching and administration

❖ **Research culture incorporates the following:**

- Group built on common understanding and supportive environment
- Where competition drives advancement, factions vie to produce results
- **However, rivalries can be destructive....**

WAYOUT FOR NORTHWEST UNIVERSITY

- Initiate a Research Policy
- Identify Research Priorities
- Initiate collaboration with Private sector and Government
- A Reward system for researchers
- Research areas relevant to National Priorities
- Establish a Commercial Park
- Mount flexible, market-driven programs with inputs from professional associations and local business
- Market the University aggressively
- Develop a Research Culture
- Capacity building via collaborative research
- Distance support and mentoring via email and internet
- Encourage post-doctoral work
- Develop a strategic plan
- Enhance town – gown relationship
- Establish consultancy firm with entrepreneurial focus

Cont ...

- Start postgraduate programmes
- Teach Writing skills
- Encourage Forging of partnerships - Subject-associations
- Tap into existing networks within nearby universities
- Focus on long-term staff development including PhD training
- Look for senior and retired Professors as mentors
- Encourage disciplinary networks to create critical mass for joint publications and resource sharing
- Create Institutions to facilitate Research governance
- Encourage staff visibility - Research gate, Google scholar
- Aggressive marketing – door to door and via the web...



**THANKS
FOR
LISTENING!**

**Any
questions?**

