



Quality the Agenda

COMMISSION FOR UNIVERSITY EDUCATION

**UNIVERSITY STATISTICS
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Quality the Agenda

COMMISSION FOR UNIVERSITY EDUCATION

UNIVERSITY STATISTICS

(2016/2017)

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FOREWORD

This report on University statistics presents comprehensive university data covering the following key thematic areas: academic programmes, student enrolment, staffing, graduation trends and finance. This is the second detailed report on university data, which the Commission for University Education (CUE) has prepared. The data presented is current and captures several indicators of the university sector. These include, but are not limited to, the dynamics of gender representation, programme diversification, enrolment, staff-student ratio and financing - all of which have been documented.

With the knowledge that data is a vital element in making decisions and crafting policies, the Commission is committed to building a rich data base, which will be easily accessed by any authorized person upon request. Policies and projections will then be made based on tangible up-to-date data. There will also be greater efficiency in the implementation of projects and realization of targets. Unlike the previous years, the universities were more cooperative in providing data, which is an indication that they have embraced the exercise wholeheartedly. Of note is data on enrolment of students by County. Previously, universities were not capturing this information in their admission records. But through Commission's intervention and constructive engagement with the universities, a significant number of them provided the data, which has been analyzed in this report.

This report will be handy to the policy makers in various State departments, private sector, NGOs, development partners and other interest groups who intend to partner with the university sector in matters pertaining to training and research.

In line with the function of the Commission stipulated in Section 5 (1) of the Universities Act (2012), Revised (2016), the Commission has put in place a framework for assuring quality of research and integrity of data collection in the university sector. In doing this, the Commission is inspired by ideals enshrined in its Vision, Mission, Strategic Objectives and Core Values.

Prof. Chacha Nyaigotti-Chacha
Chairman
Commission for University Education

ACKNOWLEDGEMENT

Compilation of the 2016/2017 University Statistics Report would not have been possible without the immense contribution of several people. First, I would like to thank the Chairman and the entire Commission fraternity for their steadfast support during the process of collecting and processing the University Data Book for 2016/17.

Secondly, I would like to thank both public and private universities for providing data on the thematic areas which have been analyzed in this report and for working closely with the Commission to validate the data so that the report captures accurately all the information they shared.

Thirdly, I wish to acknowledge the Ministry of Education for its support and for authorizing two of their officers, Mr. Polycarp Otieno and Mr. Philip Kinara to work with the team at the Commission to ensure that the report is up to the required standard.

I gratefully acknowledge the time and expertise devoted to reviewing of the document by the Commission's Editorial Committee. Last but certainly not least, I would like to express my deepest appreciation to the team in the Division of Planning, Research and Development for their hard work and commitment to the task of producing this important report. These include Prof. Jackson Too - Ag. Deputy Commission Secretary, Planning Research and Development; Ms. Hyrine Matheka - Senior Assistant Commission Secretary, Planning and Resource Mobilization; Ms. Stella Kiptoo - Assistant Commission Secretary; Dr. Alice Kande - Senior Research Officer; Mr. Pius Walela - Senior Research Officer; Mr. Reynold Njue - Planning Officer, Partnership and Resource Mobilization; Ms. Claris Adoyo - Research Officer; and Mr. Muriithi Njeru, Data Analyst, who worked tirelessly to deliver this report.

Prof. Mwenda Ntarangwi
Commission Secretary/CEO
Commission for University Education

ABBREVIATIONS AND ACRONYMS

ADEA	Association for the Development of Education in Africa
CBA	Collective Bargaining Agreement
CHET	Centre for Higher Education Transformation
CUE	Commission for University Education
DUC	Differentiated Unit Cost
GER	Gross Enrolment Rate
FDI	Foreign Direct Investment
ICT	Information Communication Technology
ISCED	International Standard Classification of Education
KAG	Kenya Assemblies of God
KUCCPS	Kenya Universities and Colleges Central Placement Services
LIA	Letter of Interim Authority
MOE	Ministry of Education
OECD	Organization for Economic Cooperation and Development
PGD	Postgraduate Diploma
PSSP	Privately Sponsored Students Programme
SDGs	Sustainable Development Goals
STEM	Science, Technology, Engineering and Mathematics
UCT	University of Cape Town
UFB	Universities Funding Board
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organization
USA	United States of America

DEFINITION OF TERMS

Accreditation	The procedure by which the Commission recognizes an institution as a University and as having fulfilled the prescribed criteria for mounting its academic programmes
Academic programme	The design of learning content, which is multi-dimensional and includes intentions, structure of content, delivery modes, academic resources and assessment modes
Differentiated Unit Cost	The annual per student cost of mounting a particular degree programme
Full Time Staff Equivalent (FTSE)	Measures the equivalence to full-time as recorded in the Contract of Employment
Full Time Academic Staff	Employees whose Contract of Employment is 100% for that post
Part Time Academic Staff	Employees whose Contract of Employment is for anything less than the full-time equivalent (100%)
Public Chartered University	A university established and maintained or assisted out of public funds
Private Chartered University	A university which is established or maintained out of funds other than public funds
Student to Fulltime Staff Ratio	The number of Full Time Equivalent (FTE) students divided by Full Time Equivalent (FTE) Faculty
Universities Constituent Colleges	Means a semi-autonomous component of a chartered university whose academic affairs are governed by the Senate of the university
Universities with Letter of Interim Authority	An instrument of accreditation granted to a private university as stipulated in the Universities Act, 2012; Revised 2016

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EXECUTIVE SUMMARY

University Statistics Report 2016/2017 provides database of invaluable information to all stakeholders. It will form a useful resource for making decisions on policy formulation, implementation, monitoring and evaluation. This is in line with the mandate of the Commission to collect, disseminate and maintain data on university education and to promote quality research and innovation. This report is organized into eight chapters namely: Introduction; methodology; academic programmes; students' enrolment; academic staff distribution by rank; graduation; income and expenditure as well as conclusions and recommendations.

The report opens with Chapter one which is an introduction that briefly describes the expansion of university education, sessional papers, policy and legislative frameworks that have guided the sector. It also presents the mandate, functions, vision and the mission of the Commission as well as the Commission's core values. Chapter two gives a synopsis of the methodology used in collecting and analyzing data which culminated into this publication. It broadly covers the development and validation of the data collection instrument; the data collection and processing; and validation of data. This Chapter also presents the scope and limitation of the data.

In Chapter three universities academic programmes have been discussed comprehensively. The chapter begins by giving a summary of universities academic programmes in public and private universities'. The academic programmes are further clustered and classified in terms of university categories. The chapter further gives the implications of the universities programmes in view of Kenya's long term development agenda.

Student enrolment is a very instrumental part of this report because accurate statistics of students in the Universities is constantly sought for by several government agencies to enable them plan well and allocate resources equitably. Chapter four therefore presents a detailed report on students' enrolment in universities. It provides data on students enrolment in public and private universities segregated in terms of gender. It also gives enrolment per programme level and cluster. The chapter analyses male and female enrolment per academic programme level and provides calculations of the ratio of academic staff to students. Postgraduate students constitute the pool from which the next generation of academics is drawn. The number of master's and doctoral enrolments remains small. Available data shows that men dominate postgraduate enrolments. Finally the report presents enrolment of students by county; country of origin (international); as well as students with disability.

The academic qualification and distribution of staff by rank are analyzed in depth in Chapter five. A very significant finding which has been reported in this chapter is that there were fewer doctoral than master's degree holders. The evidence further points to the fact that the number of males with master's and doctorate degrees is consistently higher than that of females. The distribution of men and women across ranks shows that the latter are underrepresented at the

higher ranks — from senior lecturer to full professor — and overrepresented at the level of lecturer and below.

Chapter six provides data on graduation numbers that are divided up into academic levels, gender and programme clusters. Chapter seven presents data on universities income and expenditure. It identifies the various income streams and expenditure items in the universities and gives the proportions of each. It further analyses the budget surplus/deficit realized by the universities.

Conclusions and recommendations have been discussed in Chapter eight. It is summarized and modelled along the following thematic areas: university enrolment; university staffing; university programmes; graduations and university income and expenditure.

Finally the annexes provide comprehensive information of other university data. These are necessary for planning and monitoring of the university sub sector.

Chapter One

Introduction

1.0 Background

The Commission for University Education (CUE) was established by an Act of Parliament, The Universities Act No. 42 of 2012 (Rev. 2016) to ensure maintenance of standards, quality and relevance in all aspects of university education, training and research.

This report includes efforts by the Commission for University Education (CUE) to achieve part of its specific functions as stipulated in Section 5 (1) of the Universities Act of 2012 (Rev. 2016): *‘to monitor and evaluate the state of university education systems in relation to the national development goals; promote quality research and innovation; and to collect, analyze and disseminate university data on annual basis’.*

Universities in Kenya are established by the Commission for University Education after consideration of an application by a sponsor who may be the Kenyan Government or private person(s) and/or entities. Universities established by the Government are referred to as public universities while those established by private person(s) or entities are private universities. There are two categories under public universities: Public Chartered Universities and the Public Constituent Colleges. Private universities are categorized into Private Chartered Universities, Private Constituent Colleges and Universities operating with Letters of Interim Authority (LIA). At the time of collecting the 2016/2017 university data, there were seventy (70) universities in Kenya comprising of thirty (30) Public Chartered Universities, five (5) Public Constituent Colleges, eighteen (18) Private Chartered Universities, five (5) Private Constituent Colleges and twelve (12) universities operating with Letters of Interim Authority.

1.1 University education in Kenya

The university subsector in Kenya has exponentially grown over the last four decades from one (1) university in 1970 to 33 universities in 2012 and 70 Universities in 2016. This growth has greatly been occasioned by, among other factors, the government’s need to increase access, equity, relevance and quality of university education.

The growth of the university sector previously benefited from the strong social demand arising from an increasing population base of young people who attain the Kenya Certificate of Secondary Education and the continued need to provide a highly educated and trained workforce.

To support this growth, the government has periodically developed various legal frameworks and strategies to ensure that it delivers the envisioned quality and relevant education required for socio-economic and other forms of development in the country. Among some of the legal

frameworks and policy documents that have greatly influenced the shaping of the university education in Kenya are; the sessional paper no. 14 of 2012, the Universities Act No. 42 of 2012 (revised 2016) and Kinyanjui report of 2007.

The Government aims to improve access and equity in University education and envisages an increase in enrolment from 181,000 in 2010 to 600,000 students by 2022 while taking appropriate measures to ensure a student composition that reflects national diversity. To increase access and equity, the Government and the private sector have made major strides in actualizing Public Private Partnership (PPP) initiatives that have seen the private sector play a key role in expanding access and equity in university education.

These efforts have yielded fruits as the number of academic programmes offered as well as the number of students enrolled have been increasing steadily to 3900 programmes and 548,000 students in 2016. Students are enrolled into the universities either as government sponsored or privately sponsored. Government sponsored students are placed by the Kenya Universities and Colleges Central Placement Service (KUCCPS) to various Universities. Previously, KUCCPS placed students only into public universities as the then law provided. However from 2016, government sponsored students have been placed in both public and private universities. Privately sponsored students apply directly to the University and are admitted upon satisfying the entry requirements for the particular programme as set by the respective University Senates. The Kenyan Constitution, 2010, requires all public institutions to ensure equity in terms of gender, Persons with Disability, regional distribution among others. The Commission collected data on student enrolment segregated by gender, enrolment of students with Disabilities as well as by counties and countries of origin.

The university sub sector is expected to provide the manpower required to achieve the Vision 2030, the ‘Big Four’ agenda and all other national development goals. The Sessional paper no. 14 of 2012, articulates the need to strengthen and grow academic programmes that support the national priority and strategic areas. There have been efforts to improve the quality and relevance of the programmes on offer in Kenyan universities. The Kenyan Government in the Vision 2030 has identified the need for manpower in Science, Technology Engineering and Mathematics (STEM) programmes in order to achieve its development goals.

However, as this report details in the various sections, the programmes on offer and student enrolment and graduations are highly skewed to the Arts, Humanities and Social Sciences as opposed to STEM. In monitoring the quality of university education, there are a number of quality indicators to check for, these include: employability ratios, the enrolment of international students, the student- lecturer ratios, among others.

The Commission set out to determine the number and origin of international students as well as the number of students and academic staff in the universities. To guide staffing, the CUE 2014 Harmonised Criteria and Guidelines on Appointment and Promotion of Academic Staff in Universities in Kenya, identifies eight categories for grading academic staff and the required qualification for each rank. These are: Graduate Assistant/Junior Research Fellow; Tutorial

Fellow/Junior Research Fellow; Lecturer/Research Fellow; Senior Lecturer/Senior Research Fellow; Associate Professor; Professor; Adjunct Academic Staff and Visiting Academic staff. This report covers all these categories except for Adjunct and Visiting Academic Staff. Efforts will be made to capture the missing categories of staff in subsequent data collection exercises.

Financial health of an institution determines the quality and quantity of all the other resources an institution can afford. The data on income and expenditure allows stakeholders to have an overview of what proportion of income is sourced from the various income streams, as well as what the university income is majorly being utilized for. The outcome of this section of the report revealed that majority of the universities operated in a deficit in the year 2016. While acknowledging that declining finances and revenues has been a common feature in universities across the globe, the universities are expected to re-think sustainability strategies that will see them weather the storm presently and guarantee a future.

In conclusion, the University sub sector has made progressive gains in promoting access to university education as the number of universities, programmes and students has grown remarkably. However, there is still need for concerted efforts to address relevance, equity and quality in university education. In particular, more should be done to ensure that the quality and type of courses offered by universities are in line with the requirements of national development as stipulated in the Kenya Vision 2030. The subsector needs to source for alternative funding as the funds from student fees and the Exchequer are not sufficient to cater for the operations of the universities. There is also need to look at the efficacy of the universities systems and streamlining them for efficiency and effectiveness.

Chapter Two

Methods

2.1 Introduction

University data is one of the most important information required from universities. The Government needs this data regularly to plan, forecast and provide for needs in the university education sector. As a regulator, the Commission is committed to collecting, analyzing and maintaining data for use by government, researchers and other stakeholder who require university education statistics. This effort is based on the belief that, in an ever dynamic, sophisticated and knowledge-driven world, no meaningful national development can be achieved without empowering the national statistical database with timely and reliable data. Furthermore, factual decisions and policies have been shown to be better at targeting their purpose, easily evaluated and increasingly efficient.

The data collected from universities covers various aspects in the university such as enrolment, staffing, programmes, staff qualification, graduations and enrolment of students with disabilities. This data lays the foundation for statistical information which will offer a reliable database for designing evidence-based policy in universities in Kenya and forms the basis for further research and analysis. Policy makers, researchers, postgraduate students, State Departments, Non-Governmental Organizations and numerous other stakeholders in the education sector will find this data invaluable.

2.2 Design of Data Collection

The data tool used to capture data for this report was quantitative by design. The target population was all public and private universities in Kenya. Since all the cases were considered, it qualifies to be considered, a saturated census. Data collection took five months; June to October 2017, and the data sought covered the 2016/2017 academic year. There were 70 public and private universities at the time of collecting the data. However, three did not have all the required information as they were newly registered.

Data was collected using a questionnaire with five key variables namely: Academic programmes, students' enrolment, staffing, graduation trends and income & expenditure. With respect to academic programmes, the International Standard Classification of Education (ISCED) developed by UNESCO was adopted. It classifies programmes offered in universities into twenty-one clusters and provides a means for comparison of education statistics and indicators across countries through uniform and internationally agreed definitions.

The tool captured enrolment of students in public and private universities desegregated by gender, academic level, country of origin and disability. For academic staff, gender, academic

qualification, establishment and tenure (i.e. whether full time or part time) were captured in the tool.

2.3 Validity of the Data Collection Instrument

A tool developed by the Commission in conjunction with research experts from the University of Groningen in Netherlands, was used to collect data from universities. The same tool was used in the previous year and had been subjected to two validation workshops attended by two officers, Registrar and Directors of Quality Assurance, from each university.

2.4 Data Collection

Questionnaires were sent to 70 Universities through e-mail. This was followed by phone calls to confirm that the questionnaires had been received. The contact persons in universities were academic registrars and/or quality assurance officers. In cases where the two could not be reached, vice chancellors were contacted. Data received from universities were cleaned, collated and entered into one main excel sheet and analyzed according to the following variables: university programmes, student enrolments, staff qualifications and establishments, graduation trends and finance. Descriptive statistics, which included frequency tables, percentages, ratios, charts and graphs were used to analyze data. These were then compiled into one document.

2.5 Validation of Data

Data validation was done in a stakeholder workshop attended by Registrars or Quality Assurance officers from the universities. Together with Officers from Planning, Research and Development Division from the Commission, they engaged in cross-checking and verifying data from the universities. Analyzed data output was interrogated to ascertain its validity and reliability. Where there were doubts or anomaly, the original data entries were scrutinized and appropriately analyzed.

2.6 Limitations of Data

Data collection was not without challenges. There were blank spaces, especially with regard to privately sponsored students. Classifying students as either self-sponsored, Government-sponsored or Distance learners was a challenge.

The tool did not also provide for data entry on students with multiple disabilities. Some universities admitted not being certain of where to place the programmes they offered against the UNESCO classification, while some programmes they offered were not listed in the classification. There was the likelihood that there was double counting of lecturers due to part timing.

Financial information was incomplete or was not provided in accordance with the instructions given. Another challenge arose from the fact that private and public universities have their financial years beginning (and ending) at different months of the year. However, consultations were made to enter appropriate figures.

Chapter Three

Universities Academic Programmes

3.1 Introduction

This chapter gives a highlight of the various programmes that were offered by both public and private universities in Kenya during the 2016/2017 academic year. An explicit summary of the number and the type of programmes in each of the universities is provided. Universities programmes were classified into nineteen (19) clusters adapted from the International Standard Classification of Education (ISCED).

The role of the universities in actualizing the nation's development blue print has over the years been emphasized in several policy documents among them the Ominde Report (1964); Gachathi Report (1976); Mackay Report (1982); Kamunge Report (1988); Sessional Paper No. 1 of 2005; Kinyanjui Report (2006); Sessional Paper No. 10 of 2012; as well as Kenya Vision 2030 which is the country's new development blueprint covering the period 2008 to 2030. All the while, the government has over the years envisaged a university sector that enables realization of individual and national goals of social, economic, and political development in a highly competitive and rapidly changing global Environment and Forestry. With their broad remit around the creation and dissemination of knowledge and their unique position within society, Universities have a critical role to play in the achievement of national and global development goals.

National development agenda can only be realized through transformation of the Kenyan economy driven by technological innovation, a shift from knowledge-reproduction to knowledge-production, and ensuring the availability of a critical mass of well-qualified human resource to spur development. Human resource development as an essential enabler for an industrializing economy can only be realized by offering quality education and training (Kenya Vision 2030). The heart of this transformation is a university education system that is focused, efficient and able to create knowledge, which is accessible, equitable and relevant to sustain a knowledge economy in a globally competitive arena. For a university to be globally competitive and to meet the expectations of the 21st century and beyond, the programmes offered should be aligned to the dictates of the market while ensuring quality and relevance.

The desire for equitable and accessible higher education has in the recent years resulted to an exponential growth of universities. However, a general concern in the university sector in Kenya has been the issue of substantial graduate unemployment (Economic Survey, 2017); the imbalance between Humanities, Arts and Social sciences on the one hand and Science, Technology Engineering and Mathematics on the other, and the consequent shortage of needed knowledge and skills in areas such as Manufacturing, Housing, Health, Food Security, Biotechnology and Information Communication Technology (CUE, 2016). Commission for

University Education has over the years enhanced efforts in regulating and assuring quality university education by setting standards and monitoring compliance to achieve national and global competitiveness (Universities Standards and Regulations, 2014).

One of the key functions of the Commission is to accredit and inspect programmes offered by universities to ensure relevance and compliance with the stipulated guidelines for development of a university programme. This section provides a comprehensive list of the nature of programmes offered by the universities in the year 2016.

3.2 Number of Academic Programmes in Public and Private Universities in Kenya

University programmes were classified into four academic levels: Doctorate, Masters, Bachelors and Postgraduate Diploma. Majority of programmes offered in universities in Kenya were recorded at bachelors' level at 46% (1,839), followed by Masters at 35% (1,389) while the proportion of Doctorate and Postgraduate Diploma programmes was 17% (680) and 2% (72) respectively as provided in Table 3.1.

Public chartered universities had the highest number of programmes (3,203) representing 81%, followed by private chartered (610 programmes), public university constituent colleges (69 programmes), private universities with LIA (65 programmes) while private constituent universities had the least number of programmes (33) representing 0.8% of the total programmes. One university (KAG East University) which in the year 2015/2016 operated as a registered private university was elevated to become a fully chartered university hence, contributing to the increase in the number of programmes under private chartered universities.

Table 3.1

Number of Programmes per University Category and Academic Level

University Category	Programmes per Academic Level				Total No. & proportion 2016/2017
	Doctorate	Masters	Bachelors	Postgraduate Diploma	
Public Chartered Universities	618	1178	1347	60	3203 (81%)
Public Constituent Universities Colleges	2	6	61	0	69 (1.8%)
Private Chartered Universities	56	182	361	11	610 (14.6%)
Private Constituent Universities Colleges	1	12	19	1	33 (0.8%)
Private Universities with LIA	3	11	51	0	65 (1.7%)
Total	680	1389	1839	72	3980

Comparatively, universities generally recorded an increase of 17% in the number of programmes offered, from 3,408 in the year 2015/2016 to 3,980 in 2016/2017. Public chartered universities with the highest number of programmes as provided in Annex 1 were University of Nairobi (431); Maseno University (287); Moi University (256); Jomo Kenyatta University of Agriculture and Technology (241) and Kenyatta University (205), while Universities with the least number

of programmes were Cooperative University College of Kenya (5), Taita Taveta University (12) Kirinyaga University (19); Multimedia University of Kenya (33); Murang'a and Machakos Universities both with 42 programmes.

A significant drop in the number of programmes offered by public universities constituent colleges was recorded which was partly attributable to the fact that all the seven (7) public university constituent colleges in the academic year 2015/2016 had been elevated to the status of public chartered universities, hence the 4 public constituent universities in the year 2016/2017 were relatively new establishments and consequently had few approved programmes. Details of the exact number of programmes per level in the public university constituent colleges are provided in Annex 2.

The number of programmes in private chartered universities increased with a relatively small margin of 14%, which was attributed to elevation of one university, which previously operated as a registered private university to the status of private chartered university during the academic year 2016/2017. Mount Kenya University had the highest number of programmes (98) while Adventist University had the least with 11 programmes. Annex 3 provides the number of programmes per level in private chartered universities.

Private universities operating under LIA recorded a 0.1% drop in the number of programmes offered between the academic years 2015/2016 and 2016/2017 with majority of programmes being offered at bachelors level. A similar pattern was observed in private universities constituent colleges where majority of the programmes (57%) were offered at bachelors level. Regina Pacis University College had one (1) programme at undergraduate level in the academic year 2015/2016, however, no data was obtained from the institution in the academic year 2016/2017 due to institutional restructuring and hence all academic activities during that year were being undertaken by the parent institution – Catholic University of East Africa. A comprehensive list of the programmes offered in private universities with LIA and private universities constituent colleges is provided in Annexes 4 and 5.

3.3 Programmes by Cluster

The nature of programmes offered in various universities is largely determined by the nature of the institution's establishment, market forces, appraisal by professional bodies, availability and adequacy of infrastructure and human resources among other factors. This section details the focus by each of the universities as indicated by the type of the programmes offered. There was a notable increase in the number of programmes in various clusters between the years 2015/2016 and 2016/2017 as indicated in the sections below:

3.3.1 Programmes by Cluster in Public Chartered Universities

The number of programmes offered in public chartered universities between the years 2015/2016 and 2016/2017 increased significantly by 25% from 2,556 to 3,203. On one hand, a notable increase was majorly observed in Humanities & Arts (additional 195 programmes); Health &

Welfare (additional 89 programmes); Life Science & Physical Science (additional 88 programmes); and Education (Arts) with an additional 78 programmes. On the other hand, three clusters namely; Mathematics & Statistics; Services and Social & Behavioral Science recorded fewer programmes than those that had been declared in the previous academic year 2015/2016. The top four popular programmes in public chartered universities were Humanities and Arts (493); Life Science and Physical Science (420); Agriculture, Livestock & Fisheries (381); and Health and Welfare (331). The least popular programmes were Law (8); Manufacturing (11); Architecture (43) and Services with 44 programmes. The figures and proportions are provided in Table 3.2.

Table 3.2

Programmes by Cluster in Public Chartered Universities

Cluster	Programme Level				Total No. & proportion 2016/2017
	Doctorate	Master	Bachelor	Postgraduate Diploma	
Agriculture, Livestock and Fisheries	77	130	144	10	381 (17%)
Architecture	7	15	21	0	43 (0.1%)
Business and Administration	44	97	152	2	295 (12.8%)
Computing and ICT	17	30	86	4	137 (5.9%)
Education (Arts)	72	133	77	8	290 (12.6%)
Education (Science)	5	11	31	0	47 (2%)
Engineering	27	44	100	1	172 (7.4%)
Environment and Forestry	33	55	62	5	155 (6.7%)
Health and Welfare	62	153	112	4	331 (14%)
Humanities and Arts	119	220	144	10	493 (21.4%)
Journalism and Information	9	25	37	0	71 (3%)
Law	1	1	6	0	8 (0.3%)
Life Science and Physical Science	95	150	171	4	420 (18.2%)
Manufacturing	2	3	6	0	11 (0.4%)
Mathematics and Statistics	8	21	40	1	70 (3.0%)
Security and Conflict Resolution	14	28	34	3	79 (3.4%)
Services	2	15	24	3	44 (1.9%)
Social and Behavioral Science	14	35	52	0	101 (4.3%)
Other	10	12	29	4	55(2.4%)
Total	618	1178	1347	60	3203

In public university constituent colleges, a similar trend of concentration of programmes in the Humanities, Arts and Business Administration was observed as provided in Annex 6. Several clusters such as Engineering, Architecture, Manufacturing and Law were the least popular with no single programme in all the four public universities constituent colleges.

3.3.2 Programmes by Cluster in Private Chartered Universities

The number of programmes in private chartered universities increased by 0.14% (77 additional programmes) between the years 2015/2016 and 2016/2017 which was partly attributable to

elevation of KAG East from a registered university to a fully chartered university. The programmes were largely concentrated in Humanities and Arts (145 programmes); Business and Administration (111 programmes); Health & Welfare (65 programmes) and Education (Arts) with 64 programmes. None of the private chartered universities offered Architecture and had few offerings in Manufacturing (1 programme); Engineering (2 programmes); Environment and Forestry (4 programmes); and Education (Science) with 5 programmes. The figures and proportions for these programmes are provided in Table 3.3.

Table 3.3

Programmes by Cluster in Private Chartered Universities

	Programme Level				Total No. & proportion 2016/2017
	Doctorate	Master	Bachelor	Postgraduate Diploma	
Agriculture, Livestock and Fisheries	1	2	8	0	11 (1.8%)
Architecture	0	0	0	0	0
Business and Administration	12	42	55	2	111 (18.2%)
Computing and ICT	4	16	41	0	61 (10%)
Education (Arts)	8	16	33	7	64 (10.5%)
Education (Science)	0	0	5	0	5 (0.8%)
Engineering	0	0	2	0	2 (0.3%)
Environment and Forestry	0	1	3	0	4 (0.6%)
Health and Welfare	2	20	43	0	65 (10.6%)
Humanities and Arts	16	57	71	1	145 (17.2%)
Journalism and Information	1	1	9	0	11 (1.8%)
Law	0	0	6	0	6 (1%)
Life Science and Physical Science	0	3	19	0	22 (3.6%)
Manufacturing	0	0	1	0	1 (0.2%)
Mathematics and Statistics	2	4	14	0	20 (3.3%)
Security and Conflict Resolution	0	4	9	0	13 (2.1%)
Services	0	0	8	0	8 (1.3%)
Social and Behavioural Science	10	16	26	1	53 (8.7%)
Others	0	0	8	0	8 (1.3%)
Total	56	182	361	11	610

In private universities constituent colleges, Science, Technology, Engineering and Mathematics (STEM) related programmes such as Mathematics, Engineering, Manufacturing, Architecture and other science were insignificantly represented. The number of programmes across the clusters were also comparatively low ranging from 0 to 17 programmes with majority in Social and Behavioral Science (17); Education{Arts}(4) and Health & Welfare with 4 programmes as provided in Annex 7.

3.3.3 Programmes by Cluster in Private Universities with LIA

As indicated in Table 3.4, clusters with the leading number of programmes in private chartered universities were Business and Administration (19 programmes); Humanities and Arts (13 programmes); and Computing and ICT and ICT with 12 programmes. Majority of the STEM related clusters were either scarcely represented or nonexistent in most of the institutions. There

was a significant drop in the number of programmes offered in Private Universities under LIA between the years 2015/2016 and 2016/2017 from 73 to 65 programmes. A notable drop was observed in Education (Arts) from 17 programmes in 2015/2016 to 7 programmes in 2016/2017.

Table 3.4

Programmes by Cluster in Private Universities with LIA

Cluster	Programme Level				Total No. & proportion 2016/2017
	Doctorate	Masters	Bachelors	Postgraduate Diploma	
Agriculture, Livestock and Fisheries	0	0	1	0	1 (1.5%)
Architecture	0	0	0	0	0
Business and Administration	2	4	13	0	19 (29.2%)
Computing and ICT	0	0	12	0	12 (18.5%)
Education (Arts)	0	0	7	0	7 (10.8%)
Education (Science)	0	0	1	0	1 (1.5%)
Engineering	0	0	0	0	0
Environment and Forestry	0	0	0	0	0
Health and Welfare	0	1	3	0	4 (6.1%)
Humanities and Arts	1	4	8	0	13 (20%)
Journalism and Information	0	1	1	0	2 (3.1%)
Law	0	0	1	0	1 (1.5%)
Life Science and Physical Science	0	0	0	0	0
Manufacturing	0	0	0	0	0
Mathematics and Statistics	0	0	1	0	1 (1.5%)
Security and Conflict Resolution	0	0	0	0	0
Services	0	0	1	0	1 (1.5%)
Social and Behavioural Science	0	1	2	0	3 (4.6%)
Others	0	0	0	0	0
Total	3	11	51	0	65

3.3.4 Programmes by Cluster in Public and Private Universities

Humanities and Arts had the highest proportion of programmes (16.3%), followed by Life and Physical Science (11.3%); Business and Administration (10.9%) and Agriculture Livestock and Fisheries with 10.8%. The least represented clusters were Manufacturing (0.3%), Law (0.4%) and Architecture (1.0%). The Figures and proportions are provided in Table 3.5.

Table 3.5***Programmes per Cluster in Public and Private Universities***

Cluster	Programmes Per Cluster in Public & Private Universities							Grand Total
	Public Universities			Private Universities				
	Public Chartered Universities	Public Constituent	Sub - Total	Private Chartered Universities	Private Constituent Colleges	Private Univ with LIA	Sub - Total	
Agriculture, Livestock and Fisheries	381	5	386	12	0	1	13	399
Architecture	43	0	43	0	0	0	0	43
Business and Administration	295	9	304	110	2	19	131	435
Computing and ICT	137	5	142	61	0	12	73	215
Education (Arts)	290	13	303	64	4	7	75	378
Education (Science)	47	4	51	5	0	1	6	57
Engineering	172	0	172	2	0	0	2	174
Environment and Forestry	155	2	157	4	0	0	4	161
Health and Welfare	331	6	337	64	4	4	72	409
Humanities and Arts	493	7	500	145	3	13	161	661
Journalism and Information	71	1	72	11	1	2	14	86
Law	8	0	8	6	0	1	7	15
Life Science and Physical Science	420	4	424	22	1	0	23	447
Manufacturing	11	0	11	1	0	0	1	12
Mathematics and Statistics	70	7	77	20	0	1	21	98
Security and Conflict Resolution	79	2	81	13	1	0	14	95
Services	44	2	46	8	0	1	9	55
Social and Behavioural Science	101	2	103	53	17	3	73	176
Other	55	0	55	9	0	0	9	64
Total	3203	69	3272	610	33	65	708	3980

The proportion of programmes by cluster in both public and private universities are presented in Figure 3.1.

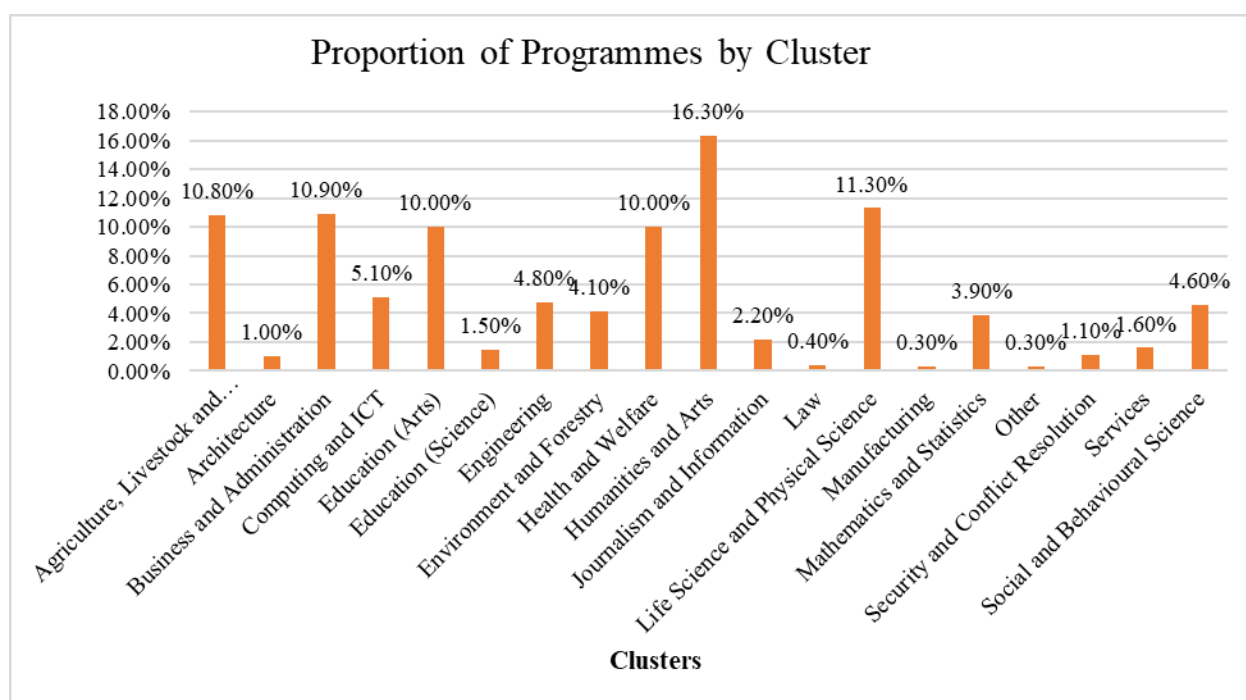


Figure 3.1: Proportion of Programmes by Cluster in Public and Private Universities in Kenya

Annexes 8 – 12 provide the programme clusters found in each of the universities in the country. This information is helpful as it clearly points out concentration of every university with regard to the type of programmes offered. There is greater concentration of programmes in Humanities and Arts (16.3%); Life Science and Physical Science (11.3%) and Business and Administration (10.9%).

3.4 Summary and Implications

From the foregoing discussion, it is evident that majority of universities in Kenya have a greater proclivity towards programmes in Humanities and Arts; Business and Administration as well Life Science and Physical Sciences. These programmes, which were still the most popular in the academic year 2015/2016, recorded the highest increase amongst the universities within one year. For instance, Programmes under Humanities and Arts increased with 177 programmes; Business Administration increased with 52 programmes while Manufacturing had only an additional 2 programmes within the same year.

Despite the fact that the country has in the last 5 years invested massively in key sectors such as Energy and Infrastructure, Universities programmes and curricula are still faulted of falling short of addressing the core of national development. To enhance efficiency and competitiveness of the country's economy, universities should align their programmes appropriately to address the areas, which are deemed critical in driving growth. The huge need for skilled workers in Science, Technology, Mathematics and Engineering professions and the persistent need to find solutions

in key areas of national development among them the Big 4 - Food Security, Health care, Manufacturing and affordable housing should largely influence universities curricula. Deliberate focus by universities coupled by Government support to run such programmes is a key ingredient to ensure that the country has a continuous supply of labour force with the required skills and competencies. The role of Humanities and Arts in anchoring and sustaining country's democracy cannot be understated. There is therefore, need to embrace the creative potential of linking arts to scientific enquiry and innovation. Universities that choose to focus in Arts and Humanities should strategically invest in requisite infrastructure and ensure that graduates in such disciplines have proper market orientation.

Effort should also be put in place to ensure that accreditation of new programmes is harmonized with information from the ministry of labour on human resource planning and audit to ensure development of programmes that are synchronised with the current and the future national development goals.

Chapter Four

Enrolment

4.1 Introduction

Enrolment in universities has been increasing since the establishment of the first Kenyan university, University of Nairobi, in 1970 with about 3,443 students. This growth is projected to continue and reach over 600,000 students by 2022. The Kenya Constitution and the Kenya Vision 2030 emphasizes on access, equity and gender parity in enrolment to achieve a better regional distribution and also meet the aspirations of Sustainable Development Goals on Quality Education and Gender Equality.

During the year 2016, seven (7) public universities constituent colleges were awarded Charters and one (1) registered University was chartered into private university. This chapter outlines analytics and summaries on enrolment in 68 Kenyan universities under four programme levels i.e. Postgraduate diploma (PGD), Bachelors, Masters and Doctorate (PhD) and further provides enrolments per cluster in public and private universities. This chapter also captures data on students enrolment by County, international students and students with disabilities in the universities.

4.2 Enrolment in Public and Private Universities

Total enrolment in all Public and Private Universities increased from 539, 749 in the year 2015 to 547,316 in 2016. This represents an overall marginal increase in enrolment of only 1.4%. But interestingly there was marked increase of students by 10,431 or 13% in Private Universities; while in Public Universities there was a decrease in enrolment by 2,864 or 0.6%. The placement of Government Sponsored students by Kenya Universities and Colleges Central Placement Service (KUCCPS) into private universities, which started in 2016, may explain the increase in enrolment in private universities. Across the different levels, the rise in enrolment was recorded in Masters and Doctorate levels while the numbers reduced with Bachelors in public universities. At Postgraduate Diploma level, there was a reduction in the number of students who enrolled in both public and private universities. From these statistics, Postgraduate Diploma programme seems to be losing its lustre as students wishing to advance their studies seem to prefer to get into Masters programmes. Table 4.1 provides enrolment features in public and private universities.

Table 4.1***Enrolment in Public and Private Universities***

Enrolment	Public University		Private University		Total	
Programme	2015	2016	2015	2016	2015	2016
PhD	6,059	8,372	1,087	1,205	7,146	9,577
Masters	45,571	48,767	9,890	9,454	55,461	58,221
Bachelors	409,222	400,927	66,528	77,491	475,750	478,418
PGD	968	890	424	210	1,392	1,100
Total	461,820	458,956	77,929	88,360	539,749	547,316

From Table 4.1, it is apparent that undergraduate enrolment supersedes post graduate enrolment by a very large margin. The present statistics show that for every 100 undergraduate students studying in the university there are only 12 masters and 2 PhD students being trained. The transition of Masters students to PhD is also worrying because the ratio of 58,221 to 9,577 or 6:1 is not satisfactory. Compared to the universities in UK or Canada where the ratio is 2:1; Kenya is doing poorly (UNESCO, 2008). The glaring gap in these ratios needs urgent attention. It is estimated that universities Kenya requires an average output of 2,400 PhDs per year to meet the targeted increase of 10% Gross Enrolment Rate (Ministry of Education, 2012).

4.2.1 Enrolment in Public and Private Universities by Gender and Academic Level

In Public and Private Universities, there are more male students than female students enrolled at all programme levels. In total, male enrolment represents 57%, while female enrolment is 43%. As shown in Figure 4.1 the gap between the male and female enrolment in universities has reduced; in 2015, male enrolment represented 59% while the female enrolment was 41%. This surpasses the constitutional threshold of 30% representation of either gender. However, in private universities the gap between the female and male students is narrow with 45,833 (52%) male students and female students are 42,527 (48%).

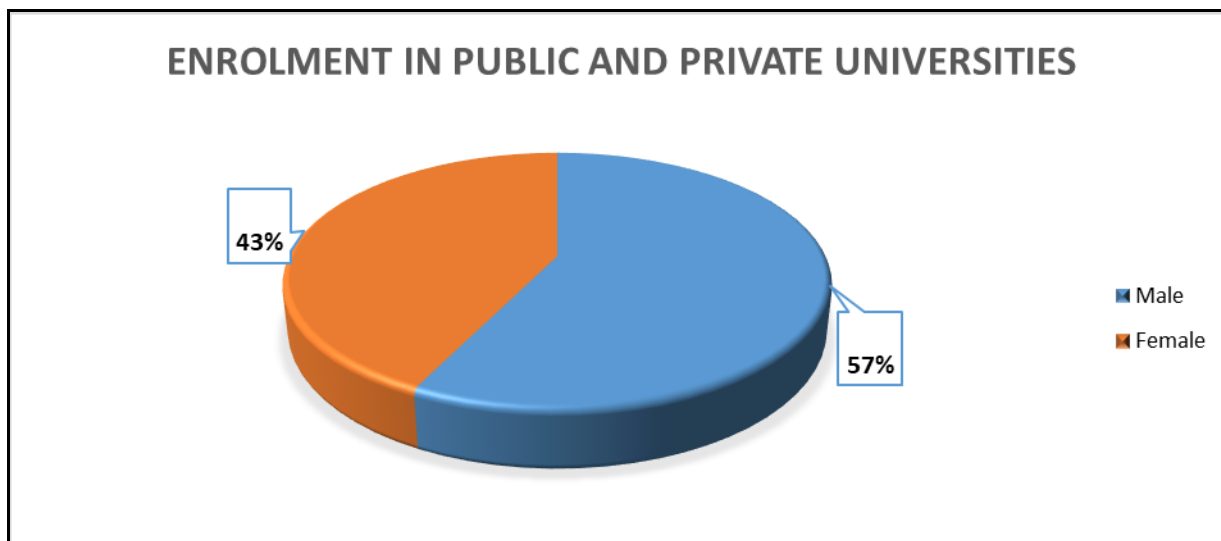


Figure 4.1 Enrolment in Public and Private Universities in terms of gender

A similar trend is observed in all the levels (Bachelors, Postgraduate Diploma, Masters and PhD) where the number of male students were more than the number of female students across all the academic levels as provided in Table 4.2.

Table 4.2

Enrolment in Public and Private Universities by Gender and Academic Level

Enrolment	Public Universities		Private Universities		Total Enrolment	
Programme	Male	Female	Male	Female	Male	Female
PhD	5,449	2,923	698	507	6,147	3,430
Masters	27,952	20,815	5,037	4,417	32,989	25,232
Bachelors	233,882	167,045	39,969	37,522	273,851	204,567
PGD	491	399	129	81	620	480
Total	267,774	191,182	45,833	42,527	313,607	233,709

4.3 Enrolment by Cluster

The UNESCO International Standard Classification of Education (ISCED) identifies clusters into which academic programmes can be classified namely: Agriculture, Livestock and Fisheries, Architecture, Business and Administration, Computing and ICT, Education(Arts), Education (Science), Engineering, Environment and Forestry, Health and Welfare, Humanities and Arts, Journalism and Information, Law, Life Science and Physical Science, Manufacturing, Mathematics and Statistics, Security and Conflict resolution, Services and Social and Behavioral Science. The collected data was further analyzed per cluster and the summaries generated per university category are presented as follows;

4.3.1 Enrolment per Cluster in Public and Private Universities

Of the 19 Clusters, Business and Administration had the highest enrolments with 144, 318, which accounted for 26% of total enrolments, followed by Education (Arts) with 108, 533 students (20%) and Humanities and Arts with 43, 526 representing 8% of the total enrolment. The clusters with the lowest enrolments were Architecture (1%), Manufacturing and other ‘unclassified clusters’, which had less than 1%.

At Doctorate level, the Business and Administration cluster had the highest enrolment with 3,891 students representing 40% of all Doctoral students. The Manufacturing cluster had no enrolments at the doctorate level. At Masters Level, the Business and Administration cluster had the highest enrolment of 27,700 followed by Humanities and Arts with 8,481, then Health and Welfare cluster with 4,519 students. The cluster with the least enrolment was manufacturing with 7 then Architecture and Education (Science) clusters with 181 students respectively. At Bachelors level, the Business and Administration cluster had the highest enrolment of 112, 643 followed by Education (Arts) with 102, 367 then Humanities and Arts with 34,129 students. Manufacturing cluster had the least enrolment with 687 students.

At Postgraduate Diploma, Education (Arts) had the highest enrolment with 828 students, followed by Humanities and Arts with 97 and Security and Conflict Resolution cluster with 39 students. There were no enrolments recorded at Postgraduate Diploma level in Architecture, Computing and ICT and ICT, Education (Science), Journalism and Information, Law, Manufacturing, Social and Behavioral Sciences. 4 Fellowship programmes were recorded under the Health and Welfare cluster. Table 4.3 shows Enrolment in public and private universities by cluster.

Table 4.3***Enrolment by Cluster in Public and Private Universities***

Cluster	PhD	Masters	Bachelors	PGD	Grand Total	Proportion
Agriculture, Livestock & Fisheries	644	1,705	30,396	2	32,747	6%
Architecture	27	181	6,092	0	6300	1%
Business & Administration	3,891	27,700	112,643	84	144,318	26%
Computing and ICT	252	1,356	19,947	0	21,555	4%
Education(Arts)	1,195	4,143	102,367	828	108,533	20%
Education (Science)	15	181	24,819	0	25,015	5%
Engineering	74	1,229	20,932	2	22,237	4%
Environment and Forestry	201	974	11,853	3	13,031	2%
Health & Welfare	355	4,519	28,553	17	33,444	6%
Humanities & Arts	1,114	8,186	34,129	97	43,526	8%
Journalism & Information	515	1,456	14,864	0	16,835	3%
Law	6	460	10,054	0	10,520	2%
Life Sciences & Physical Sciences	244	2,108	19,996	5	22,353	4%
Manufacturing	0	7	687	0	694	0.13%
Mathematics & Statistics	104	849	15,188	13	16,154	3%
Security & Conflict Resolution	55	905	7,365	39	8,364	2%
Services	33	587	7,844	10	8,474	2%
Social & Behavioral Sciences	852	1,677	10,661	0	13,190	2%
Others	0	0	26	0	26	0.005%
Total	9,577	58,223	478,416	1,100	547,316	100%

4.3.2 Enrolment by Cluster in Public Universities

In public universities, Business and Administration cluster had the highest enrolment numbers at 113,005 representing 25% of enrolments in 18 clusters followed by Education (Arts) with 93,878 (20%) and Humanities and Arts with 36,497 (8%). Manufacturing had the lowest enrolment with 590. Architecture, Computing and ICT, Environment and Forestry, Journalism and Information, Law, Manufacturing, Mathematics and Statistics, Security and Conflict Resolution, Services, Social and Behavioral Sciences had less than 5% enrolments as depicted in Table 4.4.

At Doctorate level, Business and Administration cluster had the highest enrolment, followed by Education (Arts) then Humanities and Arts. The lowest enrolments were in Architecture,

Education (Science), Law and Engineering while Manufacturing cluster had no Doctorate enrolments.

At Masters level, a similar observation was made with Business and Administration cluster having the highest enrolment, followed by Humanities and Arts then Health and Welfare. The lowest enrolments were in Architecture, Education (Science), Law, Engineering and Manufacturing.

Education (Arts) had the highest enrolment at Bachelors level, followed by Business and Administration and Humanities and Arts. At Postgraduate Diploma level, Education (Arts) cluster had the highest enrolment, followed by Humanities and Arts, then Business and Administration clusters. Architecture, Computing and ICT, Education (Science), Journalism and Information, Law, Manufacturing, Services, Social and Behavioural Sciences recorded zero enrolments at Postgraduate Diploma level. Table 4.5 presents enrolments by cluster and Academic level in Public Universities.

Table 4.4

Enrolment by Cluster in Public Universities

Cluster	Doctorate	Masters	Bachelors	PGD	Grand Total	Proportion
Agriculture, Livestock and Fisheries	632	1,679	29,843	2	32,156	7%
Architecture	27	181	6002	0	6,210	1%
Business and Administration	3,628	23,612	85,706	59	113,005	25%
Computing and ICT	231	989	14,798	0	16,018	4%
Education(Arts)	997	3,372	88,836	673	93,878	20%
Education (Science)	15	181	21,558	0	21,754	5%
Engineering	74	1,229	20,850	2	22,155	5%
Environment and Forestry	201	940	11,507	3	12,651	3%
Health &Welfare	341	3,879	21,388	17	25,625	6%
Humanities & Arts	719	6,188	29,513	77	36,497	8%
Journalism and Information	494	979	10,628	0	12,101	3%
Law	6	404	6,355	0	6,765	2.00%
Life Science & Physical Science	244	2,039	19,440	5	21,728	5%
Manufacturing	0	7	583	0	590	0.13%
Mathematics & Statistics	97	823	14,502	13	15,435	3%
Security and Conflict Resolution	55	717	5,421	39	6,232	1%
Services	33	562	6,844	0	7,439	2%
Social & Behavioral Science	578	986	7,153	0	8,717	2%
Other	0	0	0	0	0	0%
Total	8,372	48,767	400,927	890	458,956	100%

4.3.3 Enrolment by Cluster in Private Universities

Notably in private universities, Architecture cluster which had no enrolments in 2015 registered 90 students at the Bachelors level. Highest enrolments were recorded in Business and Administration and Education (Arts) clusters while fewer students numbers were registered in Science - oriented clusters for instance, Engineering, Manufacturing, Life and Physical sciences, Environment and Forestry as well as in Mathematics. This mirrors the scenario witnessed in 2015 where increased student's numbers were registered in Education (Arts) at 40%. The biggest decline was in Computing and ICT clusters with 31% drop in students enrolled.

At Doctorate level, the clusters with the highest level of enrolment were Humanities and Arts with 395 students, Social and Behavioral Sciences with 274 students and Business and Administration with 263 students. Several clusters such as Architecture, Education (Science), Engineering, Law, Manufacturing, Services, Environment and Forestry, Life Science and Physical Science, and Security and Conflict Resolution did not have any students in Private Universities.

At Master's level, the clusters with the highest enrolment were Business and Administration with 4,088 students, Humanities and Arts with 1,998 students and Education Arts with 771 students. Similar to Doctorate level, Architecture, Education (Science), Engineering, Manufacturing and Services did not have any students enrolled.

At Bachelor's level, clusters with the highest enrolment were Business and Administration with 26,937 students, Education (Arts) with 13,531 students and Health and Welfare with 7,165 students while clusters with the least enrolment were Engineering with 82 students, Architecture with 90 students and Manufacturing with 104 students. At Postgraduate Diploma level, only four clusters had enrolments. These were; Business and Administration with 25 students, Education (Arts) with 155 students, Humanities and Arts with 20 students and Services with 10 students. The rest of the clusters did not have enrolments. Table 4.5 gives a summary of enrolments in Private Universities.

There were 4 students enrolled in Fellowship programme to provide Leadership and Management skills to professionals managing Health Programs in Kenya and support service delivery in partner institutions at the University of Nairobi who were not included in the analysis.

Table 4.5***Enrolment by Cluster in Private Universities***

Cluster	Doctorate		Masters		Bachelors		Postgraduate Diploma		Grand Total	Proportion
	Male	Female	Male	Female	Male	Female	Male	Female		
Agriculture, Livestock and Fisheries	10	2	20	6	337	216	0	0	591	0.7%
Architecture	0	0	0	0	66	24	0	0	90	0.1%
Business and Administration	176	87	2,027	2,061	13,458	13,479	16	9	31,313	35.4%
Computing and ICT	15	6	250	117	3,840	1,309	0	0	5,537	6.3%
Education(Arts)	94	104	405	366	6,777	6,754	96	59	14,655	16.6%
Education (Science)	0	0	0	0	2,405	856	0	0	3,261	3.7%
Engineering	0	0	0	0	76	6	0	0	82	0.1%
Environment and Forestry	0	0	22	12	188	158	0	0	380	0.43%
Health & Welfare	6	8	339	301	3,204	3,961	0	0	7,819	8.9%
Humanities & Arts	290	105	1,302	696	2,563	2,053	10	10	7,029	8%
Journalism and Information	7	14	155	322	1,660	2,567	0	0	4,734	5.2%
Law	0	0	38	18	1,685	2,014	0	0	3,755	4.3%
Life Science& Physical Science	0	0	43	26	304	252	0	0	625	0.7%
Manufacturing	0	0	0	0	71	33	0	0	104	0.12%
Mathematics & Statistics	3	4	18	8	354	332	0	0	719	1%
Security and Conflict Resolution	0	0	119	69	1,272	672	0	0	2,132	2.14%
Services	0	0	14	11	325	675	7	3	1,035	1.2%
Social & Behavioral Science	97	177	283	408	1,372	2,136	0	0	4,473	5.06%
Other	0	0	0	0	11	15	0	0	26	0.03%
Total	699	493	5,271	4,480	40,266	37,781	129	81	88,360	100%

4.4 Summary and implications of Enrolment on University Education

Total student enrolment in public and private universities recorded a 1.4% increase from 539,749 in 2015 to 547,316. The rise has been attributed to increased enrolment witnessed in Private Universities while there was 0.6% drop in enrolment in Public Universities. Across the various academic levels, a significant increase in enrolment was observed in Masters and Doctorate levels while a decline was noted at Undergraduate and Postgraduate Diploma levels.

Public chartered universities had the highest number of enrolments at 455,515, accounting for 83.2% of the total enrolment. Private chartered universities had 78,987 students, public

university constituent colleges had 3,441 students, universities with LIA had 8,205 and private university constituent colleges with 1,168 students.

Analysis by gender indicated that male students surpassed female students at all programme levels in public and private universities. However in Universities with LIA, there were more female students enrolled under the Bachelors programmes. This is because the women university with LIA had the highest enrolment. With only a gap of 14% to achieve gender parity, the enrolment status was very encouraging as it is near parity – a target advocated by the Sustainable Development Goals (UNESCO, 2015). Generally, the gender gap is narrower as compared to 2015.

The current data further shows that the ratio of undergraduate students to postgraduate (both Masters and PhD) is 7:1 and that not many Masters degree graduates move on to enroll for a PhD degree. The implication of low enrolments in PhD is that there will be few academic staff available to teach undergraduate students. As will be seen in Chapter 5, which deals with staffing in universities, there are few Lecturers with PhD qualifications. The majority of them have Masters qualifications. If this trend continues, it means that there will be few qualified academics teaching in the universities. A cycle of low PhD enrolment leading to low staff development; which in turn leads to low PhD output could be created, unless deliberate efforts are put in place to address the matter.

The Business and Administration, Education (Arts), Humanities and Arts clusters had the largest student enrolment numbers while the Science, Technology, Engineering and Mathematics (STEM) clusters still register low students enrolments especially at the postgraduate levels. This means that fewer Kenyans are studying and doing research in these areas which greatly impedes the country's efforts towards producing manpower that can fast track the realization of Vision 2030, becoming a knowledge economy as well as to compete globally.

4.5 Enrolment by County

Counties in Kenya are geographical units envisioned by the 2010 Constitution of Kenya as the units of devolved government. Details of the division and the names of the respective counties are provided in Annex 45. This section relays information on the counties of origin of students enrolled in Universities in Kenya. It also employs analytics to provide in depth insight of the students based on county of origin. Data was received from 25 public chartered universities and 22 private chartered universities. This information comprised of a total of 110,612 male students and 76,974 female students totaling to 187,586. This information is provided in detail in the following sections:

4.5.1 Enrolment by County in Public and Private Universities

Data collected from public and private chartered universities showed that majority of students originated from Nairobi county (17,928, 9.56%) followed by Kisii (9,754, 5.2%) and Kiambu counties (8,787, 4.68%). The counties that produced the least number of students were Mandera (249, 0.13 %) followed by Tana River (275, 0.15%) and Lamu (275, 0.15%) as provided in Table 4.6.

4.5.2 Enrolment by County and Gender in Public and Private Universities

There were more male students than female students enrolled in universities. Nairobi County produced the highest male university student population (9253, 8.35%) followed by Kisii (5859, 5.30%) and Kiambu counties (4837, 4.37%), Tana River County (166, 0.15%) produced the least male student population followed by Lamu (168, 0.15%) and Mandera counties (182, 0.16%). In the same breadth, Nairobi County produced the highest number of female university students (8693, 11.29%) followed by Kiambu (3950, 5.13%) and Kisii (3895, 5.06 %) counties, Wajir and Mandera counties produced the least female student representation (67, 0.09 %) followed by Lamu county (107, 0.14%).

Wajir county had the highest ratio (3:1) of the total number of male students to their female counterparts, followed by Turkana (2.9:1) and Mandera counties (2.72:1), Elgeyo Marakwet County had the least male to female ratio (1.05:1) followed by Nairobi (1.06:1) and Nandi counties (1.2:1). As indicated in Table 4.7, Wajir County had the highest gender disparity followed by Turkana, Mandera (63.19%) counties. On the other hand, Elgeyo Marakwet County had the least gender disparity followed by Nairobi and Kajiado counties. Additional information is provided in Annex 37.

Table 4.6***Enrolment by County and Gender in Public and Private Universities***

County	M	M/F Ratio	M% of total	M% of cumulative total	F	F% of total	F% of cumulative total	Total	% of total
Nairobi	9235	1.06	51.51	8.35	8693	48.49	11.29	17928	9.56
Kilifi	626	1.51	60.19	0.57	414	39.81	0.54	1040	0.55
Tana River	166	1.52	60.36	0.15	109	39.64	0.14	275	0.15
Lamu	168	1.57	61.09	0.15	107	38.91	0.14	275	0.15
Taita Taveta	433	1.42	58.59	0.39	306	41.41	0.40	739	0.39
Garissa	428	2.12	67.94	0.39	202	32.06	0.26	630	0.34
Wajir	202	3.01	75.09	0.18	67	24.91	0.09	269	0.14
Mandera	182	2.72	73.09	0.16	67	26.91	0.09	249	0.13
Marsabit	309	2.26	69.28	0.28	137	30.72	0.18	446	0.24
Isiolo	268	2.33	69.97	0.24	115	30.03	0.15	383	0.2
Nyeri	2756	1.28	56.16	2.49	2151	43.84	2.79	4907	2.62
Kirinyaga	1464	1.38	57.91	1.32	1064	42.09	1.38	2528	1.35
Murang'a	2685	1.49	59.81	2.43	1804	40.19	2.34	4489	2.39
Kiambu	4837	1.22	55.05	4.37	3950	44.95	5.13	8787	4.68
Turkana	562	2.91	74.44	0.51	193	25.56	0.25	755	0.4
Uasin Gishu	5182	1.58	61.3	4.68	3271	38.7	4.25	8453	4.51
Elgeyo Marakwet	1120	1.05	51.33	1.01	1062	48.67	1.38	2182	1.16
Nandi	1970	1.17	54	1.78	1678	46	2.18	3648	1.94

4.5.3 Enrolment by County in Public Chartered Universities

Data from the public chartered universities indicated that Kisii County had the highest number of students enrolled (9373, 5.71%) followed by Nairobi (8739, 5.33%) and Uasin Gishu counties (8046, 4.9%). The county that produced the least number of students was Mandera (155, 0.09%) followed by Wajir (179, 0.11%) and Lamu (216, 0.13%) counties.

In public chartered universities, Kisii County (had the highest number of male students 5656, 5.68%) followed by Nairobi County (5064, 5.09%) and Uasin Gishu county (4975, 5.00%), Mandera County (119, 3.31%) produced the least number of university male students followed by Lamu (134, 1.63%) and Tana River counties (142, 1.56%). Similarly, Kisii County (3717, 5.74%) had the highest number of female students followed by Nairobi (3675, 5.68%) and Uasin Gishu counties (3071, 4.74%).

Mandera County (76.7%) had the highest ratio of male to female students (3.3:1) followed by Wajir (3.16:1) and Isiolo counties (2.5:1). Wajir County thus had the largest gender disparity followed by Turkana and Isiolo counties as provided in Table 4.7. Additional Figures are provided in Annex 39.

Table 4.7

Enrolment by County in Public Chartered Universities

County	M	M/F Ratio	% of total	M% of cumulative total	F	% of total	F% of cumulative total	Total	% of total
Nairobi	5064	1.38	57.95	5.093	3675	42.05	5.68	8739	5.33
Kilifi	570	1.71	63.05	0.573	334	36.95	0.52	904	0.55
Tana River	142	1.56	60.94	0.143	91	39.06	0.14	233	0.14
Lamu	134	1.63	62.04	0.135	82	37.96	0.13	216	0.13
Taita Taveta	396	1.39	58.24	0.398	284	41.76	0.44	680	0.41
Garissa	321	2.13	68.01	0.323	151	31.99	0.23	472	0.29
Wajir	136	3.16	75.98	0.137	43	24.02	0.07	179	0.11
Mandera	119	3.31	76.77	0.120	36	23.23	0.06	155	0.09
Marsabit	272	2.39	70.47	0.274	114	29.53	0.18	386	0.24
Isiolo	218	2.51	71.48	0.219	87	28.52	0.13	305	0.19
Kiambu	4363	1.35	57.45	4.388	3232	42.55	5.00	7595	4.63
Turkana	540	3.16	75.95	0.543	171	24.05	0.26	711	0.43
West Pokot	811	1.69	62.82	0.816	480	37.18	0.74	1291	0.79
Samburu	295	1.72	63.17	0.297	172	36.83	0.27	467	0.28
Trans Nzoia	1987	1.49	59.8	1.998	1336	40.2	2.07	3323	2.02
Uasin Gishu	4975	1.62	61.83	5.003	3071	38.17	4.75	8046	4.9
Elgeyo Marakwet	1062	1.04	50.98	1.068	1021	49.02	1.58	2083	1.27
Nakuru	4370	1.5	60.05	4.395	2907	39.95	4.50	7277	4.43
Narok	1411	1.61	61.62	1.419	879	38.38	1.36	2290	1.4
Kajiado	1016	1.22	54.95	1.022	833	45.05	1.29	1849	1.13
Kisii	5656	1.52	60.34	5.688	3717	39.66	5.75	9373	5.71
Homa Bay	3126	2.18	68.57	3.144	1433	31.43	2.22	4559	2.78

4.5.4 Enrolment by County in Private Chartered Universities

Data from the private chartered universities indicated Nairobi County produced the highest number of students (9189, 39.13%) followed by Kiambu (1192, 5.08%) and Nakuru counties (895, 3.81%). Samburu County had the least number of students in Private chartered universities (19, 0.08%) followed by West Pokot (42, 0.18%) and Turkana (44, 0.19%) counties. Unlike in Public chartered universities, Private chartered universities had more female students (52.39%)

than their male counterparts. Nairobi County produced the highest male student population (4171, 37.31%) followed by Kiambu County (474, 4.24%) and Nakuru County (404, 3.61%). Samburu County produced the least number of male university students (9, 0.08%) followed by Turkana (22, 0.20%) and West Pokot (23, 0.23%) counties.

Similarly, Nairobi county had the highest female population (5018, 40.78 %) followed by Kiambu (718, 5.84%) and Nakuru counties (491, 3.99%). Samburu County (10, 0.08%) produced the least female university students followed by West Pokot (19, 0.15%) and Turkana (22, 0.18 %) counties. Nyeri county had the least gender disparity (0.46:1) followed by Nyandarua (0.53:1) and Murang'a (0.62:1) counties. Additional information on all counties is provided in Annex 40.

Table 4.8

Enrolment by County in Private Chartered Universities

County	M	M/F ratio	% of total	M% of cumulative total	F	%of total	F% of cumulative total	Total	% of total
Nairobi	4171	0.83	45.39	37.31	5018	54.61	40.78	9189	39.13
Tana River	24	1.33	57.14	0.21	18	42.86	0.15	42	0.18
Lamu	34	1.36	57.63	0.30	25	42.37	0.20	59	0.25
Garissa	107	2.1	67.72	0.96	51	32.28	0.41	158	0.67
Wajir	66	2.75	73.33	0.59	24	26.67	0.20	90	0.38
Mandera	63	2.03	67.02	0.56	31	32.98	0.25	94	0.4
Nyandarua	54	0.53	34.62	0.48	102	65.38	0.83	156	0.66
Nyeri	140	0.46	31.6	1.25	303	68.4	2.46	443	1.89
Kirinyaga	64	0.67	40.25	0.57	95	59.75	0.77	159	0.68
Murang'a	117	0.62	38.11	1.05	190	61.89	1.54	307	1.31
Kiambu	474	0.66	39.77	4.24	718	60.23	5.84	1192	5.08
Turkana	22	1	50	0.20	22	50	0.18	44	0.19
West Pokot	23	1.21	54.76	0.21	19	45.24	0.15	42	0.18
Samburu	9	0.9	47.37	0.08	10	52.63	0.08	19	0.08
Uasin Gishu	207	1.04	50.86	1.85	200	49.14	1.63	407	1.73
Laikipia	76	0.92	47.8	0.68	83	52.2	0.67	159	0.68
Nakuru	404	0.82	45.14	3.61	491	54.86	3.99	895	3.81
Narok	70	1.06	51.47	0.63	66	48.53	0.54	136	0.58
Kajiado	176	0.93	48.09	1.57	190	51.91	1.54	366	1.56
Kisii	203	1.14	53.28	1.82	178	46.72	1.45	381	1.62

4.6 Enrolment of International Students

To collect information on countries of origin for students enrolled in universities in Kenya data was obtained from 22 public chartered universities, 2 public constituent colleges, 16 private chartered universities, 9 universities with letters of interim authority and 4 private universities constituent colleges.

Of the 4730 international students reported, 66.38 % (3137) were male and 33.62% (1593) were female. Tanzania produced the highest number of foreign students enrolled in Kenyan universities standing at 577, (12.20%) followed by South Sudan with 522, (11.04%) and Nigeria with 426, (9.01%). Countries that produced the least number of international students included Austria, Bangladesh and Afghanistan all with 1(0.021%) student each. Figure 4.2 provides additional information.

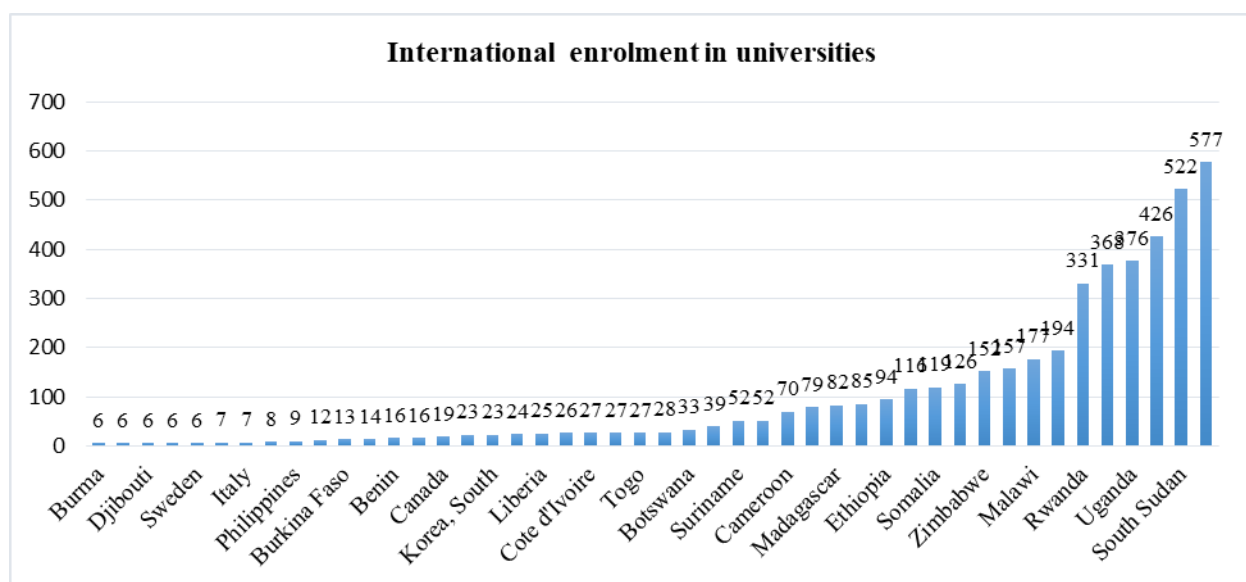


Figure 4.2: International Students Enrolment

4.6.1 Enrolment of International Students by Gender

The bulk of international students were male (66.32%). South Sudan had the highest male student representation (343, 10.93%) followed by Tanzania (339, 10.80%) and Nigeria (331, 10.55%). Countries that produced the least number of male students included Afghanistan (1, 0.03%), American Samoa (1, 0.03%) and Belgium (2, 0.07%). Tanzania had the highest number of female foreign students representation (238, 14.97%) followed by South Sudan (179, 11.26%) and Uganda (158, 9.94%). Countries with the least female representation included Austria (1, 0.07%), Brazil (1, 0.07%) and Benin (2, 0.14%).

4.6.2 International Student Enrolment by Academic Level

Disaggregation by academic levels revealed that majority of international students were enrolled at undergraduate level (69.85%) followed by Masters (23.91%), Doctorate(4.57%) and lastly Postgraduate Diploma students (1.67%) as provided in Table 4.9.

Table 4.9***Proportion of International Students by Academic Level***

Level	M	%	F	%	T	% of total
Postgraduate Diploma	59	1.25	20	0.42	79	1.67
Bachelor	2043	43.19	1261	26.66	3304	69.85
Master	854	18.05	277	5.86	1131	23.91
Doctorate	181	3.83	35	0.74	216	4.57
TOTALS	3137	66.32	1593	33.68	4730	100.00

Analysis of international student enrolment revealed that Nigeria produced the largest number of students at Postgraduate Diploma level (24, 30.37%) followed by Malawi (8, 10.12%) and Tanzania (7, 8.86%). The lowest representation was recorded for Afghanistan (0, 0%) followed by Somalia (1, 1.26%) and Swaziland (2, 2.53%).

Tanzania had the largest undergraduate representation (444, 13.43%) followed by South Sudan (432, 13.07%), and Democratic Republic of Congo (306, 9.26%). Countries with lower enrolments were: Afghanistan (1, 0.03%) followed by American Samoa (2, 0.06%) and British Indian Ocean (3, 0.09%).

At Masters level, Nigeria had the highest (119, 10.52%) Masters students representation followed by Tanzania (96, 8.48%) and South Sudan (78, 6.89%). Countries with the fewest international students enrolled in Kenyan Universities were American Samoa, Benin and Austria with 1(0.08%) student each. At Doctorate level, Tanzania had the highest (30, 14.15%) representation followed by Nigeria (29, 13.67%) and Uganda (19, 8.96%). Countries with the least doctoral representation included Burkina Faso (1, 0.47%), Canada (1, 0.47%) and Central Africa Republic (1, 0.47%).

4.6.3 International Students enrolment in Public Universities

Most of the international students in public universities came from Tanzania (80, 13.24%) followed by Rwanda (74, 12.25%) and South Sudan (72, 11.92%). Countries with low representation included Bangladesh (1, 0.165%), Austria (1, 0.165%) and China (1, 0.16%). Details of this data are provided in Figure 4.3.

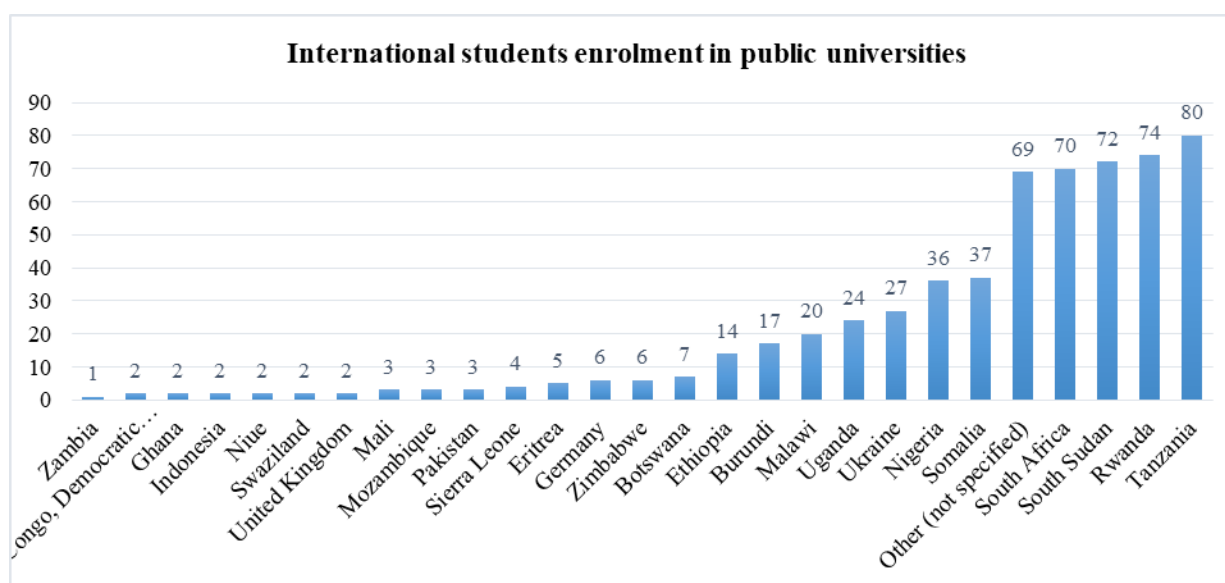


Figure 4.3 Enrolment of International Students in Public Chartered Universities

4.6.4 Enrolment of International Students by Gender in Public Universities

Majority of international students in public chartered universities were male (75.50%). South Africa had the highest international male student representation (63, 13.81%) followed by Tanzania (52, 11.40%) and Rwanda (45, 9.86%). Countries with low international student representation included Angola (1, 0.21%), Bangladesh (1, 0.21%) and Comoros (1, 0.21%). Rwanda had the highest female student representation (29, 19.59%) followed by Tanzania (28, 18.91%) and Ukraine (13, 8.78%). International countries with low female student representation included Austria (1, 0.67), Colombia (1, 0.67) and Botswana (2, 1.35%).

4.6.5 Enrolment of International Students by Level in Public Chartered Universities

Majority of international students in public chartered universities were enrolled at Bachelors level at 353(58.44%) followed by Masters at 163(26.99 %) and Doctorate at 53(8.77%) while Postgraduate Diploma level had 35(5.79%) of the total international students enrolled in public chartered universities. Table 4.10 provides the figures.

Table 4.10

Proportion of International Students by Level in Public Chartered Universities

Level	M	M%	F	F%	T	% of total
Postgraduate Diploma	32	5.30	3	0.50	35	5.79
Bachelor	277	45.86	76	12.58	353	58.44
Master	106	17.55	57	9.44	163	26.99
Doctorate	41	6.79	12	1.99	53	8.77
TOTALS	456	75.50	148	24.50	604	100.00

Analysis of international student enrolment in public universities revealed that Nigeria had the highest Postgraduate Diploma enrolment (22, 62.85%) followed by Eritrea (4, 11.42%) and Rwanda (2, 5.71%). The lowest representation was recorded by Somalia (1, 2.85%). South Africa had the highest undergraduate representation (69, 19.54%) followed by the Unclassified category (67, 18.98%), and South Sudan (56, 15.86%). Countries with lower undergraduate enrolments were: Japan (1, 0.28%), Liechtenstein (1, 0.28%), and Pakistan (1, 0.28%). At Masters level, Rwanda and Tanzania tied (26, 7.36%) with Ukraine (20, 5.66%) following. Other countries with low Masters students representation included Malaysia (1, 0.28%), India (1, 0.28%) and Ethiopia (2, 0.56%). At the Doctorate level, Tanzania had the highest (20, 37.73%) representation followed by Rwanda (10, 18.86%) and Uganda (6, 11.32%). Countries with the least doctoral representation included Nigeria (1, 1.88%), Niue (1, 1.88%) and United States (1, 1.88%). See Annex 40 for more information.

4.6.6 Enrolment of International Students in Private Chartered Universities

In Private universities, Tanzania had the highest number of students with 497(12.05%) followed by South Sudan with 450 (10.91%) while Nigeria with 390 (9.45%) was third. This information is provided in Figure 4.4. Countries with the least representation of students included Jamaica (1, 0.02%), Jordan (1, 0.02%) and Iran (2, 0.05%) as provided in Annex 42.

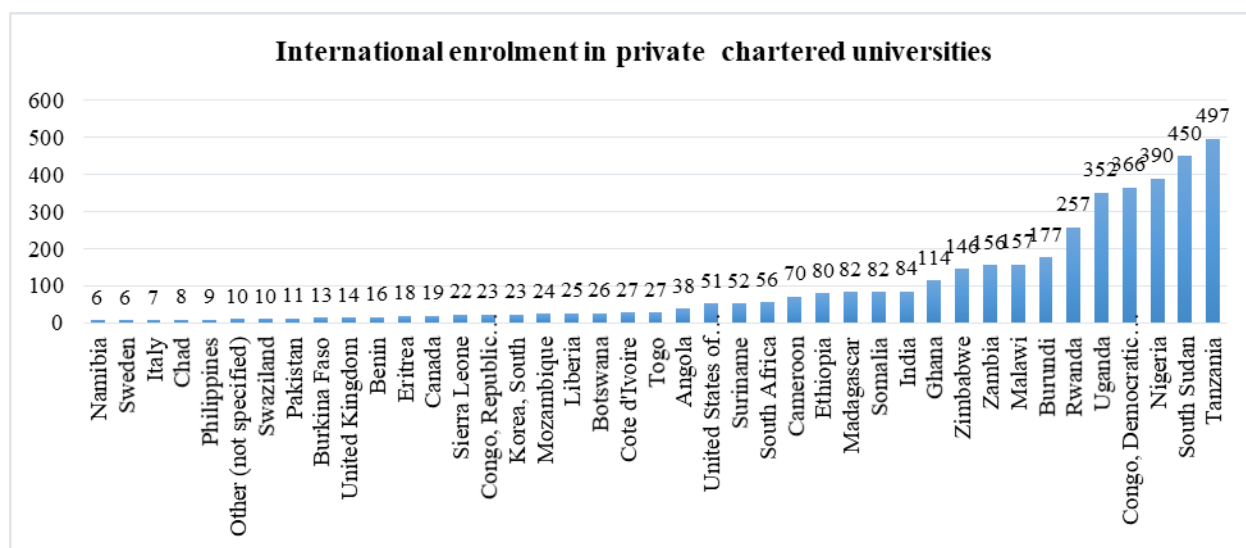


Figure 4.4: Enrolment by Nationality in Private Chartered Universities

4.6.7 Enrolment of International Students by Gender in Private Chartered Universities

Majority of international students in Private chartered universities were male (61.15%). Nigeria had the highest male population composition with 299(11.15%) followed by Tanzania with 287, (10.70%) and South Sudan with 283(10.56%). Countries with the least male student representation included Spain (1, 0.04%), Seychelles (1, 0.04%) and Belgium (2, 0.07%). Tanzania with 210 (12.05%) had the highest number of female students followed by South Sudan (167, 11.56%) and Uganda (151, 10.45%).

Countries with few female students representation included Ukraine (1, 0.07), United Arab Emirates (1, 0.07) and American Samoa (2, 0.14%).

4.6.8 Enrolment of International Students by Level in Private Chartered Universities

Majority of international students in private chartered universities were enrolled at bachelors level (71.52%) followed by Masters (23.46%), Doctorate (3.95%) and Postgraduate Diploma level (1.07%) as provided in Table 4.11.

Table 4.11

Proportion of International Students by Academic Level in Private Universities

Level	M	%	F	%	T	% of total
Postgraduate Diploma	27	0.65	17	0.41	44	1.07
Bachelor	1766	42.80	1185	28.72	2951	71.52
Master	748	18.13	220	5.33	968	23.46
Doctorate	140	3.39	23	0.56	163	3.95
TOTALS	2681	64.98	1445	35.02	4126	100.00

Analysis of international student enrolment revealed that Malawi had the largest Postgraduate Diploma enrolment (6, 13.63%) followed by Tanzania (5, 11.36%) and South Sudan (4, 9.09%). The lowest representation was recorded by Cote D'Ivoire (1, 2.27%), Ethiopia (1, 2.27%) and Liberia (1, 2.27%). Tanzania had the highest undergraduate representation (476, 13.96%) followed by South Sudan (376, 12.74%) and Uganda (276, 9.35%). The lowest undergraduate representation was by Vietnam (1, 0.03%), Yemen (1, 0.03%) and Niger (2, 0.07%). At Masters level, Nigeria (109, 11.26%) was leading followed by Ghana (77, 7.95%) and Tanzania (70, 7.23%). Other countries with low Masters student representation included Swaziland (1, 0.10%), Taiwan (1, 0.10%) and Tajikistan (1, 0.10%). At the doctorate level, Nigeria (28, 17.18%) had the highest representation followed by Tanzania (10, 6.13%) and South Africa (9, 5.52%). Countries with the least doctoral representation included Switzerland (1, 0.61%), Pakistan (1, 0.61%) and Ethiopia (2, 1.23%). Annex 42 provides more information.

4.6.9 Summary and implications of Enrolment by County and Country

Counties with larger populations in Kenya produced more university students. These include Kiambu, Uasin Gishu and Nakuru counties. However, marginalized counties representing the smaller communities in Kenya are least represented in Universities. These counties include Wajir, Mandera and Samburu counties. There is therefore need for the country to have strategies that would promote inclusivity regardless of the counties populace.

Far flung counties recorded the least number of students including Mandera County (249) followed by Wajir County (269), Lamu County (275), Tana River County (275), Isiolo County (383) and Samburu County (486). There is need to encourage students from these counties by providing supportive services and quality education to improve their

representation in Universities. There is also need to empower the girl child in the marginalized counties. This will ensure they are also adequately represented in higher education and further promote equity.

While the information on student enrolment from counties and countries of origin is critical, Universities lack effective mechanisms to collect this data. Substantive data about students' counties of origin in respective institutions is important for policy development.

From the foregoing discussion, it is evident that universities in Kenya have continued to attract students from other African countries and beyond. This is an encouraging trend and efforts should be put in place to further popularize local universities at the global scene.

Most of the international students were drawn from regional countries such as Uganda, Tanzania and South Sudan. As such, Kenya should maintain and endeavour to deepen this relationship so as to continue attracting even more students from these countries.

Majority of the international students were male and undertook undergraduate courses. Efforts should be put in place to encourage enrolment of international students at post graduate levels. To be able to comprehensively capture this type of data, this report recommends that all universities put in place a mechanism to exhaustively capture students enrolment details by county and country and for all academic levels. This will show a clear picture of the local universities' attractiveness to the rest of the world.

4.7 Enrolment of Students with Disabilities

The number of students with disabilities in the universities increased by 36.6% from 645 in 2015 to 881 in 2016. The majority were enrolled in public universities (786), representing 89.2% of the total number of students with disabilities enrolled, compared to 95 in private universities representing 10.8%. Table 4.12 shows that students with physical impairment were the highest enrolled at 53.3%, followed by students with visual impairment at 33.3% and hearing impairment at 8.1% of the total enrollment. The least number of students with disabilities had learning impairment representing 0.22% of the total students with disabilities enrolled.

Table 4.12***Enrolment of Student with Disabilities***

Category	Public Universities			Private Universities			Grand Total
	Male	Female	Total	Male	Female	Total	
Sensory Impairment	1	0	1	2	0	2	3
Mental Impairment	4	3	7	0	0	0	7
Visual Impairment	190	97	287	2	4	6	293
Hearing Impairment	44	18	62	4	5	9	71
Learning Impairment	0	0	0	1	1	2	2
Physical Impairment	265	134	399	37	34	71	470
Others	16	14	30	3	2	5	35
Grand Total	520	266	786	49	46	95	881

In terms of enrolment by gender in public universities, there were more male students enrolled representing 66.2% and female 33.8% of the total students with disabilities. Private universities enrolment was almost at par for both male and female students. Male enrolment was at 51.6% and female at 48.4% of the total students enrolled.

Chapter Five

Universities Academic Staff

5.1 Introduction

The value of any institution is its employees. Indeed, the quality and efficiency of an institutions human resource determines the quality of service or products produced by that institution. Therefore, institutions need to invest in their staff through incentives and development programmes for successful realization of their objectives.

Being the apex of the education ladder universities, are responsible for developing and nurturing the national human resource capacity required to provide necessary skills and competencies for economic development. In addition, they are required to generate new knowledge and develop new innovations and technologies that provide solutions to existing societal problems. These objectives can be achieved by ensuring universities have adequate and high quality human resource that will support the education vision of providing globally competitive and quality education, training and research as espoused in Vision 2030.

University staff are categorized into two broad categories: academic and non-academic. Kenya's Universities Act of 2012 defines an "academic staff" as a "person appointed to teach, train or to do research at a university and any other employee designated as such by the university council". Academic staff are tasked with the responsibility of creating, acquiring and transferring knowledge and information. This is done by transmitting knowledge through teaching as well as producing new knowledge through research. The combination of teaching and research by academic staff is expected to be complementary but the increase in enrolment in universities without a corresponding increase in academic staff has led to a negative bias towards research performance. Most academic staff have taken more teaching roles at the expense of research. Furthermore, the pressures of mass university education system in the country has also led to an increase in the number of universities without an additional increase in staffing thereby leading to universities reliance on part time academic staff to support teaching especially in new universities. Without enough time and resource universities cannot undertake the kind of research needed for transforming society.

The Universities Standards and Guidelines, 2014 require the ratio of fulltime to part time staff for the support of any academic programme to be 2:1. To achieve this, universities must develop programmes that expand their post graduate training for purposes of capacity building. Secondly, expansion of universities to provide access to university education should be matched with staff development programmes to provide the critically needed academic staff in the future.

Academic staff in universities are classified into six ranks depending on their qualifications and work experience i.e. Graduate Assistant, Assistant Lecturer, Lecturer, Senior Lecturer, and

Associate Professor and Professor. This chapter provides information on the qualifications and rank of academic staff in Universities in Kenya. It further probes into the various demographics of the academic staff. Data was collected from 30 public chartered universities, 5 public chartered universities constituent colleges, 18 private chartered universities, 4 private universities constituent colleges and 13 universities with letters of interim authority.

5.2 Academic Staff in Public and Private Universities

This section presents the aggregate number of academic staff disaggregated by gender. It sums up all staff from the level of professors, senior lecturers, lecturers, assistant lecturers, graduate assistants and other category of staff who support training activities such as technologists, technicians and lab attendants as declared by the universities.

Table 5.1

Academic Staff in Universities

Category	2015			2016			% Change
	Male	Female	Total	Male	Female	Total	
Public Universities	8,363	3,650	12,013	9,256	4,398	13,654	14
Private Universities	2,791	1,514	4,305	3,156	1,921	5,077	18
Total	11,154	5,164	16,318	12,412	6,319	18,731	15

Table 5.1 indicates the change in academic staff numbers between the year 2015 and 2016. The number of staff in both public and private universities increased 14% and 18% respectively.

Figure 5.1 shows the gender distribution among academic staff. It indicates that female academic staff represented 34% of the total academic staff in universities. The representation of female staff is slightly above the constitutional threshold implying that the university subsector is adhering to the constitutional requirement in their appointments of academic staff.

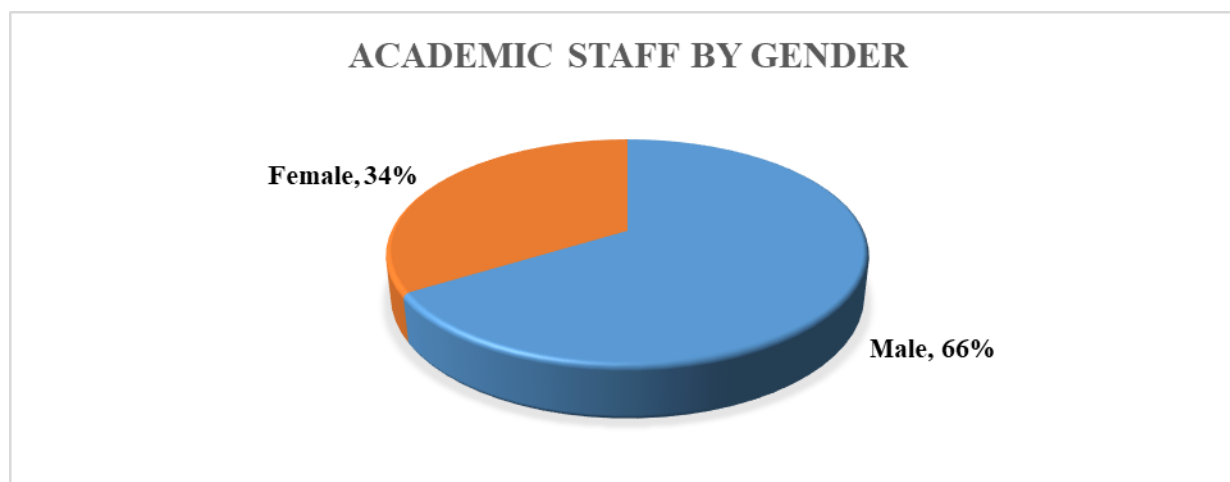


Figure 5.1 Percentage of academic staff by Gender

5.2.1 Academic staff by Gender in Public and Private Universities

Figure 5.2 shows the comparative data on gender representation of academic staff in either public or private universities. In public universities female represented 32% while in private universities female staff represented 38%. Private universities had a higher representation of female staff than public universities.

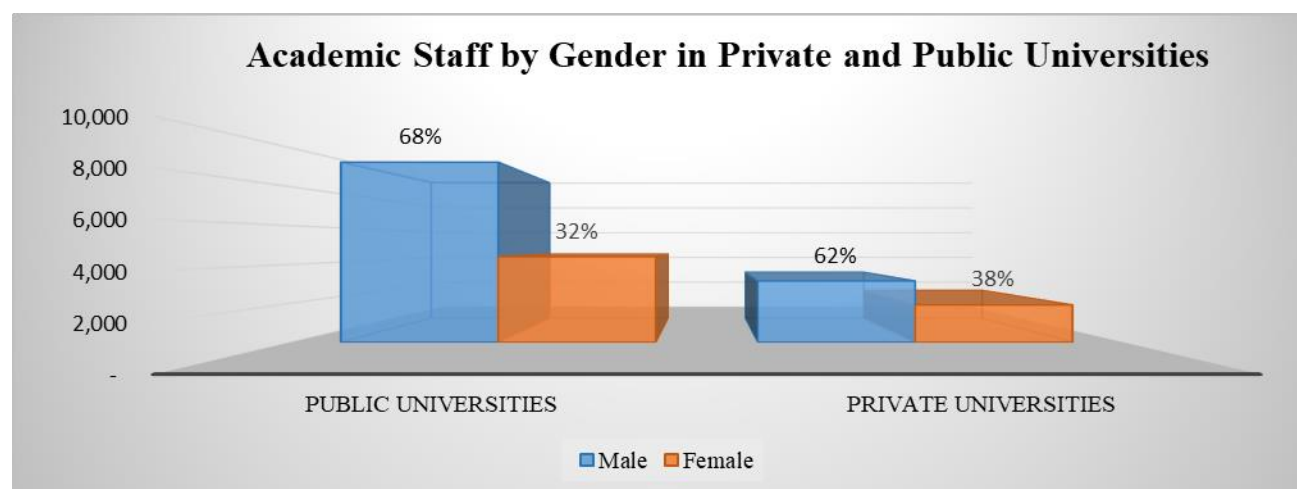


Figure 5.2 Academic staff by Gender in public and private Universities

5.2.2 Academic staff by Gender and University Category

Table 5.2 indicates number of academic staff and their gender representation among the different categories of universities.

Table 5.2
Academic Staff by Gender in the Different University Categories

Institution	Male	%	Female	%	Total
Public Chartered	9079	68	4340	32	13419
Public Universities Constituent Colleges	177	75	58	25	235
Private Chartered	2418	61	1540	39	3958
Private Universities Constituent Colleges	205	72	79	28	284
Universities with Letters of Interim Authority	533	64	302	36	835
Total	12412	66	6319	34	18731

Public and private chartered universities accounted for 93% of all academic staff. The number of academic staff across all the university categories shows a higher male representation than female.

5.3 Academic Staff by Qualification

Quality staff are an essential component of quality education. The Universities Standards and Guidelines, 2014 specify that “*the minimum academic qualifications of academic staff for a given level of academic programme shall be at least one level above what he or she is supposed to teach*”. This section provides information on the qualification of academic staff in universities. Figure 5.3 indicates that 53% of academic staff have a Masters qualification. This is commensurate with the higher enrolment of students at Bachelors degree who are mainly taught by Masters degree holders. The percentage of academic staff with PhD qualification was 32%. The representation of staff with higher levels of qualification at above 80% is an indicator of quality human resource capacity for teaching and research. Universities should strive to develop capacity of the staff through incentives such as scholarships and reduced workloads. This would enable staff to progress in their studies and achieve doctorate qualification especially those at lecturer rank without PhDs so as to comply with the University Standards and Guidelines, 2014, and enhance expertise in their fields to become producers of knowledge through research.

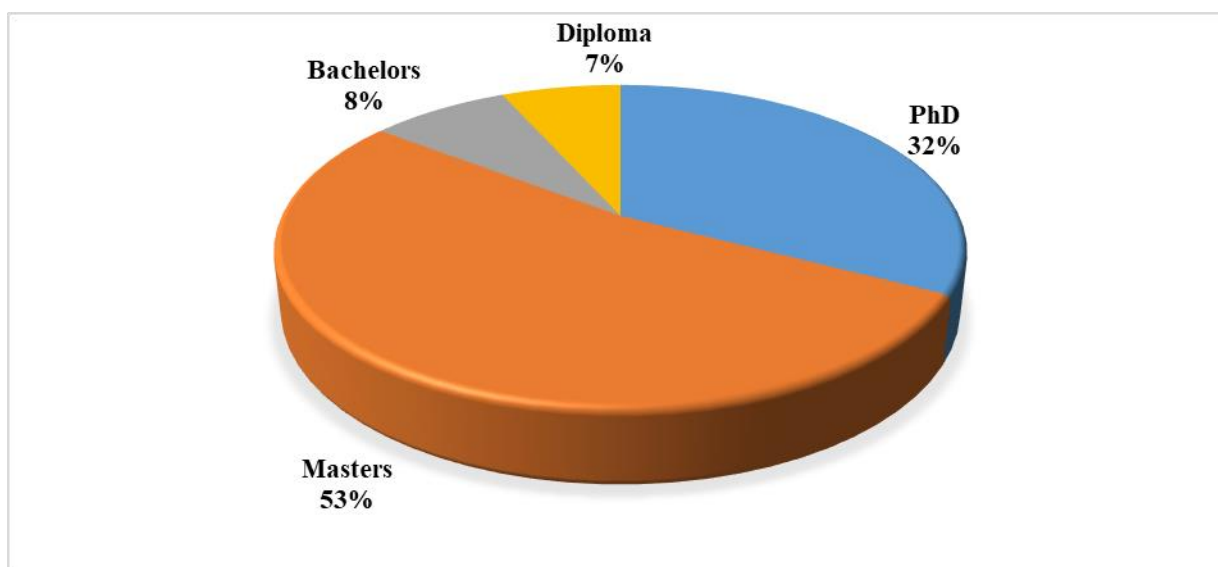


Figure 5.3 Academic staff by Qualifications

5.3.1 Academic staff by Gender and Qualification

To better understand the representation of university academic staff in terms of gender, the data was analyzed to depict the proportion of each qualification level by gender. Figure 5.4 indicates that, overall across all the qualification levels male academic staff had higher qualifications than their female colleagues. Among the proportion of all academic staff with PhD's, 71% were male while 21% female. This scenario is replicated across all the other qualification levels with male representation being over 60% at each qualification level. This situation is not peculiar as the percentage of male academic staff is higher than the female academic staff in universities as shown in Figure 5.1.

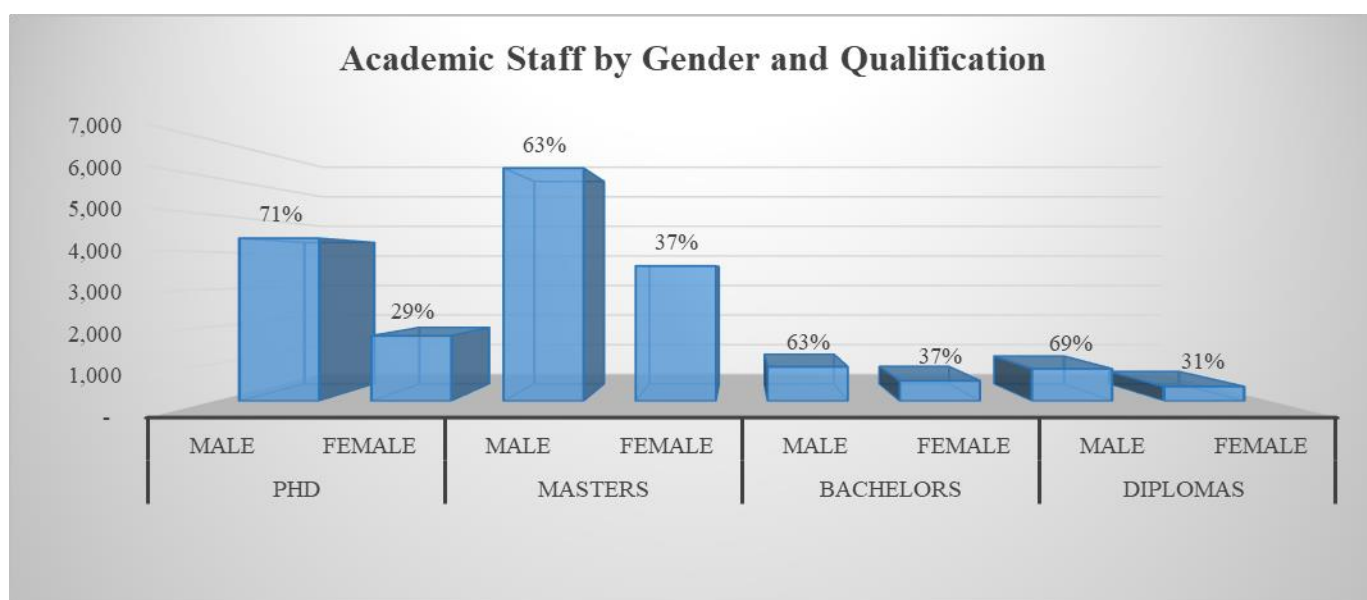


Figure 5.4 Academic Staff by Gender and Qualification

5.3.2 Comparison of Academic staff by Qualification between 2015 and 2016

The comparison between the year 2015 and 2016 already showed the number of staff increased by 2413 in 2016. Table 5.3 shows changes in academic staff by their level of qualification. There was an increase in academic staff across all qualification levels. The highest percentage increment in academic staff was at diploma level who increased by 92% from 656 in 2015 to 1259 in 2016. Academic staff with Master's qualification increased by 14%, while those with PhD and Bachelors qualifications increased by 9% and 8% respectively.

Table 5.3

Changes in Academic Staff by Qualification

Academic Staff by Qualification												
Category	PhD		% change	Masters		% change	Bachelors		% change	Diplomas		% change
	2015	2016		2015	2016		2015	2016		2015	2016	
Public Universities	4,348	4,713	8%	5,953	6,747	13%	1,104	1,007	-9%	608	1,187	95%
Private Universities	1,256	1,409	12%	2,740	3,134	14%	261	462	77%	48	72	50%
Total	5,604	6,122	9%	8,693	9,881	14%	1,365	1,469	8%	656	1,259	92%

5.4 Academic Staff by Rank

This section provides information on academic staff based on their ranks as stipulated in the Universities Standards and Guidelines, 2014 and the harmonized criteria for appointment and promotion of academic staff. These two policy documents state the minimum criteria for appointment/promotion of academic staff from the lowest rank of graduate assistant to the highest rank of professor. The information provided in Figure 5.5 shows the share of academic staff in each rank.

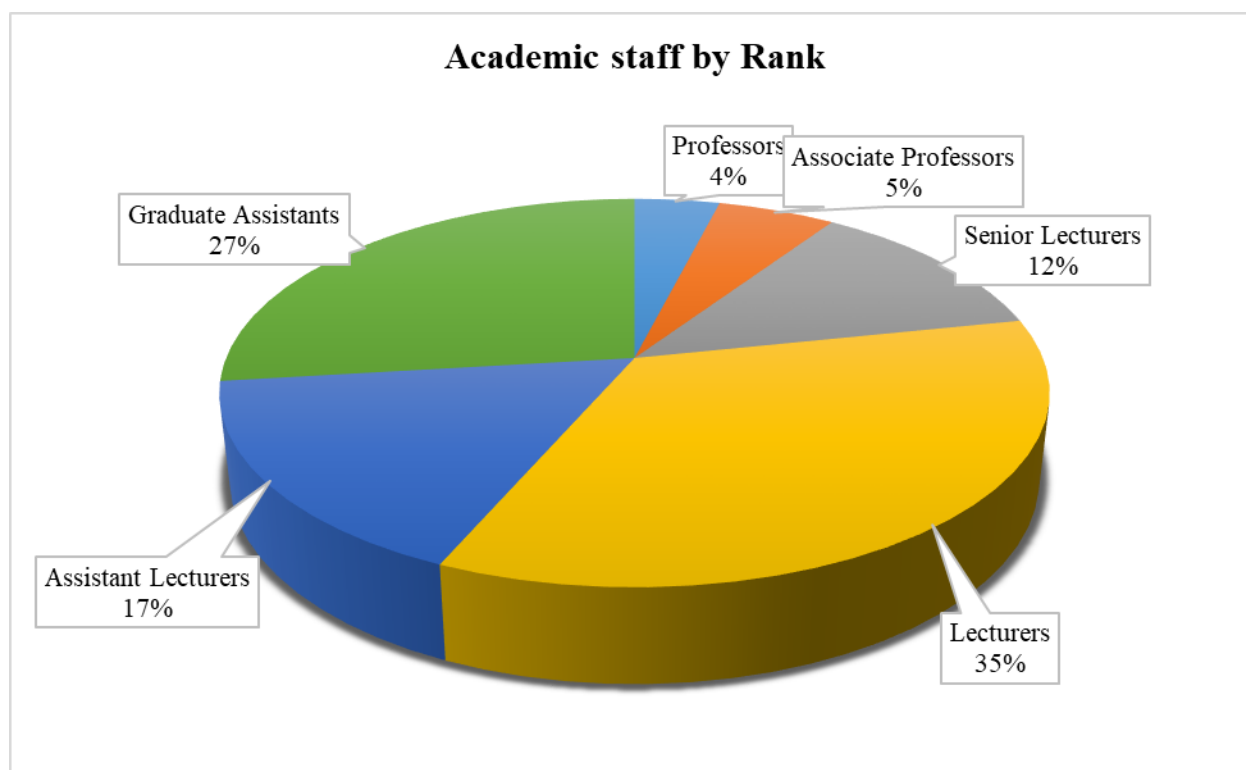


Figure 5.5 Academic staff by rank

From Figure 5.5 the share of academic staff at the rank of professor is the lowest at four (4) percent while the share of academic staff at the rank of lecturer was highest at 35%. The combined share of academic staff at senior ranks from senior lecturer to professor was at 21% while the other three ranks had a combined share of 79%.

5.4.1 Academic Staff by Rank in Public and Private Universities

A look into the distribution of staff between public and private universities shows that a large number of academic staff are in public universities at 13,258 compared to private universities which had 4,747. Based on the ranks of academic staff the data in Table 5.4 shows that both public and private universities had the highest number of academic staff at the rank of lecturer and the least at the rank of professor, though across all the ranks public universities academic staff were more than private universities academic staff.

Table 5.4

Academic staff by Rank

Category	Academic staff by Rank						
	Professors	Associate Professors	Senior Lecturers	Lecturers	Assistant Lecturers	Graduate Assistants	Total
Public Universities	557	802	1,497	4,279	2,651	3,472	13,258
Private Universities	153	177	721	1,989	335	1,372	4,747
Total	710	979	2,218	6,268	2,986	4,844	18,005

5.4.2 Academic Staff by Rank and Gender

The analysis also looked at the share of male to female academic staff at the different academic ranks. The information is presented in Figure 5.6 which indicates that the number of male academic staff across all the ranks was higher than that of females. The ranks of professor, associate professor and senior lecturer in both public and private universities showed a higher gender disparity than the ranks of lecturer, assistant lecturer and graduate assistant. This shows that as academic staff move to higher ranks the disparity between male and female academic staff widens.

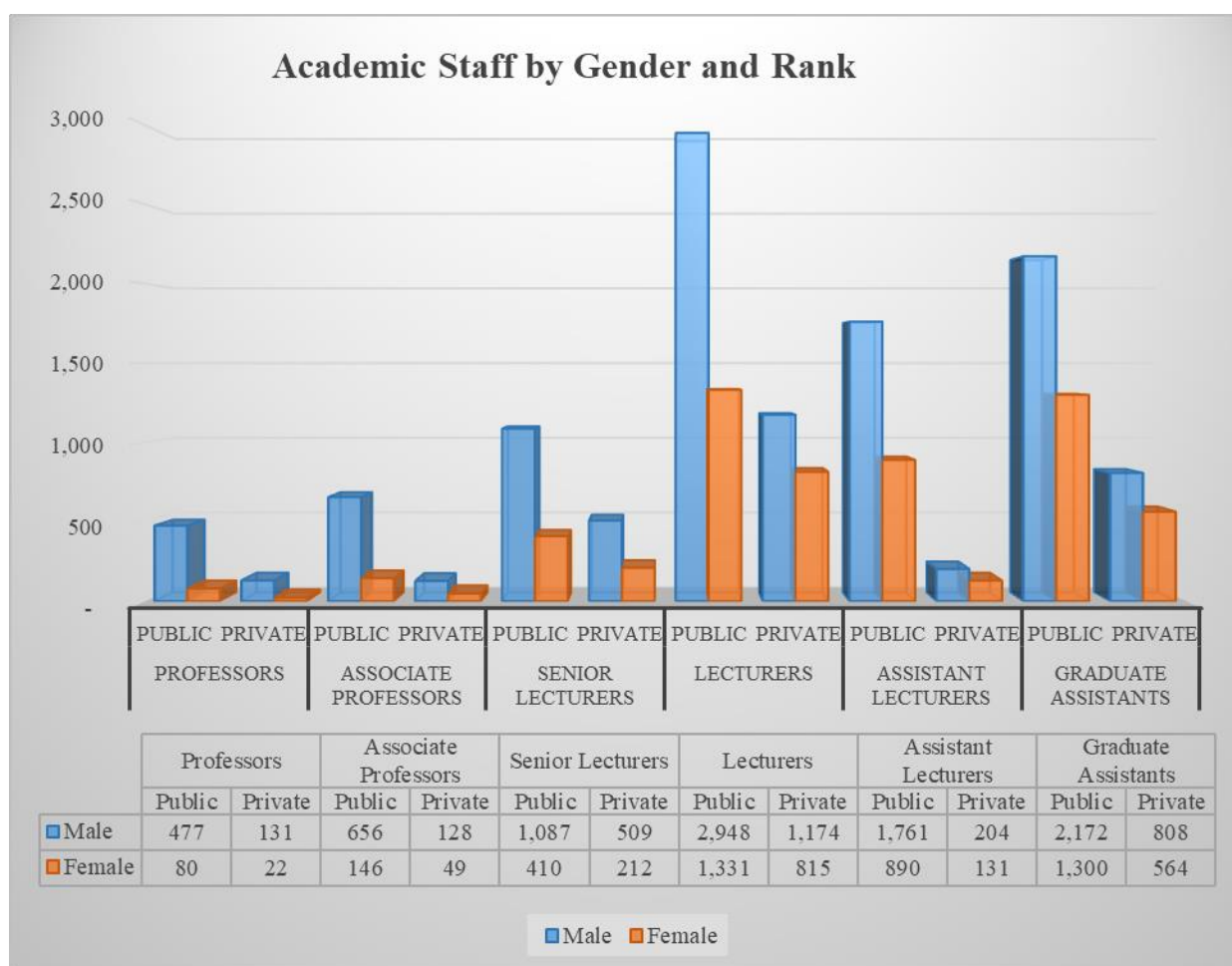


Figure 5.6 Academic Staff by Rank and Gender

5.4.3 Academic Staff by Rank and University Category

Table 5.5 is a summary of academic staff by university category. It shows that public chartered and private chartered universities have the highest number of academic staff while their constituent colleges of both public and private have the lowest number of academic staff. Among the university categories only public universities constituent colleges have the highest proportion at 56% of their academic staff at graduate assistant rank while the other categories have majority of their academic staff at lecturer level. The rank of professors and associate professors had the least proportion of academic staff across all the university categories at 8% and below.

Table 5.5***Academic Staff by Rank and University Category***

Category	Academic Staff by Rank and University Category						
	Professors	Associate Professor	Senior Lecturers	Lecturers	Assistant Lecturers	Graduate Assistants	Total
Public Chartered Universities	551	789	1,488	4,216	2,642	3,346	13,032
	4%	6%	11%	32%	20%	26%	100%
Public Universities Constituent Colleges	6	13	9	63	9	126	226
	3%	6%	4%	28%	4%	56%	100%
Private Chartered Universities	105	117	475	1,489	241	1,153	3,580
	3%	3%	13%	42%	7%	32%	100%
Private Universities Constituent College	20	22	76	88	57	14	277
	7%	8%	27%	32%	21%	5%	100%
Universities with letter of Interim Authority	28	38	170	412	37	205	890
	3%	4%	19%	46%	4%	23%	100%
Total	710	979	2,218	6,268	2,986	4,844	18,005

5.4.4 Comparison of academic staff by rank between the years 2015 and 2016

This section compares the academic staff numbers at the different ranks between the year 2015 and 2016 for both public and private universities. It shows whether during the one year period there have been some staff movement or appointments vertically in the different ranks. Figure 5.7 shows that at the rank of professor there was an increase in staff in both public and private universities. In order to make comparison with the analysis of 2015 professors and associate professors were merged for the data of 2016. Public university academic staff at the rank of professor increased by 24 to 1359 from 1335 while academic staff at the rank of professor in private universities increased by 10 from 320 to 330.

In public universities academic staff at the rank of senior lecturer decrease by 58 from 1555 to 1497 while in private universities they increased by 254 from 467 to 721. Academic staff at the rank of lecturer increased by 196 from 4101 to 4297 in public universities but in private universities the numbers declined by 17 from 2006 to 1989.

The rank of assistant lecturer had a huge decline in numbers of academic staff in both public and private universities with academic staff at this rank declining by 1167 in public and 981 in private universities from 3818 to 2651 and 1316 to 335 respectively.

The rank of graduate assistant was contrasting to assistant lecturer rank as this rank recorded an inflation of numbers. In public universities academic staff increased by 2570 from 902 to 3472 and in private universities they increased by 1234 from 138 to 1372.

The situation in the rank of graduate assistant and assistant lecturer rank had quite significant changes in staffing numbers. To understand the reason for the significant change in numbers requires additional information from universities. But one of the reasons might be attributed to the filling of information on part time staff in the data tool where one of the identified challenges was on how to rank some of their part time staff and also the phasing out of the rank of Assistant lecturer by the Harmonized Criteria and Guidelines for Appointments and Promotion of Academic Staff.

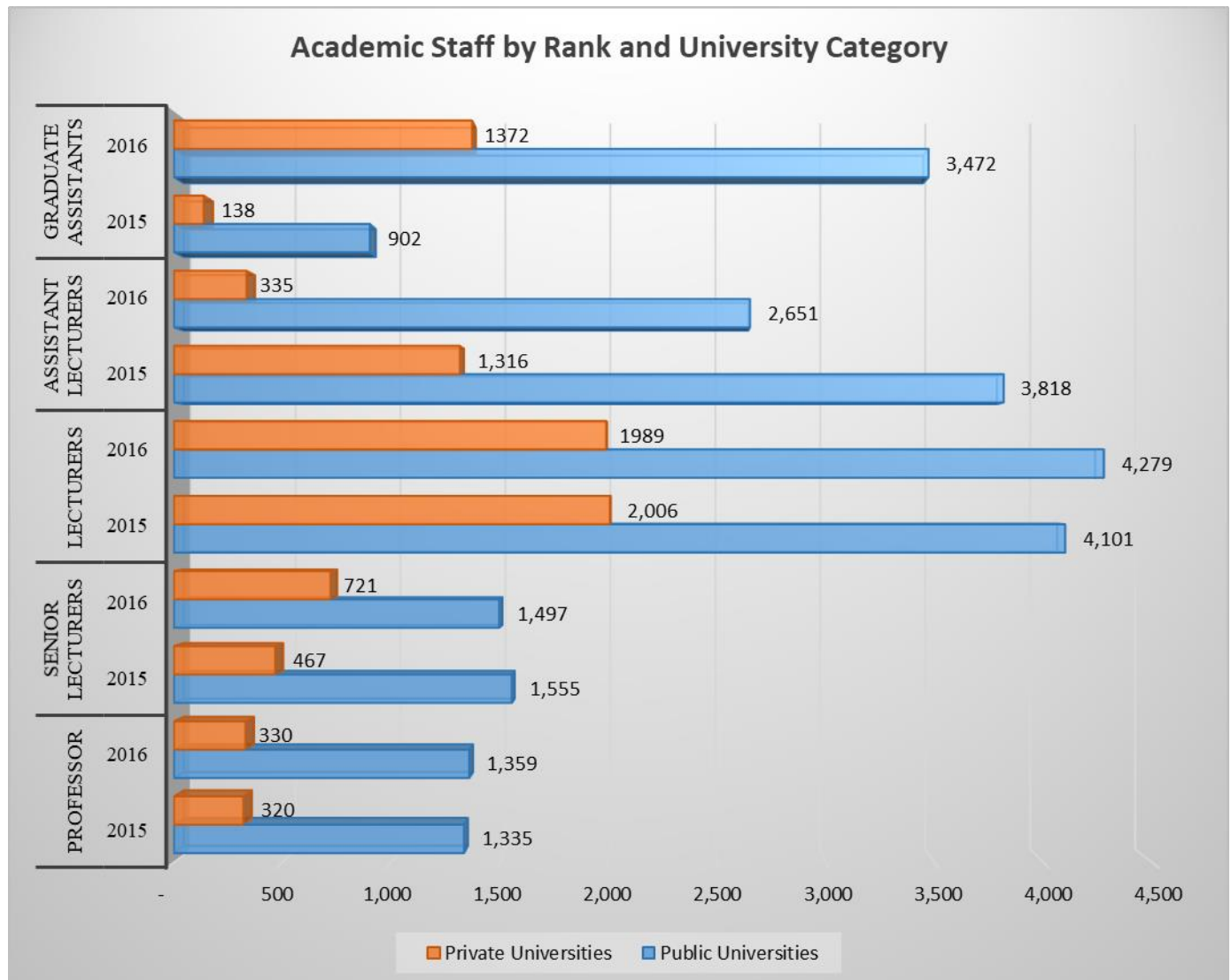


Figure 5.7 Academic Staff by Rank and University Category

5.5 Academic Staff by Programme Cluster

The Universities Standards and Guidelines stipulate that university academic programmes shall be supported by adequate full-time staff holding requisite academic qualifications. This section provides information on the number of academic staff for each academic programme domain. The information on academic staff presented is inclusive of part time academic staff.

5.5.1 Academic Staff by Gender and Programme Cluster

Academic staff under each programme domain is as shown in Table 5.6. From the table the programme domains with the highest proportion of academic staff were Business and Administration, Humanities and Arts and Health and Welfare whose proportion of staff to the total academic staff was 16%, 12% and 11% respectively. Those programme clusters with the least number of staff were Manufacturing, Architecture, Security and Conflict Resolution whose proportion of staff to the total academic staff was 1 percent and below.

Academic staff in terms of gender representation in each programme clusters was analyzed and the ratios of male to female academic staff in each programme cluster was calculated. The analysis indicated that though the overall ratio of male to female academic staff was 2:1 some programme domains had much higher ratios. Engineering programme domain had the highest male to female ratio of academic staff of 6:1. Programme clusters with male to female ratio above the overall ratio at 3:1 were Agriculture, Livestock and Fisheries, Computing and ICT, Mathematics and Statistics and Security and Conflict Resolution. This analysis shows that programmes in STEM had low numbers of female academic staff.

Table 5.6***Academic Staff by Gender and Programme Cluster***

University Staffing by Programme					
Programme Domain	Sex		Ratio	Total 2016	Percent
	M	F			
Agriculture, Livestock and Fisheries	721	264	3:1	985	5%
Architecture	170	76	2:1	246	1%
Business and Administration	1,952	1,014	2:1	2,966	16%
Computing and ICT	770	235	3:1	1,005	6%
Education (Arts)	947	652	1:1	1,599	9%
Education (Science)	321	136	2:1	457	3%
Engineering	880	155	6:1	1,035	6%
Environment and Forestry	308	137	2:1	445	2%
Health and Welfare	1,239	796	2:1	2,035	11%
Humanities and Arts	1,436	783	2:1	2,219	12%
Journalism and Information	286	215	1:1	501	3%
Law	174	146	1:1	320	2%
Life Science and Physical Science	1066	436	2:1	1502	8%
Manufacturing	17	17	1:1	34	0%
Mathematics and Statistics	551	179	3:1	730	4%
Security and Conflict Resolution	97	35	3:1	132	1%
Services	232	172	1:1	404	2%
Social and Behavioral Science	499	329	2:1	828	5%
Teacher Training	137	95	1:1	232	1%
Other	252	78	3:1	330	2%
Grand Total	12,055	5,950	2:1	18,005	100%

5.5.2 Academic Staff by Rank and Programme Cluster

A breakdown of academic staff in each programme cluster by their ranks is presented in Table 5.7. The analysis indicates that all programme domains have the highest proportion of their academic staff at the rank of lecturer. The programme domain of Agriculture, Livestock and Fisheries had the largest proportion of academic staff in the rank of professor at 10%. The highest proportion of staff in all programme clusters were in the lecturer rank except for Education (Science) which had its highest proportion of academic staff at the rank of graduate assistants. Academic staff at the rank of lecturer and below represented the highest percentage of staff supporting academic programmes in universities.

Table 3.7

Academic Staff by Rank and Programme Cluster

University Staffing by Programme								
		Professors	Associate professors	Senior Lecturers	Lecturers	Assistant Lecturers	Graduate Assistants	Total
School and program								
1	Agriculture, Livestock and Fisheries	99	122	125	304	126	209	985
		10%	12%	13%	31%	13%	21%	100%
2	Architecture	3	14	28	112	17	72	246
		1%	6%	11%	46%	7%	29%	100%
3	Business and Administration	31	77	302	1048	638	870	2966
		1%	3%	10%	35%	22%	29%	100%
4	Computing and ICT	17	22	63	321	276	306	1005
		2%	2%	6%	32%	27%	30%	100%
5	Education (Arts)	53	73	203	643	238	389	1599
		3%	5%	13%	40%	15%	24%	100%
6	Education (Science)	5	11	39	119	122	161	457
		1%	2%	9%	26%	27%	35%	100%
7	Engineering	47	81	122	281	190	314	1035
		5%	8%	12%	27%	18%	30%	100%
8	Environment and Forestry	11	16	53	166	80	119	445
		2%	4%	12%	37%	18%	27%	100%
9	Health and Welfare	112	134	329	842	150	468	2035
		6%	7%	16%	41%	7%	23%	100%
10	Humanities and Arts	80	144	303	785	364	543	2219
		4%	6%	14%	35%	16%	24%	100%
11	Journalism and Information	10	11	60	227	60	133	501
		2%	2%	12%	45%	12%	27%	100%
12	Law	3	14	46	176	35	46	320
		1%	4%	14%	55%	11%	14%	100%
13	Life Science and Physical Science	111	130	209	503	227	322	1502
		7%	9%	14%	33%	15%	21%	100%
14	Manufacturing	1	1	1	5	9	17	34
		3%	3%	3%	15%	26%	50%	100%
15	Mathematics and Statistics	30	31	50	179	185	255	730
		4%	4%	7%	25%	25%	35%	100%
16	Security and Conflict Resolution	0	3	17	39	38	35	132
		0%	2%	13%	30%	29%	27%	100%
17	Services	2	12	11	60	51	268	404
		0%	3%	3%	15%	13%	66%	100%
18	Social and Behavioral Science	41	53	128	295	82	229	828
		5%	6%	15%	36%	10%	28%	100%

19	Teacher Training	13	15	38	95	52	19	232
		6%	6%	16%	41%	22%	8%	100%
20	Other	40	16	91	68	46	69	330
		12%	5%	28%	21%	14%	21%	100%
Total		709	980	2218	6268	2986	4844	18005
		4%	5%	12%	35%	17%	27%	100%

5.5.3 Student to Academic Staff Ratios

The student to academic staff ratio is the number of students enrolled in a university divided by the number of fulltime staff teaching in a university. It is one of the indicators used to measure quality of education provided to students. The aspiration is to have a low student to staff ratio in order to have a better educational experience for learners since they will have a more interactive session while learning and may get feedback relatively quicker.

This section presents information on the national student to academic staff ratio and the indicative ratios for each programme domain. It also establishes the level of compliance to the recommended ratios as per the Universities Standards and Guidelines PROG/STD/17 which recommends the student to full time academic staff ratio as follows;

Applied Sciences	-	1:10
Arts and Humanities	-	1:15
Medical and Allied Sciences	-	1:7
Pure and Natural Sciences	-	1:10
Social Sciences	-	1:18

It should be noted that the student to staff ratios calculated in Table 5.8 includes fulltime and part time academic staff in the analysis.

The national student to academic staff ratio was 30:1. The programme clusters with the highest student to academic staff ratio were education (arts) at 68:1 Security and Conflict Resolution at 63:1, Education (Science) at 55:1 and Business and Administration at 49:1. The lowest ratio was 16:1 under the programme of Social and Behavioral Sciences.

Table 5.8***Student to Staff Ratio***

School and program		Student Enrolment	Staff	Student to Staff Ratio
1	Agriculture, Livestock and Fisheries	32,747	985	33:1
2	Architecture	6,300	246	26:1
3	Business and Administration	144,318	2,966	49:1
4	Computing and ICT	21,555	1,005	21:1
5	Education (Arts)	108,533	1,599	68:1
6	Education (Science)	25,015	457	55:1
7	Engineering	22,237	1,035	21:1
8	Environment and Forestry	13,031	445	29:1
9	Health and Welfare	33,444	2,035	16:1
10	Humanities and Arts	43,526	2,219	20:1
11	Journalism and Information	16,835	501	34:1
12	Law	10,520	320	33:1
13	Life Science and Physical Science	22,353	1,502	15:1
14	Manufacturing	694	34	20:1
15	Mathematics and Statistics	16,154	730	22:1
16	Security and Conflict Resolution	8,364	132	63:1
17	Services	8,474	404	21:1
18	Social and Behavioral Science	13,190	828	16:1
19	Teacher Training	-	232	-
20	Other	26	330	-
		547,316	18,005	30:1

Further analysis was done to find out whether universities are adhering by the ratios as stipulated in the Universities Standards and Guidelines PROG/STD/17. To determine the ratios as per the Universities Standard and Guidelines, 2014 the programme domains were again clustered in the five clusters as provided in Table 5.9. Though the Universities Standard and Guidelines, 2014 stipulate the measurement of student to academic staff ratio be measured against full time academic staff, the ratios shown in table 5.10 was inclusive of both full time and part time academic staff.

Table 5.9***Programme Clusters***

S/no	Clusters as per University Standards and Guidelines	Programme Clusters
1	Applied Sciences	1. Agriculture, Livestock and Fisheries 2. Architecture 3. Computing 4. Engineering 5. Environment 6. Manufacturing 7. Mathematics and Statistics
2	Arts and Humanities	8. Business and administration 9. Education (Arts) 10. Humanities and Arts 11. Journalism and Information 12. Law 13. Services 14. Teacher Training
3	Medical and Allied Sciences	15. Health and Welfare
4	Pure and Natural Sciences	16. Education (Science) 17. Life Science and Physical Science
5	Social Sciences	18. Security and Conflict Resolution 19. Social and Behavioral Science 20. Other

Table 5.10 indicates that even with the inclusion of part time academic staff in the analysis only programmes under the social sciences cluster met the recommended student to academic staff ratio of 18:1. Programmes in the humanities and arts cluster had the highest ratio at 40:1 against the recommended threshold of 15:1, applied science and pure and natural sciences had ratios above the recommended threshold of 10:1 with 25:1 and 24:1 ratios respectively and medical and applied sciences had a ratio of 16:1 against the threshold of 07:1. This scenario is mainly due to the increase in number of universities and programmes without a corresponding increase in staffing. Of note is that the analysis took into account part time staff to calculate the ratios and still the ratio of students to academic staff was achieved in only one cluster.

Table 5.10***Student to Staff Ratio***

S/no	Cluster	Enrolment	staff	Threshold	Current Ratio
1	Applied Sciences	112,718	4,480	10:1	25:1
2	Arts and Humanities	332,206	8,241	15:1	40:1
3	Medical and Allied Sciences	33,444	2,035	07:1	16:1
4	Pure and Natural Sciences	47,368	1,959	10:1	24:1
5	Social Sciences	21,580	1,290	18:1	17:1
Total		547,316	18,005		30:1

5.6 Summary and Implication of the Findings for Kenya's University Education Sub-Sector

The analysis on academic staff provides a general overview of the number of academic staff, their gender and how they are distributed in the different programme domains. It also tries to look at the quality of academic staff employed in universities based on their highest qualifications.

The biggest proportion of academic staff in the sub sector are holders of masters and PhD qualifications. This corresponds to the enrolment numbers that show that majority of students are enrolled in degree programmes. This is an indicator that universities have employed quality staff who contribute to the provision of quality university education in line with PROG/STD/17 (4) which states that *“the minimum academic qualifications of academic staff for a given level of academic programme shall be at least one level above what he or she is supposed to teach as provided”*.

Academic staff numbers increased from the previous year though this was not matching to the increase in number of programmes and enrollment. The number of academic staff vis-à-vis the programmes and enrollment show that we are mounting more programmes and enrolling more students in universities without a corresponding increase in staffing. This implies increased workload for staff; Over reliance on part time staff for teaching; Biasedness towards research as academic staff concentrate with teaching at the expense of research. This will impact negatively on the quality of university education.

Appointments of academic staff in universities adheres to the constitutional threshold of two third gender rule in appointment. But a further analysis shows that as staff move to higher academic ranks the gender parity widens above the recommended threshold at higher ranks. The higher ranks of senior lecturer to professor represented the lowest proportion of staff in all the

programme domains. Additionally, the ratio of male to female academic staff in STEM related programme domains was higher than the national average ratio of 2:1.

Academic staff in the rank of assistant lecturer reduced significantly while those in the rank of graduate assistant increased significantly. Universities are slowly realigning to the recommended grading of academic staff in line with Harmonized Criteria and Guidelines for Appointment and Promotion of Academic Staff as the number of academic staff in the rank of assistant lecturer are decreasing. Universities are not meeting the recommended student to academic staff ratios of the different clusters as stipulated in the Universities Standards and Guidelines even with the inclusion of part time academic staff in the calculations. Only one cluster i.e. social sciences met the recommended threshold. The high student to academic staff ratios in some clusters even with the inclusion of part time staff in the analysis will impact negatively on the quality of university education.

Chapter Six

University Graduations

6.1 Introduction

This chapter discusses graduation rates in four academic levels; Bachelors, Postgraduate Diploma, Masters and PhD levels in all universities categorized as public chartered universities, public universities constituent colleges, private chartered universities, private universities constituent colleges and universities with Letters of Interim Authority (LIA) for the academic years 2015 and 2016 respectively. Data on graduation numbers was provided by twenty five (25) public universities, 1 public university constituent college, 17 private chartered universities, 4 private universities constituent colleges and 7 universities with Letters of Interim Authority.

6.2 Total Graduations in all Universities

Graduations grew from 80,317 in the year 2015 to stand at 88,773 in the year 2016 registering a 10% increase. In terms of gender, male graduates were 44,062 in 2015 rising to 48,555 in 2016 registering 10% growth rate while their female counterparts increased to 40,218 in 2016 down from 36,255 accounting for 10% growth rate as well. During year 2016, males represented 54% of the total while female accounted for 46% as indicated in Figure 6.1.

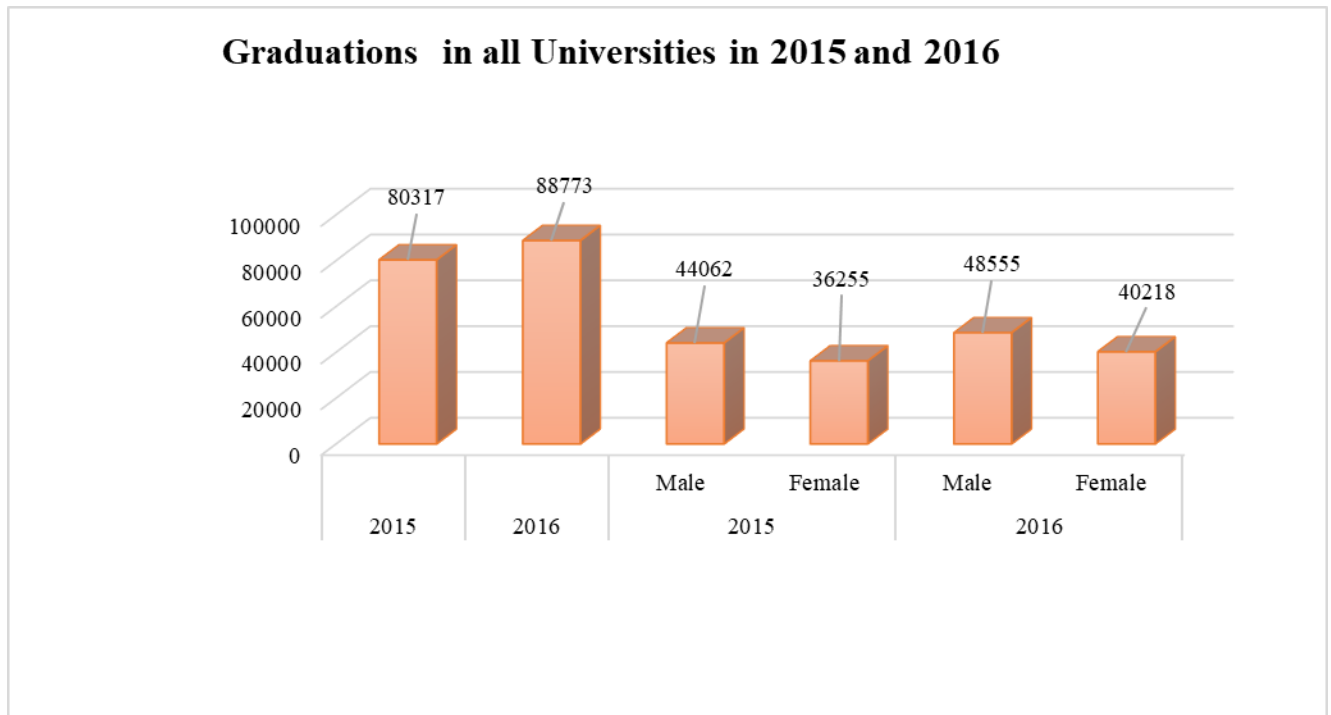


Figure 6.1 Graduations by Gender in all Universities

6.3 Graduations by in Public and Private Universities

Public universities registered 58,564 graduates in 2015 with year 2016 producing 64,451 graduates posting 10% growth rate. Private universities also saw almost similar growth rate of 11% from 21,753 to 24,322 respectively.

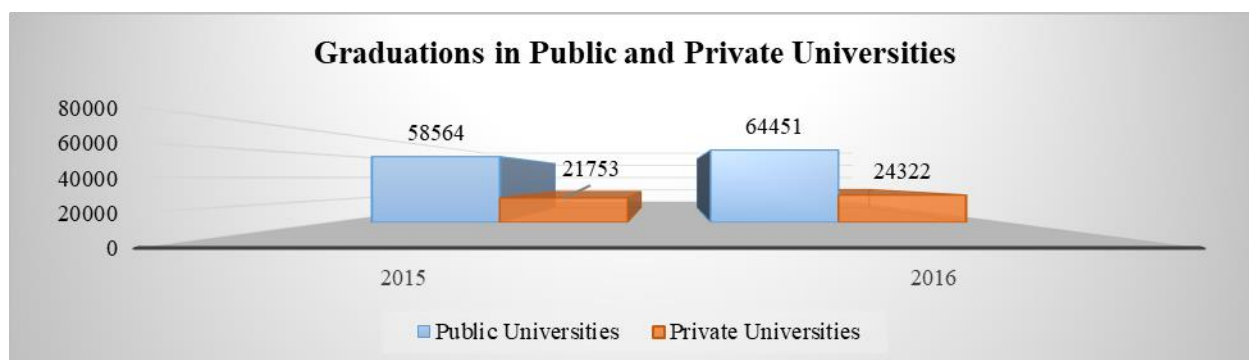


Figure 6.2 Graduations in Public and Private Universities

6.4 Graduations by Gender in Public and Private Universities

Male graduates in public universities increased from 33,567 in year 2015 to stand at 36,706 in the following year 2016 while female counterparts also registered an increase from 24,997 to 27,745 respectively. Private universities also witnessed a growth in completion rates by gender with 10,495 males graduating in 2015 as compared to 11,849 in the succeeding year 2016. Female counterparts had the same trend as 11,258 graduated in 2015 with 12,473 graduating in 2016. Figure 6.3 shows this information.

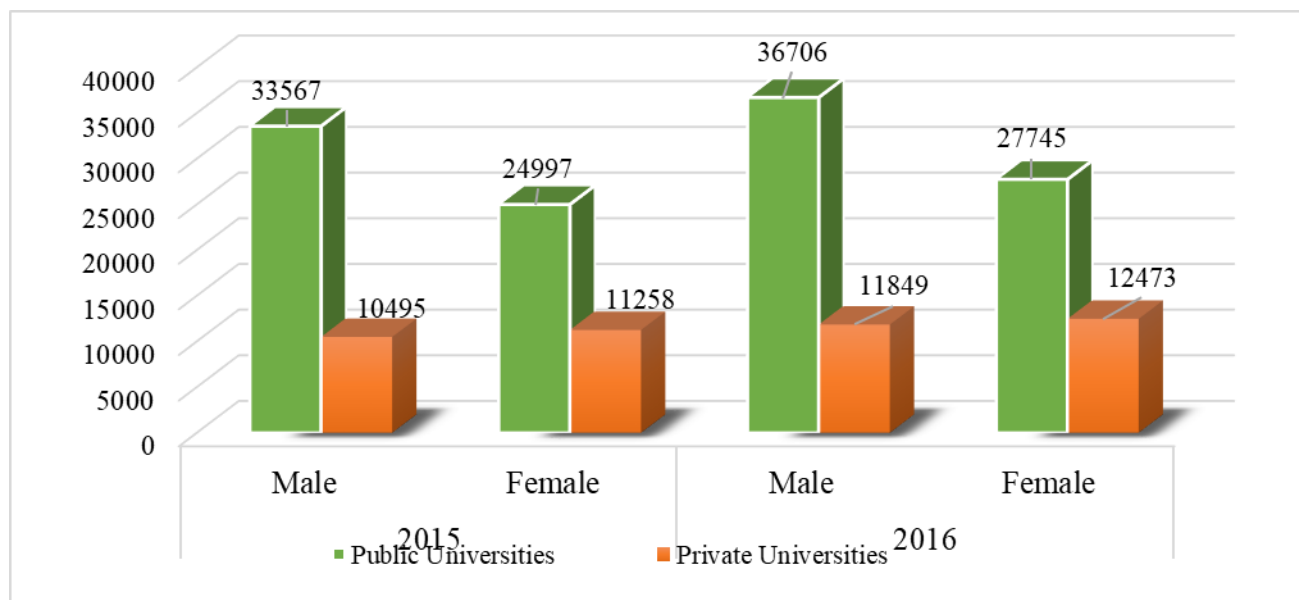


Figure 6.3 Graduations by Gender in Public and Private Universities

6.5 Graduations per University Category

Public Chartered universities accounted for 64,443 graduations in 2016 as 2015 saw 58,564 followed by Private universities registering 23,047 in 2016 up from 20,885 witnessed in the preceding year 2015. Private Universities Constituent Colleges together with Universities with LIA also recorded a remarkable growth in the period as indicated in Figure 6.4.

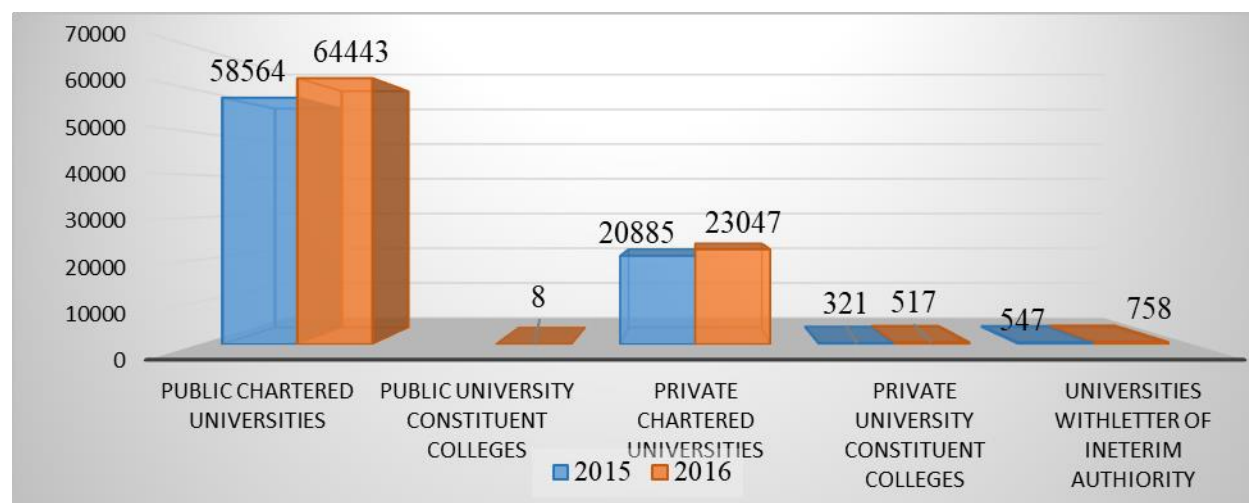


Figure 6.4 Graduations by University Category

6.5.1 Graduations by University Category and Gender

Public chartered universities registered 33,567 males in 2015 as compared to 36,699 while females counter parts went up from 24,997 in 2015 to 27,744 in 2016 respectively. Private chartered universities experienced the same scenario but with females exceeding males as 10,908 and 11,809 graduated in 2015 and 2016 respectively with males accounting for 9,977 and 11,242 in 2015 and 2016 respectively. Other university categories similarly had the same upward trends depicted in Table 6.1.

Table 6.1

Graduations by University Category and Gender

University Category	Year					
	2015			2016		
	Male	Female	Total	Male	Female	Total
Public Chartered Universities	33567	24997	58564	36699	27744	64443
Public University Constituent Colleges				7	1	8
Private Chartered Universities	9977	10908	20885	11242	11805	23047
Private University Constituent Colleges	219	102	321	320	197	517
Universities with Letter of Interim Authority	299	248	547	287	471	758

6.6 Graduations by Level in Public and Private Universities

The number of graduates at undergraduate level took the biggest share with 70,075 and 77,515 having graduated in 2015 and 2016 respectively. Masters level saw a decrease from 9,046 in 2,015 to 8,438 in 2016. Postgraduate Diploma (PGD) registered 663 and 2,020 in 2015 and 2016 with PhD having 533 and 700 in the period respectively as shown in Figure 6.5.

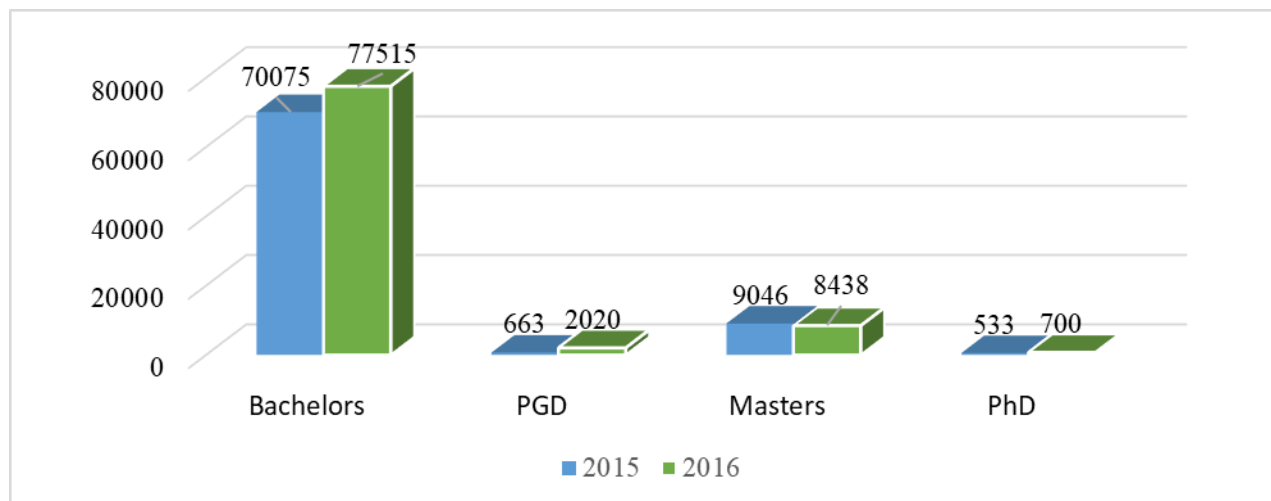


Figure 6.5 Graduations by Level in Public and Private Universities

6.7 Graduations by Level and Gender in Public Chartered Universities

Table 6.2 shows that in 2015 graduated males stood at 29,075 against 31,810 in 2016 while females accounted for 21,870 in 2015 as in 2016 the number stood at 24,483. Masters level followed with the majority of the graduation across universities. However, the graduations decreased in 2016 to stand at 3,602 for males against 3,936 registered in 2015. Female numbers also dropped from 2,690 in 2015 to settle at 2,549 in 2016. Other levels registered improvement during the period with PGD having a remarkable increase of males in 2016 to stand at 1,039 up from 245 in 2015. PhD level saw 311 male graduations in 2015 as compared to 355 of 2016. Females stood at 227 in 2016 up from 181 in the preceding year, 2015.

Table 6.2

Graduations by Level and Gender in Public Chartered Universities

Award	2015			2016		
	Male	Female	Total	Male	Female	Total
Bachelors	29075	21870	50945	31810	24483	56193
PGD	245	256	501	1039	486	1525
Masters	3936	2690	6626	3602	2549	6151
PhD	311	181	492	355	227	582

6.8 Graduations by Level and Gender in Private Chartered Universities

Bachelors level had the greatest proportion; male graduations in 2015 accounted for 29,075 while in 2016 it registered 31,810 with female numbering 21,870 in 2015 and 24,438 in 2016. In Masters level, it was observed that the graduation numbers came down during the period; during year 2015 male graduation stood at 1,313 while in 2016, the number dropped to 1,160. Further, female counterparts dropped from 1,021 in 2015 to settle at 988 in the year 2016. Both PGD and PhD registered improvement between the years and within the gender. Table 6.3 gives this information.

Table 6.3

Graduations by Level and Gender in Private Chartered Universities

Award	2015		Total	2016		Total
	Male	Female		Male	Female	
Bachelors	8536	9819	18355	9835	10606	20441
PGD	106	50	156	196	144	340
Masters	1313	1021	2334	1160	988	2148
PhD	23	18	41	51	69	120

6.9 Graduation by Level and Gender in Private Universities Constituent Colleges

Bachelors males graduation increased by 25% from 208 in 2015 260 in the following year 2016 while female graduations in the same level also saw a growth rate of 62% from 100 registered in 2015 to 162 in 2016. Masters level experienced a tremendous improvement on both males and females. Females increased from 2 in 2015 to 35 in the succeeding year 2016 while their male counterparts increased from 11 in 2015 to 60 in 2016. During the two periods there were no graduations in PhD and Postgraduate Diploma levels. This information is depicted in Table 6.4.

Table 6.4

Graduation by Level and Gender in Private Universities Constituent Colleges

Award	2015		Total	2016		Total
	Male	Female		Male	Female	
Bachelors	208	100	308	260	162	362
PGD	-	-	-	-	-	-
Masters	11	2	13	60	35	95
PhD	-	-	-	-	-	-

6.10 Graduations by Level and Gender in Universities with Letters of Interim Authority

Bachelors' level graduations rose by 19.4% from 468 in 2015 to 559 recorded in year 2016. In terms of gender on the same level, males graduation declined by 6% from 241 of 2015 to 226 in 2016 while females inclined by 47% to stand at 333 in 2016 from 227 that of 2015 respectively. Masters level graduations recorded a drop of 40% from 73 registered in 2015 to 44 of 2016. In regard to gender males saw a reduction of 59% from 54 recorded in 2015 to 22 that of 2016. Female counterparts had slight increase of 16% from 19 of 2015 to 22 of 2016 respectively. Postgraduate Diploma realized a significant increase from 6 of 2015 to settle at 152 in 2016 with females moving from 2 to 116 as males climbed from 4 to stand at 36 in 2016. There were no PhD graduations recorded in both years of study as shown in the Table 6.5.

Table 6.5

Graduations by Level and Gender in Private Universities with Letters of Interim Authority

Award	2015		Total	2016		Total
	Male	Female		Male	Female	
Bachelors	241	227	468	226	333	559
PGD	4	2	6	36	116	152
Masters	54	19	73	22	22	44
PhD						
Total	299	248	547	284	471	755

6.11 Graduations by Gender and Cluster and in Public and Private Universities

Table 6.6 indicates that in Public universities only four clusters of twenty accounted for majority of the graduates at 56% in 2016. Business and Administration took up 23% (15,013) followed by Education Arts at 17% (11,359), as Humanity and Arts garnered 10% (7,066) while Life Science and Physical Science registered 6% (4,177). Other clusters were Manufacturing with 0.13% (84), Law 1% (953) Architecture posted 1% (918), Computing and ICT 3% (2,212), Agriculture 4% (3,085) and Engineering 5% (3,341).

During the year a similar observation to that of Public Universities was noted in Private universities with only two clusters producing 60% of the graduates. Business and Administration represented 34% (8,271) while Education Arts represented 26% (6,352). Other observations made were that there were no graduations in clusters such as Architecture and Manufacturing while Engineering scored the lowest 0.04% (9), Life Science and Physical Science 0.22% (53), Agriculture, Livestock and Fisheries 0.3% (70).

Table 6.6***Graduations by Cluster and Gender in Public and Private Universities***

Cluster	Public Universities			Private Universities		
	Male	Female	Total	Male	Female	Total
Agriculture, Livestock and Fisheries	1842	1243	3085	50	20	70
Architecture	616	302	918	-	-	-
Business and Administration	8222	6799	15013	3926	4345	8271
Computing and ICT	1713	499	2212	1078	610	1688
Education (Arts)	5715	5644	11359	2886	3466	6352
Education (Science)	1911	897	2808	666	364	1030
Engineering	2809	532	3341	9	0	9
Environment and Forestry	657	435	1092	29	33	62
Health and Welfare	1630	1561	3191	726	991	1717
Humanities and Arts	3189	3877	7066	774	689	1463
Journalism and Information	837	783	1620	215	471	686
Law	444	509	953	231	222	453
Life Science and Physical Science	2574	1603	4177	25	28	53
Manufacturing	63	21	84	-	-	-
Mathematics and Statistics	1674	873	2547	38	57	95
Security and Conflict Resolution	589	247	836	375	136	511
Services	317	442	759	8	27	35
Social and Behavioral Sciences	1311	1064	2375	370	670	1040
Other	593	414	1007	477	395	872
Total	36706	27745	64451	11849	12473	24322

6.12 Graduations by Cluster and Level in Public and Private Universities

Table 6.7a represents marginal totals per cluster as percentage of the total graduations in the year 2016. The table reveals that three clusters constituted 54% of the total graduations with the highest being Business and Administration at 26%, Education (Arts) at 19% and Humanities and Arts at 9%. Health and Welfare which includes Doctors, Nurses, Nutritionists/Dieticians and Paramedics registered 5%. Agriculture, Livestock and Fisheries which is considered a catalyst of the National economy represented 3% of the graduations. Other clusters which had low tallies were Service and Manufacturing with 0% each, Architecture, Law, Environment and Forestry and Security and Conflict Resolution secured 1% each. Mathematics denoted as common denominator indicated 2% while Computing and ICT regarded as platform for technological advancement scored 4% with Education (Science) also registering 4%.

Table 6.7a*Graduations by Cluster and Level in Public and Private Universities*

Clusters	Graduation awards				Total	Marginal total as % of the total
	Bachelors	PGD	Masters	PhD		
Agriculture, Livestock and Fisheries	2880	13	224	38	3155	3
Architecture	873		43	2	918	1
Business and Administration	19029	658	3411	194	23292	26
Computing and ICT	3504	149	232	15	3900	4
Education (Arts)	16131	317	1184	79	17711	19
Education (Science)	3682	5	148	3	3838	4
Engineering	2976	268	100	6	3350	3
Environment and Forestry	1044	9	83	18	1154	1
Health and Welfare	4318	3	552	35	4908	5
Humanities and Arts	7194	205	995	84	8478	9
Journalism and Information	2160		140	6	2306	2
Law	1330		70	6	1406	1
Life Science and Physical Science	3700	162	315	53	4230	4
Manufacturing	83			1	84	0
Mathematics and Statistics	2316	212	95	19	2642	2
Security and Conflict Resolution	1289	17	41		1347	1
Services	790		3	1	794	0
Social and Behavioral Sciences	2582	2	724	91	3399	3
Other	1734		78	49	1861	2
Total	77615	2020	8438	700	88773	100

On average, all the clusters recorded 90% at the Bachelors level graduations. Positive index indicates relatively more than 90% Bachelors graduation rates and less than 10% of PGD, Masters and PhD graduation rates while negative index shows a good performance of more than 10% of PGD, Masters graduation rates and less than 90% of the Bachelors. Social and Behavioral Sciences saw improved performance in PGD, Masters and PhD at -15 followed with Business and Administration at -9, Humanities and Arts at -6. Clusters that were notably seen not to graduate PGD, Masters and PhD were those of Services at +9; Manufacturing at +8; Education (Science), Architecture, Security and Conflict Resolution at +5 each respectively with further Law at -4. Mathematics and Statistics; Life and Physical Sciences, Engineering were reported to post slightly good performance at -2 while Agriculture, Livestock and Fisheries and Education (Arts) performed slightly poor at +1 each respectively. Table 6.7b gives this information.

Table 6.7b*Graduations per Cluster and Level in Public and Private Universities*

Clusters	Graduation Awards				
	Bachelor	PGD/ Master /PhD	Total	% of Bachelors	Index
Agriculture, Livestock and Fisheries	2880	275	3155	91	+1
Architecture	873	45	918	95	+5
Business and Administration	19029	4263	23292	81	-9
Computing and ICT	3504	396	3900	89	-1
Education (Arts)	16131	1580	17711	91	+1
Education (Science)	3682	156	3838	95	+5
Engineering	2976	374	3350	88	-2
Environment and Forestry	1044	110	1154	90	0
Health and Welfare	4318	590	4908	87	-3
Humanities and Arts	7194	1284	8478	84	-6
Journalism and Information	2160	146	2306	93	+3
Law	1330	76	1406	94	+4
Life Science and Physical Science	3700	530	4230	87	-3
Manufacturing	83	1	84	98	+8
Mathematics and Statistics	2316	326	2642	87	-3
Security and Conflict Resolution	1289	58	1347	95	+5
Services	790	4	794	99	+9
Social and Behavioral Sciences	2582	817	3399	75	-15
Other	1734	127	1861	93	+3
Total	77615	11158	88773	87	

Table 6.7c presents Bachelors level as percentage of the total graduations per cluster in relation to the Masters and PhD levels in exclusion of the PGD level. The percentage average graduations for Bachelors after elimination of the PGD level shifted from 90% to 92%. Further the table shows index 1 and 2 representing measure of variability from the mean of Bachelors graduations after and before elimination of the PGD. Comparing the two indexes, Mathematics and Statistics dropped from -3 to +3, Engineering from -2 to +4. Life Science and Physical Sciences from -3 to -1, Business and Administration from -9 to -6. Clusters that saw positive impact were, Social and Behavioral Sciences from -15 to -16, Architecture from +5 to +3, Education (Science) +5 to +4, Journalism and Information +3 to +1, Law +4 to +2, Manufacturing +8 to +6. Humanities and Arts remained constant at -6 while Services also remained constant at +9 owing to non PGD level graduations.

Table 6.7c***Graduations per Cluster and Level in Public and Private Universities***

Clusters	Graduation Awards					
	Bachelor	Master /PhD	Total	% of Bachelors	Index 1	Index 2
Agriculture, Livestock and Fisheries	2880	262	3142	91	-1	+1
Architecture	873	45	918	95	+3	+5
Business and Administration	19029	3605	22634	84	-6	-9
Computing and ICT	3504	247	3751	93	+1	-1
Education (Arts)	16131	1263	17394	92	0	+1
Education (Science)	3682	151	3833	96	+4	+5
Engineering	2976	106	3082	96	+4	-2
Environment and Forestry	1044	101	1145	91	-1	0
Health and Welfare	4318	587	4905	88	-4	-3
Humanities and Arts	7194	1079	8273	86	-6	-6
Journalism and Information	2160	146	2306	93	+1	+3
Law	1330	76	1406	94	+2	+4
Life Science and Physical Science	3700	368	4068	90	-1	-3
Manufacturing	83	1	84	98	+6	+8
Mathematics and Statistics	2316	114	2430	95	+3	-3
Security and Conflict Resolution	1289	41	1330	96	+4	+5
Services	790	4	794	99	+9	+9
Social and Behavioral Sciences	2582	815	3397	76	-16	-15
Other	1734	127	1861	93	+1	+3
Total	77615	9138	86753	89		

6.13 Summary and Implications of the findings for University Education Sub-sector

The data collected for graduations compared two years, 2015 and 2016 on four thematic areas; University category, Gender, Degree award and Clusters. The university categories included; public and private chartered universities, public and private universities constituent colleges and universities with Letters of Interim Authority.

The total graduates increased by 10% in the year 2016 from 2015. Male graduates represented 54% and females graduates accounted for 46% in the year 2016 as compared to 55% males and 45% females in the year 2015. In public chartered universities, graduations grew by 10% while private universities registered a rate of 11% over the period. Male graduates in public universities increased by 9% in the year 2016 while females increased by 10%. In private universities, males graduation rate grew by 12% and females grew by 10%. In both years, female graduates in private universities were more than male counterparts standing at 52% and 48% respectively.

In respect to total graduations by level, Bachelors remained highest at 87% in both years while Masters level registered 11% in 2015 with 9% graduating in 2016, a decrease of 6%. PhDs saw 31% growth from 2015 to 2016.

In regard to graduations by gender and level, both categories registered an increase in the period of 10% and 11% respectively. On Masters level both male and females decreased by 8% and 3% respectively. Although PGD and PhD recorded low rates of graduations, they both reported an increase between the genders over the period.

Garissa University College, the only constituent college at the time, reported an improvement in graduations by gender posting 10% and 11% growth rates of males and females respectively. Masters graduations were adversely affected with males recording 8% and females 5% respectively. Postgraduate Diploma and PhD levels trended upwards during the period on both categories of gender.

Private chartered Universities also witnessed growth with majority at Bachelors level for both male and female at 11% and 8% respectively. Masters level indicated downwards trend for both males and females reporting 11% and 3% respectively while PGD and PhD levels posted an increase.

Private universities constituent colleges held graduations on Bachelors and Masters levels only where both of the levels registered growth on both males and females. Universities with Letters of Interim Authority had 38% growth rate in graduations from 2015 to 2016.

Comparing graduations rates per cluster between public and private universities in the year 2016 and year 2015, it indicates that Art based clusters produced majority of the graduates. Business and Administration, Education Arts, Humanity and Arts accounted for 50% in public universities and 66% in private universities. The envisaged critical clusters towards realization of Vision 2030 mainly, Mathematics and Statistics, Manufacturing, Architecture, Computing and ICT, Engineering and Agriculture, Livestock and Fisheries, reported 17% of the total graduations in public universities while the contribution of private universities was at 6%.

The study involved 54 public and private universities. Irrespective of being public or private, all universities have the same core functions-teaching, research, and community service. Further private universities are fulfilling a very essential need by providing access to qualified students as the spaces at the nation's public universities are inadequate to meet the requirement of a rapidly increasing student population.

Education is one of the fundamental rights of individuals. It is a critical factor for any nation's development and has always played and continues to play a significant role as change agent. This explains why a sizable percentage of the resources is invested in the educational sector and a number of global declarations affirm the right of humans to education.

According to World Economic Forum (2014) there was clearly a values-based case for gender equality: women are one half of the world's population and deserve equal access to health, education, economic participation and earning potential and political decision-making power. Ultimately, gender equality is fundamental to whether and how societies thrive. The Constitution of Kenya (2010) guarantees the right to equality for both men and women by providing threshold of one third to either sex in the country. The study revealed that the envisaged threshold was attained on the total graduations while it was observed that in private universities female graduates in both years exceeded male counterparts. Lowering cut off admissions points influenced the increase in enrolment for female students and hence graduations especially in public universities (JAB 2002/2003) report.

The study indicated that the PhD graduates were significantly low as compared to the required numbers for sustainable national development. Sessional paper No. 14 of 2012 points out that to achieve the desired student-faculty ratio of 1:40, it has been estimated that the number of additional PhDs required by universities in order to meet the stated GER of 10% (approximately 600,000 students) within 10 years by 2022 universities would collectively need to graduate an average of 2400 PhDs annually for the next five years. The target of 2400 PhDs annually may remain a dream as the trend shows that less than 400 graduate yearly while masters graduates who are potential PhDs holders registered a downwards trend the study revealed.

Nationally, the need for an increase in degrees awarded in areas of Science, Technology, Engineering and Mathematics (STEM) continues to suffer. While there are graduations in STEM degree programmes, it does not commensurate with the workforce demand. In addition, to the concern in STEM programmes, inadequate females graduating in STEM programmes aggravates the situation. The results of the study resonates with the fact that private universities almost in their entirety do not train in STEM programmes as majority have put their focus in Arts programmes a potential detriment towards achieving Vision 2030 aspirations.

Chapter Seven

Universities Income and Expenditure

7.1 Introduction

The growth of higher education sector in Kenya has been encouraged by increasing resource allocation and provision of incentives for investment and participation in developing skills training in the country. Higher education has experienced tremendous growth leading to increased demand for resources to the sector to improve and sustain quality education. This has put strain on resources provided for the sector. There is need for sustainable mechanisms to be put in place to ensure higher education continues to play a vital role in social-economic development. Currently, public institutions receive most funding from Government which is no longer adequate as they face stiff competition from other sectors for the limited government financial resources. Hence, Universities diversified sources of income as well as ensured more efficient and cost effective use of resource. This led to universities introducing a dual track tuition policy known as the privately sponsored student programme (PSSP) or Module II programme where students meet the full cost of university education without government subsidy.

The Government has developed policies and strategies to guide the financing of higher education in Kenya among them: the Kinyanjui Report (2007); Public Universities Inspection Board Report on Transformation of Higher Education & Training in Kenya: Securing Kenya's Development in the Knowledge Economy (2006); the Wandiga Report on the National Strategy for University Education 2007-2015; the Taskforce Report on Aligning Education and Training to the Constitution of Kenya (2010) and Kenya Vision 2030 and Beyond (2012); the Universities Act of 2012 (revised 2016); Sessional Paper No. 14 of 2012; and Sessional Paper No. 2 of 2015 on Reforming Education and Training Sectors in Kenya. The Differentiated Unit Cost (DUC) was introduced as a basis of financing higher education in Kenya and Universities Funding Board (UFB) established with the mandate to develop the detailed institutional funding criteria and disbursing of government funding. Other legislative frameworks in place include the Constitution of Kenya 2010, Chapter 12; Public Finance Management Act 2012; Public Finance Management Regulations 2015; and International Public Sector Accounting Standards (IPSAS). In 2016, the Government sponsored the first batch of students to Private Universities and 30 private Universities received government capitation.

This chapter discusses incomes and expenditures of universities in Kenya for a period of three years (2014-2016) based on the budget cycle. The analysis covered 35 public Universities, 21 private universities and 13 universities with Letter of Interim Authority and, gives the main sources of income received by Universities and their expenditures. The income streams are classified into four namely: government capitation, student fees, research grants and other incomes, while the expenditure items are classified into 4 namely: staff costs, capital development, maintenance and other expenses. Finally, a comparison of the income and

expenditure per university classification/category is discussed to establish whether a surplus or a deficit was realized by universities.

7.2 Summary of Income Streams in Public and Private Universities

The University sector received Ksh. 284.2 Billion from all the four income streams for a period of three years as shown in Table 7.1. The highest share was received by public universities amounting to Ksh. 226.4 Billion representing 79.67 % of total incomes, while private universities received Ksh. 57.8 Billion, representing 20.33 % of the total income received for the period.

The highest income was received from student fees amounting to Ksh. 147.1 Billion, representing 51.8 % of total incomes, with public universities receiving the largest share of Ksh. 99.3 Billion compared to Ksh. 47.8 Billion received by private universities representing 67.5 % and 32.5 % respectively, of the total student fees received during the period. The main source of income for public universities was government capitation amounting to Ksh. 102 Billion, accounting for 45.1 % of their total incomes. On the other hand, private Universities main source of income was student fees of Ksh. 47.8 Billion, accounting for 82.8 % of total incomes received. Private universities for the first time in 2016 received government capitation amounting to Ksh. 0.0775 Billion, however public universities received the highest share.

During the period, the least income received was from research grants amounting to Ksh. 11.7 Billion. Private universities had the least research grant of Ksh. 1.7 Billion compared to public universities of Ksh. 10 Billion representing 85.65% and 14.34% for public and private universities respectively.

Table 7.1

Public and Private Universities Income Streams

Income Streams (Ksh. Millions) 2014-2016 Academic Years					
University Category	Government Capitation	Student Fees	Research Grants	Other Incomes	Grand Total
Public Universities	102,046.41	99,277.31	10,031.89	15,074.65	226,430.27
Private Universities	77.54	47,847.67	1,679.48	8,188.70	57,793.38
Total	102,123.95	147,124.98	11,711.37	23,263.35	284,223.65

7.3 Proportion of Income in Public and Private Universities

The highest proportion of income was from students' fees representing 51.8 % of all incomes from universities, followed by government capitation which contributed 35.9 %. Other incomes contributed 8.2 % and research grants contributed only 4.1 %. The highest income contributor from public universities' was government capitation at 45 %, followed by students' fees contributing 44 %, other incomes 7 % and research grants 4 %.

Students' fees contributed 83 % of private universities incomes, other incomes contributed 14 %, research grants and government capitation contributing 3 % and 0.1 % respectively. Figure 7.1 is a graphical illustration of the proportion of income streams in public and private universities.

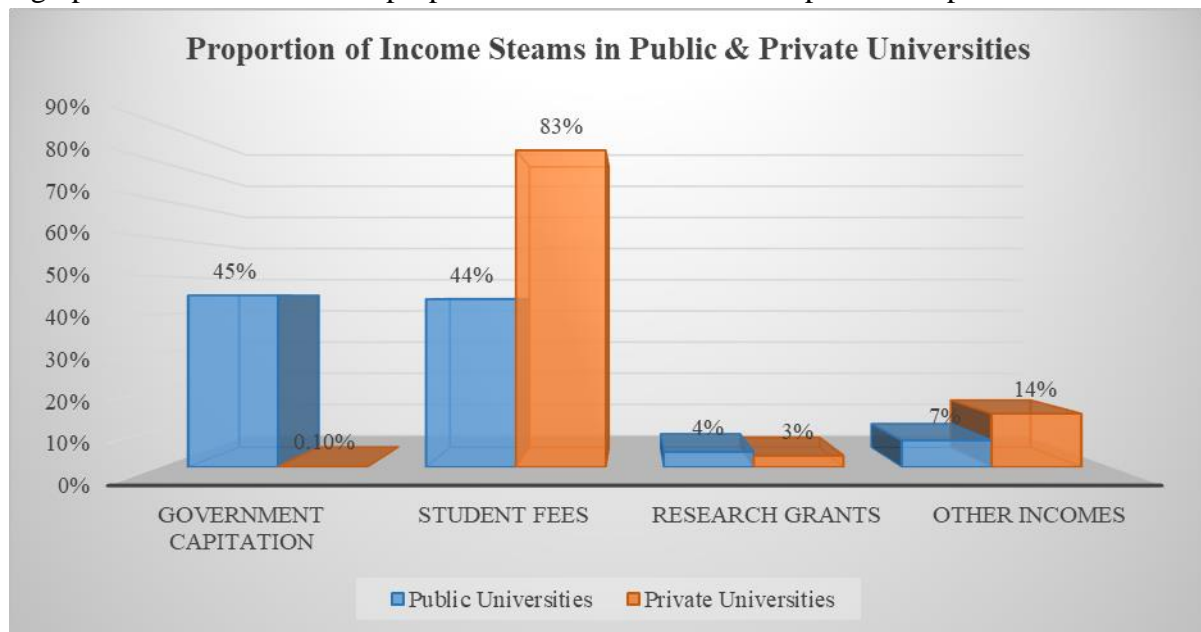


Figure 7.1 Proportion of Income Streams in Public and Private Universities

7.4 Income streams in Public and Private Universities

Income streams from both public and private universities as shown in Figure 7.2 are discussed below:

7.4.1 Government Capitation

Private universities for the first time in 2016 received Government funding. The total capitation received for the period 2014-2016 was Ksh. 102.12 Billion with public universities receiving the highest amount of Ksh. 102 Billion, while private Universities received Ksh. 0.0775 Billion. In the period, total capitation for both public and private universities increased by 2.59% from Ksh. 33.6 Billion in 2014 to Ksh. 34.5 Billion 2016. In the same period, capitation for public Universities increased by 2.4% from 33.6 Billion to 34.4 Billion respectively. This was attributed to transition of seven constituent colleges to charter in 2016, establishment of three public constituent colleges and thus increased capitation to provide for seed money for the universities.

7.4.2 Student Fees

Student fees received for the period was Ksh. 147.1 Billion, with the highest being from public universities amounting to Ksh. 99.3 Billion and Ksh. 47.8 Billion from private universities. The fees increased by 10% from Ksh. 46.3 Billion in 2014 to Ksh. 51 Billion in 2016. The fees from both public and private universities increased by 11.2 % and 7.7% respectively. This is reflected in increased enrollment by 1.6% from 539,749 in 2015 to 548,160 in 2016.

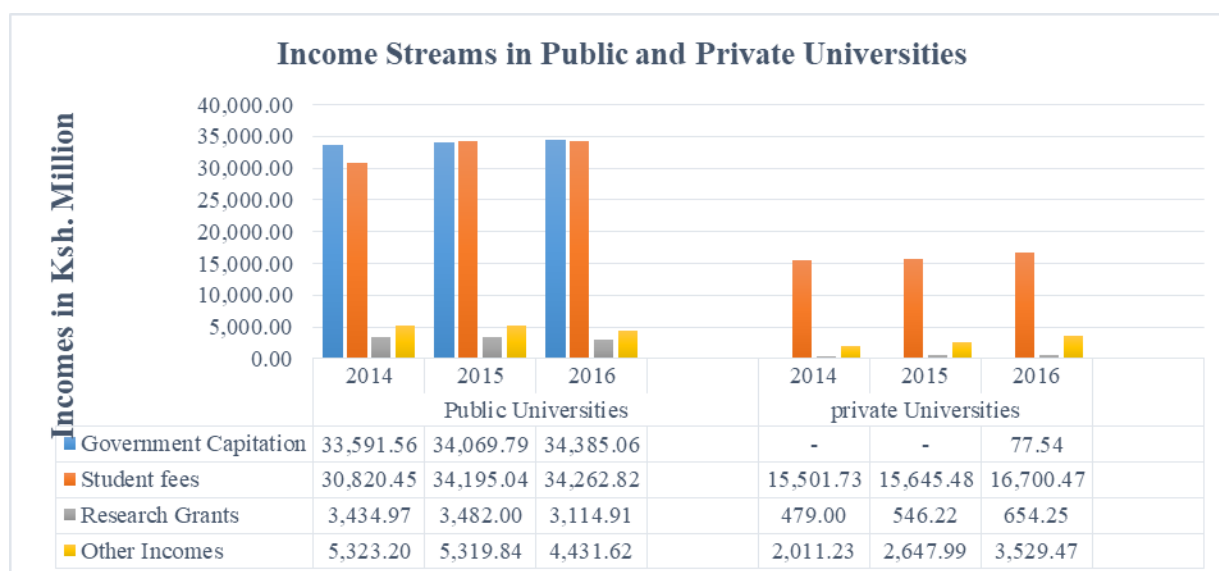


Figure 7.2 Income streams in Public and Private Universities

7.4.3 Research Grants

The total income received from research grants in the period was Ksh. 11.7 Billion, with the highest from public universities amounting to Ksh. 10 Billion and private universities Ksh. 1.7 Billion. Over the years, total research grants declined from Ksh. 3.9 Billion in 2014 to Ksh. 3.8 Billion in 2016, recording a decrease of 3.7%. However between 2015 and 2016, the grants decreased by 6.4% from 4 Billion to 3.8 Billion respectively. In the period, private universities research grants increased over the years by 36.6%, while that of public universities decreased by 9.3%.

7.4.4 Other Incomes

Other incomes from both public and private universities was Ksh. 23.3 Billion, with the highest being from public Universities of Ksh. 15.1 Billion and Ksh. 8.2 Billion from Private Universities. The income increased by 8.54% in the period from Ksh. 7.3 Billion to Ksh. 7.96 Billion in 2014 and 2016 respectively. However, other incomes from private Universities had an increasing trend, while that of public Universities declined at 75.6 % and 16.7 % respectively.

7.5 Universities Expenditure and Expenditure Items

This section describes the expenditure items on which income by universities is spent. Expenditure includes both current and capital expenditure, where current expenditure takes account of the spending on University resources used each year for operations. It includes, compensation to employees, students' meals or the renting of school buildings and other facilities. Capital expenditure on the other hand refers to spending on assets that last longer than one year. It includes, for instance, spending on construction, renovation and major repair of

buildings. Decisions about how resources are allocated affect the material conditions under which instruction takes place and can also influence the nature of instruction.

7.6 Summary of Expenditure and Expenditure Items in Public and Private Universities

The university sector spent a total of Ksh. 290.5 Billion in the period under review as shown in Table 7.2. Public universities incurred the highest expenditure of Ksh. 230.1 Billion, while private universities spent Ksh. 60.4 Billion, representing 79.2% and 20.8% of the total university expenditure in the period. The highest expenditure went to staff cost amounting to Ksh. 168.5 Billion, of which Ksh. 136.3 Billion was spent by public universities and Ksh. 32.2 Billion by private universities. This was followed by other expenditure amounting to Ksh. 88.3 Billion and public universities spent Ksh. 68.7 Billion while private universities spent Ksh. 19.6 Billion.

On buildings, the universities spent Ksh. 24.1 Billion, with public universities spending Ksh. 19 Billion, while private universities spent Ksh. 5.2 Billion. The least amount was spent on maintenance by universities at Ksh. 9.6 Billion, public universities spending Ksh. 6.2 Billion while private universities spent Ksh. 3.4 Billion.

Table 7.2

Expenditure and Expenditure Items in Public and Private Universities

Expenditure and Expenditure Items (Ksh. Millions) 2014-2016					
University Category	Staff Costs	Building Costs	Maintenance Costs	Other Expenditure	Total Expenditure
Public Universities	136,256.80	18,944.94	6,211.63	68,693.65	230,107.02
Private Universities	32,236.57	5,155.18	3,359.07	19,647.01	60,397.83
Total	168,493.37	24,100.12	9,570.7	88,340.66	290,504.85

7.7 Proportion of Expenditure Items in Public and Private Universities

Staff costs had the highest proportion of 58% of the total Universities expenditure in the period under review. This was followed by other expenditures which took 30.4%, building costs 8.3% and the least was maintenance costs at 4%. In the period, from the total expenditure by public universities 59% went to staff cost, 30% other incomes, 8% building costs and 3% went to maintenance costs. Private Universities on the other hand, spent 53% on staff costs, 32% on other expenditures, 9% on building costs and 6 % on maintenance costs of the total expenditure as shown in Figure 7.3.

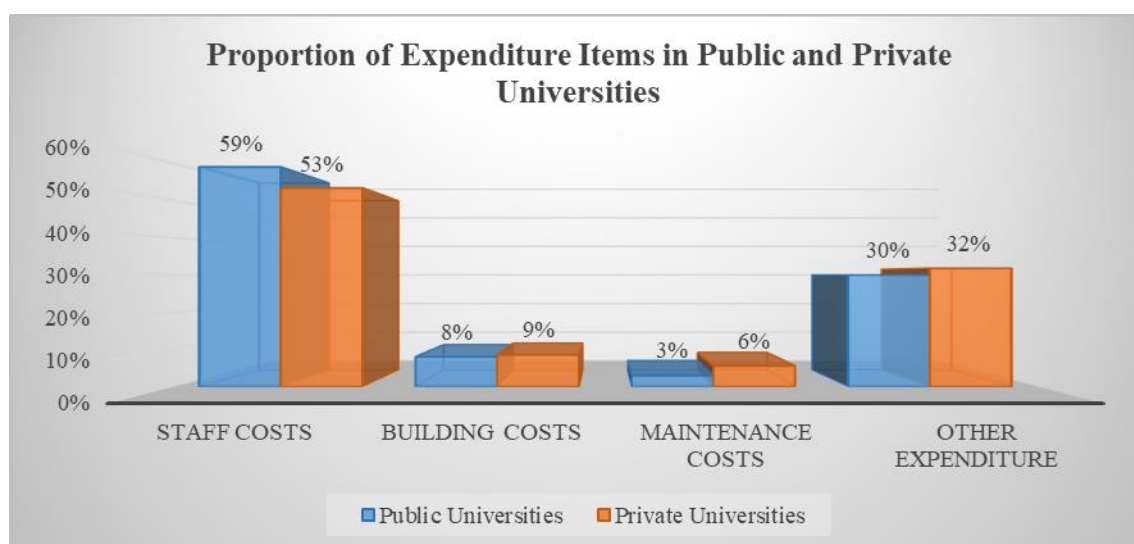


Figure 7.3 Proportion of Expenditure Items in Public and Private Universities

7.8 Expenditure Items in Public and Private Universities

The expenditure items from both public and private universities are shown in Figure 7.4 and are discussed as follows:

7.8.1 Staff Costs

Universities staff costs amounted to Ksh. 168.5 Billion in the period and public universities spent Ksh. 136.3 Billion while private universities spent Ksh. 32.2 Billion. Total staff costs increased by 5.7 % from Ksh. 55 Billion in 2014 to Ksh. 58.1 Billion in 2016, largely attributed to both public and private universities. Public universities staff costs increased by 5.65 % while that of private universities increased by 6.1%, due to increased number of staff as a result of seven public constituent colleges transition to charter and establishment of three new public colleges. In addition, one private university was awarded charter and one university with Letter of Interim Authority (LIA) in 2016.

7.8.2 Building costs

The total building expenditure for all universities was Ksh. 24.1 Billion, with public universities spending Ksh. 18.9 Billion and private Universities 5.2 Billion. The expenditure on building decreased by 24.42 % from 10.2 Billion in 2014 to 7.7 Billion in 2016, mainly attributed to public universities. Public universities building cost decreased by 17.4 %, while that of private universities decreased by 49.6 %. The decreased cost in private universities may be attributed to heavy reliance on sponsors, donors and partners in development funding which may not be consistent, while government institutions are funded by government on continuous basis during the projects life time.

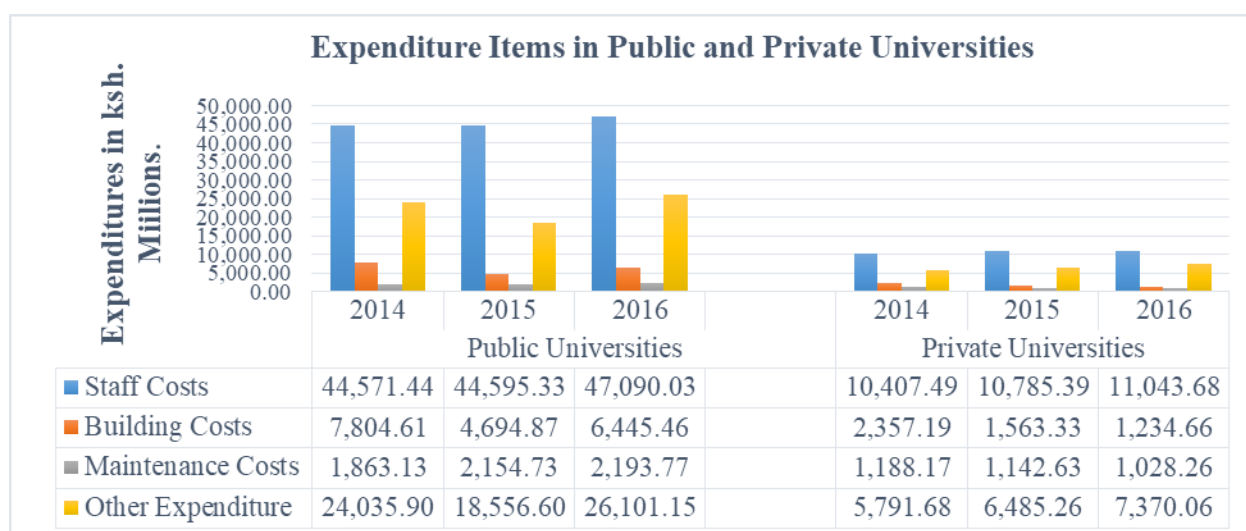


Figure 7.4 Expenditure Items in Public and Private Universities

7.8.3 Maintenance Costs

Maintenance costs amounted to Ksh. 9.6 Billion in the period under review. Public universities spent 6.2 Billion while private universities spent Ksh. 3.4 Billion on maintenance. In the period, the costs increased by 5.6% from Ksh. 3.1 Billion in 2014 to Ksh. 3.2 Billion in 2016, mainly attributed to public universities. Public universities costs increasing by 17.7% while that of private universities decreased by 13.5%.

7.8.4 Other Expenditure

Universities' other expenditure amounted to Ksh. 88.34 Billion in the period with public universities spending Ksh. 68.69 Billion and private universities Ksh. 19.65 Billion. Other expenditure increased by 12.2% with that of public universities increasing by 8.59% while that of private universities by 27.25%.

7.9 Budget Surplus/Deficit Analysis

The university sector operated on budget deficit of Ksh. 6.3 Billion in the period under review as shown in Table 7.3. Public universities operated on a deficit of Ksh. 3.7 Billion while private Universities had a deficit of Ksh. 2.6 Billion. The government has limited resources for funding public universities and there is continuous increased operational costs.

Table 7.3
Public and Private Universities Budget Surplus/Deficit

Budget Surplus/ Deficit (Ksh. Millions) 2014-2016			
University Category	Total Income	Total Expenditure	Deficit/Surplus
Public Universities	226,430.27	230,107.02	(3,676.75)
Private Universities	57,793.38	60,397.83	(2,604.45)
Total	284,223.65	290,504.85	(6,281.2)

7.10 Implication of the Findings for Kenya's University Education Sub-Sector

The university sub-sector operated on a deficit in the period under review, spending more resources than what it received from the various income streams. The sub-sector is not able to sustain itself and if the trend is not remedied it may not be able to achieve its objectives as envisaged in the Universities Act, 2012(revised 2016) section 3(1).

The analysis indicate that universities rely on income from student fees representing 51.8% of the total incomes received, followed by government capitation at 35.9 %. University capacity has been increasing in the last three years from 57,926, 66,823 and 117,070 in 2014, 2015 and 2016 respectively. However in the same years, those placed were 56,939, 67,790 and 88,447 for both public and private universities. This indicate that those placed do not fill the capacities and it is expected that the module II enrollment will reduce in the coming years if the trend is sustained. This will impact on revenue generation at the universities and hence over reliance on student fees for operations is not sustainable. Universities should diversify on other ways of generating income other than government capitation and student fees.

The least revenue was from research grants recording 4.1% of the total revenues received in the period. There is need to enhance capacity at the universities on research grant proposal, conduct a workload analysis on lecturers and develop research standards for universities. This will enhance operationalization of the harmonized criteria and promotion of academic staff in universities in Kenya.

The highest expenditure was on staff costs at 58% of the total universities expenditure and followed by other expenditure at 30.4% for the period under review. The expansion of university education in Kenya and signing of the Collective Bargaining Agreement (CBA) 2017-2022 will imply more money to pay salaries. Hence with the limited resources available, the government should budget and set aside money for implementation of the CBA to avoid lecturer's unrest, as it affects learning and quality of education in Kenya.

Chapter Eight

Conclusions and Recommendations

8.1 Introduction

This chapter presents a summary of conclusions and recommendations of the report based on collected data from universities. It provides a snapshot of the critical variables in this sector with far reaching policy implications. Data collected focused on five thematic areas namely: *programmes, enrolment, staffing, graduation and Universities Income and Expenditure*. These variables were analyzed against five university categories - *public chartered and their constituent universities, private chartered and their constituent universities as well as private universities with Letters of Interim Authority (LIA)*. From the analyses done in the preceding chapters, this section draws conclusions and proposes a raft of recommendations.

8.2 Programmes

Public Chartered universities had the highest number of programmes (3,203) representing 81%, followed by private chartered universities (610 programmes), public university constituent colleges (69 programmes), private universities with Letters of Interim Authority (LIA) (65 programmes) while private constituent universities had the least number of programmes (33) representing 0.8% of the total programmes.

Majority of the universities have continued to mount programmes in Humanities and Arts; Business and Administration as well Life Science and Physical Science. These programmes recorded the highest increase amongst the universities in the academic year 2015/2016. For instance, programmes under Humanities and Arts increased with 177 programmes; Business Administration increased with 52 programmes while manufacturing had an additional 2 programmes within the same year.

A general concern in the university sector in Kenya is the imbalance between humanities, Arts and Social sciences on the one hand and Science, Technology Engineering and Mathematics on the other. The consequent shortage of needed knowledge and skills in areas such as Manufacturing, Housing, Health, Food security, Biotechnology and Information and Communication Technology is obvious and cannot be gainsaid.

Despite the fact that the country has in the last 5 years invested heavily in key sectors such as Energy and Infrastructure, university programmes and curricula stand faulted for not addressing the main sectors and pillars of national development. This may be attributed to disconnect between policy makers in the government and university set up. The two entities rarely speak to each other.

Recommendations:

To enhance efficiency and competitiveness of the country's economy:

- i) *Universities should align their programmes appropriately to address the areas critical in driving growth and development. The huge need for skilled workers in Science, Technology, Mathematics and Engineering professions as well as key sectors such as Food Security, Health care, Manufacturing and affordable housing (The Big Four) should largely influence universities curricula;*
- ii) *Accreditation of new programmes should match the needs of the country as informed by manpower surveys from the Ministry of Labour to ensure establishment of programmes that are synchronised with the present and projected needs;*
- iii) *The Commission should work closely with the ministry of East Africa Community as well as Labour and Social Protection to operationalize the Kenya Labour Market Information System;*
- iv) *Students in the formative years of schooling should be exposed to Science, Technology Engineering and Mathematics (STEM) related courses that will open their minds to appreciate Science and to address emerging societal challenges. STEM should be readily embedded into the Competence - based Curriculum from the early learning stages to tertiary level.*

8.3 University Enrolment

Student enrolment in universities rose from 122,847 in 2008 to 547,316 in 2016 (an exponential increase of more than 300%). Private chartered universities have a student enrollment of 78,987, representing 14% of the total enrolment in Kenyan universities. The increase in enrolment is a result of increased population base of learners in primary and secondary schools as well as those already past the age of traditional university enrolment.

Analysis of students' enrolment by programmes depicts concentration of students in certain programs in comparison with others. Business and Administration, for instance, had the highest number of enrolments with 144,318 (26%), followed by Education (Arts) with 108,533 students (20%), while Humanities and Arts had 43,938 (8%). The programmes with the lowest enrolments were Engineering with 22,237 (4%) and Manufacturing with 694 (0.14%). The huge disparity between enrolments in Arts based and Science oriented programmes may partly be attributed to the cost of mounting the programmes.

Current statistics show that for 100 undergraduate students studying in the university there were only 12 masters and 2 PhD students being trained. At the ratio of 58,221 to 9,577 or 6:1, the transition of Masters Students to PhD is quite low. Compared to the universities in UK or Canada, where the ratio is 2:1; Kenya is not doing well (UNESCO, 2008).

From the data, it was evident that most university student enrolments are found in public universities with many of them at undergraduate level and very few at PhD level.

Recommendations:

- i) Implementation of the proposed Differentiated Unit Cost (DUC) should be fast tracked to enable universities mount the Science-oriented programmes which require more financial resources compared with the very popular Humanities and Social Sciences.*
- ii) Higher Education Loans Board (HELB) should enhance financial support to students who are enrolled in Science, Technology, Engineering and Mathematics programmes.*
- iii) Students should be motivated to pursue STEM courses through provision of scholarships, rewards and mentorship programmes.*
- iv) The grim picture painted by the data presented calls for concerted efforts by the players in the sector with support from the Government to fast track staff development.*
- v) Strategies should be initiated to encourage female enrolment in postgraduate programmes, and mechanisms should be put in place to promote timely completion of courses and curb the high dropout rate.*

8.3.1 Enrolment by County

Students' enrolment data by county was previously not available as most universities had not developed elaborate mechanisms in their admission documents to capture the parameter. The 2016/2017 university statistics report captured the parameter albeit not completely since most of the universities did not provide complete data.

Analysis of the data collected from both Public and Private chartered universities, revealed that Nairobi County had the highest number of students at (17,928) enrolled; followed by Kisii with (9,754) and Kiambu with (8,787). Counties with the least number of students enrolled in the university was Lamu (275), Wajir (269), and Mandera (249) County.

In terms of gender, there were more male students than female students enrolled with Nairobi County having the highest male student population (9,253) followed by Kisii (5,859) and Nakuru Counties. Wajir (68) and Mandera (68) counties had the least female student representation while Lamu and Tana River Counties had the least male student population at 168 and 167 respectively.

Recommendation:

It is evident that counties in the North Eastern part of Kenya have low enrolments in the university compared with Counties in other regions like Kisii and Kiambu whose enrolments are much higher. The big disparity may be attributed to certain historical factors, which may be corrected with more support from the government and development partners through affirmative policies.

8.3.2 International Enrolment

Many universities in Kenya have been able to attract international students from all over the world. There were a total of 5,447 international students from 105 identified and 10 unidentified countries - which is only 0.99% of the total student enrolment in the university. The majority (89%) of these international students were enrolled in Private Universities while a small fraction (11%) were in Public Universities.

Analysis of the Country data, revealed that Tanzania had the highest number of international students represented (577) followed by South Sudan (522), Nigeria (426) and Uganda (376). Others were: Democratic Republic of Congo (368), Rwanda (331), Burundi (194), Malawi (177) and Zambia (157) to mention a few. Far flung countries like Madagascar, South Korea and Pakistan had 82, 23 and 14 respectively.

Majority of international students (56.61%) were enrolled at Undergraduate level followed by Masters (29.19 %) and Doctorate (6.79%).

From these Figures it is noteworthy that Kenya attracts international students in her universities. However at about 1% of the total enrolment, it falls far short of the international ratio of 10% which would truly make our universities curve an international image. The fact that Kenyan graduates are generally accepted in the region and internationally, means that its system and quality of education is held in high esteem. The cross-border mobility of professionals working in diaspora and remitting capital (now reported to be the third foreign revenue stream) is contributing a significant proportion to the GDP.

Recommendations:

Universities should strive to attract international students, particularly at post graduate level by:

- i) *Investing more resources in infrastructure, enriching curriculum as well as the faculty. Tied to that is the need to improve the quality and relevance of the programmes and enhance completion rates.*
- ii) *A national policy should be crafted to encourage enrolment of international students in Universities with functional international offices to address the unique needs of foreign students.*
- iii) *Universities should endeavor to provide predictable university calendars, availability of hostels on campus and guarantee continuity of learning even when there are cases of unrest in the universities.*
- iv) *University should leverage the use of technology to support learning across borders through virtual learning.*

8.3.3 Enrolment of Persons with Disability (PwDs)

The number of students with disabilities reported was quite small 881 (0.16%) compared to the overall enrolment at university level. Although this was reported as the total number of persons

with disabilities, there is a possibility that the numbers could be more. To have a clearer perspective of the number of persons with disability transiting to the university, there is need to capture data of persons with disability who register for the Kenya Certificate of Secondary Examination (KCSE) and then track to establish those who qualified to join university. In that way, it will be possible to have a sense of the statistics of PwDs in the university.

8.4 University Staffing

The analysis of academic staff provided a general overview of the number, gender and how academic staff were distributed in the different programme domains. Analysis of the quality of academic staff employed in universities based on their highest qualifications is also provided.

Most academic staff were found in public universities compared to those in private universities. The majority of them, 68% were male, while 32% were female. Although this meets the one third policy of either gender representation in appointments, a further analysis of academic staff of the ranks they hold, shows that gender disparity widens at higher ranks of Senior Lecturer to professor. Most of the academic staff were master's holders (53%) and only 34% were PhD holders with the highest numbers being found in public universities. In terms of rank, most of the academics were at the level of Lecturer (39%); while those at the level of Senior Lecturer and Professor were 13% and 10% respectively. The ratio of male to female academic staff in STEM related programme domains was also skewed with the male academics dominating in those fields. The report further indicates that universities are not meeting the recommended student to academic staff ratios of the different clusters as stipulated in the Universities Standards and Guidelines even with the inclusion of part time academic staff in the calculations except in the Social Science cluster. The high student to academic staff ratios in some clusters even with the inclusion of part time staff in the analysis impacts negatively on the quality of university education.

The findings have varied implications on the university sub sector as explained below;

1. The number of academic staff vis-à-vis the programmes and enrolment show enrolment has risen as more programmes have been mounted without a corresponding increase in staff levels. The implication of this is:
 - i. There will be increased workload for staff;
 - ii. Over reliance on part time staff for teaching;
 - iii. Minimum research as academic staff concentrate on teaching at the expense of research;

This will impact negatively on the quality of university education;

2. The university sub sector adheres to the constitutional threshold of one third gender policy in appointment of academic staff. But looking at the different ranks the analysis shows that as staff move to higher academic ranks the gender disparity widens above the recommended threshold;

3. The sub sector is slowly realigning to the recommended grading of academic staff in line with Harmonized Criteria and Guidelines for Appointment and Promotion of Academic Staff as the number of academic staff in the rank of Assistant Lecturer are decreasing;
4. The high student to academic staff ratios in some clusters even with the inclusion of part time staff will impact negatively on the provision of quality university education.

Recommendations:

Arising from implications articulated above the following recommendations are proposed:

- i) *Universities should strictly adhere to the CUE harmonized criteria for appointment and promotion of university academic staff on the required qualifications of staff (Universities Standard and Guidelines INST/STD/04), teaching loads and staff student ratios.*
- ii) *There is need for a national policy to guide recruitment and management of part time university academic staff.*
- iii) *There is need for an articulate policy on management of postgraduate programmes to encourage enrolment and completion at the required timelines.*
- iv) *The Commission should ensure that universities include enrolment and staffing projections in all new applications for institutions and programme accreditation.*
- v) *The Commission should ensure that before any new programme is accredited, the recommended student to academic staff ratios as stipulated in the Universities Standards and Guidelines PROG/STD/17 is not breached.*
- vi) *A comprehensive audit of all existing programmes should be undertaken to determine how universities are adhering to the recommended full time academic staff to student ratios in each cluster.*
- vii) *Universities should endeavor to embrace Technology appropriately so as to mitigate staff shortages.*

8.5 Graduation

The total graduates increased by 10% in the year 2016. There were more male graduates (54%) than female 46% in the year 2016. Male graduates in public universities had 9% increase in the year 2016 with females increasing by 10%. In private universities males had a growth rate of 12% with females growing by 10%. In both years, female graduates in private universities were more than male counterparts standing at 52% and 48% respectively.

Analysis of total graduations by level shows that Bachelors remained all high at 87% in both years, while at Masters Level it registered a decrease from 11% in 2015 to 9% graduating in 2016. With regard to graduations by gender and level, both categories registered an increase in the period at 10% and 11% respectively. At Masters level both male and females decreased by 8% and 3% respectively.

Comparing graduations rates per cluster between Public and Private Universities in the year 2016 and year 2015, it indicated the same trend of Art based clusters producing majority of the graduates. Business and Administration, Education Arts, Humanity and Arts accounted for 50% in public universities while accounting for 66% in private universities. The envisaged critical clusters towards realization of vision 2030 mainly, Mathematics and Statistics, Manufacturing, Architecture, Computing and ICT, Engineering and Agriculture, Livestock and Fisheries reported 17% of the total graduations in public universities while contributing to 6% in private universities.

Recommendations:

- i) The government, universities, national tertiary educational institutions and the private sector should work together to develop creative complementary funding models that promote high quality postgraduate training.*
- ii) Universities should put in place mechanisms to facilitate timely completion of studies especially at Post Graduate level.*

8.6 University Income and Expenditure

Higher education has experienced tremendous growth leading to increased demand for resources to the sector to improve and sustain quality education. Currently, higher learning institutions receive most funding from Government which is no longer adequate as they face stiff competition from other sectors for the limited government financial resources. The report indicates that the university sub-sector operated on a deficit in the period under review, spending more resources than what it received from the various income streams. If the trend is not remedied the sector may not be able to achieve its objectives as envisaged in the Universities Amendment Act, 2016.

The analysis for the period under review indicates that Universities largely rely on income from student fees representing 51.8% of the total incomes received, followed by government capitation at 35.9%. The least revenue was obtained from research grants at 4.1% of the total revenues received in the period.

Universities should explore ways of forging partnerships with Industry so that the training in the university relates to what the industry requires. Firms would be eager to support universities where training activities adds value to the persons they will be hiring in future. With proper structures such arrangements could contribute to the firms as well as to the wider economy. For example, Safaricom is supporting an academy at Strathmore University in Kenya that offers a Master of Science degree in mobile telecommunications and innovation; Manu Chandaria Foundation has set up the Business Incubation Hub in Kenyatta University; while IBM has established research and training centers in Catholic and Kabarak Universities.

8.7 Emerging Issues

The following are some of the emerging issues that are bound to shape the university subsector in Kenya presently and in future.

- i) Curriculum reforms currently being undertaken (competency - based learning) – The Commission should champion the reforms by embedding them in programme and institutional accreditation process.*
- ii) The Commission should prepare the university sector to handle the anticipated high transition arising from the government policy of 100% transition to Secondary Education.*
- iii) The University Education Management Information Systems (UEMIS) should be integrated with the National Education Management Information System (NEMIS) to enable among other features, real time capture of university data and tracking of students to university level.*

These issues will have implications to the university sub - sector in terms of aligning programmes to fit into the competence based approach and re-tooling of the academic staff to deliver the content of their revised curricula. The use of technology to learn and manage university operations is also critical. In order to meet these future expectations, there will be need to build the capacity of the academic staff so that they get appropriate skill sets to cope with new technological demands.

ANNEXES

Annex 1 : Number of Programmes in Public Chartered Universities

	University	Doctorate	Masters	Bachelors	Postgraduate Diploma	Total
1	Chuka University	16	20	36	1	73
2	Dedan Kimathi University of Technology	5	10	33	0	48
3	Egerton University	26	56	59	3	144
4	Jaramogi Oginga Odinga University of Science & Technology	37	31	28	0	96
5	Jomo Kenyatta University of Agriculture & Technology	33	98	106	4	241
6	Karatina University	11	35	37	2	85
7	Kenyatta University	15	99	88	3	205
8	Kibabii University	9	17	17	2	45
9	Kirinyaga University	0	1	18	0	19
10	Kisii University	28	45	95	2	170
11	Laikipia University	11	9	28	0	48
12	Maasai Mara University	10	18	48	0	76
13	Machakos University	3	9	28	2	42
14	Maseno University	80	112	90	5	287
15	Masinde Muliro University of Science & Technology	51	71	64	3	189
16	Meru University of Science & Technology	6	8	35	0	49
17	Moi University	57	113	77	9	256
18	Multimedia University of Kenya	0	11	22	0	33
19	Murang'a University of Technology	2	10	30	0	42
20	Pwani University	4	7	45	4	60
21	Rongo university	15	21	41	0	77
22	South Eastern Kenya University	7	28	43	0	78
23	Taita Taveta University	0	4	8	0	12
24	Technical University of Kenya	50	19	65	0	134
25	Technical University of Mombasa	4	15	39	0	58
26	The Cooperative University of Kenya	0	0	5	0	5
27	University of Eldoret	20	30	56	0	106
28	University of Embu	8	15	21	0	44
29	University of Kabianga	2	19	29	0	50
30	University of Nairobi	108	247	56	20	431
	Total	618	1178	1347	60	3203

Annex 2: Number of Programmes in Public Universities Constituent Colleges

	Public Constituent University	Doctorate	Master	Bachelors	Postgraduate Diploma	Total
1	Alupe University College	0	0	18	0	18
2	Garissa University College	0	2	9	0	11
3	Kaimosi Friends University College	1	4	11	0	16
4	Tom Mboya University College	1	0	23	0	24
	Total	2	6	61	0	69

Annex 3: Number of Programmes in Private Chartered Universities

	University	Doctorate	Masters	Bachelors	Postgraduate Diploma	Total
1	Adventist University	2	9	0	0	11
2	Africa International University	5	16	10	2	33
3	Africa Nazarene University	2	8	15	0	25
4	Catholic University of Eastern Africa	5	13	28	0	46
5	Daystar University	2	13	32	1	48
6	Great Lakes University of Kisumu	2	7	16	0	25
7	Kabarak University	7	10	29	0	46
8	KAG EAST University	4	3	11	0	18
9	KCA University	1	9	12	2	24
10	Kenya Highlands Evangelical University	0	0	13	0	13
11	Kenya Methodist University	5	17	28	1	51
12	Mount Kenya University	6	27	63	2	98
13	Pan Africa Christian University	2	5	9	1	17
14	Scott Christian University	0	5	10	1	16
15	St. Paul's University	3	6	17	0	26
16	Strathmore University	5	13	14	0	32
17	United States International University	3	8	13	0	24
18	University of Eastern Africa Baraton	2	13	41	1	57
	Total	56	182	361	11	610

Annex 4: Number of Programmes in Private Constituent Colleges

	University	Doctorate	Masters	Bachelors	Postgraduate Diploma	Total
1	Hekima University College	0	2	1	0	3
2	Tangaza University College	1	10	11	0	22
3	Marist International University College	0	0	2	1	3
4	Uzima University College	0	0	5	0	5
5	Regina Pacis University College	0	0	0	0	0
	Total	1	12	19	1	33

Annex 5: Number of Programmes in Institutions with Letters of Interim Authority

	University	Doctorate	Masters	Bachelors	Postgraduate Diploma	Total
1	Aga Khan University	0	2	1	0	3
2	GRETSA University	0	0	5	0	5
3	International Leadership University	2	5	5	0	12
4	Kiriri Women's University of Science and Technology	0	0	4	0	4
5	Lukenya University	0	0	3	0	3
6	Management University of Africa	1	3	3	0	7
7	Pioneer International University	0	0	3	0	3
8	Presbyterian University of East Africa	0	1	5	0	6
9	Riara University	0	0	8	0	8
10	The East African University	0	0	4	0	4
11	Umma University	0	0	6	0	6
12	Zetech University	0	0	4	0	4
	Total	3	11	51	0	65

Annex 6: Programmes by Cluster in Public Constituent Colleges

Cluster	Programme Level				Total No. of programmes & proportion 2016/2017
	Doctorate	Master	Bachelor	Postgraduate Diploma	
Agriculture, Livestock and Fisheries	0	0	5	0	5 (0.07%)
Architecture	0	0	0	0	0
Business and Administration	0	1	8	0	9 (0.13%)
Computing and ICT	0	0	5	0	5 (0.07%)
Education (Arts)	2	3	8	0	13 (0.19%)
Education (Science)	0	0	4	0	4 (0.06%)
Engineering	0	0	0	0	0
Environment and Forestry	0	0	2	0	2 (0.03%)
Health and Welfare	0	0	6	0	6 (0.09%)
Humanities and Arts	0	1	6	0	7 (0.1%)
Journalism and Information	0	0	1	0	1 (0.01%)
Law	0	0	0	0	0
Life Science and Physical Science	0	0	4	0	4 (0.06%)
Manufacturing	0	0	0	0	0
Mathematics and Statistics	0	1	6	0	7 (0.1%)
Security and Conflict Resolution	0	0	2	0	2 (0.03%)
Services	0	0	2	0	2 (0.03%)
Social and Behavioral Sciences	0	0	2	0	2 (0.03%)
Others	0	0	0	0	0
Total	2	6	61	0	69

Annex 7: Programmes by Cluster in Private Constituent Colleges

Cluster	Programme Level				Total No. of programmes & proportion 2016/2017	Total No. of programmes & proportion 2015/2016
	Doctorate	Master	Bachelors	Post Graduate Diploma		
Agriculture, Livestock & Fisheries	0	0	0	0	0	0
Architecture	0	0	0	0	0	0
Business and Administration	0	1	1	0	2 (6%)	2
Computing and ICT	0	0	0	0	0	0
Education (Arts)	0	1	3	0	4 (12%)	3
Education (Science)	0	0	0	0	0	1
Engineering	0	0	0	0	0	0
Environment and Forestry	0	0	0	0	0	0
Health and Welfare	0	0	4	0	4 (12%)	6
Humanities and Arts	0	1	2	0	3 (9%)	8
Journalism and Information	0	0	1	0	1 (3%)	1
Law	0	0	0	0	0	0
Life Science and Physical Science	0	0	1	0	1 (3%)	0
manufacturing	0	0	0	0	0	0
Mathematics & Statistics	0	0	0	0	0	0
Security and Conflict Resolution	0	1	0	0	1 (3%)	1
Services	0	0	0	0	0	0
Social and Behavioural Sciences	1	8	7	1	17 (50%)	8
Others	0	0	0	0	0	1
Total	1	12	19	1	33	31

Annex 8: Programmes by Cluster and Academic Level in Public Chartered Universities

Cluster	University	Doctorate	Master	Bachelors	Postgraduate Diploma	Total
Agriculture, Livestock and Fisheries	Chuka University	3	1	6	0	10
	Egerton University	8	18	13	0	39
	Jaramogi Oginga Odinga University of Science & Technology	5	4	6	0	15
	Jomo Kenyatta University of Agriculture & Technology	8	9	14	0	31
	Karatina University	1	5	4	1	11
	Kenyatta University	2	7	10	0	19
	Kibabii University	0	0	2	0	2
	Kisii University	5	6	11	0	22
	Laikipia University	0	0	3	0	3
	Maasai Mara University	0	0	2	0	2
	Machakos University	0	0	2	0	2
	Maseno University	10	12	9	4	35
	Masinde Muliro University of Science & Technology	2	6	8	0	16
	Meru University of Science & Technology	1	0	10	0	11
	Moi University	0	0	0	0	0
	Murang'a University of Technology	1	1	2	0	4
	Murang'a University of Technology	1	1	5	5	12
	Pwani University	1	2	5	0	8
	Rongo university	3	4	8	0	15
	South Eastern Kenya University	0	0	1	0	1
	Taita Taveta University	0	1	1	0	2
	Technical University of Mombasa	0	0	19	0	19
	University of Eldoret	2	8	7	0	17
	University of Embu	0	1	4	0	5
	University of Kabianga	24	44	11	1	80
	University of Nairobi					
Humanities and Arts	Chuka University	5	5	1	0	11
	Egerton University	3	9	7	0	19
	Jaramogi Oginga Odinga University of Science & Technology	7	7	3	0	17
	Jomo Kenyatta University of Agriculture & Technology	0	2	2	1	5
	Karatina University	0	0	0	0	0
	Kisii University	1	1	1	0	3
	Laikipia University	5	6	6	0	17
	Maseno University	22	24	22	0	68
	Masinde Muliro University of Science & Technology	11	21	5	1	38
	Moi University	27	41	24	5	97
	Rongo university	2	6	5	0	13
	Technical University of Kenya	8	6	4	0	18
	Technical University of Mombasa	1	2	5	0	8
	The Cooperative University of Kenya	0	0	2	0	2
	Karatina University	0	1	0	0	1
	Kenyatta University	1	18	10	0	29
	Kisii University	4	5	8	0	17
	Maasai Mara University	2	6	10	0	18
	Machakos University	1	1	3	0	5
	Murang'a University of Technology	0	0	5	0	5
	Pwani University	1	1	9	0	11
	Rongo university	2	6	4	0	12
	South Eastern Kenya University	0	4	3	0	7
		0	1	0	0	1

Cluster	University	Doctorate	Master	Bachelors	Postgraduate Diploma	Total
	University of Nairobi	16	47	5	3	71
Journalism and Information	Chuka University	1	1	2	0	4
	Egerton University					
	Jomo Kenyatta University of Agriculture & Technology	0	2	2	0	4
	Laikipia University	0	0	2	0	2
	Maasai Mara University					
	Maseno University	2	0	3	0	5
	Masinde Muliro University of Science & Technology	0	0	3	0	3
	Moi University	2	0	3	0	5
	Moi University	0	1	0	0	1
	Rongo university	0	4	1	0	5
	Technical University of Kenya	1	3	6	0	10
	Jomo Kenyatta University of Agriculture & Technology	0	0	1	0	1
	Karatina University	1	2	0	0	3
	Karatina University	0	1	1	0	2
	Kenyatta University	1	2	2	0	5
	Kibabii University	0	0	1	0	1
	Kisii University	0	0	1	0	1
	Multimedia University of Kenya	1	4	2	0	7
	University of Kabianga	0	2	3	0	5
	University of Nairobi	0	0	1	0	1
	Technical University of Mombasa	0	3	2	0	5
		0	0	2	0	2
Law	Egerton University	0	0	1	0	1
	Kenyatta University	0	0	1	0	1
	Moi University	0	0	1	0	1
	Jomo Kenyatta University of Agriculture & Technology	0	0	1	0	1
	Kisii University	0	0	1	0	1
	University of Nairobi	1	1	1	0	3
Life Science and Physical Science	Chuka University	0	1	4	0	5
	Dedan Kimathi University of Technology	0	0	2	0	2
	Egerton University	3	5	3	2	13
	Jaramogi Oginga Odinga University of Science & Technology	5	1	1	0	7
	Jomo Kenyatta University of Agriculture & Technology	5	8	15	0	28
	Karatina University	3	5	4	0	12
	Kenyatta University	2	27	14	1	44
	Kibabii University	0	0	4	0	4
	Kirinyaga University	0	0	1	0	1
	Kisii University	1	6	19	0	26
	Laikipia University	0	0	4	0	4
	Maasai Mara University	0	0	4	0	4
	Machakos University	0	0	1	0	1
	Maseno University	6	15	5		26
	Masinde Muliro University of Science & Technology				0	
	Meru University of Science & Technology	13	10	13	0	36
	Meru University of Science & Technology	0	0	1	0	1
	Moi University	9	12	5	0	26
	Multimedia University of Kenya	0	1	5	0	6
	Murang'a University of Technology	0	0	4	0	4
	Pwani University	1	0	2	0	3
	Rongo university	0	0	6	0	6
	South Eastern Kenya University	1	6	6	0	13
	Technical University of Kenya	16	4	12	0	32

Cluster	University	Doctorate	Master	Bachelors	Postgraduate Diploma	Total
	Technical University of Mombasa	2	4	7	0	13
	University of Eldoret	3	8	8	0	19
	University of Embu	4	3	6	0	13
	University of Kabianga	0	2	5	0	7
	University of Nairobi	21	32	10	1	64
Manufacturing	Dedan Kimathi University of Technology	1	1	1	0	3
	Egerton University	0	0	2	0	2
	Kirinyaga University	0	0	1	0	1
	Moi University	1	2	0	0	3
	Pwani University	0	0	2	0	2
Security and Conflict Resolution	Egerton University	1	3	3	0	7
	Dedan Kimathi University of Technology	0	1	1	0	2
	Jaramogi Oginga Odinga University of Science & Technology	0	0	0	0	0
	Jomo Kenyatta University of Agriculture & Technology	0	1	7	1	9
	Kenyatta University	1	1	1	1	4
	Kirinyaga University	0	0	3	0	3
	Laikipia University	0	0	1	0	1
	Maseno University	3	6	7	0	16
	Masinde Muliro University of Science & Technology	2	3	1	0	6
	Meru University of Science & Technology	1	2	2	0	5
	Moi University	0	1	2	0	3
	Rongo university	0	0	1	0	1
	Technical University of Kenya	1	2	2	0	5
	Technical University of Mombasa	0	1	2	0	3
	University of Embu	0	1	1	0	2
	University of Nairobi	5	6	0	1	12
Services	Chuka University	0	0	3	0	3
	Dedan Kimathi University of Technology	0	0	2	0	2
	Egerton University	0	2	1	0	3
	Kenyatta University	1	9	3	0	13
	Kisii University	1	1	4	0	6
	Laikipia University	0	0	1	0	1
	Maasai Mara University	0	0	2	0	2
	Machakos University	0	0	1	0	1
	Maseno University	0	0	1	0	1
	Masinde Muliro University of Science & Technology	0	1	0	0	1
	Moi University	0	1	0	0	1
	Murang'a University of Technology	0	0	2	0	2
	Pwani University	0	0	1	0	1
	Rongo university	0	0	2	0	2
	Technical University of Mombasa	0	0	1	0	1
	University of Nairobi	0	1	0	3	4
Social and Behavioural Science	Chuka University	1	1	1	0	3
	Dedan Kimathi University of Technology	0	0	2	0	2
	Egerton University	1	0	3	0	4
	Jomo Kenyatta University of Agriculture & Technology	7	21	16	0	44
	Karatina University	0	0	2	0	2
	Kenyatta University	1	0	3	0	4

Cluster	University	Doctorate	Master	Bachelors	Postgraduate Diploma	Total
	Kisii University	3	7	11	0	21
	Maasai Mara University	0	0	1	0	1
	Maseno University	0	1	2	0	3
	Moi University	1	3	3	0	7
	Pwani University	0	0	2	0	2
	Rongo university	0	0	0	0	0
	Technical University of Kenya	0	0	6	0	6
	University of Kabianga	0	2	0	0	2
Others	Chuka University	1	5	5	0	11
	Dedan Kimathi University of Technology	0	1	0	0	1
	Egerton University	1	2	1	0	4
	Jomo Kenyatta University of Agriculture & Technology	1	0	10	0	11
	Kibabii University	0	0	1	0	1
	Kirinyaga University	0	0	1	0	1
	Kisii University	1	1	0	0	2
	Laikipia University	2	1	1	0	4
	Maseno University	0	1	2	0	3
	Masinde Muliro University of Science & Technology	0	0	1	0	1
	Moi University	0	0	1	1	2
	Pwani University	0	0	1	0	1
	Rongo university	0	0	2	0	2
	Technical University of Kenya	4	1	3	0	8
	University of Nairobi	0	0	0	3	3
Architecture	Jomo Kenyatta University of Agriculture & Technology	2	6	4	0	12
	Kenyatta University	0	0	4	0	4
	Maasai Mara University	0	0	1	0	1
	Technical University of Kenya	5	0	6	0	11
	Technical University of Mombasa	0	0	1	0	1
	University of Nairobi	0	9	5	0	14
Business and Administration	Chuka University	0	1	4	0	5
	Dedan Kimathi University of Technology	1	2	4	0	7
	Egerton University	1	2	2	0	5
	Jaramogi Oginga Odinga University of Science & Technology	3	2	3	0	8
	Jomo Kenyatta University of Agriculture & Technology	1	5	4	0	10
	Karatina University	5	7	4	0	16
	Kenyatta University	0	10	3	0	13
	Kibabii University	1	4	2	0	7
	Kirinyaga University	0	1	7	0	8
	Kisii University	5	6	12	0	23
	Laikipia University	1	1	1	0	3
	Maasai Mara University	0	3	10	0	13
	Machakos University	1	5	4	0	10
	Maseno University	11	9	14	0	34
	Masinde Muliro University of Science & Technology	1	3	4	0	8
	Meru University of Science & Technology	0	2	6	0	8
	Moi University	2	5	8	1	16
	Multimedia University of Kenya	0	1	4	0	5
	Murang'a University of Technology	1	4	6	0	11

Cluster	University	Doctorate	Master	Bachelors	Postgraduate Diploma	Total
	Pwani University	0	1	1	0	2
	Rongo university	1	1	4	0	6
	South Eastern Kenya University	0	1	6	0	7
	Taita Taveta University	0	2	3	0	5
	Technical University of Kenya	5	1	4	0	10
	Technical University of Mombasa	1	4	6	0	11
	The Cooperative University of Kenya	0	0	3	0	3
	University of Eldoret	0	2	8	0	10
	University of Embu	1	1	2	0	4
	University of Kabianga	1	3	5	0	9
	University of Nairobi	1	8	8	1	18
Computing and ICT	Chuka University	0	0	2	0	2
	Dedan Kimathi University of Technology	1	0	2	0	3
	Egerton University	0	0	2	0	2
	Jaramogi Oginga Odinga University of Science & Technology	3	4	4	0	11
	Jomo Kenyatta University of Agriculture & Technology	0	2	4	0	6
	Karatina University	0	1	2	0	3
	Kenyatta University	0	0	5	0	5
	Kibabii University	1	1	2	1	5
	Kirinyaga University	0	0	2	0	2
	Kisii University	0	0	2	0	2
	Laikipia University	0	0	1	0	1
	Maasai Mara University	0	0	2	0	2
	Machakos University	5	8	5	1	19
	Maseno University	1	1	5	1	8
	Masinde Muliro University of Science & Technology	1	1	0	0	2
	Meru University of Science & Technology	0	0	3	0	3
	Moi University	0	2	6	0	8
	Multimedia University of Kenya	0	0	5	0	5
	Murang'a University of Kenya	0	0	1	0	1
	Pwani University	0	0	1	0	1
	Rongo university	0	0	1	0	1
	South Eastern Kenya University	0	0	2	0	2
	Taita Taveta University	0	2	2	0	4
	Technical University of Kenya	3	0	6	0	9
	Technical University of Mombasa	0	0	2	0	2
	University of Eldoret	0	0	3	0	3
	University of Embu	0	0	1	0	1
	University of Kabianga	0	2	2	1	5
	University of Nairobi	1	5	8	0	14
Education (Arts)	Chuka University	3	3	3	1	10
	Egerton University	3	4	3	0	10
	Jaramogi Oginga Odinga University of Science & Technology	8	5	3	0	16
	Karatina University	1	10	1	0	12
	Kenyatta University	3	4	3	1	11
	Kibabii University	3	8	4	1	16
	Kisii University	1	1	4	1	7
	Laikipia University	0	0	2	0	2
	Maasai Mara University	0	0	3	0	3
	Machakos University	1	0	1	0	2
	Maseno University	10	9	8	1	28

Cluster	University	Doctorate	Master	Bachelors	Postgraduate Diploma	Total
	Masinde Muliro University of Science & Technology	6	13	5	0	24
	Moi University	6	18	9	1	34
	Murang'a University of Kenya	0	5	1	0	6
	Pwani University	0	0	7	0	7
	Rongo university	7	6	3	0	16
	South Eastern Kenya University	1	4	2	0	7
	University of Eldoret	8	10	6	0	24
	University of Embu	1	2	2	0	5
	University of Kabianga	1	6	4	0	11
	University of Nairobi	9	25	3	2	39
Education (Science)	Chuka University	1	1	1	0	3
	Egerton University	1	1	2	0	4
	Jaramogi Oginga Odinga University of Science & Technology	0	0	1	0	1
	Karatina University	1	2	1	0	4
	Kenyatta University	0	1	1	0	2
	Kibabii University	1	2	2	0	5
	Kisii University	0	0	1	0	1
	Laikipia University	0	0	2	0	2
	Maasai Mara University	0	0	3	0	3
	Machakos University	0	0	1	0	1
	Masinde Muliro University of Science & Technology	1	4	5	0	10
	Meru University of Science & Technology	0	0	1	0	1
	Moi University	0	0	1	0	1
	Murang'a University of Kenya	0	0	0	0	0
	Pwani University	0	0	1	0	1
	Rongo university	0	0	1	0	1
	South Eastern Kenya University	0	0	1	0	1
	University of Eldoret	0	0	4	0	4
	University of Embu	0	0	0	0	0
	University of Nairobi	0	0	2	0	2
Engineering	Dedan Kimathi University of Technology	2	5	17	0	24
	Egerton University	1	3	7	0	11
	Jaramogi Oginga Odinga University of Science & Technology	1	0	2	0	3
	Jomo Kenyatta University of Agriculture & Technology	1	11	15	0	27
	Kenyatta University	0	1	10	0	11
	Machakos University	0	0	4	0	4
	Maseno University	0	2	2	0	4
	Masinde Muliro University of Science & Technology	1	3	5	0	9
	Meru University of Science & Technology	0	0	9	0	9
	Moi University	0	1	6	0	7
	Multimedia University of Kenya	0	2	3	0	5
	Murang'a University of Kenya	0	0	0	0	0
	South Eastern Kenya University	0	3	0	0	3
	Taita Taveta University	0	0	1	0	1
	Technical University of Kenya	8	2	2	0	12
	Technical University of Mombasa	0	2	9	0	11
	University of Eldoret	0	1	3	0	4
	University of Nairobi	13	8	5	1	27

Cluster	University	Doctorate	Master	Bachelors	Postgraduate Diploma	Total
Environment and Forestry	Chuka University	1	1	3	0	5
	Egerton University	2	4	3	1	10
	Jaramogi Oginga Odinga University of Science & Technology	0	1	2	0	3
	Jomo Kenyatta University of Agriculture & Technology	0	5	5	0	10
	Karatina University	0	3	2	0	5
	Kenyatta University	1	7	7	0	15
	Kisii University	2	2	4	0	8
	Laikipia University	0	0	2	0	2
	Maasai Mara University	2	1	5	0	8
	Machakos University	0	0	3	0	3
	Maseno University	2	4	4	0	10
	Masinde Muliro University of Science & Technology	2	2	1	0	5
	Moi University	1	1	2	0	4
	Pwani University	0	1	4	0	5
	Rongo university	1	1	1	1	4
	South Eastern Kenya University	2	3	7	0	12
	Technical University of Kenya	0	1	1	0	2
	Technical University of Mombasa	0	1	0	0	1
	University of Eldoret	8	8	2	0	18
	University of Embu	0	0	0	0	0
	University of Kabianga	0	3	3	0	6
	University of Nairobi	9	6	1	3	19
Health and Welfare	Chuka University	0	0	1	0	1
	Dedan Kimathi University of Technology	0	0	3	0	3
	Egerton University	1	1	4	0	6
	Jaramogi Oginga Odinga University of Science & Technology	2	6	4	0	12
	Jomo Kenyatta University of Agriculture & Technology	8	23	24	1	56
	Karatina University	0	0	1	0	1
	Kenyatta University	3	9	10	0	22
	Kirinyaga University	0	0	3	0	3
	Kisii University	2	4	6	0	12
	Machakos University	0	0	1	0	1
	Maseno University	13	21	6	0	40
	Masinde Muliro University of Science & Technology	6	10	10	1	27
	Meru University of Science & Technology	3	3	7	0	13
	Moi University	6	21	7	2	36
	Pwani University	0	1	4	0	5
	Rongo university	0	0	1	0	1
	South Eastern Kenya University	0	4	4	0	8
	Technical University of Kenya	0	1	3	0	4
	University of Embu	0	0	1	0	1
	University of Kabianga	0	0	3	0	3
	University of Nairobi	18	49	9	0	76

Cluster	University	Doctorate	Master	Bachelors	Postgraduate Diploma	Total
Mathematics and Statistics	Dedan Kimathi University of Technology	0	0	1	0	1
	Jaramogi Oginga Odinga University of Science & Technology	3	3	1	0	7
	Jomo Kenyatta University of Agriculture & Technology	0	8	7	0	15
	Karatina University	0	0	2	0	2
	Kenyatta University	0	3	2	0	5
	Kibabii University	3	2	1	0	6
	Kisii University	0	2	4	0	6
	Laikipia University	0	0	1	0	1
	Maasai Mara University	1	0	2	0	3
	Machakos University	0	0	3	0	3
	Multimedia University of Kenya	0	3	1	0	4
	Murang'a University of Kenya	0	0	3	0	3
	Rongo university	0	0	1	0	1
	South Eastern Kenya University	0	0	3	0	3
	Taita Taveta University	0	0	1	0	1
	University of Eldoret	1	0	2	0	3
	University of Kabianga	0	0	2	0	2
	University of Nairobi	0	0	3	1	4
Total		618	1178	1347	60	3203

Annex 9: Programmes by Cluster and Academic Level in Public Constituent Colleges

Cluster	Public Constituent College	Doctorate	Master	Bachelors	Postgraduate Diploma	Total
Agriculture, Livestock and Fisheries	Kaimosi Friends University College	0	0	1	0	1
	Tom Mboya University College	0	0	4	0	4
	Total	0	0	5	0	5
Humanities and Arts	Alupe University College	0	0	3	0	3
	Garissa University College	0	0	1	0	1
	Kaimosi Friends University College	0	1	1	0	2
	Tom Mboya University College	0	0	1	0	1
	Total	0	1	6	0	7
Journalism and Information	Alupe University College	0	0	1	0	1
	Total	0	0	1	0	1
Life Science and Physical Science	Alupe University College	0	0	2	0	2
	Garissa University College	0	0	1	0	1
	Tom Mboya University College	0	0	1	0	1
	Total	0	0	4	0	4
Mathematics and Statistics	Alupe University College	0	0	1	0	1
	Kaimosi Friends University College	0	1	2	0	3
	Tom Mboya University College	0	0	3	0	3
	Total	0	1	6	0	7
Security and Conflict Resolution	Kaimosi Friends University College	0	0	2	0	2
	Total	0	0	2	0	2
Services	Alupe University College	0	0	1	0	1
	Tom Mboya University College	0	0	1	0	1
	Total	0	0	2	0	2
Social and Behavioural Science	Kaimosi Friends University College	0	0	1	0	1
	Tom Mboya University College	0	0	1	0	1
	Total	0	0	2	0	2
Business and Administration	Alupe University College	0	0	1	0	1
	Garissa University College	0	1	2	0	3
	Kaimosi Friends University College	0	0	1	0	1
	Tom Mboya University College	0	0	4	0	4
	Total	0	1	8	0	9
Computing and ICT	Alupe University College	0	0	1	0	1
	Garissa University College	0	0	2	0	2
	Kaimosi Friends University College	0	0	1	0	1
	Tom Mboya University College	0	0	1	0	1
	Total	0	0	5	0	5
Education (Arts)	Alupe University College	0	0	3	0	3
	Garissa University College	0	1	2	0	3
	Kaimosi Friends University College	1	2	1	0	4
	Tom Mboya University College	1	0	2	0	3
	Total	2	3	8	0	13
Education (Science)	Alupe University College	0	0	1	0	1
	Garissa University College	0	0	1	0	1
	Kaimosi Friends University College	0	0	1	0	1
	Tom Mboya University College	0	0	1	0	1
	Total	0	0	4	0	4
Environment and Forestry	Tom Mboya University College	0	0	2	0	2
	Total	0	0	2	0	2
Health and Welfare	Alupe University College	0	0	4	0	4
	Tom Mboya University College	0	0	2	0	2
	Total	0	0	6	0	6

Annex 10: Programmes by Cluster and Academic Level in Private Chartered Universities

Cluster	Private Chartered University	Doctorate	Master	Bachelors	Postgraduate Diploma	Total
Agriculture Livestock and Fisheries	Kenya Methodist University	1	1	1	0	3
	Great Lakes University of Kisumu	0	1	1	0	2
	Mount Kenya University	0	0	3	0	3
	University of Eastern Africa Baraton	0	0	2	0	2
	KAG East University	0	0	1	0	1
	Total	1	2	8	0	11
Humanities and Arts	Adventist University	2	6	0	0	8
	Africa International University	5	13	2	0	20
	Africa Nazarene University	2	2	3	0	7
	Kenya Methodist University	0	3	3	0	6
	Strathmore University	0	0	1	0	1
	Kabarak University	1	3	3	0	7
	Great Lakes University of Kisumu	0	1	3	0	4
	Mount Kenya University	1	12	7	0	20
	University of Eastern Africa Baraton	0	0	12	0	12
	Catholic University of Eastern Africa	1	7	13	0	21
	Daystar University	0	1	8	0	9
	Scott Christian University	0	2	2	0	4
	St. Paul's University	1	2	2	0	5
	Pan Africa Christian University	1	3	4	1	9
	KAG East University	2	2	4	0	8
	Kenya Highlands Evangelical University	0	0	4	0	4
	Total	16	57	71	1	145
Journalism and Information	Africa Nazarene University	0	0	1	0	1
	Kenya Methodist University	0	0	1	0	1
	Kabarak University	0	0	1	0	1
	Mount Kenya University	0	0	1	0	1
	Catholic University of Eastern Africa	0	0	1	0	1
	Daystar University	1	0	1	0	2
	United States International University	0	1	1	0	2
	Pan Africa Christian University	0	0	1	0	1
	KAG East University	0	0	1	0	1
	Total	1	1	9	0	11
Law	Africa Nazarene University	0	0	1	0	1
	Strathmore University	0	0	1	0	1

Cluster	Private Chartered University	Doctorate	Master	Bachelors	Postgraduate Diploma	Total
	Kabarak University	0	0	1	0	1
	Mount Kenya University	0	0	1	0	1
	Catholic University of Eastern Africa	0	0	1	0	1
	Daystar University	0	0	1	0	1
	Total	0	0	6	0	6
Life Science and Physical Science	Kenya Methodist University	0	0	1	0	1
	Kabarak University	0	1	2	0	3
	Great Lakes University of Kisumu	0	0	1	0	1
	Mount Kenya University	0	1	3	0	4
	University of Eastern Africa Baraton	0	1	6	0	7
	Catholic University of Eastern Africa	0	0	3	0	3
	Daystar University	0	0	1	0	1
	United States International University	0	0	1	0	1
	Kenya Highlands Evangelical University	0	0	1	0	1
	Total	0	3	19	0	22
Manufacturing	University of Eastern Africa Baraton	0	0	1	0	1
	Total	0	0	1	0	1
Mathematics and Statistics	Kenya Methodist University	0	0	1	0	1
	Strathmore University	1	3	1	0	5
	Kabarak University	0	0	4	0	4
	Mount Kenya University	0	0	3	0	3
	University of Eastern Africa Baraton	0	0	1	0	1
	Catholic University of Eastern Africa	1	1	1	0	3
	Daystar University	0	0	3	0	3
	Total	2	4	14	0	20
Security and Conflict Resolution	Africa Nazarene University	0	1	2	0	3
	Kenya Methodist University	0	0	1	0	1
	Mount Kenya University	0	1	3	0	4
	Catholic University of Eastern Africa	0	1	1	0	2
	Daystar University	0	1	1	0	2
	KAG East University	0	0	1	0	1
	Total	0	4	9	0	13

Cluster	Private Chartered University	Doctorate	Master	Bachelors	Postgraduate Diploma	Total
Services	Kenya Methodist University	0	0	2	0	2
	Strathmore University	0	0	2	0	2
	University of Eastern Africa Baraton	0	0	1	0	1
	Scott Christian University	0	0	1	0	1
	United States International University	0	0	2	0	2
	Total	0	0	8	0	8
Social and Behavioural Science	Africa International University	0	1	1	1	3
	Africa Nazarene University	0	1	1	0	2
	Strathmore University	1	2	2	0	5
	Kabarak University	1	0	0	0	1
	Great Lakes University of Kisumu	0	0	1	0	1
	KCA University	0	0	1	0	1
	Mount Kenya University	2	1	3	0	6
	University of Eastern Africa Baraton	0	0	1	0	1
	Catholic University of Eastern Africa	1	1	1	0	3
	Daystar University	1	4	2	0	7
	Scott Christian University	0	0	1	0	1
	United States International University	2	3	3	0	8
	St. Paul's University	1	2	6	0	9
	Pan Africa Christian University	1	1	1	0	3
	KAG East University	0	0	1	0	1
	Kenya Highlands Evangelical University	0	0	1	0	1
	Total	10	16	26	1	53
Business and Administration	Adventist University	0	1	0	0	1
	Africa International University	0	1	3	0	4
	Africa Nazarene University	0	1	3	0	4
	Kenya Methodist University	1	3	1	0	5
	Strathmore University	2	4	3	0	9
	Kabarak University	2	1	5	0	8
	Great Lakes University of Kisumu	1	0	2	0	3
	KCA University	0	5	5	1	11
	Mount Kenya University	1	2	7	1	11
	University of Eastern Africa Baraton	0	7	5	0	12

Cluster	Private Chartered University	Doctorate	Master	Bachelors	Postgraduate Diploma	Total
	Catholic University of Eastern Africa	1	2	1	0	4
	Daystar University	0	7	4	0	11
	Scott Christian University	0	2	2	0	4
	United States International University	1	3	4	0	8
	St. Paul's University	2	0	3	0	5
	Pan Africa Christian University	0	1	2	0	3
	KAG East University	1	1	2	0	4
	Kenya Highlands Evangelical University	0	0	3	0	3
	Total	12	41	55	2	110
Computing and ICT	Adventist University	0	1	0	0	1
	Africa International University	0	0	1	0	1
	Africa Nazarene University	0	1	2	0	3
	Kenya Methodist University	0	3	3	0	6
	Strathmore University	4	0	3	0	7
	Kabarak University	2	0	5	0	7
	Great Lakes University of Kisumu	0	0	1	0	1
	KCA University	3	0	4	0	7
	Mount Kenya University	1	0	5	0	6
	University of Eastern Africa Baraton	0	0	3	0	3
	Catholic University of Eastern Africa	0	0	1	0	1
	Daystar University	0	0	3	0	3
	Scott Christian University	0	0	2	0	2
	United States International University	0	1	2	0	3
	St. Paul's University	0	0	3	0	3
	Pan Africa Christian University	0	0	1	0	1
	Kenya Highlands Evangelical University	0	0	2	0	2
	Total	10	6	41	0	57
Education (Arts)	Africa International University	0	1	3	1	5
	Africa Nazarene University	0	1	1	0	2
	Kenya Methodist University	1	3	5	1	10
	Kabarak University	1	0	1	0	2
	Great Lakes University of Kisumu	1	0	1	0	2
	KCA University	1	0	2	1	4

Cluster	Private Chartered University	Doctorate	Master	Bachelors	Postgraduate Diploma	Total
	Mount Kenya University	3	0	5	1	9
	University of Eastern Africa Baraton	2	2	0	1	5
	Catholic University of Eastern Africa	1	1	2	0	4
	Daystar University	0	0	5	1	6
	Scott Christian University	0	1	2	1	4
	St. Paul's University	1	0	3	0	4
	KAG East University	1	0	1	0	2
	Kenya Highlands Evangelical University	0	0	2	0	2
	Total	12	9	33	7	61
Education (Science)	Kenya Methodist University	0	0	1	0	1
	Kabarak University	0	0	1	0	1
	Mount Kenya University	0	0	1	0	1
	University of Eastern Africa Baraton	0	0	1	0	1
	Catholic University of Eastern Africa	0	0	3	0	3
	Total	0	0	7	0	7
Engineering	Mount Kenya University	0	0	3	0	3
	University of Eastern Africa Baraton	0	0	2	0	2
	Total	0	0	5	0	5
Environment and Forestry	Africa Nazarene University	0	1	1	0	2
	Strathmore University	0	0	1	0	1
	Kabarak University	0	0	1	0	1
	Mount Kenya University	0	0	2	0	2
	University of Eastern Africa Baraton	0	0	1	0	1
	Daystar University	0	0	1	0	1
	Total	0	1	7	0	8
Health and Welfare	Adventist University	0	1	0	0	1
	Kenya Methodist University	1	4	8	0	13
	Kabarak University	2	0	5	0	7
	Great Lakes University of Kisumu	3	1	6	0	10
	Mount Kenya University	6	0	16	0	22
	University of Eastern Africa Baraton	0	3	5	0	8
	Daystar University	0	0	2	0	2
	Total	12	9	42	0	63

Annex 11: Programmes by Cluster in Private Constituent Colleges

Clusters	Private Constituent College	Doctorate	Master	Bachelor	Postgraduate Diploma	Total
Humanities and Arts	Hekima University College	0	1	1	0	2
	Tangaza University College	0	0	1	0	1
	Total	0	1	2		3
Journalism and Information	Tangaza University College	0	0	1	0	1
	Total	0	0	1	0	1
Life Science and Physical Science	Uzima University College	0	0	1	0	1
	Total	0	0	1	0	1
Security and Conflict Resolution	Hekima University College	0	1	0	0	1
	Total	0	1	0	0	1
Social and Behavioural Science	Tangaza University College	1	8	7	0	16
	Marist International University College	0	0	0	1	1
	Total	1	8	7	1	17
Business and Administration	Tangaza University College	0	1	0	0	1
	Marist International University College	0	0	1	0	1
	Total	0	1	1	0	2
Education (Arts)	Tangaza University College		1	2		3
	Marist International University College		0	1		1
	Total		1	3		4
Health and Welfare	Uzima University College	0	0	4	0	4
	Total	0	0	4	0	4

Annex 12: Programmes by Cluster and Academic Level in Institutions with Letters of Interim Authority

Clusters	Institutions with LIA	Doctorate	Master	Bachelor	Postgraduate Diploma	Total
Agriculture Livestock and Fisheries	Lukenya University	0	0	1	0	1
	Total	0	0	1	0	1
Humanities and Arts	Riara University	0	0	1	0	1
	Umma University	0	0	2	0	2
	GRETSA University	0	0	1	0	1
	International Leadership University	1	3	1	0	5
	Management University of Africa	0	1	1	0	2
	Pioneer International University	0	0	1	0	1
	Presbyterian University of East Africa	0	0	1	0	1
	Total	1	4	8	0	13
Journalism and Information	Aga Khan University	0	1	0	0	1
	Riara University	0	0	1	0	1
	Total	0	1	1	0	2
Law	Riara University	0	0	1	0	1
	Total	0	0	1	0	1
Mathematics and Statistics	Kiriri Women's University of Science and Technology	0	0	1	0	1
	Total	0	0	1	0	1
Services	GRETSA University	0	0	1	0	1
	Total	0	0	1	0	1
Social and Behavioural Science	International Leadership University	0	1	2	0	3
	Total	0	1	2	0	3
Business and Administration	Riara University	0	0	1	0	1
	The East African University	0	0	1	0	1
	Umma University	0	0	1	0	1
	Zetech University	0	0	2	0	2
	GRETSA University	0	0	1	0	1
	International Leadership University	1	1	1	0	3
	Kiriri Women's University of Science and Technology	0	0	1	0	1
	Lukenya University	0	0	1	0	1
	Management University of Africa	1	2	2	0	5

Clusters	Institutions with LIA	Doctorate	Master	Bachelor	Postgraduate Diploma	Total
	Pioneer International University	0	0	1	0	1
	Presbyterian University of East Africa	0	1	1	0	2
	Total	2	4	13	0	19
Computing and ICT	Riara University	0	0	2	0	2
	The East African University	0	0	2	0	2
	Umma University	0	0	1	0	1
	Zetech University	0	0	2	0	2
	GRETSA University	0	0	1	0	1
	Kiriri Women's University of Science and Technology	0	0	2	0	2
	Pioneer International University	0	0	1	0	1
	Presbyterian University of East Africa	0	0	1	0	1
	Total	0	0	12	0	12
Education (Arts)	Riara University	0	0	2	0	2
	The East African University	0	0	1	0	1
	GRETSA University	0	0	1	0	1
	International Leadership University	0	0	1	0	1
	Lukenya University	0	0	1	0	1
	Presbyterian University of East Africa	0	0	1	0	1
	Total			7	0	7
Education (Science)	Presbyterian University of East Africa	0	0	1	0	1
	Total	0	0	1	0	1
Health and Welfare	Aga Khan University	0	1	1	0	2
	Umma University	0	0	2	0	2
	Total		1	3		4

Annex 13: Enrolment by Gender and Academic Level in Public and Private Universities

Universities	Postgraduate Diploma		Bachelors		Masters		Doctorate		Grand Total	Proportion
	Male	Female	Male	Female	Male	Female	Male	Female		
Public Chartered Universities	491	399	231,800	165,734	27,916	20,805	5,448	2,922	455,515	83%
Public University Constituent Colleges	0	0	2,082	1,311	36	10	1	1	3,441	0.60%
Private Chartered Universities	129	81	36,183	32,655	4,708	4160	610	461	78,987	14.40%
Private University Constituent Colleges	0	0	605	364	106	73	11	9	1,168	0.20%
Institutions with LIA	0	0	3,181	4,503	223	184	77	37	8, 205	1.70%
Total	620	480	273,851	204,567	32,989	25,232	6,147	3,430	547,316	100%

Annex 14: Proportion of Masters to Doctorate Students

Universities	Masters Students		Doctorate Students		Masters /PhD
	Male	Female	Male	Female	
Public Chartered Universities	27,952	20,815	5,449	2,923	6:1
Private Chartered Universities	5,273	4,477	699	493	8:1
Total	33,225	25,292	6,148	3,416	6:1

Annex 15: Enrolment by Cluster in Public and Private Universities

Cluster	Public Chartered	Public University Constituent	Private Chartered	Private University Constituent	Institution with LIA	Grand Total	Proportion
Agriculture, Livestock & Fisheries	32109	47	590	0	1	32747	6%
Architecture	6210	0	90	0	0	6300	1%
Business & Administration	112095	910	26765	124	4424	144318	26%
Computing and ICT	15899	119	4909	0	628	21555	4%
Education(Arts)	92452	1426	13462	184	1009	108533	20%
Education (Science)	21327	427	3085	15	589	25443	5%
Engineering	22155	0	82	0	0	22237	4%
Environment and Forestry	12648	3	380	0	0	13031	2%
Health & Welfare	25559	66	7174	448	197	33444	6%
Humanities & Arts	36448	49	5504	271	1666	43938	8%
Journalism & Information	12101	0	4706	10	18	16835	3%
Law	6765	0	3443	0	312	10520	2%
Life Sciences & Physical Sciences	21700	28	625	0	0	22353	4%
Manufacturing	590	0	104	0	0	694	0%
Mathematics & Statistics	15240	195	590	0	129	16154	3%
Security & Conflict resolution	6140	92	2132	0	0	8364	2%
Services	7417	22	981	0	44	8464	2%
Social & Behavioral Sciences	8660	57	4339	115	29	13200	2%
Others	0	0	26	0	0	26	0%
Total	455,515	3,441	78,987	1,168	8,205	547, 316	100%

Annex 16: Enrolment by Gender and Academic Level in Public Chartered Universities

Name of University	Bachelors			Postgraduate Diploma			Masters			Doctorate			Grand Total	2015
	M	F	T	M	F	T	M	F	T	M	F	T		
University of Nairobi	34586	21900	56486	131	71	202	9118	6591	15709	1058	439	1497	73894	98715
Moi University	23049	16833	39882	4	2	6	356	245	601	372	312	684	41173	46726 35242
Kenyatta University	24289	29466	53755	114	197	311	5727	7008	12735	364	261	625	67426	71491
Egerton University	11081	6269	17350	0	0	0	1499	203	1702	22	14	36	19088	22403
Jomo Kenyatta University of Agriculture And Technology	13,673	9063	22736	26	9	35	5119	2963	8082	1757	871	2628	33481	34375
Maseno University	9425	6758	16183	123	59	182	797	597	1394	420	214	634	18393	18,272
Dedan Kimathi University of Technology	3920	1787	5707	0	0	0	267	94	361	74	44	118	6186	6096
Chuka University	9086	5724	14810	31	29	60	559	437	996	70	67	137	16003	10543
Technical University of Kenya	8313	2933	11246	0	0	0	19	16	35	101	28	129	11410	10032
Technical University of Mombasa	6773	2473	9246	0	0	0	89	37	126	6	3	9	9381	6875
Pwani University	3604	2456	6060	0	0	0	160	35	195	20	7	27	6282	6275
Kisii University	11730	8384	20114	58	31	89	894	501	1395	200	94	294	21892	13546
Masinde Muliro University for Science and Technology	14556	10295	24471	0	0	0	358	305	663	206	127	333	25467	14231
Maasai Mara University	5629	4486	10115	0	0	0	85	85	170	46	89	135	10420	9139
South Eastern Kenya University	4344	2960	7304	0	0	0	229	186	415	33	36	69	7788	6898
Meru University of Science and Technology	2988	1596	4584	0	0	0	99	55	154	14	4	18	4756	4339
Multimedia University of Kenya	2596	1468	4064	0	0	0	5	2	7	0	0	0	4071	3941
Jaramogi Oginga Odinga University of Science and Technology	6654	4054	10708	0	0	0	762	209	971	279	67	346	12025	10656
Laikipia University	4350	3511	7861	0	0	0	1053	639	1692	188	116	304	9857	9006
University of Kabianga	1189	1111	2300	0	0	0	221	219	440	22	6	28	2768	2266
University of Eldoret	8325	7007	15332	0	0	0	42	35	77	16	7	23	15432	23838

Name of	Bachelors			Postgraduate Diploma			Masters			Doctorate			Grand	
Karatina University	3459	2509	5968	0	0	0	77	82	159	49	39	88	6215	7636
Kibabii University	3461	2720	6181	4	1	5	142	85	227	34	20	54	6467	5342
University of Embu	2146	1830	3976	0	0	0	54	36	90	20	13	33	4099	2649
Kirinyaga University	1123	755	1878	0	0	0	4	1	5	0	0	0	1883	1126
Murang'a University	1623	858	2481	0	0	0	4	7	11	0	0	0	2492	1450
Machakos University	4147	2398	6545	0	0	0	53	42	95	11	19	30	6670	4907
Rongo University	2942	2168	5110	0	0	0	115	80	195	66	25	91	5396	5121
Taita Taveta University	1122	686	1808	0	0	0	9	10	19	0	0	0	1827	2119
The Co-operative University	1617	1656	3273	0	0	0	0	0	0	0	0	0	3273	1807
Total	225829	163871	397,534	491	399	890	27844	20768	48,721	5447	2921	8370	455,515	497062

Annex 17: Enrolment by Gender and Academic Level in Public Constituent Colleges

Name of Universities	Bachelors			Postgraduate Diploma			Masters			Doctorate			Grand Total
	M	F	T	M	F	T	M	F	T	M	F	T	
Garissa University College	511	178	689	0	0	0	18	4	22	0	0	0	711
Kaimosi Friends University College	961	757	1718	0	0	0	0	0	0	0	0	0	1718
Alupe University College	98	81	179	0	0	0	0	0	0	0	0	0	179
Tom Mboya University College	378	252	630	0	0	0	0	0	0	1	1	2	632
Turkana University College	134	43	177	0	0	0	18	6	24	4	2	64	201
Total	2082	1311	3393	0	0	0	36	10	46	1	1	2	3441

Annex 18: Enrolment by Gender and Academic Level in Private Constituent Colleges

Name of University	Bachelors			Postgraduate Diploma			Masters			Doctorate			Grand Total
	M	F	T	M	F	T	M	F	T	M	F	T	
Hekima University College	41	0	41	0	0	0	7	8	15	0	0	0	56
Tangaza University College	196	73	269	0	0	0	92	59	151	11	9	20	440
Marist International University College	125	85	210	0	0	0	7	6	13	0	0	0	224
Regina Pacis University College	0	0	0	0	0	0	0	0	0	0	0	0	
Uzima University College	243	205	448	0	0	0	92	59	151	0	0	0	448
Total	605	363	968	0	0	0	106	73	179	11	9	20	1168

Annex 19: Enrolment by Gender and Academic Level in Private Chartered Universities

Name of University	Bachelors			Postgraduate Diploma			Masters			Doctorate			Grand Total	2015
	M	F	Total	M	F	Total	M	F	Total	M	F	Total		
University of Eastern Africa, Baraton	1069	1022	2091	0	0	0	34	36	70	11	5	16	2177	1870
Catholic University of Eastern Africa	1622	1893	3515	0	0	0	425	440	865	102	51	153	4533	5827
Daystar University	1602	2618	4220	1	4	5	264	638	902	18	54	72	5199	5024
Scott Christian University	142	105	247	0	0	0	15	13	28	0	0	0	275	184
United States International University	2481	2603	5084	0	0	0	527	913	1440	44	84	128	6678	6166
St. Paul's University	1918	2442	4360	0	0	0	126	113	239	43	27	70	4669	4765
Pan Africa Christian University	240	242	482	10	10	20	89	105	194	33	25	58	754	489
Africa International University	303	195	498	7	3	10	197	83	280	74	80	154	942	959
Kenya Highlands Evangelical University	254	165	419	0	0	0	0	0	0	0	0	0	419	71
Africa Nazarene University	951	1605	2556	0	0	0	236	235	471	14	2	16	3043	3267
Kenya Methodist University	4335	4656	8991	4	1	5	293	307	600	52	41	93	9689	7819
Strathmore University	2115	2113	4228	0	0	0	443	355	798	11	10	21	5047	4646
Kabarak University	2675	2242	4917	0	0	0	112	75	187	69	44	113	5217	2927
Great Lakes University of Kisumu	461	517	978	0	0	0	90	64	154	11	4	15	1147	1186
KCA University	1074	853	1927	5	1	6	158	105	263	33	22	55	2196	3787
Mount Kenya University	14734	9284	24018	102	62	164	1108	613	1721	35	26	61	25964	21562
Adventist University of Africa	0	0	0	0	0	0	553	46	599	93	8	101	700	629
KAG East University	196	85	281	0	0	0	38	19	57	0	0	0	338	307
Total	36172	32640	68812	129	81	210	5020	4160	8868	608	457	1071	78,987	

Annex 20: Enrolment by Gender and Academic Level in Institutions with LIA

Name of University	Doctorate			Masters			Bachelor			PGD			Grand Total
	M	F	T	M	F	T	M	F	T	M	F	T	
Kiriri Women's University of Science and Technology	0	0	0	0	0	0	0	1603	1603	0	0	0	1603
Aga Khan University	0	0	0	65	47	112	4	48	52	0	0	0	164
GRETSA University	0	0	0	0	0	0	146	176	322	0	0	0	322
Presbyterian University of East Africa	0	0	0	11	7	18	264	245	509	0	0	0	527
The East African University	0	0	0	0	0	0	461	276	737	0	0	0	737
Management University of Africa	65	22	87	108	98	206	871	993	1864	0	0	0	2157
Riara University	0	0	0	0	0	0	451	411	862	0	0	0	862
Pioneer International University	0	0	0	0	0	0	275	248	523	0	0	0	523
Umma University	0	0	0	0	0	0	373	221	594	0	0	0	594
International Leadership University	12	15	27	39	32	71	21	10	31	0	0	0	129
Zetech University	0	0	0	0	0	0	231	172	403	0	0	0	403
Lukenya University	0	0	0	0	0	0	84	100	184	0	0	0	184
Total	77	37	114	223	184	407	3181	4503	7684	0	0	0	8205

Annex 21: University Staffing by Rank in Public Chartered Universities

University	Professor		Senior Lecturers		Lecturers		Assistant Lecturers		Graduate Assistants		Total		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
Chuka University	13	3	18	8	65	24	64	48	14	13	174	96	270
Dedan Kimathi University of Technology	25	2	28	9	58	10	185	105	42	18	338	144	482
Egerton University	77	15	68	27	183	61	68	42	22	7	418	152	570
Jaramogi Oginga Odinga University of Science and technology	19	6	26	4	63	22	10	5	155	72	273	109	382
Jomo Kenyatta University of Science and Technology	100	27	81	12	204	91	86	31	140	98	611	259	870
Karatina University	9	2	6	4	45	23	7	8	140	90	207	127	334
Kenyatta University	77	22	139	67	532	279	42	28	333	183	1,123	579	1,702
Kibabii University	19	6	23	9	77	17	63	21	24	14	206	67	273
Kirinyaga University	2	2	1	1	11	7	-	-	58	53	72	63	135
Kisii University	12	-	44	18	106	44	94	67	22	9	278	138	416
Laikipia University	9	2	7	7	37	20	117	55	8	8	178	92	270
Maasai Mara University	9	1	10	3	38	13	25	18	184	76	266	111	377
Machakos University	8	1	2	-	21	8	46	18	28	27	105	54	159
Maseno University	51	9	32	9	119	54	64	23	29	17	295	112	407
Masinde Muliro University of Science and Technology	44	4	28	13	133	64	56	31	50	29	311	141	452
Meru University of Science and Technology	10	-	6	4	25	12	211	72	3	1	255	89	344
Moi University	110	14	127	41	232	116	24	27	191	124	684	322	1,006
Multi Media University of Kenya	10	-	5	3	42	20	16	6	3	2	76	31	107
Murang'a University of Technology	5	2	6	2	15	4	59	28	12	3	97	39	136
Pwani	15	3	12	8	29	14	64	19	5	3	125	47	172

University													
Rongo University	20	2	23	5	17	13	156	56	41	26	257	102	359
South Eastern Kenya University	16	3	15	3	62	18	58	32	26	36	177	92	269
Taita Taveta University	3	1	3	1	14	-	10	7	11	6	41	15	56
Technical University of Kenya	33	8	27	13	85	70	96	81	99	104	340	276	616
Technical University of Mombasa	14	1	18	2	32	9	64	16	194	63	322	91	413
The Co-operative University	4	1	2	-	9	6	8	1	23	6	46	14	60
University of Eldoret	42	9	28	10	83	48	33	22	31	7	217	96	313
University of Embu	5	2	5	1	30	12	3	-	10	12	53	27	80
University of Kabianga	17	1	8	3	54	24	20	16	47	29	146	73	219
University of Nairobi	338	75	280	123	475	217	4	6	140	125	1,237	546	1,783
Total	1,116	224	1,078	410	2,896	1,320	1,753	889	2,085	1,261	8,928	4,104	13,032

Annex 22: University Staffing by Rank in Public Universities Constituent Colleges

University	Professor		Senior Lecturers		Lecturers		Assistant Lecturers		Graduate Assistants		Total		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
Alupe University College	3	2	1	-	15	6	-	-	10	2	29	10	39
Garissa University College	4	-	4	-	14	2	8	1	21	3	51	6	57
Kaimosi Friends University College	4	-	3	-	7	1	-	-	53	33	67	34	101
Tom Mboya University College	3	-	1	-	12	1	-	-	-	-	16	1	17
Turkana University College	3	-	-	-	4	1	-	-	3	1	10	2	12
Total	17	2	9	-	52	11	8	1	87	39	173	53	226

Annex 23: University Staffing by Rank in Private Chartered Universities

University	Professor		Senior Lecturers		Lecturers		Assistant Lecturers		Graduate Assistants		Total		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
Adventist University	20	8	15	2	-	-	-	-	-	-	35	10	45
Africa International University	10	5	21	10	40	36	-	-	20	8	91	59	150
Africa Nazarene University	2	2	9	4	33	15	-	-	-	-	44	21	65
Catholic University of Eastern Africa	5	3	16	4	43	23	21	9	-	-	85	39	124
Daystar University	8	2	23	16	26	33	4	5	-	-	61	56	117
Great Lakes University of Kisumu	3	2	2	2	18	18	3	-	22	21	48	43	91
Kabarak University	5	-	18	7	47	27	15	12	4	2	89	48	137
KAG East University	29	3	3	-	1	-	-	-	29	13	62	16	78
KCA University	8	-	5	3	54	25	35	16	3	1	105	45	150
Kenya Highlands Evangelical University	3	-	2	-	9	3	5	3	8	4	27	10	37
Kenya Methodist University	5	2	17	3	134	115	36	43	-	2	192	165	357
Mount Kenya University	16	7	34	10	88	47	-	-	421	253	559	317	876
Pan Africa Christian University	3	3	7	5	17	8	-	-	21	14	48	30	78
Scott Christian University	1	1	5	1	5	1	-	2	5	4	16	9	25
St. Paul's University	8	4	32	9	196	179	8	3	-	-	244	195	439
Strathmore University	9	2	35	17	42	17	12	9	75	91	173	136	309
United States International University	23	9	80	45	72	63	-	-	-	-	175	117	292
University of Eastern Africa Baraton	7	4	9	4	37	17	-	-	71	61	124	86	210
Total	165	57	333	142	862	627	139	102	679	474	2,178	1,402	3,580

Annex 24: University Staffing by Rank in Private Universities Constituent College

University	Professor		Senior Lecturers		Lecturers		Assistant Lecturers		Graduate Assistants		Total		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
Hekima University	1	-	16	1	-	-	-	-	-	-	17	1	18
Marist International University College	1	-	6	-	12	7	36	10	4	6	59	23	82
Tangaza University College	33	3	29	6	28	18	1	-	2	-	93	27	120
Uzima University College	4	-	13	5	18	5	6	4	-	2	41	16	57
Total	39	3	64	12	58	30	43	14	6	8	210	67	277

Annex 25: University Staffing by Rank in Institutions with letter of Interim Authority

Institution	Professor		Senior Lecturers		Lecturers		Assistant Lecturers		Graduate Assistants		Total		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
Aga Khan University	16	6	42	23	44	28	-	3	2	-	104	60	164
GRETSA University	3	-	4	4	4	4	3	5	6	7	20	20	40
International Leadership University	10	1	4	4	35	25	6	5	-	-	55	35	90
Kiriri Women's University of Science and Technology	1	-	1	2	7	1	-	-	16	16	25	19	44
Lukenya University	2	-	3	1	1	3	-	-	24	17	30	21	51
Management University of Africa	6	-	21	9	39	17	-	-	3	3	69	29	98
Pioneer International University	2	1	2	1	3	2	5	-	5	5	17	9	26
Presbyterian University of Eastern Africa	5	-	14	4	30	16	6	2	10	7	65	29	94
RAF International University	-	-	-	-	-	-	-	-	-	-	-	-	-
Riara University	3	3	5	6	60	54	-	-	3	1	71	64	135

The East African University	6	-	10	4	9	4	-	-	16	12	41	20	61
Umma University	-	-	5	-	16	4	2	-	6	-	29	4	33
Zetech University	1	-	1	-	6	-	-	-	32	14	40	14	54
Total	55	11	112	58	254	158	22	15	123	82	566	324	890

Annex 26: University Staffing by Qualification in Public Chartered Universities

Universities	PhD		Masters		Bachelors		Postgraduate Diploma		Total		Total
	M	F	M	F	M	F	M	F	M	F	
Chuka University	63	42	106	54	5	-	18	10	192	106	298
Dedan Kimathi University of Technology	48	11	86	32	37	16	25	12	196	71	267
Egerton University	175	62	224	82	31	11	59	13	489	168	657
Jaramogi Oginga Odinga University of Science and technology	108	32	162	76	3	1	10	3	283	112	395
Jomo Kenyatta University of Science and Technology	271	90	266	115	73	54	1	-	611	259	870
Karatina University	68	39	135	86	4	2	7	2	214	129	343
Kenyatta University	475	312	499	380	45	18	81	41	1,100	751	1,851
Kibabii University	42	15	164	52	-	-	-	-	206	67	273
Kirinyaga University	10	6	24	20	15	11	2	-	51	37	88
Kisii University	123	57	138	76	19	11	9	6	289	150	439
Laikipia University	36	8	115	65	5	13	16	12	172	98	270
Maasai Mara University	42	21	224	91	4	-	6	2	276	114	390
Machakos University	26	9	21	28	34	33	44	18	125	88	213
Maseno University	137	44	152	74	29	22	42	15	360	155	515
Masinde Muliro University of Science and Technology	127	44	92	37	16	13	4	1	239	95	334
Meru University of Science and Technology	38	16	192	73	21	4	25	6	276	99	375
Moi University	237	55	459	251	1	1	2	-	699	307	1,006
Multi Media University of Kenya	19	4	54	25	15	3	8	-	96	32	128
Murang'a University of Technology	20	7	77	34	6	2	4	-	107	43	150
Pwani University	55	18	69	24	13	5	-	-	137	47	184

Rongo University	49	12	176	66	35	23	6	-	266	101	367
South Eastern Kenya University	93	24	80	53	4	15	-	-	177	92	269
Taita Taveta University	12	1	18	6	9	5	9	1	48	13	61
Technical University of Kenya	108	57	163	154	92	30	11	30	374	271	645
Technical University of Mombasa	62	13	180	72	68	18	56	13	366	116	482
The Co-operative University	14	6	28	8	9	8	-	1	51	23	74
University of Eldoret	109	91	44	45	35	16	24	7	212	159	371
University of Embu	40	15	10	9	4	4	5	3	59	31	90
University of Kabianga	52	17	75	49	1	-	-	-	128	66	194
University of Nairobi	649	206	276	146	14	15	341	173	1,280	540	1,820
Total	3,308	1,334	4,309	2,283	647	354	815	369	9,079	4,340	13,419

Annex 27: University Staffing by Qualification in Public Universities Constituent Colleges

Universities	PhD		Masters		Bachelors		Postgraduate Diploma		Total		Total
	M	F	M	F	M	F	M	F	M	F	
Alupe University College	17	8	10	3	1	1	-	-	28	12	40
Garissa University College	15	2	37	4	3	1	3	-	58	7	65
Kaimosi Friends University College	10	3	55	33	-	-	-	-	65	36	101
Tom Mboya University College	8	-	8	1	-	-	-	-	16	1	17
Turkana University College	7	1	3	1	-	-	-	-	10	2	12
Total	57	14	113	42	4	2	3	-	177	58	235

Annex 28: University Staffing by Qualification in Private Chartered Universities

Universities	PhD		Masters		Bachelors		Postgraduate Diploma		Total		Total
	M	F	M	F	M	F	M	F	M	F	
Adventist University	35	10	-	-	-	-	-	-	35	10	45
Africa International University	63	14	36	37	-	-	-	-	99	51	150
Africa Nazarene University	17	10	27	11	-	-	-	-	44	21	65
Catholic University of Eastern Africa	63	27	83	42	-	-	-	-	146	69	215
Daystar University	32	23	29	33	1	-	3	1	65	57	122
Great Lakes University of Kisumu	4	4	33	29	8	11	2	-	47	44	91
Kabarak University	25	9	56	39	8	5	2	-	91	53	144
KAG East University	33	3	26	13	1	-	-	-	60	16	76
KCA University	33	12	134	75	62	26	11	-	240	113	353
Kenya Highlands Evangelical University	3	-	22	8	2	2	1	-	28	10	38
Kenya Methodist University	42	33	151	131	13	9	7	-	213	173	386
Mount Kenya University	139	63	339	229	70	51	10	15	558	358	916
Pan Africa Christian University	25	13	22	16	-	1	-	-	47	30	77
Scott Christian University	9	3	3	4	-	1	4	2	16	10	26
St. Paul's University	49	18	196	176	-	-	-	-	245	194	439
Strathmore University	89	33	78	81	9	19	-	-	176	133	309
United States International University	94	41	94	63	-	-	-	-	188	104	292
University of Eastern Africa Baraton	22	16	80	46	17	31	1	1	120	94	214
Total	777	332	1,409	1,033	191	156	41	19	2,418	1,540	3,958

Annex 29: University Staffing by Qualification in Private Universities Constituent College

Universities	PhD		Masters		Bachelors		Postgraduate Diploma		Total		Total
	M	F	M	F	M	F	M	F	M	F	
Hekima University	17	1	-	-	-	-	-	-	17	1	18
Marist International University College	20	6	30	26	-	-	3	-	53	32	85
Tangaza University College	56	13	34	16	1	-	-	-	91	29	120
Uzima University College	5	2	27	8	10	5	2	2	44	17	61
Total	98	22	91	50	11	5	5	2	205	79	284

Annex 30: University Staffing by Qualification in Institutions with LIA

Institutions	PhD		Masters		Bachelors		Postgraduate Diploma		Total		Total
	M	F	M	F	M	F	M	F	M	F	
Aga Khan University	7	7	76	44	21	9	-	-	104	60	164
GRETSA University	7	4	9	14	4	2	-	1	20	21	41
International Leadership University	10	4	6	5			-	-	16	9	25
Kiriri Women's University of Science and Technology	8	2	17	15	2	2	2	-	29	19	48
Lukenya University	6	4	13	11	13	7	-	-	32	22	54
Management University of Africa	27	9	38	23	1	-	-	-	66	32	98
Pioneer International University	4	2	10	4	3	3	-	-	17	9	26
Presbyterian University of Eastern Africa	15	4	35	19	14	5	1	1	65	29	94
RAF International University							-	-	-	-	-
Riara University	10	9	60	54	4	-	-	-	74	63	137
The East African University	17	3	21	14	4	2	-	-	42	19	61
Umma University	11	2	14	3	3	-	-	-	28	5	33
Zetech University	8	-	32	14	-	-	-	-	40	14	54
Total	130	50	331	220	69	30	3	2	533	302	835

Annex 31: University Staffing by Rank and Cluster in Public Chartered Universities

Clusters		Professors		Associate professors		Senior Lecturers		Lecturers		Assistant Lecturers		Graduate Assistants		Subtotal		Total
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1	Agriculture, Livestock and Fisheries	85	11	99	22	93	26	216	75	89	36	98	79	680	249	929
2	Architecture	3	-	14	-	14	14	91	21	11	6	37	35	170	76	246
3	Business and Administration	17	2	37	5	89	36	358	167	342	182	359	186	1,202	578	1,780
4	Computing and ICT	10	-	10	-	26	4	105	15	183	57	111	52	445	128	573
5	Education (Arts)	31	6	39	14	98	57	262	156	103	82	119	99	652	414	1,066
6	Education (Science)	3	-	7	1	19	9	51	25	76	43	80	29	236	107	343
7	Engineering	44	2	80	-	112	10	246	30	147	43	228	67	857	152	1,009
8	Environment and Forestry	10	1	14	1	38	13	106	51	52	28	76	40	296	134	430
9	Health and Welfare	70	18	81	29	132	80	380	231	59	46	143	134	865	538	1,403
10	Humanities and Arts	45	11	74	26	142	51	289	162	201	125	209	145	960	520	1,480
11	Journalism and Information	7	1	5	1	19	12	60	40	28	22	63	40	182	116	298
12	Law	2	1	6	7	21	12	55	46	13	12	5	7	102	85	187
13	Life Science and Physical Science	89	17	100	27	154	40	328	138	154	67	159	95	984	384	1,368
14	Manufacturing	1	-	-	1	-	1	4	1	7	2	5	12	17	17	34
15	Mathematics and Statistics	22	-	29	-	38	5	133	32	134	50	118	61	474	148	622
16	Security and Conflict Resolution	-	-	3	-	10	6	19	10	28	10	20	3	80	29	109
17	Services	1	-	10	2	5	3	33	21	20	29	150	102	219	157	376
18	Social and Behavioral Science	16	8	22	5	40	19	92	57	61	18	87	59	318	166	484
19	Teacher Training	12	1	11	4	24	12	46	37	28	24	10	9	131	87	218
20	Other	3	-	4	-	4	-	23	4	18	6	9	6	61	16	77
Total		471	79	645	145	1,078	410	2,897	1,319	1,754	888	2,086	1,260	8,931	4,101	13,032

Annex 32: University Staffing by Rank and Cluster in Public University Constituent Colleges

Clusters		Professors		Associate professors		Senior Lecturers		Lecturers		Assistant Lecturers		Graduate Assistants		Subtotal		Total
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1	Agriculture, Livestock and Fisheries	1	-	-	-	-	-	1	-	-	-	-	-	2	-	2
2	Architecture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Business and Administration	-	-	2	-	3	-	11	2	1	-	32	6	49	8	57
4	Computing and ICT	-	-	-	-	-	-	4	-	3	-	3	1	10	1	11
5	Education (Arts)	2	-	4	2	4	-	13	7	3	1	23	15	49	25	74
6	Education (Science)	-	-	-	-	-	-	6	-	-	-	2	-	8	-	8
7	Engineering	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Environment and Forestry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Health and Welfare	1	-	1	-	1	-	5	2	-	-	1	-	9	2	11
10	Humanities and Arts	1	-	2	-	-	-	3	-	-	-	10	6	16	6	22
11	Journalism and Information	1	-	-	-	-	-	-	-	-	-	-	1	1	1	2
12	Law	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Life Science and Physical Science	-	-	2	-	1	-	5	-	-	-	2	2	10	2	12
14	Manufacturing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Mathematics and Statistics	-	-	-	-	-	-	3	-	1	-	13	6	17	6	23
16	Security and Conflict Resolution	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1
17	Services	-	-	-	-	-	-	1	-	-	-	-	1	1	1	2
18	Social and Behavioral Science	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1
19	Teacher Training	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total		6	-	11	2	9	-	52	11	8	1	87	39	173	53	226

Annex 33: University Staffing by Rank and Cluster in Private Chartered Universities

Clusters		Professors		Associate professors		Senior Lecturers		Lecturers		Assistant Lecturers		Graduate Assistants		Subtotal		Total
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1	Agriculture, Livestock and Fisheries	2	-	1	-	6	-	9	2	-	1	18	12	36	15	51
2	Architecture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Business and Administration	6	3	13	10	92	35	234	158	55	38	108	90	508	334	842
4	Computing and ICT	6	-	9	-	18	9	121	45	22	5	76	25	252	84	336
5	Education (Arts)	5	1	5	3	14	5	67	79	2	7	43	45	136	140	276
6	Education (Science)	-	1	1	-	2	1	11	13	2	1	35	4	51	20	71
7	Engineering	1	-	1	-	-	-	5	-	-	-	16	3	23	3	26
8	Environment and Forestry	-	-	-	1	2	-	5	1	-	-	3	-	10	2	12
9	Health and Welfare	5	3	8	5	20	14	72	59	16	16	101	84	222	181	403
10	Humanities and Arts	16	1	23	9	63	19	124	102	18	8	105	56	349	195	544
11	Journalism and Information	-	1	3	1	14	11	47	55	4	6	14	11	82	85	167
12	Law	-	-	-	-	7	3	35	25	4	6	16	18	62	52	114
13	Life Science and Physical Science	5	-	-	1	9	5	20	12	3	3	35	29	72	50	122
14	Manufacturing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Mathematics and Statistics	8	-	-	1	4	1	5	5	-	-	37	13	54	20	74
16	Security and Conflict Resolution	-	-	-	-	1	-	7	3	-	-	8	3	16	6	22
17	Services	-	-	-	-	1	-	2	1	-	-	4	8	7	9	16
18	Social and Behavioral Science	6	3	9	9	34	24	73	52	-	2	26	54	148	144	292
19	Teacher Training	-	-	-	-	-	2	6	6	-	-	-	-	6	8	14
20	Other	28	4	4	-	46	13	19	9	13	9	34	19	144	54	198
Total		88	17	77	40	333	142	862	627	139	102	679	474	2,178	1,402	3,580

Annex 34: University Staffing by Rank and Cluster in Universities with LIA

Clusters		Professors		Associate professors		Senior Lecturers		Lecturers		Assistant Lecturers		Graduate Assistants		Subtotal		Total
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1	Agriculture, Livestock and Fisheries	-	-	-	-	-	-	1	-	-	-	2	-	3	-	3
2	Architecture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Business and Administration	3	-	9	-	31	13	77	36	7	3	52	35	179	87	266
4	Computing and ICT	1	-	3	-	3	3	25	6	4	2	27	11	63	22	85
5	Education (Arts)	7	-	3	1	10	6	15	22	1	2	18	19	54	50	104
6	Education (Science)	-	-	-	-	5	-	4	4	-	-	7	4	16	8	24
7	Engineering	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Environment and Forestry	-	-	-	-	-	-	2	1	-	-	-	-	2	1	3
9	Health and Welfare	10	2	6	3	42	22	42	28	-	3	2	1	102	59	161
10	Humanities and Arts	2	1	5	2	11	7	58	39	8	4	9	3	93	56	149
11	Journalism and Information	-	-	-	1	-	2	13	8	-	-	1	1	14	12	26
12	Law	-	-	-	1	2	1	8	7	-	-	-	-	10	9	19
13	Life Science and Physical Science	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Manufacturing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Mathematics and Statistics	-	-	1	-	1	1	1	-	-	-	3	4	6	5	11
16	Security and Conflict Resolution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	Services	1	-	-	-	1	1	1	1	1	1	1	2	5	5	10
18	Social and Behavioral Science	1	-	2	-	2	1	5	6	1	-	1	1	12	8	20
19	Teacher Training	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	Other	-	-	1	-	4	1	2	-	-	-	-	1	7	2	9
Total		25	3	30	8	112	58	254	158	22	15	123	82	566	324	890

Annex 35: University Staffing by Rank and Cluster in Private Universities Constituent Colleges

Clusters		Professors		Associate professors		Senior Lecturers		Lecturers		Assistant Lecturers		Graduate Assistants		Subtotal		Total
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1	Agriculture, Livestock and Fisheries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Architecture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Business and Administration	-	-	1	-	2	1	2	3	8	2	1	1	14	7	21
4	Computing and ICT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	Education (Arts)	1	-	2	-	8	1	13	9	29	8	3	5	56	23	79
6	Education (Science)	1	-	2	-	3	-	4	1	-	-	-	-	10	1	11
7	Engineering	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Environment and Forestry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Health and Welfare	3	-	1	-	13	5	18	5	6	4	-	2	41	16	57
10	Humanities and Arts	3	-	3	-	8	2	4	4	-	-	-	-	18	6	24
11	Journalism and Information	-	-	-	-	2	-	3	1	-	-	2	-	7	1	8
12	Law	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	Life Science and Physical Science	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Manufacturing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Mathematics and Statistics	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	Security and Conflict Resolution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	Social and Behavioral Science	5	2	5	1	6	2	5	5	-	-	-	-	21	10	31
19	Teacher Training	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	Other	5	-	7	-	22	1	9	2	-	-	-	-	43	3	46
Total		18	2	21	1	64	12	58	30	43	14	6	8	210	67	277

Annex 36: Universities Staffing Comparison between Years 2015 and 2016

Clusters		Professors		Senior Lecturers		Lecturers		Assistant Lecturers		Graduate Assistants		Total	
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
1	Agriculture, Livestock and Fisheries	211	221	133	125	288	304	193	126	78	209	903	985
2	Architecture	24	17	36	28	101	112	56	17	14	72	231	246
3	Business and administration	114	108	279	302	1,358	1,048	1,240	638	91	870	3082	2966
4	Computing and ICT	40	39	87	63	355	321	363	276	48	306	893	1005
5	Education (Arts)	123	126	188	203	581	643	534	238	39	389	1465	1599
6	Education (Science)	15	16	23	39	53	119	40	122	21	161	152	457
7	Engineering	79	128	108	122	220	281	200	190	155	314	762	1035
8	Environment and Forestry	35	27	58	53	171	166	204	80	44	119	512	445
9	Health and Welfare	250	246	318	329	726	842	346	150	113	468	1753	2035
10	Humanities and Arts	176	224	204	303	726	785	471	364	58	543	1635	2219
11	Journalism and Information	20	21	29	60	175	227	105	60	31	133	360	501
12	Law	21	17	47	46	197	176	90	35	21	46	376	320
13	Life Science and Physical Science	248	241	201	209	498	503	452	227	116	322	1515	1502
14	Manufacturing	10	2	7	1	13	5	7	9	13	17	50	34
15	Mathematics and Statistics	57	61	48	50	136	179	235	185	39	255	515	730
16	Security and Conflict Resolution	7	3	15	17	30	39	63	38	13	35	128	132
17	Services	11	14	16	11	38	60	98	51	33	268	196	404
18	Social and Behavioral Science	125	94	133	128	432	295	241	82	71	229	1002	828
19	Teacher Training	5	28	14	38	36	95	68	52	4	19	127	232
20	Veterinary	55		36		52		32		27		202	0
21	Other	42	56	30	91	24	68	42	46	4	69	142	330
	Total	1,668	1,689	2,010	2,218	6,210	6,268	5,080	2,986	1,033	4,844	16,001	18,005

Annex 37: Students Enrolment per County and Gender in Public and Private Universities

	COUNTY	MALE	FEMALE	TOTAL
1	Nairobi	9235	8693	17928
2	Mombasa	1334	924	2258
3	Kwale	382	283	665
4	Kilifi	626	414	1040
5	Tana River	166	109	275
6	Lamu	168	107	275
7	Taita Taveta	433	306	739
8	Garissa	428	202	630
9	Wajir	202	67	269
10	Mandera	182	67	249
11	Marsabit	309	137	446
12	Isiolo	268	115	383
13	Meru	3722	2102	5824
14	Embu	2684	1408	4092
15	Kitui	2793	1975	4768
16	Machakos	3569	2705	6274
17	Makueni	2940	1906	4846
18	Nyandarua	1807	1333	3140
19	Nyeri	2756	2151	4907
20	Kirinyaga	1464	1064	2528
21	Murang'a	2685	1804	4489
22	Kiambu	4837	3950	8787
23	Turkana	562	193	755
24	West Pokot	834	499	1333
25	Samburu	304	182	486
26	Trans Nzoia	2110	1451	3561
27	Uasin Gishu	5182	3271	8453
28	Elgeyo Marakwet	1120	1062	2182
29	Nandi	1970	1678	3648
30	Baringo	1609	1226	2835
31	Laikipia	1122	935	2057
32	Nakuru	4774	3398	8172
33	Narok	1481	945	2426
34	Kajiado	1192	1023	2215
35	Kericho	2640	1732	4372
36	Bomet	2653	1768	4421
37	Kakamega	4509	3235	7744
38	Vihiga	1894	1241	3135

39	Bungoma	4561	2870	7431
40	Busia	2165	1281	3446
41	Siaya	2826	1696	4522
42	Kisumu	3458	2175	5633
43	Kisii	5859	3895	9754
44	Homa Bay	3274	1553	4827
45	Migori	2560	1474	4034
46	Nyamira	2349	1504	3853
47	Tharaka-Nithi	1911	987	2898
	Unclassified	4703	3878	8581
	TOTAL	110612	76974	187586

Annex 38: Enrolment by Gender and County in Public Chartered Universities

	COUNTY	MALE	FEMALE	TOTAL
1	Nairobi	5064	3675	8739
2	Mombasa	1016	639	1655
3	Kwale	342	231	573
4	Kilifi	570	334	904
5	Tana River	142	91	233
6	Lamu	134	82	216
7	Taita Taveta	396	284	680
8	Garissa	321	151	472
9	Wajir	136	43	179
10	Mandera	119	36	155
11	Marsabit	272	114	386
12	Isiolo	218	87	305
13	Meru	3591	1926	5517
14	Embu	2574	1190	3764
15	Kitui	2676	1855	4531
16	Machakos	3291	2396	5687
17	Makueni	2790	1749	4539
18	Nyandarua	1753	1231	2984
19	Nyeri	2616	1848	4464
20	Kirinyaga	1400	969	2369
21	Murang'a	2568	1614	4182
22	Kiambu	4363	3232	7595
23	Turkana	540	171	711
24	West Pokot	811	480	1291
25	Samburu	295	172	467
26	Trans Nzoia	1987	1336	3323
27	Uasin Gishu	4975	3071	8046
28	Elgeyo Marakwet	1062	1021	2083

29	Nandi	1874	1573	3447
30	Baringo	1473	1098	2571
31	Laikipia	1046	852	1898
32	Nakuru	4370	2907	7277
33	Narok	1411	879	2290
34	Kajiado	1016	833	1849
35	Kericho	2469	1544	4013
36	Bomet	2514	1660	4174
37	Kakamega	4315	3065	7380
38	Vihiga	1827	1166	2993
39	Bungoma	4403	2698	7101
40	Busia	2060	1181	3241
41	Siaya	2687	1591	4278
42	Kisumu	3180	1921	5101
43	Kisii	5656	3717	9373
44	Homa Bay	3126	1433	4559
45	Migori	2490	1412	3902
46	Nyamira	2259	1442	3701
47	Tharaka-Nithi	1886	948	2834
	Unclassified	3350	2721	6071
	TOTAL	99434	64669	164103

Annex 39: Enrolment by Gender and County in Private Chartered Universities

	COUNTY	M	F	TOTAL
1	Nairobi	4171	5018	9189
2	Mombasa	318	285	603
3	Kwale	40	52	92
4	Kilifi	56	80	136
5	Tana River	24	18	42
6	Lamu	34	25	59
7	Taita Taveta	37	22	59
8	Garissa	107	51	158
9	Wajir	66	24	90
10	Mandera	63	31	94
11	Marsabit	37	23	60
12	Isiolo	50	28	78
13	Meru	131	176	307
14	Embu	110	218	328
15	Kitui	117	120	237
16	Machakos	278	309	587
17	Makueni	150	157	307
18	Nyandarua	54	102	156

19	Nyeri	140	303	443
20	Kirinyaga	64	95	159
21	Murang'a	117	190	307
22	Kiambu	474	718	1192
23	Turkana	22	22	44
24	West Pokot	23	19	42
25	Samburu	9	10	19
26	Trans Nzoia	123	115	238
27	Uasin Gishu	207	200	407
28	Elgeyo Marakwet	58	41	99
29	Nandi	96	105	201
30	Baringo	136	128	264
31	Laikipia	76	83	159
32	Nakuru	404	491	895
33	Narok	70	66	136
34	Kajiado	176	190	366
35	Kericho	171	188	359
36	Bomet	139	108	247
37	Kakamega	194	170	364
38	Vihiga	67	75	142
39	Bungoma	158	172	330
40	Busia	105	100	205
41	Siaya	139	105	244
42	Kisumu	278	254	532
43	Kisii	203	178	381
44	Homa Bay	148	120	268
45	Migori	70	62	132
46	Nyamira	90	62	152
47	Tharaka-Nithi	25	39	64
	Unclassified	1353	1157	2510
	TOTAL	11178	12305	23483

Annex 40: International Students by Level in Public Chartered Universities

	Postgraduate Diploma		Bachelors		Masters		Doctorate		Subtotal		
COUNTRY	M	F	M	F	M	F	M	F	M	F	Total
Angola	0	0	1	0	0	0	0	0	1	0	1
Austria	0	0	0	0	0	1	0	0	0	1	1
Bangladesh	0	0	0	0	1	0	0	0	1	0	1
Bosnia and Herzegovina	0	0	0	0	0	0	0	0	0	0	0
Botswana	0	0	0	1	5	1	0	0	5	2	7
Burundi	0	0	7	4	1	1	3	1	11	6	17
China	0	0	0	0	0	1	0	0	0	1	1
Colombia	0	0	0	0	0	1	0	0	0	1	1
Comoros	0	0	1	0	0	0	0	0	1	0	1
Congo, Democratic Republic of the	0	0	1	0	1	0	0	0	2	0	2
Congo, Republic of the	0	0	0	0	1	0	0	0	1	0	1
Eritrea	4	0	0	1	0	0	0	0	4	1	5
Estonia	0	0	0	0	0	0	0	0	0	0	0
Ethiopia	0	0	11	1	1	1	0	0	12	2	14
Germany	0	0	0	0	2	4	0	0	2	4	6
Ghana	0	0	0	0	0	0	1	1	1	1	2
India	0	0	0	0	1	0	0	0	1	0	1
Indonesia	0	0	0	0	0	0	0	0	0	0	0
Iran	0	0	0	0	0	0	0	0	0	0	0
Iraq	0	0	1	0	0	0	0	0	1	0	1
Japan	0	0	1	0	0	0	0	0	1	0	1
Liberia	0	0	0	0	0	0	0	0	0	0	0
Libya	0	0	0	1	0	0	0	0	0	1	1
Malawi	2	0	0	3	9	4	2	0	13	7	20
Malaysia	0	0	0	0	1	0	0	0	1	0	1
Maldives	0	0	0	0	0	0	0	0	0	0	0
Mali	0	0	0	0	2	1	0	0	2	1	3
Morocco	0	0	0	0	0	0	0	0	0	0	0
Mozambique	0	0	0	0	3	0	0	0	3	0	3
Niger	0	0	0	0	0	0	0	0	0	0	0
Nigeria	21	1	3	0	7	3	1	0	32	4	36
Niue	0	0	0	0	0	1	1	0	1	1	2
Norfolk Island	0	0	0	0	0	0	0	0	0	0	0

Northern Mariana Islands	0	0	0	0	0	0	0	0	0	0	0
Norway	0	0	0	0	0	0	0	0	0	0	0
Oman	0	0	0	0	0	0	0	0	0	0	0
Pakistan	0	0	0	1	2	0	0	0	2	1	3
Russia	0	0	0	0	0	1	0	0	0	1	1
Rwanda	2	0	21	15	14	12	8	2	45	29	74
Sierra Leone	0	0	2	0	1	1	0	0	3	1	4
Somalia	0	1	30	4	2	0	0	0	32	5	37
South Africa	0	0	62	7	1	0	0	0	63	7	70
South Sudan	0	0	46	10	10	2	4	0	60	12	72
Suriname	0	0	0	0	0	0	0	0	0	0	0
Svalbard	0	0	0	0	0	0	0	0	0	0	0
Swaziland	0	0	1	0	1	0	0	0	2	0	2
Tanzania	2	0	18	14	17	9	15	5	52	28	80
Uganda	1	1	5	4	6	1	5	1	17	7	24
Ukraine	0	0	2	4	12	8	0	1	14	13	27
United Arab Emirates	0	0	0	0	0	0	0	0	0	0	0
United Kingdom	0	0	0	0	1	1	0	0	1	1	2
United States of America	0	0	0	0	0	0	0	1	0	1	1
Zambia	0	0	0	0	1	0	0	0	1	0	1
Zimbabwe	0	0	1	0	2	2	1	0	4	2	6
Other (not specified)	0	0	61	6	1	1	0	0	62	7	69
TOTAL	32	3	275	76	106	57	41	12	454	148	602

Annex 41: International students by Level in Public Universities Constituent Colleges

	Postgraduate Diploma		Bachelor		Master		Doctorate		Subtotal		Total
COUNTRY	M	F	M	F	M	F	M	F	M	F	
Indonesia	0	0	2	0	0	0	0	0	2	0	2
TOTALS	0	0	2	0	0	0	0	0	2	0	2

Annex 42: International students by Level in Private Chartered Universities

COUNTRY	Postgraduate Diploma	Bachelors	Masters	Doctorate	TOTALS
Afghanistan	0	1	0	0	1
American Samoa	0	1	1	0	2
Angola	0	17	6	3	26
Belgium	0	2	0	0	2
Belize	0	0	0	0	0
Benin	0	0	4	0	4
Botswana	0	4	18	3	25
Bouvet Island	0	0	0	0	0
Brazil	0	0	1	0	1
British Indian Ocean Territory	0	2	2	0	4
Bulgaria	0	0	1	0	1
Burkina Faso	0	1	4	1	6
Burma	0	3	3	0	6
Burundi	2	132	26	4	164
Cambodia	0	1	0	0	1
Cameroon	0	13	22	11	46
Canada	0	14	4	1	19
Central African Republic	0	0	2	0	2
Chad	0	1	4	0	5
Chile	0	0	0	0	0
China	0	1	3	0	4
Comoros	0	1	0	0	1
Congo, Democratic Republic of the	5	229	46	6	286
Congo, Republic of the	0	20	1	0	21
Cook Islands	0	0	0	0	0
Coral Sea Islands	0	0	0	0	0
Costa Rica	0	1	0	0	1
Cote d'Ivoire	1	2	8	1	12
Djibouti	0	4	0	1	5
Ecuador	0	1	0	0	1
Egypt	0	5	0	0	5
El Salvador	0	0	0	0	0
Equatorial Guinea	2	0	0	0	2
Eritrea	0	12	2	0	14
Estonia	0	0	0	0	0
Ethiopia	1	34	28	2	65
Finland	0	2	1	0	3

Gabon	0	1	1	0	2
Gambia, The	0	4	1	0	5
Germany	0	0	1	0	1
Ghana	2	5	77	8	92
Guatemala	0	1	0	0	1
Guernsey	0	0	0	0	0
Guinea	0	2	1	0	3
Guinea-Bissau	0	0	2	0	2
Iceland	0	1	0	0	1
India	0	41	7	0	48
Indonesia	0	1	0	0	1
Iran	0	2	0	0	2
Italy	0	4	0	0	4
Jamaica	0	1	0	0	1
Jan Mayen	0	0	0	0	0
Japan	0	2	1	0	3
Jersey	0	0	0	0	0
Jordan	0	0	1	0	1
Korea, North	0	0	1	0	1
Korea, South	0	18	4	1	23
Lesotho	0	1	1	0	2
Liberia	1	7	11	2	21
Madagascar	0	0	54	1	55
Malawi	6	89	27	4	126
Malaysia	0	1	0	0	1
Maldives	0	0	0	0	0
Mali	0	0	1	1	2
Mauritius	0	0	3	0	3
Mayotte	0	0	0	0	0
Mexico	0	0	1	0	1
Mozambique	0	4	7	0	11
Namibia	0	0	3	0	3
New Zealand	0	0	1	0	1
Nicaragua	0	0	0	0	0
Niger	0	2	2	0	4
Nigeria	2	194	93	28	317
Norway	0	2	1	0	3
Oman	0	0	0	0	0
Pakistan	0	5	4	1	10
Philippines	0	1	0	0	1
Romania	0	1	0	0	1
Russia	0	0	0	0	0

Rwanda	3	178	44	8	233
Senegal	0	1	0	0	1
Seychelles	0	0	1	0	1
Sierra Leone	0	14	4	0	18
Somalia	0	51	22	2	75
South Africa	3	21	13	9	46
South Georgia and the South Sandwich Islands	0	0	0	0	0
Spain	0	0	1	0	1
South Sudan	4	358	61	1	424
Suriname	0	50	2	0	52
Svalbard	0	0	0	0	0
Swaziland	2	7	1	0	10
Sweden	0	4	2	0	6
Switzerland	0	2	0	1	3
Taiwan	0	1	1	0	2
Tajikistan	0	0	1	0	1
Tanzania	5	318	64	8	395
Togo	0	2	10	0	12
Turkey	0	5	0	0	5
Uganda	5	212	48	10	275
Ukraine	0	1	0	0	1
United Arab Emirates	0	1	0	0	1
United Kingdom	0	12	0	0	12
United States of America	0	32	13	6	51
Yemen	0	1	0	0	1
Zambia	0	39	39	6	84
Zimbabwe	0	54	56	13	123
Unspecified	0	2	8	0	10
TOTALS	44	2260	884	143	3331

Annex 43: International students by Level in Institutions with LIA

	Postgraduate Diploma		Bachelors		Masters		Doctorate		Subtotal		Total
COUNTRY	M	F	M	F	M	F	M	F	M	F	
American Samoa	0	0	1	0	0	0	0	0	1	0	1
British Indian Ocean Territory	0	0	1	0	0	0	0	0	1	0	1
China	0	0	0	1	0	0	0	0	0	1	1
Congo, Democratic Republic of the	0	0	1	1	0	0	0	0	1	1	2
Eritrea	0	0	0	1	0	0	0	0	0	1	1
Ghana	0	0	0	0	0	0	4	2	4	2	6
India	0	0	2	0	0	0	0	0	2	0	2
Japan	0	0	0	0	1	0	0	0	1	0	1
Madagascar	0	0	1	0	0	0	0	0	1	0	1
Mozambique	0	0	0	1	0	0	0	0	0	1	1
Netherlands	0	0	1	0	0	0	0	0	1	0	1
Nigeria	0	0	2	0	0	0	0	0	2	0	2
Pakistan	0	0	1	0	0	0	0	0	1	0	1
Somalia	0	0	2	3	0	1	0	0	2	4	6
South Sudan	0	0	9	2	1	0	0	0	10	2	12
Tanzania	0	0	10	3	0	2	0	0	10	5	15
Uganda	0	0	1	1	3	2	0	0	4	3	7
United Kingdom	0	0	0	1	0	0	0	0	0	1	1
Zimbabwe	0	0	0	0	1	0	0	0	1	0	1
TOTALS	0	0	32	14	6	5	4	2	42	21	63

Annex 44: International Students by Level in Private Universities Constituent Colleges

	Postgraduate Diploma		Bachelors		Masters		Doctorate		Subtotal		Total
COUNTRY	M	F	M	F	M	F	M	F	M	F	
Angola	0	0	11	0	0	1	0	0	11	1	12
Benin	0	0	11	1	0	0	0	0	11	1	12
Botswana	0	0	1	0	0	0	0	0	1	0	1
Bouvet Island	0	0	0	0	0	0	0	0	0	0	0
Brazil	0	0	1	1	0	0	0	0	1	1	2
Burkina Faso	0	0	7	0	0	0	0	0	7	0	7
Burma	0	0	0	0	0	0	0	0	0	0	0
Burundi	0	0	9	1	1	2	0	0	10	3	13

Cambodia	0	0	0	0	0	0	0	0	0	0	0
Cameroon	0	0	22	1	1	0	0	0	23	1	24
COUNTRY	M	F	M	F	M	F	M	F	M	F	Total
Central African Republic	0	0	1	0	0	0	1	0	2	0	2
Chad	0	0	2	0	1	0	0	0	3	0	3
Congo, Democratic Republic of the	0	0	68	6	2	2	0	0	70	8	78
Congo, Republic of the	0	0	2	0	0	0	0	0	2	0	2
Cook Islands	0	0	0	0	0	0	0	0	0	0	0
Coral Sea Islands	0	0	0	0	0	0	0	0	0	0	0
Costa Rica	0	0	0	0	0	0	0	0	0	0	0
Cote d'Ivoire	0	0	14	0	1	0	0	0	15	0	15
Djibouti	0	0	0	0	0	1	0	0	0	1	1
Equatorial Guinea	0	0	1	0	0	0	0	0	1	0	1
Eritrea	0	0	0	1	1	0	0	1	1	2	3
Estonia	0	0	0	0	0	0	0	0	0	0	0
Ethiopia	0	0	10	4	0	1	0	0	10	5	15
Gabon	0	0	2	0	0	0	0	0	2	0	2
Ghana	0	0	11	1	0	0	0	0	11	1	12
India	0	0	32	0	0	2	0	0	32	2	34
Italy	0	0	1	0	2	0	0	0	3	0	3
Kiribati	0	0	303	234	75	88	16	7	394	329	723
Lesotho	0	0	0	2	0	0	0	0	0	2	2
Liberia	0	0	3	1	0	0	0	0	3	1	4
Madagascar	0	0	26	0	0	0	0	0	26	0	26
Malawi	0	0	27	1	3	0	0	0	30	1	31
Malaysia	0	0	1	0	0	0	0	0	1	0	1
Mexico	0	0	4	0	0	0	0	0	4	0	4
Mozambique	0	0	12	0	0	0	0	0	12	0	12
Namibia	0	0	1	1	1	0	0	0	2	1	3
Nigeria	0	0	45	10	10	6	0	0	55	16	71
Peru	0	0	1	0	0	0	0	0	1	0	1
Philippines	0	0	8	0	0	0	0	0	8	0	8
Pitcairn Islands	0	0	0	0	0	0	0	0	0	0	0
Poland	0	0	1	0	0	0	0	0	1	0	1

Rwanda	0	0	13	5	2	4	0	0	15	9	24
Sierra Leone	0	0	3	0	0	1	0	0	3	1	4
Singapore	0	0	0	0	0	0	0	0	0	0	0
Slovakia	0	0	1	0	0	0	0	0	1	0	1
Somalia	0	0	0	0	0	1	0	0	0	1	1
South Africa	0	0	8	0	2	0	0	0	10	0	10
South Sudan	0	0	5	2	3	1	3	0	11	3	14
Tanzania	0	0	66	15	3	1	2	0	71	16	87
Thailand	0	0	0	0	0	0	0	0	0	0	0
Timor-Leste	0	0	0	0	0	0	0	0	0	0	0
Togo	0	0	13	0	1	1	0	0	14	1	15
Uganda	0	0	54	8	4	1	2	1	60	10	70
United Kingdom	0	0	0	0	1	0	0	0	1	0	1
Vietnam	0	0	0	1	0	0	0	0	0	1	1
Zambia	0	0	34	36	2	0	0	0	36	36	72
Zimbabwe	0	0	14	1	7	0	0	0	21	1	22
Other (not specified)	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	849	333	123	113	24	9	996	455	1451

Annex 45: Counties in Kenya



Annex 46: Graduation in Public Chartered Universities

S/No.	University	Graduation year	
		2015	2016
1.	Chuka University	1310	1396
2.	Co-operative University of Kenya	0	351
3.	Dedan Kimathi University of Technology	1122	1620
4.	Egerton University	5404	4418
5.	Jomo Kenyatta University of Science and Technology	6443	7778
6.	Jaramogi Oginga Odinga University of Science and Technology	625	886
7.	Karatina University	823	945
8.	Kenyatta University	10510	9034
9.	Kibabii University	0	507
10.	Kisii University	2563	2263
11.	Laikipia University	1487	1587
12.	Machakos University	0	211
13.	Maasai Mara University	773	962
14.	Multimedia University of Kenya	809	539
15.	Masinde Murilo University of Science and Technology	3170	2506
16.	Maseno University	3010	2278
17.	Moi University	4500	6783
18.	Meru University of Science and Technology	542	1006
19.	Rongo University	54	628
20.	South Eastern Kenya University	413	841
21.	Technical University of Kenya	1243	1901
22.	Technical University of Mombasa	311	1052
23.	University of Eldoret	1964	2401
24.	University of Embu	0	98
25.	University of Kabianga	0	1584
26.	University of Nairobi	11488	10868
Total		58564	64443

Annex 47: Graduation in Public Chartered by Degree Award in 2015 and 2016

S/No.	University and Degree award	Graduation year	
		2015	2016
	Bachelors		
1.	Chuka University	1240	1313
2.	Co-operative University of Kenya	0	351
3.	Dedan Kimathi University of Technology	1082	1576
4.	Egerton University	5180	4241
5.	Jomo Kenyatta University of Science and Technology	5471	6365
6.	Jaramogi Oginga Odinga University of Science and Technology	521	805
7.	Karatina University	815	933
8.	Kenyatta University	9195	8082
9.	Kibabii University	0	492
10.	Kisii University	2422	2131
11.	Laikipia University	1446	1560
12.	Machakos University	0	207
13.	Maasai Mara University	766	952
14.	Multimedia University of Kenya	809	539
15.	Masinde Murilo University of Science and Technology	3048	2506
16.	Maseno University	2871	2091
17.	Moi University	3857	6331
18.	Meru University of Science and Technology	525	983
19.	Rongo University	43	625
20.	South Eastern Kenya University	351	743
21.	Technical University of Kenya	1243	1901
22.	Technical University of Mombasa	47	43
23.	University of Eldoret	1896	1931
24.	University of Embu	0	95
25.	University of Kabianga	0	1567
26.	University of Nairobi	8117	7822
	Total	50945	56185
	Postgraduate Diploma		
1.	Chuka University	8	18
2.	Jomo Kenyatta University of Science and Technology	66	11
3.	Kenyatta University	31	41
4.	Kibabii University	0	3
5.	Kisii University	12	51
6.	Laikipia University	4	10
7.	Machakos University	0	3
8.	Maasai Mara University	0	2
9.	Maseno University	27	45
10.	Moi University	6	16
11.	South Eastern Kenya University	31	49
12.	Technical University of Mombasa	257	1009
13.	University of Eldoret	0	205
14.	University of Nairobi	59	62
	Total	501	1525

	Masters		
1.	Chuka University	59	53
2.	Dedan Kimathi University of Technology	35	35
3.	Egerton University	202	154
4.	Jomo Kenyatta University of Science and Technology	804	1248
5.	Jaramogi Oginga Odinga University of Science and Technology	87	62
6.	Karatina University	8	10
7.	Kenyatta University	1177	813
8.	Kibabii University	0	11
9.	Kisii University	129	81
10.	Laikipia University	33	16
11.	Maasai Mara University	3	4
12.	Masinde Murilo University of Science and Technology	83	0
13.	Maseno University	89	109
14.	Moi University	594	345
15.	Meru University of Science and Technology	17	23
16.	Rongo University	11	0
17.	South Eastern Kenya University	31	48
18.	Technical University of Mombasa	7	0
19.	University of Eldoret	60	238
20.	University of Embu	0	3
21.	University of Kabianga	0	17
22.	University of Nairobi	3197	2881
	Total	6626	6151
	Doctorate		
1	Chuka University	3	12
2	Dedan Kimathi University of Technology	5	9
3	Egerton University	22	23
4	Jomo Kenyatta University of Science and Technology	102	154
5	Jaramogi Oginga Odinga University of Science and Technology	17	19
6	Karatina University	0	2
7	Kenyatta University	107	98
8	Kibabii University	0	1
9	Laikipia University	4	1
10	Machakos University	0	1
11	Maasai Mara University	4	4
12	Masinde Murilo University of Science and Technology	39	0
13	Maseno University	23	33
14	Moi University	43	91
15	Rongo University	0	3
16	South Eastern Kenya University	0	1
17	University of Eldoret	8	27
18	University of Nairobi	115	103
	Total	492	582

Annex 48: Graduation in Public Chartered Universities by Gender in 2015 and 2016

S/No.	University and year of graduation	Gender		Total
		Male	Female	
	2015			
1	Chuka University	716	594	1310
2	Dedan Kimathi University of Technology	763	359	1122
3	Egerton University	3114	2290	5404
4	Jomo Kenyatta University of Science and Technology	4043	2400	6443
5	Jaramogi Oginga Odinga University of Science and Technology	389	236	625
6	Karatina University	478	345	823
7	Kenyatta University	5877	4633	10510
8	Kisii University	1433	1130	2563
9	Laikipia University	680	807	1487
10	Maasai Mara University	388	385	773
11	Multimedia University of Kenya	414	395	809
12	Masinde Murilo University of Science and Technology	1820	1350	3170
13	Maseno University	1921	1089	3010
14	Moi University	2461	2039	4500
15	Meru University of Science and Technology	345	197	542
16	Rongo University	43	11	54
17	South Eastern Kenya University	241	172	413
18	Technical University of Kenya	872	371	1243
19	Technical University of Mombasa	145	166	311
20	University of Eldoret	1061	903	1964
21	University of Nairobi	6363	5125	11488
	Total	33567	24997	58564
	2016			
1	Chuka University	756	640	1396
2	Co-operative University of Kenya	174	177	351
3	Dedan Kimathi University of Technology	1125	495	1620
4	Egerton University	2507	1911	4418
5	Jomo Kenyatta University of Science and Technology	4877	2901	7778
6	Jaramogi Oginga Odinga University of Science and Technology	504	382	886
7	Karatina University	490	455	945
8	Kenyatta University	5332	3702	9034
9	Kibabii University	304	203	507
10	Kisii University	1311	952	2263
11	Laikipia University	784	803	1587
12	Machakos University	138	73	211
13	Maasai Mara University	492	470	962
14	Multimedia University of Kenya	334	205	539
15	Masinde Murilo University of Science and Technology	1499	1007	2506
16	Maseno University	1368	910	2278
17	Moi University	2819	3964	6783
18	Meru University of Science and Technology	647	359	1006
19	Rongo University	370	258	628
20	South Eastern Kenya University	513	328	841
21	Technical University of Kenya	1309	592	1901

22	Technical University of Mombasa	739	313	1052
23	University of Eldoret	1103	1298	2401
24	University of Embu	61	37	98
25	University of Kabianga	1056	528	1584
26	University of Nairobi	6087	4781	10868
	Total	36699	27744	64443

Annex 49: Graduation in Private Chartered Universities by Gender in 2015 and 2016

S/No.	University and Year of Graduation	Gender		Total
		Male	Female	
	2015			
1	Adventist University	65	1	66
2	Africa International University	78	42	120
3	Africa Nazarene University	377	612	989
4	Daystar University	278	568	846
5	Great Lakes University of Kisumu	195	397	592
6	Kabarak University	395	419	814
7	KAG East University	56	14	70
8	KCA University	528	413	941
9	Kenya Highlands Evangelical University	25	28	53
10	Kenya Methodist University	1222	1750	2972
11	Mount Kenya University	5057	4685	9742
12	Pan Africa Christian University	42	54	96
13	Scott Christian University	19	8	27
14	St. Paul's University	454	454	908
15	Strathmore University	365	346	711
16	United States International University	559	757	1316
17	University of Eastern Africa Baraton	262	360	622
	Total	9977	10908	20885
	2016			
1	Adventist University	30	1	31
2	Africa International University	f	42	138
3	Africa Nazarene University	397	755	1152
4	Daystar University	296	620	916
5	Great Lakes University of Kisumu	212	273	485
6	Kabarak University	403	405	808
7	KAG East University	38	10	48
8	KCA University	595	468	1063
9	Kenya Highlands Evangelical University	57	57	114
10	Kenya Methodist University	1071	1428	2499
11	Mount Kenya University	6137	5289	11426
12	Pan Africa Christian University	50	47	97
13	Scott Christian University	23	9	32
14	St. Paul's University	566	783	1349
15	Strathmore University	446	477	923
16	United States International University	543	793	1336
17	University of Eastern Africa Baraton	282	348	630
	Total	11242	11805	23047

Annex 50: Graduation in Private Chartered Universities by Degree Award

Graduation Award			Graduation Year	
			2015	2016
Bachelors	Private Chartered Universities	Africa International University	86	67
		Africa Nazarene University	873	1007
		Daystar University	750	669
		Great Lakes University of Kisumu	534	440
		Kabarak University	766	737
		KAG East University	57	41
		KCA University	827	931
		Kenya Highlands Evangelical University	53	114
		Kenya Methodist University	2553	2324
		Mount Kenya University	8831	10462
		Pan Africa Christian University	66	60
		Scott Christian University	27	32
		St. Paul's University	808	1273
		Strathmore University	606	771
		United States International University	956	956
		University of Eastern Africa, Baraton	561	557
	Total		18354	20441
Postgraduate Diploma	Private Chartered Universities	Africa International University	1	3
		Africa Nazarene University	0	1
		Daystar University	0	16
		KAG East University	13	0
		KCA University	6	0
		Kenya Methodist University	3	1
		Mount Kenya University	133	207
		Pan Africa Christian University	0	13
		Strathmore University	0	99
	Total		156	340
Masters	Private Chartered Universities	Adventist University	66	31
		Africa International University	25	67
		Africa Nazarene University	116	144
		Daystar University	95	222
		Great Lakes University of Kisumu	52	40
		Kabarak University	39	48
		KAG East University	0	7
		KCA University	108	131
		Kenya Methodist University	416	167

		Mount Kenya University	770	751
		Pan Africa Christian University	30	24
		St. Paul's University	100	76
		Strathmore University	103	52
		United States International University	360	359
		University of Eastern Africa Baraton	54	29
		Total	2334	2148
PhD	Private chartered universities	Africa International University	8	1
		Daystar University	1	9
		Great Lakes University of Kisumu	6	5
		Kabarak University	9	23
		KCA University	0	1
		Kenya Methodist University	0	7
		Mount Kenya University	8	6
		Strathmore University	2	1
		United States International University	0	21
		University of Eastern Africa Baraton	7	44
		Total	41	118
Total	Private Chartered Universities	Adventist University	66	31
		Africa International University	120	138
		Africa Nazarene University	989	1152
		Daystar University	846	916
		Great Lakes University of Kisumu	592	485
		Kabarak University	814	808
		KAG East University	70	48
		KCA University	941	1063
		Kenya Highlands Evangelical University	53	114
		Kenya Methodist University	2972	2499
		Mount Kenya University	9742	11426
		Pan Africa Christian University	96	97
		Scott Christian University	27	32
		St. Paul's University	908	1349
		Strathmore University	711	923
		United States International University	1316	1336
		University of Eastern Africa Baraton	622	630
		Total	20885	23047

Annex 51: Graduation in Private Universities Constituent Colleges by Gender

Gender			Graduation Year	
			2015	2016
Male	Private Constituent Colleges	Hekima University College	0	43
		Marist International University College	38	52
		Tangaza University College	151	191
		Uzima University College	30	34
	Total		219	320
Female	Private Constituent Colleges	Hekima University College	0	8
		Marist International University College	32	32
		Tangaza University College	61	107
		Uzima University College	9	50
	Total		102	197
Total	Private Constituent Colleges	Hekima University College	0	51
		Marist International University College	70	84
		Tangaza University College	212	298
		Uzima University College	39	84
	Total		321	517

Annex 52: Graduation in Private University Constituent Colleges by Degree Award

Graduation Award			Graduation Year	
			2015	2016
Bachelors	Private Constituent Colleges	Hekima University College	0	35
		Marist International University College	70	80
		Tangaza University College	199	223
		Uzima University College	39	84
	Total		308	422
Masters	Private Constituent Colleges	Hekima University College	0	16
		Marist International University College	0	4
		Tangaza University College	13	75
	Total		13	95
Total	Private Constituent Colleges	Hekima University College	0	51
		Marist International University College	70	84
		Tangaza University College	212	298
		Uzima University College	39	84
	Total		321	517

Annex 53: Graduation in Universities with LIA by Gender

Gender			Graduation Year	
			2015	2016
Male	Universities with Letter of Interim Authority	Aga Khan University	26	16
		GRETSA University	47	39
		International Leadership University	56	31
		Management University of Africa	31	70
		Presbyterian University of East Africa	139	102
		Riara University	0	29
	Total		299	287
Female	Universities with Letter of Interim Authority	Aga Khan University	34	35
		GRETSA University	40	42
		International Leadership University	26	19
		Kiriri Women's University of Science and Technology	0	115
		Management University of Africa	29	110
		Presbyterian University of East Africa	119	97
		Riara University	0	53
	Total		248	471
Total	Universities with Letter of Interim Authority	Aga Khan University	60	51
		GRETSA University	87	81
		International Leadership University	82	50
		Kiriri Women's University of Science and Technology	0	115
		Management University of Africa	60	180
		Presbyterian University of East Africa	258	199
		Riara University	0	82
	Total		547	758

Annex 54: Graduation in Universities with LIA by Degree Award


Graduation Award			Graduation Year	
			2015	2016
Bachelors	Universities with Letter of Interim Authority	Aga Khan University	39	32
		GRETSA University	87	81
		International Leadership University	41	15
		Kiriri Women's University of Science and Technology	0	18
		Management University of Africa	54	145
		Presbyterian University of East Africa	247	186
		Riara University	0	82
	Total		468	559
PGD	Universities with Letter of Interim Authority	International Leadership University	0	23
		Kiriri Women's University of Science and Technology	0	97
		Management University of Africa	6	35
	Total		6	155
Masters	Universities with Letter of Interim Authority	Aga Khan University	21	19
		International Leadership University	41	12
		Presbyterian University of East Africa	11	13
	Total		73	44

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