

**JANUARY 2013**

# **UNIVERSITY OF NAIROBI**



## **RESEARCH POLICY**

**(Revised Edition)**

**UNIVERSITY OF NAIROBI**  
**Vision, Mission and Core Values**

**Vision**

**A world-class  
university  
committed to  
scholarly  
excellence**

**Mission**

To provide quality university education and training and to embody the aspirations of the Kenyan people and the global community through creation, preservation, integration, transmission and utilization of knowledge

**Core Values**

- Freedom of thought and expression
- Innovativeness and creativity
- Good corporate governance
- Team spirit and teamwork
- Professionalism
- Quality customer service
- Responsible corporate citizenship
- And strong social responsibility
- Respect for and conservation of the Environment

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## ACRONYMS/ABBREVIATIONS

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|              |   |
|--------------|---|
| BPS          | Board of Postgraduate Studies   |
| CAB          | College Academic Board  |
| CAE          | College of Architecture and Engineering   |
| CAVS         | College of Agriculture and Veterinary Sciences  |
| CBPS         | College of Biological and Physical Sciences   |
| CEES         | College of Education and External Studies   |
| CHS          | College of Health Sciences  |
| CHSS         | College of Humanities and Social Sciences   |
| CIPL         | Centre for International Programmes and Links   |
| CIOMS        | Council for International Organizations of Medical Sciences                           |
| DVC (AA)     | Deputy Vice-Chancellor (Academic Affairs)   |
| DVC (A&F)    | Deputy Vice-Chancellor (Administration and Finance)                                   |
| DVC (RPE)    | Deputy Vice-Chancellor (Research Production and Extension)                            |
| DVC (SA)     | Deputy Vice-Chancellor (Student Affairs)  |
| FabLab       | Fabrication Laboratory  |
| FTSE         | Full Time Student Equivalent  |
| IAGAS        | Institute of Anthropology, Gender and African Studies                                 |
| ICT          | Information and Communication Technologies  |
| IPMO         | Intellectual Property Management Office   |
| IRB          | Institutional Review Board  |
| KESSP        | Kenya Education Sector Support Programme  |
| KNH/UoN-ERRC | Kenyatta National Hospital/University of Nairobi Ethics and Research Review Committee |
| LOIs         | Letters of Intent   |
| MDGs         | Millennium Development Goals  |
| MoA          | Memorandum of Agreement   |
| MoU          | Memorandum of Understanding   |
| QMS          | Quality Management Systems  |
| RDAB         | Research Development Advisory Board   |
| R&D          | Research & Development  |
| RFA          | Request for Applications  |
| RFP          | Request for Proposals   |
| STP          | Science and Technology Park   |
| UNES         | University of Nairobi Enterprise Services Ltd   |
| UON          | University of Nairobi   |

## FOREWORD

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This University of Nairobi Research Policy is intended for both internal and external users within and outside the University as a reference point for research conducted at the University. It aims at providing an enabling environment within which research and consultancy can be carried out. The research policy development is anchored on the 2008-2013 Strategic Plan of the University of Nairobi, the Kenya Constitution 2010, Kenya Vision 2030 and other Government of Kenya policy documents and guidelines. As such, the research policy outlines the general vision of the University with regard to the utilization of cutting-edge research knowledge targeted at current development needs and demands in the near future. It also constitutes a baseline for the participation of academic units and staff in research career development within the University of Nairobi. An implementation strategy and subsequent development of specific action plans are described herein.

In view of the chronic scarcity of financial resources with ever increasing magnitude of problems to tackle, an optimal valorisation of any type of research activities – be it result oriented or aimed at fostering capacity building – is of utmost importance to the University. Through this policy, the University shall, therefore, pay particular attention to the appropriate support of research activities, including such key aspects as permanent staff education, the rigorous implementation of this policy at all unit levels, and establishing an appropriate embodiment within its management systems for the success of this research policy.

**Prof. G. A. O. Magoha**  
**Vice-Chancellor**

## PREAMBLE

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The Education Sector in Kenya has since the year 2003 embarked on plans for reforms at all levels through stakeholder consultations. This consultative forum has resulted in the Kenya Education Sector Support Programme (KESSP) which provides a road map for the envisaged reforms necessary in the Universities. One major highlight in the National Strategy for University Education reform process is the emphasis on the creation of a culture of innovation through acquisition, creation and application of knowledge. In the strategy report, the strategic goal for quality and relevance of University is stated as: To improve quality and relevance of learning through research for socio-economic transformation of society (Kenya). Further, recent developments in University education management have resulted in the enactment of The Universities Act No. 42 of 2012 which gives provisions within which universities will operate.

In the development of its strategic plan 2008-2013, the University of Nairobi has highlighted the need for enhancing research activities through a policy as strategic objective 4. The strategies stated include:

- Development and implementation of Research Policy;
- Expansion of opportunities for local, regional and international exposure of participation in learned forums; and
- Establish links with both public and private sectors for purposes of research and consultancy contracts.

In The Universities Act No. 42 of 2012 which replaced the University of Nairobi Act 1985, the objectives of university education are defined in Article 3(1). Specifically these roles *inter alia* are defined as “(a) to promote socio-economic development in line with the country’s development agenda; (b) to achieve manpower development and skills acquisition; (c) the discovery, storage and dissemination of knowledge; and (d) to encourage research, innovation and application of innovation to development.” The University of Nairobi intends to discharge fully these roles and in particular to participate in the discovery, transmission and preservation of knowledge and to stimulate the intellectual life, economic and socio-cultural development of Kenya.

In order to fulfil the above functions and objectives, the university has:

- Re-organized both its academic and research programmes in line with changes in its management strategies; and
- Developed a research policy to provide oversight for research activity management and enhance the university’s participation in global research

The University of Nairobi Research Policy shall provide a clear orientation that should advantageously serve to counteract the relatively widespread attitude regarding the usefulness of research and academics within a large sector of our society.

## DEFINITION OF TERMS

**Consultancy:** Professional advice that provides expert opinion or advice within a particular area of interest or expertise, usually at a fee paid to the consultant or consulting firm. In the case of University of Nairobi, the consultant may be the individual or a group of individuals employed at the University, the specific units, research affiliates or University of Nairobi Enterprise Services Ltd.

**Extension:** Formal and non-formal education programs which are based on research outputs taken to end users (such farmers) for the purpose of improving the end user's ability to enhance productivity, output and benefits.

**Intellectual Property:** As used in this Policy, it implies work or innovation resulting from creativity of persons for the time being affiliated with the University of Nairobi. Intellectual Property may include new inventions, manuscripts for publication, and designs to which one claims the first right.

**Outreach:** An activity of providing services to populations who might not otherwise have access to the services being provided or who live in places where the services are inadequate or unaffordable. The key component of outreach services is that the people providing the service are mobile thus meeting those in need of outreach services at their locations. In addition to delivering services, outreach has an educational role, raising the awareness of existing services.

**Production:** The processes and methods used to transform tangible products, such as output of research carried out at the University of Nairobi like new crop varieties or machines/machine parts or works of art, and intangible products such as output like ideas, knowledge and information of research into goods or services.

**Research:** Research as used in this Policy implies scholarly or scientific inquiry or investigation into an area of academic interest which aims to contribute towards a body of knowledge or theory.

**Research Fund:** A fund sourced and set aside for the purpose of supporting research activities at the University of Nairobi and for which researchers within the University will be expected to compete.

**Research Affiliate:** A visiting researcher attached to a University department for a limited period to carry out a specific research.

**Research Associate:** An academic research position at a university in which the person recruited to the position works under supervision of a principal investigator. A research Associate often has an advanced degree such as Masters or Doctorate.



## BACKGROUND TO THE RESEARCH POLICY

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On August 14, 2012 the Vice-Chancellor appointed a Senate Sub-Committee to review and align the University of Nairobi Research Policy to changes in the University and beyond, especially the Kenya Constitution 2010 and The Universities Act No. 42 of 2012. The membership of the Committee and its terms of reference is given below:

### Membership of the Sub-Committee

The following are the members of the Senate Sub-Committee:

|                         |   |
|-------------------------|---|
| Prof. Isaac K. Nyamongo | - Director, IAGAS ( <b>Chairman</b> )                   |
| Prof. Charles Omwandho  | - Dean, School of Medicine                              |
| Prof. Solomon Shibairo  | - Dean, Faculty of Agriculture                          |
| Prof. Genevieve Wanjala | - Dean, School of Education                             |
| Prof. Horace Ochanda    | - Assoc. Dean, Kenya Science Campus                     |
| Prof. Eunice W. Mutitu  | - Director, BPS   |
| Prof. Tom J. C. Anyamba | - Dean, School of the Built Environment                 |
| Prof. Lydia Njenga      | - Ag. Dean, School of Physical Sciences                 |
| Dr. Harriet Kidombo     | - Ag. Dean, School of Continuing and Distance Education |
| Mr. Ibrahim Otieno      | - Director, ICT   |
| Ms Rebecca W. Ngondo    | - Chief Legal Officer                                   |
| Mr. Ben M. Waweru       | - Ag. Academic Registrar - <b>Secretary</b>             |

### Joint Secretaries

|                        |                             |
|------------------------|-----------------------------|
| Mrs Beatrice Wanjala   | - Ag. Registrar, DVC (RPE)  |
| Mr. Bernard D. Njuguna | - Snr. Asst. Registrar, BPS |

### Terms of Reference

The terms of reference were outlined as follows:

- (i) To review and align the University of Nairobi Research Policy to changes in the University and the Kenya Constitution;
- (ii) To consider and review research uptake/utilization;
- (iii) To consider and review extension/outreach; and
- (iv) To deal with any other issues concerning research.

### Methodology

In order to carry out its mandate, the Senate Sub-Committee used the following techniques to gather information used for revising the research policy:

#### (i) Review of the University of Nairobi Draft Research Policy

The Committee reviewed the existing draft Research Policy with a view to identifying areas that should be changed or adjusted. In particular, the Committee was keen to ensure that the policy was properly aligned to the current administrative and financial systems of the University.

#### (ii) Review of research policies and documents from other Universities

The Sub-Committee reviewed research policies and other related documents solicited from Universities and research institutions in Kenya and other countries for purposes of benchmarking. Among others, research policies reviewed were from Moi University, Massachusetts Institute of Technology, University of Kwa-Zulu Natal,

Stanford University, University of Aberdeen, Harvard University, Bournemouth University, University of Georgia, Keele University and Macquarie University.

**(iii) Presentations from key University organs**

The Sub-Committee interviewed members of key university organs and compiled reports. The reports from these interactions provided a wide view of the University Community on conduct and administration of research.

**(iv) Interviews with key stakeholders**

The Sub-Committee interviewed key stakeholders such as representatives of Kenya Vision 2030 Secretariat. This was done in order to ensure that the policy remained relevant to the needs of various key stakeholders.

**(v) Meetings**

The Sub-Committee held a total of 8 meetings. The information availed to the Sub-Committee was analysed and discussed during these meetings. After going through several drafts, the Sub-Committee subsequently formulated the University of Nairobi Research Policy

**Declaration**

We the undersigned members of the Senate Sub-Committee on Formulation of University Research Policy are in full agreement with the contents of the Research Policy.

| <i>Name</i>             | <i>Signature</i> | <i>Date</i> |
|-------------------------|------------------|-------------|
| Prof. Isaac K. Nyamongo | _____            | _____       |
| Prof. Charles Omwandho  | _____            | _____       |
| Prof. Solomon Shibairo  | _____            | _____       |
| Prof. Genevieve Wanjala | _____            | _____       |
| Prof. Horace Ochanda    | _____            | _____       |
| Prof. Eunice W. Mutitu  | _____            | _____       |
| Prof. Tom J. C. Anyamba | _____            | _____       |
| Prof. Lydia Njenga      | _____            | _____       |
| Dr. Harriet Kidombo     | _____            | _____       |
| Mr. Ibrahim Otieno      | _____            | _____       |
| Ms Rebecca W. Ngondo    | _____            | _____       |
| Mr. Ben M. Waweru       | _____            | _____       |
| Mrs Beatrice Wanjala    | _____            | _____       |
| Mr. Bernard D. Njuguna  | _____            | _____       |

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## CHAPTER 1: INTRODUCTION TO THE RESEARCH POLICY

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### 1.1 National Context

The Constitution of Kenya 2010 expressly asserts the freedom of Kenyans to express themselves. In particular, Article 33 (1) states that “Every Kenyan has a right to freedom of expression” which includes among others (c) “academic freedom and freedom of scientific research.” Thus, the freedom to conduct scientific research is not only recognized in government pronouncements but is also enshrined in the Constitution of Kenya 2010. Furthermore, in order for the country to attain Vision 2030, three core pillars, namely economic, social and political have been identified as the engines of Kenya’s development. The delivery of Vision 2030 is underscored by the need to carry out relevant research in order to inform decision-making. Research is thus underscored as a strategic component of Kenya Vision 2030.

The importance placed upon research by the Government of Kenya is stated in Sessional Paper Number 1 of 2005 p.85:

*Research and development (R&D) is a means of creating wealth and enhancing human development and is a critical component of higher education and training. It also plays a vital role in industrial transformation, economic growth and poverty reduction. However, quality research requires sufficient funding, availability of highly trained research staff, adequate and appropriate facilities and equipment. For Kenya to meet her needs in R&D, there is need to give R&D priority in national development.*

The same intention is emphasized in Sessional Paper No 14 of 2012. The strategies recorded in the Sessional Paper seek to strengthen research and development through:

- Increased investment in Research & Development (R&D);
- Creation of a strong linkage between national goals, aspirations, linkages and research; and
- Wide dissemination of research findings for operational activities.

Kenya is a country with diverse people, stunning landscapes and rich natural resources. Research is essential for effective management and utilization of natural resources and for building and protecting national wealth. Based on African Union recommendations, the Government is expected to allocate at least 1% of its Gross Domestic Product to research and development (AU 2005). The University of Nairobi is in an excellent position and has comparative advantage to tap into this resource. Through this research policy, the University of Nairobi will take up its mantle as a leading national centre for relevant and effective research and thus contribute to achievement of national aspirations.

### 1.2 The need for the University Research Policy

The crucial role that Universities play in promoting research in the Humanities; the Social, Biological and Physical Sciences; Technology and Innovation; and Information and Communication Technologies (ICT) all of which are essential in providing Kenya with the essential competitive edge in the knowledge economy is indisputable. The Ministry of Higher Education, Science and Technology, in its reform strategy has emphasized this role. Further, the Universities’ responsibility is to also advise and inform, through research, the Ministry and other government institutions, on various pressing current issues and concerns connected to sustainable development. In recent years, the University of Nairobi has laid ground for improvement of its ICT infrastructure, sufficient to serve cutting edge research needs.

Innovation, Research and Development are key strategic issues that the University must address in order to remain relevant and to extend frontiers of knowledge. This can only be achieved through a responsive research policy to guide research activities at the institution.

### 1.3 University Statement of Commitment

The vision, mission and core values of the University of Nairobi demonstrate the importance attached to research by the University. The University finds itself with the inherent role of providing leadership in the domain of higher education and research. This role, however, has now to be fulfilled in the context of changing paradigms, characterized by an ever shrinking resource base, due to diminished capability of the exchequer to continue fully funding the needs of the universities and due to the continuing global economic crisis. Against this background, the University commits itself to living up to the highest ideals of good governance, to seeking to be socially responsive, and to promoting and pursuing excellence in training and research. The purpose of this research policy is to ensure that research is facilitated and strengthened at the University of Nairobi in order to meet its goals and achieve its potential. In order to achieve the University corporate goal, the office of the Deputy Vice-Chancellor (Research Production and Extension) has defined the vision, mission and core values relating to research at the University of Nairobi. Accordingly, the Vision of the research office is “excellence in research, innovation and extension”. The Mission is “to promote discovery, application and dissemination of knowledge through quality research and innovation.” These aspirations are guided by core values which include: freedom of thought and expression; innovativeness and creativity; good corporate governance; team spirit and teamwork; professionalism; quality customer service; transparency and accountability; and ethical practices.

**Vision**  
**Excellence in research, innovation and extension**

**Mission**  
**To promote discovery, application and dissemination of knowledge through quality research and innovation**

**Core Values**

- **Freedom of thought and expression**
- **Innovativeness and creativity**
- **Good corporate governance**
- **Team spirit and teamwork**
- **Professionalism**
- **Quality customer service**
- **Transparency and Accountability**
- **Ethical practices**

Consequently:

- In pursuance of and guided by goals and objectives of university education as defined in Article 3(1) of the Universities Act No. 42 of 2012, the research policy shall enable the University to participate in the discovery, transmission and preservation of knowledge and to stimulate the intellectual life and socio-cultural development of University of Nairobi and Kenya.
- Implementing a Quality Management System (QMS) based on the ISO 9001:2008 standard and guided by the principles derived from the University Quality Policy Statement: the University is committed to quality as the guiding principle in its decision making and leadership in the provision of university education and related

services to its customers shall be a central focus of the research policy statement. The University QMS has defined procedures that guide the conduct of research and consultancies in the University. In particular QMS Procedure UON/OP/65 (Procedure for Research) and UON/OP/80 (Procedure for Consultancy Services) are most relevant to this policy. The research policy will ensure quality of research and related educational services.

- Acknowledging the interest of both local and international community, the research policy will nurture excellence and professionalism, freedom of thought in academic inquiry, creativity, innovativeness and teamwork, in accordance with the priorities, principles and strategies indicated in this policy.
- Recognizing the need for a specific research policy framework to facilitate effective response to societal needs, the research policy provides a framework within which research will be undertaken at the University of Nairobi.

The University research policy shall:

- Espouse the virtues of *truth, integrity, honesty, tolerance, professionalism, teamwork and meritocracy*;
- Uphold the *ethics* and etiquette of teaching, learning and research;
- Promote and defend the *freedom of thought* and *academic enquiry* as well as freedom of association;
- Ensure *openness* and *transparency* in all its dealings and operations;
- Nurture *responsible corporate citizenship and strong social responsibility*;
- *Respect the beliefs and values of others*;
- *Respect and protect the environment*; and
- Have the courage to *initiate and adapt to change*.

#### **1.4 Purpose of the University of Nairobi Research Policy**

The policy will enable the University to fully contribute towards the development of the nation of Kenya and the world. It will provide a guiding framework to facilitate research-related policy development and review, and planning, and implementation of research activities within the university. It will also ensure that all research activities have a clear purpose drawn from the mission and vision of the University of Nairobi and that all resources mobilized for research activities are directed towards the fulfilment of institutional goals. These resources include policy framework and supportive infrastructure, human resources, sound knowledge and information, physical infrastructure, equipment, services and finances.

The research policy will also provide minimum standards for implementation of research and related activities that encourage efficient and effective communication, efficient, ethical and honest research conduct and availability of all essential human and material resources. It will ensure that research activity will underpin the educational activities of the university thus facilitating the development of sufficient numbers of highly-skilled human capital for national development.

This research policy must, therefore, aim to satisfy the following principles:

- Relevance to national and international development policy aims such as the MDGs and the Kenya national development “Kenya Vision 2030” initiative;
- Strategic linkage to the vision, mission, core values and strategic plan of the University of Nairobi; and

- Conformity with international best practices in order to facilitate world class research implementation and dissemination, and foster research linkages with international academic and research institutions and grant-awarding bodies.

### **1.5 Strategic Objectives of the Research Policy**

The strategic objectives of this research policy are to:

- Enhance the University of Nairobi’s position as a leader in innovative research;
- Initiate and strengthen collaborative research with national, regional and international institutions;
- Enhance the profile of the University of Nairobi through numerous, top quality journal publications, research citations and research awards;
- Foster thriving postgraduate programmes;
- Collaborate with government to translate research findings to policy; and,
- Collaborate with industry in knowledge management, innovation and wealth creation.

### **1.6 Scope**

In this policy the University will facilitate, host and conduct research in areas where latest developments promise to offer new knowledge or address problems constraining development initiatives in Kenya and Africa and where it can complement and add value to other national, regional and international activities: capacity building is a major goal of all research activities. The research scope shall:

- Facilitate the sharing of information through conferences; workshop; seminars and other mode of international exposures;
- Include broad areas such as cultural, social, health, agriculture, industry, environment, education, and legal issues and should capture major priority areas within the university research framework, as well as the national, regional and global agenda; and
- Capture creative and innovative technologies to advance research within the university while contributing to global knowledge.

### **1.7 Outline of the Research Policy**

The research policy presented here covers the following areas:

- i. A mission statement concerning research as already discussed in this Chapter
- ii. The governance of research
- iii. Academic policies, academic freedom, and research
- iv. Objectivity in research policy
- v. Research approval process
- vi. Research ethics and integrity in research
- vii. Sponsored research services
- viii. Consultancy
- ix. Undergraduate and graduate research
- x. Research supervision and research risk compliance
- xi. Environmental health and safety
- xii. Research development fund
- xiii. Protection of human subjects in research
- xiv. Use of animals in research
- xv. Research quality and research assessment

## CHAPTER 2: THE RESEARCH POLICY AREAS

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### 2.1 Introduction

One of the hallmarks of world-class universities is the level and nature of research undertaken by their students, staff and research affiliates. World-class universities also have elaborate research supporting structures in place which facilitate grant seeking, grant management and research output. In order to ensure that research activities carried out by researchers at the University of Nairobi make impact nationally and internationally, the University has established structures to facilitate the research processes at all levels. The research conducted by the university community is facilitated by various policy positions as elaborated below.

### 2.2 Guiding Principles of Key Policy Areas

#### 2.2.1 Creating an Enabling Environment

The University of Nairobi recognizes the central role research plays in its mandate as the premier institution of higher learning in Kenya. The research function of the University of Nairobi dovetails into the teaching mandate. The generation of new knowledge (through research) directly influences curriculum development and teaching. Research provides the raw materials for efficient and stimulating classroom interaction; it puts the teacher on the cutting edge of new knowledge.

In order to continue to play the key function of research, the University of Nairobi commits itself to establishing, maintaining, and protecting an enabling research environment that promotes innovation, production, domestication and stimulating exchange of ideas within the University community and with the outside world. An enabling environment takes into cognizance appropriate governance structures whose mandate is to support the development and maintenance of research structures consistent with these commitments and international standards. To drive this process, the University of Nairobi has created the office of DVC (RPE).

#### 2.2.2 Research Governance Structure

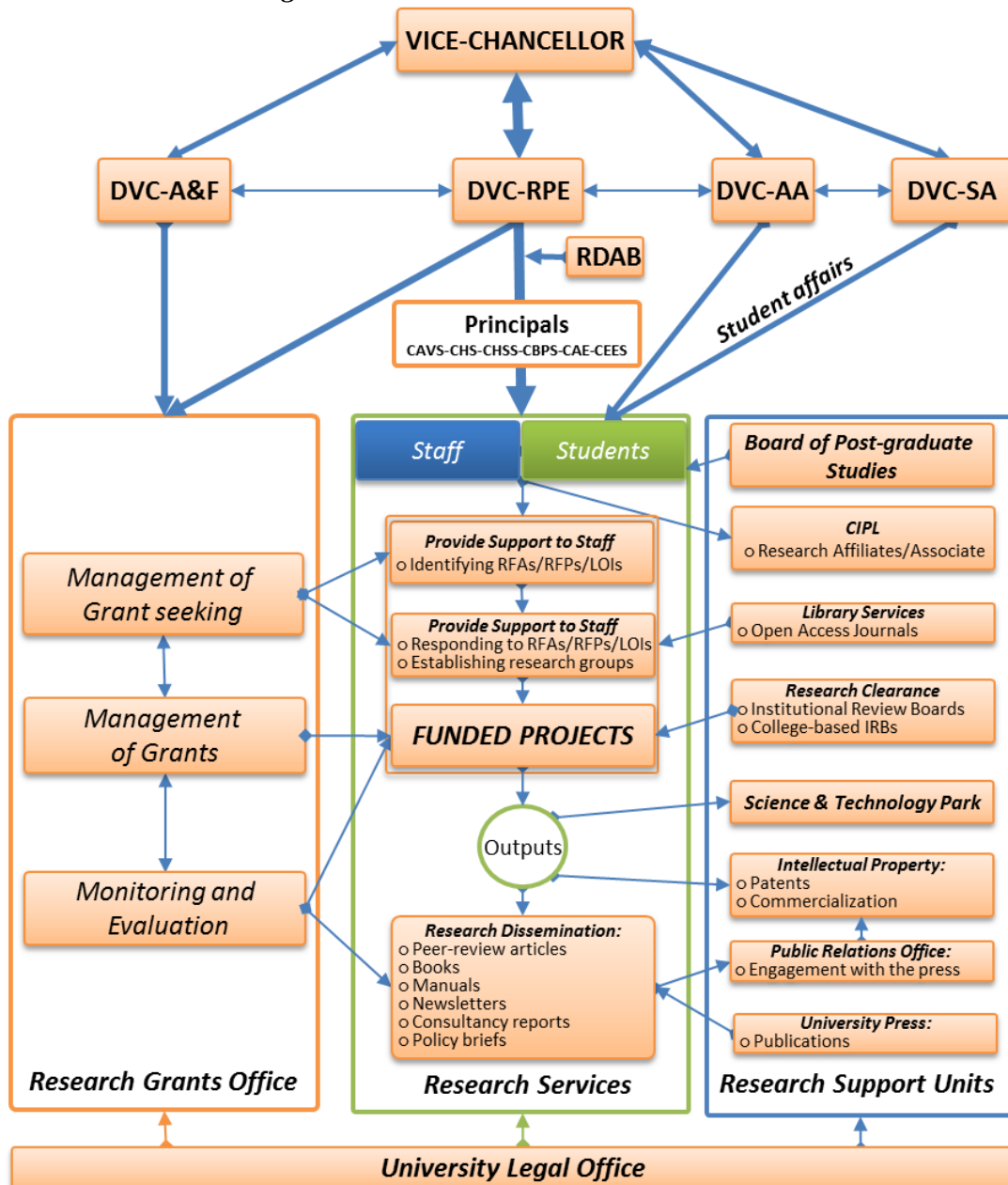
The research governance structure at the University of Nairobi is summarized in Figure 1. It takes into account the existing university structures and how they interface with research activities. In particular, the Research Grant Office shall be responsible for providing support to grant sourcing, grant management and monitoring and evaluation. The second core aspect of the governance structure is direct support to research activities including managing the human resource and products of research activities. Lastly, the research governance structure recognizes the supportive role provided by other units such as Board of Post-graduate Studies (BPS), Centre for International Programmes and Links (CIPL), Science and Technology Park, Legal Office, Intellectual Property Management Office (IPMO), Institutional Review Board (IRB), Library and University Press. The DVC(SA) will similarly provide support services such as student counselling and student placement. The public relations office will play a key role in the communication of research activities at the University of Nairobi.

In the day to day management of the research, production and extension activities, a Research Development Advisory Board (RDAB) shall be constituted to advise DVC(RPE) on the following:

- Research infrastructure development and formulation of appropriate policies;
- Research planning, coordination, administration, logistical support;
- Potential grant sources;
- Protection of intellectual assets, commercialization, dissemination and publication;

- Strategic alliances with government, industry, local and international research institutes;
- Management of research libraries and archives;
- Research branding, setting research standards and benchmarking, research quality assurance/control, research risk assessment and capacity building;
- Coordination of seminars, consultancies, workshops, conferences and symposia;
- Management of the research contracts and consultancies;
- Management of the University Research Fund; and
- Extension and outreach services

**Figure 1: Research Governance Structure**



### 2.2.3 Academic Policies, Academic Freedom and Research

In its academic policies the University emphasizes the need for staff to balance between teaching and research and extension activities. Specifically, the University shall include



research in the job description of every academic member of staff and ensure that time is allocated for research purposes and each member of academic staff is evaluated and rewarded for successful conduct of research. Further, the university recognizes the rights of staff and students in respect of academic freedom and research as enshrined in the Kenya Constitution 2010. These rights are recognized in the University of Nairobi's Vision, Mission and Core values as well as in the Vision, Mission and core values of the research office.

#### **2.2.4 Objectivity in Research**

Fair and honest reporting is the hallmark of scientific endeavours. To this end researchers are expected to:

- maintain the highest degree of intellectual honesty in the design, conduct, data analysis, reporting of research findings and in acknowledging significant direct and indirect contributions made by colleagues and collaborators;
- be honest regarding reporting of any conflicts of interest that might exist in relation to the specific works they are carrying out; and
- report any real or potential conflicts of interest to the University and in reporting of their research findings.

#### **2.2.5 Research Approval Process**

The University shall endeavour in the spirit of continual improvement to streamline the research approval process both for students, staff and research affiliates by creating specialized institutional review boards (IRBs) at college level. Therefore, each college shall be required to set up specialized College-based Institutional Review Boards (IRBs) to facilitate research clearance at that level. These College-based review boards shall review research protocols submitted for assessment and make timely recommendations so as not to frustrate research activities and the donor funding requirements. The Institutional Review Boards (IRBs) shall develop and present for approval by the relevant University organs guidelines for seeking ethical clearance exemption. The guidelines will be based on acceptable minimum standards.

#### **2.2.6 Ethical Practice**

The University of Nairobi shall ensure that researchers working within the University and/or who are associated with the University of Nairobi shall work in accordance with established international ethical standards. The University shall review these ethical standards from time to time as dictated by advances in knowledge. To this end, the University shall create a balanced Institutional Review Board to enforce established Ethical Standards.

Researchers at the University of Nairobi as well as University of Nairobi research affiliates will be expected to be aware of ethical requirements. All research conducted by staff of University of Nairobi shall be required to receive ethical approval from the Institutional Review Board within reasonable time and before the research work can be conducted.

#### **2.2.7 Sponsored Research Services**

The University of Nairobi recognizes the special challenges that come with sponsored research projects. In particular these projects may be prone to conflict of interest, conflict of commitment and may thus require special attention from the research grants office. University of Nairobi shall expand the mandate of the Research Grants Office to include seeking donor research funds; guiding researchers to potential funding sources; negotiating with potential donor funding agencies; keeping a record of recipients; managing research funds; and detecting and managing potential conflicts as well as research misconduct. Thus the Office of Sponsored Research will ensure that the University of Nairobi is fully compliant

with research sponsor terms and conditions, University policies, government regulations and requirements. Sponsored research activities shall be subject to specific Memorandum of Understanding/Agreement.

### **2.2.8 Consultancy**

The University of Nairobi recognizes that it owns an extensive pool of expertise. The University shall create a conducive environment in order to avail this expertise for consultancy as a way of contributing to the overall university mandate and national development. In particular the University undertakes to support its staff to create a vehicle through which staff can compete for consultancy services. The University shall set up consultancy groups from among its pool taking into account the often required multi-disciplinary teams.

### **2.2.9 Undergraduate and Post-graduate Research**

The University of Nairobi undertakes to train and create sufficient interest in research among its students both at the undergraduate and post-graduate levels. The University through the Board of Post-Graduate Studies (BPS), faculties, schools and institutes shall create an enabling environment through appropriate provisions in approved syllabi and regulations. The BPS shall take the lead in facilitating a research environment which supports post-graduate students to complete their studies within the stipulated period. In this regard and working with the Office of the Deputy Vice Chancellor (RPE) the Board of Post-Graduate Studies shall enforce University of Nairobi statutes regarding supervision of post graduate students and regular reporting of progress. The office of the Deputy Vice-Chancellor (SA) shall play a facilitative role in supporting the research functions through mentorship programmes, student placement and counselling.

### **2.2.10 Research Supervision and Research Risk Compliance**

The University of Nairobi shall ensure that researchers who carry out research under the name of the University adhere to research protocol, research ethics and guidelines provided by funding agencies and the University of Nairobi. The University shall identify and mitigate potential research compliance risks.

### **2.2.11 Environmental Health and Safety**

Recognizing that the environment provides an important link in our research output, the University of Nairobi has an obligation to protect and preserve the environment—the biological, physical and social environment. In all its operations as well as operations of individuals affiliate, the University of Nairobi shall enforce the protection and preservation of the biological, physical and social environment. The guiding principle shall at all times be continuous improvement of the environment in its totality.

In particular:

- Use of chemicals and laboratory discharge shall be done in a manner consistent with established standards for the discharge of any harmful products into the environment;
- Use of agricultural chemicals for the purpose of experimentation in agriculture would be done with due regard to environmental protection; and
- Disposal of human biological waste will be carried out in line with established principles for the disposal of hazardous biological material.

In research involving social experimentation, the outcome should not adversely pollute the social and cultural tenets of communities in which such a research is carried out. Due care

shall be taken by the researchers to mitigate any such social and cultural pollutants. Thus, the University of Nairobi commits itself to protect and preserve the biological, physical and social environment.

#### **2.2.12 Deans Committee Research Development Fund**

The University of Nairobi manages a Deans Committee Grant whose aim is to provide funds in order to develop capacity and strengthen the research culture. The Deans Committee Grant shall be transformed into a Research Development Fund whose purpose will be to provide support to research of strategic importance to the University through a competitive process. Priority will also be given to research with the potential to attract further funding from funding bodies. Therefore projects will be required to have clear, tangible deliverables and be explicit how they will lead directly to future proposals for research funding. The granting process will therefore be aligned to emerging research themes and with national strategic priorities. The Fund shall also carry the research and supervision money paid by post-graduate students, which will be held in a special Vote to facilitate student research.

#### **2.2.13 Protecting Human Research Subjects**

The involvement of humans as research subjects shall be governed by procedures consistent with established international standards espousing the principles of respect, beneficence and justice. In particular, the University of Nairobi Researchers shall subscribe to the Council for International Organizations of Medical Sciences (CIOMS) in respect research involving human subjects. These standards shall be enforced by an Institutional Review Board established for the purpose of reviewing proposals to ensure adherence to ethical standards. For the time being, these functions are managed by a joint [Kenyatta National Hospital/ University of Nairobi Ethics and research Review Committee \(KNH/UON-ERRC\)](#).

#### **2.2.14 Protecting Experimental and Laboratory Animals**

The use of animals for research shall be governed by the established international conventions on the use of laboratory animals for experimentation and other forms of research. This would include, but not limited to, the humane treatment of animals used for research purposes. In particular minimum standards for housing and care, regulation of the use of animals and in particular regular assessment of pain, suffering distress and lasting harm caused to animals will be set based on internationally agreed standards.

#### **2.2.15 Research Quality and Research Assessment**

In order to ensure that researchers of the University of Nairobi attain the highest research standards, the University shall train its researchers to produce quality research. The University shall establish mechanisms through which research activities are conducted and assessed to ensure that they attain the highest standards. In this regard the University established an office of Quality Assurance and Standards. The University shall enforce the use of the research notebook by its researchers.

#### **2.2.16 Intellectual Property Rights**

The university shall provide an enabling environment that encourages knowledge and product creation. In order to protect discoveries and inventions by its researchers, the University shall institute appropriate mechanisms to protect intellectual property rights. Such protection shall ensure that inventions/innovations are patented so as to protect the rights of the University as well as inventors/innovators in line with University of Nairobi Intellectual Property Policy. Researchers shall be required to familiarize themselves with the provisions of the University of Nairobi Intellectual Property Policy.

### **2.2.17 Incubation Lab/Fab Lab/Mentoring Lab/Science Park**

The University of Nairobi shall nurture talent and facilitate the incubation of new ideas and mentoring of incubates. To facilitate this, the University Science and Technology Park (STP), which operates from a rapid prototyping centre, the FabLab (Fabrication Laboratory), shall enable technology transfer through commercialization of technology. The University of Nairobi houses a Level 3 Emerging Pathogens Laboratory (the only one of its kind in an institution of higher learning in the region) for specialized molecular diagnostics and genomics. In this regard, researchers shall be required to take cognizance of the procedures of business incubation including the mentoring of incubates as espoused in the University of Nairobi Science Technology Park procedures.

### **2.2.18 Plagiarism**

The University of Nairobi shall nurture academic integrity among staff and students. In particular, the University takes seriously academic dishonesty and shall take serious action as espoused in University documents. The University shall have zero tolerance towards plagiarism and shall put in place appropriate deterrent measures to ensure academic honesty.

### **2.2.19 Research Utilization**

The University shall institute processes to ensure that research conducted at the University is made available to researchers, industry, policy makers, targeted users and the general public through publications, workshops, outreach and extension services.

## **CHAPTER 3: STRATEGIES TO ENHANCE RESEARCH CAPACITY**

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### **3.1 Introduction**

In order for the university to realize its goals as laid out in this research policy, it is important that strategies be developed to facilitate research. In this regard, the University has identified a number of areas as key to enhancing the research capacity. These are: university research fund, human resource and capacity building, research systems and value addition, linkages with industry, research management structure, communication, sensitization on the research process, commercialization of innovations/inventions, and ICT infrastructure.

### **3.2 University Research Fund**

Key elements of any institutional strategy to foster research development and safe applications of research findings is to ensure steady flow of resources for research facilitation. The research resources may include accruing tuition and gifts/research endowment funds as well as significant funding from external research sponsors/donors. It is therefore important that a strategy is developed to establish University Research Fund to support research on a competitive basis through provision of short and long term fellowships and competitive grants for research. The schedule and procedure for the award of such research grants shall be enhanced.

### **3.3 Human Resource and Capacity Building**

This policy advocates for provision of opportunities to increase the research capacity of faculties/schools/institutes, centres and departments and individuals to conduct research in relevant fields and to develop and deliver new concepts and technologies. This should be provided through opportunities for post-graduate training, and short-term post-doctoral training programs and continuous staff development. The realization of this potential will require critical examination of the role of Board of Postgraduate Studies program at the University to meet the demands of research delivery needs. Major avenues of consideration will include:

- Proactive approach to seek and expand fellowship/donor support for postgraduate training;
- Adoption of modern and interactive technologies for information access and delivery;
- Enabling compilation of information database on postgraduate training programs and output at the University;
- Coordination and organization of postgraduate and academic research exhibitors, conferences, workshops and seminars; and
- Short-term staff training and exchange programmes, which will include providing staff with opportunities for linkages to institutions with strong research portfolio/tradition.

### **3.4 Research Systems and Value Addition**

In order to achieve the policy strategic objectives, there is need to identify and prioritize strategic institutional innovation systems such as the Fab/Labs and specialized centres that provide extension and outreach services. Therefore, the University will facilitate, host and conduct relevant research activities. The main focus of the research activity will be on improving the productivity and sustainability of Kenya's development, through provision of improved product with high impact on socio-economic development.

### **3.5 Industry - Academic Research Interphase**

The University-private-public sector cooperation or partnerships in research and development has recently become a prominent form of organizing and managing of technological innovations mainly in institutions of the developed countries. The pressure of international competition, increased diffusion of information and communication, declining public funding of R&D have facilitated the enlarging of private industry engagement/investment in R&D. In this policy the partnership of the University research units with private sector will be encouraged. The engagement will be through: Joint research ventures: contractual research programs and other appropriate avenues. The management of such partnerships will be conducted through instruments of engagement such Memoranda of Understanding/Agreement (MoUs/MoAs) and Letters of Intent (LOIs) with in-built incentives to improve institutional wealth.

### **3.6 Development of appropriate Research Management Structures**

There are constraints in institutions of higher learning in confronting challenges and other sets of complex research issues due to limited capacity to engage in cutting edge research. In order to mitigate research compliance risks, the University shall re-organize the functions and role of Research Grants Office to:

- Provide support for research policy formulation and strategic planning;
- Provide support service for the administration of internal and external research grants scheme, including funding allocation, monitoring research progress and expenditures, and evaluation of results;
- Act as a focal point for internal and external research information dissemination and external liaison;
- Develop and maintain a central database and institutional repository for research activities;
- Support services for University Research Centre funding allocation and progress monitoring;
- Compile submissions for Research Assessment Exercise including assessment of research risk areas; and
- Provide secretarial support to the University Research Committee and other Working Groups, evaluating research proposal for funding.

### **3.7 Research Communication**

Communication plays a key role in dissemination of research findings. Thus the university shall:

- Establish a well-structured and objective information delivery system and network to enhance research activity and information sharing;
- Coordinate and organize a University-wide or college-based research conferences and make outcome publications available online and on print. Such conferences or workshops could be annual or bi-annual events;
- Facilitate, host and coordinate thematic regional and international conferences at reasonable intervals;
- Provide opportunity for postgraduate students to share research findings through conferences, workshops and seminars;
- Support (fund) local international-standard journals to create more avenues for disseminating research findings. In particular, the University will actively encourage Colleges, Faculties/Schools/Institutes to initiate and manage e-journals hosted by the University of Nairobi; and
- Facilitate the establishment of strong research groups in various thematic areas.

### 3.8 Sensitization on the Research Process

The research process begins with the development of a concept or idea (often in response to a Request for Proposals (RFPs) or Request for Applications (RFAs)) that is turned into a proposal, followed by a grant award; then the performance of the project and several other steps that ultimately lead to the closeout process. Understanding of such an entire process will enable the research teams and other stakeholders become more effective research implementers and administrators. The research work flow illustrated in Figure 2 may be used as guide to determine the critical role played by research implementers and administrators. The University of Nairobi shall endeavour to sensitize students and staff on the research process on a regular basis including new requirements by donor agencies.

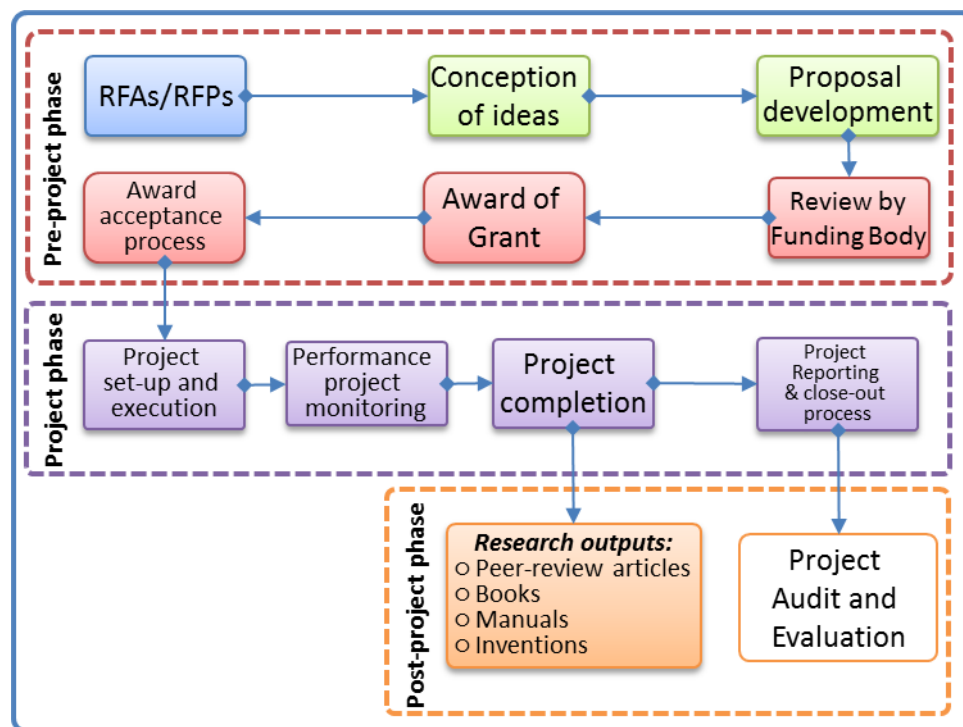


Figure 2: Research work flow diagram

### 3.9 Commercialization of Products

University research units have in the past developed marketable products, but the commercialization of such products has remained elusive. For example, the development of the bacterial cultures that are used for the now popular Maziwa Lala (fermented milk) through research carried out at the Department of Food Science and Technology, College of Agriculture and Veterinary Sciences (CAVS), Kabete. The University shall develop a clear strategy to link research activity to commercialization of products through, for example, establishment of Science and Technology Parks (STPs). Commercialization of research products, would improve the image of the University locally and internationally.

### 3.10 ICT Infrastructure

The University of Nairobi has recently embarked on expansion and growth in the area of ICT resources and infrastructure. The use of ICT has permeated all areas of the University. The University's investment in ICT infrastructure and training of staff on ICT literacy skills has improved adoption of ICT in teaching and research. As a result, the level of awareness and acceptance of the technology as a major driver in realizing the University objectives has

improved tremendously. ICT growth and uptake in the University is important in improving research delivery at all levels. The strategy will include:

- Online dissemination of University research outputs through use of e-journals;
- Access to e-books;
- Providing access to research information;
- Building database and programs for on-going research management;
- Formulation of an Open Access policy to facilitate access to research findings and other materials;
- Creation of institutional repositories to disseminate research output;
- Development of a research and Grants Management Information System; and
- Adoption of anti-plagiarism policy and software to address plagiarism concerns.



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## CHAPTER 4: POLICY IMPLEMENTATION STRATEGY

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### 4.1 Strategic Assumptions of the Research Policy

The following strategic assumptions guided the development of this research policy:

- The policy will improve the quality and quantity of research being carried out at the University of Nairobi.
- The success / failure of the research policy will be measured through changes in the research productivity of University of Nairobi.
- Research productivity will be measured using the following indicators:
  - Number / proportion of staff members engaged in research;
  - The number of research projects;
  - The inputs, namely: types and size of funding, facilities, human resources and time; and
  - The output, namely: research degrees, publications, patents and citations.
- The functional organs of the University, namely, departments, centres, faculties/institutes/schools, colleges and boards (in particular the Board of Postgraduate Studies) and central administration (in particular the office of the DVC (RPE)) will influence research productivity by successfully carrying out the roles and responsibilities identified in this policy.
- The University of Nairobi shall implement the recommended ratios of research time into its FTSE (Full Time Student Equivalent) calculations and will recruit the full establishment of staff required to effectively perform both teaching and research mandates of the University.

### 4.2 Research Productivity Framework

The research productivity framework is a 3-dimensional matrix. The first dimension consists of the Administrative, Financial and Human Resources roles and responsibilities that are necessary for the successful implementation of research. The second dimension consists of the research career progression methodology which will be applied to progressively develop a researcher from postgraduate studies up to research mentorship role at Professorial level. The third dimension consists of the main organs of the University which have a responsibility to carry out the roles and activities required to develop the researcher. These organs consist of:

- Academic staff members
- The Department
- The Faculty, Institute or School
- The College
- The Office of Deputy Vice-Chancellor (Research, Production and Extension)

The matrix will thus document the policies that guide the organs of the University with the aim of increasing the research productivity of members of staff. The research productivity conceptual framework has the following guiding principles. The policy shall:

- Encourage the implementation of relevant research projects and which will be carried out using sound methodology, honest reporting, efficient resource utilization and observance of ethical standards;
- Facilitate research proposal writing and sourcing of research funds;
- Facilitate disbursement of research funds to the researcher efficiently;
- Give appropriate research incentives to its researchers;

- Manage and audit research activities in order to assess performance, compliance and risk management;
- Facilitate, automate and decentralize research management;
- Establish common benchmarks for research activity, including methods for monitoring and evaluating research progress; and
- Maintain a sustainable research structure that ensures a steady, successful flow of postgraduate students.

### 4.3 Research Policy Implementation Structure

The general structure of the research policy is documented in Table 1. The policy assumes that four general policy areas must be addressed, namely: research infrastructure, research administration, research finance and management of human resource. Each of these general policy areas should aim at implementing the policies that develop researchers. The organs of the University that will implement these policies are the department, the faculty, institute or school, the college and central administration – through the office of Deputy Vice-Chancellor (RPE).

The column entitled ‘Issues’ in Table 1 gives a list of aspects that are covered under each policy area. For example, research infrastructure covers ICT, library, laboratories, animal houses, green houses and farms among others.

**Table 1: Research Policy Template**

| <b>Policy Area</b>                   | <b>Issues</b>   |
|--------------------------------------|---|
| <b>Research infrastructure</b>       | <ul style="list-style-type: none"> <li>• Website/Internet</li> <li>• ICT (computers, networks, communications, research software)</li> <li>• Library</li> <li>• Laboratories and laboratory equipment</li> <li>• Studios and workshops, micro-teaching rooms, Fablabs</li> <li>• Houses (animal-, green- insectaries, etc.)</li> <li>• Vehicles</li> <li>• Research farms</li> </ul>  |
| <b>Administration</b>                | <ul style="list-style-type: none"> <li>• Policy</li> <li>• Collaboration and linkages</li> <li>• Legal assistance</li> <li>• Productivity Measurement</li> <li>• Dissemination (Website, publications including e-journals and e-publishing)</li> <li>• Coordination and Management of multidisciplinary projects</li> <li>• Research Networking</li> <li>• Maintenance of Research Standards</li> <li>• Institutional Review Boards</li> <li>• Project management</li> </ul> |
| <b>Finance</b>                       | <ul style="list-style-type: none"> <li>• Research funding management and accounting</li> <li>• Grants management</li> </ul>   |
| <b>Management of Human resources</b> | <ul style="list-style-type: none"> <li>• Staff Establishment e.g. Grant writer, Director of researcher.</li> <li>• Recruitment and selection</li> <li>• Training and Development e.g. study leave, sabbatical leave</li> <li>• Incentives</li> </ul>  |

| Policy Area | Issues   |
|-------------|--|
|             | <ul style="list-style-type: none"> <li>• Research load</li> <li>• Promotion requirements</li> <li>• Staff Appraisal</li> </ul> |

#### 4.4 Research Career Development Framework

The research policy aims to facilitate the development of research careers, assuming that researchers will become increasingly productive and useful for the fulfilment of the research objectives of the University of Nairobi as they grow in seniority. Table 2 classifies provides the different categories of researchers and outlines the qualifications, roles, research activities, research-to-teaching load and expected outputs of each category.

**Table 2: Research Career Development Framework**

|                                      | Postgraduate student  | Research trainee  | Researcher   | Research Mentor  |
|--------------------------------------|---|---|--|--|
| <b>Qualifications &amp; position</b> | • Bachelors or Masters degree   | • Masters, or Ph.D.   | • Ph.D.  | • Ph.D.  |
|                                      | • Masters. or Ph.D. student   | • Tutorial Fellow or Lecturer   | • Lecturer or Senior Lecturer  | • Associate Professor and Professor  |
| <b>Role</b>                          | <ul style="list-style-type: none"> <li>• Qualify with expected degree.</li> <li>• Assist in research.</li> </ul>  | • Carry out research project.   | <ul style="list-style-type: none"> <li>• Carry out research.</li> <li>• Supervise other researchers and students.</li> <li>• Attract and administer research funding.</li> </ul> | <ul style="list-style-type: none"> <li>• Mentor all research activity.</li> <li>• Recruit and supervise other researchers and students.</li> <li>• Attract and administer large research grants.</li> <li>• Attract and administer grants for graduate training</li> </ul> |
| <b>Research activity</b>             | • Postgraduate research project or thesis activity.   | • Doctoral or postdoctoral research.  | • Successfully implement funded research projects.   | <ul style="list-style-type: none"> <li>• Successfully administer large grants.</li> <li>• Participate in research administration in consultation with head of dept.</li> </ul>   |
| <b>Research / teaching load</b>      | <b>(for research institutes the general load is 70% research / 30% teaching)</b><br>Academic departments shall observe the research and teaching load in the proportion of 30% Research / 70% other mission-oriented activities |   |  |  |
| <b>Expected Outputs (indicative)</b> | <ul style="list-style-type: none"> <li>• Dissertation, Thesis, Conference papers.</li> <li>• 1 Thesis/Project in 2 years for Masters/ 1</li> </ul>  | <ul style="list-style-type: none"> <li>• Thesis, conference papers, journal papers.</li> <li>• 1 conference/ journal paper per annum</li> </ul> | <ul style="list-style-type: none"> <li>• Reports, conference and journal papers, books.</li> <li>• 1 journal paper or 2 conference papers per annum</li> </ul>                   | <ul style="list-style-type: none"> <li>• Reports, conference and journal papers, books.</li> <li>• 2 journal papers or 3 conference papers per annum</li> </ul>  |

|  | <b>Postgraduate student</b>                                   | <b>Research trainee</b> | <b>Researcher</b> | <b>Research Mentor</b>                   |
|--|---|-------------------------|-------------------|--|
|  | Thesis in 3 years for PhD<br>• 2 conference papers in 4 years |                         | • 1 patent        | or 1 book every four years.<br>• Patents |

In order to fulfil the mission and vision of the University of Nairobi, it is expected that staff will balance their time between activities that contribute towards each of the mission areas of the university. One way that this process can be guided, and employee time appropriately allocated, is through a capacity matrix. Employee time will be distributed as appropriate among the following areas: teaching and learning, research, research and development, consultancy, administration and extension. (see Appendix A for an example).

The disciplinary procedures that guide the conduct of research shall be as contained in the Regulations Governing the Conduct of Research as approved by University Management Board on 27<sup>th</sup> August, 2011. These regulations are contained in Appendix B of this document.

## CHAPTER 5: RESEARCH FUNCTIONS & PROCEDURES

### 5.1 University-wide functions and procedures

The procedures below will be managed by the office of the Deputy Vice-Chancellor (RPE).

| Policy Area                           | Functions & Procedures  |
|---------------------------------------|---|
| <b><i>Research infrastructure</i></b> | <ul style="list-style-type: none"> <li>• All research projects of the University of Nairobi shall be listed on the University website and should provide a start and end date for the project. Projects may be allocated a web page or website, as appropriate.</li> <li>• All researchers of the University shall have adequate access to computing resources and Internet facilities.</li> <li>• Library services shall be accessible through the network and at least 40% of library materials shall be provided in digital formats.</li> <li>• A research library shall be maintained to support access to University research archives and specialist journals.</li> <li>• A copy of all research publications produced within the University of Nairobi and / or by University of Nairobi staff or registered postgraduate students shall be archived in an e-repository of the University of Nairobi.</li> <li>• The University shall facilitate flexible, efficient and responsive procurement, maintenance and retirement of all University of Nairobi research infrastructure.</li> <li>• The University of Nairobi shall allocate each year a research fund for which faculty will compete</li> </ul>  |
| <b><i>Administration</i></b>          | <ul style="list-style-type: none"> <li>• The University shall set and evaluate research benchmarks.</li> <li>• All research projects shall be formalized through registration with the Office of the Deputy Vice-Chancellor (RPE) Large research projects shall be required to formalize legal agreements with donors, funding agencies and collaborators through the Legal Office.</li> <li>• All research projects shall be administered using research management software developed or procured by the University.</li> <li>• All academic staff members and post-graduate students, and any other staff member or associate who intends to carry out research at the University of Nairobi, shall sign a research contract. The research contract shall include a statement of compliance with all relevant policies including research procedures contained in this document, regulations governing the conduct of research (Appendix B), research ethics (Appendix C), Intellectual Property Rights Policy, and a statement of the applicable research benchmark.</li> <li>• Any person who has not signed a research contract is not mandated to carry out research at the University of Nairobi.</li> <li>• University of Nairobi staff members who are mandated to carry out research may receive basic research funding from the University.</li> <li>• The level of basic funding that shall be allocated to each category of research shall be regularly set by the DVC (RPE) in consultation with the Deans/Directors and with UMB.</li> <li>• Every academic staff member shall submit an annual research plan to</li> </ul> |

| Policy Area                         | Functions & Procedures  |
|-------------------------------------|---|
|                                     | <p>the DVC (RPE) through the head of department/ faculty/ institute/ school/ Centre. Annual research appraisal will be based on the submitted plan, which will also be used for mentoring purposes.</p> <ul style="list-style-type: none"> <li>• All research outputs of the University that have been accepted for publication shall be disseminated in electronic form (with the digitized citation as a minimum standard) through the website and in conventional formats through the research library.</li> <li>• The University shall facilitate research networking through seminars, visits and conferences.</li> <li>• The University of Nairobi shall foster and facilitate collaboration between researchers, departments, faculties, universities, research organizations and industry.</li> <li>• All abstracts of research degree theses and dissertations passed by the University of Nairobi shall be disseminated through international abstract archiving and dissemination systems.</li> <li>• The University shall maintain a Legal Officer in the Grants Office in order to efficiently process research-related legal documents such as contracts, memoranda, intellectual property and others.</li> <li>• The University shall evaluate and process requests for the formation of specialized research institutes.</li> <li>• Researchers who contravene the regulations guiding the conduct of research (Appendix B) will be dealt in accordance with the disciplinary procedures stipulated in the guidelines.</li> </ul> |
| <b>Finance</b>                      | <ul style="list-style-type: none"> <li>• The University shall competitively allocate postgraduate scholarships to each college for each financial year.</li> <li>• The University of Nairobi shall allocate each year a research fund for which faculty will compete.</li> <li>• The University shall maintain a fund to facilitate a staff member who does not have alternative funding and who is the first author of a paper accepted for presentation at a recognized international conference to travel and attend the conference.</li> <li>• The research funds managed by each organ of the University shall be audited by the organ that it reports to.</li> <li>• The University shall create a research incentives budget that will be used to reward staff who publish original research papers in internationally-recognized journals.</li> <li>• The University shall maintain tutorial fellows and junior research fellows.</li> </ul>  |
| <b>Management of Human Resource</b> | <ul style="list-style-type: none"> <li>• The University shall establish research positions through the office of the DVC (RPE)</li> <li>• The University shall include research in the job description of every academic member of staff and ensure that time is allocated for research purposes and each member of academic staff is evaluated and rewarded for successful conduct of research.</li> <li>• The University shall establish and maintain multi-disciplinary/cross-disciplinary research teams for purposes of providing a competitive edge in grant seeking.</li> </ul>  |

## 5.2 Functions and Procedures for Staff

| Policy Area                         | Functions & Procedures  |
|-------------------------------------|---|
| <b>Research infrastructure</b>      | University of Nairobi staff <ul style="list-style-type: none"> <li>• Shall upload current curriculum vitae and citations / copies of publications on website / e-repository of the University.</li> <li>• Shall annually submit a research plan.</li> <li>• Shall submit the citation (and a hard copy and soft copy where possible) of all publications in which he or she is an author to the University e-repository and provide an in-links to the repository.</li> <li>• Shall annually submit resource requirements and laboratory use plan to the department</li> <li>• Shall use research infrastructure in line with University policy and departmental guidelines</li> <li>• Shall regularly recommend relevant research journals and publications for procurement through the relevant research team/Faculty.</li> <li>• Shall encourage co-authorship and in line with funding requirements.</li> </ul>             |
| <b>Administration</b>               | <b>General procedures</b><br>University of Nairobi staff: <ul style="list-style-type: none"> <li>• Shall report research progress on a quarterly basis.</li> <li>• Shall be associated with and participate in a research team</li> </ul> <b>Postgraduate students</b> <ul style="list-style-type: none"> <li>• Shall comply with University supervision guidelines</li> </ul> <b>Research Affiliates/Associates</b> <ul style="list-style-type: none"> <li>• Shall comply with the University of Nairobi research policy</li> </ul> <b>Researchers</b> <ul style="list-style-type: none"> <li>• Shall supervise research students</li> <li>• Shall assist in the management of research projects</li> </ul> <b>Research Mentors</b> <ul style="list-style-type: none"> <li>• Shall supervise research students</li> <li>• Shall manage research projects</li> <li>• Shall assist in the running of a research team.</li> </ul> |
| <b>Finance</b>                      | University of Nairobi staff: <ul style="list-style-type: none"> <li>• Shall seek and attract research funding</li> <li>• Shall account for all basic, project and grant funding in line with financial policies, procedures and timelines of the University of Nairobi and in line with any donor requirements that apply to specific funding</li> </ul>  |
| <b>Management of Human resource</b> | <b>General Procedures</b><br>University of Nairobi staff: <ul style="list-style-type: none"> <li>• Shall meet the University of Nairobi requirements for the relevant recruitment grade</li> <li>• Shall carry out research for the proportion of time allocated to the activity by the department.</li> <li>• Shall take advantage of opportunities for training such Post-doctoral training.</li> <li>• Shall demonstrate research productivity within University benchmarks</li> </ul> <b>Postgraduate Students</b> <ul style="list-style-type: none"> <li>• Shall abide by University of Nairobi policies and common regulations governing post-graduate training.</li> </ul>   |

| Policy Area | Functions & Procedures  |
|-------------|---|
|             | <ul style="list-style-type: none"> <li>• Shall work with the supervisor to identify suitable research topics and funding opportunities.</li> <li>• Shall consult with the supervisor in line university regulations.</li> </ul> <p><b><i>Research trainees (Tutorial fellows, graduate assistants)</i></b></p> <ul style="list-style-type: none"> <li>• Shall work with the departmental Chair to identify suitable research training opportunities.</li> <li>• Shall undergo a post-graduation research training programme within one year of recruitment.</li> <li>• Shall be bonded for a period of three years immediately after completion of the research training programme.</li> </ul> <p><b><i>Researchers / Research Mentors</i></b></p> <ul style="list-style-type: none"> <li>• Shall work with the departmental chair or Directors of Institutes/ Schools and donor liaison office to identify suitable research topics and funding opportunities.</li> <li>• Shall sign a research contract with the University of Nairobi.</li> <li>• Shall conduct research.</li> </ul> |



### 5.3 Research Functions and Procedures for Research Associates

Research associates are scholars (including postgraduate students) from other academic and research institutions who seek to interact with researchers and use the location and facilities of University of Nairobi to further their research work. Research associates are of value to the University because they:

- Raise the profile of the University with their home institutions;
- Foster research networking, collaborative research and joint publication;
- Impart knowledge and ideas to University students; and,
- Inject new research ideas into the University of Nairobi community of researchers.

The research policy with regard to research associates is outlined below:

| Policy Area                    | Functions & Procedures   |
|--------------------------------|--|
| <i>Research infrastructure</i> | <ul style="list-style-type: none"> <li>• Research associates shall be provided with the following research facilities during their period of association:               <ul style="list-style-type: none"> <li>○ Inclusion of name, institutional details and year of association on the University of Nairobi website with a link to their institution</li> <li>○ An electronic mail address, research server account and access to the University network for research purposes</li> <li>○ Office space, where available.</li> <li>○ Access to the University library system including the relevant research libraries.</li> <li>○ Teach students where applicable</li> </ul> </li> </ul>  |
| <i>Administration</i>          | <ul style="list-style-type: none"> <li>• Research associates shall apply in writing to the DVC (RPE) through the head of the host department / faculty / institute or school enclosing:               <ul style="list-style-type: none"> <li>○ A request for affiliation to the relevant department for the purposes of research</li> <li>○ A research proposal of 10 – 15 pages including theoretical framework, literature review, objectives, methodology and work plan.</li> <li>○ Two letters of recommendation from academic referees familiar with their work;</li> <li>○ Current curriculum vitae (resume)</li> <li>○ Supporting documentation showing financial sponsorship for the project.</li> </ul> </li> <li>• Research associates are expected to undertake the following activities during the period of association:               <ul style="list-style-type: none"> <li>○ Prepare a minimum of two working papers;</li> <li>○ Teach / assist postgraduate students, as requested,</li> <li>○ Give at least one presentation about their research to the University of Nairobi community</li> <li>○ Submit a report on research accomplishments to the head of the host department / faculty / institute / school within 60 days of the end of their term;</li> </ul> </li> <li>• Research associates must meet the following requirements:               <ul style="list-style-type: none"> <li>○ Sign a University of Nairobi contract to comply with all University policies governing the conduct of research</li> <li>○ Comply with Intellectual Property Policy of the University of Nairobi;</li> </ul> </li> </ul> |

| Policy Area                         | Functions & Procedures  |
|-------------------------------------|---|
|                                     | <ul style="list-style-type: none"> <li>○ Comply with all Government of Kenya regulations concerning the conduct of research in Kenya</li> <li>○ Give due acknowledgement of any assistance received from the University of Nairobi in any publications based on research conducted during the period of association;</li> <li>○ Provide the University library and the host Department / Faculty / Institute / School with two copies each of publications emanating from the research</li> </ul> |
| <i>Finance</i>                      | <ul style="list-style-type: none"> <li>● The research associate shall pay the required affiliation fee to the University of Nairobi.</li> <li>● The research associate shall pay for consumables, equipment and services, where required.</li> </ul>  |
| <i>Management of Human resource</i> | <p>The University of Nairobi shall:</p> <ul style="list-style-type: none"> <li>● Maintain current details for application procedures, appointment procedures, Government requirements, payments and immigration status on the website to facilitate application by research associates.</li> <li>● Assist research associates with application and settling in, wherever possible.</li> </ul>   |

## 5.4 Research Functions and Procedures for Departments

| Policy Area                    | Functions & Procedures  |
|--------------------------------|---|
| <i>Research infrastructure</i> | <p><b>Departments:</b></p> <ul style="list-style-type: none"> <li>• Shall define and procure the necessary facilities for postgraduate research activities.</li> <li>• Shall provide basic research facilities such as laboratories, greenhouses, animal houses, insectaries and farms.</li> <li>• Shall provide computers at 1:1 ratio for academic staff and 1:3 ratio for postgraduate students.</li> <li>• The University of Nairobi shall allocate each year a research fund for which faculty will compete Shall maintain and upgrade the departmental website regularly to ensure that all research publications and other research activities are reflected accurately on the website.</li> <li>• Shall subscribe to two specialist journals</li> <li>• Shall facilitate the acquisition of 2 research journals for each research team through the library</li> </ul>   |
| <i>Administration</i>          | <p><b>Shall be responsible for:</b></p> <p><i>General policies</i></p> <ul style="list-style-type: none"> <li>• Formation of research teams and placement of all researchers into appropriate teams</li> <li>• Formation of a departmental research committee and ensure the committees hold regular meetings</li> <li>• Bi-annual auditing of departmental research activities (using the work plan and other instruments) and submission of an interim or final report as appropriate.</li> <li>• Receipt and review of all research proposals from members of the department and make recommendations to the relevant faculty / institute or school.</li> <li>• Monitoring of research standards in line with the Intellectual Property, Biosafety, Regulations governing conduct of research (Appendix B), Research Ethics (Appendix C), and other policies and standards defined in the University</li> <li>• Measuring research output of each researcher</li> <li>• Dissemination of departmental research output including ensuring that members of staff display their most recent publication website.</li> <li>• Evaluating the qualifications of visiting researchers (including research associates) and making recommendations on the same to the relevant faculty / institute / school.</li> <li>• Making administrative arrangements for the hosting of visiting researchers.</li> <li>• Organization and hosting of meetings and conferences</li> </ul> <p><i>Postgraduate Students</i></p> <ul style="list-style-type: none"> <li>• Implementation of a substantial research component in all undergraduate programmes.</li> <li>• Identification of strong undergraduates for recruitment into postgraduate research programmes.</li> <li>• The establishment of a strong departmental Ph.D. programme.</li> </ul> |

| Policy Area                         | Functions & Procedures   |
|-------------------------------------|--|
|                                     | <ul style="list-style-type: none"> <li>• Advertisement of postgraduate courses and opportunities for postgraduate scholarships through website and other relevant media</li> <li>• Implementation of the policy for postgraduate students</li> <li>• Supervision of students in line with this policy</li> <li>• Regular review of all postgraduate curricula</li> </ul> <p><b>Research Trainees</b></p> <ul style="list-style-type: none"> <li>• Recruitment of research trainees</li> <li>• General mentorship and postdoctoral programmes targeted at maturing all researchers in the department.</li> </ul> <p><b>Researchers / Research Mentors</b></p> <ul style="list-style-type: none"> <li>• Implementation of the research policy for academic staff</li> </ul>  |
| <i>Financial roles</i>              | <p><b>Shall be responsible for disbursement, accounting and management of all funding at departmental level:</b></p> <ul style="list-style-type: none"> <li>• University-funded research</li> <li>• Postgraduate research funding</li> <li>• Funding for the hosting of visiting researchers.</li> <li>• Funding for meetings and conferences hosted by the department.</li> </ul>   |
| <i>Management of Human resource</i> | <p><b>Shall be responsible for:</b></p> <ul style="list-style-type: none"> <li>• Identification and public dissemination of the available opportunities for postgraduate studies, scholarships, postdoctoral training and employment through print and electronic media.</li> <li>• Identification of human resource requirements and initiation of a recruitment process.</li> <li>• Recruitment of human resources by a fair and transparent process guided by documented requirements and recommendations made to the relevant office.</li> <li>• Development of relevant content, criteria and programmes for human resource training in research.</li> <li>• Appropriate mentorship of all researchers.</li> <li>• Implementation of the relevant research / teaching load for each researcher.</li> <li>• Recommendations for promotion once staff that have fulfilled the laid down criteria.</li> <li>• Evaluation and feedback for researchers and implementation of the necessary interventions to improve performance.</li> <li>• Recommendations for “outstanding researcher” award at departmental level</li> <li>• Recommendations for the appointment Professor Emeritus</li> </ul> |

## 5.5 Research Functions and Procedures for Faculties, Institutes, Schools & Centres

| Policy Area                      | Functions & Procedures  |
|----------------------------------|---|
| <i>Research infrastructure</i>   | <ul style="list-style-type: none"> <li>• Shall maintain and upgrade research websites at faculty / institute / school level.</li> <li>• Shall maintain a research library for the management of specialist journals and books, within the faculty / institute / school or through the main library system as appropriate.</li> <li>• Shall maintain research facilities that are shared by more than one department to a high standard</li> <li>• Shall facilitate the semi-annual production of a faculty / institute / school journal.</li> <li>• Shall maintain a working paper / discussion paper / technical report series.</li> </ul>   |
| <i>Administration</i>            | <p><b>Shall be responsible for:</b></p> <ul style="list-style-type: none"> <li>• Establishing a faculty research committee to strategize, evaluate and recommend on all issues to do with research and postgraduate students in the faculty, institute or school.</li> <li>• Assisting in the drafting and approval of memoranda of understanding and other link documents</li> <li>• Receipt, discussion, collation and dissemination of research reports and statistics for the institution at the faculty / institute / school level.</li> <li>• Organization of seminars, symposia and conferences hosted by the school.</li> <li>• Management of interdisciplinary and interdepartmental research projects</li> <li>• Approval and forwarding of requests to host research associates and research fellows.</li> <li>• Submitting copies of all research reports, papers and theses to Jomo Kenyatta Memorial Library and all relevant libraries as well as uploading copies onto the intranet.</li> <li>• Organization and management of postgraduate examinations</li> </ul> |
| <i>Financial roles</i>           | <p><b>Shall be responsible for disbursement, accounting and management of:</b></p> <ul style="list-style-type: none"> <li>• Summary accounts for all research projects within the faculty / institute / school</li> <li>• Financial management and reporting of interdisciplinary and interdepartmental research grants.</li> </ul>   |
| <i>Management Human resource</i> | <p><b>Shall be responsible for:</b></p> <ul style="list-style-type: none"> <li>• Public dissemination of the available opportunities for postgraduate studies, scholarships, postdoctoral training and employment through print and electronic media.</li> <li>• Identifying promising scholars and students and encouraging them to apply to join the faculty when an appropriate position is advertised.</li> <li>• Management of research recruitment processes at faculty / institute / school level in an ethical and transparent manner.</li> <li>• Monitoring the implementation of the relevant research / teaching load for each researcher.</li> <li>• Evaluation of promotion requests and recommendation to the relevant authority.</li> </ul>  |

| Policy Area | Functions & Procedures   |
|-------------|--|
|             | <ul style="list-style-type: none"> <li>• Drafting and presentation to the College Academic Board of faculty / institute / school rating of relevant journals and conferences.</li> <li>• Evaluation and feedback for senior researchers and implementation of the necessary interventions to improve performance.</li> <li>• Recommendations for “outstanding researcher” award at school / faculty / institute level</li> <li>• Evaluation of recommendations for the appointment Professor Emeritus</li> </ul> |

## 5.6 Research Functions & Procedures for Colleges

| Policy Area                      | Procedures  |
|----------------------------------|---|
| <i>Research infrastructure</i>   | <ul style="list-style-type: none"> <li>• Shall maintain and update the college research website.</li> <li>• Shall make recommendations to the central library system regarding multidisciplinary journals and reference works that are of general utility to researchers in the college.</li> <li>• Shall procure, manage and maintain research infrastructure (such as a generator) that is shared between faculties, institutes and schools in the college.</li> </ul>  |
| <i>Administration</i>            | <p><b>Shall be responsible for:</b></p> <ul style="list-style-type: none"> <li>• Assisting in the drafting and approval of memoranda of understanding and other link documents</li> <li>• Creation of common standards for the evaluation of research in the college.</li> <li>• Receipt, discussion, collation and dissemination of research reports and statistics for the institution at the college level.</li> <li>• Organization of seminars, symposia and conferences hosted by the college.</li> <li>• Administration of an office for the maintenance of Intellectual Property Rights and other research policies and standards relevant to the college.</li> <li>• Formation and maintenance of a multidisciplinary research committee.</li> <li>• Publication of an annual research report describing all research activities taking place in the college.</li> <li>• Implementation of an annual research open day for the purpose of exhibiting college research activities to industry and the general public.</li> </ul> |
| <i>Financial roles</i>           | <p><b>Shall be responsible for disbursement, accounting and management of:</b></p> <ul style="list-style-type: none"> <li>• Summary accounts for all research projects within the College</li> </ul>  |
| <i>Management Human resource</i> | <p><b>Shall be responsible for:</b></p> <ul style="list-style-type: none"> <li>• Management of academic and research staff recruitment process at College level.</li> <li>• Recruitment of human resources through a fair and transparent process guided by documented requirements and recommendations made to the relevant office.</li> <li>• Data processing and appraisal of research activities at the faculties, institutes and schools in the college.</li> <li>• Evaluation of promotion requests and recommendation to the relevant authority.</li> <li>• Evaluating and harmonizing the promotion criteria of faculties, institutes and schools within the college in line with University of Nairobi standards i.e. the Kagiko Report</li> <li>• Recommendations for “outstanding researcher” award at college level</li> <li>• Evaluation of recommendations for the appointment Professor Emeritus and forwarding requests to Central Administration.</li> </ul>   |

## 5.7 Research Functions and Procedures for Office of the DVC (RPE)

| Policy Area                    | Functions & Procedures  |
|--------------------------------|---|
| <b>Research Infrastructure</b> | <p><b>Shall be responsible for:</b></p> <ul style="list-style-type: none"> <li>• Drafting, implementation and regular review of benchmarks for all University research infrastructure.</li> <li>• Maintenance and audit of all university research infrastructure</li> <li>• In liaison with ICTC, planning, procurement, management and maintenance of the University ICT facilities including Internet access, research management software and other computing facilities that are necessary for research.</li> <li>• Maintenance of the University library system to enable access to global knowledge sources in traditional and digital formats.</li> <li>• Digitization of all knowledge resources produced at the University of Nairobi to make them more accessible to researchers.</li> <li>• Facilitation and enforcement of the policy that a print and electronic copy of all research publications, dissertations and thesis produced by members of the University of Nairobi must be provided to the Jomo Kenyatta Memorial Library and relevant college library</li> <li>• Planning, procurement, management and maintenance of all research infrastructure and research materials.</li> <li>• Development of Open Access Policy</li> </ul>   |
| <b>Administration</b>          | <p><b>Shall be responsible for:</b></p> <p><b>Postgraduate Research Management</b></p> <ul style="list-style-type: none"> <li>• Marketing and advertisement of Postgraduate research programmes</li> <li>• Development and regular review of curricula that involve postgraduate research</li> <li>• Provision of a conducive environment for postgraduate students to carry out research.</li> <li>• Linking of postgraduate students with industry to conduct collaborative research</li> <li>• Drafting and implementation of policies, rules and procedures concerning registration, scholarship awards, conduct and examination of postgraduate theses.</li> <li>• Regular evaluation of the quality and quantity of postgraduates thesis examined</li> </ul> <p><b>Grants sourcing and management</b></p> <ul style="list-style-type: none"> <li>• Lobbying government for resources and legislation to support University of Nairobi strategic areas</li> <li>• Training on proposal writing to attract donor funding.</li> <li>• Establishment of links with international centres of research excellence and local and regional bodies concerned with research.</li> <li>• Rapid identification of research and research funding opportunities and public relations activities geared at attracting opportunities</li> <li>• Liaison with donor agencies and industry to attract research funds and win research contracts, both locally and internationally.</li> <li>• Involving research mentors when lobbying and liaising with external agencies</li> </ul> |



| Policy Area | Functions & Procedures  |
|-------------|---|
|             | <ul style="list-style-type: none"> <li>• Linking researchers with research opportunities, research partners and funding agencies</li> </ul> <p><b><i>Research administration</i></b></p> <ul style="list-style-type: none"> <li>• Publicize the University Research Policy to all staff and students.</li> <li>• Harmonizing University research policies with relevant national, regional and international policies.</li> <li>• Regular evaluation and review the University of Nairobi Research Policy.</li> <li>• Co-ordination with government regarding national research agenda.</li> <li>• Drafting and implementing the University of Nairobi research strategy.</li> <li>• Prioritization of key research areas.</li> <li>• Identification and acquisition of resources required for the implementation of Research policies.</li> <li>• Maintenance of a database of all researchers, research capacity and research infrastructure at the University.</li> <li>• Conduct of regular training, seminars and workshops on research strategic plans and implementation of policies</li> <li>• Managing multidisciplinary research through virtual research centres.</li> <li>• Overall supervision and co-ordination of work done by researchers</li> <li>• Drafting and implementing research contracts with all academic members of staff at the University of Nairobi.</li> <li>• Enforcing and managing legal agreements that guide conduct in key areas such as research contracts, intellectual property policy implementation, industry contracts, regulations on bio-safety and other relevant issues.</li> <li>• Development and implementation of an instrument to review and evaluate the work of all Researchers on regular basis</li> <li>• Publication and dissemination of all research findings generated at the University of Nairobi</li> <li>• Regular evaluation and benchmarking of the research output of the University of Nairobi.</li> <li>• Ensuring that all work done by researchers conforms to all procedures and policies laid down in the research policy</li> <li>• Arrangement and facilitation of university-wide conferences and seminars on research archiving and dissemination</li> <li>• Submitting Ph.D. thesis abstracts to International dissertation abstract archiving and dissemination systems</li> <li>• Approval of requests for hosting of research associates by University departments / faculties / institutes / schools.</li> <li>• Developing and implementing a communication strategy for disseminating internal and external research information.</li> </ul> <p><b><i>Innovation and Industrial links</i></b></p> <ul style="list-style-type: none"> <li>• Organize fora, seminars and workshops in partnership with industry and potential donors</li> <li>• Facilitating the protection of the intellectual property rights of those engaged in research and development.</li> <li>• Identification of outstanding research works to be included in the Research year book</li> <li>• Partnering academic staff with relevant industries and approving ‘industrial leave.’</li> </ul> |

| Policy Area                      | Functions & Procedures   |
|----------------------------------|--|
|                                  | <ul style="list-style-type: none"> <li>• Marketing research publications and products of research and development</li> </ul> <p><b>Research resources</b></p> <ul style="list-style-type: none"> <li>• Approval and facilitation of research positions within University departments</li> <li>• Approval and facilitation of the hosting of research visitors by departments.</li> <li>• Subscription to digital journals and facilitation of access to journals.</li> <li>• Monitoring and evaluating the use of research infrastructure.</li> <li>• Retiring obsolete research infrastructure.</li> <li>• Inviting researchers to present their work for consideration for inclusion in the research year book</li> <li>• Facilitation of publication of quality research work produced at the University of Nairobi through the University Press.</li> </ul>  |
| <b>Financial roles</b>           | <p><b>Shall be responsible for:</b></p> <ul style="list-style-type: none"> <li>• Matching research resources with projects/people.</li> <li>• Ensuring the most efficient use of research funds (at least 85% of research funds should be used for research implementation.)</li> <li>• Providing Scholarships to postgraduate Students in liaison with other donors</li> <li>• Lobbying for funding for Research work from the government and other donors.</li> <li>• Managing research grants that involve more than one college.</li> </ul>  |
| <b>Management Human resource</b> | <p><b>Shall be responsible for:</b></p> <ul style="list-style-type: none"> <li>• Organizing and facilitating training of researchers on the use of information and communication technology equipment and the research management software</li> <li>• Organizing and facilitating the training of researchers on how to upload their content onto the website</li> <li>• Assisting staff with proposal writing, editing of research papers, editing and production of research posters, identification of research funding, training needs and opportunities, software and all research-oriented issues.</li> <li>• Monitoring and evaluating the overall co-ordination and supervision of postgraduate research work and intervening where necessary.</li> <li>• Defining a policy for ‘sabbatical (research) leave’ and awarding such leave to staff who qualify for the opportunity</li> <li>• Rewarding staff who produce results which are of national or regional importance.</li> <li>• Organizing an annual awards ceremony to recognize University of Nairobi researchers who have shown extraordinary progress or research achievement.</li> </ul> |

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## APPENDICES

### Appendix A: Computer Science Capacity Matrix (Getao, 2006)

The capacity matrix may be tailored for different departments (for example some departments may not have a research and development function.)

| Mission Area             | Proportion | Development (Education & Training)  | Experience (Relevant Activity)   | Performance (Evaluation by client, employer and public)  |
|--------------------------|------------|---|--|--|
| Teaching & Learning      | 25%        | <ul style="list-style-type: none"> <li>• Masters degree.</li> <li>• Courses on teaching skills</li> <li>• Courses on electronic learning</li> </ul>   | <ul style="list-style-type: none"> <li>• Curriculum development</li> <li>• Teaching of courses</li> <li>• Development of electronic learning courses</li> </ul>  | <ul style="list-style-type: none"> <li>• Student evaluation</li> <li>• External examination moderation processes</li> <li>• Industry evaluation of graduates</li> <li>• UoN teaching appraisal processes.</li> </ul>   |
| Research                 | 30%        | <ul style="list-style-type: none"> <li>• Ph.D.</li> <li>• Proposal writing</li> <li>• Research Project Management</li> </ul>  | <ul style="list-style-type: none"> <li>• Research proposals</li> <li>• Research projects</li> <li>• Conference attendance</li> <li>• Technical reports</li> <li>• Conference papers</li> <li>• Journal papers</li> </ul> | <ul style="list-style-type: none"> <li>• Successful grant proposals</li> <li>• Research project evaluation</li> <li>• Patents</li> <li>• Products sold</li> </ul>  |
| Research and Development | 20%        | <ul style="list-style-type: none"> <li>• Bachelors degree: 2.1 (Hons)</li> <li>• Practical training in hardware and software environments</li> <li>• Specialized education in Computer Science</li> </ul> | <ul style="list-style-type: none"> <li>• Supervision of undergraduate and postgraduate projects</li> <li>• Special interest product development</li> <li>• Product development for industry</li> </ul>                   | <ul style="list-style-type: none"> <li>• Good student projects</li> <li>• Industrial methodologies and frameworks</li> <li>• Software packages</li> <li>• Patents</li> <li>• Quality industrial solutions</li> <li>• Marketable products</li> </ul>  |
| Consultancy              | 10%        | <ul style="list-style-type: none"> <li>• Training in consultancy-related skills e.g. marketing, legal issues, customer service, time management etc.</li> </ul>   | <ul style="list-style-type: none"> <li>• Consultancy tender bids</li> <li>• Consultancy projects</li> </ul>  | <ul style="list-style-type: none"> <li>• Successful consultancy projects</li> <li>• Reports</li> <li>• Client references</li> <li>• Client repeat assignments</li> <li>• Funds generated through consultancy</li> </ul>  |
| Administration           | 10%        | <ul style="list-style-type: none"> <li>• M.Sc.</li> <li>• Courses on management skills</li> </ul>   | <ul style="list-style-type: none"> <li>• Meeting attendance</li> <li>• Meeting chairmanship</li> <li>• Course coordination</li> <li>• Administrative duties</li> <li>• Dept. chairman</li> <li>• Director</li> </ul>     | <ul style="list-style-type: none"> <li>• Successful participation in University committees</li> <li>• Smooth administration of university processes</li> <li>• Student evaluation</li> <li>• Strategic plans</li> <li>• Administrative reports</li> <li>• Administrative systems developed</li> <li>• Administrative software developed</li> </ul> |
| Extension                | 5%         | <ul style="list-style-type: none"> <li>• Training in extension-relevant skills such as public relations.</li> </ul>   | <ul style="list-style-type: none"> <li>• Public relations activities</li> <li>• Gender awareness in ICT activities</li> <li>• Institutional links</li> </ul>   | <ul style="list-style-type: none"> <li>• Activities</li> <li>• Feedback from members of public</li> <li>• Student appraisal</li> </ul>   |

## Appendix B: Regulations Guiding the Conduct of Research

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### REGULATIONS GOVERNING THE CONDUCT OF RESEARCH

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#### 1. PREAMBLE

- a. These regulations are made by Senate and Council in accordance with the Provisions of the University of Nairobi Act and the Terms of Service of staff, regulations governing student affairs and relevant laws of the Republic of Kenya.
- b. The Regulations came into effect on 11<sup>th</sup> September, 2001 and shall be binding upon every member of staff on Academic, Senior Library and Administrative terms of service, and students, upon their being granted funds to carry out research and so long as such a member of staff/student remains employed/registered with the University of Nairobi.
- c. Every student/member of staff, residents, fellows, trainees and individuals employed on contractual basis, visiting Professor, Lecturer, Researcher or Scientist, and any other individual participating in research or teaching, sponsored or hosted by the funds or other resources of the University shall be required to read these regulations and to sign a declaration appended here under, that he/she has understood the contents and meaning and that he/she undertakes to be bound thereby.
- d. Failure or refusal to comply with clause 1(c) herein may constitute grounds for the withdrawal/cancellation of research funding granted by the University or recommendation to the donor for withdrawal or cancellation of research funding and/or debarment of conducting research in the University of Nairobi.
- e. (i) In addition, nothing in these regulations shall preclude the University from requiring all persons listed in clause 1(c) from executing any bond, assurance or undertaking to conduct research devoid of misconduct.  
(ii) Such bond, assurance or undertaking when required and executed, shall have the same effect as if it were part of these regulations.
- f. These regulations shall supplement all other regulations set out in the various memoranda of understanding signed between the University of Nairobi and various institutions and or bodies.
- g. In the event of a conflict or contradiction these Regulations shall prevail over the Memoranda of understanding.

#### **2: ADMINISTRATION OF RESEARCH FUNDS (GRANTS)**

- a. The Finance Department shall handle all grants awarded to all persons listed in clause 1(c) who are involved in research projects.
- b. Each grant shall be deposited in a University of Nairobi account and operated through a vote number that shall be given to each grant recipient.
- c. Each grant shall be accompanied by an MoU or the award instrument and a detailed budget as approved by the funding agency
- d. A grant recipient shall be required to apply to the finance department whenever he or she wishes to draw funds from a research grant account
- e. Such an application in 2(d) above, shall be accompanied by relevant documents that are a prerequisite before any funds can be disbursed.
- f. Funds awarded by the Deans Committee will be disbursed in accordance with the Committee regulations, which are an initial 60 percent of the grant and the remaining

- 40 percent, upon the submission of a progress report and a statement of accounts.
- g. No further advances of funds shall be allowed until the prior portion of disbursement has been satisfactorily accounted for.
- h. The University is entitled to levy a fee to cover overheads of all research grants administered by the institution. This fee, which may be, reviewed from time to time, currently stands at 15% of the recurrent budget of each grant.

### **3: REPORTS AND FINANCIAL STATEMENTS**

- (a) The grant recipient shall be required to submit to the Vice-Chancellor through the College Principal the following:
  - i. Quarterly and annual progress reports
  - ii. Quarterly and annual financial reports in compliance with the project budget
  - iii. Upon completion of any project:
    - a. A final report detailing the work accomplished and any attendant policy recommendation.
    - b. A complete financial statement, in Kenya Shillings, covering all funds expended on the project, in compliance with the approved budget.
- (b) Grants Financial statement shall be audited by the Auditor General in accordance with the Kenya Law (Public Audit Act, 2003). However, where the donor insists on specialized audit the same shall be done in accordance with University regulations and the donor shall bear the cost of such audit.

### **4: COMPLIANCE WITH THE TERMS GOVERNING RESEARCH CONDUCT**

All persons listed in clause 1(c) shall be required to:

- (a) Conduct themselves in accordance with the highest standards of integrity, personal discipline and morality.
- (b) Adhere to administrative and academic procedures established to control, govern and operate research funds advanced to individuals for purposes of conducting research.
- (c) Expend all monies advanced in form of research grants on projects for which the grants were advanced.
- (d) Present accounting statements that are devoid of dishonesty and cheating.
- (e) Observe deadline in the submission of progress reports, final reports and financial statements.
- (f) Carry out their research in accordance with high ethical standards and in such a way that nobody shall suffer any prejudice.
- (g) Conduct research that is not based on plagiarism.
- (h) For each project maintain the University of Nairobi research notebook or any other research notebook of collaborators approved by the University.

### **5: RESEARCH MISCONDUCT**

The following shall constitute research misconduct:

- (a) Any false accounting of UON/donor funds.
- (b) Non-compliance with the professional and ethical standards.
- (c) Plagiarism.
- (d) Withholding the research results
- (e) Failure to disclose intellectual property accruing from the research in compliance with the University of Nairobi intellectual property policy
- (f) Commercialization of research products/technologies without prior approval
- (g) Fabrication and falsification of research data
- (h) Violation of University of Nairobi research or related policies and guidelines



## **Appendix C: Statement of Research Ethics**

### **UNIVERSITY OF NAIROBI STATEMENT OF RESEARCH ETHICS**

Researchers at the University of Nairobi shall:

1. Advance knowledge through disciplined research for the welfare of Kenya and all mankind.
2. Publish and disseminate the basis, methodology and results of their research in a truthful and accurate manner for peer review and advancement of their discipline of study.
3. Acknowledge and apportion credit to sources of data and information, collaborators, participating institutions and donors in all research reports and publications with honesty and fairness.
4. Avoid directly or indirectly causing harm to human or animal research subjects.
5. Analyse, mitigate and manage any potentially harmful impacts of their research.
6. Protect the biodiversity of the Earth.
7. Observe best practices and safety codes in the use of substances and equipment during research.
8. Manage research funds and utilize institutional facilities, resources and knowledge in an efficient, honest and transparent manner.
9. Study institutional policies and procedures and identify, adopt and apply those that are relevant to their research activities.
10. Identify and declare any intellectual property arising from the research that has potential commercial value and arrange for its protection in conformity with the Intellectual Property Policy of the University of Nairobi.



## Appendix D: Individual Research Work Plan

ACADEMIC YEAR: \_\_\_\_\_

NAME: \_\_\_\_\_ Employee/Student Number \_\_\_\_\_

Department: \_\_\_\_\_

Designation  Prof  Ass. Prof.  Senior Lecturer  Lecturer  Tutorial fellow  Graduate student

I undertake to perform research at the University of Nairobi in line with the requirements set out in the Research Policy.

I have set the following personal targets for this academic year.

| RESEARCH ACTIVITY         |  | Target        | Actual <sup>1</sup> | Comments |  |
|---------------------------|--|---------------|---------------------|----------|--|
| Projects                  | Number of research proposals to submit           |               |                     |          |  |
|                           | Level of research funding to be sought           |               |                     |          |  |
|                           | Number of research projects to be implemented    |               |                     |          |  |
|                           | Other research-oriented activities to be pursued |               |                     |          |  |
| Publications              | Working papers / Discussion Papers               |               |                     |          |  |
|                           | Technical Reports                                |               |                     |          |  |
|                           | Conference Papers                                |               |                     |          |  |
|                           | Peer reviewed publications                       |               |                     |          |  |
|                           | Book Reviews                                     |               |                     |          |  |
|                           | Book chapters                                    |               |                     |          |  |
|                           | Plays/Poems/Scripts                              |               |                     |          |  |
|                           | Computer programs                                |               |                     |          |  |
|                           | Reports  |               |                     |          |  |
| Presentations             | Workshop presentations                           |               |                     |          |  |
|                           | Conference presentations                         |               |                     |          |  |
|                           | Attendance of Conferences                        |               |                     |          |  |
|                           | Research seminars                                |               |                     |          |  |
|                           | Other (Specify) _____                            |               |                     |          |  |
| Supervision               | Ph.D. student supervision                        |               |                     |          |  |
|                           | Masters degree student supervision               |               |                     |          |  |
|                           | Dissertation examination                         |               |                     |          |  |
|                           | Thesis examination                               |               |                     |          |  |
| Other Research Activities | Editing of journals                              |               |                     |          |  |
|                           | Review of journal papers                         |               |                     |          |  |
|                           | Research collaboration                           |               |                     |          |  |
|                           | Other (specify)                                  | • Innovations |                     |          |  |
|                           |  | • Patents     |                     |          |  |
|                           | • Copyrights                                     |               |                     |          |  |
|                           | • Inventions                                     |               |                     |          |  |

I will give a report of my achievements in June this academic year which will be evaluated by the Faculty/ Institute / School Research Committee.

I agree to abide by the statement of Research Ethics of the University of Nairobi.

Signed: \_\_\_\_\_  
Member of Staff/Student

Date: \_\_\_\_\_

Signed & Stamped: \_\_\_\_\_  
Dean / Director

Date: \_\_\_\_\_

What impact has your research had? \_\_\_\_\_

\_\_\_\_\_

Overall Comments by Supervisor: \_\_\_\_\_

\_\_\_\_\_

I acknowledge the comments of my Supervisor:

Signed: \_\_\_\_\_  
Member of Staff

Date: \_\_\_\_\_

Signed & Stamped: \_\_\_\_\_  
Dean / Director

Date: \_\_\_\_\_

Cc. DVC, RPE

Principal College: CHSS / CAE / CEES / CAVS / CHS / CBPS (Delete as appropriate)

Dean/Director/Coordinator, Faculty/School/Institute/Centre of .....

Chair, Department of .....

<sup>1</sup>To be evaluated at the end of the academic year against set targets & form attached to Annual Staff Appraisal