# SP/2012-2013/027Fiii UNIVERSITY OF PORT HARCOURT PORT HARCOURT, NIGERIA



## STRATEGIC RESEARCH PLAN

STRATEGIC RESEARCH PLAN 2012-2016

## TABLE OF CONTENTS

	Content	-	-	-	-	-	-	-	-	-	1
1.0	Preamble	-	-	-	-	-	-	-	-	-	1
1.1	University	of Port	Harco	urt Vis	sion	-	-	-	-	-	1
1.2	Objectives	of the S	Strateg	ic Rese	earch F	Plan	-	-	-	-	1
1.3	Measureme	ent and	Evalua	ation	-	-	-	-	-	-	2
2.0	Research C	lusters	at Uni	port	-	-	-	-	-	-	2
2.1	Democracy	, Econ	omy ar	nd Pub	lic Poli	icy	-	-	-	-	2
2.2	Human Hea	alth and	d Popu	lations	-	-	-	-	-	-	3
2.3	Natural Res	sources	and E	nviron	ment		-	-	-	-	3
2.4	Oil and Gas	s Resea	rch Cl	uster	-	-	-	-	-	-	4
2.5	Agriculture	Resea	rch Clu	ıster	-	-	-	-	-	-	4
2.6	Arts and Cu	ılture	-	-	-	_	-	-	-	-	5
2.7	Sports	-	-	-	-	_	-	-	-	-	5
2.8	Higher Edu	cation	Resear	rch	-	-	-	-	-	-	6
3.0	Research C	hairs	-	-	-	-	-	-	-	-	6
4.0	Research P	artners	hip	-	-	-	-	-	-	-	7
5.0	Strategies f	or Actu	alizin	g the C	bjectiv	ves	-	-	-	-	9
6.0	Membershi	p High	er Edu	cation	Relate	d Orga	anizati	ons	-	-	9
7.0	Timeline	-	-	-	-	-	-	-	-	-	10
8 N	Conclusion	_	_	_	_	_	_	_	_	_	10

## 1.0 PREAMBLE

The Strategic Research Plan has been developed as a direct response to the research component of the University Strategic Plan. It is a 5-year strategic research plan (2012-2016).

## 1.1 UNIVERSITY OF PORT HARCOURT VISION

## **VISION**

To be ranked among the best Universities in Africa, renowned for its teaching, research, innovation and knowledge transfer.

## **MISSION**

Pursuit of academic excellence, the advancement of knowledge and community service through quality teaching, life-long learning, social inclusion, strengthening of civil society, and policy relevant research that address the challenges of contemporary society.

The mission can be achieved through focused objectives, enhanced investment in high quality research and sustainable excellence of our academic programmes.

## 1.2 OBJECTIVES OF THE STRATEGIC RESEARCH PLAN

- To encourage trans-disciplinary research targeted at addressing human development indices in line with the MDGs.
- To build the capacity of staff in research and in writing grant-oriented proposals.

- iii) To increase the number of applications for external research grants by 50% in the next five years.
- iv) To increase the number of copyrights, patents, licenses and research contracts between the University and external institutions/agencies by 50% in the next five years.
- v) To develop sustainable research culture in the University.
- vi) To increase the number of Research Chairs by 50%.
- vii) To develop the Uniport Technology Park and Art Village.

## 1.3 MEASUREMENT AND EVALUATION

The University of Port Harcourt (UNIPORT) strategic research plan objectives will be measured through new discoveries, innovations, inventions and creative works using the following key performance indicators (kpi):

- a) Quality and number of publications (for example books published by highly reputable publishers and citations of articles in internationally indexed journals).
- b) Visibility and impact of research. National and international research ranking and rating.
- c) Number of disclosures of new discoveries, inventions and innovations; patents and copyrights filed by the University.
- d) Level of external research funding and the number of industry research contracts.
- e) Number of endowed research chairs, awards and Honours as well as research centres.

- f) Number of spin-off companies; number of business enterprises under incubation.
- g) Earned royalties and income from consultancies.
- h) Commercial licence agreements
- i) Creative works and curated exhibitions.

## 2.0 RESEARCH CLUSTERS AT UNIPORT

Eight transdisciplinary research clusters have been identified as areas of the University's research strengths. Within each of the eight research clusters are Research Chairs, Research Laboratories, Centres and Institutes to drive the research activities.

## 2.1 DEMOCRACY, ECONOMY AND PUBLIC POLICY

The challenges of the world being a global village are formidable: globalization; rapid technological innovation; human conflict over power, wealth and security; the need for a highly educated citizenry; growing social diversity and the historic challenge of maintaining Nigerian unity. UNIPORT has research strength in democracy, economy and public policy studies. This strength is rooted in the Faculties of Humanities, Science, Education, Management Sciences and Social Sciences. This is further reinforced by a set of active research centres and institutes including the Centre for Ethnic and Conflict Studies, the Centre for Gender Studies, Institute of Niger Delta Studies, and Bamanga Tukur Institute of International Trade and Development.

## 2.2 HUMAN HEALTH AND POPULATIONS

The Human Health and populations research cluster has many research initiatives that share common interest of enhancing human health. Research in this cluster includes

biological and biochemical determinants of health, social determinants of health and promotion, research on health care systems and services, research on society, culture, public health, and demographic health of population's studies. UNIPORT has strength in health education, practice and research. Considerable cross-disciplinary health research takes place in the College of Health Sciences and its Teaching Hospital, the Faculties of Sciences and Social Sciences. In addition, health research is enhanced through various research centres and Institutes such as the Centre for Malaria Research and Phytomedicine, Centre for Health & Development, Centre for Medical Research and Training, and Institute of Maternal and Child Health.

## 2.3 NATURAL RESOURCES AND ENVIRONMENT

The University of Port Harcourt is located in the Niger Delta region of Nigeria with a large dependence upon the sustainable use of natural resources. Marine and freshwater fisheries, aquaculture and forestry are the mainstays of the local economy. UNIPORT has developed a commitment to deepen its research on natural resource conservation and their sustainable exploitation. Environmental research in the University involves multidisciplinary activity related to the ecological and human aspects of developing healthy environments. Specific research sub-clusters have been identified as follows: Ecology and Conservation of Biodiversity; Environmental Quality Measurement, Monitoring and Modeling; Environmental Chemistry and Toxicology; Climate Change and Coastal Erosion; Bio-remediation and protection of soil, and water resources. Institute of Natural Resources and Sustainable Development, Centre for Occupational

Health, Safety and Environment and Regional Centre for Bioresources & Conservation drive the Natural Resources and Environmental research.

## 2.4 ENERGY (OIL AND GAS) RESEARCH CLUSTER

The Institute of Petroleum Studies coordinates research activities in oil and gas. The Centres and Institutes that drive the oil and gas research activities include: Centre for Oil and Gas Technology; Centre for Petroleum Geosciences; Centre for Gas, Refining, Petrochemical and LNG Technology; Fugro Centre for Geotechnical, Geophysics and Environmental Management; Emerald Energy Institute and Offshore Technology Institute. The Institute of Petroleum Studies is the training and research hub in Oil and Gas in the Gulf of Guinea. The University is committed to renewable energy research. Regional Centre for Biotechnology drives the bio-fuels component of the energy research. There is also the Centre for Nuclear Energy Studies.

## 2.5 AGRICULTURE RESEARCH CLUSTER

The Faculty of Agriculture has the mandate to carry out research activities in agriculture with emphasis on freshwater fisheries and aquaculture, swamp rice, plantain and banana. Soil conservation/enhancement of soil fertility is also an area of research focus due to the impact of oil and gas exploration and production in the Niger Delta region. The University of Port Harcourt has distinguished itself as a dynamic institution that seeks out and capitalizes on international, national and local opportunities for collaborative research and partnership. A network of universities in East Africa known as Regional Universities for Capacity Building in Agriculture

(RUFORUM) has signed a partnership agreement with the University on collaborative research and training in Agriculture. This partnership has linked UNIPORT to external funds for agricultural research and training.

The Institute of Agricultural Research & Development drives research in the agricultural research cluster.

## 2.6 ARTS AND CULTURE

The University has a strong research focus in Arts and Culture. This research explores the nature of human creativity through the examination of texts, the critical evaluation of elements of modern culture, the creation of new knowledge and art. Scholars working in this cluster often work independently rather than in teams, but their research benefits from the presence of a critical mass of scholars and cross-disciplinary discussion and consultation. Culture is the core of the debate about the forces that underlie human development in both cognitive and social spheres. About 50% of the Nollywood stars are graduates of UNIPORT. The University has established an Institute for Arts and Culture for the promotion of research in this cluster. Writers-in-Residence have been engaged by the University to train emerging young writers and researchers on the act of creative writing. Communications Trends Limited (CTL) has signed an MoU with the University on teaching, research and practice of arts and culture.

## 2.7 SPORTS

The University has a long tradition of dominating in sporting activities among universities in Nigeria and the West Africa sub-region. UNIPORT is currently the Champion of both the National Universities Games and the West African Universities Games due to the practice sports science and state-of-the art sporting facilities in the University. Approval has been secured for degree programme in Sports Medicine. The research components of the programme will focus on, determining optimal exercise regimes for promoting human health and wellness, and the relationships between sports and nutrition. Nigeria Olympic Committee (NOC) has recognized the University's Sports Institute as a Centre of Excellence. The University is Olympic Africa Centre and received an endowment of High Performance Centre (HPC) from the International Amateur Athletic Federation (IAAF), for English West Africa.

## 2.8 HIGH EDUCATION RESEARCH

Higher education research enhances our understanding of tertiary education institutions, helps higher education administrators in making more informed decisions about current and future operations. Higher education research covers such topics as curriculum reviews, industry partnership, internationalization of higher education, entrepreneurial education, Education for Sustainable Development (ESD), recruitments and admissions; retention, attrition and transfers, and improving the efficiency and effectiveness of an institution.

## 3.0 RESEARCH CHAIRS

The University has strategically placed its Research Chairs in the research clusters identified above to facilitate research capacity development in these areas of strength.

RESEARCH CLUSTER	AFFILIATED RESEARCH CHAIRS					
Democracy, Economy and Public	1. Claude Ake Chair in Political Theory					
Policy	2. KLS Kodjo Chair in Development Economics					
	3. Bamanga Tukur Chair in International Trade					
Human Health and Populations	Alex Ibru Chair in Children Development and					
	Communication Disorders					
Natural Resources and	1. Biogeochem Chair in Ecology					
Environment	2. Fugro Chair in Environmental Management					
	3. Stanley Lawson Chair in Environmental Geology.					
	4. Bruce Powell Chair in Animal Biology.					
	5. Ayebaemi Spiff Chair of Environmental Chemistry.					
	6. Emmanuel Anonke Chair of Biochemistry.					
	7. Gabriel/Ekeke/Neimeth Chair of Sickle Cell Research.					
Oil and Gas	1. Emmanuel Egbogah Chair in Petroleum Engineering					
	2. Shell Aret Adams Chair in Petroleum Engineering					
	3. PTDF Chair in Gas Engineering					
	4. O.B. Lulu-Briggs Chair in Petroleum Geosciences					
	5. Ross Chair in Subsea Engineering					
	6. Chi Ikoku Chair in Gas Engineering.					
	7. Mallam El-Rufai Chair of Engineering Management.					
Agriculture	All Agricultural Research Chairs in the RUFORUM Network					
Arts and Culture	1. E.J. Alagoa Chair of Historiography.					
	2. Obi Wali Chair of Language & Literature					
	3. Kay Williamson Chair in Applied linguistics					
	4. Yemisi Shyllon Chair in Fine Arts and Design					
	5. Ikoli Harcourt Whyte Chair in Music					
	6. Rex Lawson Chair of Highlife Music.					
	7. Clement Nimenilo Chair of Music					
	8. Festus Stanley Chair of Cultural Heritage					
Sports	No Research Chair at the moment, but the sporting facilities					
	at the University Sports Institute are of international					
	standards for research and practice in sports.					

## 4.0 RESEARCH PARTNERSHIP

The University encourages collaborative research partnerships. We have functional MOUs with the following institutions

S/N	Name of Local/	Areas of	Year of	Duration of	Current Status			
	Foreign Partner	Linkages/Collaboration	Commencement	Linkage/Collaboration	Due for renewal	Active	Terminated	
1	Songhai Centre, Benin Republic	Industrial Training (IT) at Songhai Centre for Agricultural Students from the University of Port Harcourt.	2008	5 years	2013	√		
2	European Business Competence License (EBCL), Austria	University of Port Harcourt as a Preparatory Centre for EBCL Certification Programme.	2008	5 years	2013	<b>√</b>		
*3	University of Texas, Austin, USA.	Staff and Students Exchange Programmes in Geosciences.	2008	5 years	2013	V		
*4	UNITECH Drilling Limited, Uyo, Akwa-Ibom State Nigeria.	i) Oil and Gas Field Development Planning and Studies. ii) Collaboration in Staff Training and Development, Senior Staff Exchange, iii) Organizing of Seminars and Workshops.	2009	2 years	2011	V		
5	University of Ibadan, Nigeria	Teaching, Research and Outreach Programmes.	2010	5 years	2015	V		
6	University of Mines and Technology (UMaT) TARKWA, Ghana	i) Teaching and Research, ii) Staff and Student Exchange Programmes.	2010	5 Years	2015	1		
7	National Centre for Remote Sensing, Jos	i)Technical Partnership ii)Training ii)Research Collaboration iv)Academic Cooperation	2010	2 years	2012	1		
*8	Safety, Engineering & Fire Consultants (Nig.) Ltd.	i)Post-Doctoral Training ii)HSE Mgt.	2006, 2011	5 years	Renewed Jan. 2011. Next renewal in 2016	√		
9	University of Abomey-Calavi, Republic of Benin	i)Collaboration & Coordination of Teaching Activities & Scientific Research/Projects ii)Exchange of information & Scientific Publications iii)Co-Supervision of Doctorate Thesis iv)Equipment of Laboratory & Lecture Halls	2010	5 years	2015	1		
10	TASMAC London School of Business (TLSB)	i)TLSB to provide one MBA Scholarship to Uniport Student ii)Post graduate training	2010	2 years	No renewal	√ 	2013	
*11	Institut Française du Pétrole, (IFP) Paris, France	i) Exchange of staff for teaching and research. ii) Award of joint Degrees. iii) Exchange of students for study and research iv) Exchange of information including library resources etc. v) Joint research & publication vi) Organization of continuing professional education and Organization of capacity building programmes.	2005	Permanent		1		

12	Walter Sisulu University	i)Reciprocal Exchange of Students ii)Reciprocal Exchange of Staff iii)Joint Research Activities iv)Exchange of Publication, reports and information, etc	September 2011	3 years	2014	1	
13	University of Gothenburg	i)Reciprocal Exchange of Students ii)Reciprocal Exchange of Staff iii)Joint Research Activities iv)Exchange of Publication, reports and information, etc	September 2011	3 years	2014	V	
14	London School of Hygiene & Tropical Medicine (LSHTM)	i) Exchange of staff for teaching and research. ii) Exchange of students for study and research iii) Exchange of information including library resources etc. iv) Joint research and Publication.	October 2011	5 years	2016	٧	
15	Kwame Nkrumah University of Science and Technology (KNUST)	i)Exchange of Staff and Students ii)Joint Research Activities iii)Exchange of Publication, reports, information, etc.	December 2011	5 years	2016	√ 	
16	Kansas State University , USA & Centre of Excellence on Environment & Conservation (Universities of Maiduguri, Port Harcourt, Nsukka, and National Biotechnology Development Agency [NABDA])	i)Reciprocal Exchange of Students ii)Reciprocal Exchange of Staff iii)Joint Research Activities iv)Exchange of Publication, reports and information, etc v)Development of Educational and Curricular programmes vi)Collaboration in research and technological transfer programmes vii)Development of joint proposals and projects	September 2011	5 years	2016	√	
17	University of Northampton	Staff & Student Exchange     Programmes     Development in Research     Activities     Exploration of     Collaboration at Course     level, for example     articulation arrangement	November 2011	3 years	2014	٨	
18	NNPC (R&D)	Biofuel Research	2012	Five years	2017	1	
19.	Total E&P Nigeria Limited	Oil and Gas Research	2012	Permanent		V	

## 5.0 STRATEGIES FOR ACTUALIZING THE OBJECTIVES

The Office of Deputy Vice-Chancellor (Research &Development) will provide essential support services to researchers to enable them achieve their goals of excellence in research. Specifically, the Office of the DVC (R&D) will:

i) Identify and assist in obtaining research grants from diverse sources to support research.

- ii) Provide first class services in administering research grants.
- iii) Ensure compliance with regulatory bodies and ethical research standards.
- iv) Provide workshops, mentorship and internal review mechanisms, grant proof-reading, and grant proposal writing, and assistance with grant budget preparations.
- v) Advice and inform researchers about policies on intellectual property, overhead costs, publication rights, liability, etc.
- vi) Above all, create conducive environment for sustainable research culture.

## 6.0 MEMBERSHIP OF HIGHER EDUCATION RELATED ORGANIZATIONS

The University of Port Harcourt is a member of several organizations that promote best practices in research capacity, building and management. Some of the organizations include:

- i) Association of African Universities (AAU). (UNIPORT houses the AAU regional Secretariat for Awareness Campaign on HIV/AIDS in West African Higher Education Institutions).
- ii) West African Research and Innovation Management Association (WARIMA).
- iii) Association of Commonwealth Universities (ACU).
- iv) Research Africa.
- v) Partner Institution with African Virtual University (AVU).
- vi) International Association of Universities (IAU).
- vii) Global Universities Network International (GUNI).

## 7.0 TIMELINE

	TIMELINE					
ACTIVITY	2012	2013	2014	2015	2016	
Research Grants and						
Fellowships						
Number of Patents and						
Copyrights						
Number of Publication						
(Journal articles)						
Research Partnerships from						
4 to 8						
Increasing Research Chairs						
from 20 to 30						
Develop Technology Park						
(Choba Park)						
Develop Art Village (Delta						
Park)						
Number of spin-off						
companies; number of						
business enterprises under						
incubation.						
Earned royalties and income						
from consultancies.						
Commercial licence						
agreements						
Creative works and curated						
exhibitions.						

## 8.0 CONCLUSION

The University will continue to explore industry partnerships and endeavour to maximize commercial capacity through the University Technology Park. Together we shall make the University of Port Harcourt truly an Entrepreneurial University where Research meets business and enterprise in the Technology Park.