

**AN INVESTIGATION ON THE ROLE OF KENYAN UNIVERSITIES IN  
PROMOTING RESEARCH AND SCHOLARLY PUBLISHING: A CASE OF  
TECHNICAL UNIVERSITY OF KENYA AND STRATHMORE UNIVERSITY**

**BY**

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## DECLARATION

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## ABSTRACT

Scholarly publishing creates new knowledge through dissemination of research findings. Universities are mandated to conduct research, disseminate research findings and spearhead innovative activities. In Kenya, the Commission for University Education (CUE) was established to ensure that universities perform to the high standards in promoting research and scholarly publishing. This study investigated the role of Kenyan universities in promoting research and scholarly publishing and recommended strategies for improvement. The objectives of the study were to: establish the researches undertaken and publications by faculty members of universities; assess the state of research infrastructure and adequacy of funds allocated to research by Kenyan universities; assess the role of CUE in promoting research and scholarly publishing; determine incentives offered by universities to promote research and scholarly publishing; identify challenges faced by Kenyan universities in promoting research and scholarly publishing and recommend strategies for addressing identified challenges as well as promoting research and scholarly publishing by Kenyan universities. The study was guided by the Three-phase model and the Douglas McGregor's XY- management theory model. The study utilized exploratory research design adopting qualitative and quantitative approaches. Two universities in Kenya and CUE provided the study population. Simple random and purposive sampling techniques were applied. The study population was 433 and a sample size of 111 comprising, deans of schools, librarians, research directors, Information Communication Technology (ICT) directors and deputy vice chancellors in-charge of academic and research and key informants from CUE. Qualitative and quantitative data were collected using questionnaires and interviews. Data were analyzed and the findings were presented in tables, bar charts and pie charts. The major finding of the study show that university faculty members undertake research and publish research findings/scholarly articles mostly in the academician's areas of specialization; ineffective documentation of publications; funding of research is inadequate and the state of research infrastructure varies from institution to institution. The role of CUE in promoting research and scholarly publishing has not yet been realized in universities and there was no documentation/or evidence on the performance of CUE and universities, while incentives offered to university faculty members are ineffective. Faculty members of universities experienced challenges including: inadequate research funding and infrastructure, poor management and supervision of university research programs, poorly funded libraries, time for research, training and poor research culture. The study concluded that there is need for universities to motivate and facilitate their faculty members to undertake research and publish research findings /scholarly articles and CUE should play active role in promoting research and scholarly publishing by Kenyan universities. Recommendations arising from the study included; the need for universities to document and disseminate research /scholarly output, need for enhanced research funding and improved access to research infrastructure; CUE to play active role in promoting research and scholarly publishing and universities to come up with research incentive scheme.

## **DEDICATION**

I solemnly dedicate this thesis to my husband Mr. John Wasilwa, my mum Rispah, my daughters Maureen, Purity and Faith, my sister Judy and all who provided moral support and encouragement throughout the study.

“May God bless you abundantly.”

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## **ABBREVIATIONS AND ACRONYMS**

**AJOL**-Africa Journals Online

**ARL**-Association of Research Libraries

**CUE**-Commission for University Education

**DVC-PRES**- Deputy Vice Chancellor in charge of Planning, Research and Extension Services

**GU**- University of Gothenberg

**ICT**- Information Communication Technology

**IWP**-Internet/ Web Presence

**KLISC**- Kenya Library and Information Service Consortium

**LERU**-League of European Research Universities

**NACOSTI**- National Commission for Science, Technology and Innovation

**NGO**-Non Governmental Organizations

**NREN**- Nigerian Research and Educational Network

**NUC**- National University Commission

**NUFFIC**- Netherlands University Foundation for International Cooperation

**NVLP**- National Virtual Library

**OECD**- Organization for Economic Cooperation and Development

**PRD**- Planning Research and Development

**PRM**- Planning and Resource Mobilization

**RD-** Research and Development

**RSC-** Research Publication and Citation

**SU-** Strathmore University

**TCU-** Tanzania Commission for Universities

**TIF-**Total Influence Factor

**TUK-** Technical University of Kenya

**UNCHE-** Uganda National Council of Higher Education

**UNESCO-**United Nations Educational Scientific and Cultural Organization

**UoN-** University of Nairobi

**USA-** United States of America

## **CHAPTER ONE**

### **1.0 INTRODUCTION**

This chapter presents, the background to the study, problem statement, aim of the study, objectives of the study, research questions, significance of the study, limitations /scope of the study, research assumptions and definition of terms.

#### **1.1 Background to the study**

Scholarly publishing is an activity that is mostly associated with scholars that teach or conduct research in institutions of higher learning and research institutions (Okemwa 2007:3). Scholarly publishing creates new knowledge and disseminates research findings. Institutions of higher learning exist to fulfill these functions. Universities in the world are ranked according to the number of journals published by its faculty members. Scholarly publications are considered during hire or promotion of faculty members, therefore scholarly publishing is very important. “In the United States of America (USA), and of late in universities all over the world, lack of publication for academics without tenure can even lead to loss of job. Academic advancement and job retention depend upon publishing the result of research.” (Ampem, 2003:19). As a result of rapid expansion of higher education and entrance of market forces in higher education delivery, it was necessary to form structures and mechanisms, standards and guidelines to assure quality.

In response to challenges in the higher education, most countries in the world have established oversight bodies to promote and enhance quality of university education. In Kenya the Commission for University Education (CUE) was established. Nigeria has established the National University Commission (NUC), Uganda established the Uganda

National Council of Higher Education (UNCHE), whereas Tanzania established the Tanzania Commission for Universities (TCU). These oversight bodies are in charge of accreditation of all universities and are responsible for ensuring that all universities in the country comply with established standards and regulations.

The world over, universities are responsible for research, knowledge generation, scholarship and innovation necessary for driving social, technological and economic development. They are also relied upon to serve as conduits for the transfer, adaptation and dissemination of knowledge that is generated worldwide. According to Migosi, Muola and Maithya (2012:115), research is a vital and necessary part of modern university education, where universities are perceived to be producers of new knowledge. Universities in Kenya exist either as public or private institutions. The government supports public universities and as of March 2017, there were thirty (30) universities and five (5) university constituent colleges. Privately sponsored chartered universities were eighteen (18), five (5) private university constituent colleges and thirteen (13) institutions with Letters of Interim Authority. This brings to seventy one (71) the total complement of public and private universities inclusive of constituent colleges in the country” (CUE, 2017).

In line with Section 28 (4) of the University Act, 2012, CUE published the list of accredited universities in Kenya. Accredited Universities and Date of Accreditation (see appendix 1). In universities today, promotion is based on the number of publications a faculty member has published, teaching experience, number of postgraduate students supervised, contributory roles to the community and university and others depending on the position. While in the webometric ranking of universities and in measuring and



evaluating of universities' performance, research publications, citations and web visibility are considered as very important indicators.

Scholarly research and publishing have become an integral component of the academic world. The importance of publishing to any academic is perhaps best underlined by the maxim 'publish or perish'. Indeed, publishing in the academic world determines a scholar's standing or status both within the local research community and internationally. At the centre of the scholarly communication process is the academic reward system, the issue of promotion and tenure that is integrally tied up with the formal peer-reviewed publication. The reward system present in most universities recognizes publication as evidence of scholarly achievement and is required for rank and tenure and to satisfy criteria for grants (Ampem, 2003:1).

## **1.2 Problem statement**

Kenyan Universities are facing renewed internal and external pressure as the push for them to meet the changing needs of the country that have become more pronounced. The country is quickly moving towards a knowledge-based economy and there is urgent need for new products and services. This raises the need for good coordination of university research to facilitate a process of national dialogue on what information exists in the country, its storage and utilization as well as the agenda for future research to address our national development goals and dilemmas.

CUE was established to ensure that universities meet the highest standards in promoting research and scholarly publishing. Universities in Kenya are required by law to promote research and scholarly publishing. Universities are required to identify research areas and set aside adequate financial resources to meet its research obligations. Every university should have adequate and competent human resources, clearly stipulate its appointment criteria and should take into account research activities when determining academic staff

workload. They should help facilitate staff research by providing appropriate and adequate facilities such as library and Information Communication Technology (ICT) infrastructure and incentives to members of staff who conduct research. They should document and disseminate its research outputs but also provide evidence on the promotion of quality research and innovation. Currently all academic programmes must indicate what print and electronic resources are available in their respective universities. Universities are required to have anti plagiarism policies and systems to ensure high standards of scholarly work.

In the year 2017, CUE set standards for all postgraduates to publish their research findings in refereed scholarly journals before their graduation. This emphasized the importance that commission places in dissemination of research output. Consequently, it is necessary to examine the role of universities in promoting research and scholarly publishing.

### **1.3 Aim of the study**

The aim of the research was to investigate the role of Kenyan universities in promoting research and scholarly publishing and recommend strategies for improvement.

### **1.4 Objectives of the study**

1. To establish researches undertaken and publications by the academic staff.
2. To assess the state of research infrastructure and adequacy of funds allocated to research by Kenyan universities.

3. To determine the incentives offered by universities to promote research and scholarly publishing.
4. To identify challenges faced by Kenyan universities in promoting research and scholarly publishing.
5. To determine the role of the Commission for University Education in promoting research and scholarly publications by universities.
6. To propose strategies for addressing identified challenges as well as promoting research and scholarly publishing in Kenyan universities.

### **1.5 Research questions**

1. What research has been undertaken and publications by the academic staff?
2. What is the state of research infrastructure in Kenyan universities and how adequate are the funds allocated to research and scholarly publishing by Kenyan universities?
3. What is the role of the Commission for University Education in promoting research and scholarly publishing in Kenyan universities?
4. What incentives do Kenyan universities offer to promote research and scholarly publishing?
5. What challenges are faced by Kenyan universities in promoting research and scholarly publishing?
6. What strategies do you propose for addressing identified challenges as well as promoting research and scholarly publishing in Kenyan universities?

### **1.6 Significance of the study**

The study sought to contribute to the existing body of knowledge on the role and contribution of universities in promoting research and scholarly publishing in Kenya.

The findings and recommendations of the study are expected to provide practical and effective ways of promoting research and scholarly publishing by Kenyan universities.

Additionally, the findings will help the CUE to know how much has been achieved so far in its role in promoting university research and innovation. It will also serve as future reference for researchers in the field.

### **1.7 Limitations/scope of the study**

The study covered two universities, one public and one private chartered university, namely the Technical University of Kenya (TUK) and Strathmore University. CUE Officials were also consulted as key informants.

### **1.8 Limitations**

One of the limitations to this study concerns the length of the questionnaire. Many respondents reported taking too long to complete. The extent of the time required for completing the questionnaire might have deterred some from responding. However, the response level was quite high at eight seven point five percent (87.5%).

### **1.9 Research assumptions**

1. Kenyan universities play an active role in the promotion of research and scholarly publishing.

2. Universities in Kenya have inadequate research infrastructure and funds for research.

From the study findings, these assumptions were proved true, therefore the research was worth carrying out.

### **1.10 Definition of terms**

The listed terms here below will be used through the thesis as they have been defined:

**Accreditation** means the procedure by which the Commission formally recognizes an institution or an academic programme of a university.

**Commission** means the Commission for University Education established under section 4 of the Universities Act No 42, 2012.

**Constituent College** means a semi-autonomous component of a chartered university whose academic affairs are governed by the Senate of the university.

**Dissemination** is the distribution of information and intervention materials to groups of audience.

**Institution** means an organization founded for purposes of university education and research.

**Private university** means a university which is established or maintained out of funds other than public funds.

**Public university** means a university established and maintained or assisted out of public funds.

**Research** is an intellectual inquiry or examination that's investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or law

**Scholarly publishing** means a field of publishing which is mostly associated with scholars that teach or rather conduct research in institutions of higher learning and other institutions of research.

**Standard** means a reference point against which different aspects of the institution and programme are compared or evaluated for quality.

### **1.11 Chapter summary**

Chapter one gave the introduction and background to the study. The study covered two universities in Kenya. It attempted to look into the importance of research and scholarly publishing to academics, the research problem and objectives of the study, significance of the study, scope, limitations and defined terms to be used in this study.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 INTRODUCTION**

According to Kumar (2005), literature review is the process of going through the existing literature in order for a researcher to acquaint her/himself with the available body of knowledge in the area of interest. This chapter presents a review of literature on scholarly publishing by universities and the role played by various higher education oversight bodies in various parts of the world in terms of research and dissemination of findings. The chapter has also identified and highlighted gaps in available literature. The study was guided by Mackenzie Owen theory (2005), the Three-phase model of research and Douglas McGregor's XY-theory (1960), management theory model.

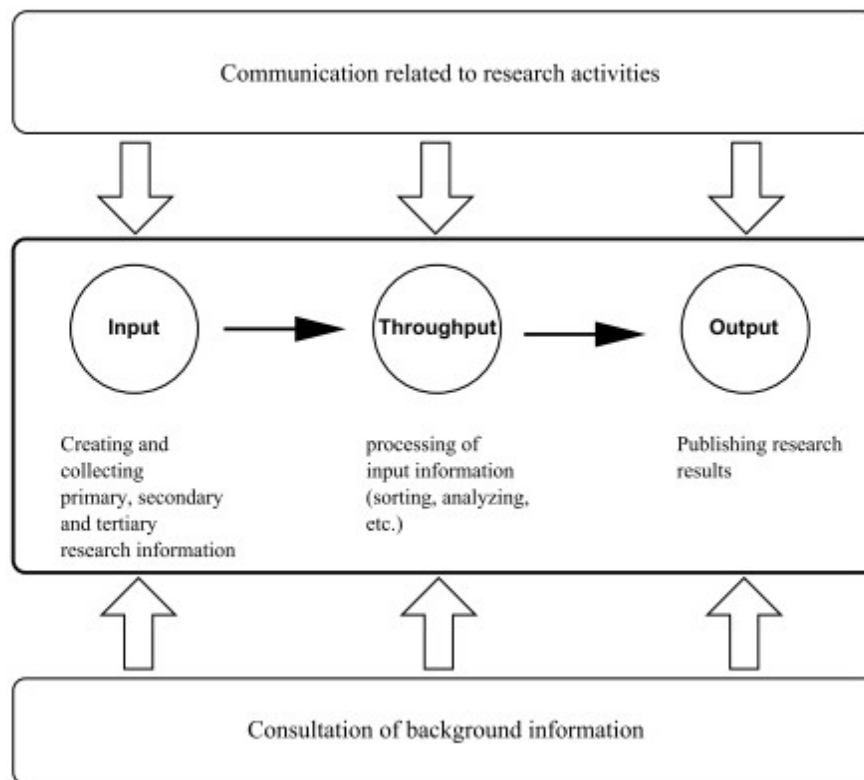
#### **2.1 Theoretical framework**

According to Borgatt (1996), theoretical framework is a collection of interrelated concepts. A theory is a system of explaining phenomena by stating construction and the laws that inter-relate these constructions (Mugenda and Mugenda, 1999). A theoretical framework guides a research, determining what things to measure and what statistical relationship to look for.

The study was guided by Mackenzie Owen theory (2005:100), the Three-phase model of research. This model identifies activities taking place at three different stages in a research process. For example, creating and collecting primary, secondary and tertiary

research information, processing of collected data/information and publishing research findings.

First, is an input phase where a researcher gathers and selects information/ data that is to be used for carrying out the research. The model has a through put phase where internal and external information is processed and analyzed to produce research results. There is also an output phase whereby information in the form of reports, conference papers, articles etc. on research activities and its results are produced and made public. Which is then made available as input to other researchers.



**Figure 1: Three-phase model of research**

**Source: Mackenzie Owen (2005: 100)**



In scholarly publishing dissemination of research findings is very important. According to Okemwa, (2007), scholarly publishing is considered the norm for disseminating and validating research results and is also crucial for career advancement in most academic fields. In this model there is consultation of background information and communication related to research activities. To begin any research activity, there is always consultation of background information. This enables the researcher to define the research problem. Researchers do not work in isolation, but always maintain diverse contacts with resource persons, colleagues and other researchers with whom they exchange information through different forms of communication i.e. telephone, email, conferences etc. This model therefore, guides the study by providing a clear understanding of the entire process of research and scholarly publishing of which the academic staff of universities are required to conduct research and disseminate findings. The study was also guided by Douglas McGregor's XY- management theory model (1960); it is a salutary and simple reminder of the natural rules for managing people, which under the pressure of day-to-day business are all too easily forgotten. McGregor's ideas suggest that there are two fundamental approaches to managing people. Many managers tend towards theory x, and generally get poor results. Enlightened managers use theory y, which produces better performance and results, and allows people to grow and develop.

Theory X (authoritarian) assumes that, humans inherently dislike working and try to avoid work. Because people dislike work, they have to be made to work by putting pressure and controlling their activities closely. Average people prefer to be directed by others, avoid taking responsibility, are unambitious and prefer security at work. Based on that conclusion, he proposed a new set of managerial assumptions, which he called

Theory Y management: Theory Y( participative) assumes that, work is an activity as natural to people as play and rest. When suitably motivated, people are self-directed to achieve organizational objectives. Commitment of employees can be obtained by ensuring job satisfaction for them. People learn to accept responsibility and under suitable conditions actively seek responsibility. And lastly, people are imaginative and creative.

### **2.1.1 Relevance of X-Y theory to the study**

It is a perception by the university oversight bodies that researchers, because they are human, can dislike and avoid work. Therefore, they have to be made to work by putting pressure and controlling their activities closely. In Kenyan universities, faculty members are required to publish. The CUE has stipulated standards and guidelines i.e. the appointment criteria are purely based on research output (for example, the number of publications by faculty members). On the other hand, this management theory suggests that suitably motivated people are self directed to achieve organizational objectives. Commitment of employees can be obtained by ensuring job satisfaction for them. People learn to accept responsibility and under suitable conditions actively seek responsibility. And lastly people are imaginative and creative.

According to this theory, researchers are supposed to be motivated if they work under a conducive environment (research infrastructure), given space, time and adequate funds. This theory assumes that people are creative and imaginative and under suitable conditions can actively seek responsibilities and hence more research output. The theory

therefore guided the study in determining the role universities should play in promoting research and scholarly publishing.

## **2.2 Research activities in universities**

Research is one of the core pillars of any university system (Migosi et al. 2012), and (Nyaigotti, 2004). Kinyanjui, (2007) stated that research should be made an integral part of the responsibilities of every academic member of university staff and academic staff should be evaluated and appraised annually on the basis of research output, in addition to teaching, administration, mentoring and community service. Research in Kenyan universities is making a lot of progress. Most universities are collaborating with partners within and outside the country in getting research support and have established research centers to facilitate management of research activities.

According to Rotich, (2010: 2-3), the university of Nairobi has intensified collaboration with local and international partners, which has led to a substantial increase in available research grants. Moi University has research units that facilitate research within and outside the university. The university sets aside funds under its research grant. Maseno University has established the Centre for Research and Technology Development to enhance the capacity to undertake research and technology development and to handle research activities.

### ***2.3 Publications as indicators in webometric ranking of universities***

Publications are used as critical factors in determining promotion and tenure of university faculty members. Publication in reputable journals is one way through which research findings are widely disseminated (Migosi et al. 2012). Scholarly output, particularly in the form of journal publication is a key indicator of a university's performance.

It contributes to a university's ranking, faculty ranking and academicians' scholarship credentials (Min, Abdullah and Mohamed, 2013).

According to The Top American Research Universities annual report (2013:5), 'Nothing stirs the public imagination about higher education more than rankings, unless it's football'. In the webometric ranking of universities and in measuring and evaluating of universities' performance, research publications, citations and web visibility are considered as very important indicators.

According to the last journals consortium ranking, University of Nairobi (UoN) was ranked 4<sup>th</sup> in Africa (UoN, 2015). Journal consortium is an online platform that provides resources to the academic community. The ranking was based on research publications and citations for the last five years (2010 to 2014) as well as visibility on the internet. In the ranking, UoN recorded a Total Influence Factor of 42.81, a Research Publications and Citations score of 38.80 and an Internet/Web Presence of 4.01. The University of Cape Town emerged position 1, while Cairo University and University of Pretoria took positions 2 and 3 respectively. Overall, a total 1,447 universities and higher education institutions in Africa were ranked. In East Africa, Makerere University and Addis Ababa University took positions 2 and 3 respectively. The number of universities and higher

education institutions ranked in East Africa was 314. In Kenya, 67 universities and higher education institutions were ranked with Kenyatta University taking position 2 and Moi University, 3. From the methodology used in the ranking, the Total Influence Factor (TIF) is the sum of Research Publication and Citation score plus the Internet/Web Presence score. In addition, the Research Publication and Citation (RSC) score is directly proportional to the number of publications and citations of a university or higher institution over the 5 years period. Journals Consortium utilizes the publications and citations scores available on Google Scholar. The Internet/Web Presence (IWP) is also directly proportional to the number of times the university or higher institution appears on the internet. African universities and higher institutions ranking (2015), (see appendix 2).

“University leaders believe rankings help maintain and build institutional position and reputation; good students use rankings to ‘shortlist’ university choice, especially postgraduates; and key stakeholders use rankings to influence their decisions about accreditation, funding, sponsorship and employee recruitment. Rankings also influence national and international partnerships and collaborations” (OECD, 2015).

The Shanghai ranking, which is largely based on achievements in research, stimulated a plethora of imitators. The Times Higher Education journal started to produce rankings from 2004, which purported to rank universities based on attributes wider than research, and has announced the intention to invest heavily in developing its system further. Leiden University has produced a citation based ranking strictly limited to research performance. The Lisbon Council has produced a ranking of university systems based on criteria such

as inclusiveness, access, effectiveness and responsiveness, in which Australia is ranked most highly, UK second, Denmark third and the USA fifth (LERU, 2015).

## **2.4 Research infrastructure in universities**

Excellency in research requires access to excellent research infrastructures. Research infrastructures are different for different institutions and different areas. Research infrastructures at the University of Gothenburg refer to facilities and resources, such as research sites, laboratories, boats, technology platforms, apparatus, biological collections, databases, and software resources, together with the staff expertise. The infrastructures are open to independent users with no connection to the provider of the research infrastructure and have a clear and transparent principle for access where academic research has first priority and where selection is based on research quality. At Gothenburg university, research infrastructure has a long term Operational and Funding Plan (3years), support high quality research and can also be used for teaching (GU, 2015).

Monash University is committed to providing world-class research infrastructure to support its strong research community. They have recently made a series of major investments on research infrastructure. Monash now has a world-class integrated network of technology platforms in the areas of biomedicine, science and engineering (MU, 2015).

## **2.5 Funding for research**

Migosi et al, (2012) and Ngome ,(2003), observed that one of the key factors that stunted the growth of research in the Kenyan university system was inadequate research funds, while a large portion of support (although inadequate) for postgraduate and staff training and research was contributed by donors and international organizations. It was also pointed out by Rotich (2010) that it is hard for Kenyan universities to support research because most of them are severely constrained by inadequate funds - most research activities depend on donor support. However, Kenyan universities are making progress by increasing allocation of funds to research using internally generated funds. The University of Nairobi has in particular intensified collaboration with local and international partners, which has resulted in a substantial increase in the available research grants.

## **2.6 Higher Education Oversight Bodies**

### **2.6.1 The Commission for University Education**

The Commission for University Education in Kenya was established by an Act of Parliament, as the successor to the Commission for Higher Education which was established under Universities Act Cap 210B of 1985 (CUE,2017). The commission is mandated to promote the objectives of university education, by regulating and accrediting universities and programmes, regulating and assuring quality university education through setting and enforcing rules, standards and guidelines for global competitiveness. CUE's vision is to promote accessible and sustainable quality university education (Universities Act, 2012).

### **2.6.2 Functions of CUE**

The general functions of the commission are: to promote the objectives of university education; advise the Cabinet Secretary on policy relating to university education; promote, set standards and assure relevance in the quality of university education; monitor and evaluate the state of university education systems in relation to the national development goals; license any student recruitment agencies operating in Kenya and any activities by foreign institutions; develop policy for criteria and requirements for admission to universities; recognize and equate degrees, diplomas and certificates conferred or awarded by foreign universities and institutions in accordance with the standards and guidelines set by the Commission from time to time; undertake or cause to be undertaken, regular inspections, monitoring and evaluation of universities to ensure compliance with set standards and guidelines; collect, disseminate and maintain data on university education; and promote quality research and innovation (Universities Act, 2012).

According to the CUE Newsletter (2013), the quality of post graduate training in the region has been at risk because of academic dishonesty, the thriving business of paper mill outfits trading academic papers at exorbitant fees borne by the students seeking the service. This has caused duplication of papers and thereby, compromised the quality of academic reports, papers, thesis and dissertations among other academic publications.

To facilitate promotion of quality research and innovation in universities, CUE has established a division known as Planning, Research and Development. The division was



established in August 2013 after it was noted that this objective of the Commission tended to be overshadowed by the finance and administration function (CUE,2017).

The Division has two departments; Planning and Resource Mobilization (PRM) and Research and Development (RD). The functions of the division are to: Promote quality university research, innovation and industry linkages in Kenya; advise the cabinet secretary on university education policy issues; spearhead monitoring and evaluation of university education systems in relation to national development goals; provide leadership on formulation of the commission's research and innovation agenda; formulate and review the commission's development and resource mobilization strategies; develop policy for criteria and requirements for admissions to universities; collect, disseminate and maintain data on university education in Kenya; and develop and manage the commission's performance management systems (CUE,2017)

As the oversight body, CUE performs the following functions: - Conduct research on critical issues in university education; prepare research proposals in support of university education; publish and disseminate research findings on university education and research; formulate, implement and review university research policies and strategies; and implement policies on plagiarism and open access.

### **2.6.3 Overview of National University Commission**

The Nigerian National Universities Commission Act (1993) describes the Commission as the organization in charge of the accreditation of Nigerian Universities; it was established in 1962 as part of the federal ministry of education in Nigeria. The role of the commission is to ensure that all Nigerian universities perform to the set standards and

regulations for award of degrees. The commission is required to advise the Federal and State Governments on all aspects of university education, including development of universities in Nigeria. It also inquires into and advises the Federal Government on the financial needs (both recurrent and capital) of university education in Nigeria; investigates and studies the financial needs of university research with regard to ensuring adequacy of amount provided.

The commission also receives a block grant from the Federal Government and allocates the same to Federal universities, in accordance with such formula as may be approved by the Federal Government, taking into account, grants provided to the universities by State Governments as well as by persons and institutions in and outside Nigeria. The Commission also collates, analyzes and publishes information relating to university education in Nigeria and from other sources, where such information is relevant to the discharge of its functions under the Act (National Universities Commission Act, 1993).

The Australian Government funds higher education research and research training through peer reviewed competitive research funding schemes and through performance-based block research funding schemes. The government is the source of public funding for Australian universities (OCDE, 2015).

In Uganda, the university oversight body is the National Council for Higher Education (UNCHE) which was established under section 4 of the Universities and Other Tertiary Institutions Act of 2001 (as amended in 2003 and 2006) as a semi-autonomous and self-accounting body. The objectives of the UNCHE are to regulate higher education, to guide

the establishment of institutions of higher learning, and to ensure that quality and relevant education is delivered (Ministry of Education and Sports, 2015).

Bailey (2014) and Mohadeb (2013) stated that: to promote research and innovation in universities, UNCHE established the Department of Research, Development and Documentation in 2007, which is responsible for a wide range of support functions, including: collecting and disseminating information on higher education; publishing UNCHE quality assurance documents (quality indicators, regulations, etc.), undertaking research; managing the government fund for university research; maintaining the UNCHE's website; overseeing the development of UNCHE infrastructure; and coordinating training activities for UNCHE staff (relating to quality assurance in particular).The UNCHE is funded entirely by government for its operational costs, with project-specific funding from international donors including the Rockefeller Foundation, Ford Foundation, Carnegie Corporation and the Netherlands University Foundation for International Cooperation (NUFFIC).

#### **2.6.4 The role and functions of Higher Education Oversight Bodies in the world**

In the United States of America (USA) federal government and the states share the responsibility of financing higher education (roughly \$70 billion each), although their roles are quite different. The federal government provides about \$40 billion per year for student aid grants, tuition tax credits, and loan subsidies and about \$27 billion per year for research in colleges and universities. The states provide about \$6 billion for student grants and \$65 billion for direct institutional subsidies, which principally support

instruction, with smaller allocations for research and public service. The states bear nearly all the expense of constructing and renovating physical facilities.

The federal government plays the most significant role in funding research and setting research priorities. However, most funding, and the most prestigious research grants are awarded through a peer-review process. The federal government also plays a prominent role in collecting data and providing information about higher education. This federal data system has become quite large and cumbersome; an effort to simplify and improve it by collecting data on individual students, who move frequently among institutions, has become controversial (OECD, 2015).

## **2.6.5 Challenges of universities governing bodies**

### **2.6.5.1 Problems of the National Universities Commission (NUC)**

The increase in the number of federal universities and the continuing demand for more, the establishment of state universities and private universities and inadequate funds have been the biggest problems of the commission in terms of logistics. In spite of the explosion in students' enrolment, there is no corresponding increase in facilities and qualified teaching staff. These problems have resulted in a decline in the quality of university products.

According to National Universities Commission (NUC) annual report of 1994, the first-generation universities were adequately funded because the number of universities and students enrolment was manageable. With the increase in students' enrolment, it is expected that the federal government would have complied with the recommendation made by UNESCO that 25% of 'the annual budget should be allocated to the education

sector. With so many universities and duplication of courses and the issue of rationalization of courses being treated as only an academic exercise by National Universities Commission and universities, the resources available can only be sparsely distributed.

## **2.7 Strategies adopted by Higher Education Oversight Bodies to address challenges**

NUC is using ICT to improve the quality of teaching, learning and research in Nigerian university system. In this connection, a number of initiatives have been introduced by the NUC, namely the National Virtual Library Project, Development of ICT Resource centers in some universities, Nigerian Research and Education Network and deployment of Electronic teaching and learning platform. According to NUC (2015), the National Virtual Library was established in 2001, whose objectives were to: improve the quality of teaching and research in Nigerian institutions, enhance access to academic Libraries in Nigeria to global library and information resources and to enhance scholarship, research and lifelong learning through the establishment of permanent access to shared digital archival collections. The ICT Resource centres were created in Nigerian universities to support the development of ICT competence of students and staff in the institutions. The Nigeria University Electronic teaching and learning platform is an ICT enabled interactive teaching and learning concept introduced by the NUC in the Nigerian university system. This was expected to improve the webometric ranking of the universities as the e-content developed during teaching can be made available on the universities website (NUC, 2015).

## **2.8 Incentives offered by universities to promote research and scholarly publishing**

Okemwa, (2007), points out that, good remuneration and other monetary rewards for scholars are incentives. However, there are other incentives which can create an enabling environment for scholarly publishing. For example, maintaining the best infrastructure that institutions of higher learning should have and maintaining the prestige and comfort associated with higher education can be an important incentive for scholars in sub-Saharan Africa. In South Africa, academics receive incentives for publishing in certain journals and this encourages them to produce more peer reviewed research (Muller, 2017). According to SUN (2018), Stellenbosch University rewards publications units as well as creative outputs through financial incentives. An amount is awarded annually for publication units that qualify for a subsidy from the department of higher education and training.

Okemwa (2007) noted that, such incentives can enable scholars not only to desire to publish, but also to add to the body of knowledge. However, sabbatical leave, which is meant to ensure that scholars have time and attention for research and interaction with their counterparts from other regions of the world, is not easily facilitated in the institutions of learning based in sub-Saharan Africa.

## **2.9 Scholarly publishing**

Scholarly publishing is a field that is mostly associated with scholars who teach or conduct research in institutions of higher learning and other institutions of research (Okemwa, 2007). According to Association of Research Libraries (2014), scholarly

publishing is defined as: “The creation, dissemination, and application of new knowledge... fundamental to the development of an informed citizenry and healthy global economy”. Institutions of higher education exist to fulfill these functions. Kinyanjui, (2007) stated that “Research should be made an integral part of the responsibilities of every academic member of university staff. Academic staff should be evaluated and appraised annually on the basis of research output, in addition to teaching, administration, and mentoring and community service”. In universities today, promotion is based on the number of publications a faculty member has published and also ranking of universities considers the number of publications faculty members have published. “Scholarly research and publishing have become an integral component of the academic world. The importance of publishing to any academic is perhaps best underlined by the maxim ‘publish or perish’. Indeed, publishing in the academic world determines a scholar’s standing or status both within the local research community and internationally. At the centre of the scholarly communication process is the academic reward system, the issue of promotion and tenure that is integrally tied up with the formal peer-reviewed publication. The reward system present in most universities recognizes publication as evidence of scholarly achievement and is required for rank and tenure and to satisfy criteria for grants” (Ampem, 2003).

Mason (2014) and Dancik (1990:93) stated that: “If professors are expected to publish and there are only so many articles that can fill a journal, and so much competition to get articles accepted for publication, it forces new publication to crop up on a continual basis.” Mason, (2014) again cites Burch, (1991) saying that “promotion and tenure committees judge professors’ worth by how much and where they publish. It is seen as a

necessity for post secondary institutions to show that their staff can produce a sizable volume of good quality research.” It was also noted by Boden, (1990), that there is also a reality that fewer tenure track jobs are being offered in certain disciplines, which increases the competition to prove that quality research can be carried out. How much a professor produces is also a key determining factor in sabbatical leaves.

Boden, (1990:16) commended that, “along with university administrators expecting scholarly publications, there is additional pressure from faculty peers. They demand that everyone contributes to the overall reputation and standing of the department, since the university financial position and their own are connected to how much important research is being done.” There is also pressure to prove that they have contributed to the intellectual body of knowledge of their field in a meaningful way when going after research money. Boden, (1990:20) further pointed out in Appraisal of research that: “Scholars can only continue to receive research funds if they regularly produce, but in particular they must show that the money “produced ‘output’ in the form of publications of some sort”.

Until research findings are published it is never complete. According to Flipsen, (2013), the importance of publishing research findings is to advanced scientific knowledge and exchange ideas amongst peers. Flipsen advised those keen to publish in journals to consider the readership, aims, scope, impact (geographically) and cost in order to be competitive with other scholars globally. He also advised that peer refereed papers already published needed to be posted on the university website to give the institution more visibility.



## **2.10 Challenges of research and scholarly publishing in Kenya**

According to Sawyerr, (2004), research capacity includes: quality of the research environment, funding, adequate infrastructure, research incentives, time available to the researcher, etc. He adds that: Negative institutional conditions such as poor infrastructure (equipment, laboratories, libraries, and so forth) and lack of funding impose clear limitations on research and research capacity development.

Scholarly publishing in Kenya is facing a number of challenges, including: Technological, economic, socio-political, and environmental. Knowledge production needs an environment where there is free flow of information. Environmental factors can really hinder the flow of information. According to Okemwa (2007:17), most scholars in Kenya and Africa as a whole operate in an environment where there is limited freedom of expression or no freedom at all.

Scholars, especially in the humanities and social sciences restrain themselves from publishing what they think may not be viewed favorably by those in power. Publishing anything critical of those in authority may be a reason for denial of promotion for those scholars who work in government-owned institutions of higher learning. Denial of promotion is the best that can happen to a scholar who publishes anything critical of those in authority. Such individuals can be fired and/or be arraigned before the courts of law, convicted and sent to jail for being found guilty of crimes bordering on treason. Scholars are compromised and made to produce publications which do not contribute to knowledge. In the 1980s, prominent scholars in Kenya were funded to research on and publish about a populist political slogan of the then President of Kenya, Daniel arap Moi, called the “Nyayo philosophy of love, peace and unity.” Scholars who were involved in the project were not only promoted, but pampered. There was nothing philosophical or scholarly in the slogan, but government funds were provided to scholars dedicated to the project. This was despite the fact that there were plenty of topical issues which could merit scholarship. Issues like corruption in

government, rigging of elections, nepotism, environmental degradation and tribal clashes could all merit scholarly publishing but were too sensitive.

Brain drain is another challenge of scholarly publishing in Kenya. Due to poor working conditions, low salaries, political instability and many other reasons Kenyan scholars are moving out to search for greener pastures.

Okemwa, (2007), attributes this brain drain to low and eroding wages and salaries, unsatisfactory living conditions, social unrest, political conflicts and wars and declining quality of educational systems. Other reasons which encourage scholars to migrate include lack of research infrastructure and other facilities, inadequacy of research funds and lack of professional equipment and tools.

According to Ngobeni, (2012), scholarly publishing in Africa has also suffered from lack of government funding and oppressive political environments, which have resulted in the sad fact that the majority of African scholars have migrated and are making their living in countries other than their own. Their outputs are then claimed as products of their adopted countries. Most African universities are impoverished, and so are their lecturers (this is one of the plethora of the push factors) and most universities in the United States, Europe and the diaspora have superior facilities (this is one of the plethora of pull factors). This has resulted in what we know today as brain drain. Ngome, (2003), noted that, in Kenya, as in other African countries, higher education is in deep crisis and a review of pertinent data shows a mass exodus of experienced and competent lecturers. Lack of incentives is also a challenge to scholarly publishing. These incentives can be good remuneration, monetary rewards, best research infrastructure, space and time for research.

Other challenges to scholarly publishing are, social-economic and technological. “Most institutions of higher learning in Kenya are not financially well endowed. Scholars are not well supported financially, many research facilities are outdated, poorly-funded libraries, absence of organized library networking, inability to afford journal subscriptions, and dated books – all makes it difficult for scholars to make scientific

progress. Also due to lack of access to the internet it is hard for the scholars to progress” (Okemwa, 2007). The internet connectivity is very poor and costly and also supply of electricity is poor and very unreliable.

According to CUE, (2017), researches by Kenyan universities are negatively affected by the following challenges:

- a) Low levels of funding by the universities and government.
- b) Lack of research infrastructure: laboratories and equipment.
- c) Lack of qualified human resources.
- d) Universities spreading too thin: lack of geographical and thematic focus.
- e) Rapidly expanding privately sponsored teaching programs that are pulling academic staff away from research into teaching only.
- f) Poor University-Industry linkages: hence undermining the relevance of teaching programs and low levels of university research funding by industry.
- g) Poor implementation of policies on intellectual property rights, research ethic, plagiarism and open access to information.
- h) Poor alignment of university research to national development goals and aspirations
- i) Poor management, supervision, monitoring and evaluation of university research programs.
- j) Low impact of university research and its utilization at the national level.

In response to the challenges facing scholarly publishing, Rotich, (2010), suggests that universities in Africa and more so in Kenya, must increase funds allocated to research and the dissemination of findings as well as allocate more money to organizing conferences, seminars and other forums where research findings are shared. The funds allocated should not only fund the activity of research, but should also promote activities that are used to disseminate findings. According to Ngobeni, (2012), there is need to increase library funding which has for years been the cornerstone of scholarly books.

According to Okemwa (2007), there is need to improve technology, especially accessibility to the internet so that scholars can use the web and email to track down information as well as exchange ideas with colleagues globally. Rotich, (2010), recognizes the need to improve internet connectivity in African universities in order to increase visibility of published scholarly materials. “Although some universities produce large quantities of research material in terms of theses and dissertations, there is no evidence in terms of visibility outside the gates of these universities. It is therefore necessary to post most of these research findings on the websites of universities and to encourage the extraction of major findings and their presentation during conferences, or submitting them for publication in journals in countries other than where the research was done. He added that internet postings would reduce the amount of money required for the dissemination of research findings.”

## **2.11 Chapter Summary**

This chapter reviewed literature on scholarly publishing by universities and the role played by various higher education oversight bodies in various parts of the world in terms

of research and dissemination of findings. It recorded concerns about researches undertaken in universities, research infrastructure, funding for research and incentives offered to academic staff in promotion of research and scholarly publishing. It also looked into the challenges facing the scholarly community, identified and highlighted gaps in available literature.

## **CHAPTER THREE**

### **3.0 RESEARCH METHODOLOGY**

This chapter presents the research design, the study area, target population, sample size, sampling techniques, research instruments, validity and reliability, data collection methods, data analysis and ethical considerations.

#### **3.1 Research design**

Research design is a framework or a detailed outline on how a research study will be conducted. According to Kothari (2004), research design is a strategy specifying the approach used in gathering and analyzing data. The study adopted mixed method research approach. Qualitative approach was mostly used; however there were some limited elements of quantitative aspects that necessitated consideration of quantitative approaches. The need to investigate the role of the selected universities in promoting research and scholarly publishing required a qualitative approach while there were aspects of quantification of data, for example, the number of publications lecturers had published, rating research infrastructure in percentages and response rates that required quantitative approach. According to Straus and Corbin (1990), quantitative and qualitative methods can be combined in the same research project providing greater insights in the findings.

The study used exploratory research design. Explorative studies are undertaken when a new area is being investigated or when little is known about the area of interest (Polit et al, 2001). Exploratory research design was appropriate because there was need to explore

the full nature of the phenomenon. Exploratory research is valuable means of understanding what is happening, seek new insights, ask questions and assess the phenomenon in new light (Yin 1994). An assessment was conducted on the researches undertaken and publications by the academic staff, research infrastructure and adequacy of funds allocated to research by universities, the role of the Commission for University Education in promoting research and scholarly publications by universities, incentives that are offered by universities to promote research and scholarly publishing, challenges faced by universities in promoting research and scholarly publishing and strategies for addressing identified challenges as well as promoting research and scholarly publishing by Kenyan universities.

### **3.2 Study area**

The study area was two universities in Kenya, one public and one private, namely Technical University of Kenya (TUK) and Strathmore University (SU). CUE officials were also consulted as key informants.

### **3.3 Target population**

According to Mugenda and Mugenda, (1999), the target population is that population to which a researcher wants to generalize the results of a study. Two universities in Kenya constituted the target population. The population for the study consisted of academic staff, librarians, ICT directors/ head of ICT, directors of research and management from the two selected universities, namely the Technical University of Kenya (TUK) and Strathmore University. The total population at Strathmore University was one hundred and fifty (150), while the Technical University of Kenya had two hundred and seventy

seven (277). Stratified and random sampling was used to select the lecturers and purposive sampling was used to select the key informants. The key informants included: deputy vice chancellors in charge of academics and research, directors of schools/ deans of schools, directors of research, librarians and head of ICT/ ICT directors. At the Commission for University Education the study targeted the director of research department in Planning, Research and Development division.

### **3.4 Sampling techniques**

The sampling techniques used in the study were purposive sampling, stratified sampling and simple random sampling. Purposive sampling was used to select key informants in universities and CUE and stratified and simple random sampling was used to select the university lecturers. Purposive sampling technique was used because it allows the researcher to select a sample that serves the purpose of the study i.e. the sample that has the required information and knowledge in the field. The researcher divided the lecturers into groups basing on schools then used simple random sampling to draw the sample. Simple random sampling is the sampling method in which each member of the population has an equal chance of being selected. This sampling method enables every unit of a population to have a chance to be selected and an equal opportunity to participate.

#### **3.4.1 Sampling Procedures**

A list of academic staff, Information Communication Technology (ICT) and library staff was obtained from the Human Resource Management (HRM) records at both



universities. Thus this list was used as a sampling frame. Lecturers were divided into strata's basing on schools and departments, and then later selected randomly from both universities. Key informants from Technical University of Kenya (TUK), Strathmore University (SU) and Commission for University Education (CUE) were selected using purposive sampling.

### **3.5 Sample size**

A sample is the small group obtained from the accessible population (Mugenda and Mugenda, 1999). Determining the sample size is a very important issue for collecting accurate results. The sample size for this study was 111 comprising of eighty (80) lecturers both from Technical University of Kenya (TUK) and Strathmore University (SU), fifteen chairpersons of departments and sixteen (16) key informants from universities and CUE. The key informants were seven (7) directors/deans of schools, two (2) research directors, two (2) librarians, two (2) Information Communication Technology (ICT) directors, two (2) deputy vice chancellors in charge of academic and research from both universities and one (1) research director from the Commission for University Education (CUE). To determine the sample size for this study, the researcher adopted table 3.1.

**Table 3.1. Sample size**

| Institution                   | Population | Respondents                | Sample size |
|-------------------------------|------------|----------------------------|-------------|
| Technical University of Kenya | 277        | Academic Staff             | 68          |
|                               |            | ICT Staff                  | 1           |
|                               |            | Library staff              | 1           |
|                               |            | Director Research          | 1           |
|                               |            | DVC Research and Academics | 1           |
| Strathmore University         | 150        | Academic Staff             | 34          |
|                               |            | ICT staff                  | 1           |
|                               |            | Library Staff              | 1           |
|                               |            | DVC Research and Academics | 1           |
|                               |            | Director Research          | 1           |
| CUE                           | 6          | Director Research          | 1           |
| Total                         | 433        |                            | 111         |

### **3.6 Research instruments**

#### **3.6.1 Interview**

An interview is an oral administration of questions or an interview schedule (Mugenda and Mugenda, 1999). Unstructured interview schedules were used which allowed participants to freely express their views. The researcher used both personal and telephone interview method to collect data from key informants. Personal interview involved presentation of oral questions to the participants in a face-to-face contact whereas telephone interview involved telephone conversations. The interviewer sought permission from the relevant authorities to conduct an interview with the concerned officers by first introducing him/her self and stating the purpose of the study.

The researcher used a tape recorder to capture answers by first seeking permission from the respondents and also took notes while carrying out the interview. Telephone interview was used because it allows the researcher to call back for clarification on some issues if need arises. Interview questions were emailed to the respondents in advance to

enable them to prepare for the interview. According to Saunders et al. (2007), advantages of interviews are listed as the possibility of obtaining comprehensively detailed primary data that can be immediately analyzed.

### **3.6.2 Questionnaire**

The study used self-administered questionnaires to collect data from heads of departments, and lecturers. The questionnaires were printed and delivered to the respondents in person. The researcher administered ninety five (95) questionnaires; eighty (80) questionnaires were distributed to the lecturers and fifteen (15) questionnaires to the chairpersons of departments. The questionnaires enabled the researcher to collect data from a large sample within a short time. Both open ended and closed ended questions were used and this enabled the researcher to collect data and analyze with ease.

### **3.7 Validity and reliability**

Validity is the degree to which results obtained from analyzed data actually represent the phenomenon under study, while reliability is the measure of the degree to which a research instrument yields consistent results or data after repeated trials (Mugenda and Mugenda, 1999). In this study, interviews and questionnaires were used. The researcher used test-retest technique to assess reliability. This means an instrument was administered once and then again under similar conditions. According to Kumar (2005), pre-testing a research instrument entails a critical examination of the understanding of each question and its meaning as understood by a respondent. Pre-testing is usually carried out on a group of people similar to the study population under actual field conditions. A pilot study was done to pre-test the research instruments in order to make necessary changes

and corrections before the actual study. This was done on ten lecturers selected from Kenyatta University. Pretesting proved to be useful as respondents raised issues on unclear areas and this prompted corrections and rephrasing of questions. To enhance validity of the findings, the researcher formulated questions basing on objectives which were checked and scrutinized by the experts and lecturers of Moi University.

### **3.8 Data analysis, presentation and interpretation**

Data analysis is the process of bringing order, structure and meaning to the mass of information collected (Mugenda and Mugenda, 1999). Data that were gathered in the study using interviews and questionnaires were analyzed, presented and interpreted in an attempt to give answers to the research questions.

Both qualitative and quantitative data were collected. Qualitative data refers to non numeric data or data that has not been quantified (Saunders et al, 2007). To analyze the qualitative data the researcher transcribed the data which was audio recorded. The interview was transcribed, meaning, reproducing as a written account using the actual words (Saunders et al, 2007). The researcher checked, coded and grouped the data into categories from various sources. Coding was done by hand on hard copies. Categories were identified basing on objectives of the study and research questions. Lastly, the researcher evaluated and analyzed data using mixed method of data analysis (qualitatively and quantitatively) in order to determine its usefulness.

### **3.8.1 Data presentation and interpretation**

The researcher presented audio recorded data using descriptive narratives and quantitative data was presented using tables and charts. Tables are important since they were used to list down variables in a more simplified manner for easy tabulation and making the work more organized. This reduces time taken for analysis. Also charts are important in evaluation of data collected since variables from the study can be worked in one chart. It is through data presentation that the researcher shows the results of the study to other people.

### **3.9 Ethical considerations**

According to Saunders et al, (2007), research ethics relates to questions about how we formulate and clarify research topics, design, research and gain access, collect data, process and store data, analyze data and write and present research findings in a moral and responsible way. The researcher in the introductory letter assured the study participants, that the information that they would provide would be treated as private and confidential and purely for studies, and would not be used for any other purpose. The researcher ensured voluntary and uncoerced participation of the respondents and also had to seek their consent. The researcher sought a research permit from National Council of Science, Technology and Innovation (NACOSTI) to enable her collect data.

### **3.10 Ethical issues in disseminating the research findings**

In disseminating research findings, issues of confidentiality and anonymity were maintained. The respondent's identity was protected and the researcher ensured that all

data were generated from actual research and no alterations were made to the research findings. The researcher acknowledged all the work of other authors by indicating the sources of information and also by having a list of references. Also the researcher did not misuse privileges by using the collected data for any other purpose apart from the intended purpose.

### **3.11 Chapter summary**

This chapter presented the research design, the study area, target population, sample size, sampling techniques, research instruments, validity and reliability, data collection methods and ethical considerations.

## **CHAPTER FOUR**

### **DATA PRESENTATION, ANALYSIS AND INTERPRETATION**

#### **4.0 INTRODUCTION**

This chapter presents the collected data, analysis and interpretation of the results on the role of universities in promoting research and scholarly publishing. The researcher collected data from the deans/- directors of schools, chairpersons of departments and lecturers from two universities in Kenya, one public and one private chartered university. Responses from all the participants were examined, compiled and evaluated to answer the research questions. Data were tabulated and presented through tables and charts and also coded, grouped and presented using descriptive narratives. The key informants of the study were two deputy vice chancellor in-charge of academics and research, five research deans/-directors, two university librarians, two ICT directors and director of research at the Commission for University Education. For ease of reference the key informants were allocated numbers and this numbers were used in the text to refer to the specific statements attributed to the respondents. The order is given under Informant interviewee and date of interview attached as Appendix 5. The findings are based on the study objectives.

#### **4.1 Response rate**

The study respondents were lecturers, chairpersons of departments, directors/- deans of schools, librarians, ICT directors, research directors/- deans, deputy vice chancellors in-charge of academic affairs and research from two universities and the director research, from CUE (Table 4.1 page 40).

At Strathmore University deans are in-charge of schools, while at Technical University of Kenya directors are in-charge of schools. TUK has the director of research, while Strathmore University has a dean in-charge of research.

Table 4.1 Participants response

| Institution | Participants                 | Sample    | Responses | Percentage |
|-------------|------------------------------|-----------|-----------|------------|
| TUK         | Lecturers                    | 48        | 38        | 79.1%      |
|             | Chairpersons of departments  | 15        | 10        | 66.7%      |
|             | Directors/- Deans of Schools | 5         | 3         | 60%        |
|             | ICT director                 | 1         | 1         | 100%       |
|             | University Librarian         | 1         | 1         | 100%       |
|             | Director Research            | 1         | 0         | 0          |
|             | DVC Academic and Research    | 1         | 0         | 0          |
|             | SU                           | Lecturers | 32        | 32         |
| SU          | Directors/- Deans of Schools | 2         | 2         | 100%       |
|             | ICT directors                | 1         | 1         | 100%       |
|             | University Librarian         | 1         | 1         | 100%       |
|             | Director Research            | 1         | 1         | 100%       |
|             | DVC Academic and Research    | 1         | 1         | 100%       |
| CUE         | Director Research            | 1         | 1         | 100%       |
| Total       |                              | 111       | 92        | 82.8       |

The researcher administered ninety five (95) questionnaires; eighty (80) questionnaires were distributed to the lecturers and fifteen (15) questionnaires to the chairpersons of departments of the two universities. At the end of the exercise 70 (87.5%) questionnaires from lecturers and 10 (66.7%) questionnaires from chairpersons of departments were returned. Fifteen questionnaires were missing; this is because lecturers proceeded on holiday before returning them. However the response rate was high. This high response rate indicated that the respondents had a lot of interest in the topic of research. Interviews were conducted with the directors/-deans of schools, ICT directors, librarians, research directors/- deans, deputy vice chancellors in-charge of academic affairs and research and with the key informant from CUE.



## 4.2 General information/ background information about the lecturers

This section presents the background information of lecturers and chairpersons of departments from the two universities who participated in the study. It contains the lecturers and chairpersons of departments' gender, age and areas of specialization. (Table 4.2)

**Table 4.2 Gender, ages, and areas of specialization of the lecturers and chairpersons of departments**

| Background             | Labels                         | No of Lecturers TUK | No of Lecturers SU | Total No of lecturers | %    | Chairpersons of departments | %  |
|------------------------|--------------------------------|---------------------|--------------------|-----------------------|------|-----------------------------|----|
| Gender                 | Male                           | 28                  | 20                 | 48                    | 68.6 | 8                           | 80 |
|                        | Female                         | 10                  | 12                 | 22                    | 31.4 | 2                           | 20 |
| Age                    | 30 years & below               | 5                   | 8                  | 13                    | 18.6 | 0                           | 0  |
|                        | 31-40 years                    | 12                  | 18                 | 30                    | 42.8 | 1                           | 10 |
|                        | 41-50 years                    | 14                  | 4                  | 18                    | 25.7 | 6                           | 60 |
|                        | 51years & above                | 7                   | 2                  | 9                     | 12.9 | 3                           | 30 |
| Area of specialization | Humanities and social sciences | 24                  | 25                 | 49                    | 70   | 6                           | 60 |
|                        | Applied and pure sciences      | 14                  | 7                  | 21                    | 30   | 4                           | 40 |

The results showed that, eight (80%) chairpersons of departments were male while two (20%) were female. The study sought to establish the ages of the lecturers. It was established that majority of the lecturers were aged between thirty one and forty years (31-40 years) representing 30 (42.8%), followed by lecturers aged between forty one and fifty (41-50 years) representing 18 (25.7%), and lecturers aged (30 years and below) and

(50 years and above) representing 13(18.6%) and 9 (12.9%) respectively. Most chairpersons of departments were aged between (41-50 years) representing 6 (60%), followed by those aged (50 years and above) representing 3 (30%) and (31-40years) representing 1 (10%). The findings showed that forty-nine (70%) lecturers were from humanities and social sciences while twenty-one (30%) lecturers were from pure and applied sciences. It was also noted that six (60%) chairmen of departments were from humanities and social sciences while four (40%) were from pure and applied sciences.

### **4.3 Researches undertaken and publications by the faculty members**

The study sought to establish the researches undertaken and publications by the academic staff. The aim of this was to find out if the university faculty members undertake research and publish scholarly articles/ research output. Fifty-eight 58 (82.8%) lecturers said they undertake research and mostly in their areas of specialization, eight (11.4%) said they don't and four (5.7%) had no comment. It was noted that those who had no comment were the new staff.

The study also sought to find out if faculty members publish scholarly articles/ research output. When asked about publishing articles and research output, majority 57(81%) said they have published scholarly articles/ research output, while 13(19%) said they have not published. In probing the lecturers further to find out if universities document and disseminate research output, 51 (73%) lecturers said that their university documents and disseminates research output, while 19 (27%) said universities don't document and disseminate research output (Table 4.3).

**Table 4.3 Researches undertaken and publications by university faculty members**

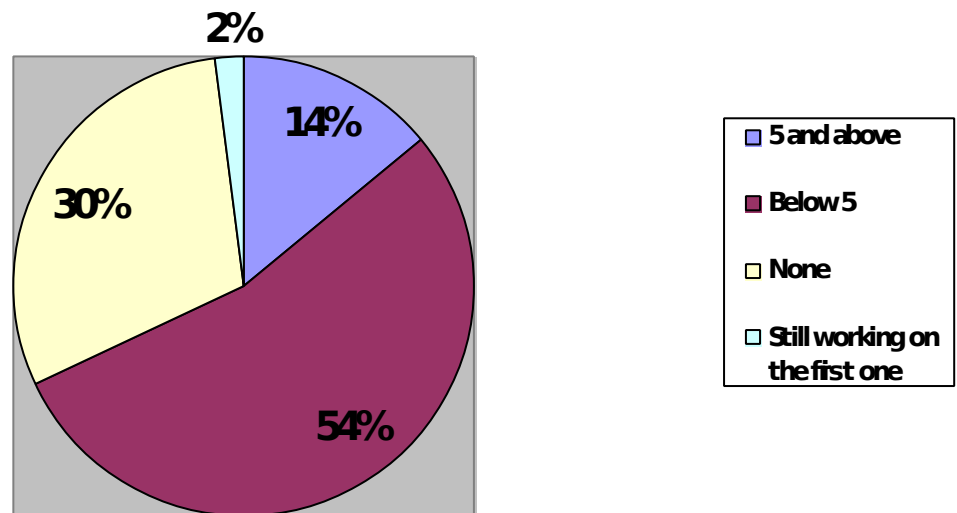
| Reponses     | Do university faculty members publish scholarly articles/research output |           | Does the university document and disseminate the output |           |
|--------------|--|-----------|---|-----------|
|              | %  | n         | %   | n         |
| Yes          | 81   | 57        | 73  | 51        |
| No           | 19   | 13        | 27  | 19        |
| <b>Total</b> | <b>100</b>   | <b>70</b> | <b>100</b>  | <b>70</b> |

When asked how and where the scholarly articles/ research output are disseminated, their responses were as follows: deposited in the university library; university website/ institutional e-repository; published in journals (local and international) as well as in books and conference proceedings both local and international. However, concern was raised about ineffective documentation of publications deposited in the institutional e - repository.

Probing the chairpersons of departments about the researches undertaken and publications by the academic staff, all said that researches are undertaken in their departments and mostly in their areas of specialization. The study revealed that the faculty members of the university publish scholarly articles/ research output with all the chairpersons of departments agreeing. When asked further if the university documents and disseminate the output, majority 7(70%) out of ten (10) chairpersons of departments agreed. However, three (30%) chairpersons of departments were of the view that the university does not document and disseminate research output. Those who said the university documents and disseminates research output listed the following ways: University website/ institutional e-repository, conference proceedings (local and international), annual reports, journals (local and international) and in university news.

However, some were of the view that there is ineffective documentation of works deposited in the institutional e-repository/university website.

Lecturers from both universities were further asked about the number of publications by university faculty members in the last five years. Findings revealed that ten (14%) university faculty members had done more than five publications in the last five years, 38 (54%) had published less than five, 21 (30%) had not published any and one (2%) faculty member was still working on the first one (Figure 4.4). It was further noted that majority of those who had not published were from the same university.



**Figure 4.4 Publications by academic members from TUK & SU in the last five years**

On publications, the study established that one chairperson of a department has had 22 publications in the last five years, another one has had 15 publications, one had published six (6) and seven chairpersons of departments have had less than five publications in the last five years. The findings show that faculty members from humanities and social sciences have had more publications than those from the applied and pure sciences. This

was demonstrated by the three chairmen of departments who had the highest number of publications coming from humanities and social sciences group.

The deans/- directors of schools and deputy vice chancellors in-charge of academic affairs and research were asked about the researches undertaken and publications by the academic staff. The respondents said researches are undertaken and mostly in the disciplines of the academicians. Some key informants said researches have been successful. This was based on the increase in the number of requests to present papers in conferences and also increase in the number of publications in the institutional e-repository/ university website. The key informants had the following views on research undertaken and publications by the academic staff. Typical response from one key informant was captured as follows;

*Looking at the percentage of lecturers undertaking research – not successful but actual research is very successful. The number of requests to forward papers/ conferences is quite a number. I can say research is successful (Interviewee no 3 on 4/4/ 2016).*

In addition, this was captured from another respondent

Individual members do research on their own. There are no research activities in the school and publications are on individual basis. We do partner with other universities and personally I have partnered with Maseno University and University of Kabianga. For the time being we are not partnering with any university outside the country. We are successful in undertaking research and in the last five years, we have done like a hundred papers and even more (Interviewee no 5 on 9/3/ 2016).

Again another key respondent said this;

We do deep research. We have research centers i.e. dispute resolution centre and intellectual property centre. In the last five years we have published seventeen publications in the school. Researchers mostly deposit their papers on the university website, the library; publish in journals, books and in conference proceedings. We also have the university printing press (Interviewee no 9 on 13/4/ 2016).

The study sought to establish if there are any rewards given to university faculty members who publish more. Findings show that, rewards given to faculty members who publish more are promotions and recognition. One key informant said that “Sometimes there are grants, sponsoring researchers to attend conferences but, it is not guaranteed”. Another one happily responded that;

*There are promotions to those who produce minimum publications. At least four to six publications for senior lecturers.. but, the quality of your work has to be seen. You qualify to be promoted if there is a vacancy. Also the more you publish the more known you are (Interviewee no 4 on 17/3/ 2016).*

In response to rewards given to university faculty members who publish more, 42 (60%) lecturers said that there are no rewards given to faculty members who publish more, 15 (35%) said there are rewards in terms of promotion, monetary, recognition, research grants, academic trips to attend conferences and scholarships, while three (5%) were not aware. Eight chairpersons of departments said that there are no rewards given to faculty members who publish more. Two chairpersons of departments said there are rewards in terms of promotion and research grants. However, one reacted sharply that, “it is practically very difficult” meaning it’s not guaranteed.

#### **4.4 State of research infrastructure and adequacy of research funds**

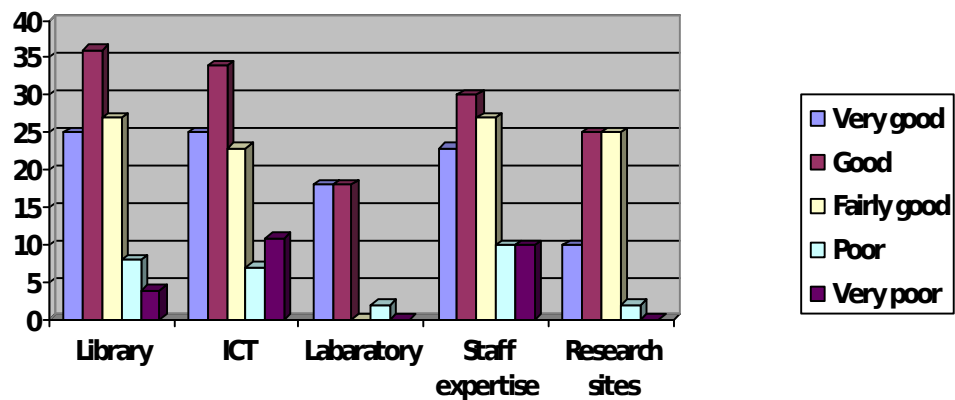
On the state of research infrastructure, majority of the lecturers said their institutions have libraries, ICT and staff expertise. The lecturers were asked about the research infrastructure in their universities and to rate the state of research infrastructure. The infrastructure reported were: Library, laboratories, ICT, research sites and staff expertise. Other research infrastructure cited were: research office, other research institutions, online libraries and plagiarism checker. The library was rated as the first, ICT second,

staff expertise third, research site fourth and laboratory fifth and last one (Table 4.4).

**Table 4.4 Perceptions of the respondents on the state of research infrastructure at TUK and SU (multiple responses)**

| Infrastructure  | State of infrastructure rating response in % |    |      |    |             |    |      |   |           |   |
|-----------------|--|----|------|----|-------------|----|------|---|-----------|---|
|                 | Very good                                    |    | good |    | Fairly good |    | Poor |   | Very poor |   |
|                 | %  | n  | %    | n  | %           | n  | %    | n | %         | n |
| Library         | 25   | 17 | 37   | 26 | 27          | 19 | 8    | 6 | 2.8       | 2 |
| ICT             | 25   | 17 | 34   | 24 | 23          | 16 | 7    | 5 | 11        | 8 |
| Laboratories    | 18   | 13 | 18   | 13 | -           | -  | 2    | 2 | -         | - |
| Staff expertise | 23   | 16 | 30   | 21 | 27          | 19 | 10   | 7 | 10        | 7 |
| Research sites  | 10   | 7  | 25   | 17 | 25          | 17 | 2    | 2 | -         | - |

**Figure 4.4 State of research infrastructure at TUK and SU (The values on the vertical side represents the state of infrastructure rating response in %)**



However, the state of the library, ICT and staff expertise varied from institution to institution. Forty two (42) (60%) lecturers did not rate the laboratories indicating that it was not applicable to their areas of specialization, while twenty seven (27) (38.5%) were unable to rate the research sites. Findings revealed that the state of research infrastructure

in private chartered university is good as compared to the public university, where most lecturers indicated that the state of research infrastructure is poor.

The chairpersons of departments had the following responses on the state of research infrastructure in the university. They reported that library, ICT and staff expertise were the major research infrastructure in the university. However, the response about research sites and laboratories was very low indicating that laboratories were not applicable to their areas of specialization. It was further realized that those who said they have laboratories were from applied and pure sciences.

The study sought to establish views of the librarians, ICT directors, research directors and DVC in-charge of academic and research on the state of research infrastructure in their institutions. On the side of the library, one librarian said that the library was not well stocked and the available space was inadequate considering the number of users. The respondent also reported that they relied mostly on the e-resources as they are members of the Kenya Library and Information Services Consortium (KLISC). The following are some of the responses from the librarians about the state of the libraries: One respondent was captured as follows:

Not well stocked. As compared to the number of students, it is very small. You know, it was built long time. We really have challenges of acquiring print resources and mostly we rely on the e resources because, we are members of the Kenya Library and Information Services Consortium. About the funds allocated to the library by the university, I can say they are terribly inadequate. The budget keeps on fluctuating. After the budget, you go and defend it; thereafter it is the management that decides the percentage to allocate to the library. I don't know the criteria used for allocation; it is not known (*Interviewee no 1 on 26/2/ 2016*).

In contrary, another respondent had to say this;

*We have the best library. It is well stocked. The budget for the library depends on the university budget; it always goes with the clients. Funds allocated by the*



*university to the library are very adequate, although I don't know the criteria used for allocation (Interviewee no 12 on 15/4/ 2016).*

The findings show that, the state of research infrastructure vary from university to university. It was noted that there is a very big difference between private and public universities.

The results showed that the libraries have digital repositories where all the research output from universities is stored. However, it was reported that documentation of research output and scholarly publications was inadequate. This was captured in the following statement:

*There is no adequate documentation on research output and scholarly publications. It takes long before getting in the library. You know the publications are deposited in the university e repository of which it takes time to get here (Interviewee no 12 on 15/4/ 2016).*

The librarians were further probed about the challenges facing libraries. The challenges identified in terms of library service delivery, included; inadequate funds, space, appropriate furniture and lack of current and relevant reading resources. When ICT directors were asked about the state of ICT in their institutions, their responses were expressed as follows:

*Yes, it is good. There are internet connections in the university but the speed is very slow and not all areas are covered. I can say, we offer free and unlimited access to the internet to all the scholars, researchers and even students but the strength is very weak. May be very early in the morning, or very late in the evening when some people have left the campus. As you can see, those students crowding over there, that area is covered by the internet. Networking is very expensive. The annual cost of maintaining the internet connections is ksh 13 million and still it is inadequate as compared to the number of student's enrolment (Interviewee no 2 on 29/2/ 2016)*

This was a response from one key informant. On the other hand another key informant responded:

We have a fully incorporated ICT in all areas. The internet is everywhere, in lecture rooms, library, administration etc. It is very adequate, it is like 80%. We buy the internet from the provider KENNET at subsidized costs of course with more bandwidth. We also have a back up from Jami Telecom and the speed is better off. We spent around ksh31.8 million annually on internet and ksh40 million on hardware and software. All full time lecturers have computers provided by the university and we also provide software for research i.e SPSS, latex, open source and turn it in. All classes have a pc and a projector well connected to the internet and every student is provided with a laptop (*Interviewee no 6 on 6/4/ 2016*).

The ICT directors however, said they face a number of challenges as far as ICT is concerned. The challenges mentioned included: Inadequate funding, inadequate technical staffs, vandalism, the cost of acquiring the current systems and upgrading the systems. Findings from the study revealed that, the major problem in ICT is inadequate funding. This was captured in the following statement.

*The major problem is just funding. Funding is inadequate and the technical staffs are also inadequate. Another challenge is vandalism. Staff and students theft, they steal almost everything (Interviewee no 2 on 29/2/ 2016)*

Additionally another respondent expressed this;

*The challenges we have is the cost of the new and current systems. Also, keeping on upgrading the system is another challenge. For any upgrade...there is demand on the hardware. The number of ICT staff is a challenge too. Imagine, fifteen staff against six thousand users (Interviewee no 6 on 6/4/ 2016)*

Looking at the challenges, the key informants suggested for more funding and collaborations. From these explanations the study noted that the state of research infrastructure varied from university to university. It was also revealed that Strathmore university provides laptops to all their students and researchers and gives them space and time for research.

The deans/directors of research, deans/directors of schools and deputy vice chancellor in charge of academic affairs and research were asked about the research infrastructure and

facilities that are available for use by the researchers in their universities. The following are their typical responses:

*There is ICT/ computers and I can say the internet is not adequate. There is a research directorate which is a new office and the university library, but there are no adequate textbooks (Interviewee no 5 on 9/3/2016).*

Additionally another respondent was captured as follows:

The directorate of research provides support and facilitates research. Professors are the biggest resource for research. This is achieved by employing professors to nurture young researchers. However, it has not been strong here as compared to other universities. I can also mention the library e-resources, the internet/ ICT and laboratories and print materials which are not adequate (*Interviewee no 3 on 4/4/2016*).

On the other hand the following was revealed by one key respondent:

*We have ICT, library and research centers. Our library is one of the best in the country. We have given every lecturer and all our students laptops (Interviewee no 11 on 13/4/2016).*

Again other respondents added:

The library has many e-books and we have wifi in the university. We give each student a laptop and scholars get laptops too. There are many research centers and we have a database which is good for research (*Interviewee no 9 on 13/4/2016*).

Well, there is wifi or internet connection, space for researchers, ICT laboratories and we also have a committee which looks at research protocol. Lecturers are also given time to do research, for example, during the long holidays (*Interviewee no 4 on 17/3/2016*).

Here, we have the internet that is ICT, there is a research office, working space, the e resources in the library, excellent, reliable and clean environment (*Interviewee no 10 on 14/4/2016*).

The key informants had to mention the following research infrastructures; the library, ICT, laboratories, research centers, working space, time to do research, clean working environment, research office/directorate and staff expertise (professors). From the explanations the study further noted that the state of research infrastructure varied from university to university.

#### **4.4.1 Adequacy of funds allocated to research by universities**

The study sought to assess the adequacy of funds allocated to research by universities. The respondents were 70 lecturers and 10 chairpersons of departments and deans/-directors of schools. Out of the 70 lecturers, 53 (76 %) said their universities allocate funds to research, 12 (17%) said no funds are allocated to research and 5(7%) said they were not aware of funds allocated to research. It was noted that the five lecturers, who said they were not aware, were new. Probed further as to how adequate are the funds allocated to research, nine (12.8%) said the funds are adequate, 35 (50%) said the funds were inadequate, seven (10%) said the funds were more than adequate and two (2.9%) did not know whether the funds are adequate, inadequate or more than adequate. About the proportion of funds allocated to research as compared to the total budget of the university, most of the respondents were not aware of the percentage. The respondents who said it was most adequate said that the proportion of funds allocated to research as compared to the total budget of the university was 20% and above, those who said it was adequate said it was 10-20%, whereas those who said it was inadequate said it was less than 10%.

The chairpersons of departments were also asked about the adequacy of funds allocated to research by Kenyan universities. Nine (90%) chairpersons of departments said there are no funds allocated to research by the university, while one (10%) said, there are funds allocated to research by the university. The one who said there are funds, added that the funds are inadequate and the proportion of funds allocated to research as compared to the total budget of the university is less than 10%.

In response to the adequacy of funds allocated to research, all the key informants said their institutions allocate funds to research but said the funds were not adequate. They said researchers requested for more funds. The findings showed that the proportion of the funds allocated to research to the total budget of the university is less than 10%. The key informants suggested that, more funds should be allocated to research. They also said that researchers should look for alternative ways to fund research i.e. applying for research grants. The study established that universities should partner and collaborate with other universities, the banking industry, etc. and also engage in business projects so as to generate more funds for research. In response to the adequacy of funds allocated to research by universities, one key informant said:

Yes, there are funds allocated to research by the university. I am not aware how much...you won't be given, may be you can find out from the finance office. I don't know the percentage and I cannot say whether it is enough or not enough because adequacy depends on several factors (*Interviewee no 4 on 17/3/ 2016*).

Findings from the study revealed that funds allocated to research by universities are inadequate. This was expressed in the following statements.

*Funds allocated to research are not adequate. It can just be used as a seed to invest (Interviewee no 11 on 13/4/2016).*

*Funds are there but are inadequate. It is not enough (Interviewee no 5 on 9/3/ 2016).*

Again, this was reported:

*The university allocates funds to research and it is not adequate. Our university allocates 12% of the total budget of the university to research but is just used as seed money, where schools use to get more money (Interviewee no 10 on 14/4/ 2016).*

In the study findings, inadequate research infrastructure and funds are the major problems facing universities in terms of research and scholarly publishing. The findings of this study support those by Okemwa, (2007), who established that many scholars work in

institutions which are not financially well endowed and in such institutions, research facilities are inadequate and outdated by international standards. Libraries of institutions of higher learning and other research institutes are poorly funded and continue to experience budgetary cuts every year.

#### **4.5 The role of the Commission for University Education (CUE) in promoting research and scholarly publishing**

The study sought to determine the role of the Commission for University Education (CUE) in promoting research and scholarly publishing by universities. Forty (40) (57.1%) respondents said CUE does not play any role in promoting research and scholarly publishing. Twenty three (23)(32.9%) lecturers said CUE plays a role in promoting research and scholarly publishing, 40 (57.1%) said CUE does not play any role and seven (10%) had no idea about the role CUE plays (Table 4.5.1).

Table 4.5.1 the response on role played by CUE in promoting research and scholarly publishing

| Response     | Number of respondents | % Response |
|--------------|-----------------------|------------|
| Yes          | 23                    | 32.9       |
| No           | 40                    | 57.1       |
| Did not know | 7                     | 10         |

Probed further on which role CUE plays in promoting research and scholarly publishing, they responded by giving the following roles:

- a) Encouraging the academic staff to publish and undertake PhD studies
- b) Ensuring quality is maintained in research
- c) Considering research output in evaluating programs

- d) Emphasis on curriculum review and development
- e) Regular auditing
- f) Issuing guidelines on recruitment and promotion
- g) Encouraging collaborations and faculty members to do research.

When the chairpersons of departments were asked about the role played by CUE in promoting research and scholarly publishing by Kenyan universities, eight (80%) said CUE does not play any role in promoting research and scholarly publishing while two (20%) said CUE plays a role. For those who said CUE plays a role said: CUE has developed guidelines for promoting scholarly publishing.

Probed further if there was any evidence to show that CUE has performed its objective of promoting research and scholarly publishing by universities, 56 (80%) lecturers said there is no evidence that CUE has performed its objective, seven (10%) said there is evidence and another seven (10%) said they did not know (Table 4.5.2). Those who said there is evidence said it wasn't direct.

Table 4.5.2 Evidence on CUE performance in promoting research and scholarly publishing

| Reponses     | Number of respondents | % Response |
|--------------|-----------------------|------------|
| Yes          | 7                     | 10         |
| No           | 56                    | 80         |
| Did not know | 7                     | 10         |

In response to the question if there is any evidence to show that CUE has performed its objective of promoting research and scholarly publishing by universities, all the chairpersons of departments said there is no evidence that CUE has played its objective

of promoting research and scholarly publishing. However, one reacted sharply that “I think the more appropriate agency for promoting research is National Commission for Science, Technology and Innovation (NACOSTI)- better to look at this area”.

The key informants from the universities indicated that the Commission for University Education does not play any role in promoting research and scholarly publishing but the National Commission for Science, Technology and Innovation (NACOSTI) plays a major role. Some were of the view that it does but in a reluctant way. Others said that CUE mostly does the auditing but has never come up directly to promote research and scholarly publishing. From their explanations it was clear that there was no evidence and documentation that CUE has promoted research and scholarly publishing. Majority of the respondents viewed CUE as more of a regulatory body, while NACOSTI was recognized for promoting and supporting research.

The study established that CUE played a role in developing criteria for promotion but there is a communication breakdown. The key informants were of the view that CUE policies are well crafted but their implementation is very poor. The responses of the key informants from universities about the role played by CUE in promoting research and scholarly publishing were expressed in the following statements:

Not aware, may be, quality. Their presence is not much felt and actually I am not aware of its role. I think there is no evidence, and if there is, then I am yet to find out (*Interviewee no 3 on 4/4/ 2016*).

CUE comes to audit but they don't come directly to promote research - NACOSTI collaborates with us. There is no evidence and documentation that they have performed, actually universities are the ones promoting research (*Interviewee no 10 on 14/4/ 2016*)



CUE is a regulatory body. They push universities to do research and also do auditing but I don't know how often they do it, it is not known. There is indirect evidence, but haven't supported any research (*Interviewee no 9 on 13/4/ 2016*)

It plays a role, for example, the criteria for appointment and promotion. CUE-communication they don't, their problem is communication. There is no evidence to show that is has performed and I think there is no documentation (*Interviewee no 5 on 9/3/ 2016*)

I don't know exactly their role. CUE is a regulatory body. CUE can do, but NACOSTI is doing it (*Interviewee no 4 on 17/3/ 2016*)

CUE does not play any role in promoting research. Universities have the deputy vice chancellors in charge of research, research centers and internet... universities promote research. There is no evidence to show that CUE has performed, they come to find whether the syllabus has been revised or introduced for example for a degree to start, we pay Ksh 660,000. Their policies are well crafted but implementation is very poor. Every student pays ksh 1000 every year to CUE and every audit they charge Ksh 800,000. This is extortion...bullying universities and collecting money from them (*Interviewee no 11 on 13/4/ 2016*)

Some also were of the view that CUE was just bullying universities and collecting money from them. They cited an example of every university student paying Ksh 1000 every year to the Commission and also every audit costs Ksh 800,000 although it is not known how often they do it. From the explanations, it was indicated that universities are not satisfied with the roles of CUE and its activities are viewed as mere extortion.

The study sought to determine the role of the Commission for University Education in promoting research and scholarly publishing. According to CUE, (2015), on promotion of quality research and dissemination, the commission is undertaking the following roles:- Conducting research on critical issues in university education; improving research funding and capacity; implementing policies on plagiarism and open access and publishing and disseminating research findings on university education research. The

Commission has the mandate to conduct research on critical issues in the university education like funding of research by the universities and government, research infrastructure, human resources, implementation of policies on intellectual property rights, research ethic, plagiarism and open access to information, university research to national development goals and aspiration, management, supervision, monitoring and evaluation of university research programs and impact of university research and its utilization at the nation level.

The commission is also mandated to formulate, implement and review university research policies and strategies and implement policies on plagiarism and open access and in preparation of research funding proposals in support of university education. It is also responsible for publishing and disseminating research findings on university education research, which is done by the research and development section within the commission.

When key informants from CUE were asked about the role of the commission in promoting research and scholarly publishing, findings indicated that they play a number of roles. The study established that, apart from CUE major role, which is regulatory, they also promote research and scholarly publishing by organizing forums with universities and other stakeholders and conferences for presentation of university research output. They plan for conferences/forums twice a year, mostly in April and August. The response from the key informant was captured in the following statement;

Our major role is regulatory but on the side of promoting research and scholarly publishing we do organize forums and call our key stakeholders, majorly universities. We normally plan for presentations and conferences, that is twice a year in April and August. The challenge we have is that, the staffing is very thin and we have not been real able to work on research (*Interviewee no 13 on 1/4/2016*)

The findings show that CUE has not been able to do much in terms of promoting research and publishing. However, the key informant was of the view that CUE is new and the staffing is too thin but had plans to do research, document and publish by collaborating with universities and its wish is to promote standards of university research.

The study also sought to establish documentation and evidence on the performance of CUE. From the explanations it was clear that, there was no documented evidence on its performance. It was however indicated that, they were putting in efforts and the evidence was to come up soon. The study findings revealed that CUE is coming up with a tool where they would be able to key in all the information about all the universities and they were planning to invite all stakeholders to review progress. This following was a typical response on the evidence of CUE's performance;

Partly yes, partly no but, there are efforts we are putting in as far as research is concerned. The evidence will come up soon because the tool is there. There is no evidence though we have been doing some follow ups, we want to see it well documented. CUE role is on course and we hope by the time the tool will be fully implemented we will do thorough follow ups. This will again depend on or based on the willingness of universities to give out full information about their status  
*(Interviewee no 13 on 1/4/ 2016)*

It was further realized that NACOSTI was interfering with CUE mandate but CUE would prefer working with NACOSTI not to clash with it. The study noted that CUE expected a lot on research and output from universities in addition to teaching. Findings showed that universities are not giving out full information to CUE concerning their status. The key informant from CUE was of the view that whatever information has been given to CUE by universities was totally different and that is challenging. The key informants cited an

example of the information on the number of students in the universities; they were of the view that universities are not giving out the correct figures. This was captured as below:

Universities are not giving out full information. For example, on the total number of students, what we see on the ground and what we get is different. We get to know that it is this number of students and we have been given a different figure. They don't give information in a willing manner and is quite challenging. *(Interviewee no 13 on 1/4/ 2016)*

The key informant from CUE explained that, they are not policing universities but doing that to be able to create a forum to work together so as to improve the status of universities. For the Commission to have a policy on funding the universities, evidence is needed and all these depend on the willingness of universities to give out information.

It was also further indicated that, CUE has an advisory role to the government on aspects of improving universities, and basing on non-factual information is a challenge.

This was expressed in the following statement:

We are trying to create a forum where we will work with universities so as to improve the status of universities. We are not doing these to police them, but we are doing these at least to have a policy on funding universities. The evidence is really needed and all these depends on the willingness of universities to give out information *(Interviewee no 13 on 1/4/ 2016)*

The study findings showed that CUE had plans to promote local journals and to see progress being made by universities in terms of postgraduates, particularly, the duration of the study, research undertaken and the role of supervisors in the studies. This would require the creation of a common repository for universities and also getting reports from universities on semi-annual basis about the postgraduates. By implementing the tool mentioned earlier CUE would want to track the information about staff adequacy and

qualifications, number of postgraduates, areas of researches undertaken etc. in all the universities in Kenya. This was expressed as follows:

We have a tool which is new and is in implementation form. With this tool we want to track universities in terms of staff adequacy, their qualifications, like, how many professors are there in a university, how many PhDs are there in a certain department? And as such which areas of research are they involved in or engaged in? Actually with a click of a button, you can be able to get all the information from any university in Kenya. In case you need this kind of research; you go directly to Moi, TUK or Maseno in this department and get it (*Interviewee no13 on 1/4/ 2016*)

On the other hand, the study established that, the Commission was not seeing the expected output and university impact in terms of national development. It was suggested that universities should give their staff space and time as well as assist them solicit funds for research and scholarly publishing. The study findings show clearly that the relationship between the Commission for University Education and universities is not good. This was evidenced by pointing of fingers at each other.

#### **4.6 Incentives offered by the university to faculty members**

**Table 4.6.1 Incentives offered by the university to faculty members who undertake research and scholarly publishing**

Are there any incentives offered by the university to promote research and scholarly publishing?

| Response  | Number of respondents | % Response |
|-----------|-----------------------|------------|
| Yes       | 35                    | 50%        |
| No        | 33                    | 47.1%      |
| Not Aware | 2                     | 2.9%       |

The study sought to find out if there are incentives offered by universities to faculty members who undertake research and scholarly publishing. Thirty five (50%) lecturers said incentives are there for those who conduct research and publish findings, 33 (47.1%) lecturers said there are no incentives, while two (2%) were not aware. These findings revealed that universities are putting in more efforts in terms of motivating researchers. When probed on the kind of incentives offered by universities to faculty members, they mentioned the following:

- a) Facilitation to attend conferences and presentations, both local and international
- b) Accommodating work schedule
- c) PhD Scholarships
- d) Monetary rewards
- e) Consideration for promotion
- f) Annual salary increment
- g) Recognition on the university website
- h) Time off/leave

The chairpersons of departments were also asked about the incentives offered by the university as to promote research and scholarly publishing. Nine (9) (90%) chairpersons

of departments said there are no incentives offered to university faculty members while one said they are there. The one, who said incentives are there, cited conference attendance facilitations and added that, it is ineffective. The views of the chairpersons of departments differed a lot with those of lecturers because all the chairpersons of departments were from the same university. Therefore this finding indicates clearly that some universities offer incentives while others do not.

Majority of the lecturers said the incentives are not effective and had different views about the mechanism of providing incentives. The study established that incentives are given to university faculty members who are best qualified; those who apply through deans showing evidence of published articles while majority of the lecturers indicated that the mechanism of providing incentives is not known.

The study also sought to establish whether researchers are facilitated to undertake research and their responses are in table (4.6.2)

Table 4.6.2 University facilitation in conducting research and scholarly publishing

| Response  | Number of Respondents | % Response |
|-----------|-----------------------|------------|
| Yes       | 43                    | 61.4       |
| No        | 23                    | 32.8       |
| Not Aware | 4                     | 5.7        |

Forty three (43) (61.4%) lecturers said they are facilitated to undertake research, twenty three (23) (32.8%) said they are not facilitated and four (4) (5.7%) were not aware. The findings revealed that universities are making good progress in terms of facilitating the

faculty members to undertake research. Those who said they are facilitated had the following examples of facilitations:

- a) Sponsorship to attend seminars, workshops, trainings and conferences across the globe
- b) Reduced workload and accommodative work schedules
- c) Payment for journal publications
- d) Funding research/grants
- e) Funding for PhD
- f) Provision of research infrastructure i.e. laboratory, e resources and ICT
- g) Time for research for faculty members.

The chairmen of departments were also probed about facilitation of university faculty members to conduct research. Six (60%) chairmen of departments said university don't facilitate faculty members who undertake research, while four (40%) said the university facilitates faculty members conducting research and scholarly publishing. The facilitation mentioned includes:

- a) Use of laboratory facilities, technical staff and ICT
- b) Facilitation to attend conferences and
- c) Payment to publish in journals

Lecturers were further asked whether the universities partner or collaborate with other stakeholders in undertaking research and scholarly publishing. Forty four (44) (63%) respondents said they collaborate and partner with other stakeholders, twenty four (24) (34.4%) said they don't collaborate, while two (2) (2.8%) were not aware (Table 4.6.3). It was further revealed that those who were not aware were new in the institution and had



work experience of less than a year. The study further sought to establish whether universities collaborate with other stakeholders in undertaking research and scholarly publishing. The responses are in table 4.6.3 below.

**Table 4.6.3 university collaboration and partnership with other stakeholders**

| Response     | Number of respondents | % Response |
|--------------|-----------------------|------------|
| Yes          | 44                    | 63         |
| No           | 24                    | 34.2       |
| Did not know | 2                     | 2.8        |

Findings revealed that universities collaborate with the industry and other universities both locally and internationally. The study showed that they collaborate with; government ministries, capital market authorities, funding agencies, data collection agencies, science/ research institutions and online libraries. These results showed that universities collaborate a lot with the industry and other universities globally.

When the chairpersons of departments were asked about the university collaboration with other stakeholders, all of them indicated that universities collaborate. They mentioned the following collaborations:

- a) Support joint research work with other universities
- b) Funding agencies
- c) Professional associations
- d) Practitioners in the industry
- e) Private sector organizations

f) Across disciplines and departments

Key informants from universities were also asked about the incentives offered by universities as to promote research and scholarly publishing. One key informant from university said the incentives offered by universities to promote research and scholarly publishing had not been fully implemented but they offer incentives internally (faculty levels) while another one said, they don't offer incentives but are putting structures in place.

Their views on incentives were expressed as follows:

No not yet implemented but internally yes, because some faculties have their own incentives. You know research and scholarship comes from individual passion (*Interviewee no 10 on 14/4/ 2016*).

None, as per now we don't offer any incentive, but structures are being put in place (*Interviewee no 3 on 4/4/2016*).

Those who said they offer incentives cited the following incentives: Promotion based on the number of publications by the university faculty member, monetary, research grants, time, space and leave to do research (sabbatical leave). However, they were of the view that the incentives are ineffective due to the fact that research and publishing comes out of determination and individual passion. This was captured in the following statement:

Yes we offer incentives, salary rise for people with more publications. A whole day is given to lecturers to undertake research. You know, you either publish or you perish. With promotions you have to publish, if you don't publish, you stagnate, you go or dismissed. The incentives never worked, they were ineffective because people will publish anything, so it was stopped. They were not effective; people without determination will not publish (*Interviewee no 11 on 13/4/ 2016*)

The key informants were further probed if they facilitate their staff to undertake research.

All admitted that they facilitate although levels varied from university to university.

Some indicated that they facilitate through giving their staff, time off to carry out research hence balancing between teaching and research. ie those doing PhDs are given less units to teach. Other facilitations cited included: good/conducive working environment, good working space, library (e-resources), training, encouraging academic staff to do research and funding researchers for presentations in conferences. The study also sought to find out if universities collaborate or partner with other stakeholders and the findings revealed that universities mostly collaborate with the industry, other universities (both locally and internationally), NGOs, government, banking industry, consortium industry among others.

#### **4.7 Challenges faced by universities in promoting research and scholarly publishing**

The study sought to establish the challenges faced by universities in promoting research and scholarly publishing. The lecturers were asked to rate the challenges faced by their institutions in terms of promoting research and scholarly publishing and the results are presented in (Table 4.7.1).

**Table 4.7.1 Challenges faced by Kenyan universities in promoting research and scholarly publishing**

| Challenges                    | Strongly agree |      | Agree |      | Neutral |      | Disagree |     | Strongly disagree |      |
|-------------------------------|----------------|------|-------|------|---------|------|----------|-----|-------------------|------|
|                               | n              | %    | n     | %    | n       | %    | n        | %   | n                 | %    |
| Limited freedom of expression | 8              | 11.4 | 12    | 17   | 14      | 20   | 28       | 40  | 8                 | 11.4 |
| Inadequate research funds     | 34             | 48.5 | 25    | 35.7 | 11      | 15.7 | 0        | 0   | 0                 | 0    |
| Brain drain                   | 17             | 24.2 | 23    | 32.8 | 18      | 25.7 | 12       | 17  | 0                 | 0    |
| Lack of incentives            | 26             | 37.1 | 26    | 37.1 | 12      | 17   | 6        | 8.5 | 0                 | 0    |
| Lack of research facilities   | 19             | 27   | 23    | 32.8 | 13      | 18.5 | 14       | 20  | 1                 | 1.4  |

|   |    |      |    |      |    |      |    |      |    |      |
|---|----|------|----|------|----|------|----|------|----|------|
| Poorly funded libraries   | 21 | 30   | 27 | 38.5 | 11 | 15.7 | 11 | 15.7 | 0  | 0    |
| Lack of professional equipment  | 29 | 41.4 | 14 | 20   | 16 | 22.8 | 9  | 12.8 | 2  | 2.8  |
| Poor management, supervision and evaluation of university research programs | 17 | 24.2 | 29 | 41.4 | 13 | 18.5 | 7  | 10   | 4  | 5.7  |
| Poor university industry linkages   | 14 | 20   | 34 | 48.5 | 11 | 15.7 | 5  | 7    | 6  | 8.5  |
| Lack of access to the internet  | 3  | 4.2  | 15 | 21.4 | 12 | 17   | 18 | 25.7 | 22 | 31.4 |

According to Migosi et al (2012), research is a core pillar of any university system. The aim of the question was to establish challenges faced by universities in promoting research and scholarly publishing and be able to come up with strategies to address them. The findings revealed that universities face many challenges in promoting research and scholarly publishing, including: inadequate research funds, poorly funded libraries, lack of professional equipment, poor management, supervision and evaluation of university research programs, poor university industry linkages, lack of incentives and brain drain (Table 4.7.1).

**Table 4.7.2 other challenges faced by universities in promoting research and scholarly publishing**

Are there other challenges faced by universities in promoting research and scholarly publishing?

| Response  | Number of respondents | % Response |
|-----------|-----------------------|------------|
| Yes       | 37                    | 52.8       |
| No        | 28                    | 40         |
| Not aware | 5                     | 7.1        |

In response to the question as to whether there are other challenges facing universities in promoting research and scholarly publishing, thirty seven (37) (52.8%) lecturers said there are other challenges, twenty eight (28) (40%) said there are no other challenges, while five (5) (7.1%) were not aware. The other challenges mentioned are:

- a) Lack of facilitation to foreign trips to use advanced technology
- b) Challenging operating environment with limited resources
- c) Lack of accountability
- d) Balancing between teaching load and research
- e) Poor data collection by state agencies
- f) Lack of research culture

When the chairpersons of departments were asked about other challenges faced by universities in promoting research and scholarly publishing, eight (8) said there are no other challenges while two (2) said there are other challenges. Those who said there are other challenges mentioned the following:

- a) Lack of crediting of journals
- b) Lack of university supported journals
- c) Limited focus on applied/ project/ industry research work that is more beneficial to individual researchers and the university as a whole.

The findings revealed that there is limited peer collaboration and limited number of experts in certain areas such as engineering, medicine, space, etc and also poor academic structures for research in universities. The explanation was that, there is over emphasis on the teaching load and as such lecturers concentrate more on teaching than in doing

research work. It was noted that research is not valued so much by managers whose intentions are in cutting costs rather than convincing the staff to be actively involved in research.

The findings showed that there is a tendency of repeating researches that had previously been done without doing proper checking and also limited focus on project/industry research work that is more beneficial to the individual researchers and the universities. The study also revealed that there is inadequate research human resource/ expertise as evidenced by very few professors in the universities. The key informants in the universities were asked about the challenges facing universities in promoting research and scholarly publishing, and their responses are as follows:

- a) Research funds and incentives: It was reported that funds are inadequate and incentives have made lecturers to do part time teaching everywhere rather than doing research.
- b) Lack of expertise: The study showed that nurturing young researchers has been a problem due to lack of experts in the field i.e. very few professors in universities.
- c) Time for research: It was indicated that faculty staff don't have time to do research since they have to balance between research and teaching. They were of the view that time has always been the excuse for not doing research and publishing.
- d) Poor research culture: There is lack of research oriented faculty members because the research culture is not up to date.

- e) Other challenges: The study identified other challenges, including training for research, selfishness amongst researchers, poor management, and poor university industry linkages, lack of equipment and inadequate research infrastructure, space for doing research etc were also mentioned.

#### 4.8 Strategies for addressing identified challenges as well as promoting research and scholarly publishing

The study sought to establish the strategies to address the identified challenges in promoting research and scholarly publishing. The lecturers were asked to rate the strategies (Table 4.8 page 72).

**Table 4.8 Strategies for addressing identified challenges as well as promoting research and scholarly publishing**

| Strategy                                    | Strongly agree |      | Agree |      | Neutral |      | Disagree |   | Strongly disagree |   |
|---|----------------|------|-------|------|---------|------|----------|---|-------------------|---|
|   | n              | %    | n     | %    | n       | %    | n        | % | n                 | % |
| Improved research funding and capacity      | 49             | 70   | 21    | 30   | 0       | 0    | 0        | 0 | 0                 | 0 |
| Improving access to research infrastructure | 49             | 70   | 19    | 27   | 2       | 3    | 0        | 0 | 0                 | 0 |
| Improving collaboration and linkages        | 45             | 64.2 | 22    | 31.4 | 3       | 4.3  | 0        | 0 | 0                 | 0 |
| Improving dissemination of output           | 43             | 61.4 | 27    | 38.6 | 0       | 0    | 0        | 0 | 0                 | 0 |
| Improving                                   | 39             | 55.2 | 21    | 30   | 10      | 14.3 | 0        | 0 | 0                 | 0 |

|  |   |   |
|--|---|---|
| implementation of intellectual property rights | 7 | 2 |
|--|---|---|

The study established that there is need to increase research funds and capacity, access to research infrastructure, collaboration and linkages, dissemination of output and implementation of intellectual property rights. Over 95% of the respondents agreed that there is need for increasing research funding, improved research infrastructure, collaboration and linkages and improved dissemination of research output, while 86% agreed on improved implementation of intellectual property rights. The aim of this was to formulate strategies to address the challenges and for improvement in terms of promoting research and scholarly publishing.

Asking lecturers further as to whether there are other strategies to address the identified challenges, 27 (38.6) said there are other strategies, 30 (42.6) said there are no other strategies, while 13 (18.6) were neutral. (Table 4.8.1)

**Table 4.8.1 other strategies for addressing identified challenges in promoting research and scholarly publishing**

Are there other strategies for addressing identified challenges in promoting research and scholarly publishing?

| Response  | Number of respondents | %Response |
|-----------|-----------------------|-----------|
| Yes       | 27                    | 38.6      |
| No        | 30                    | 42.6      |
| Not Aware | 13                    | 18.6      |

Those who said yes proposed the following strategies:



- a) Mentor students at undergraduate level i.e. students must publish their research work before they graduate;
- b) Improve linkages with donors and funding bodies;
- c) Reduce workload in teaching and increase research work and research culture among faculty members who demonstrate promise in research areas;
- d) Improve supervision and collaboration with industry, research institutions and other universities globally;
- e) Enhance recognition, celebration and honor excellent research output;
- f) Evaluate supervisors based on the number of publications;
- g) Build capacity through refresher courses for researchers;
- h) Provide relevant, adequate and qualified academic staff for supervision
- i) Allocate research funds and peg promotion only on research output;
- j) Reduce publication costs and have sharing platforms for past researches.
- k) Motivate staff members to undertake research.

The chairpersons of departments were also asked to propose strategies to address challenges and they mentioned the following:

- a) Facilitate researchers
- b) Recognize role of universities in generating new knowledge by government

- c) Improve university leadership at all levels
- d) Increase funds in support of research
- e) Provide incentives to researchers
- f) Improve collaboration and linkages
- g) Involve CUE in research (should play a bigger role in research)
- h) Expose researchers to advanced technology
- i) There should be a system of recognizing top researchers e.g. through rating

On the other hand the key informants from universities were also probed about strategies and they proposed the following strategies for addressing the challenges affecting promotion of research and scholarly publishing:

- a) Training: Train researchers in attracting research funds i.e. writing proposals that will attract research funds;
- b) Funding: The government should increase research funds beyond the current 2% ratio. They were of the view that there should be an increased budgetary allocation to research and also funding research through other avenues of income i.e. partnering with funding bodies;
- c) Create awareness: Create awareness on research on key platforms; telling researchers about the need for research and giving them leave/time to do the research hence mobilizing individuals to get involved in research.

- d) Incentives: Develop a research incentive scheme to motivate, reward and give incentives to researchers and scholars to do more research rather than doing part time teaching everywhere.
- e) Employ research oriented faculty members.
- f) Monitor research output at all levels.
- g) Workload balance: balance teaching and research as well as clearly articulate the structure to avoid overloading of researchers.
- h) Develop structures that can compel lecturers to do research
- i) Encourage lecturers to be committed to their work and also universities to employ their own full time lecturers to teach on part time basis.
- j) Ensure CUE plays a big role in promoting research and scholarly publishing.

#### **4.9 Discussion of findings**

According to Migosi et al (2012), research is regarded as one of the core pillars of any university system. The findings revealed that university faculty members undertake research, publish scholarly articles/ research output and the universities documents and disseminates the output. Fifty eight (58) (82.8%) lecturers agreed that faculty members undertake researches, (57) (81%) said they publish scholarly articles while 51 (73%) said that the university documents and disseminates the output. From the findings it was indicated that researches are mostly undertaken in the academician's areas of specialization. The study established that scholarly articles/ research output are deposited in the university library; university website/ institutional e-repository; published in

journals (local and international) and books, and in conference proceedings both local and international. This results are consistent with those of Migosi et al (2012), who found out that publication in reputable journals is one way through which research findings are widely disseminated. The study established that, majority fifty nine (59) (84%) of the lecturers had done less than five publications in the last five years while (14%) lecturers had done more than five publications while one (2%) faculty member was still working on the first one. On the other hand 2 (20%) of the chairmen of departments had done more than fifteen publications in the last five years while 8 (80%) had done less than ten publications. It was observed that there is an increase in the requests to present papers in conferences and also increase in the number of publications deposited in the institution e-repository which indicates progress in research and scholarly publishing. These results indicate that lecturers and universities are more aware of the importance of research and scholarly publishing and are working towards its promotion. These findings are in agreement with the earlier research by Kinyanjui (2007), who pointed out that, research should be made an integral part of the responsibilities of every academic member of university staff and academic staff should be evaluated and appraised annually on the basis of research output, in addition to teaching, administration, mentoring and community service. However, the lecturers were of the view that there is ineffective documentation of publications deposited in the institutional e -repository.

The situation in Kenya seems to be different from Vietnam. Findings from the study are in contrast from those of Pho and Tran (2016), who observed that most universities in Vietnam still put more effort on teaching than on research. If lecturers fulfilled the

required number of teaching hours every year, they would be promoted every three years despite not publishing.

In this study findings showed that most institutions have libraries, ICT and staff expertise as the major research infrastructure and resources. It was also realized that the state of research infrastructure vary from university to university noting a big difference between private and public universities. From the data collected it was established that the research infrastructure was inadequate as compared to the number of users/clients. Consequently, it was suggested that there is need to increase investment so as to cater for all the needs.

The research showed that funds allocated to research are inadequate and the proportion of the funds allocated to research as compared to the total budget of the university is less than 10%. These findings are in agreement with those of Okemwa (2007), who observed that most institutions of higher learning in Kenya are not financially well endowed, scholars are not supported financially, many research facilities are outdated and libraries are poorly funded. The findings are also in conformity with those of Sharma (2014), who also observed that, many scholars in Asia work in institutions which are not financially well endowed. Therefore the situation in Asia seems to be the same as in Kenya.

This study was supported by the findings of Ngobeni (2012), who highlighted that scholarly publishing in Africa has suffered from lack of government funding, Ngome (2003), who observed that, one of the key factors that affected the growth of research in Kenyan University system was inadequate research funds and Rotich (2010), who

pointed out that Universities in Africa and more so in Kenya, must increase funds allocated to research and dissemination of findings.

The findings showed that there is poor relationship and communication breakdown between the Commission of University Education and the universities in Kenya. CUE was of the view that universities are not being transparent. The study established that CUE's role in promoting research and scholarly publishing has not yet been realized in universities and there is no documentation and evidence on CUE's performance in terms of promoting research and scholarly publishing by universities.

The research established that the incentives offered to university faculty members who undertake research are ineffective and the mechanism of offering them is not known. The results also revealed that researchers are facilitated to undertake research which showed that, universities are putting in more efforts in terms of motivating researchers. It was further indicated that universities collaborate with industry and other universities locally and internationally. The study also established that universities encounter challenges in terms of promoting research and scholarly publishing including: poor management, supervision and evaluation of university research programs, poor university industry linkages, inadequate research funds, brain drain, lack of incentives, lack of research facilities, poorly funded libraries and lack of professional equipment. Other challenges indicated include; lack of facilitation to foreign trips to use advanced technology; challenging operating environment with limited resources; lack of accountability; balancing between teaching load and research; lack of university supported journals and crediting of journals; Poor data collection by state agencies; lack of research culture; lack of expertise; lack of time for research; lack of research oriented faculty members; lack of

training for researchers and selfishness amongst researchers. These results are in consistent with those of Sawyerr (2004), who found that research capacity include quality of the research environment, funding, adequate infrastructure, research incentives and time available to the researcher.

The study established strategies to address the identified challenges and they include; improved research funding and capacity, improving access to research infrastructure, improving collaboration and linkages, improving dissemination of output and improving implementation of intellectual property rights. Other strategies established in the study include; improved compensation towards research, reduced workload, capacity building and refresher courses for researchers, research incentive scheme, sharing platforms for past researches, employing research oriented faculty members, mentoring students at undergraduate level, involvement of CUE in research, monitoring research output at all levels and coming up with structures that can compel lecturers to do research.

#### **4.10 Chapter summary**

This chapter presented findings on the role of universities in promoting research and scholarly publishing. Findings were based on objectives. The major finding of the study show that university faculty members undertake research and publish research findings/scholarly articles mostly in the academician's areas of specialization; ineffective documentation of publications; funding of research is inadequate and the state of research infrastructure varies from institution to institution. The role of CUE in promoting research and scholarly publishing has not yet been realized in universities, while

incentives offered to university faculty members are ineffective. Faculty members of universities experienced challenges including: inadequate research funding and infrastructure, poor management and supervision of university research programs, poorly funded libraries, time for research, training and poor research culture. The chapter also presented strategies for addressing challenges and discussed findings of the study.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

#### **5.0 INTRODUCTION**

This chapter presents the summary of the main findings of the study that address the role of universities in promoting research and scholarly publishing. The summary is provided in relation to the objectives of the study. Several conclusions and recommendations have been made based on the study findings. Finally, the study provides suggestions for further research.



## **5.1 Summary of findings related to the study objectives**

### **5.1.1 Researches undertaken and publications by faculty members**

Universities are mandated to conduct research, disseminate research findings and spearhead innovative activities. The findings revealed that university faculty members undertake research, publish scholarly articles/ research output and the universities documents and disseminates the output. From the findings it was clear that researches are mostly undertaken in the academician's areas of specialization. The study established that scholarly articles/ research output are deposited in the university library; university website/ institutional e-repository; published in journals (local and international) and books, and in conference proceedings both local and international. However, the lecturers were of the view that there is ineffective documentation of publications deposited in the institutional e -repository.

Research is regarded as a pillar of any university system and as such faculty members of universities are expected to undertake research and disseminate the findings. Academic members of universities are evaluated and appraised on the basis of research output, in addition to teaching and in ranking universities, research, publications and web visibility are considered as key indicators.

### **5.1.2 State of research infrastructure and adequacy of funds allocated to research by Kenyan universities.**

The study established that the state of research infrastructure in universities varies from institution to institution. Majority of the respondents revealed that their institutions have libraries, ICT and staff expertise. However, the respondents were of the view that the

research infrastructure is inadequate as compared to the number of users and suggested for more investment in the same so as to cater for the needs. Findings obtained from the study indicates that funds allocated to research by universities are inadequate and library budget keeps on fluctuating from year to year basing on the management decisions. ICT and library faces a number of challenges including: cost of acquiring and upgrading the current systems, inadequate staff, lack of current and relevant reading resources, space, vandalism and inadequate funding. The findings showed that there is need for more funding and collaborations.

### **5.1.3 Role of the Commission for University Education in promoting research and scholarly publishing by Kenyan universities.**

CUE was established to ensure that universities meet the highest standards in promoting research and scholarly publishing. Findings revealed that CUE does not play any role in promoting research and scholarly publishing by universities. Few respondents were of the view that CUE plays a role in promoting research and scholarly publishing by: Encouraging the academic staff to publish and undertake PhD studies; ensuring quality is maintained in research; considering research output in evaluating programs; emphasis on curriculum review and development; regular auditing; issuing guidelines on recruitment and promotion and encouraging collaboration and faculty members to do research. Majority of the respondents viewed CUE as a regulatory body and therefore recognized NACOSTI for promoting and supporting research. Findings revealed that there is some duplication in the roles of NACOSTI and CUE in terms of supporting and promoting research activities. Informants from CUE prefer working with NACOSTI rather than overlapping with it. Findings obtained from the study revealed that there is lack of

transparency by universities in giving out information to CUE as the information given was not factual. On the hand the study established that CUE in its efforts to promote research and scholarly publishing organizes forums with universities and other stakeholders and conferences for presentation of university research output. The research showed that CUE's role in promoting research and scholarly publishing has not yet been fully realized in universities.

#### **5.1.4 Incentives offered by Kenyan universities to promote research and scholarly publishing**

The research established that the incentives offered to university faculty members who undertake research are ineffective and the mechanism of offering them is not known. The incentives reported included: facilitation to attend conferences and presentations (both local and international), accommodating work schedule, PhD scholarships, monetary rewards, consideration for promotion, annual salary increment, recognition on the university website and time off/leave (sabbatical leave).

The results also revealed that researchers are facilitated to undertake research which showed that, universities are putting in more efforts in terms of motivating researchers, including: good/conducive working environment, good working space, library (e-resources) and training, encouraging the academic staff to do research and funding researchers for presentations in conferences. It was further indicated that universities collaborate with industry and other universities locally and internationally.

### **5.1.5 Challenges faced by Kenyan universities in promoting research and scholarly publishing**

The findings revealed that universities face several challenges in promoting research and scholarly publishing, including: inadequate research funds, poorly funded libraries, lack of professional equipment, poor management, supervision and evaluation of university research programs, poor university industry linkages, lack of incentives and brain drain. The study also established other challenges faced by faculty members while undertaking research, including: Lack of facilitation to foreign trips to use advanced technology, challenging operating environment with limited resources, lack of accountability, balancing between teaching load and research, lack of university supported journals and crediting of journals and poor data collection by state agencies.

The challenges reported by key informants in universities included: Research funds and incentives, lack of expertise, time for research, poor research culture, training for research, selfishness amongst researchers, inadequate research infrastructure and space for doing research.

### **5.1.6 Strategies for addressing identified challenges as well as promoting research and scholarly publishing in Kenyan universities**

The study established strategies to address the challenges identified and they include: improved research funding and capacity, improving access to research infrastructure, improving collaboration and linkages, improving dissemination of output and improving implementation of intellectual property rights. Other strategies established in the study include: improved compensation towards research, reduced workload, capacity building

and refresher courses for researchers, research incentive scheme, sharing platforms for past researches, employing research oriented faculty members, mentoring students at undergraduate level, involvement of CUE in research, monitoring research output at all levels and coming up with structures that can compel lecturers to do research.

## **5.2 Conclusion**

The aim of the study was to investigate the role of universities in promoting research and scholarly publishing and recommend strategies for improvement. The world over, universities are responsible for research, knowledge generation, scholarship and innovation. From the study it is evident that research and scholarly publishing is considered as a pillar of any university system and as such faculty members of universities are expected to undertake research and disseminate the findings. Findings from the study revealed that researches have been successful based on the number of requests to present papers in conferences and also increase in the number of publications in the institutional e repository/ university website. Results from the study indicate that universities and lecturers in Kenya are aware of the importance of research and scholarly publishing and are working towards its promotion. However, there is ineffective documentation of publications through the institutional e repository.

The study established that there is inadequate research infrastructure and inadequate funding of research. The findings indicate that there was a general consensus among respondents that, inadequate research funds was a great problem. The proportion of the funds allocated to research to the total budget of the university was less than 10%. The key informants from universities suggested that more funds should be allocated to research.

CUE is mandated to promote research and scholarly publishing by universities. The study established that there is a poor relationship between CUE and universities, evidenced by universities accusing CUE of overstepping its mandate. On the other hand CUE accuses universities of lack of transparency. CUE was viewed as a regulatory body and NACOSTI was recognized for promoting and supporting research. Findings showed that CUE does not play an active role in promoting research and scholarly publishing and there is no evidence or documentation to show that CUE has performed its objective of promoting research and scholarly publishing in terms of providing funding to universities or directly to researchers. The respondents were of the view that CUE policies are well stated but the implementation is very poor. The study also noted that there is communication breakdown between CUE and universities. From the findings it was discovered that CUE's role in promoting research and scholarly publishing has not yet been fully realized at universities.

The study established that incentives offered to university faculty members by universities are ineffective and the lecturers are not aware of the criterion for providing incentives. The study identified challenges encountered by university faculty members while undertaking research and scholarly publishing. This was evidenced by ineffective documentation of publications, inadequate or no funding at all, poor research infrastructure, inadequate working space, and inadequate time for undertaking research. The study established strategies to address the challenges identified and they include: improved research funding and capacity, improving access to research infrastructure, improving collaboration and linkages, improving dissemination of output and improving implementation of intellectual property rights.

Findings show that universities are making more efforts in promoting research and scholarly publishing by improving the research infrastructure and motivating, encouraging and facilitating university faculty members to undertake research and disseminate findings.

### **5.3 Recommendations**

Based on the findings of the study, the following recommendations were made:

#### **5.3.1 Effective documentation of publications disseminated through the university website.**

This study proposes effective documentation of publications disseminated through the university website to ensure increased web presence of the university faculty members and recognition on the web. It will also be easy to count the number of publications for the members of the university faculty which is a requirement for promotion. Effective documentation will also help the university during webometric ranking of universities where publications and web visibility are considered as very important indicators.

#### **5.3.2 Enhanced research funding and capacity**

Findings revealed that there is inadequate funding for research. Universities should allocate more funds to research by also obtaining funds from other sources other than relying on the two percent from the government. Universities should collaborate with funding agencies, train the staff on how to source for funds, and engage in business to acquire more funds for research. If funds will be increased the university will be able to pay for journal publications of their faculty members, sponsor them to attend

conferences, pay for their presentations at conferences and provide incentives for the faculty members.

### **5.3.3 Improved access to research infrastructure**

Improved access to research infrastructure could be achieved by investing more in the internet connectivity and library. Since most libraries in Kenyan universities have access to current electronic academic resources through KLISC, lecturers and researchers should improve their searching skills and embrace emerging technologies for research and scholarly publishing. The internet speed should be improved to enable sharing of researches and scholarly materials globally. Research centres should be created by universities. Staff expertise should also be improved, for example, by employing more professors to nurture the young researchers and scholars and also through training. Universities should provide good working environment for research; that is, good space and time for research. Laboratories should be in good conditions and researchers and scholars should be provided with computers to enable them undertake research.

### **5.3.4 Improved communication between CUE and universities**

The study established that the relationship between CUE and universities is poor. There should be improved, reciprocal communication between CUE and universities. As much as the CUE expects universities to comply with the set up policies, guidelines and standards, it should also consider the challenges faced by universities.

This could be done through coming up with a common repository for all universities where all the information about all the universities could be stored. CUE should provide a communication network whereby universities can provide feedback on matters affecting



them. This will help CUE work with universities in addressing challenges and agree on the most appropriate solutions. This will result in a platform where transparency will be achieved.

### **5.3.5 Policy implementation and performance documentation**

CUE should implement their policies and have documentation on their performance. The study also recommends that CUE should embrace a more participatory approach to universities in creating policies in promoting research and scholarly publishing.

### **5.3.6 Research incentive scheme**

The study also established that incentives offered to university faculty members are ineffective and that lecturers were not aware of the criterion for providing incentives. Universities should provide a research incentive scheme that will be fair to all the members of the university faculty.

### **5.3.7 Facilitation and motivation of university faculty members**

The study established that university faculty members experienced challenges while undertaking research and scholarly publishing. It is therefore recommended that universities facilitate and motivate their faculty members to undertake research while CUE plays active role in promoting research and scholarly publishing by Kenyan Universities.

## **5.4 Relevance/relationship of the theoretical framework to the findings**

According to Okemwa, (2007), scholarly publishing is considered the norm for disseminating and validating research results and is also crucial for career advancement

in most academic fields. The study adopted Three-phase model of research by Mackenzie Owen (2005) and Douglas McGregor's XY- management theory model (1960). In the three phase model, there is creating and collecting primary, secondary and tertiary research information, processing of collected data/information and lastly publishing research findings. From the study, research and scholarly publishing to be successful, there must be adequate research funds, adequate research infrastructure, incentives to motivate the researchers and also good management and supervision of research programs.

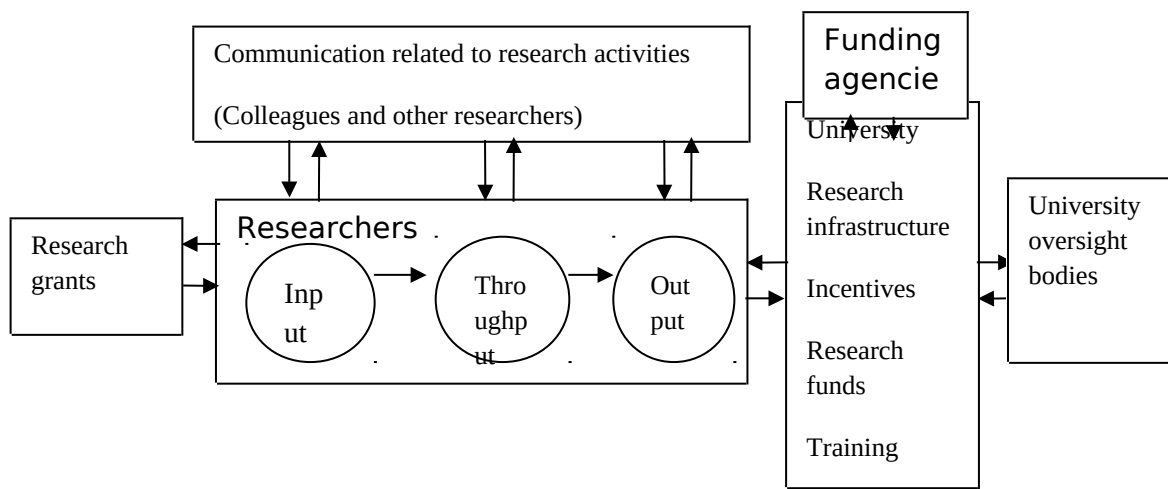
The study was also guided by Douglas McGregor's XY- management theory model (1960); it is a salutary and simple reminder of the natural rules for managing people, which under the pressure of day-to-day business are all too easily forgotten. In Kenyan universities, faculty members are required by law to publish. The CUE has stipulated standards and guidelines i.e. the appointment criteria are purely based on research output (for example, the number of publications by faculty members). So one either publishes or perishes. McGregor's XY- management theory suggests that suitably motivated people are self-directed to achieve organizational objectives. According to McGregor's XY- management theory, researchers are supposed to be motivated if they work under a conducive environment (research infrastructure), given space, time and adequate funds. This theory assumes that people are creative and imaginative and under suitable conditions can actively seek responsibilities and hence more research output. The two theories complement each other in a way that, three phase model guided the study on activities taking place at difference stages in research process and McGregor's XY- management theory model guided the study on the conducive environment for research.

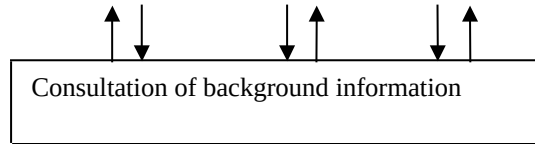
## 5.5 Proposed framework to promote research and scholarly publishing in universities

For research and scholarly publishing to be successful there is need for universities to facilitate its staff to undertake research and publish research findings. University faculty members and researchers need conducive working environment with adequate research infrastructure (library, research equipment, laboratories, research sites, ICT etc), space and time for undertaking research. To facilitate research motivation is very important. University should come up with incentive scheme to motivate researchers and university faculty members. To undertake research and publish research findings, funds are needed. Therefore, universities should collaborate with funding agencies and also train researchers and scholars on how to source for research funds and also engage in business to acquire more funds. Dissemination of findings is mostly through the university website, journals (international and local), in books and also in conference proceedings, both local and international.

On the other hand we have university oversight bodies that are in charge of promotion and enhancement of quality university education. There should be good communication between university oversight bodies and universities. To promote research and scholarly publishing in universities the study proposed the following framework:

**Figure 5.6 Proposed framework**





## 5.6 For further research

1. The study therefore suggests: A follow up study in 10 years to see how universities are surviving in terms of promoting research and scholarly publishing.
2. A study of the role of the Commission for University Education (CUE) in promoting research and scholarly publishing by Kenyan universities.
3. A study of the perception of academic staff on research and publishing in Africa.

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**APPENDIX I: ACCREDITED UNIVERSITIES AND DATE OF  
ACCREDITATION**

|    | Public Chartered Universities                                     | Date of Accreditation / Chartered |
|----|---|-----------------------------------|
| 1  | University of Nairobi (UON)                                       | Established 1970, Chartered 2013  |
| 2  | Moi University (MU)   | Established 1984, Chartered 2013  |
| 3  | Kenyatta University (KU)  | Established 1985, Chartered 2013  |
| 4  | Egerton University (EU)   | Established 1987, Chartered 2013  |
| 5  | Jomo Kenyatta University of Agriculture<br>and Technology (JKUAT) | Established 1994, Chartered 2013  |
| 6  | Maseno University (Maseno)  | Established 2001, Chartered 2013  |
| 7  | Masinde Muliro University of Science and<br>Technology (MMUST)    | Established 2007, Chartered 2013  |
| 8  | Dedan Kimathi University of Technology                            | 2012                              |
| 9  | Chuka University  | 2013                              |
| 10 | Technical University of Kenya                                     | 2013                              |
| 11 | Technical University of Mombasa                                   | 2013                              |
| 12 | Pwani University  | 2013                              |
| 13 | Kisii University  | 2013                              |
| 14 | University of Eldoret   | 2013                              |



|    |  |      |
|----|--|------|
| 15 | Masaai Mara University   | 2013 |
| 16 | Jaramogi Oginga Odinga University of<br>Science and Technology | 2013 |
| 17 | Laikipia University  | 2013 |
| 18 | South Eastern Kenya University                                 | 2013 |
| 19 | Meru University of Science and<br>Technology                   | 2013 |
| 20 | Multimedia University of Kenya                                 | 2013 |
| 21 | University of Kabianga   | 2013 |
| 22 | Karatina University  | 2013 |

|    |                                     |      |
|----|-------------------------------------|------|
| 23 | Kibabii University                  | 2015 |
| 24 | Rongo University                    | 2016 |
| 25 | The Cooperative University of Kenya | 2016 |
| 26 | Taita Taveta University             | 2016 |
| 27 | Murang'a University College         | 2016 |
| 28 | University of Embu                  | 2016 |
| 29 | Machakos University                 | 2016 |
| 30 | Kirinyaga University                | 2016 |

#### Public University Constituent Colleges

|   |  |      |
|---|--|------|
| 1 | Garissa University college (MU)            | 2011 |
| 2 | Alupe University college (MU)              | 2015 |
| 3 | Kaimosi Friends University college (MMUST) | 2015 |
| 4 | Tom Mboya University college (Maseno)      | 2016 |
| 5 | Turkana University college (MMUST)         | 2016 |

#### Private Chartered Universities

|    |  |      |
|----|--|------|
| 1  | University of Eastern Africa, Baraton        | 1991 |
| 2  | Catholic University of Eastern Africa (CUEA) | 1992 |
| 3  | Daystar University                           | 1994 |
| 4  | Scott Christian University                   | 1997 |
| 5  | United States International University       | 1999 |
| 6  | Africa Nazarene University                   | 2002 |
| 7  | Kenya Methodist University                   | 2006 |
| 8  | St. Paul's University                        | 2007 |
| 9  | Pan Africa Christian University              | 2008 |
| 10 | Strathmore University                        | 2008 |
| 11 | Kabarak University                           | 2008 |

|    |  |      |
|----|--|------|
| 12 | Mount Kenya University                 | 2011 |
| 13 | Africa International University        | 2011 |
| 14 | Kenya Highlands Evangelical University | 2011 |
| 15 | Great Lakes University of Kisumu       | 2012 |
| 16 | KCA University                         | 2013 |
| 17 | Adventist University of Africa         | 2013 |
| 18 | KAG EAST University Registered -1989   | 2016 |

#### Private University Constituent Colleges

|   |  |      |
|---|--|------|
| 1 | Hekima University College (CUEA)               | 1993 |
| 2 | Tangaza University College (CUEA)              | 1997 |
| 3 | Marist International University College (CUEA) | 2002 |
| 4 | Regina Pacis University College (CUEA)         | 2010 |
| 5 | Uzima University College (CUEA)                | 2012 |

#### Institutions with Letter of Interim Authority

|    |  |      |
|----|--|------|
| 1  | Kiriiri Women's University of Science and Technology | 2002 |
| 2  | Aga Khan University                                  | 2002 |
| 3  | GRETSA University                                    | 2006 |
| 4  | Presbyterian University of East Africa               | 2008 |
| 5  | The East African University                          | 2010 |
| 6  | Management University of Africa                      | 2011 |
| 7  | Riara University                                     | 2012 |
| 8  | Pioneer International University                     | 2012 |
| 9  | UMMA University                                      | 2013 |
| 10 | International Leadership University                  | 2014 |
| 11 | Zetech University                                    | 2014 |
| 12 | Lukenya University                                   | 2015 |
| 13 | RAF International University                         | 2016 |

## APPENDIX II: AFRICAN UNIVERSITIES AND HIGHER INSTITUTIONS RANKING (2015)

| Rank | Institution                     | Country      | Research Publications and Citations | Internet/ Web Presence | Total Influence Factor |
|------|---------------------------------|--------------|-------------------------------------|------------------------|------------------------|
| 1    | University of Cape Town         | South Africa | 40.89                               | 4.13                   | 45.02                  |
| 2    | Cairo University                | Egypt        | 39.75                               | 3.68                   | 43.43                  |
| 3    | University of Pretoria          | South Africa | 39.66                               | 3.69                   | 43.35                  |
| 4    | University of Nairobi           | Kenya        | 38.8                                | 4.01                   | 42.81                  |
| 4    | University of South Africa      | South Africa | 37.72                               | 4.6                    | 42.32                  |
| 6    | University of the Witwatersrand | South Africa | 39.07                               | 3.14                   | 42.2                   |
| 7    | Stellenbosch University         | South Africa | 39.32                               | 2.83                   | 42.16                  |
| 8    | University of Ibadan            | Nigeria      | 38.45                               | 2.77                   | 41.22                  |
| 9    | University of Kwazulu Natal     | South Africa | 38.36                               | 2.77                   | 41.13                  |
| 10   | Ain Shams University            | Egypt        | 37.54                               | 3.01                   | 40.54                  |
| 11   | University of Johannesburg      | South Africa | 36.97                               | 3.09                   | 40.05                  |
| 12   | Makerere University             | Uganda       | 36.67                               | 3.35                   | 40.03                  |
| 13   | University of Nigeria           | Nigeria      | 35.98                               | 3.98                   | 39.96                  |
| 14   | University of Ghana             | Ghana        | 33.95                               | 3.88                   | 37.83                  |
| 14   | Addis Ababa University          | Ethiopia     | 33.49                               | 2.64                   | 36.13                  |
| 16   | Rhodes University               | South Africa | 33.14                               | 2.71                   | 35.85                  |
| 17   | Alexandria University           | Egypt        | 32.9                                | 2.72                   | 35.62                  |
| 18   | Ahmadu Bello University         | Nigeria      | 32.9                                | 2.66                   | 35.57                  |
| 19   | University of the Western Cape  | South Africa | 31.8                                | 3.02                   | 34.82                  |
| 20   | University of Lagos             | Nigeria      | 31.8                                | 2.68                   | 34.48                  |
| 21   | Al-Azhar University             | Egypt        | 31.67                               | 2.71                   | 34.38                  |
| 22   | University of the Free State    | South Africa | 31.03                               | 3.03                   | 34.06                  |

### **APPENDIX III: INSTITUTIONS' INTERVIEW SCHEDULE**

(DVC, Directors/ Deans of Schools)

The Technical University of Kenya (TUK) and Strathmore University

1. What research activities are undertaken by the university/school?
2. What type of research publications do the faculty members publish in your university/school?
3. Which are the publications and how many were published in the last five years?
4. Are there any rewards given to the faculty members who produce more publications?
5. What research infrastructures and facilities are available for use by researchers in the university/school?
6. Are the infrastructure and facilities available for use by researchers adequate?
7. Are the funds allocated to research adequate?
8. What amount of funds was allocated to research by the university in the last budget and strategic plan?
9. What is the proportion of the funds allocated to research to the total budget of the university?
10. Does the university facilitate its staff to conduct research?
11. Does the institution provide incentives to members of staff who undertake research?
12. What incentives are offered by your university as to promote research and scholarly publishing?
13. Which is the mechanism of providing incentives?
14. How effective are the incentives in promoting research and scholarly publishing?

15. Do you collaborate with any other stakeholders in undertaking research activities?
16. Have you been successful in undertaking research and scholarly publishing?
17. Does the university document and disseminate its research output?
18. How does the university disseminate its output and where?
19. Does the CUE play any role in promoting research and scholarly publishing in the university?
20. Is there any evidence that CUE has performed its functions in promoting research and scholarly publishing in your university?
21. What challenges do you face in promoting research and scholarly publishing in the university?
22. What strategies can be adopted for addressing identified challenges as well as promoting research and scholarly publishing in the university?

#### HEAD OF ICT/DIRECTOR OF ICT

1. What is the state of ICT in the university?
2. Are there internet connections in the university?
3. Does the university offer free and unlimited access to the internet to scholars and researchers?
4. Apart from connectivity, what other facilitation does your university give to your researchers and scholars?
5. What is the annual cost of maintaining internet connections?
6. Are there any challenges as far as ICT is concerned?
7. What do you think is the way forward?

### **UNIVERSITY LIBRARIAN**

1. Is the library well stocked?
2. Are there funds allocated by the university to the library for subscription of periodicals?
3. How adequate are the funds allocated to the library?
4. For the last five years, has the budget allocated to the library been increasing or reducing and by how much?
5. Are there documentations on research output and scholarly publications? (i.e. repository or any other database)
6. How many scholarly journals were published by faculty members in the last five years?
7. Are the publications present on the web?
8. What are the challenges in terms of library service delivery?
9. What can be done to address the challenges?

### **DIRECTORS OF RESEARCH CENTRES/DIRECTORATES**

1. Which research activities are undertaken in the university?
2. What is the state of the infrastructure within the institution?
3. Are there funds allocated by the university to the research?
4. How adequate are the funds?
5. Do you collaborate or partner with stakeholders within and outside the country?
6. What are the challenges faced by the university as far as research is concerned?
7. From your own opinion, how can these challenges be addressed and what strategies can be adopted for improvement?

COMMISSION FOR UNIVERSITY EDUCATION (CUE)

1. What is your role in promotion of research and scholarly publishing in Kenyan universities?
2. Do you undertake any activities for promoting research and scholarly publishing in Kenyan universities?
3. Are there any stakeholders involved in undertaking the above activities?
4. How do you collaborate with such stakeholders?
5. Is there any evidence that you (CUE) have performed your function in promoting research and scholarly publishing by Kenyan universities?
6. Which are the challenges faced by the Commission for University Education in promoting university research and scholarly publishing?
7. What strategies have you adopted to address the identified challenges as well as promoting research and scholarly publishing by universities?

## APPENDIX IV: QUESTIONNAIRE

INSTITUTION QUESTIONNAIRE (HOD's, PROFESSORS, ASSOCIATE PROFESSORS AND LECTURERS)

Dear participant,

I'm a post graduate student at Moi University, Nairobi Campus undertaking Master of Science degree in Information Science Publishing studies. I am carrying out a research on the role of Kenyan universities in promoting research and scholarly publishing. Note that, all the information gathered from this questionnaire is solely for academic research purposes and will be treated with a lot of confidentiality.

Do not write your name on this questionnaire.

The questionnaire consists of two types of questions.

(i) Structured questions which will require a respondent to tick in the box provided for the answers and

(ii) Unstructured questions which will require the respondent to give brief relevant precise and correct information as possible. Please tick appropriately for the questions.

### GENERAL INFORMATION

1. Gender

Male

Female



2. Age (in years)

21-30

31-40

41-50

51 and above

3. Which position do you hold in the institution?

HOD

Professor

Associate Professor

Lecturer

4. Which School and Department do you work in?

.....  
.....

**RESEARCH UNDERTAKEN AND PUBLICATIONS BY FACULTY MEMBERS**

5. (a) Is research undertaken in your School/ Department?

Yes

No

(b) If yes, which one?

.....  
.....  
.....  
.....

6. (a) Do the faculty members publish scholarly articles/ research output?

Yes

No

(b) If yes, does the university document and disseminate the output?

Yes

No

(c) If yes, How? And, where?

.....  
.....  
.....  
.....

7. (a) What is the number of publications you have done in the last five years?

.....  
.....

(b) Are there any rewards given to the faculty members who produce more publications?

Yes

No

(c) If yes, which rewards are given?

.....  
.....  
.....

STATE OF RESEARCH INFRASTRUCTURE AND ADEQUACY OF RESEARCH FUNDS

8 (a) Which are the research infrastructure in the university?

- 1. Library
- 2. Laboratories
- 3. ICT
- 4. Research sites
- 5. Staff expertise

(b) Are there other research infrastructure in the university?

Yes  No

(c) If yes, please name them

.....

.....

.....

.....

(d) What is the state of research infrastructure in the university?

|   | Research infrastructure | Very Good | Good | Fairly good | Poor | Very poor |
|---|-------------------------|-----------|------|-------------|------|-----------|
| 1 | Library                 |           |      |             |      |           |
| 2 | Laboratory              |           |      |             |      |           |
| 3 | ICT                     |           |      |             |      |           |
| 4 | Research sites          |           |      |             |      |           |
| 5 | Staff expertise         |           |      |             |      |           |

9(a) Are there funds allocated to research by the university?

Yes

No

(b) If yes, How adequate are the funds allocated to research by universities?

More adequate  Adequate  Inadequate

(c) What is the proportion of funds allocated to research to the total budget of the university?

Less than 10%  10-20%  More than 20%

THE ROLE OF THE COMMISSION FOR UNIVERSITY EDUCATION IN PROMOTING RESEARCH AND SCHOLARLY PUBLISHING

10(a) Does the Commission for University Education play any role in promoting research and scholarly publishing in your institution?

Yes  No

(b) If yes, which role does the CUE play in promoting research and scholarly publishing?

.....  
.....  
.....

(c) Is there any evidence that CUE has performed its functions in promoting research and scholarly publishing in your university?

Yes  No

(d) If yes, which one?

.....  
.....  
.....  
.....

**KIND OF INCENTIVES OFFERED BY THE UNIVERSITY TO FACULTY MEMBERS WHO UNDERTAKE RESEARCH AND SCHOLARLY PUBLISHING**

11(a) Does the university facilitate you when conducting research and scholarly publishing?

Yes

No

(b) If yes, how?

.....  
.....  
.....  
.....

11 (a) Are there any incentives offered by the university to promote research and scholarly publishing?

Yes

No

(b) If yes, what kind of incentives is offered by the university to the faculty members who undertake research and scholarly publishing?

.....  
.....

.....  
.....

(c ) What is the mechanism of providing incentives?

.....  
.....  
.....  
.....

(d) How effective are the incentives in promoting research and scholarly publishing in your university?

.....  
.....  
.....  
.....

12 (a) Do the university collaborate with other stakeholders in undertaking research and scholarly publishing?

Yes

No

(b) If yes, please name them and explain briefly how?

.....

.....

.....

.....

13(a) The following are the challenges of research and scholarly publishing in Kenyan Universities;

|    | Challenges  | Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
|----|---|----------------|-------|---------|----------|-------------------|
| 1  | Limited freedom of expression   |                |       |         |          |                   |
| 2  | Inadequate research funds   |                |       |         |          |                   |
| 3  | Brain drain   |                |       |         |          |                   |
| 4  | Lack of incentives  |                |       |         |          |                   |
| 5  | Lack of research facilities   |                |       |         |          |                   |
| 6  | Poorly funded libraries   |                |       |         |          |                   |
| 7  | Lack of Professional equipment  |                |       |         |          |                   |
| 8  | Poor management, supervision, monitoring and evaluation of university research programs |                |       |         |          |                   |
| 9  | Poor University-Industry linkages   |                |       |         |          |                   |
| 10 | Lack of access to the internet  |                |       |         |          |                   |

(b) Do you think there are other challenges that the university is facing in promoting research and scholarly publishing?

Yes

No

(c) If yes, please name them.....

.....

.....

.....

14(a) Strategies for addressing identified challenges as well as promoting research and scholarly publishing in Kenyan universities.

|   | Strategies   | Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
|---|--|----------------|-------|---------|----------|-------------------|
| 1 | Improved research funding and capacity                 |                |       |         |          |                   |
| 2 | Improving access to research infrastructure            |                |       |         |          |                   |
| 3 | Improving collaboration and linkages                   |                |       |         |          |                   |
| 4 | Improving dissemination of output                      |                |       |         |          |                   |
| 5 | Improve implementation of intellectual property rights |                |       |         |          |                   |

(b) Are there any other strategies for addressing identified challenges as well as promoting research and scholarly publishing in your university?

Yes

No



( c) If yes, please name them

.....  
.....  
.....  
.....

(d) In your own opinion what can be done to promote research and scholarly publishing in Kenyan universities?

.....  
.....  
.....  
.....

**APPENDIXV; INFORMANT INTERVIEWEES AND DATE OF INTERVIEW**

Technical University of Kenya

1. Librarian TUK----- 26/2/2016
2. ICT director TUK----- 29/2/2016
3. Director of School TUK 1----- -4/4/2016

4. Director of School TUK 2----- 17/3/2016

5. Director of School TUK 3----- 9/3/2016

Strathmore University

6. DVC research ----- 13/4/2016

7. Dean in charge of Research----- 14/4/2016

8. Librarian ----- 15/4/2016

9. ICT director ----- 6/4/2016

10. Dean of School 1----- 13/4/2016

11. Dean of School 2----- 15/4/2016

Commission for University Education

12. Director of research (CUE)----- -1/4/2016

**APPENDIX 6 RESERCH PERMIT**

**THIS IS TO CERTIFY THAT:**  
**MS. FLORENCE NAMAROME WENGUA**  
**of MOI UNIVERSITY, 0100 NAIROBI, has**  
**been permitted to conduct research in**  
**Nairobi County**  
**on the topic: THE ROLE OF KENYAN**  
**UNIVERSITIES IN PROMOTING RESEARCH**  
**AND SCHOLARLY PUBLISHING**  
**for the period ending:**  
**18th February, 2017**

**Permit No. : NACOSTI/P/16/19211/9063**  
**Date Of Issue : 19th February, 2016**  
**Fee Received :Ksh 1000**

**Applicant's Signature** **Director General**  
**National Commission for Science, Technology & Innovation**

**THIS IS TO CERTIFY THAT:**

**MS. FLORENCE NAMAROME WENGUA**  
of MOI UNIVERSITY, 0-100 NAIROBI, has  
been permitted to conduct research in  
**Nairobi County**

on the topic: **THE ROLE OF KENYAN  
UNIVERSITIES IN PROMOTING RESEARCH  
AND SCHOLARLY PUBLISHING**

for the period ending:  
**18th February, 2017**

  
.....  
**Applicant's  
Signature**

**Permit No : NACOSTI/P/16/19211/9063**

**Date Of Issue : 19th February, 2016**

**Fee Received : Ksh 1000**

  
.....  
**Director General**

**National Commission for Science,  
Technology & Innovation**





**NATIONAL COMMISSION FOR SCIENCE,  
TECHNOLOGY AND INNOVATION**

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Fax: +254-20-318245, 318249  
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Website: www.nacosti.go.ke  
When replying please quote

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Uhuru Highway  
P.O. Box 30623-00100  
NAIROBI-KENYA

Ref: No. **NACOSTI/P/16/19211/9063**

Date:  
**19<sup>h</sup> February, 2016**


Florence Namarome Wengua  
Moi University  
P.O. Box 3900-30100  
**ELDORET.**

**RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on *“The role of Kenyan Universities in promoting research and scholarly publishing”* I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for a period ending **18<sup>th</sup> February, 2017**.

You are advised to report to **the County Commissioner and the County Director of Education, Nairobi County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

  
DR. S. K. LANGAT, OGW  
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner  
Nairobi County.

The County Director of Education  
Nairobi County.

**COUNTY COMMISSIONER  
NAIROBI COUNTY  
P. O. Box 30124-00100, NBI  
TEL: 341866**

