

**DEFICITS IN ACADEMIC STAFF CAPACITY IN AFRICA AND CHALLENGES OF
DEVELOPING AND RETAINING THE NEXT GENERATION OF ACADEMICS**

By

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Table of Contents

ACKNOWLEDGEMENTS	viii
EXECUTIVE SUMMARY	ix
SECTION 1 – INTRODUCTION	1
Context and Objectives	1
Methodology	1
Limitations of the Study	2
Organization of Findings	3
SECTION 2 – GHANA	4
National Student Profile	4
<i>Total Student Enrolment and Distribution by Gender and Program Levels</i>	4
National Academic Staff Profile	4
<i>Academic Staff Capacity and Enrolment Pressures</i>	4
<i>Academic Staff Distribution by Gender</i>	5
<i>Academic Staff Distribution by Age</i>	5
<i>Academic Staff Distribution by Qualification</i>	6
Institutional Profiles	7
University of Ghana Student Profile	7
<i>Total Student Enrolment by Program Level and Gender</i>	7
<i>Postgraduate Enrolments</i>	8
University of Ghana Academic Staff Profile	9
<i>Academic Staff Capacity and Enrolment Pressures</i>	9
<i>Academic Staff Distribution by Gender</i>	9
<i>Academic Staff Distribution by Age</i>	10
<i>Distribution of Academic Staff Rank by Gender</i>	11
<i>Distribution of Academic Staff by Qualification</i>	11
University of Education-Winneba (UEW) Student Profile	12
<i>Total Student Enrolment</i>	12
<i>Postgraduate Student Enrolment</i>	12
University of Education - Winneba -- Academic Staff Profile	13
<i>Academic Staff Capacity and Enrolment Pressures</i>	13
<i>Distribution of Academic Staff by Gender</i>	14
<i>Distribution of Academic Staff by Age</i>	15
<i>Distribution of Academic Staff by Qualification</i>	15
<i>Academic Staff Development</i>	16

SECTION 3 – KENYA	17
National Student Profile	17
<i>Total Student Enrolment and Distribution by Gender</i>	17
Institutional Profiles	18
Kenyatta University Student Profile	18
Kenyatta University Academic Staff Profile	19
<i>Academic Staff Capacity and Enrolment Pressures</i>	19
<i>Distribution of Academic Staff by Gender and Qualification</i>	19
<i>Distribution of Academic Staff by Age</i>	20
<i>Academic Staff Development</i>	21
SECTION 4 – MOZAMBIQUE	23
National Student Profile	23
<i>Total Student Enrolment and Distribution by Gender and Type of Institution</i>	23
National Academic Staff Profile	23
<i>Academic Staff Capacity and Enrolment Pressures</i>	23
Institutional Profiles	26
Catholic University of Mozambique (CUM) Student Profile	26
<i>Total Student Enrolment by Gender and Program Level</i>	26
<i>Student Graduation by Program Level</i>	26
Catholic University Academic Staff Profile	27
<i>Academic Staff Capacity and Enrolment Pressures</i>	27
SECTION 5 – NIGERIA	30
National Student Profile	30
<i>Total Student Enrolment and Distribution by Program Levels</i>	30
National Academic Staff Profile	31
<i>Academic Staff Capacity and Enrolment Pressures</i>	31
Institutional Profiles	31
Bayero University Student Profile	31
<i>Total Student Enrolment</i>	31
Bayero University Academic Staff Profile	32
<i>Academic Staff Capacity and Enrolment Pressures</i>	32
<i>Distribution of Academic Staff by Qualification</i>	33
University of Ibadan Student Profile	34
<i>Total Student Enrolment and Distribution by Gender</i>	34
<i>Distribution of Students by Program Level</i>	34
<i>Postgraduate Enrolment by Gender</i>	35

<i>Graduates by Program Level and Gender</i>	35
University of Ibadan Academic Staff Profile	37
<i>Academic Staff Capacity and Enrolment Pressures</i>	37
<i>Distribution of Academic Staff Rank by Gender</i>	38
<i>Distribution of Academic Staff by Qualification</i>	38
Obafemi Awolowo University Student Profile	39
<i>Total Student Enrolment by Gender and Program Level</i>	39
<i>Postgraduate Student Enrolment by Gender and Program</i>	40
Obafemi Awolowo Academic Staff Profile	40
<i>Academic Staff Capacity and Enrolment Pressures</i>	41
<i>Distribution of Academic Staff by Gender</i>	41
<i>Distribution of Academic Staff by Age</i>	41
<i>Distribution of Academic Staff by Qualification</i>	42
SECTION 6 – SOUTH AFRICA	44
National Student Enrolment	44
<i>Total Student Enrolment and Distribution by Gender and Program Levels</i>	44
<i>Number and Distribution of Postgraduate Degrees Awarded</i>	44
National Academic Staff Profile	46
<i>Academic Staff Capacity and Enrolment Pressures</i>	46
<i>Academic Staff Distribution by Gender</i>	46
Institutional Profiles	47
Nelson Mandela Metropolitan University Student Profile	47
<i>Total Student Enrolment by Gender and Program Level</i>	47
<i>Postgraduate Student Enrolment by Gender and Race</i>	48
<i>Number and Distribution of Postgraduate Degrees Awarded and Graduating Rates</i>	48
Nelson Mandela Metropolitan University Academic Staff Profile	49
<i>Distribution of Academic Staff by Gender and Race</i>	49
Rhodes University Student Profile	51
<i>Total Student Enrolment by Gender</i>	51
<i>Distribution of Student Enrolment by Program Level</i>	51
<i>Distribution of Postgraduate Students by Gender, Program Level and Race</i>	51
Rhodes University Academic Staff Profile	53
<i>Academic Staff Capacity and Enrolment Pressures</i>	53
<i>Distribution of Academic Staff by Qualification</i>	54
<i>Distribution of Academic Staff by Age</i>	55
<i>Rank Distribution of Academic Staff by Gender and Race</i>	55

Stellenbosch University Student Profile	56
<i>Total Student Enrolment by Gender and Program Level</i>	<i>56</i>
<i>Distribution of Postgraduate Enrolment by Gender and Race.....</i>	<i>57</i>
<i>Number of Postgraduate Degrees Awarded</i>	<i>58</i>
Stellenbosch University Academic Staff Profile.....	59
<i>Academic Staff Capacity and Enrolment Pressures</i>	<i>59</i>
<i>Distribution of Academic Staff by Gender and Race</i>	<i>60</i>
<i>Rank Distribution of Academic Staff by Gender.....</i>	<i>60</i>
<i>Distribution of Academic Staff by Age.....</i>	<i>61</i>
University of Cape Town Student Profile.....	62
<i>Total Student Enrolment by Gender and Program Level</i>	<i>62</i>
<i>Distribution of Postgraduate Enrolments by Gender and Program Level</i>	<i>63</i>
<i>Postgraduate Graduation Rates by Program Level</i>	<i>63</i>
University of Cape Town Academic Staff Profile	64
<i>Academic Staff Capacity and Enrolment Pressures</i>	<i>64</i>
<i>Distribution of Academic Staff by Gender</i>	<i>65</i>
<i>Distribution of Academic Staff by Age.....</i>	<i>65</i>
<i>Distribution of Academic Staff by Qualification.....</i>	<i>66</i>
University of Kwazulu-Natal Student Profile	66
<i>Total Student Enrolment by Program Level</i>	<i>66</i>
<i>Postgraduate Student Enrolment by Gender</i>	<i>67</i>
<i>Postgraduate Student Enrolment by Race</i>	<i>68</i>
<i>Postgraduate Student Enrolment by Program Level</i>	<i>68</i>
<i>Post-Graduate Completion and Drop-Out Rates</i>	<i>68</i>
University of Kwazulu-Natal Academic Staff Profile.....	70
<i>Academic Staff Capacity and Enrolment Pressures</i>	<i>70</i>
<i>Distribution of Academic Staff by Gender and Race</i>	<i>71</i>
<i>Distribution of Academic Staff by Qualification.....</i>	<i>72</i>
<i>Distribution of Academic Staff by Age.....</i>	<i>73</i>
Witswatersrand University Student Profile	73
<i>Total Student Enrolment by Gender and Program Level</i>	<i>73</i>
<i>Postgraduate Student Enrolment.....</i>	<i>73</i>
Witswatersrand University Academic Staff Profile.....	74
<i>Academic Staff Capacity and Enrolment Pressures</i>	<i>74</i>
<i>Distribution of Academic Staff by Gender.....</i>	<i>74</i>
<i>Distribution of Academic Staff by Age.....</i>	<i>75</i>

<i>Distribution of Academic Staff by Qualification.....</i>	75
<i>Professional Development.....</i>	76
SECTION 7 – TANZANIA.....	77
National Student Profile	77
<i>Total Student Enrolment and Distribution by Gender</i>	77
National Academic Staff Profile	78
<i>Academic Staff Capacity and Enrolment Pressures</i>	78
<i>Academic Staff Distribution by Gender</i>	79
<i>Academic Staff Distribution by Qualification.....</i>	79
<i>Distribution of Academic Staff by Rank.....</i>	80
Institutional Profiles	81
University of Dar es Salaam Student Profile.....	81
<i>Total Student Enrolment and Distribution by Gender</i>	81
<i>Distribution of Student Enrolment by Program Level</i>	82
<i>Distribution of Postgraduate Students by Gender</i>	82
<i>Distribution of Postgraduate Degrees Awarded by Gender</i>	83
University of Dar es Salaam Academic Staff Profile	83
<i>Academic Staff Capacity and Enrolment Pressures</i>	84
<i>Distribution of Academic Staff by Gender</i>	84
<i>Distribution of Academic Staff by Qualification.....</i>	85
<i>Distribution of Academic Staff by Age.....</i>	86
<i>Distribution of Academic Staff by Rank.....</i>	87
<i>Academic Staff Development</i>	88
SECTION 8 – UGANDA.....	89
National Student Profile	89
<i>Total Student Enrolment</i>	89
National Academic Staff Profile	89
<i>Academic Staff Capacity and Enrolment Pressures</i>	89
<i>Distribution of Academic Staff by Qualification.....</i>	89
Institutional Profiles	91
Makerere University Student Profile.....	91
<i>Total Student Enrolment and Distribution by Gender and Program Levels</i>	91
Makerere University Academic Staff Profile	92
<i>Academic Staff Capacity and Enrolment Pressures</i>	92
<i>Distribution of Academic Staff Rank by Gender.....</i>	92
<i>Distribution of Academic Staff by Qualification.....</i>	93

<i>Staff Development</i>	94
SECTION 9 – COMPARATIVE ANALYSIS	95
Introduction	95
Staff Capacity Deficits Vis-a-Vis Enrolment Pressures	95
Cultivating the Next Generation of Academics -- An examination of the Current Pipeline	99
<i>Proportion of Postgraduate Enrolments</i>	99
<i>Analysis of Doctoral and Masters Enrollees as a Proportion of Total Postgraduate Enrolments</i>	100
<i>Analysis of Postgraduate Enrolments by Type of Programs</i>	101
<i>Disaggregating Postgraduate Enrolment by Gender</i>	101
<i>Post-Graduate Completion and Drop-Out Rates</i>	102
<i>Analysis of Output Data for Masters and Doctoral Programs</i>	102
Analysis of Existing Staff Complement and Implications for Developing the Next Generation of Academics	103
<i>The Gender Gap in Academic Staff Complement as Lost Potential</i>	103
<i>An Ageing Professoriate and the Need for Replenishment</i>	104
<i>Academic Staff Qualifications and Implications for Developing a High-Caliber New Generation</i>	106
<i>Professional Development for Staff Capacity Building</i>	108
<i>Significance of Rank Distribution for Regenerating the Academy</i>	108
Conclusion and Recommendations	110
References	116

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Finally, I wish to register my thanks to the PHEA, for recognizing the critical importance of the issue of the "Next Generation of African Academics" and providing the support necessary to interrogate its various dimensions. Hopefully, findings from this study have given us some ideas of the issues involved and how to address the challenges that they expose.

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EXECUTIVE SUMMARY

While academic staff recruitment and retention remains a challenge across the globe, the situation in many African countries appears to be particularly strident. University leaders on the continent acknowledge the devastating impact of staff shortage on the mission of institutions of higher education and warn that if something is not done very soon to address the problem, the African academy will not only lose its ability to produce the requisite number of personnel to support the countries' human resource needs, but the quality of intellectual life will continue to erode.

In view of the above reality, this report seeks to analyze the staffing situation in various universities that are members of the Partnership for Higher Education in Africa [PHEA]. The purpose is to ascertain the extent of the problem in these institutions, examine their ability to develop the next generation of academics in order to combat the decline, and proffer some suggestions about what can be done to regenerate the African professoriate.

The study concludes that over the last decade, student enrolment in African universities has grown by significant amounts to absorb the increasing demand on higher education. While expanding access to the underserved eligible population is commendable, the pressure of enrolment growth on the capacity of universities to provide quality education is, undoubtedly, dire, especially as there is no commensurate expansion in academic staff numbers in most institutions.

Student-staff ratios in various countries have generally gone up over the years. Incommensurate staff and student growth rates, as well as high and increasing student-staff ratios put a tremendous burden on academic staff, a factor that has been noted to discourage people from entering the academy. This situation creates a huge challenge since the ability of existing or new institutions to absorb the increasing numbers will depend, to a very large extent on an adequate pool of instructors.

Postgraduate students constitute the pool from which the next generation of academics will be drawn. Unfortunately, the proportion of masters and doctoral enrolments remain relatively small, with declining trends in some countries. Available data show that postgraduate enrolments are dominated by males, even though South African institutions are closer to parity. Any hope of increasing the low proportion of females in the academy has to start with efforts at improving their numbers in postgraduate programs. The data also points to low graduation and time-to-completion rates, as well as high drop-out rates in some programs. These trends do not augur well for developing an adequate pool of high quality future academics. It, therefore, behooves governments, national tertiary education bodies, universities, and the private sector to work together to develop creative and complementary funding models that promote high quality postgraduate training.

The difference between staff establishment and vacancies is a very good indicator of gaps in human resource capacity and the extent to which existing academic staff are able to meet the institution's own assessment of the complement of staff it needs to carry out its research and teaching responsibilities. Anecdotal evidence from all the institutions suggest that they do not have a full complement of staff needed to carry out their academic missions. While the proportion of female staff in various institutions has improved over the years, it is clear, that they still constitute a small fraction of academic staff. Consequently, there are enough females in the professoriate to serve as role models who can attract prospective female academics or mentor

those already in their institutions. The urgency of the need for initiatives that help to build the next generation of academics in African universities is made clear by the fact that the current crop is aging very fast, with no commensurate expansion in the numbers of young scholars entering the profession. Institutions need to have well-organized mentoring programs in place, within each department or faculty, that match new colleagues with committed, exemplary mid-career and/or established ones. Their sensitivity and responsiveness to young employees' work-life circumstances is particularly helpful in attracting and retaining female academics whose careers tend to be significantly compromised by the contending demands of home and work.

The quality of any higher education system is determined, not only by the number of people teaching in it, but even more importantly, by the qualifications of its academic staff. One significant measure of the capability of the professoriate to provide quality research and instruction is doctoral level certification. In most of the institutions studied, however, there were fewer doctoral degree holders than masters degree holders. The evidence further points to the fact that the proportions of males with masters and doctorate degrees have been consistently higher than those of females with such degrees. The distribution of males and female across ranks also shows that the latter are very underrepresented at higher ranks -- i.e., from senior lecturer to full professor -- and overrepresented at the level of lecturer and below. Concerted efforts have to be put in place to encourage female enrolment in postgraduate programs, support them to stay in those programs, ensure that they are able to complete their programs successfully, and mentor them to pursue academic careers.

Our ability to make major deductions from this study in comparative institutional and national terms, across different variables, and from a longitudinal perspective has been severely constrained by the lack of relevant, and in some cases consistent, data. Universities will not be able to undertake credible and feasible programs to address the issues raised by the study if they do not have the appropriate data from which to design strategies. They should embark on efforts to shore up their information capture capabilities and systems, establish offices of institutional analysis to mine relevant data for particular purposes on a consistent and continuing bases.

It is imperative that national tertiary bodies, universities, governments, and development partners come together to address the problem of staff shortage because in spite of the huge expansion in student enrolments over the last decade, a significant number of qualified applicants are unable to avail themselves of tertiary education in a continent where human resource capacity is sorely lacking.

SECTION 1 – INTRODUCTION

Context and Objectives

While academic staff recruitment and retention remains a challenge across the globe (Hugo, 2005; Metcalf et al., 2005; Smolentseva, 2003; Thewlis, 2003), the situation in many African countries appears to be particularly strident. University leaders on the continent acknowledge the devastating impact of staff shortage on the mission of institutions of higher education and warn that if something is not done very soon to address the problem, the African academy will not only lose its ability to produce the requisite number of personnel to support the countries' human resource needs, but the quality of intellectual life will continue to erode. As noted recently by Akilagpa Sawyerr, the immediate past Secretary General of the Association of African Universities, "the most significant human element is absence of sufficient highly qualified academics. A 'pandemic of enrolment explosion' had taken place in recent years without commensurate growth in faculty numbers. Sawyerr told a conference in Dublin City University in 2008 that one consequence, for instance, was that for the first time teaching positions in the University of Dar es Salaam (UDSM) were being filled by staff with only a bachelor's degree" (Walshe, 2008).

Authorities at UDSM argued during the 2008 University Leaders' Forum in Accra that these bachelors degree holders are not really involved in teaching and that they are in training to move up the ladder to regular academic staff status. This argument notwithstanding, there is no denying the fact that they are counted as academic staff in the institution's own publications and can be reasonably considered to have the responsibilities that come with that position. In any case, the central problem of academic staff shortage is accentuated, not attenuated, when these individuals are removed from the list of academic staff. Thus, while the explanation for their presence on the staff list is appreciated, it does not take away the specter of the shortage of qualified academic staff at the institution. In fact, other countries are also being compelled to depend on first degree holders for university instruction. "In Ethiopia, staff shortages are reportedly forcing the use of graduates with bachelor's degrees to teach undergraduates following the recent tripling in the number of public universities" (World Bank, 2008, p. 53).

It is in the context of the preceding concerns that this report seeks to analyze the staffing situation in various universities that are members of the Partnership for Higher Education in Africa [PHEA] (see <http://www.foundation-partnership.org>). The purpose is not only to ascertain the extent of the problem in these institutions, but also to examine their ability to develop the next generation of academics in order to combat the decline. Furthermore, the report hopes to provide a concrete context for discussions about what can be done to ensure the regeneration of academic staff capacity and, by extension, intellectual life that will enable these institutions to discharge their mandates with the requisite levels of quality.

Methodology

The original goal was to cover all institutions and countries that are members of the PHEA. Therefore, an invitation was extended to all Vice-Chancellors and heads of the national tertiary education bodies. A common survey instrument was designed and sent to all institutions and the relevant national tertiary education bodies. It sought to gather national and institutional data on the following: enrolment numbers and growth rates for undergraduate and postgraduate students;

gender distribution of various categories of students; graduation numbers and rates; time to degree completion; academic staff numbers and growth rates; distribution of academic staff by gender, age, rank, qualification, and where their highest degrees were obtained; number of academic staff pursuing masters and doctoral degree at home and abroad; academic staff vacancies. In addition to these quantitative data, the instrument also sought to gather some qualitative data, covering issues such as national and institutional policies and initiatives to recruit, develop and retain the next generation of academic staff; relationships with various donors (private, bilateral, and multilateral) to enhance the teaching and research capabilities of their staff; and programs to tap Diaspora talent and resources.

Each institution was asked to designate a contact person to provide the relevant data. Several institutions and national bodies either declined to participate, mainly because of what they considered to be the tedium of providing the requested information, or failed to respond to our request to participate. Eventually, the study covered 15 out of the 22 member-institutions and seven of the nine member-countries. It is worth noting that not all of the institutions and countries represented in the final list completed the questionnaire. Where the research team could find credible, relatively significant and meaningful data from other sources for a particular institution or country, that country or institution was included in the study even though it may not have responded to the call to participate or responded to the questionnaire.

In the final analysis, the following institutions were covered by the study: 1) Bayero University; 2) Catholic University of Mozambique; 3) Kenyatta University; 4) Makerere University; 5) Nelson Mandela Metropolitan University; 6) Obafemi Awolowo University; 7) Rhodes University; 8) University of Dar es Salaam; 9) University of Cape Town; 10) University of Education-Winneba; 11) University of Ghana; 12) University of Ibadan; 13) University of Kwazulu-Natal; 14) University of Stellenbosch; 15) University of the Witwatersrand. The countries included are: 1) Ghana; 2) Kenya; 3) Mozambique; 4) Nigeria; 5) South Africa; 6) Tanzania; and 7) Uganda.

The study also took advantage of the presence of various personalities connected to the higher education sector in Africa, at the University Leaders' Forum in Ghana. A preliminary report was presented at the Forum which elicited discussions that helped to better understand the context for the quantitative data that came from the surveys. The Forum also helped to explore ideas about feasible options for addressing the problem of staff shortage and developing the next generation of academics. In addition to primary sources named above, the research team also made use of secondary data from publications put out by governments, national tertiary education bodies, individual institutions, international bodies, and other researchers.

Limitations of the Study

While the original goal of the study was to encompass all institutions and countries that are members of the PHEA, we were unable to achieve this for a variety of reasons. As noted above, these included the failure of about a third of the institutions to participate either due to a lack of response or concerns about the burden that completing the instrument would impose on their staff members. We were, therefore, unable to get the depth and breadth of information that we would have wanted. However, based on the feedback that we received from participants at the University Leaders' Forum (which included participants from institutions and agencies that did not complete the survey), it was clear that the general thrust of the findings reflect the situation in various countries and institutions.

A major limitation of the study stems from the inability of most institutions and national bodies to provide relevant data needed to construct their profiles from which to assess the nature and extent of opportunities and challenges related to issues covered by the study. While the goal of the study was to generate data covering the last ten years, it became apparent that most institutions and national bodies, outside South Africa, either did not have the capacity to generate such longitudinal data, were not taking advantage of the resources at their disposal to generate such data, or had neglected to keep any such data or keep track of them. Consequently, we had to contend with gaps in the data when we could not find other credible sources from which to fill them in. As a result, our ability to explore trends was constrained in some cases, and our desire to engage with comparative data for all institutions and countries across specific time periods was severely restrained.

There were incidences of inconsistencies in data provided by particular institutions, national bodies, or statistics from various agencies. We tried to address this problem by triangulating data and using what seemed to approximate the most commonly occurring figures. In other cases, where corroborating data was not available we retained the inconsistencies in order to highlight the problem. It is our view that this problem, while of significant concern in specific circumstances, was not, in the overall scheme of things, such as would undermine the conclusions reached by the study.

Finally, it is important to acknowledge limitations imposed by the inability of the research team to undertake field work in the respective countries and institutions. This would have enriched the findings from the survey and other secondary sources, by enabling the team to cross-check data, probe for important data that was not provided, get critical insights into concrete institutional and national contexts, and providing opportunities to engage directly with different categories of actors such as graduate students, current staff, policy makers, and so on.

We were largely unsuccessful in our efforts to gather information from the universities and national bodies on such matters as strategies to recruit and retain staff, development of the next generation of academic, engagement with academics in the Diaspora, and comprehensive information on relationships with various donors to advance teaching and learning. While it appears that many institutions and national bodies do not have any such strategies and information available, our lack of success does not necessarily indicate their absence in all cases. We are, for example, aware of initiatives such the Nigeria National Universities Commission's Linkage with Experts and Academics in the Diaspora (LEAD) program and the University of Kwazulu-Natal's Leadership and Equity Advancement Program (LEAP) for nurturing new academics. The unwillingness of the institutions to answer questions regarding these matters is the main stumbling block, and in the absence of such cooperation, it is difficult to know whether any strategies exist and to evaluate them over time.

Organization of Findings

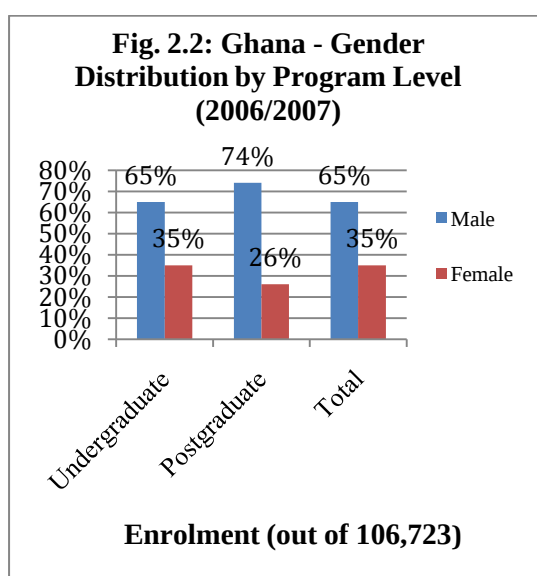
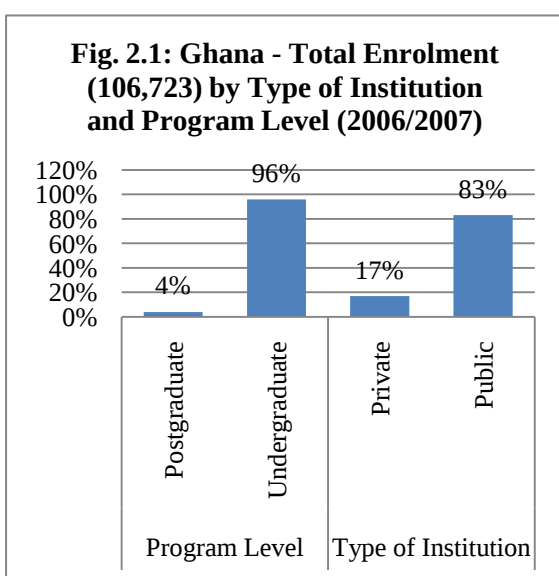
The findings from the study are organized as follows. The introductory section is followed by seven sections that deal with relevant issues in the context of each country covered by the study. Each starts with an analysis of country-level data, followed by detailed analyses for particular institutions. Section 9 constitutes a comparative analysis of data from national and institutional profiles, and critically interrogates the key issues related to the development and retention of the next generation of academics. It concludes with some general observations from the findings and provides recommendations for further exploration of pertinent issues.

SECTION 2 – GHANA

National Student Profile

Total Student Enrolment and Distribution by Gender and Program Levels

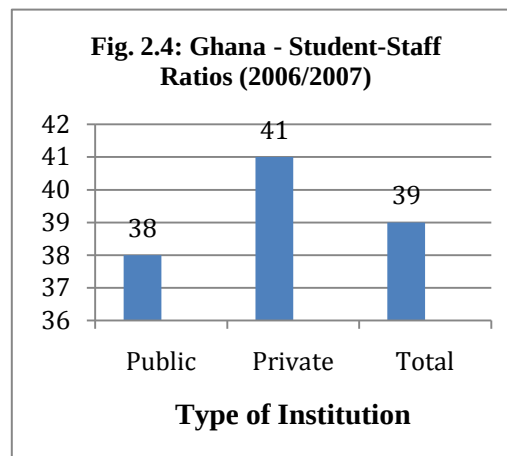
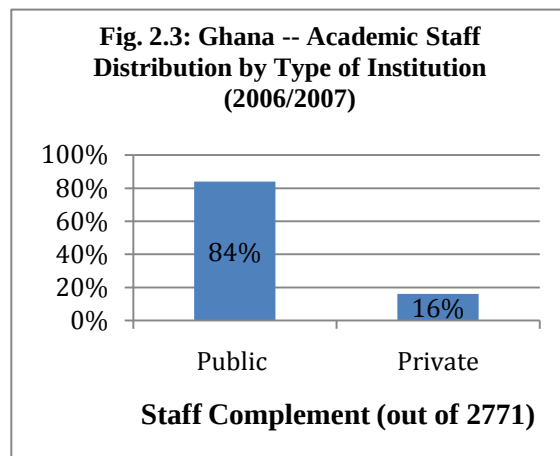
In 2006/07, total student enrolment in Ghana's universities stood at 106,723. 83% of them were enrolled in public universities, compared to 17% in private universities (fig. 2.1). Only 4% of students were enrolled in postgraduate programs (fig. 2.1). 94% of the postgraduate enrolments were in public universities. Of the total number of students, 35% were female and 65% were male. In terms of gender distribution of students by program level, the data show that 26% of postgraduate students were female while their counterparts at the undergraduate level constituted 35% of that population (fig. 2.2).



National Academic Staff Profile

Academic Staff Capacity and Enrolment Pressures

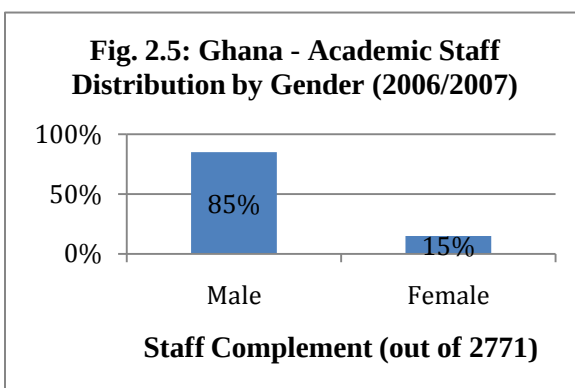
There was a total of 2771 academic staff members in the country's universities in 2006/2007. Majority of them (i.e., 84%) were in public institutions. While data was not available to measure the relative growth in the number of students and academic staff over a period of time, we are unable to determine the extent to which staff capacity has been able to cope with enrolment growth. We are, nevertheless, able to measure pressure on academic staff, using student-staff ratios which stood at 39:1, nationally, in 2006/2007. The respective ratios for public and private institutions were 38:1 and 41:1. Clearly, this puts a lot of burden on academic staff when measured against the fact that Ghana's National Council on Tertiary Education has set lecturer student ratios at 1:18, 1:10, and 1:8, respectively, for the Humanities, Sciences and Medicine" (Tettey, 2006, p. 31)



Source: From Data Provided by Ghana National Council for Tertiary Education (2008)

Academic Staff Distribution by Gender

Only 15% of staff in public institutions, and 13% of their counterparts in private institutions, were female. Overall, only 15% of academic staff in the country's universities were female (fig. 2.5).



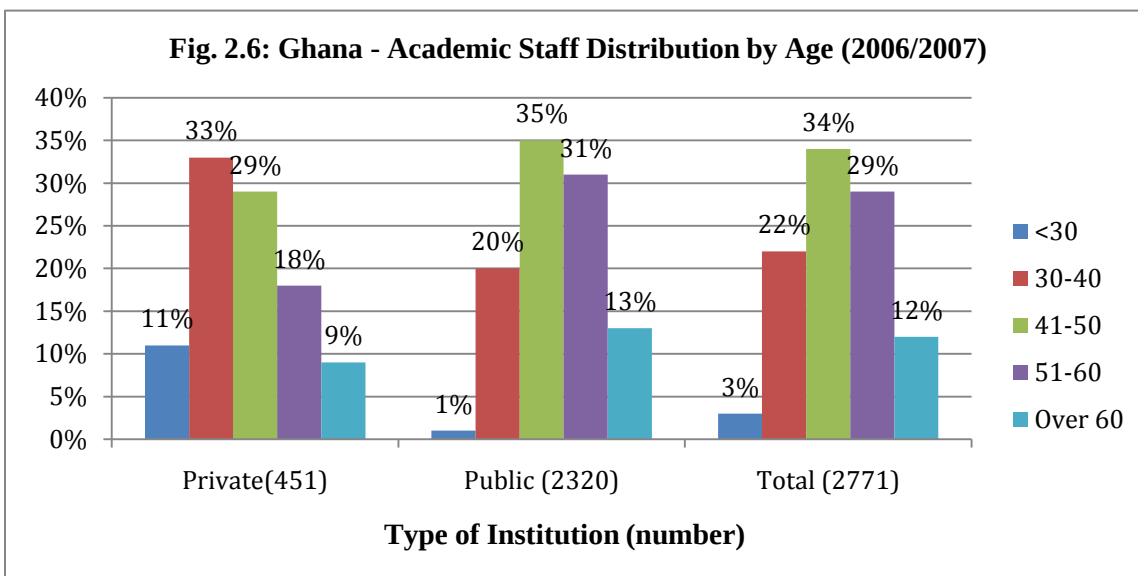
Source: From Data Provided by Ghana National Council for Tertiary Education (2008)

Academic Staff Distribution by Age

A significant majority of staff, for whom data was available, was over the age of 50 in 2006/2007. As shown in fig. 2.6, 41% of staff were in the 51-60+ category, while only a quarter were under 41 years old. In the public universities, 44% of staff were above 50 years old and only 21% were 40 years old or younger. It is interesting to note that the proportions are quite different for private institutions where the 50+ cohort accounted for 27% of the total, compared to 44% who were below 41 years old.

With a retirement age of 60, and public universities catering to the vast majority of students, it is clear that the next decade will be very challenging for staff replenishment to meet the needs of students as 31% of current staff in those institutions will be retiring. The fact that public and private universities depend on staff members who are passed their retirement ages for 13% and 9%, respectively, of their staff complement, is a clear manifestation that it is imperative to

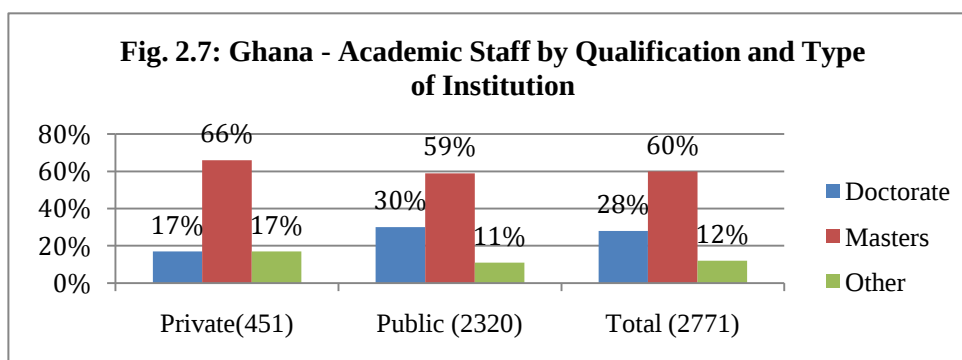
cultivate a requisite number of new generation academics to sustain the mandate of these institutions.



Source: From Data Provided by Ghana National Council for Tertiary Education (2008)

Academic Staff Distribution by Qualification

Fig. 2.7 shows that only 28% of staff had doctoral degrees in 2006/2007, compared to 60% who had masters degrees. It is worth noting that 12% of staff have other qualifications below the masters level. When the distribution of qualifications is disaggregated by type of institution, we see that



Source: From Data Provided by Ghana National Council for Tertiary Education (2008)

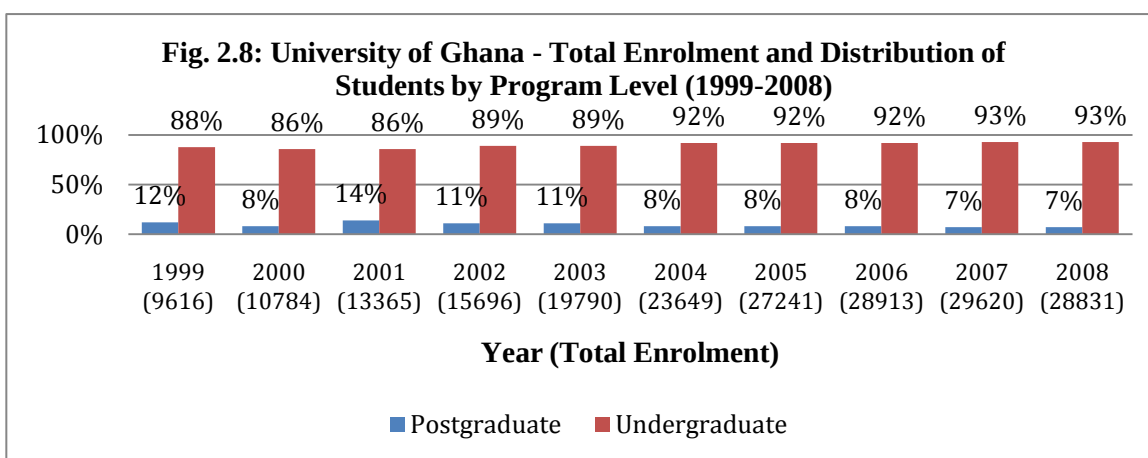
the percentage of doctoral degree holders improves to 30% for public universities and declines to only 17% for private universities. Obviously, the capacity of the private institutions to offer high quality graduate programs in a variety of fields, that have the ability to produce the next generation of academics is significantly limited.

Institutional Profiles

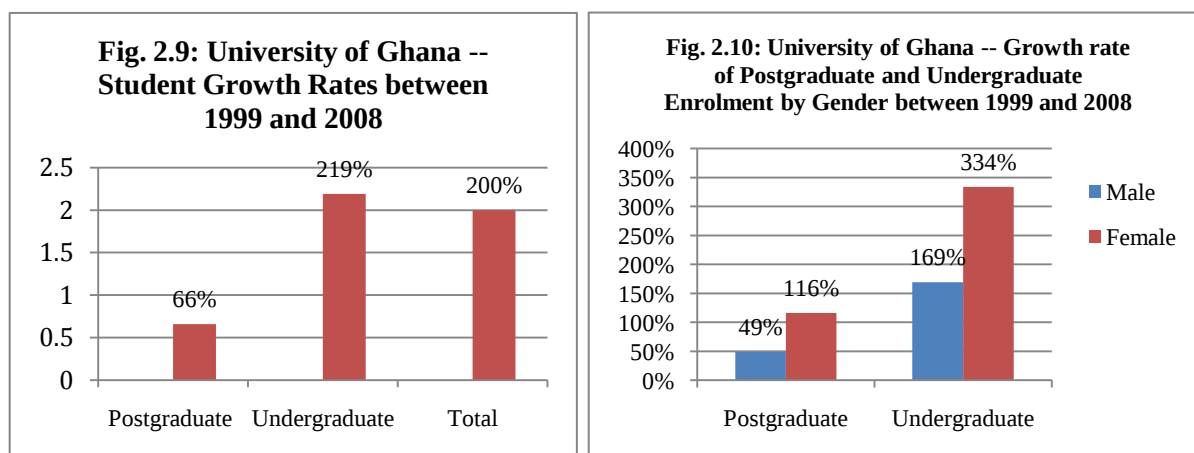
University of Ghana Student Profile

Total Student Enrolment by Program Level and Gender

Total student enrolments increased from 9616 in 1999 to 28831 in 2008. This represents a 200% increase in the last decade (Fig. 2.8). Undergraduate enrolments have been significantly higher than postgraduate enrolments and have grown at a faster pace than postgraduate enrolments. The latter increased by 66% between 1999 and 2008 whereas the number of undergraduates shot up by a whopping 200% during the same period (fig. 2.9).



Source: From Data Provided by the University of Ghana (2008)



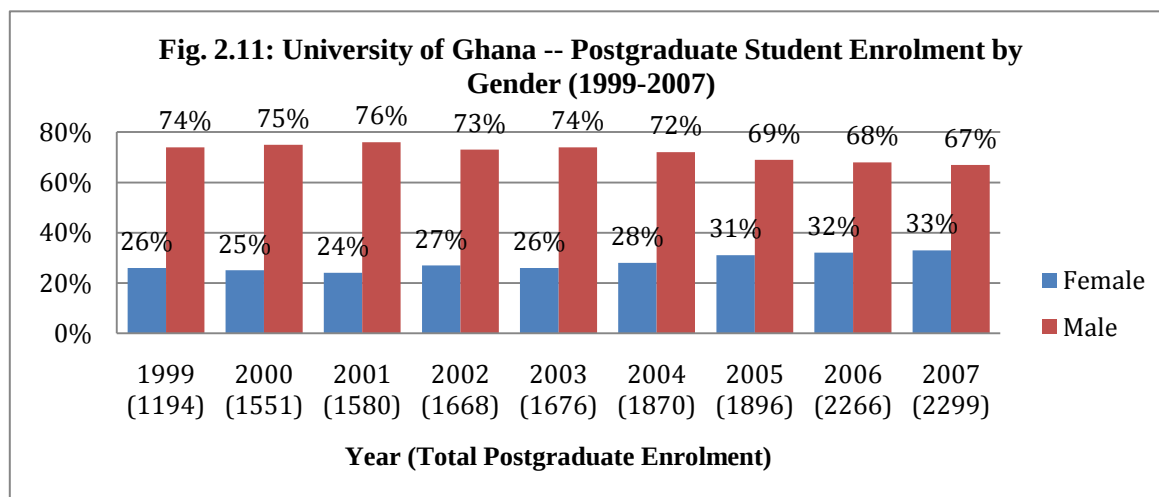
Source: From Data Provided by the University of Ghana (2008)

Male enrolments, at both the undergraduate and postgraduate levels, far exceeded female enrolments over the course of the 1999-2007 period. The gender gap, however, improved during the period as the female composition of the undergraduate student population went from 30% of

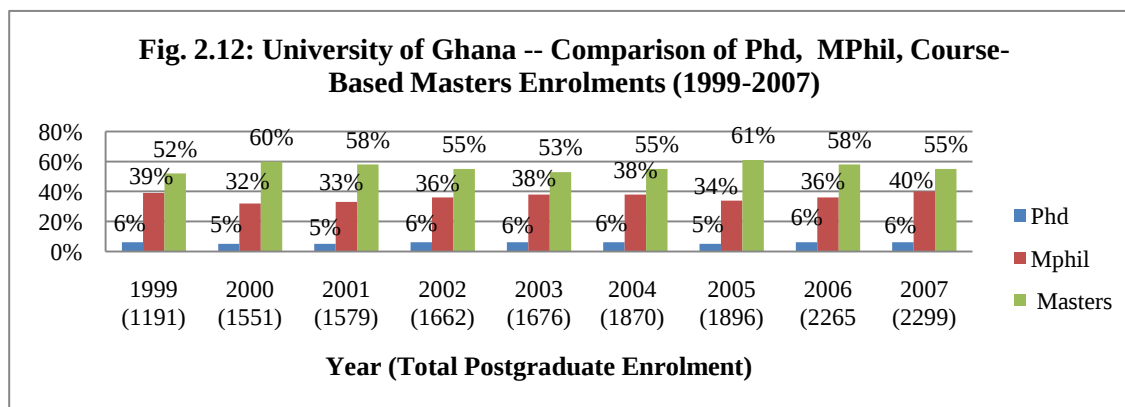
8422 in 1999 to 42% of 27321 in 2007. The proportion of postgraduate females increased from 26% in 1999 to 33% in 2007 (fig. 2.11), increasing the potential for more females to join the academy, albeit with still big disparities in their proportion relative to their male counterparts. In absolute terms, the undergraduate and postgraduate female populations increased by about 334% and 116%, respectively, during the period (fig. 2.10).

Postgraduate Enrolments

An analysis of postgraduate enrolments by faculty shows that, for much of the decade under review, majority of students were enrolled in the Business School. Enrolments there made up close to 40% of total postgraduate enrolments, hitting a high of 57% of enrolments in 2002. It then decreased through the high 30 percentile range before settling at 33% of total postgraduate enrolments in 2007. These relatively high enrolments in business programs, where most students are eyeing professional rather than academic careers, may not necessarily translate into the cultivation of the next generation of academics.



Source: From Data Provided by the University of Ghana (2008)



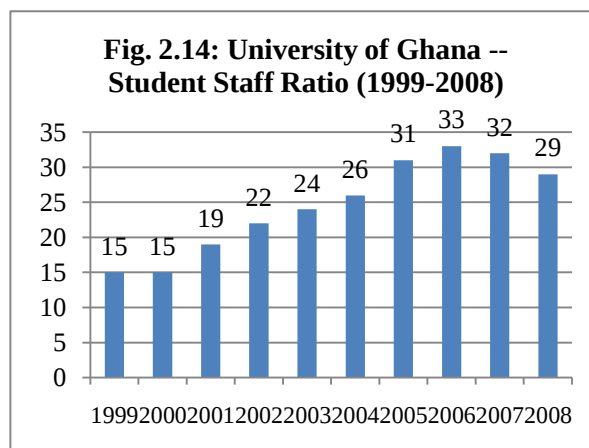
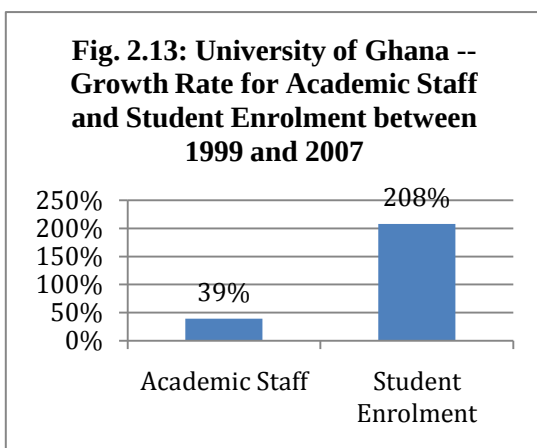
Source: From Data Provided by the University of Ghana (2008)

Fig. 2.12 helps to illustrate this concern. It shows that majority of postgraduate students were enrolled in course-based Masters programs, followed by those in thesis-based MPhil programs. The proportion of students in course-based programs increased from 52% in 1999 to 55% in 2007, while that of MPhil students rose very imperceptibly from 39% in 1999 to 40% in 2007. Doctoral enrolments remained unchanged, at 6%, during this period (fig. 2.12).

University of Ghana Academic Staff Profile

Academic Staff Capacity and Enrolment Pressures

Academic staff numbers increased from 658 in 1999 to 913 in 2007, representing a 39% increase. This compares to a 208% increase in student enrolment over the same period, from 9616 to 29620 (fig. 2.13). Clearly academic staff growth has not come close to compensating for the tremendous increase in student enrolment.

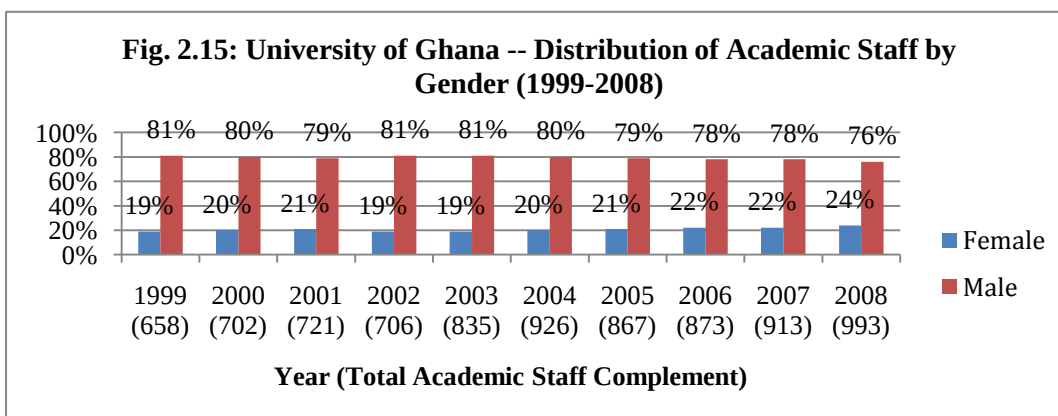


Source: From Data Provided by the University of Ghana (2008)

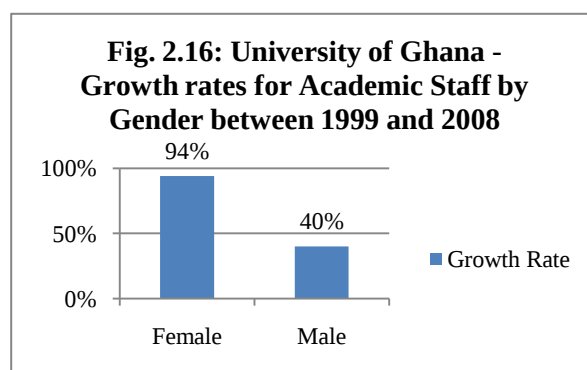
Fig. 2.14 shows that student-staff ratios have risen gradually over the years, from 1999 until 2006, before going down for two consecutive years in 2007 and 2008. They rose from about 15:1 in 1999 to about 33:1 in 2006, ending at 29:1 in 2008. As noted earlier, these ratios fall far above what is considered acceptable by the National Council for Tertiary Education, thereby imposing severe burden on academic staff.

Academic Staff Distribution by Gender

An analysis of gender distribution shows the dominance of male staff. They constituted 81% of staff in 1999, going down to 76% in 2008 (fig. 2.15). There have been improvements in female numbers due to the fact that of the 287 people hired during that period 69% were female. Indeed, female staff numbers have grown 94% over the decade, from 124 to 241, compared to their male counterparts, whose strength grew by 40%, from 534 to 752 (2.16). It is noteworthy that while the proportion of female staff has improved gradually over the decade, from 19% in 1999 to 24% in 2008 (fig. 2.15), the current levels still leave a huge disparity that needs to be addressed.



Source: From Data Provided by the University

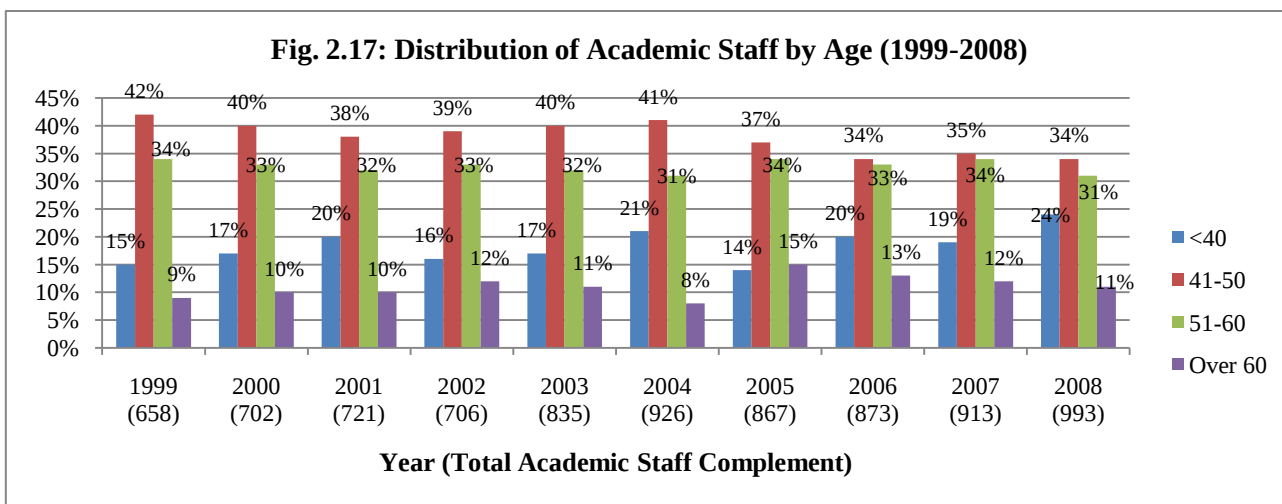


Source: From Data Provided by the University of Ghana (2008)

Academic Staff Distribution by Age

Generally, those in the 41-50 age bracket have made up the majority of staff members (fig. 2.17). In 2008, academic staff above 50 years of age constitute 42% of the total staff complement. It is significant to note that 11% of those in this group are, in fact, over 60 years old. This compares to about 24% who are below 41 years and 34% in the 41-50 age range. A look at trends over the last ten years shows that while those in the 41-50 year group made up 42% of staff in 1999, their proportion has dropped to 34% in 2008. The proportion of those in the 51-60 year range has only decreased marginally from 34% to 31% during this period, while those above 60 years have grown from 9% of the total to 11%.

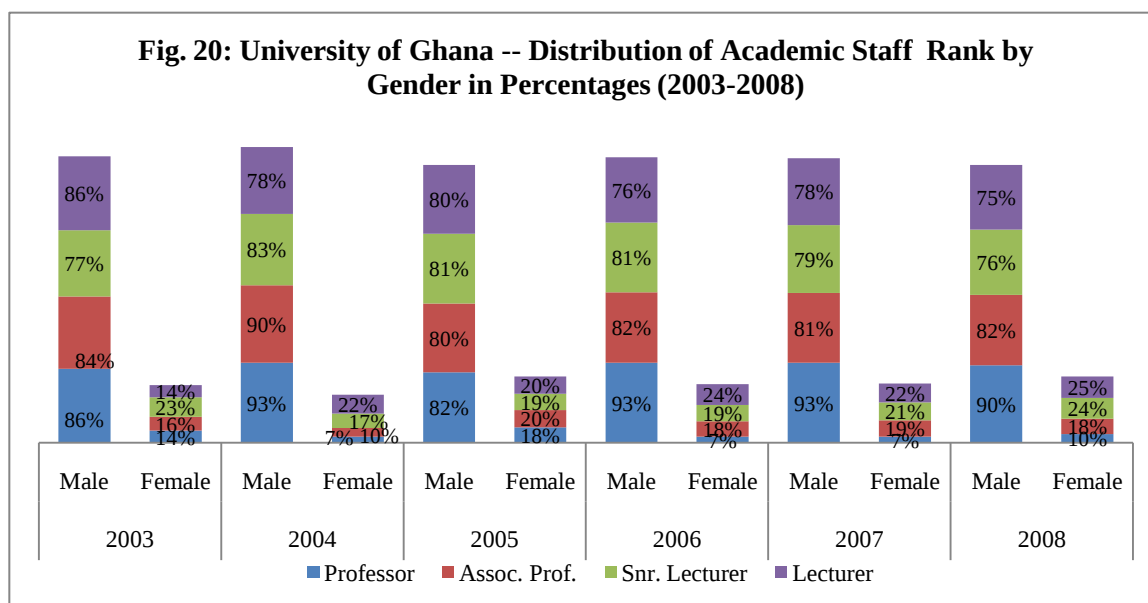
As illustrated in fig. 2.19, the proportion of staff below 41 years has gone up from 15% in 1999 to 24% in 2008. This is largely due to the fact that a higher proportion of those hired in the last decade have come from this cohort. Of the 287 people hired in that period 54% were in that range at the time they were employed. A significant majority of staff will, nevertheless, be retiring in the next decade. It is important, then, that efforts are made to replace them, at least in commensurate measure, if current staff levels are to be maintained a decade from now.



Source: From Data Provided by the University of Ghana (2008)

Distribution of Academic Staff Rank by Gender

Fig. 2.18 shows that females make up the minority of staff at all ranks and that their proportion, generally, decreases further the higher one goes up the ranks. While their proportion at the Lecturer rank has increased significantly from 14% in 1999 to 25% in 2008, changes at the senior lecturer and professorial levels have been marginal. In fact, their proportion, at the full professor rank, went down from 14% in 1999 to 10% in 2008.

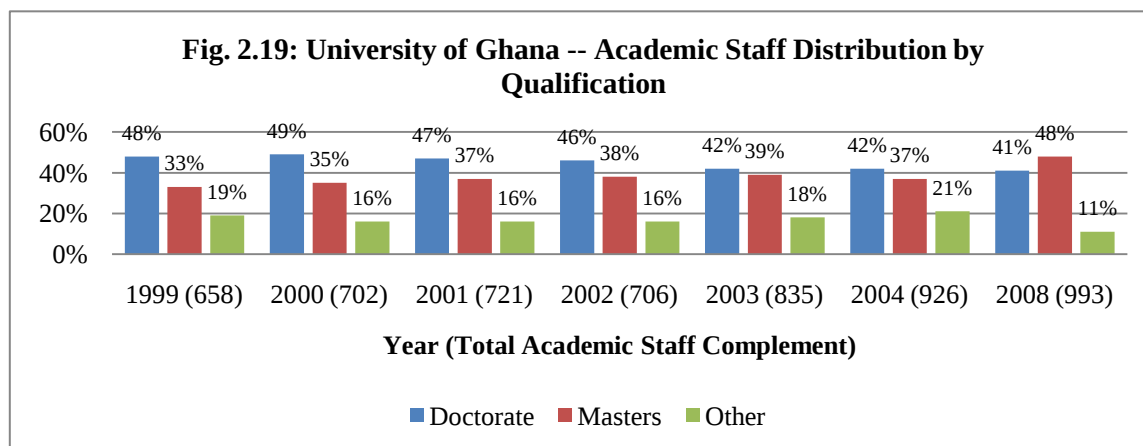


Source: From Data Provided by the University of Ghana (2008)

Distribution of Academic Staff by Qualification

Over the years, the proportion of academic staff with doctoral degrees has declined whereas those with Masters degrees have seen their proportion creep up. Overall, the proportion of doctorate

holders dropped from 48% in 1999 to 41% in 2008, whereas that of masters degree holders increased from 33% to 48% (fig. 2.19). In fact, the proportion of those with other qualifications, below Masters, stayed relatively strong for much of the decade, exceeding a fifth of the total staff complement in 2004, before going down to 11% in 2008.

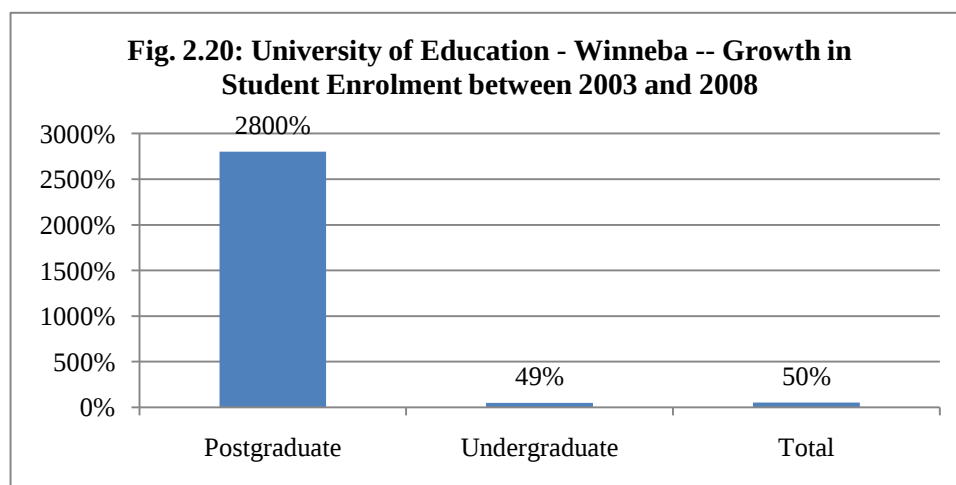


Source: From Data Provided by the University of Ghana

University of Education-Winneba (UEW) Student Profile

Total Student Enrolment

Total student enrolment at UEW increased by about 50% between 2003/2004 and 2007/2008, from 10015 to 15378 (fig. 2.20).

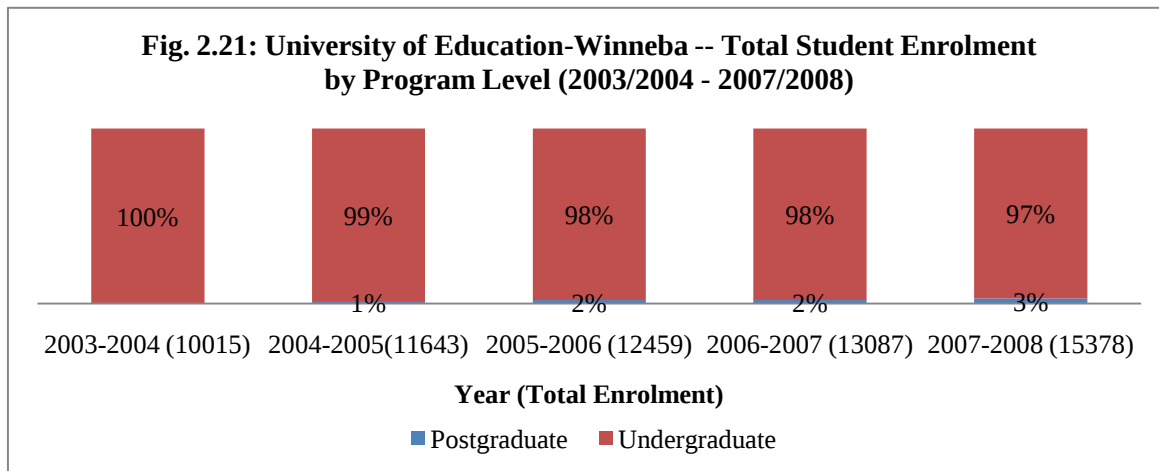


Source: From Data Provided by the UEW (2008)

Postgraduate Student Enrolment

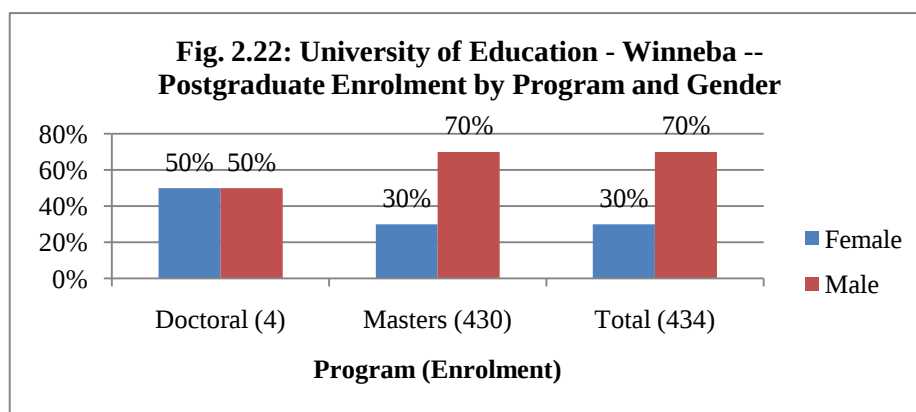
Fig. 2.21 shows that UEW is largely an undergraduate institution, with a huge majority of students enrolled in undergraduate programs. Enrolment in postgraduate programs increased over

the 2003/2004 - 2007/2008 period, going from 15 in 2003/2004 to 434 in 2007/2008. Altogether, postgraduate programs increased by 2800% while undergraduate enrolments went up by 49% (see fig. 2.22). In absolute terms, however, postgraduate student numbers continue trail far behind undergraduate enrolment (fig. 2.21).



Source: From Data Provided by the UEW (2008)

Fig. 2.22 illustrates the gender distribution of postgraduate students in 2007/2008. 70% were male and 30% were female. Only 4 out of the 430 postgraduate students were enrolled in a doctoral program, which was exclusively in the Faculty of Science Education. It is worth noting that the doctoral enrolment had equal representation of males and females.



Source: From Data Provided by the UEW (2008)

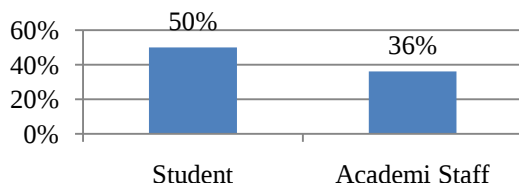
University of Education - Winneba -- Academic Staff Profile

Academic Staff Capacity and Enrolment Pressures

Academic staff increased from 240 in 2003/2004 to 326 in 2007/2008, representing a 36% jump, compared to the 50% growth in student numbers that was registered during the period (fig. 2.23).

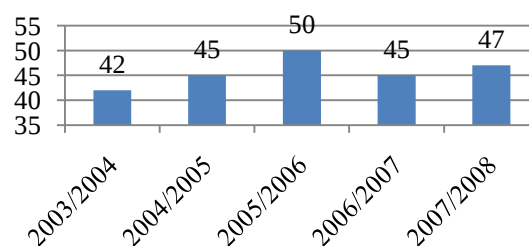
Student-staff ratios at UEW were very high (Fig. 2.24), rising from 42:1 in 2003/2004 to 50:1 in 2005/2006, before settling at 47:1 in 2007/2008. The professoriate is obviously growing at a rate that is incommensurate with the expanding numbers of students and, therefore, incapable of adequately supporting the academic mandate of the institution and providing the requisite quality of instruction and research needed.

Fig. 2.23: University of Education - Winneba - Growth rate for Academic Staff and Student Enrolment between 2003/2004 and 2007/2008



Source: From Data Provided by UEW (2008)

Fig. 2.24: University of Education - Winneba -- Student Staff Ratio (2003/2004 - 2007/2008)

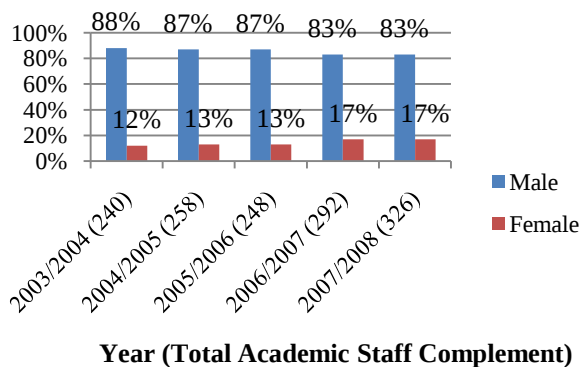


Source: From Data Provided by UEW (2008)

Distribution of Academic Staff by Gender

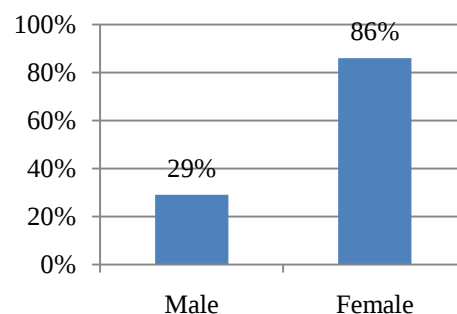
The overwhelming majority of staff has been male, consistently making up over 80% of the total number between 2003/2004 and 2007/2008 (fig. 2.25). It is worth noting that the proportion of female staff increased from 12% in 2003/2004 to 17% in 2007/2008. The growth in absolute number of female staff between 2003/2004 and 2007/2008 is 86%. This is a positive sign, and more needs to be done to increase their numbers and bridge the gap between them and their male counterparts.

Fig. 2.25: University of Education - Winneba -- Distribution of Academic Staff by Gender



Source: From Data Provided by UEW (2008)

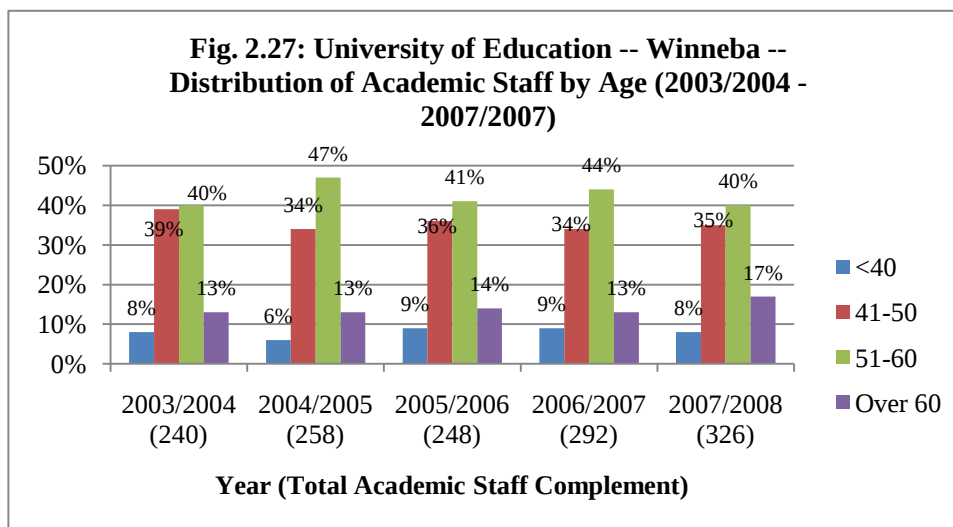
Fig. 2.26: University of Education - Winneba -- Academic Staff Growth Rate by Gender



Source: From Data Provided by UEW (2008)

Distribution of Academic Staff by Age

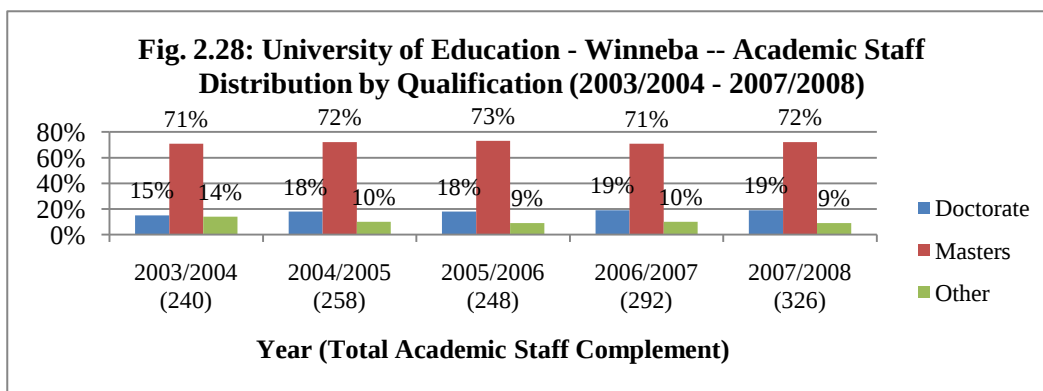
As shown in fig. 2.27, majority of staff were between 51-60 years old in each of the years between 2003 and 2008. A very startling revelation from the data is the fact that over 50% of staff were over 50 years old. In fact, the proportions were 60%, 55%, 57%, and 57%, respectively, each year from 2004/2005. Comparatively, less than 10% of staff were below 40 years of age during the 2003/2004-2007/2008 period. This is far lower than those in the over-60 year category, meaning that there are more retirees on staff than there are those under 40.



Source: From Data Provided by UEW (2008)

Distribution of Academic Staff by Qualification

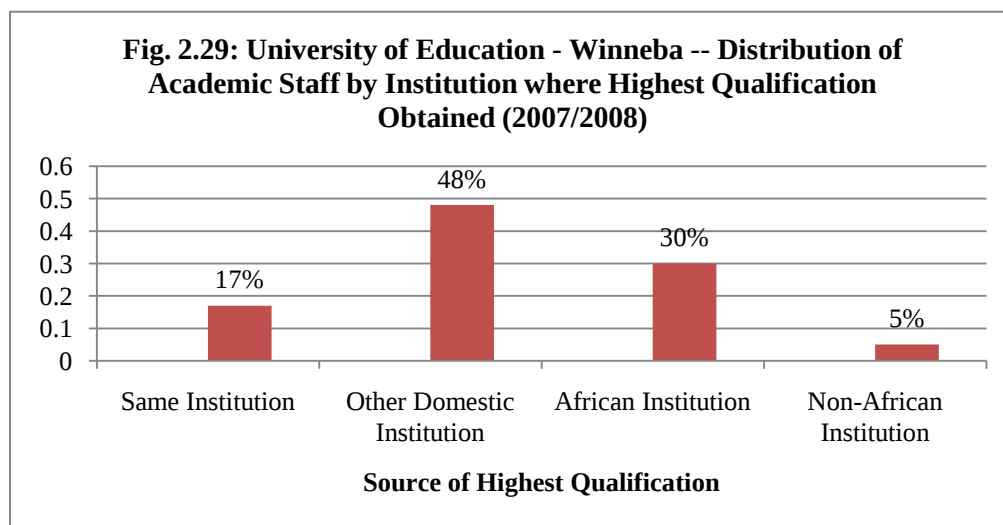
The overwhelming majority of staff in each of the years under review (i.e., over 70%) had Masters degrees. Less than a fifth had doctorate degrees (fig. 2.38). With a relatively small number of doctoral degree holders on its academic staff, the ability of UEW to offer doctoral programs is severely constrained. It is noteworthy that around a tenth of faculty members, each year, had undergraduate degrees.



Source: From Data Provided by UEW (2008)

Academic Staff Development

Majority of academic staff received their highest degrees from other institutions in Ghana. Only 5% of all staff received their highest degrees from other African institutions, compared to 30% from non-African institutions (2.29). This shows that cross-training of academics among African institutions is quite low, relative to training by institutions outside the continent.



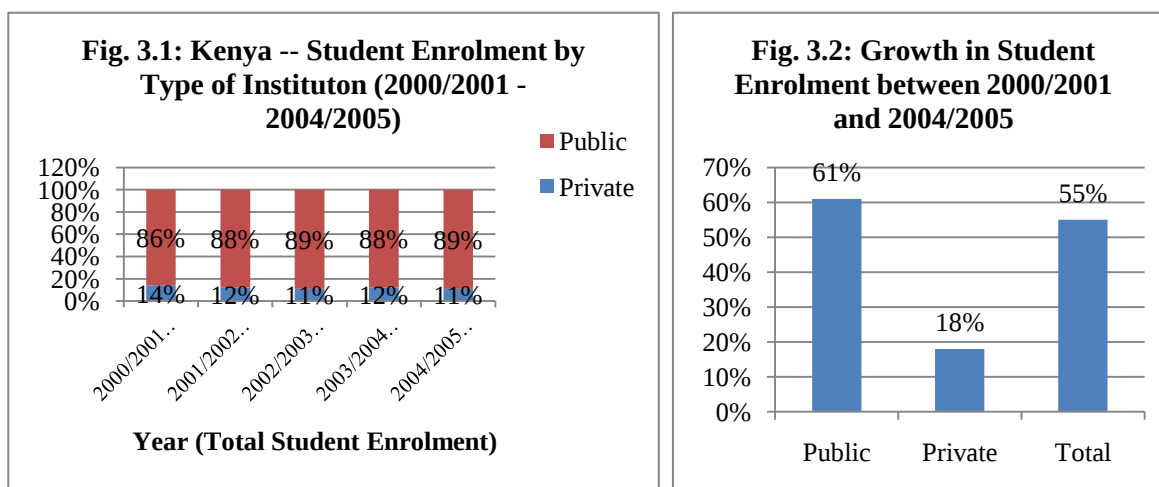
Source: From Data Provided by UEW (2008)

SECTION 3 – KENYA

National Student Profile

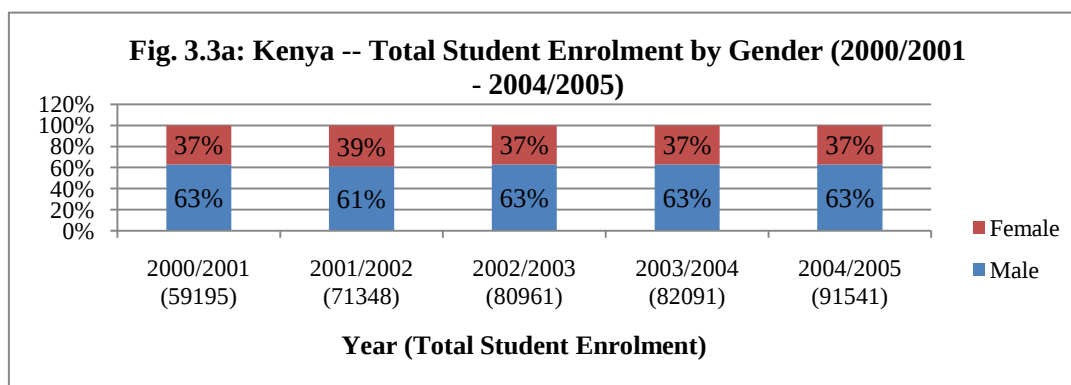
Total Student Enrolment and Distribution by Gender

Total student enrolment increased from 59,195 in 2000/2001 to 91,541 in 2004/2005 (fig. 3.1), representing a 55% growth over the period (fig. 3.2). Enrolments in public universities over the same period went up from 50,704 to 81,491 – a 61% growth. Private universities, on the other hand, saw their numbers increase from 8,491 in 2000/2001 to 10,050 in 2004/2005, reflecting a growth rate of 18%. Their proportion of total enrolments, however, went down from 14% of the total in 2000/2001 to 11% in 2004/2005 (fig. 3.1).

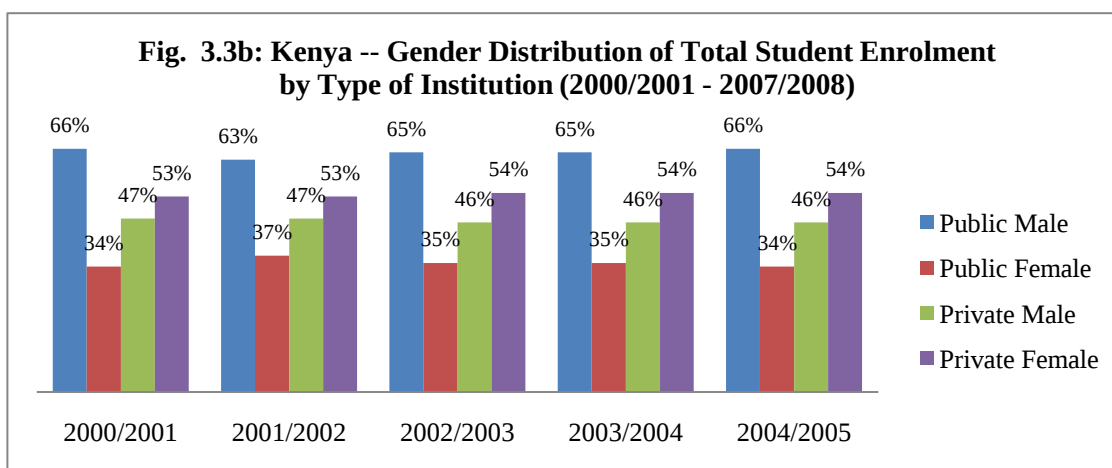


Source: Kenya Commission for Higher Education (2008); Kenya National Bureau of Statistics (2004, 2006, 2007)

As shown in fig. 3.3a, male students have constituted the majority of the total student population. The proportion of female students, at the national level, remained unchanged at 37% for both 2000/2001 and 2004/2005. The proportion of females in public institutions also remained unchanged at 34% in both of those years (fig. 3.3b). The picture is, however, quite different for private universities where female enrolments consistently outstripped male enrolments, increasing marginally from 53% in 2000/2001 to 54% in 2004/2005 (fig. 3.3b).



Source: Kenya Commission for Higher Education (2008); Kenya National Bureau of Statistics (2004, 2006, 2007)



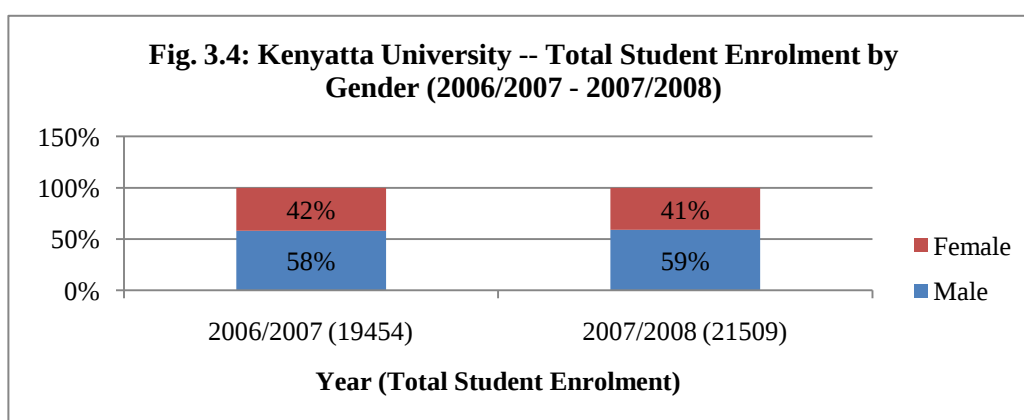
Source: Kenya Commission for Higher Education (2008); Kenya National Bureau of Statistics (2004, 2006, 2007)

Institutional Profiles

Kenyatta University Student Profile

Total Student Enrolment

In 2006/2007, Kenyatta University had a total enrolment of 19454, increasing to 21509 in 2007/2008 (fig. 3.4). This represents about an 11% rise. Of the total enrolments, in 2006/2007, 58% were male and 42% female. The proportions of males and females in 2007/2008 were 59% and 41%, respectively.

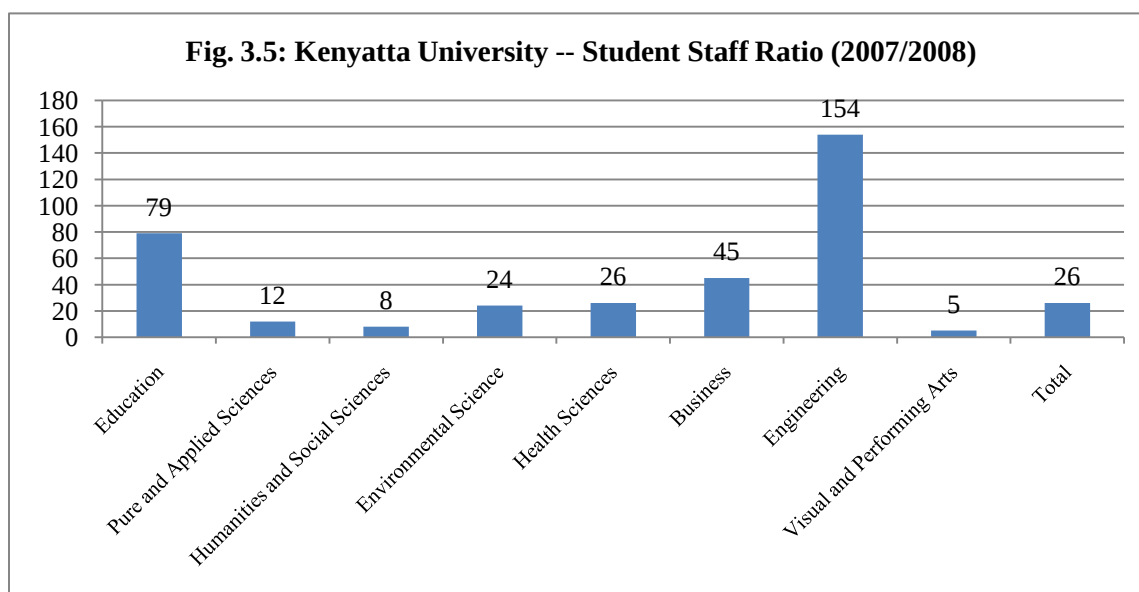


Sources: Kenyatta University (n.d.); Data Provided by Kenyatta University (2008)

Kenyatta University Academic Staff Profile

Academic Staff Capacity and Enrolment Pressures

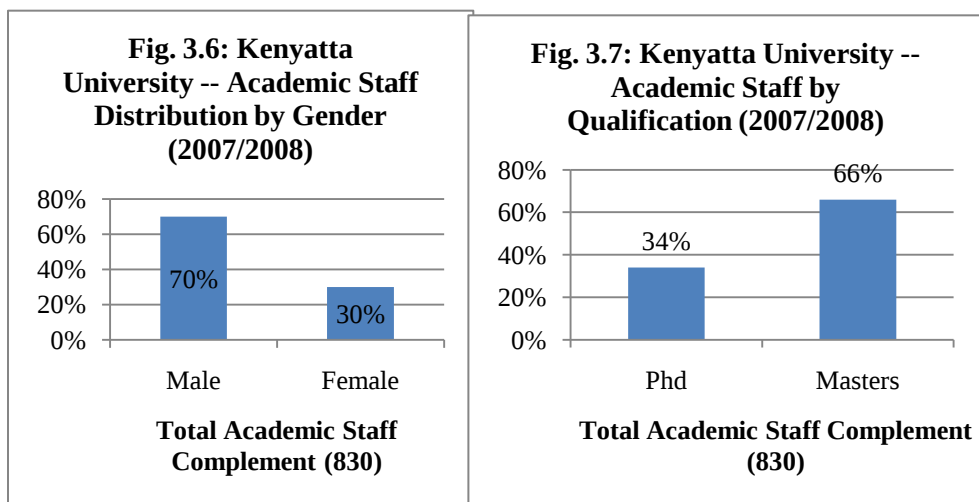
In 2007/2008, there were 830 academic staff at Kenyatta University. The student-staff ratio in 2007/2008 stood at about 26:1 (fig. 3.5). There were, however, variations across schools which need to be noted. While the ratio in Visual and Performing Arts and in Humanities and Social Sciences were as low as about 5:1 and 8:1, respectively, the figure for Education was as high as about 79:1. The ratio for the School of Engineering was an astounding 154:1 (fig. 3.5). These figures show that there are significant capacity problems in some faculties that urgently need to be addressed.



Sources: Kenyatta University (n.d.); Data Provided by Kenyatta University (2008)

Distribution of Academic Staff by Gender and Qualification

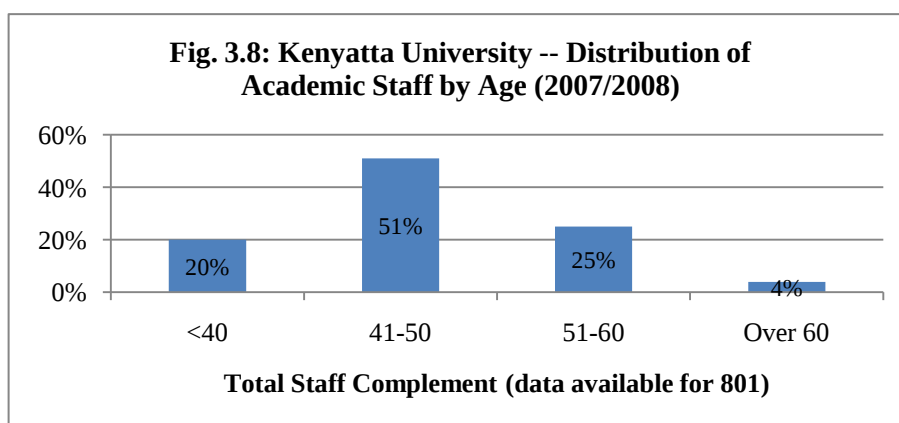
Figure 3.6 shows that males dominated the overall staff complement, at 70% of the total. When the academic staff is disaggregated by qualification, we see that only about a third of staff, for whom data is available, had doctoral degrees in 2007/2008. 34% had doctoral degrees, while 66% had Masters degrees (fig. 3.7). In the School of Business and the School of School of Economics, an overwhelming 89% and 73% of staff, respectively, had only Masters degrees.



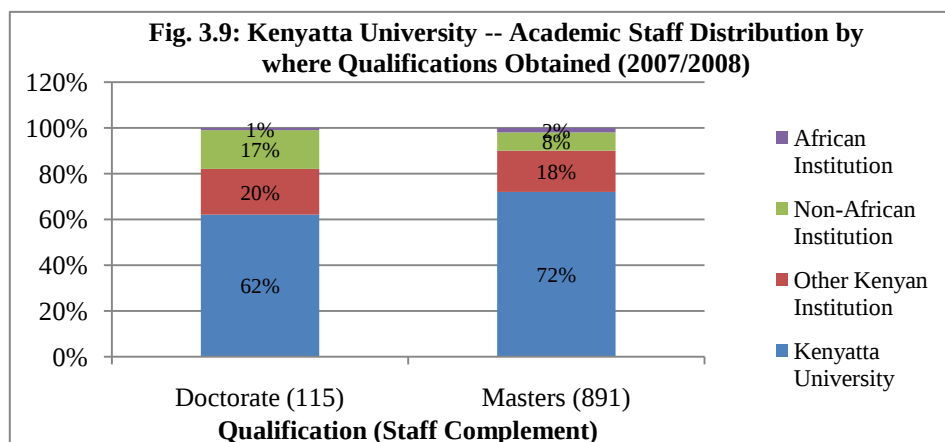
Sources: Kenyatta University (n.d.); Data Provided by Kenyatta University (2008)

Distribution of Academic Staff by Age

Majority of academic staff, for whom data is available, was aged between 41 and 50 years of age, and constituted 51% of the total complement. 20% of staff was under 41 years old, 25% was between 51-60 years of age, while 4% were over 60 years old (fig. 3.8). The age distribution of staff shows that Kenyatta University has a sizeable proportion of staff who could fill up positions to be vacated by 25% of their colleagues in the next decade. It is important, though, that plans be in place to ensure that their ranks are filled by enough staff under 41 years old over the next decade, if the staff complement is to be sustained beyond that period.



Sources: Kenyatta University (n.d.); Data Provided by Kenyatta University (2008)



Sources: Kenyatta University (n.d.); Data Provided by Kenyatta University (2008)

Fig. 3.9 shows that of all the doctoral degree holders at the institution, for whom data is available, a significant majority obtained their qualification from Kenyatta University. That is 62% of the total. This is a significant indicator of the fact that the institution is a major contributor to the production of the next generation of academic staff in the country. Overall, 82% of staff obtained their doctoral degrees from domestic institutions, compared to about 18% who got theirs from other countries. It is significant to note that only about 1% of staff obtained their doctoral degrees from other African institutions, indicating that there is not much intra-continental training of doctoral students.

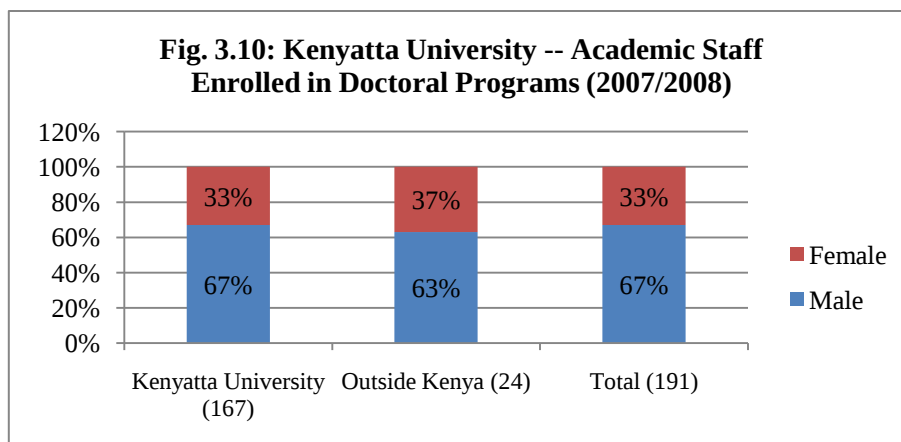
Fig. 3.9 also shows that 72% of staff with Masters degrees, for whom data is available, obtained them from Kenyatta University. Of the total, about 18% received their masters qualifications from Kenyan institutions, while about 10%, got them from foreign institutions, 8% of which were non-African.

Based on the foregoing, it is clear that Kenyan institutions play a critical role in the development of academics. The need to enhance the ability of domestic institutions to produce high-quality staff is, therefore, imperative if the size and quality of the next generation of academics in that country is to be improved.

Academic Staff Development

Kenyatta University has a staff development program in place that has allowed 167 of its academic staff to enroll in doctoral programs at the institution. This represents 20% of its total academic staff complement of 830. Of these enrollees, 67% were male, compared to 33% female. The School of Pure and Applied Science had the most staff enrolled in doctoral education at the institution -- i.e., 22%. This was followed by the School of Humanities and Social Sciences whose members constituted 15% of the total.

In addition to those enrolled at Kenyatta University, in 2007/2008, there were 24 other staff members enrolled in doctoral programs at institutions outside the country. 63% were males (fig. 3.9) and, again, majority of them were from the School of Pure and Applied Science, which accounted for 46% of the total.



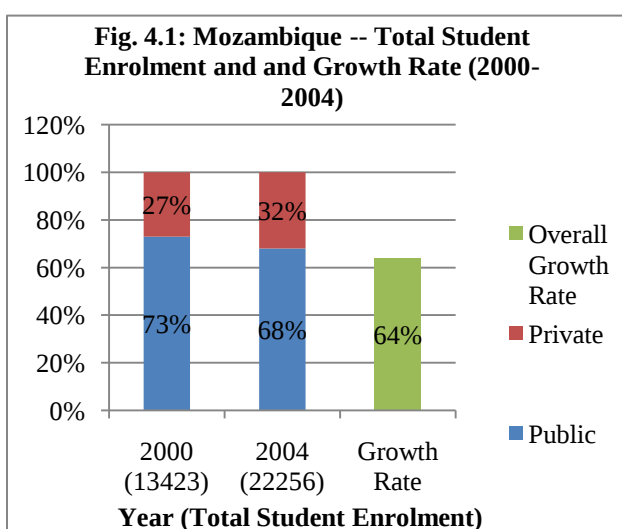
Sources: Kenyatta University (n.d.); Data Provided by Kenyatta University (2008)

SECTION 4 – MOZAMBIQUE

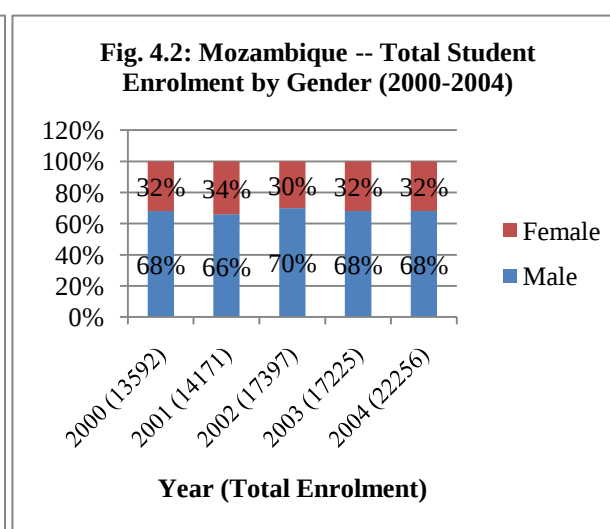
National Student Profile

Total Student Enrolment and Distribution by Gender and Type of Institution

Between 2000 and 2004, student enrolment in Mozambiquan universities increased from 13,592 to 22,256 (fig. 4.1). This represented a 64% growth during that time frame. While there were more enrolments in public universities in both 2000 and 2004, the proportion of students in the former saw a decline from 73% to 68%.



Source: Costa and de Nooijer (2006)



Source: Costa and de Nooijer (2006)

Fig. 4.2 shows that male students have outnumbered their female counterparts every year over this period, with the proportion of the latter staying at the same level, in 2004, as it was in 2000 -- i.e., 32%.

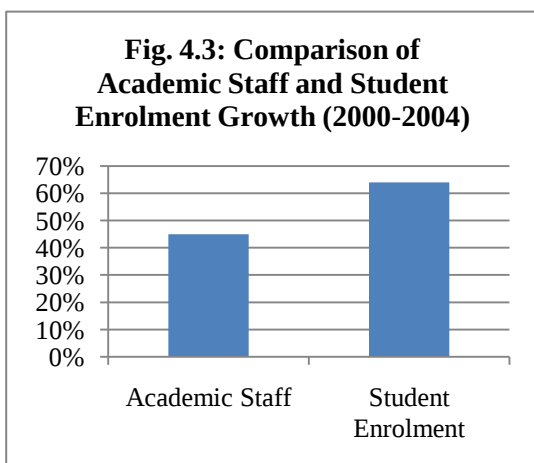
National Academic Staff Profile

Academic Staff Capacity and Enrolment Pressures

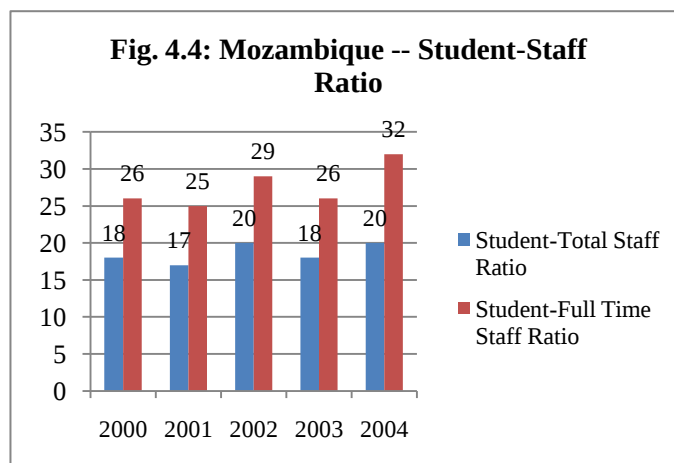
The total number of academic staff grew by 45% between 2000 and 2004, going from 770 to 1113. This compares unfavorably with the 64% growth in student numbers during this period (see fig. 4.3).

The overall student-staff ratio increased from 18:1 in 2000 to 20:1 in 2004. There is, however, a significant change, upwards, in these figures if we calculate the ratio using only full-time staff. Fig. 4.5 provides a nuanced comparison of student-staff ratios, using the total complement of staff as well as only full-time staff as the basis. It shows that while the overall ratio in 2000 and 2004

were 18:1 and 20:1, respectively, the corresponding ratios, based on full-time staff, were 26:1 and 32:1. Clearly, these institutions are depending significantly on part-time staff to keep ratios at relatively lower levels (see fig. 4.6 below). In view of the generally ephemeral nature of part-time staff, this may not be a dependable, sustainable strategy.



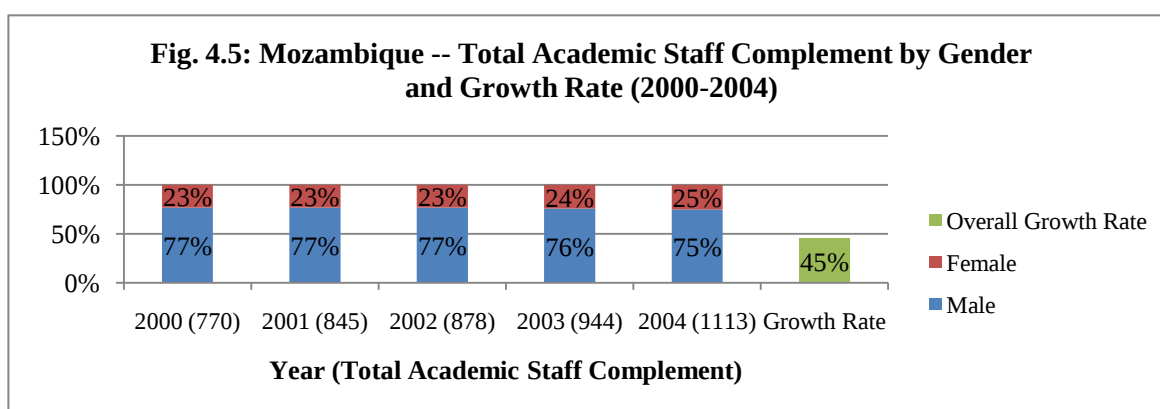
Source: Adapted from Costa and de Nooijer (2006)



Source: Adapted from Costa and de Nooijer (2006)

Distribution of Academic Staff by Gender and Employment Status

The proportion of male staff remained consistently very high, compared to their female counterparts (fig. 4.5). The proportion of the latter only increased marginally, during the period under review, climbing from 23% in 2000 to 25% in 2004.

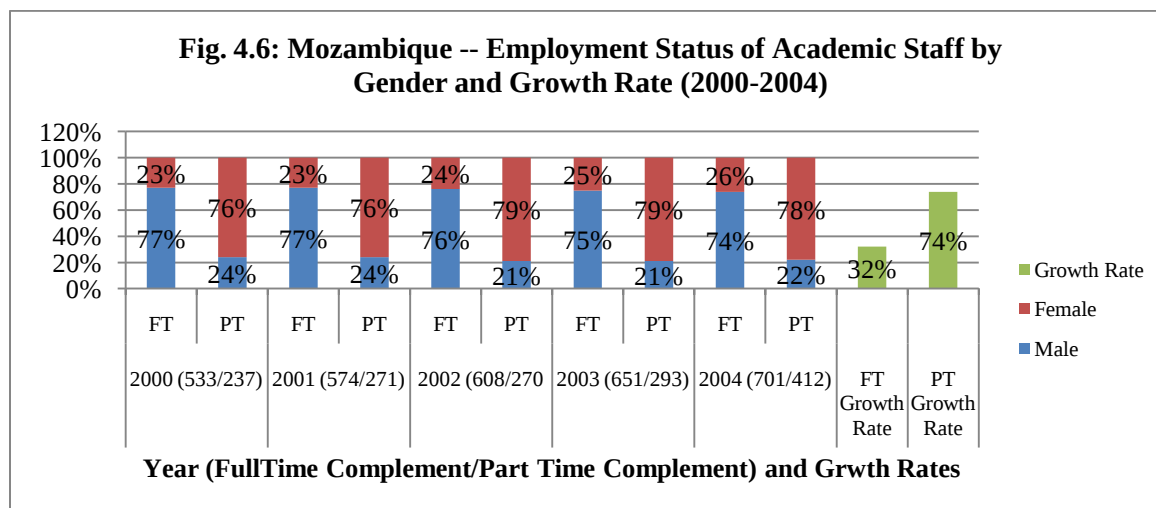


Source: Costa and de Nooijer (2006)

Fig. 4.6 shows that full-time staff constituted the majority of staff in universities between 2000 and 2004. However, the proportion of part-time (PT) staff went up from 31% in 2000 to 37% in 2004. Furthermore, the increasing use of part-time staff is vividly captured by the fact that their numbers grew by a significant margin (i.e., 74% compared to the 32% growth in full (FT) staff) during the period (fig. 4.5). This steady dependence on part-time staff is a clear indication that

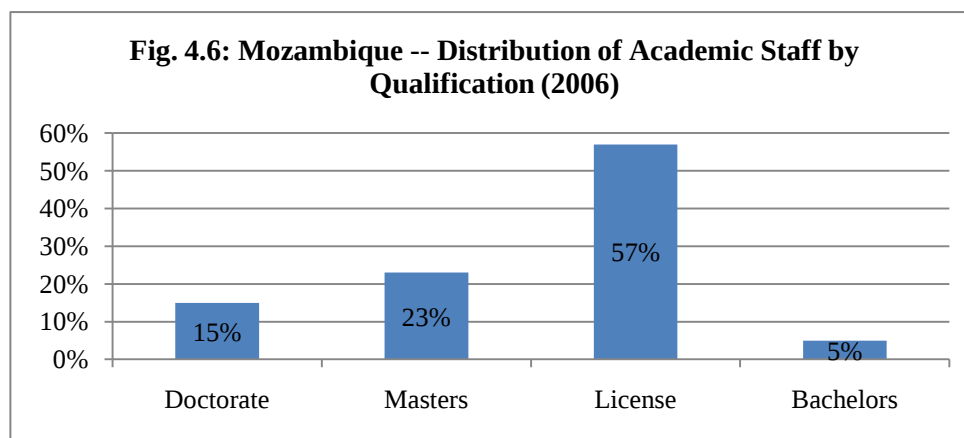
institutions do not have the requisite complement of dedicated staff to fulfill their academic mandates.

It is worth noting, though, that while full-time female staff increased their complement from 23% of the total to 26%, during the period, their part-time colleagues registered a drop in their proportion from 24% to 22% (fig. 4.6).



Source: Costa and de Nooijer (2006)

Fig. 4.6 shows the distribution of academic staff by qualification. Of the 1389 staff members at post in 2006, only 15% and 23%, respectively, had doctoral and masters degrees (fig. 4.6). These figures signal a challenge for these institutions as sources for the production of high caliber academics with the capacity to regenerate themselves at globally competitive levels.



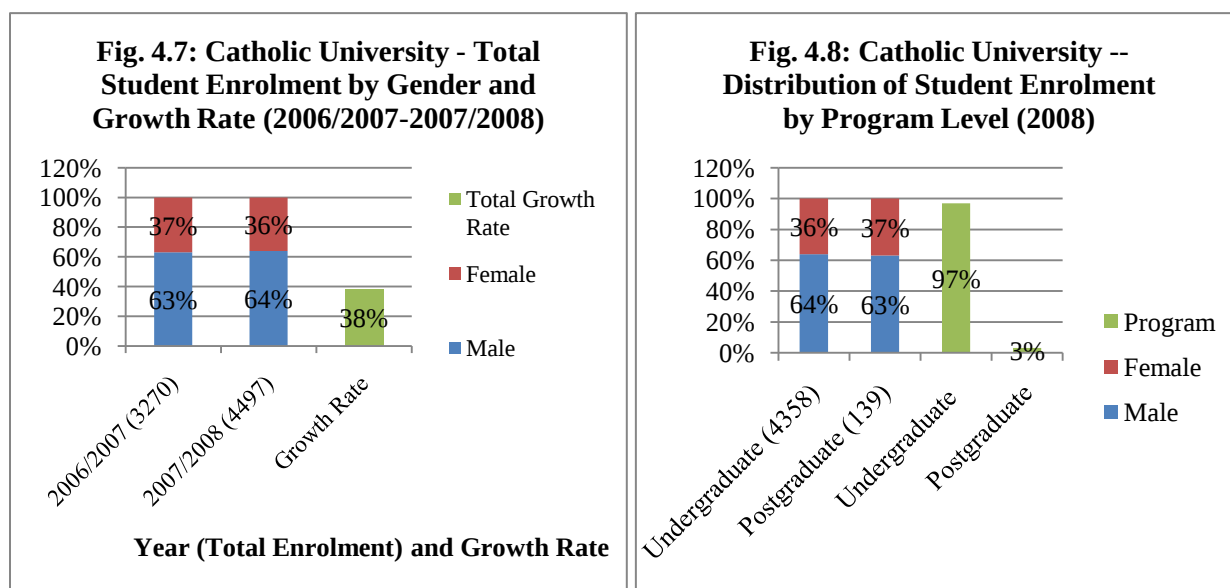
Source: Matos (2008)

Institutional Profiles

Catholic University of Mozambique (CUM) Student Profile

Total Student Enrolment by Gender and Program Level

In 2006/2007, the university had 3270 students, enrolled across its various campuses. Of these, 63% were male and 37% female. By 2007/2008, the total student population had increased to 4497, a growth of 38%. The proportion of female students, however, dropped marginally to 36% of enrollees (fig. 4.7).

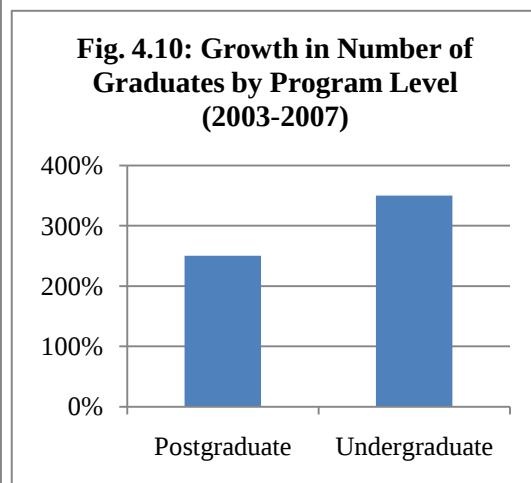
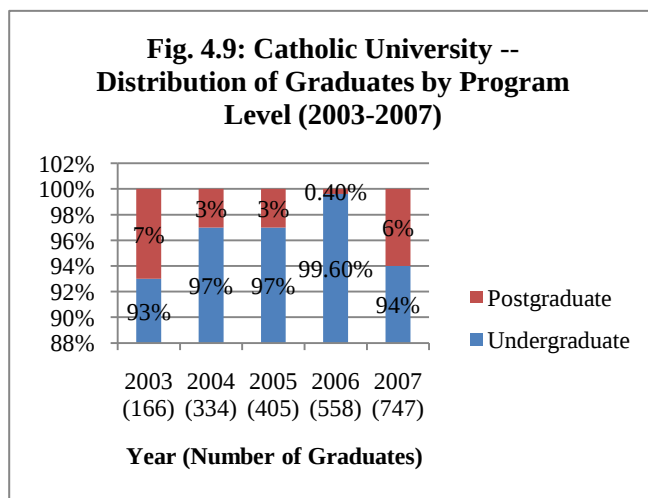


Source: From Data Provided by CUM Office of the Vice-Rector -- Academic Affairs and Development (2008)

As shown in fig. 4.8, the overwhelming majority of students, in 2008, were undergraduates. They made up 97% of total enrolments in 2007/2008. Female students made up 36% and 37%, of the undergraduate and postgraduate cohorts, respectively.

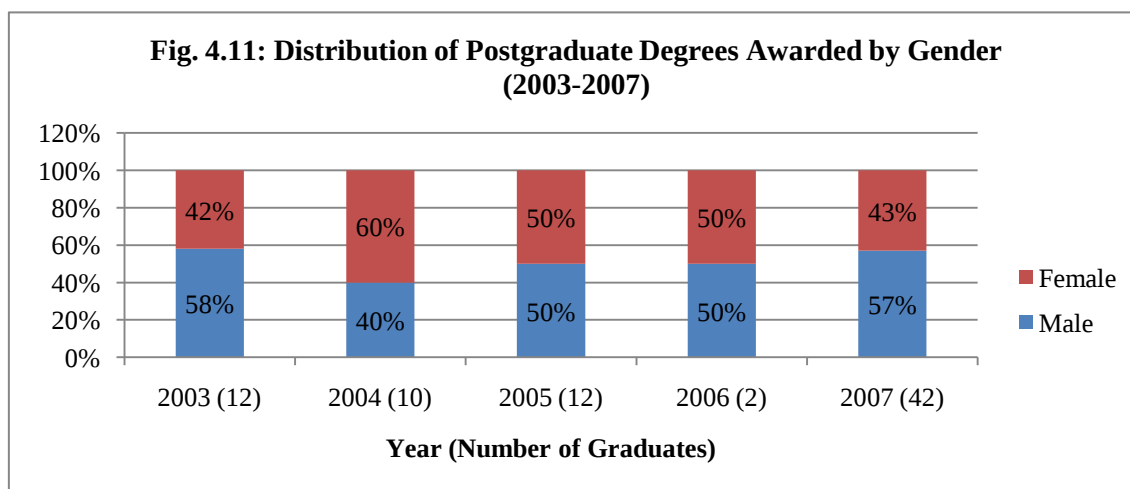
Student Graduation by Program Level

In consonance with the relative distribution of undergraduate and postgraduate enrolments, the number of undergraduate degrees awarded far exceeded the number of postgraduate degrees conferred between 2003 and 2007. A disaggregation of graduation growth rates between undergraduates and postgraduates shows that the former went up by 358% during the 2003-2007 period while the latter increased by 250% between 2003 and 2007 (fig. 4.10).



Source: From Data Provided by CUM Office of the Vice-Rector -- Academic Affairs and Development (2008)

Prior to 2007, only the MBA program graduated students at the postgraduate level. Graduates from other masters programs were added to the complement that year. Apart from 2003 and 2007, when the number of male graduates exceeded female graduates, there was either parity or more female graduates in the intervening years (fig. 4.11).



Source: From Data Provided by CUM Office of the Vice-Rector -- Academic Affairs and Development (2008)

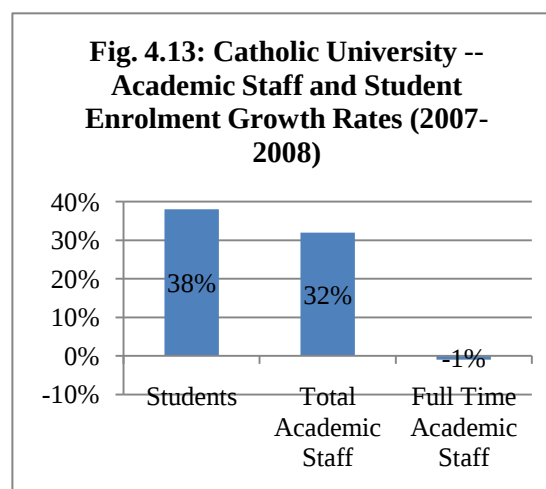
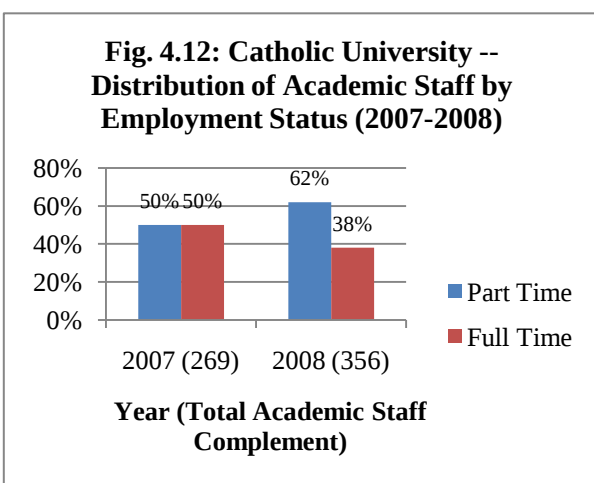
Catholic University Academic Staff Profile

Academic Staff Capacity and Enrolment Pressures

The university had 269 academic staff in 2007, almost equally divided between part-time and full-time employees. The total number of academic staff increased to 356 in 2008, with a 62% complement of part-time staff (fig. 4.12). This large number of part-time instructors raises

questions about the stability of the professoriate and sustainability of programs. Depending on part-timers for 50% and 62% of the institution's instructional needs, in 2007 and 2008 respectively, takes away from certainty about the professoriate and may diminish confidence in programs.

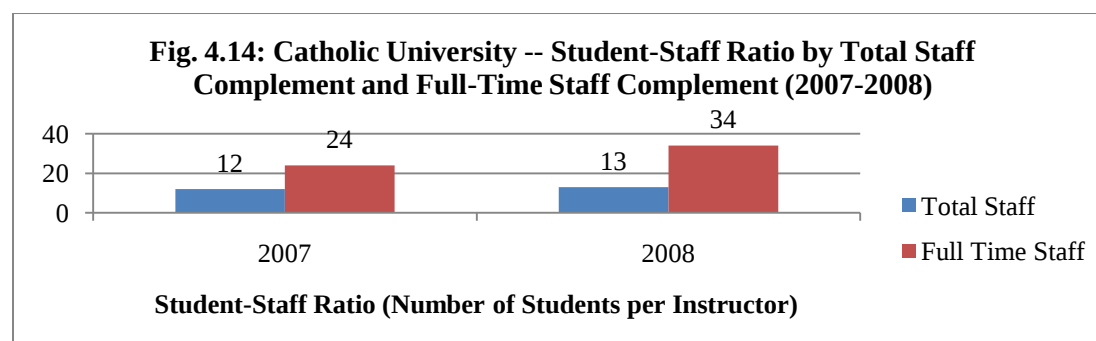
Despite the use of a large number of part-time instructors, it is clear that the growth in total academic staff numbers at CUM (32%) is unable to match the growth in student enrolment (38%). The staff growth rate even drops into negative territory if only full-time staff growth is analyzed (fig. 4.13).



Source: Catholic University of Mozambique (2008); From Data Provided by CUM Office of the Vice-Rector -- Academic Affairs and Development (2008)

In 2007, 46% of part-time staff was engaged in distance education, providing 87% of the instructional needs of those programs. In 2008, 43% of them was providing 97% of the instructional needs of those programs. It is clear that the institution is depending on more and more part time instructors to meet the increasing numbers of distance education students whose numbers grew by 121% from 645 in 2007 to 1427 in 2008.

Student-staff ratios stood at 12:1 and 13:1 in 2007 and 2008, respectively, when they are calculated using the full complement of instructional staff -- both full- and part-time. However, when only full-time academic staff is used, the ratios increase to 24:1 in 2007 and 34:1 in 2008.



Source: Catholic University of Mozambique (2008); From Data Provided by CUM Office of the Vice-Rector -- Academic Affairs and Development (2008)

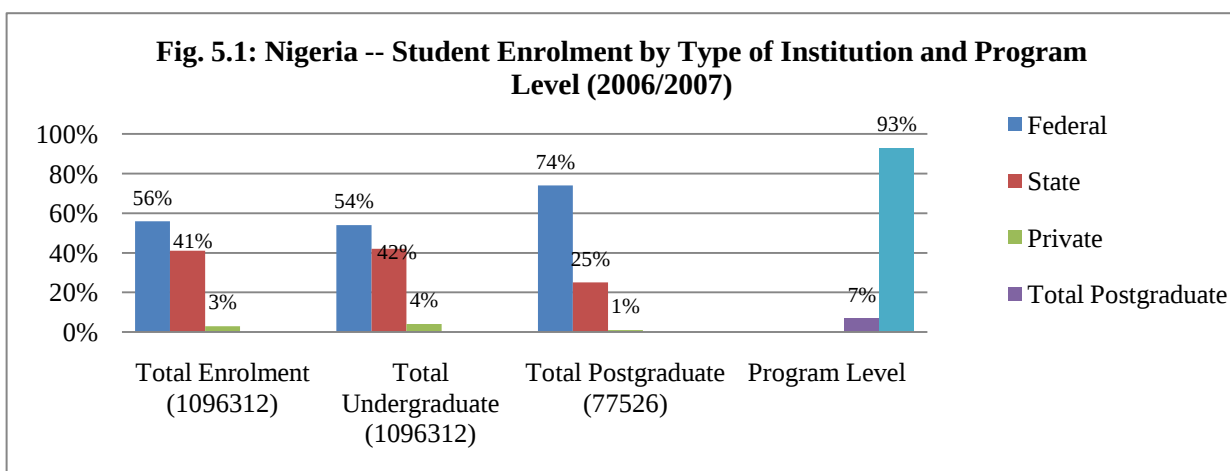
The discrepancy in these ratios is illustrated in fig. 4.14, and shows that the use of total instructional figures may not provide a good assessment of the university's ability to deliver stable, sustainable programs. In the absence of data on academic staff qualifications, one wonders what the caliber of these part-time instructors is and the implications for the quality of education that students are receiving.

SECTION 5 – NIGERIA

National Student Profile

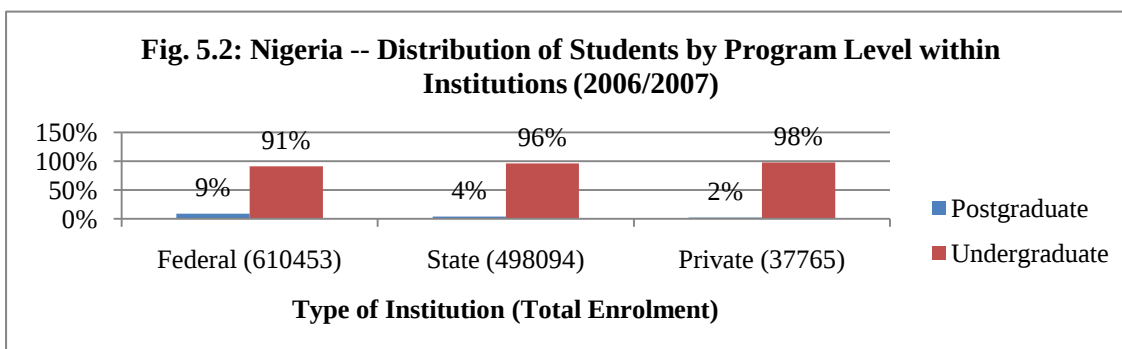
Total Student Enrolment and Distribution by Program Levels

In 2006/2007, there were 1,096,312 students enrolled in Nigerian universities. Of these, 56% were enrolled in federal universities, 41% in state universities, and 3% in private universities (fig. 5.1).



Source: Adapted from Saliu, 2007

The overwhelming majority of students were undergraduates. 93% of them were enrolled in undergraduate programs, compared to 7% in postgraduate programs (fig. 5.1). Of the total postgraduate enrolment in the country, federal universities accounted for 74% while state universities had 25%. Only 1% of total postgraduate enrolments were in private institutions (fig. 5.6 and Table 5.2).



Source: Adapted from Saliu, 2007

Fig. 5.2 shows how undergraduate and postgraduate students are distributed within each type of institution. The data points to the fact that federal universities had the highest proportion of postgraduate enrolments, at 9%, followed by state universities, at 4%, and private universities, at 2%.

National Academic Staff Profile

Academic Staff Capacity and Enrolment Pressures

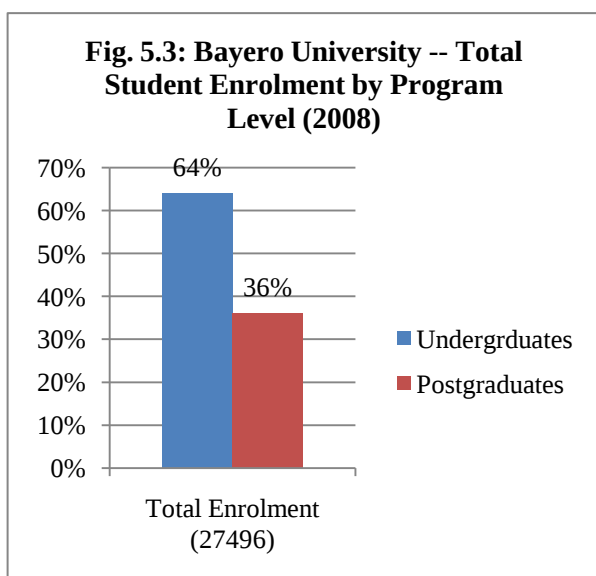
There were 27,394 academic staff members in Nigerian universities in 2006/2007 (Saliu, 2007), and they had to handle the pressure that comes with a student-staff ratio of 40:1.

Institutional Profiles

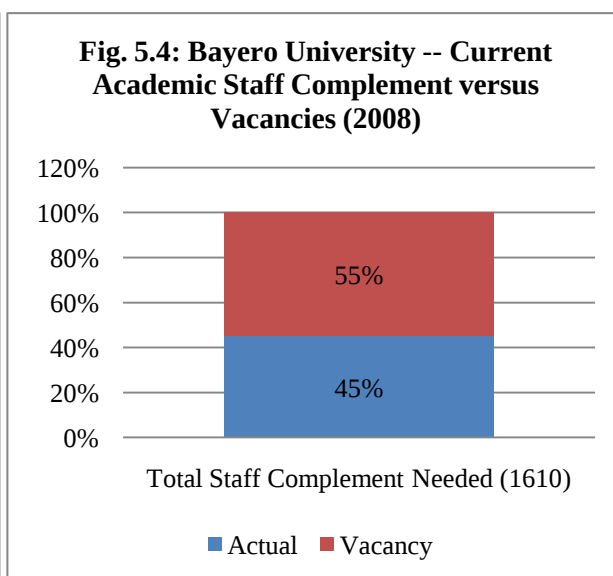
Bayero University Student Profile

Total Student Enrolment

Bayero University had 27,496 students enrolled in all its programs in 2008. 64% of them were undergraduates while postgraduates made up the remaining 36% (fig. 5.3). This looks like a healthy proportion of postgraduate students from which to draw the next generation of scholars. However, in the absence of disaggregated data to allow us to understand how they are distributed across programs, it is difficult to say how well the university is doing in terms of its contribution to the growth and development of the country's academic staff needs.



Source: Adapted from Jega (2008)



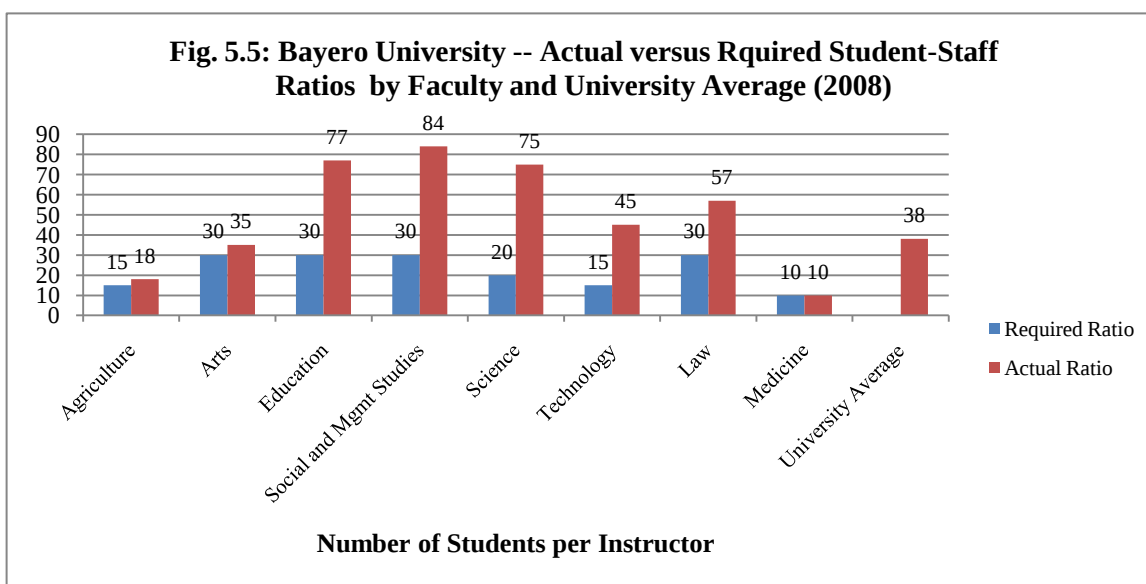
Source: Adapted from Jega (2008)

Bayero University Academic Staff Profile

Academic Staff Capacity and Enrolment Pressures

In 2008, the university had a total academic staff complement of 731. According to the Vice-Chancellor of the university, this figure represents only 45% of the 1610 needed to adequately run programs (Jega, 2008). The university, therefore, has to contend with a staff shortfall of 55% (fig. 5.4). In fact, no academic unit, apart from the Faculty of Medicine, has been able to meet its staff establishment (Jega, 2008).

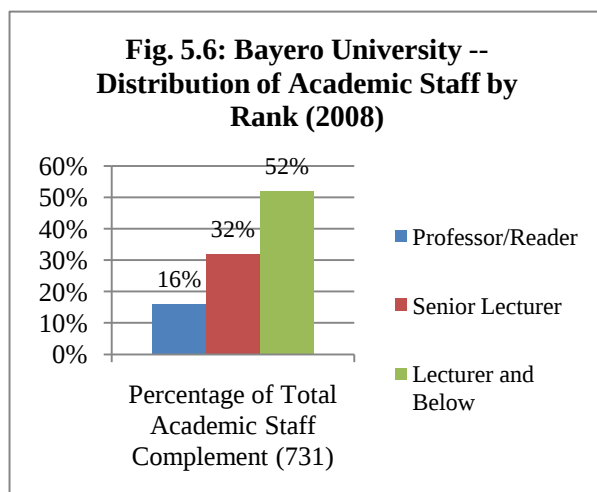
The student staff ratio across the university, in 2008, was 38:1. From fig. 5.5, below, it is clear that all faculties, with the exception of Medicine, exceeded the requisite student-staff ratios. In most cases, the difference is very significant. For example, while the required ratio in the Faculty of Social and Management Sciences was 30:1, the actual ratio stood at 84:1. The difference between the required and actual ratios in the Faculties of Science and Education were 55 and 47 respectively (fig. 5.5). These excessive ratios, which are related to the staff shortages noted above, make it difficult for students to get the requisite quality of instruction and pose tremendous workload challenges to academic staff who are then left with little time to devote to their research endeavors.



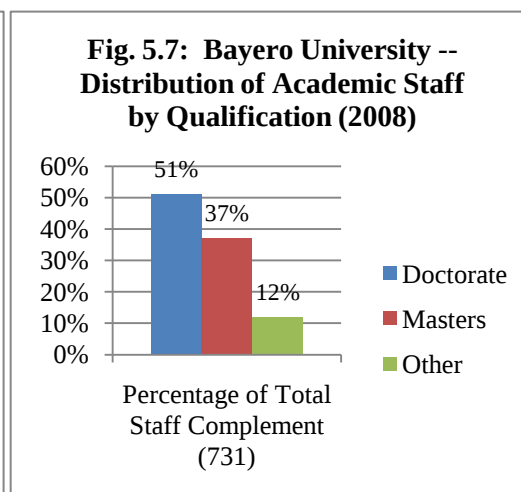
Source: Adapted from Jega (2008)

The above pressures have implications for the capacity of various ranks to undertake the full range of academic responsibilities in a balanced way and to develop themselves. In 2008, the rank distribution of academic staff was as follows: 16% professor/reader; 32% senior lecturer; 52% lecturer and below (Jega, 2008; see fig. 5.6). This means that an overwhelming majority of staff are junior scholars. This situation has implications for their career advancement and the quality of research and teaching when juxtaposed with the fact that there are not enough faculty members, in general, to meet the academic mandate of the institution, based on the number of

students. The relationship among these variables is illustrated by the difference between the required and actual student staff ratios (Table 5.7).



Source: Adapted from Jega (2008)

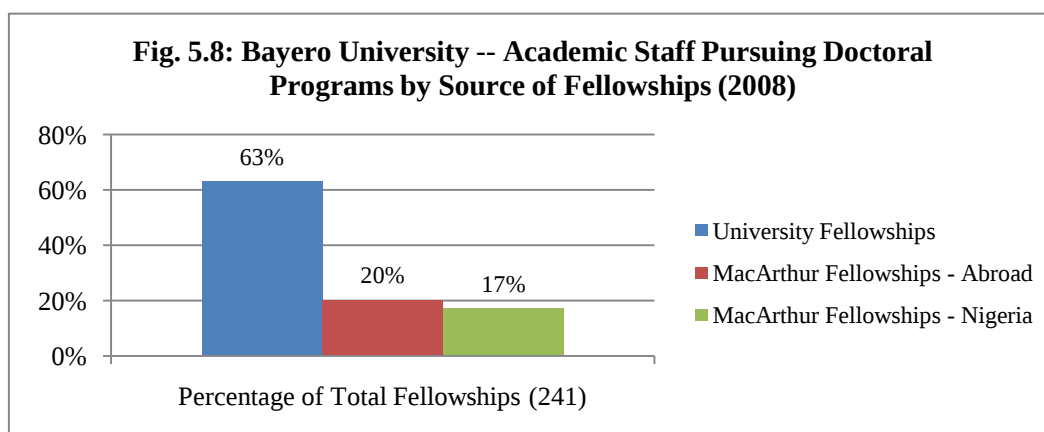


Source: Adapted from Jega (2008)

Distribution of Academic Staff by Qualification

Of the 731 academic staff members at post in 2008, 373 had doctoral degrees; 271 had masters degrees; and 87 had other qualifications (Jega, 2008). These figures, respectively, represent 51%, 37% and 12% of the total staff complement (see fig. 5.7 above).

With just over half of staff possessing doctoral degrees, the university's ability to (re)generate the requisite calibre of the next generation of staff is severely constrained. It is in recognition of this that it has embarked on efforts to provide career development opportunities to staff members to enable them acquire doctorate degree in their fields. Thus, between 2002 and 2008, 241 staff members benefited from various scholarship programs. 63% of beneficiaries were awarded university fellowships, 20% received MacArthur Foundation scholarships to pursue programs outside Nigeria, while 17% were supported to undertake programs in the country (fig. 5.8).

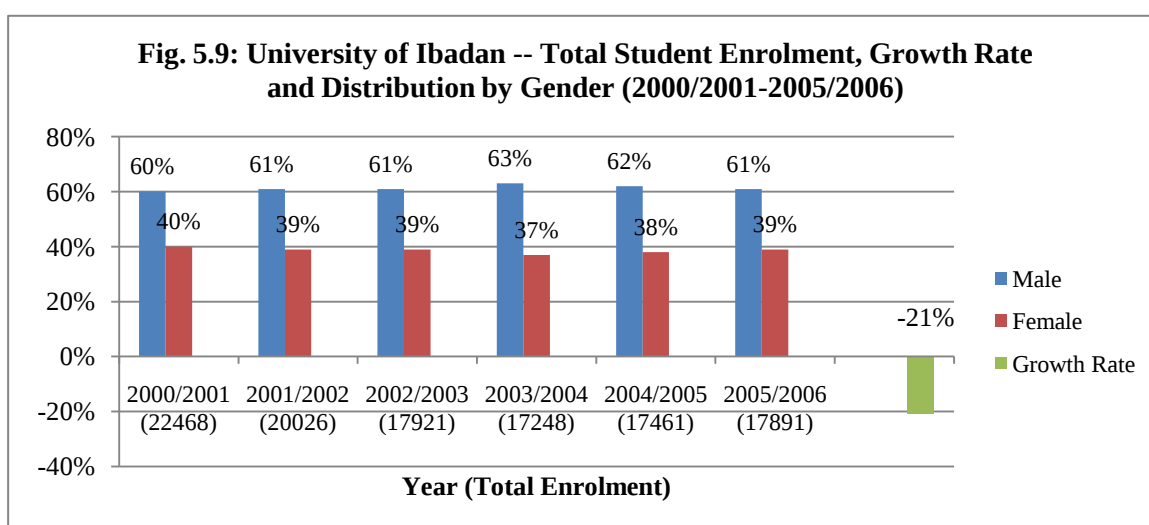


Source: Adapted from Jega (2008)

University of Ibadan Student Profile

Total Student Enrolment and Distribution by Gender

Total student enrolment decreased from 22468 in 2000/2001 to 17891 in 2005/2006. This represents a 21% drop over the 6-year period (fig. 5.9). It is worth noting that total enrolment dropped every year between 2001/02 and 2003/2004, before inching up in 2004/05 and 2005/06 (fig. 5.9). Female enrolments lagged behind male enrolments throughout the period under review, with their proportion of total enrolment going down from 40% to 39% (Table 5.10).

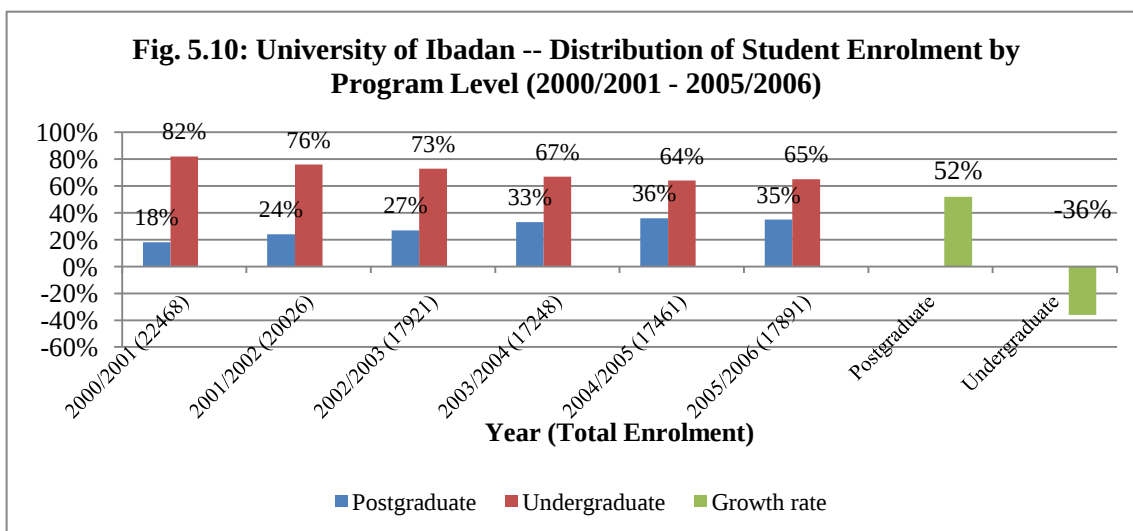


Source: Adapted from University of Ibadan (n.d); University of Ibadan 2007

Distribution of Students by Program Level

As shown in fig. 5.10, undergraduate students outnumbered postgraduate students over the 2000/01-2005/06 period, even though the proportion of postgraduates rose each year. In 2000/01, undergraduates made up 82% of the student body, compared to 18% postgraduates. By 2005/06, the proportion of undergraduates had gone down to 65% of the total, while that of postgraduates rose to 35% (Table 5.10). Overall, undergraduate enrolment decreased by 36% while postgraduate enrolment shot up by 52% between 2000/01 and 2005/06 (Table 5.10).

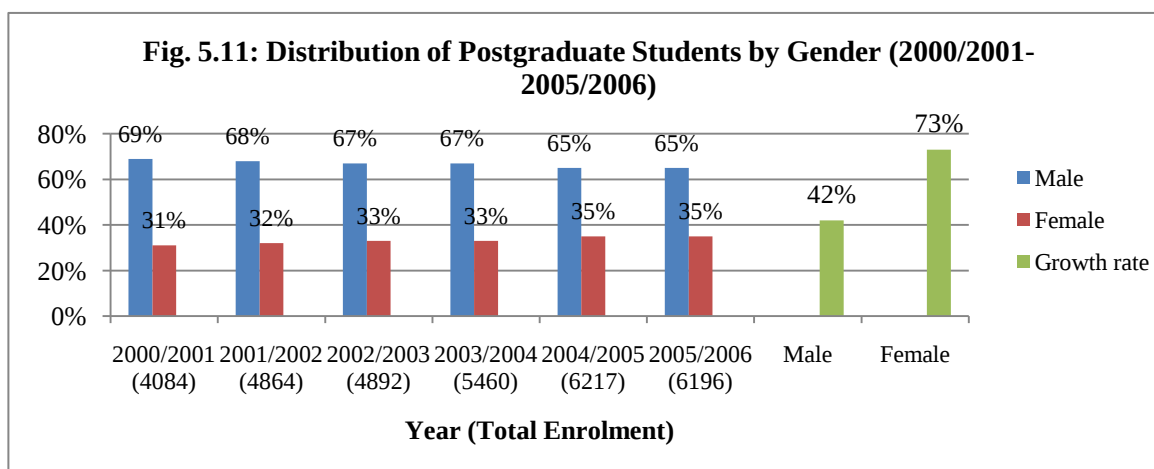
When undergraduate enrolments are disaggregated by gender, we see that female students' share of the total undergraduate enrolment went down from 42% to 41%, while the male population increased, albeit, minimally to 59%.



Source: Adapted from University of Ibadan (n.d); University of Ibadan 2007

Postgraduate Enrolment by Gender

The 52% expansion postgraduate enrolments is reflected in both male and female enrolments (fig. 5.11). The former went up by 42% while the latter made a very significant leap of 73%.

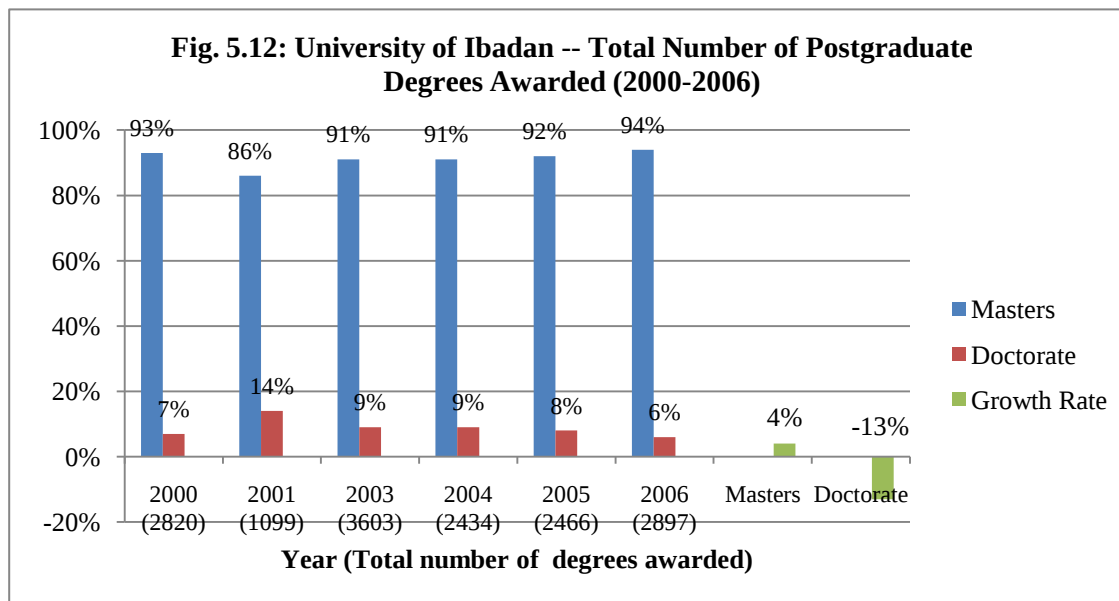


Source: Adapted from University of Ibadan (n.d); University of Ibadan 2007

Graduates by Program Level and Gender

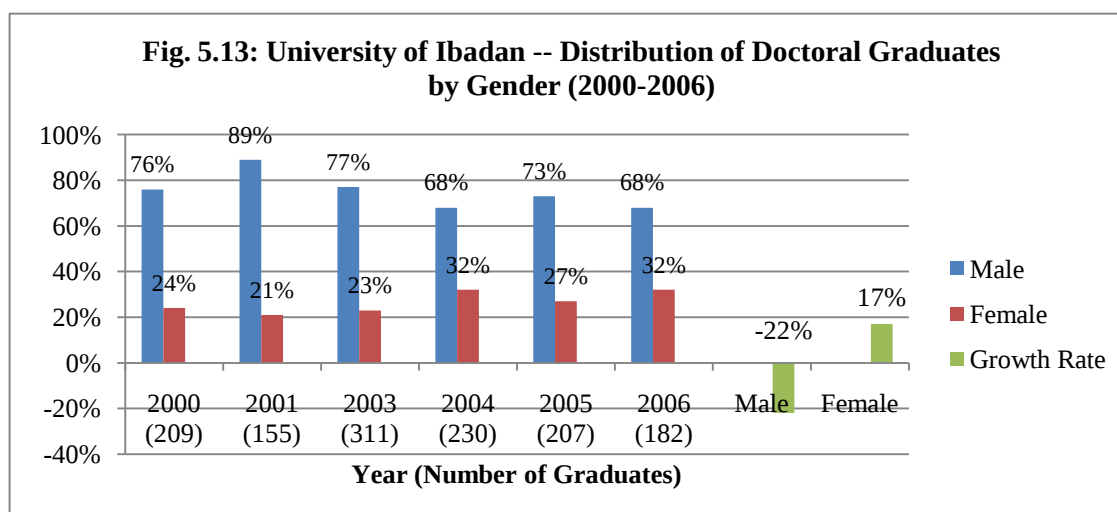
Between 2000/2001 and 2005/2006, the number of undergraduate degree recipients went down by 27%, from 53731 to 3906, while postgraduate degree awardees increased by 9%, from 2866 to 3115. It is worth noting that the above increase for postgraduates affected masters and doctoral

graduates differently. The number of masters graduates increased by 4% between 2000 and 2006, while doctoral graduates declined by 13% (fig. 5.12).



Source: Adapted from University of Ibadan (n.d); University of Ibadan 2007

Much of the drop in doctoral graduates seems to stem from the decrease in the number of males since 2003. Over the course of the 6-year period, female doctoral graduates went up by 17%, from 47 to 55, while their male counterparts saw a 22% drop in their numbers, from 162 to 127 (fig. 5.13). This is so in spite of the decrease in their absolute numbers after 2004.

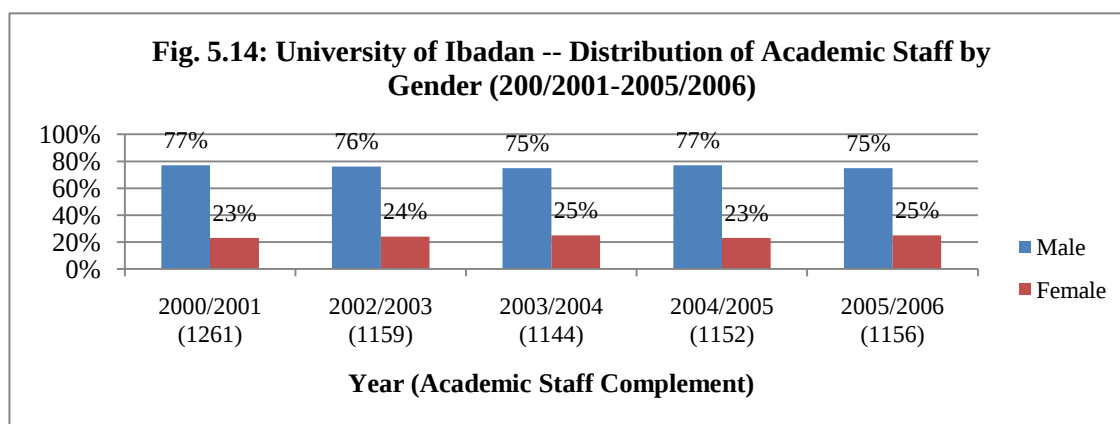


Source: Adapted from University of Ibadan (n.d); University of Ibadan 2007

University of Ibadan Academic Staff Profile

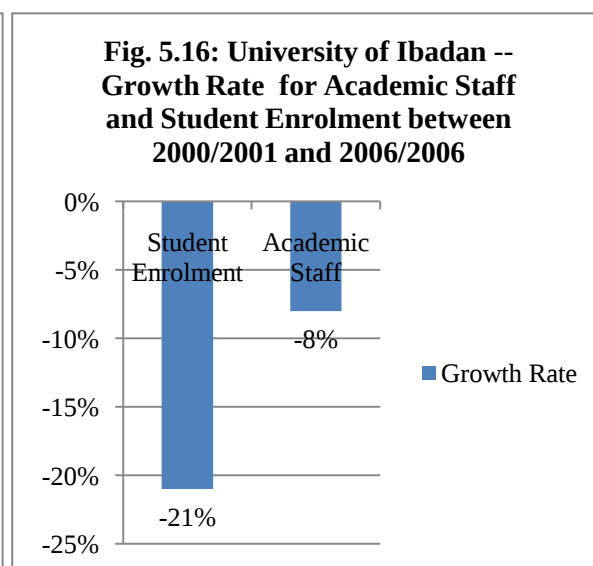
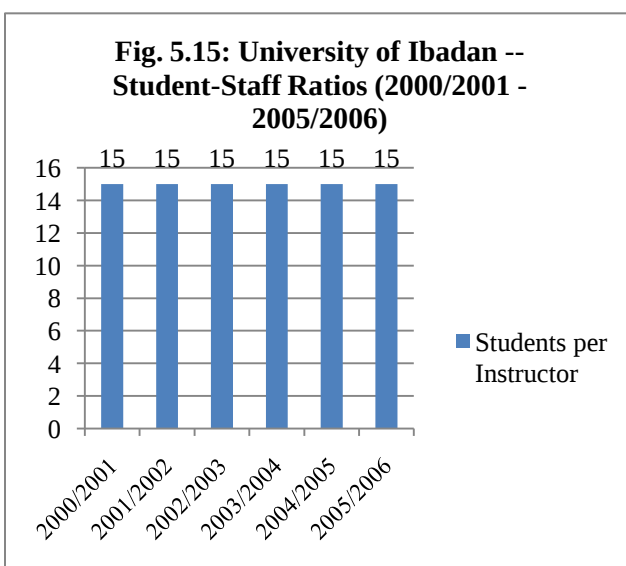
Academic Staff Capacity and Enrolment Pressures

Academic staff numbers decreased from 1261 in 2000/01 to 1156 in 2005/06, representing an 8% drop. As illustrated in fig. 5.14, male staff constituted the majority, although the proportion of females rose over the years. Thus, while females made up 23% of total staff numbers in 2000/01, their proportion went up to 25% in 2005/06 (fig. 5.14).



Source: Adapted from University of Ibadan (n.d); University of Ibadan 2007

Student-staff ratios remained constant, at 15:1, throughout the period under review (fig. 5.15). The only way that the university was able to maintain this ratio was by cutting down on enrolments by significant margins at a time when it was losing academic staff. Thus, in order for student-staff ratios to remain at existing levels between 2000/2001 and 2005/2006, when staff numbers declined by 8%, student enrolment had to be chopped by 21% (fig. 5.16). This response to staff shortage, and possibly other pressures, has implications for student access to higher education.

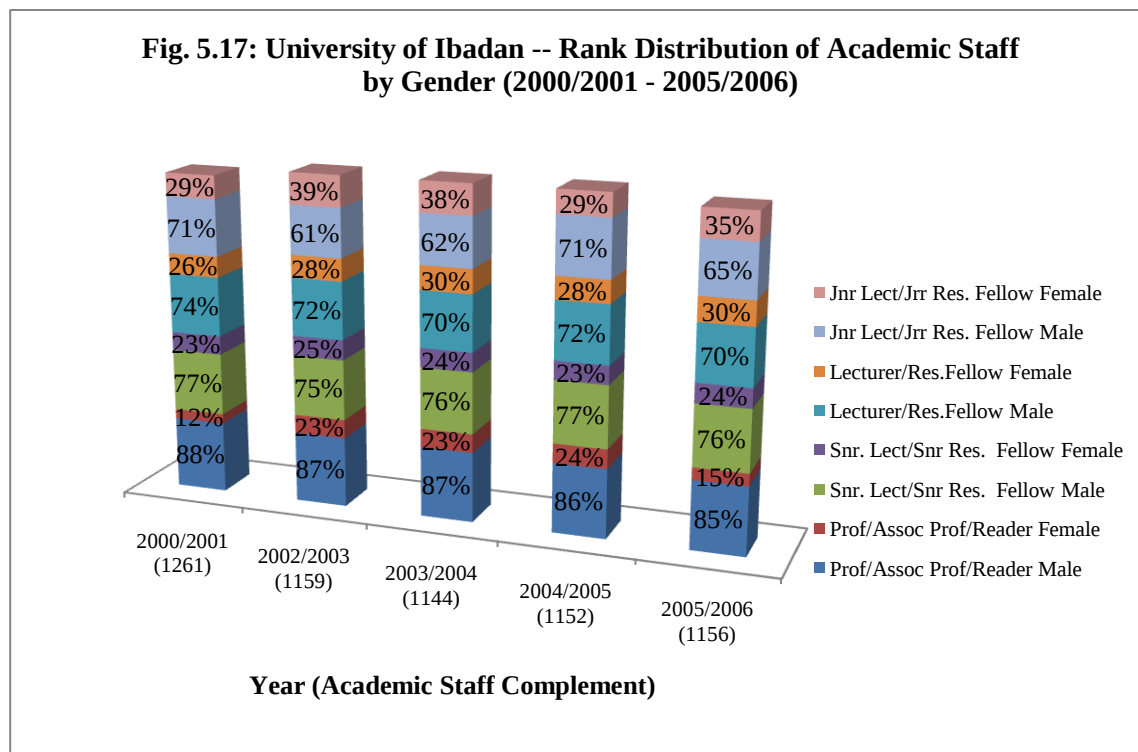


Distribution of Academic Staff Rank by Gender

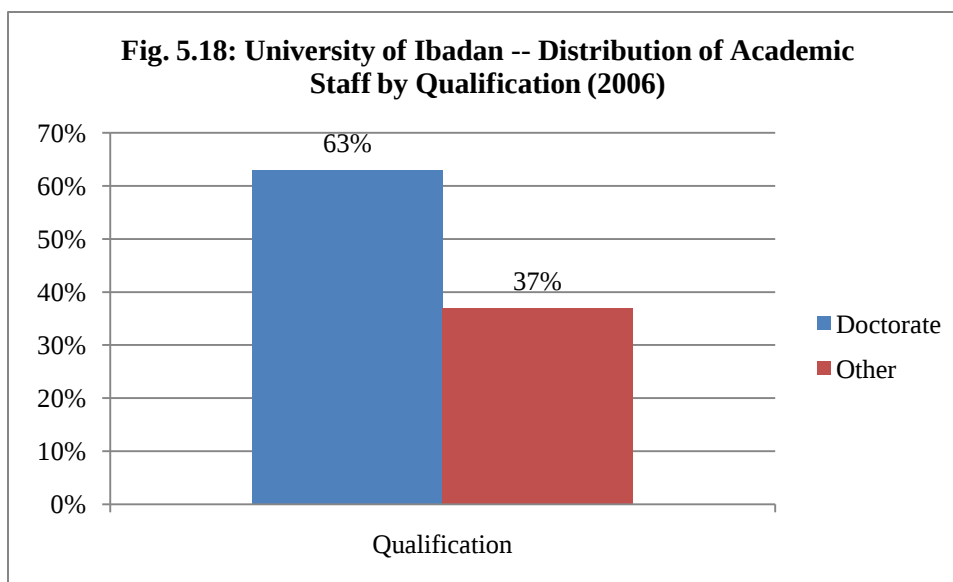
Males dominated each rank over the years. It is instructive to note, however, that the proportion of females at each rank went up between 2000/01 and 2005/06. It increased from 12% to 15% at the professor/associate professor/reader rank; 23% to 24% at the senior lecturer/senior research fellow rank; 26% to 30% at the lecturer/research fellow rank; and 29% to 35% at the junior lecturer/junior research fellow rank (fig. 5.17). In the overall scheme of things, however, the relatively small percentage of females at senior ranks reflects certain systemic issues which have significant implications for the attractiveness of academia to females and their career progress. These issues will be addressed later in the comparative analysis.

Distribution of Academic Staff by Qualification

Of the total staff complement at the University of Ibadan, about 63% had doctoral degrees in 2006 (fig. 5.18). The proportion of staff with doctorates, however, varies across faculties, with all staff in the Institute of African Studies possessing doctoral degrees while only 5% of those in the Faculty of Law had doctorates. While the university has a relatively high number of doctorate degree holders among its professoriate, it is worth noting that over a third have lower qualifications, raising questions about the extent to which professional development might be needed to enhance their capacity for high quality research and the supervision of the next generation of academics.



Source: Adapted from University of Ibadan (n.d)



Source: Adapted from University of Ibadan (n.d)

Obafemi Awolowo University Student Profile

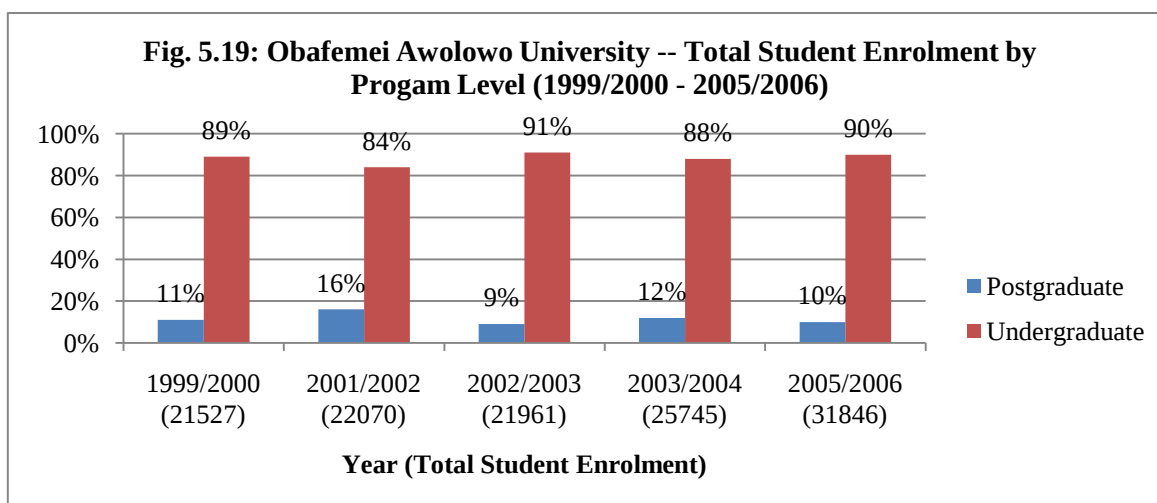
Like other institutions covered by this report, there are inconsistencies in data provided by Obafemi Awolowo University (OAU) both in the submissions made to the research team and in official statistics on the university's website¹. For student data, we use the following sources to ensure that one set of data, which is also official, is consistently used.²

Total Student Enrolment by Gender and Program Level

Between 1999/2000 and 2005/2006, total student enrolment increased from 21527 to 31846, representing a 48% growth. During the same period, postgraduate enrolments went up from 2460 to 3088 to register a growth rate of 26% (figs. 5.19 and 5.20).

¹ See: <http://www.oauife.edu.ng/administration/pbmis/Digest%202005-2006/2005-2006%20home-page.htm>

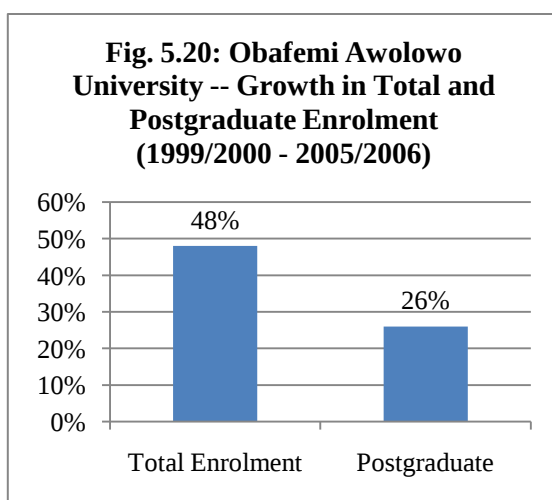
² <http://www.oauife.edu.ng/administration/pbmis/Digest%202005-2006/TABLE2.2,%202.3,%202.4%20AND%20FIGURE%20iii,%20iv,%20&%20v%20TOTAL%20ENROLMENT%20%20DISTRIB%201999%20-%202006.htm>;
[http://www.oauife.edu.ng/administration/pbmis/Digest%202005-2006/TABLE%202.5%20TOTAL%20ENROL%20AND%20PERCENT%20DIST%20OF%20STU%20BY%20FAC%20\(PG\).htm](http://www.oauife.edu.ng/administration/pbmis/Digest%202005-2006/TABLE%202.5%20TOTAL%20ENROL%20AND%20PERCENT%20DIST%20OF%20STU%20BY%20FAC%20(PG).htm)



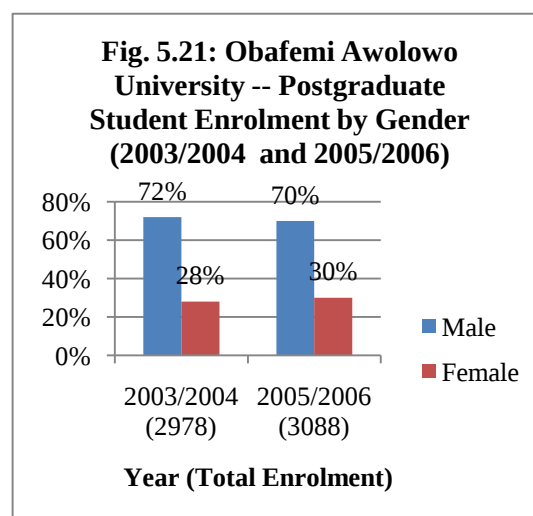
Source: Obafemi Awolowo University (2008)

Postgraduate Student Enrolment by Gender and Program

Male students dominated the postgraduate student population, with females making up only 28% and 30% of the total in 2000/2004 and 2005/2006, respectively (fig. 5.21). In 2005/2006 (the year for which comparative data is available), doctoral students constituted 13% of the total postgraduate enrolment. It is important to note that the population of doctoral students went down from 400 in 2005/2006 to 374 in 2006/2007, a drop of 7% (fig. 5.22).



Source: Obafemi Awolowo University (2008)



Source: Obafemi Awolowo University (2008)

Obafemi Awolowo Academic Staff Profile

The same problem of inconsistency referred to above, in the context of student-related data, is noticeable in data provided by OAU for academic staff. The differences in total staff complement

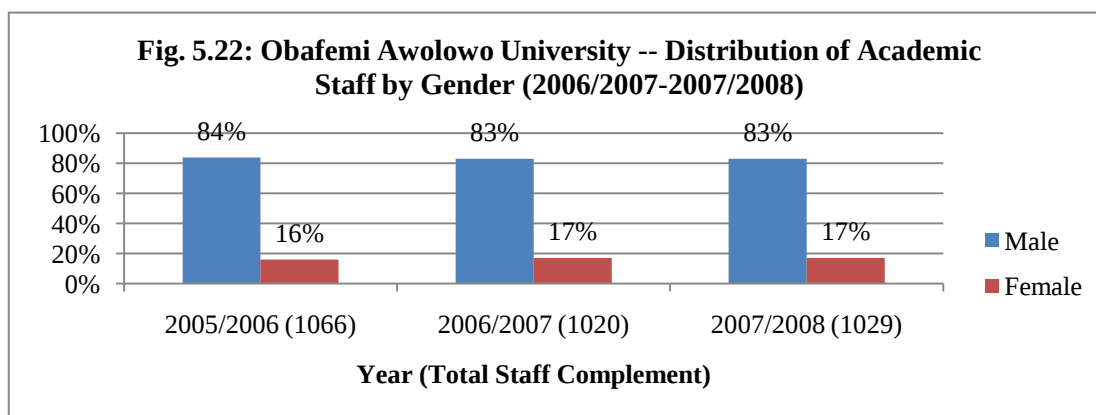
across various categories in similar years that are found in the following discussion is, thus traceable, to this problem.

Academic Staff Capacity and Enrolment Pressures

Total academic staff numbers increased from 1020, in 2006/2007 to 1029, in 2007/2008. This represents an increase of 0.8%. Student-staff ratio for 2005/2006 (the only year for which comparative data was available) was 30:1. Unfortunately, the absence of relevant comparative data makes it difficult to determine the extent to which academic staff growth kept pace with student enrolment growth.

Distribution of Academic Staff by Gender

The proportion of female staff increased only very marginally from 16% in 2005/2006 to 17% in the subsequent two years (fig. 5.22).



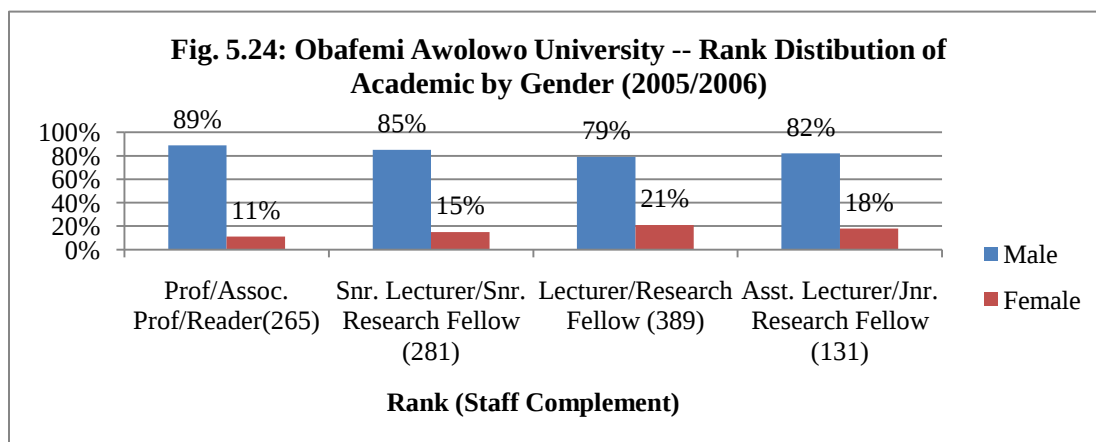
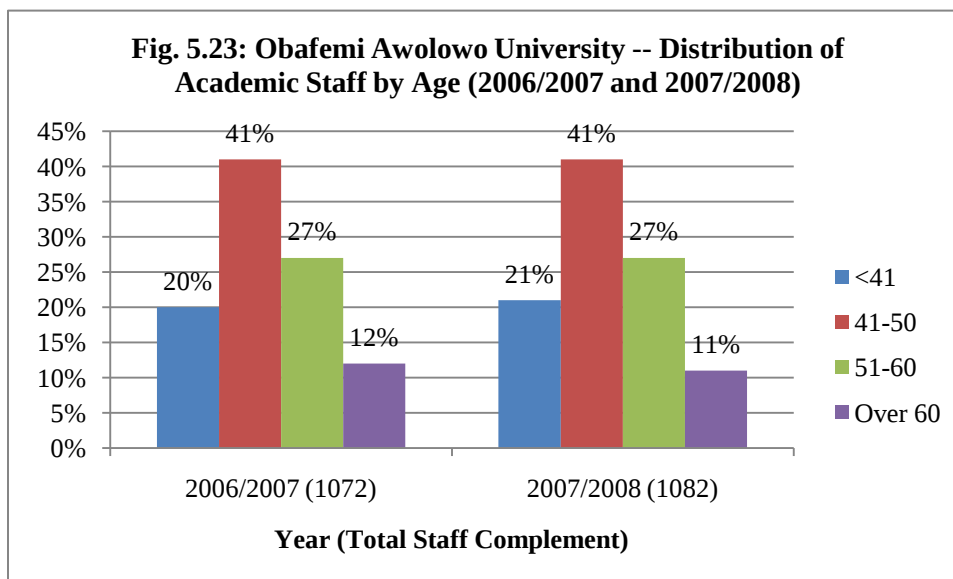
Source: Obafemi Awolowo University (2008)

Distribution of Academic Staff by Age

As shown in fig. 5.23, the majority of staff in both 2006/2007 and 2007/2008 were in the 41-50 year range, followed by those in the 51-60 year category. It is significant to note that 39% and 38% of staff in 2006/2007 and 2007/2008, respectively, were over 50 years old, compared to only 20% and 21% of those under 41 years old. Unless there is a strong effort to recruit significant numbers of staff in the latter group within the next decade, the university may not be able to replace the large number of staff who will be retiring in that time frame.

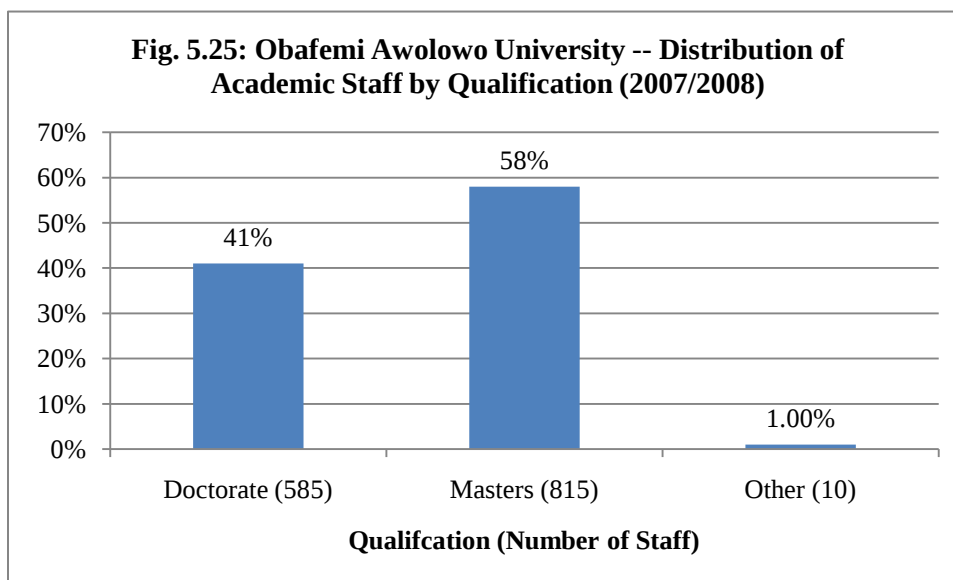
Distribution of Academic Staff by Rank and Gender

In 2005/2006, male staff overwhelmingly dominated the most senior ranks (Full Professor/Associate Professor/Reader), with females constituting only 11% of number (fig. 5.24). This fact, combined with evidence from fig. 5.22 shows clearly that OAU not only has a long way to go in attracting females to its academic staff but also in helping them climb up the professional ladder.



Distribution of Academic Staff by Qualification

The highest qualification for majority of staff at OAU, in 2007/2008, was a masters degree. Masters degree holders made up 58% of staff, compared to doctorate degree holders who comprised 41% of the total (fig. 5.25). With a large population of masters degree holders, the ability of programs to train the next generation of scholars at the highest levels of scholarship is severely constrained.

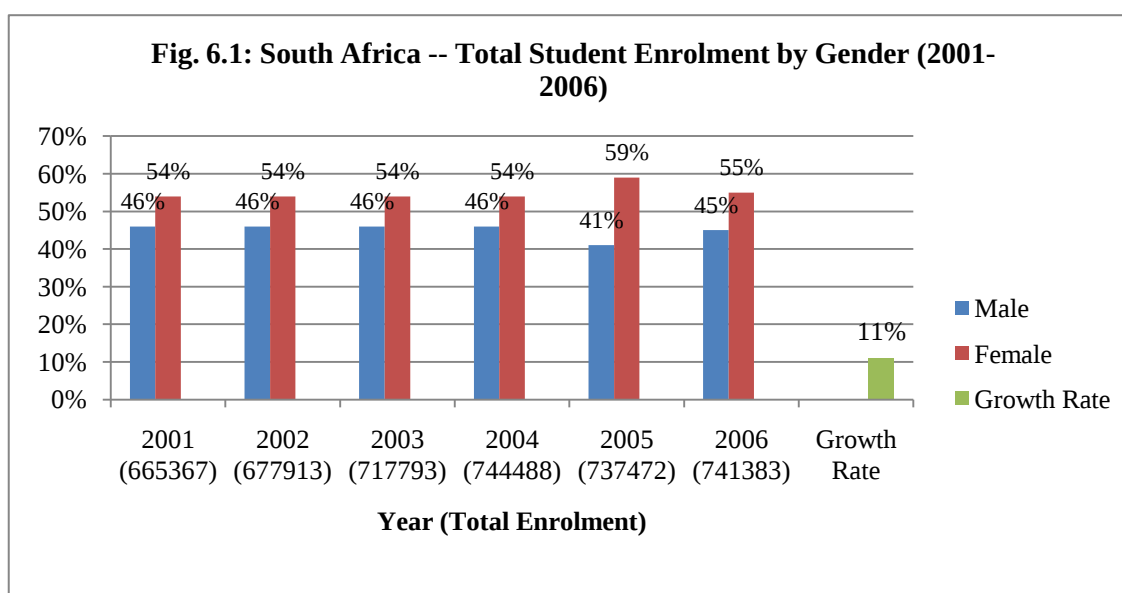


SECTION 6 – SOUTH AFRICA

National Student Enrolment

Total Student Enrolment and Distribution by Gender and Program Levels

Total student enrolment in South African universities increased from 665,367 in 2001 to 741,383 in 2006. This represents a growth of 11% over the period (fig. 6.1). More female students were enrolled in South African universities in each of the years under review. Their proportion of the total student population increased marginally from 54% in 2001 to 55% in 2006 (fig 6.1).

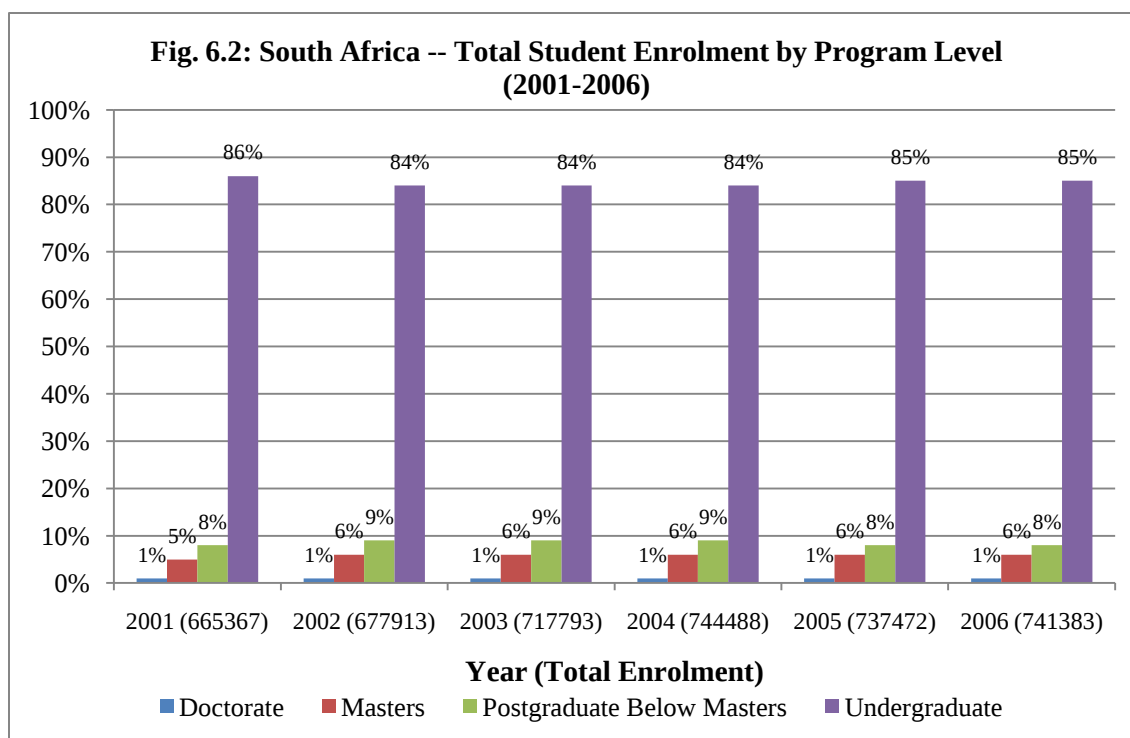


Source: Adapted from South Africa Department of Education (2002, 2003, 2004, 2005a, 2005b, 2006, 2008)

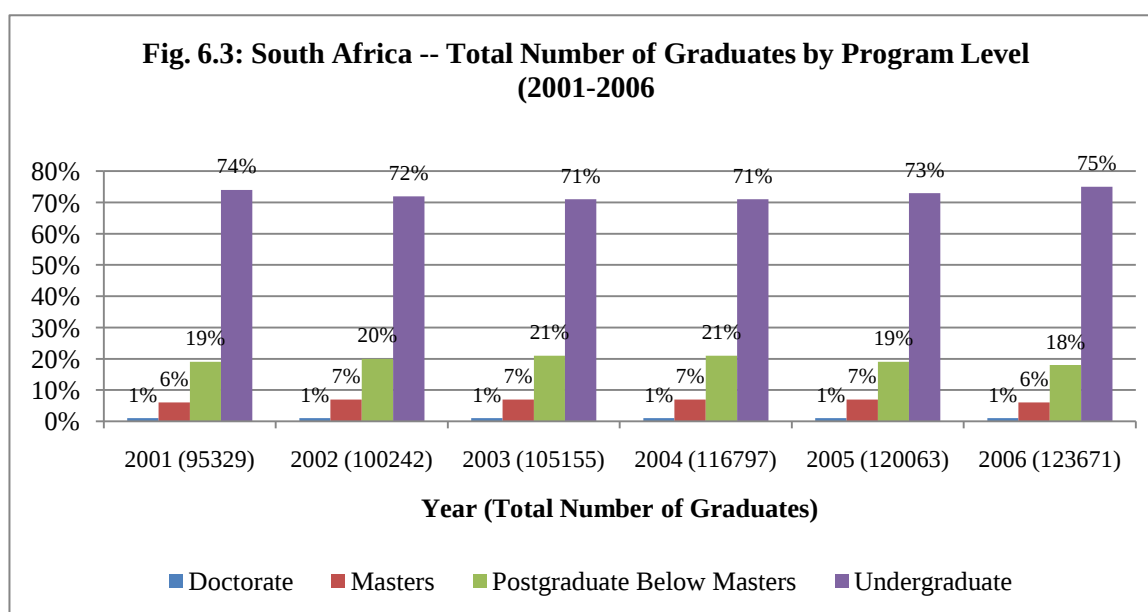
Between 2001 and 2006, the vast majority of students were enrolled in undergraduate programs, with postgraduate enrolments constituting just between 14% and 16% (fig. 6.2). Doctoral enrolments remained at 1% of the total throughout the 2001-2006 period, while masters enrolments increased only marginally from 5% to 6%.

Number and Distribution of Postgraduate Degrees Awarded

Not surprisingly, a look at the yearly number of degrees awarded shows a pattern similar to enrolments, with the proportion of doctoral graduates remaining stable at 1%, between 2001 and 2006, as did masters graduates at 6% (fig. 6.3). It is worth noting that almost a fifth of graduates received postgraduate degrees below the masters level, indicating that the bulk of postgraduate recipients were unlikely to be enrolled in programs that will lead to the growth of the next generation of academics.



Source: Adapted from South Africa Department of Education (2002, 2003, 2004, 2005a, 2005b, 2006, 2008)

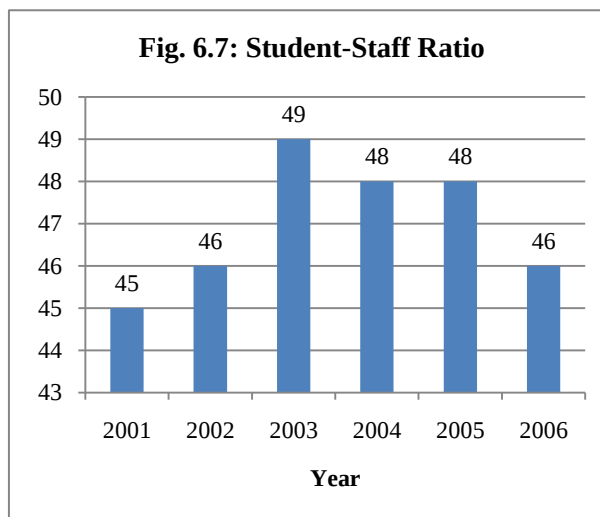
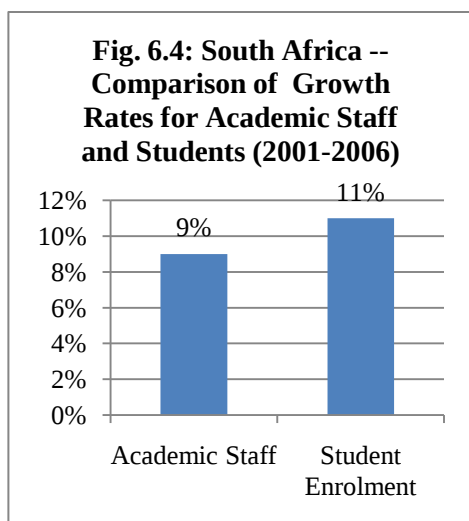


Source: Adapted from South Africa Department of Education (2002, 2003, 2004, 2005a, 2005b, 2006, 2008)

National Academic Staff Profile

Academic Staff Capacity and Enrolment Pressures

Permanent academic staff increased by 9%, between 2001 and 2006, from 14740 to 16077. This is lower than the rate of student expansion over the same period (fig. 6.4)

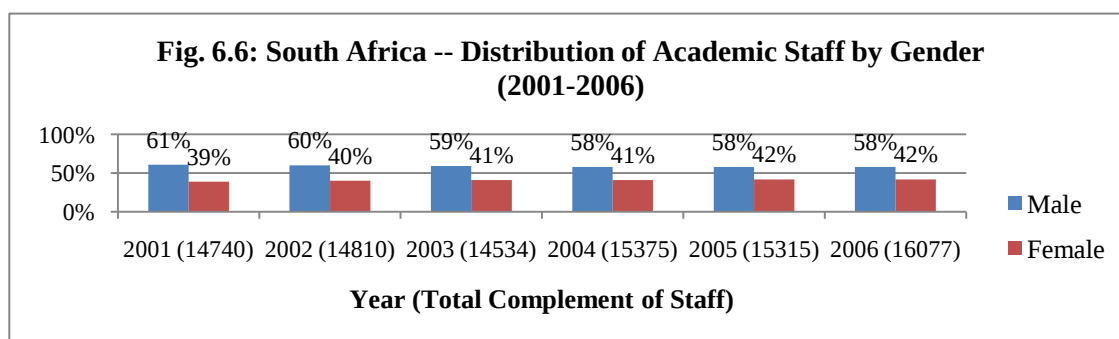


Source: Adapted from South Africa Department of Education (2002, 2003, 2004, 2005a, 2005b, 2006, 2008)

Student-staff ratios were relatively high, increasing marginally from 45:1 in 2001 to 46:1 in 2006, with a high point of 49:1 in 2003 (fig. 6.5).

Academic Staff Distribution by Gender

Males constituted the majority of the professoriate during the period under review, but the proportion of females steadily increased from 39% in 2001 to 42% in 2006 (fig. 6.6).



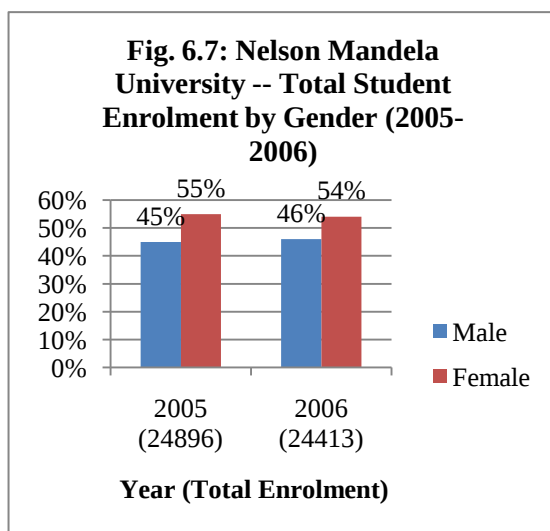
Source: Adapted from South Africa Department of Education (2002, 2003, 2004, 2005a, 2005b, 2006, 2008)

Institutional Profiles

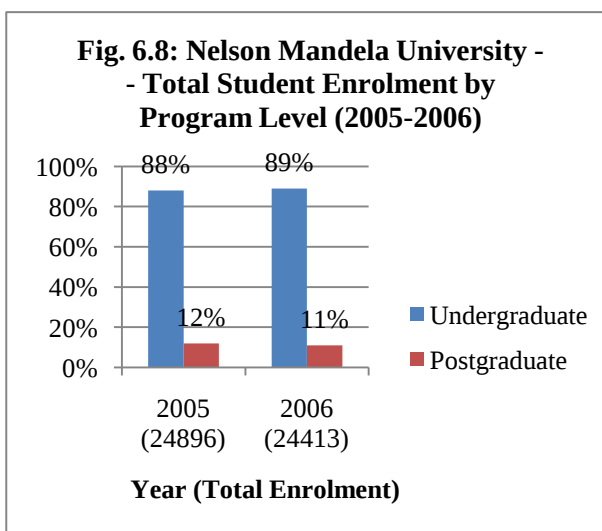
Nelson Mandela Metropolitan University Student Profile

Total Student Enrolment by Gender and Program Level

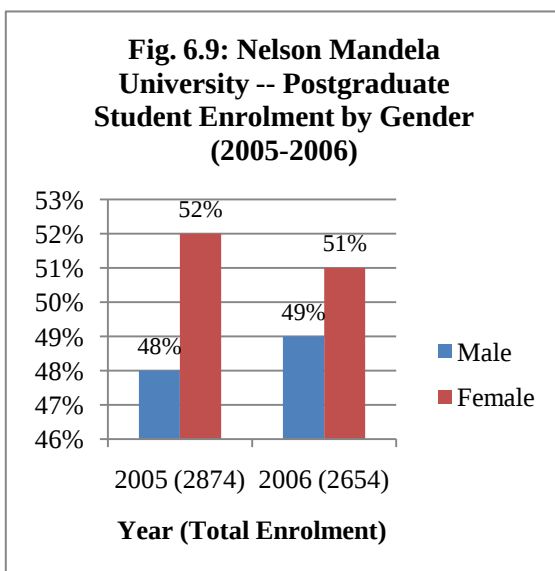
Total student enrolment at Nelson Mandela Metropolitan University (NMMU) decreased from 24896 in 2005 to 24413 in 2006, a drop of 2%. Female students constituted the majority of the population in both years, at 55% and 54%, respectively (fig. 6.7). The postgraduate student complement was only 12% in 2005, going down to 11% in 2006 (fig. 6.8).



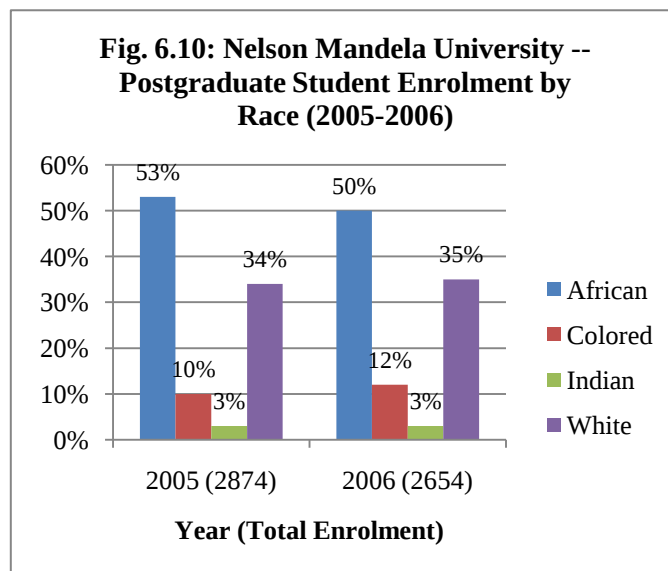
Source: Adapted from Nelson Mandela University (2007)



Source: Adapted from Nelson Mandela University (2007)



Source: Adapted from Nelson Mandela University (2007)

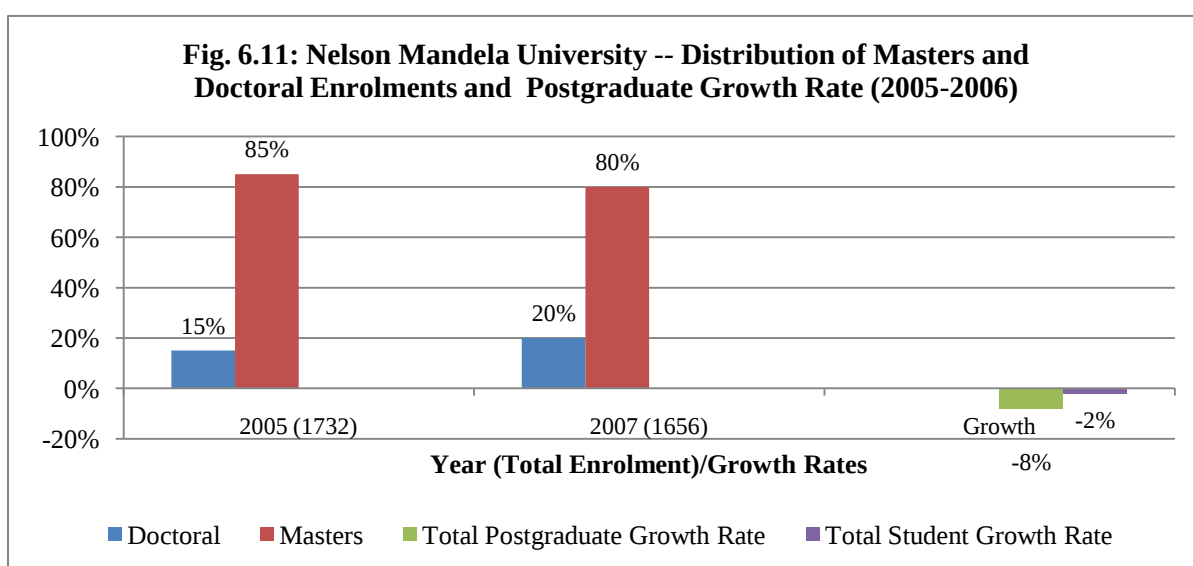


Source: Adapted from Nelson Mandela University (2007)

Postgraduate Student Enrolment by Gender and Race

It is instructive to note that the overall higher proportion of females at Nelson Mandela University is reflected at the postgraduate level where they represented 52% and 51% of enrolments in 2005 and 2006, respectively (fig. 6.9). African students made up the majority of postgraduate students, decreasing from 53% in 2005 to 50% in 2006 (fig. 6.10). They are followed by Whites at 34% and 35% in the corresponding years.

Fig. 6.11 disaggregates postgraduate students into masters and doctoral enrollees. Of the 1732 students enrolled in both programs in 2005, 85% were at the masters level, compared to 15% at the doctoral level. Two years later, the proportions were 80% and 20%, respectively, as masters enrolments dropped by 10% and doctoral enrolments grew by 25%. Overall enrolments of masters and doctoral students dropped by 8% during the period, compared to the 2% decrease for total enrolments.



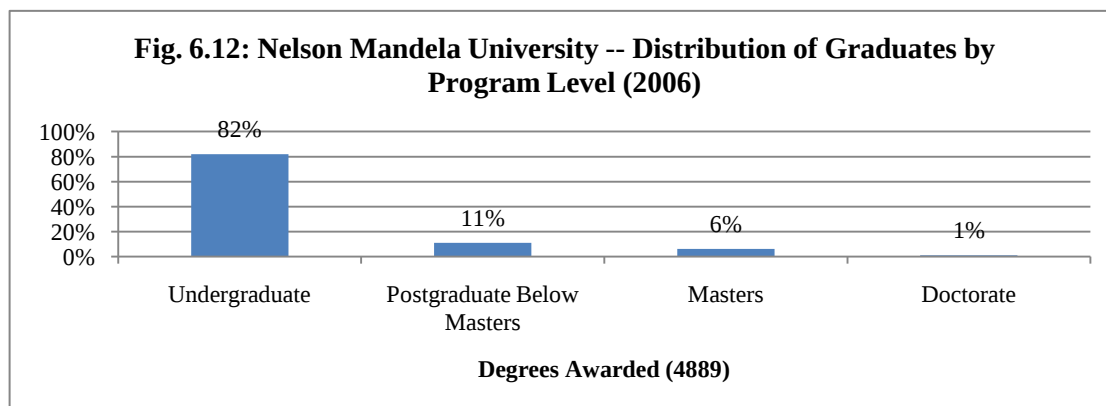
Source: Adapted from Nelson Mandela University (2007)

It is a positive sign to see doctoral enrolments go up during the period, but the drop in masters enrolments should raise concerns about whether the feeder programs for doctoral enrolment might shrink over time as to result in fewer doctoral students in the future.

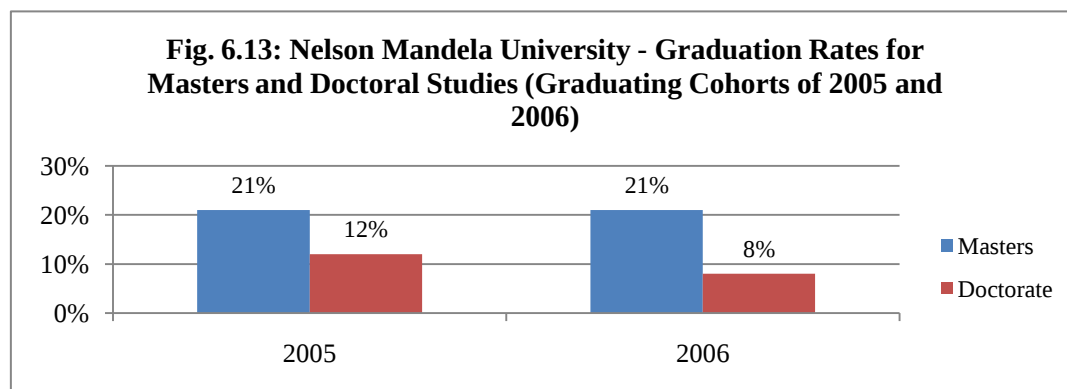
Number and Distribution of Postgraduate Degrees Awarded and Graduating Rates

The vast majority of students who graduated in 2006 received undergraduate degrees. As shown in fig. 6.12, only 6% of graduates received masters degrees, while those with doctorate degrees constituted 1% of the total graduating class of 4889.

Overall, graduations rates for postgraduate students were very low (fig. 6.13), indicating a very slow rate at which the next generation of scholars may be produced. The graduation rate for doctoral students was about 12% for the cohort that was supposed to graduate in 2005, going down to 8% for the following year's cohort. Graduation rates were relatively higher, though not satisfactory, for master students, at about 21% in both 2005 and 2006.



Source: Adapted from Nelson Mandela University (2007)

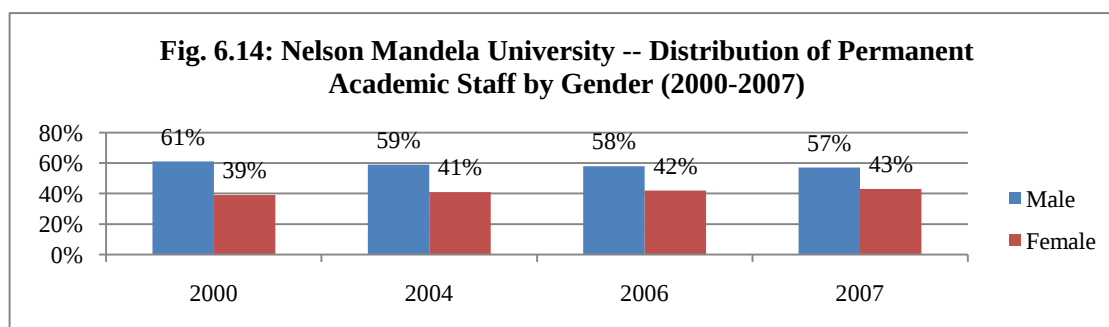


Source: Adapted from Nelson Mandela University (2007)

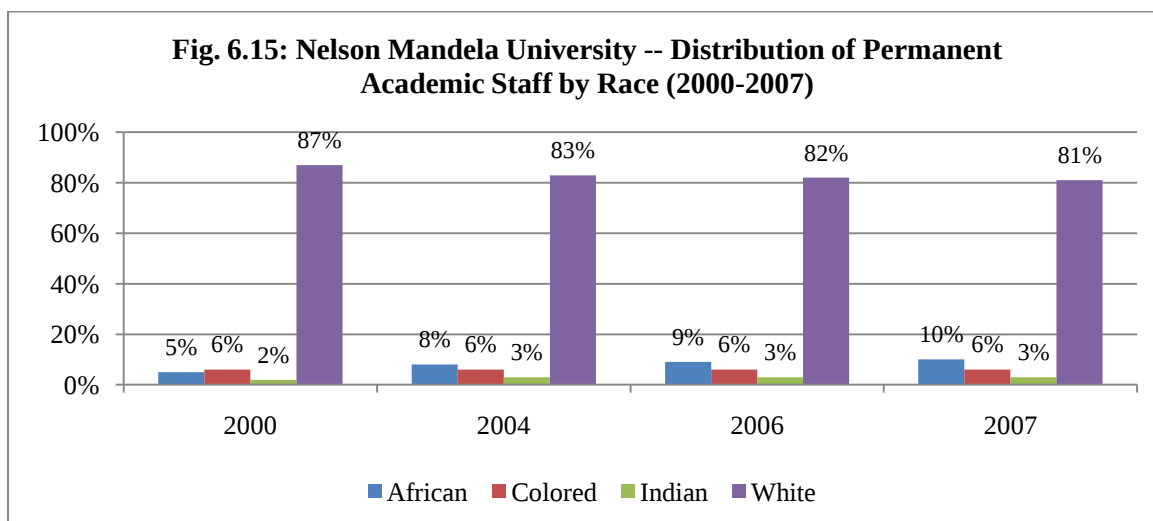
Nelson Mandela Metropolitan University Academic Staff Profile

Distribution of Academic Staff by Gender and Race

While the exact number of permanent staff is not available, figs. 6.14 and 6.15 provide insights into the gender distribution of academic staff and the relative proportions of different racial groups. The gender distribution of staff, between 2000 and 2007 show that while females have lagged behind their male counterparts, their proportion has been inching up in size since 2000, from 39% to 43% in 2007 (Fig. 6.20 and Table 6.17).



Source: Adapted from Nelson Mandela University (2007)

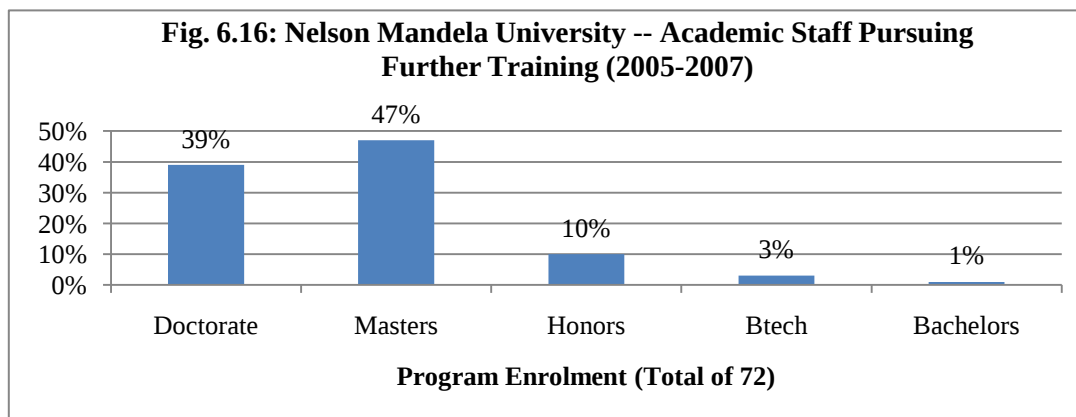


Source: Adapted from Nelson Mandela University (2007)

White staff made up an overwhelming majority of the total staff complement in each of the four years under review, albeit decreasing from about 87% in 2000 to about 81% in 2007 (fig. 6.15). The proportion of African staff increased from about 5% to about 10% during the same period, while the percentage of Colored staff was stable at about 6%. The proportion of Indian staff was also relatively stable, between 2004 and 2007, at about 3%. Hopefully, the racial distribution of academic staff will change to make room for some of the non-White students enrolled in postgraduate programs at NMMU and across the country.

Professional Development

Between 2005 and 2007, a total of 72 staff members pursued various higher qualifications. 39% of them were enrolled in doctoral programs while 47% pursued masters degrees (fig. 6.16). It is good to know that the institution is providing opportunities for staff to enhance their qualifications. In the absence of data showing the qualifications of current staff, however, it is difficult to tell what the impact of these staff development programs are or will be over the course of the next few years, in terms of strengthening the quality of the institution's professoriate.

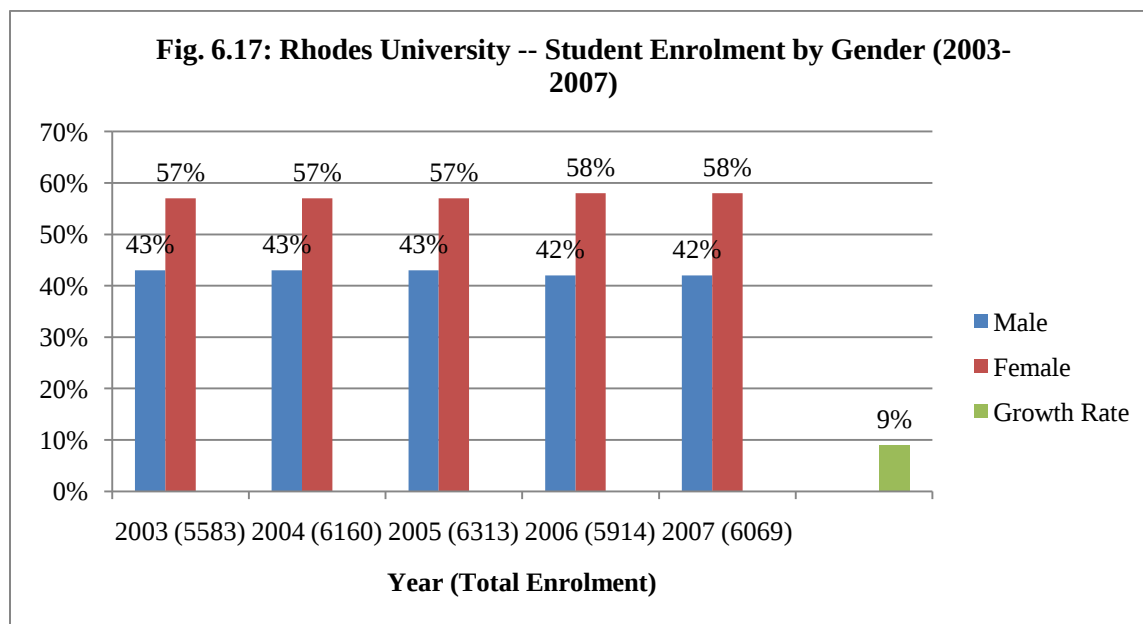


Source: Adapted from Nelson Mandela University (2007)

Rhodes University Student Profile

Total Student Enrolment by Gender

The total student population increased from 5,583 in 2003 to 6067 in 2007. This represents a 9% increase over five years (fig. 6.17). Females outnumbered their male counterparts throughout the period. In 2003, they constituted 57% of enrolments, going up to 58% in 2007.



Source: Rhodes University (2005, 2008a, 2008b)

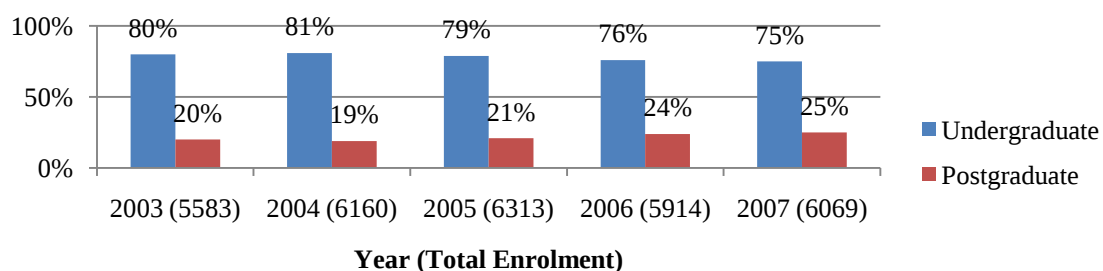
Distribution of Student Enrolment by Program Level

Undergraduate enrolments dominated student numbers, going from 80% of the total population in 2003 to 75% in 2007. Postgraduate enrolments increased commendably from 20% to 25% during the period (fig. 6.18), thereby increasing the potential to cultivate the next generation of academics.

Distribution of Postgraduate Students by Gender, Program Level and Race

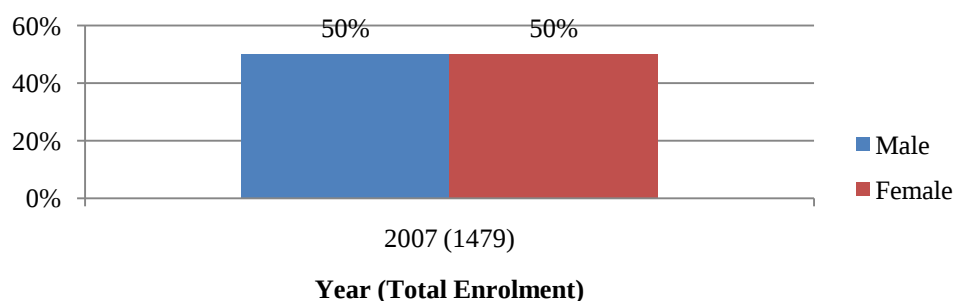
The only year for which data is available for disaggregating postgraduate enrolment by gender is 2007. In that year, male and female enrolment was, essentially, evenly split, at 50% (fig. 6.19). This is a very positive sign that has the potential to increase the female complement of the next generation of academics. To be certain about the extent to which these female students are on the path to an academic career, we will require further information on what programs, and at what levels, they are enrolled. Unfortunately, that data is not available.

Fig. 6.18 : Rhodes University -- Student Enrolment by Program Level (2003-2007)



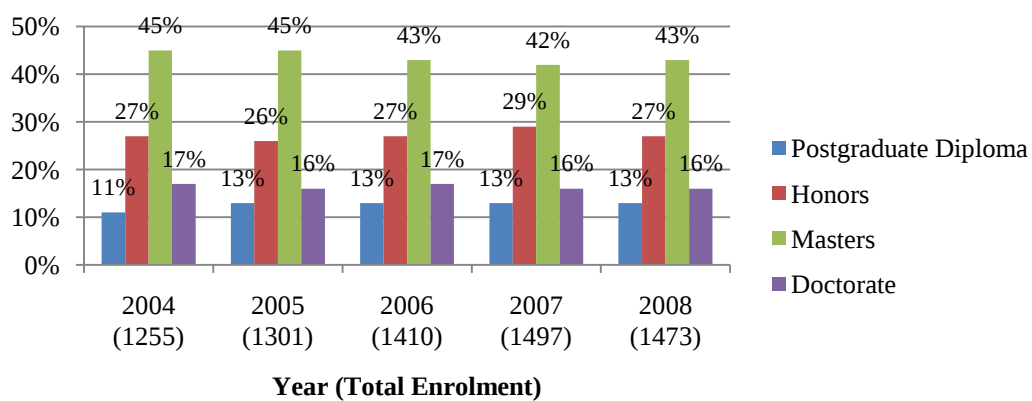
Source: Rhodes University (2005, 2008a, 2008b)

Fig. 6.19: Rhodes University -- Postgraduate Student Enrolment by Gender (2007)



Source: Rhodes University (2008b)

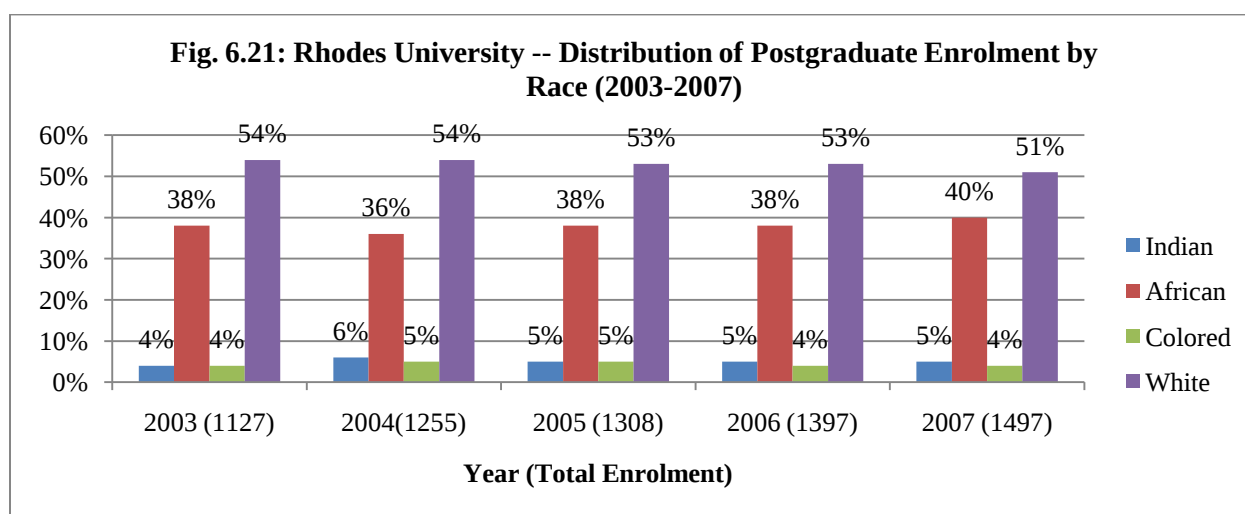
Fig. 6.20: Rhodes University -- Distribution of Postgraduate Students by Program Level (2004-2008)



Source: Rhodes University (2008b)

As shown in fig. 6.20, a significant majority of postgraduate students were enrolled in masters programs, with the proportion dipping slightly from 45%, in 2004, to 43% in 2008. Doctoral enrolments were quite healthy, although they also showed a small decline from 17%, in 2004, to 16% in 2008. Overall, programs that have the potential to generate the next generation of academics seem to be doing well. It will, however, be useful to get data on those masters programs that have a professional, rather than an academic orientation, to determine what the real potential is for the production of new academics.

Majority of postgraduate students were White, with their proportion going down a little from 54%, in 2003, to 51%, in 2007. Black students constituted the second largest group, increasing from 38% of the total in 2003 to 40% in 2007. Indian and Colored students made up about 1/20 of the total postgraduate population over the period (fig. 6.21), with a stagnating proportion. In order to grow the next generation of academics, from these groups, at Rhodes University, efforts need to be redoubled to increase representation from these two groups.



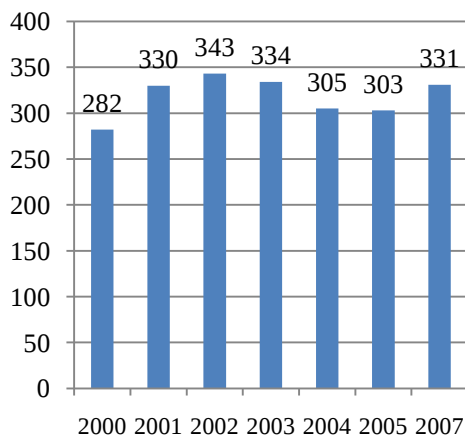
Source: Rhodes University (2005, 2008a, 2008b)

Rhodes University Academic Staff Profile

Academic Staff Capacity and Enrolment Pressures

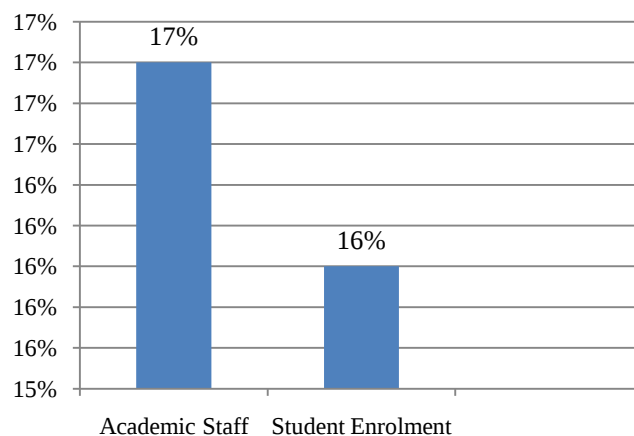
Academic staff numbers grew from 282 in 2000 to 331 in 2007. This represents a 17% increase over the period. While there was a significant drop in staff numbers between 2002 and 2005 (fig. 6.22), the university managed to bring staff growth and enrolment growth almost into alignment at 17% and 16%, respectively (fig. 6.23). This allowed enrolment pressures to be contained as student-staff ratios remained relatively steady, between 18/19:1, except between 2003 and 2005 when increased enrolments took place in tandem with decreased staff complement (fig. 6.24).

Fig. 6.22: Rhodes University -- Total Permanent Staff Complement (2000-2007)



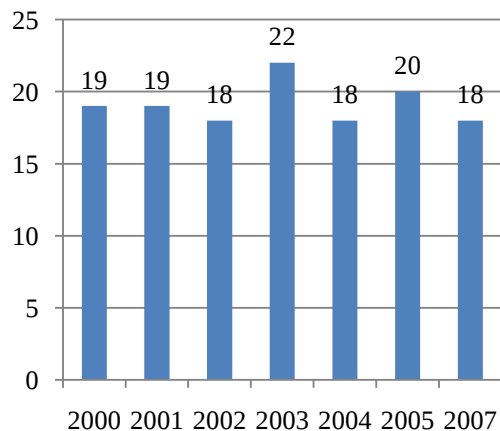
Source: Rhodes University (2005, 2008a, 2008b)

Fig. 6.23: Growth Rates for Permanent Academic Staff Complement and Total Student Enrolment (2000-2007)



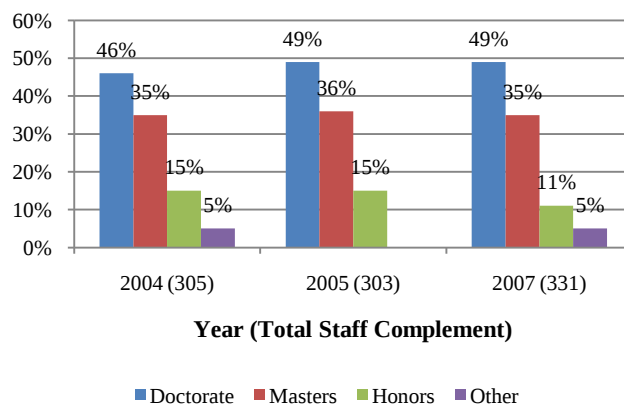
Source: Rhodes University (2005, 2008a, 2008b)

Fig. 6.24: Rhodes University -- Student Staff Ratios (2000-2007)



Source: Rhodes University (2005, 2008a, 2008b)

Fig. 6.25: Rhodes University -- Distribution of Academic Staff by Qualification (2004-2007)



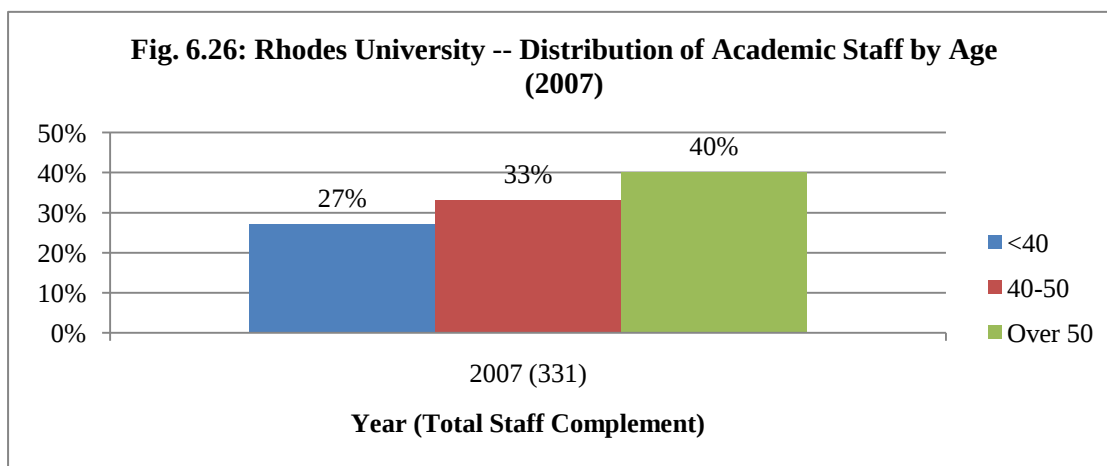
Source: Rhodes University (2005, 2008a, 2008b)

Distribution of Academic Staff by Qualification

46% of staff in 2004 had doctoral degrees, while 35% and 15% had masters and honors degrees, respectively (Table 6.24). In 2007, the proportion of doctorate holders went up to 49% while masters holders remained at 35% of the staff complement. It is instructive to note that staff with qualifications below the masters level constituted a significant portion of the professoriate in 2007, having decreased only slightly to 17% from 20% in 2004.

Distribution of Academic Staff by Age

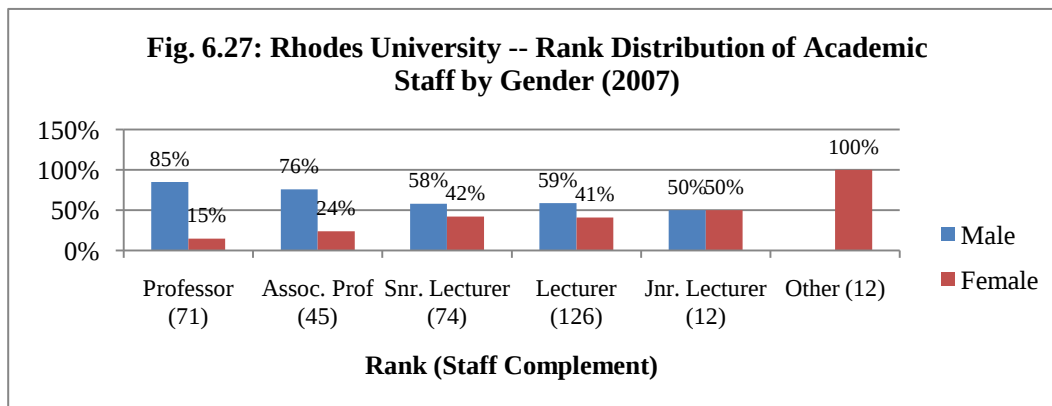
The largest group of academic staff in 2007 were those in the over-50 age category, with 40% representation, compared to 33% for the 40-50 year group and 27% for those below 40 years of age (fig. 6.26). With almost 2/3 of the over-50 group pushing past 55 years of age and approaching retirement in the next five years, it is important for the university to seriously pursue efforts that will replenish the stock with a reasonable complement of new generation academics.



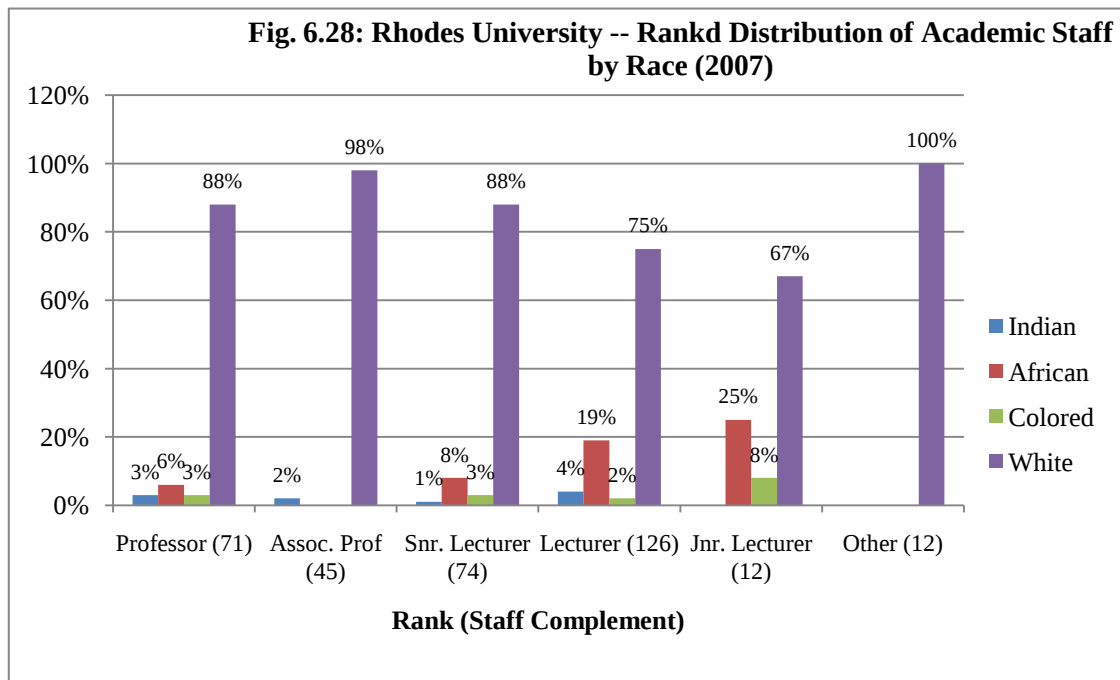
Source: Rhodes University (2008b)

Rank Distribution of Academic Staff by Gender and Race

In 2007, the academic staff composition stood at 36% female and 64% male. Male staff dominated the two most-senior ranks (i.e., full professor and associate professor) in 2007 (fig. 6.27). The gap, however, narrows quite noticeably at the senior lecturer and lecturer levels. This narrowing gap is a positive sign that the university is employing more females relative to past years and that, hopefully, they will not be constrained in their career progress as they approach the professorial ranks. It is also noteworthy that, although the numbers are small, the preparatory rank of junior lecturer has equal representation of males and females.



Source: Rhodes University (2008b)



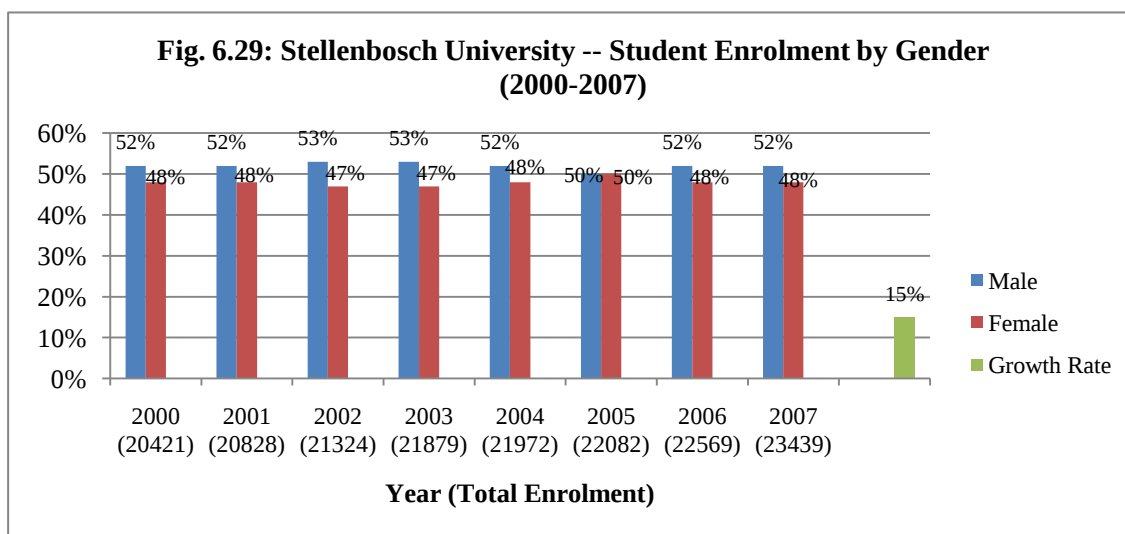
Source: Rhodes University (2008b)

It is crystal clear, from fig. 6.28, that Whites dominated all ranks in the professoriate in 2007. This dominance is particularly stark at the three most-senior ranks. It is noteworthy that not a single African or Colored staff appears within the associate professor rank. Rhodes University has some ways to go in bringing its academic staff composition anywhere close to its postgraduate student population (6.21). Minority postgraduates student, in particular, are likely to have their educational experience and career goals enhanced from seeing, and being mentored by, academic staff who share backgrounds similar to theirs.

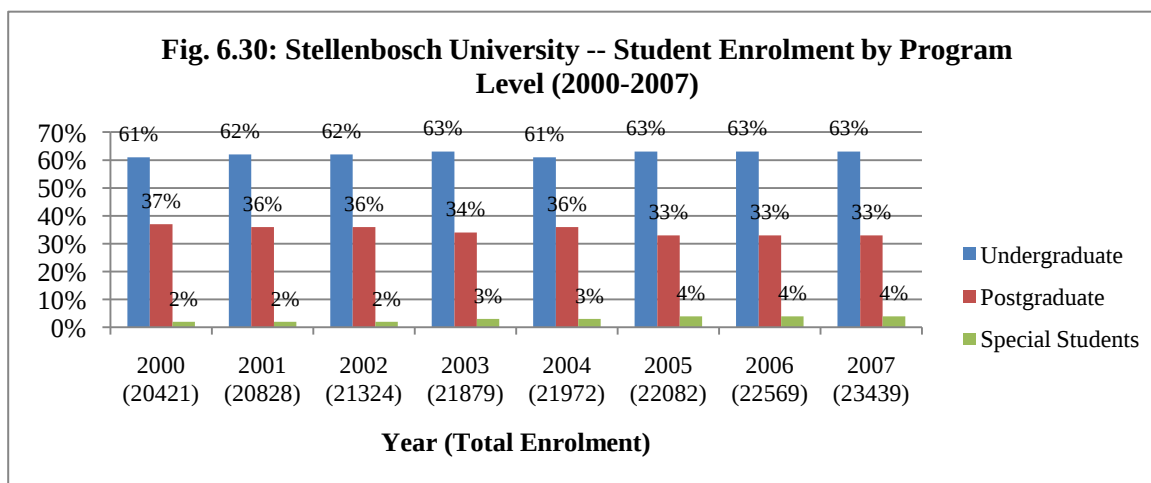
Stellenbosch University Student Profile

Total Student Enrolment by Gender and Program Level

The total student population increased from 20421 in 2000 to 23439 in 2007. This represents a 15% increase. Female enrolment trailed male enrolment each year, remaining at 48% for much of the period except in 2005 when it achieved parity (fig. 6.29). Undergraduate students have constituted the bulk of the student body over the period, constituting over 60% each year. Postgraduate enrolments have been at commendable levels, but decreasing from 37% in 2000 to 33% in 2007 (fig. 6.30).



Source: Stellenbosch University (2008)



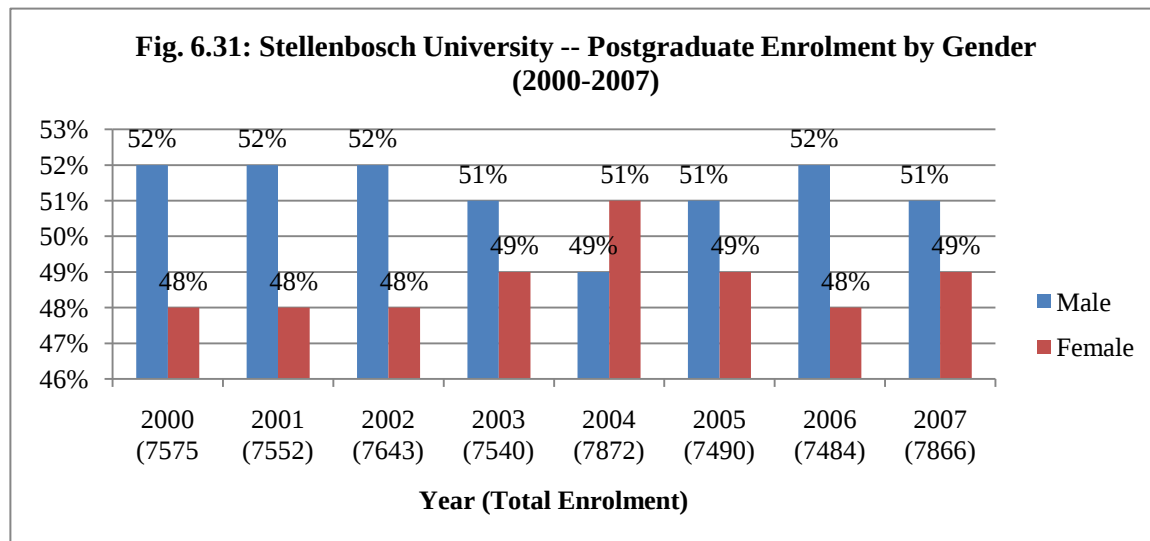
Source: Stellenbosch University (2008)

Distribution of Postgraduate Enrolment by Gender and Race

Unlike their counterparts, who constituted majority of the student population at the undergraduate level (in the lower 50% range), female postgraduates, by and large, constituted a smaller proportion of total postgraduate enrolments, relative to males. While the difference in proportions is not very large (see fig. 6.31), the fact that they are a reversal of what pertained at the undergraduate level raises questions about why the representation of females at the postgraduate level does not mirror the undergraduate picture. The implication is that fewer females are moving on to postgraduate students, meaning that they university is likely to cultivate less of them for academic careers.

It is important to note that between 2003 and 2007, majority of postgraduate students were enrolled in the Faculty of Economics and Management, with the proportion of students in that faculty rising from 23% to 33% of the total population (Stellenbosch University, 2008). Thus, the

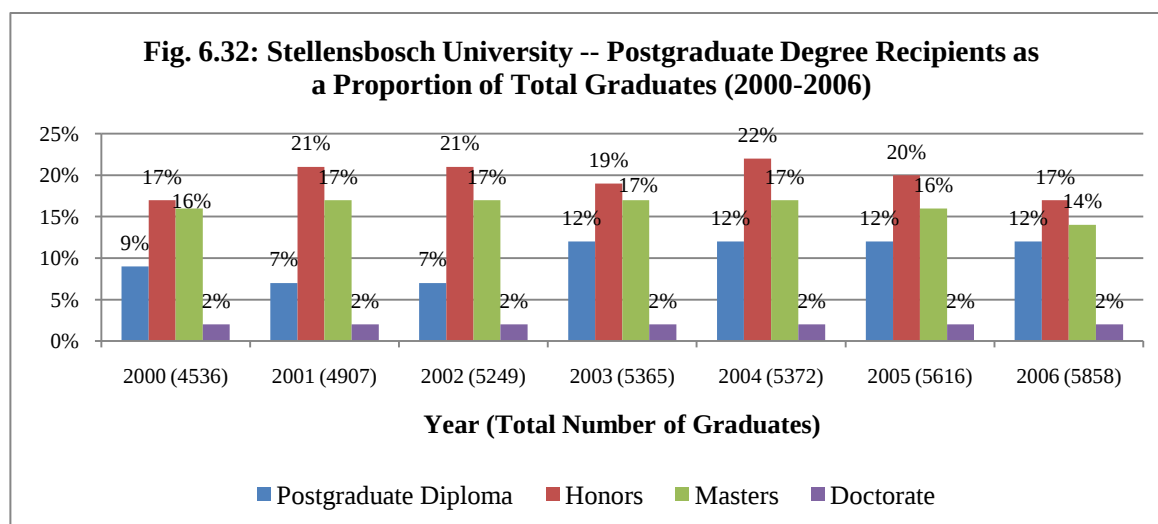
commendable postgraduate proportions noted in fig. 6.30 may be skewed by students enrolled in professional business programs that do not lead to careers in academia.



Source: Stellenbosch University (2008)

Number of Postgraduate Degrees Awarded

For most of the 2000-2006 period, masters graduates made up 17% of all graduates except in 2000, 2005, and 2006 (fig. 6.32). Doctoral graduates remained constant over the 7-year period, at 2% a year of total graduates. The majority of postgraduate degrees went to those enrolled in programs below the masters level.

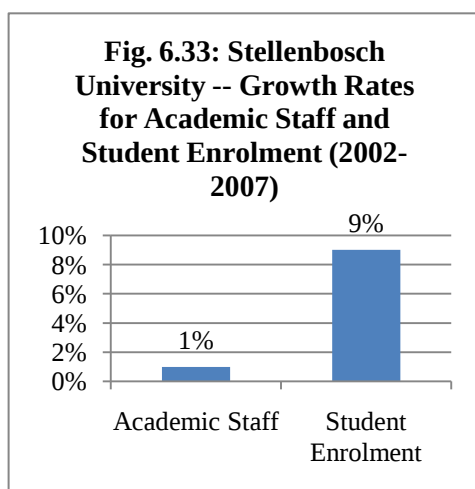


Source: Stellenbosch University (2008)

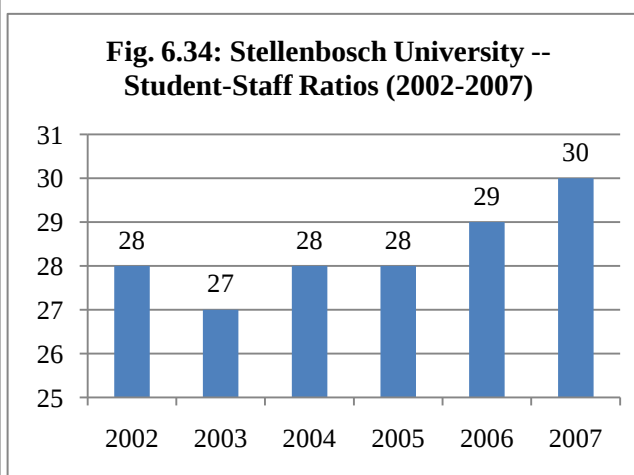
Stellenbosch University Academic Staff Profile

Academic Staff Capacity and Enrolment Pressures

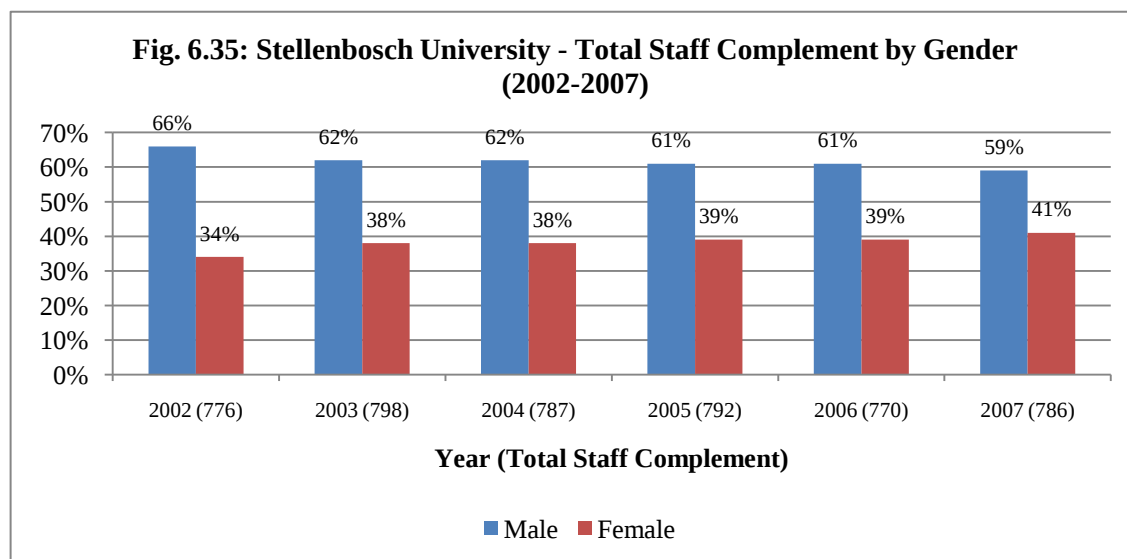
Permanent academic staff members increased from 776 in 2002 to 788 in 2007. This represented a marginal 1% increment over the period, compared to a 9% expansion in student enrolment (fig. 6.33). These incommensurate growth rates obviously put extra burden on staff, as evidenced by student-staff ratios which crept from 28:1 in 2002 to 30:1 in 2007 (fig. 6.34).



Source: Stellenbosch University (2008)



Source: Stellenbosch University (2008)

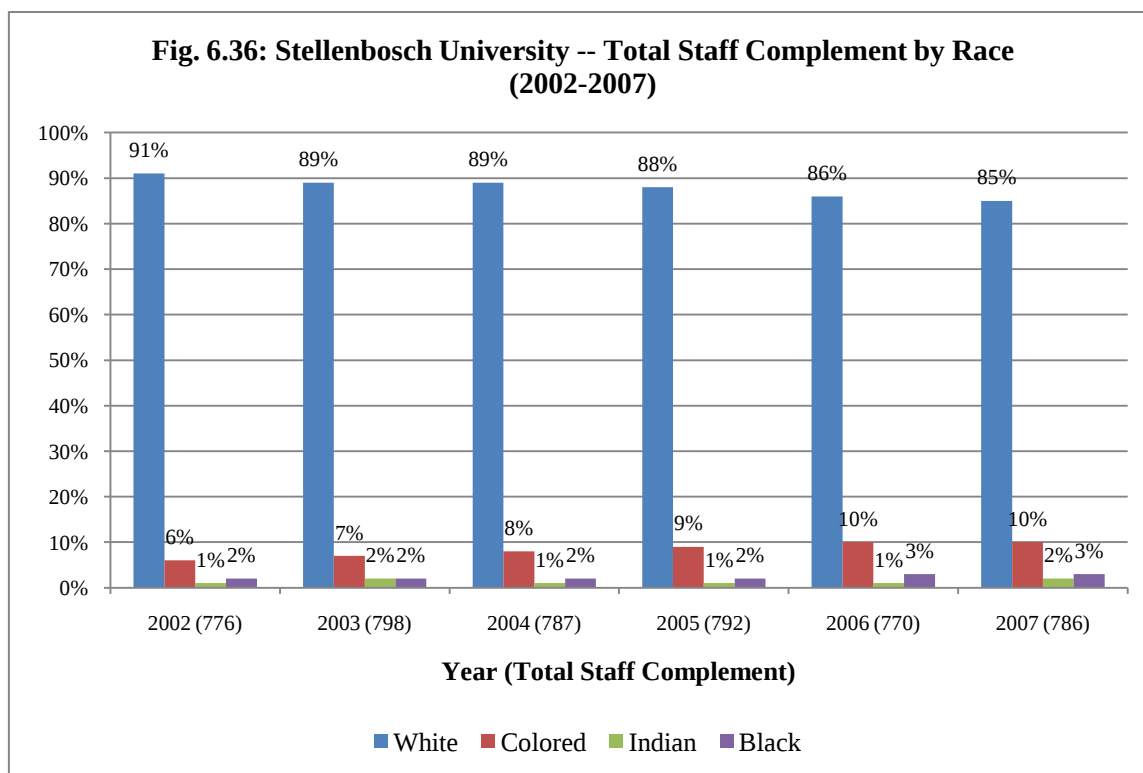


Source: Stellenbosch University (2008)

Distribution of Academic Staff by Gender and Race

Male staff made up the majority between 2002 and 2007 (fig. 6.35). It is important to point out, though, that the proportion of female staff went up gradually over the period, increasing from 34% of the total in 2002 to 41% in 2007. In absolute terms, male permanent academic staff numbers decreased 10 % during this period, while those for their female counterparts increased 25%.

White staff constituted the overwhelming majority of staff throughout the years under review (fig. 6.36), even though their proportion dropped from 91% in 2002 to 85% in 2007. Colored staff constituted the second largest group, even though their proportion was in single digits until 2006 and 2007 when they rose to 10% of the total (fig. 6.36). In order to make Stellenbosch University a welcoming place for students and academics from racially marginalized communities who could potentially populate the next generation of the South African professoriate, the trend towards increasing the proportion of non-White staff will need to be sustained and enhanced.

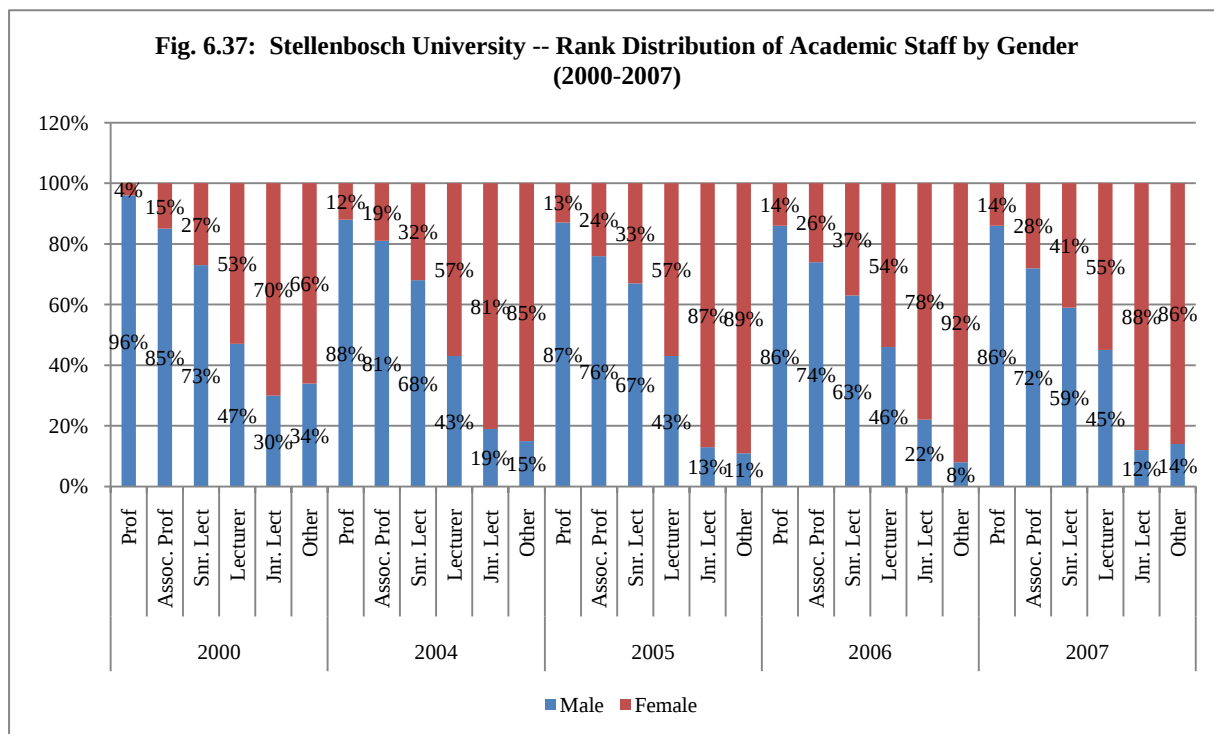


Source: Stellenbosch University (2008)

Rank Distribution of Academic Staff by Gender

Figs 6.37 shows that the senior ranks of academic staff (i.e., from senior lecturer to full professor) are dominated by males, whereas the junior ranks have a majority of females. Over the years, however, there have been improvements in the proportions of females in the senior ranks. Thus, whereas only 4% of full professors were female in 2000, the corresponding figure in 2007 was 14%. The female proportions of associate professors also went up from 15% in 2000 to 28% in 2007. Female senior lecturers increased, in proportion, from 27% in 2000 to 41% in 2007. These

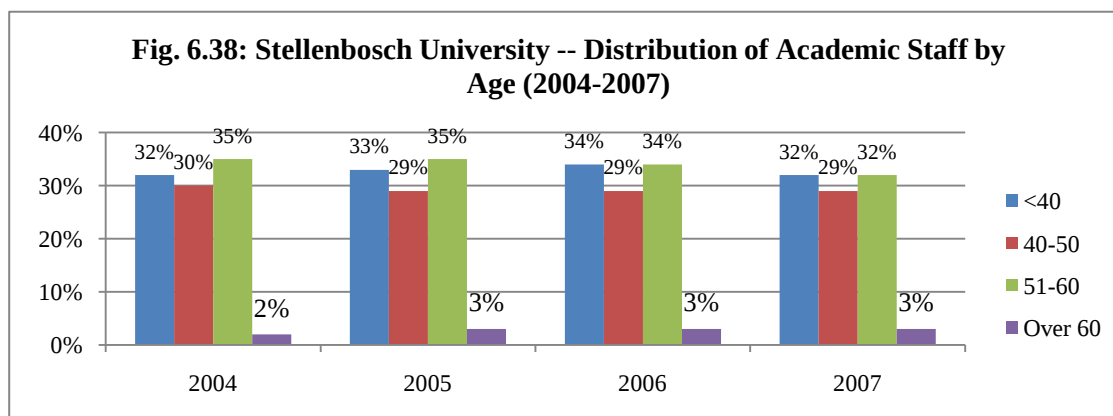
are positive trends that need to be sustained and enhanced in order to increase the size of female role models, mentors, to support each other and female students, thereby dispelling notions of academia as a difficult terrain for women to navigate.



Source: Stellenbosch University (2008)

Distribution of Academic Staff by Age

As illustrated in fig. 6.38, academic staff in the 50-60 year category made up the majority of staff each year, between 2004 and 2007. They made up over a third of staff members between 2004 and 2006, before dropping slightly to 32% in 2007. Staff under 40 years, by and large, remained close to a third of the total, while those in the 40-49 age bracket made up less than a third of the total each year.

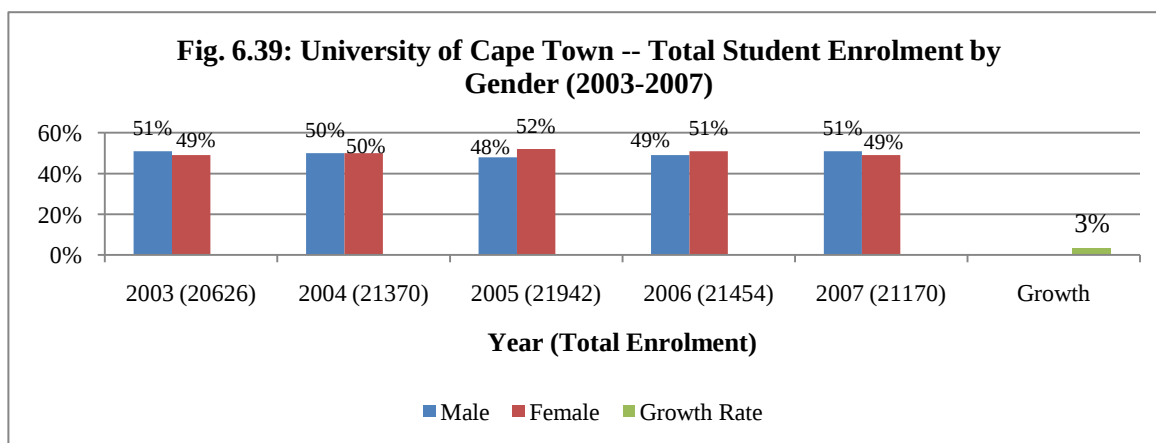


Source: Stellenbosch University (2008)

University of Cape Town Student Profile

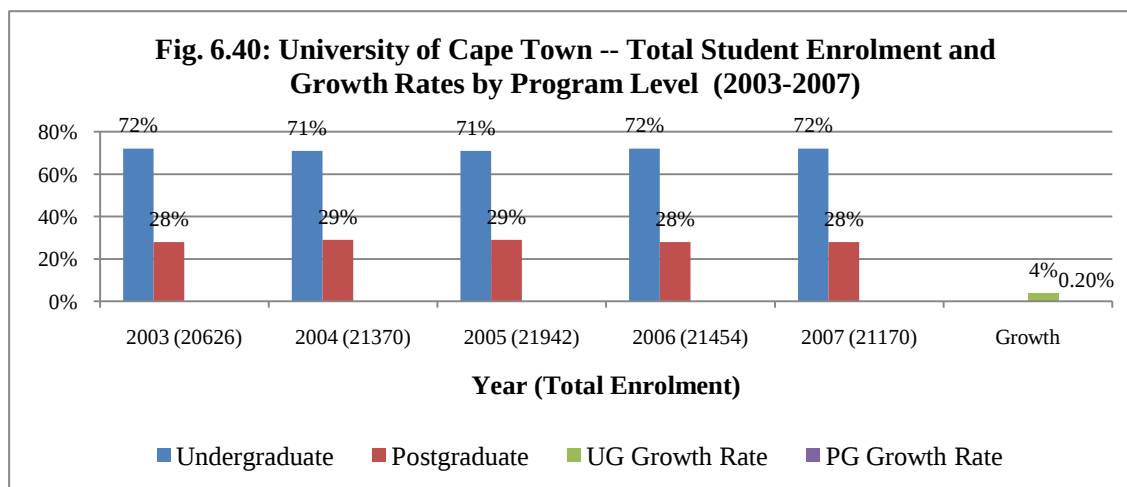
Total Student Enrolment by Gender and Program Level

Total student enrolment increased from 20626 in 2003 to 21170 in 2007. This represented a 3% increase (fig 6.39). The proportion of male and female enrolments were almost even for much of the period



Source: University of Cape Town (2004, 2005, 2006) and from data provided by UCT

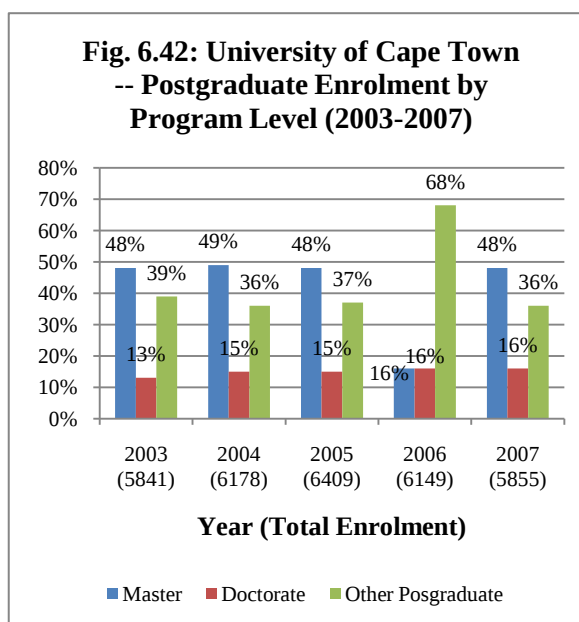
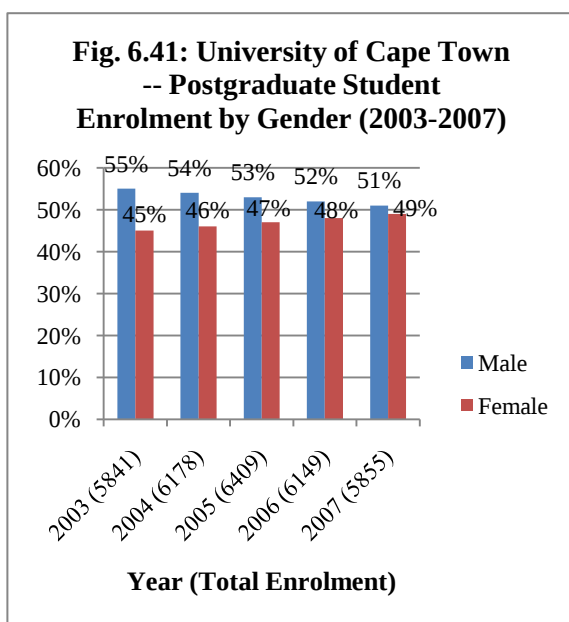
During this time, undergraduate students made up close to three quarters of the total enrolment, and they grew by 4% from 14785 to 15315. The proportion of postgraduate students stayed healthy and steady throughout, going up imperceptibly by only 0.2%, from 5841 to 5855 (fig. 6.40)..



Source: University of Cape Town (2004, 2005, 2006) and from data provided by UCT

Distribution of Postgraduate Enrolments by Gender and Program Level

The female proportion of postgraduate enrolments trailed behind that of males in each of the years under review (fig. 6.41). It is important to note, nevertheless, that this proportion has steadily increased over the years, growing from 45% of postgraduate enrolments in 2003 to 49% in 2007. The potential for this to impact female representation in the professoriate is a welcome prospect.



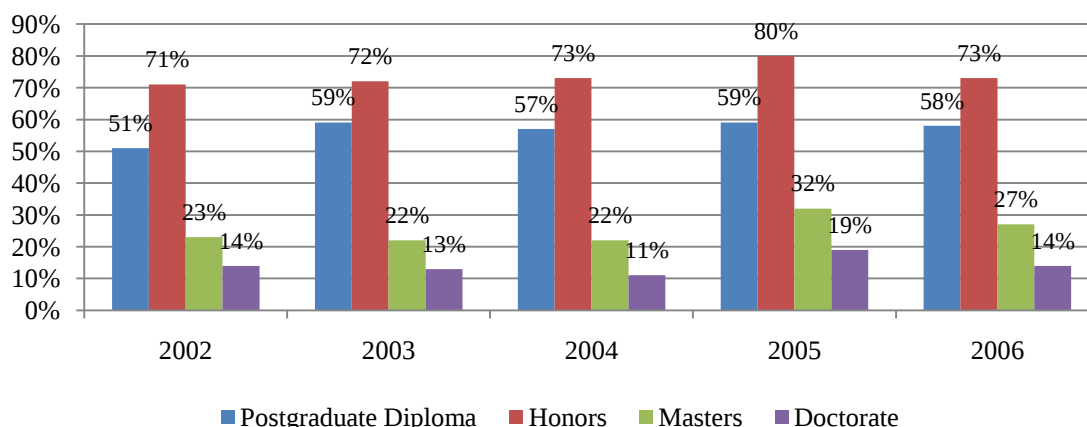
Source: University of Cape Town (2004, 2005, 2006) and from data provided by UCT

While fig. 6.40 shows a healthy proportion of postgraduate students, that picture does not necessarily hold prospects for a significant proportion of next generation academics being trained and so should be treated with caution. As figure 6.42 illustrates, there is a significant proportion of the postgraduate cohort that is enrolled in programs that may not lead to academic careers. It is also important to note that the proportion of masters students went down significantly in 2006, when it represented only 16% of the total. It will be useful to find out the reasons for the aberration in 2006.

Postgraduate Graduation Rates by Program Level

The highest graduation rates were among honors students, represented by 71% in 2002 and 73% in 2006 (fig. 6.42). Graduation rates among masters students went up from 23% in 2002 to 32% in 2005, before sliding to 27% in 2006. Doctoral graduation rates also improved between 2002 and 2005, going up from 14% to 19%. The rates, however, went down to 14% in 2006. Overall graduation rates among masters and doctoral students were very low and raise questions about the capacity of the institution to produce the next generation of academics to correct the staff capacity deficit that the country's tertiary institutions are facing.

Fig. 6.42: University of Cape Town -- Postgraduate Student Graduation Rates by Program Level for 2002-2006 Graduating Cohorts



Source: University of Cape Town (2004, 2005, 2006) and from data provided by UCT

University of Cape Town Academic Staff Profile

Academic Staff Capacity and Enrolment Pressures

Academic staff numbers increased from 641 in 2002 to 713 in 2006 (fig. 6.43), representing an 11% rise. This is a noteworthy growth rate as it outstrips student enrolment growth for the same period, which was 4% (fig. 6.44). It represents a development that is rare for a lot of other institutions battling to keep up with expansion in student intake.

Fig. 6.43: University of Cape Town -- Academic Staff Complement by Gender (2002-2006)

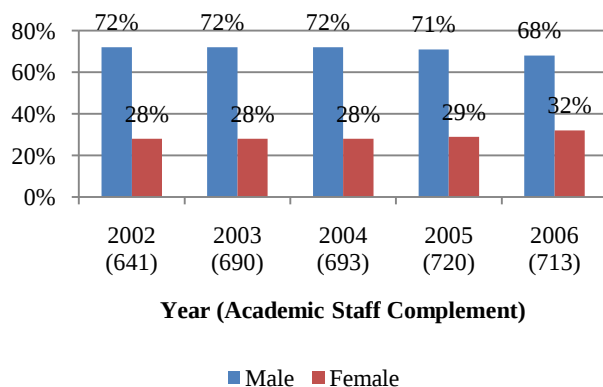
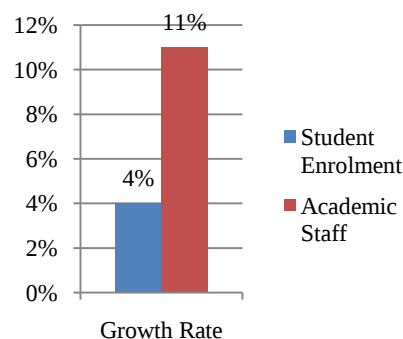


Fig. 6.44: Growth Rates for Academic Staff and Student Enrolment (2002-2006)



Source: University of Cape Town (2004, 2005, 2006) and from data provided by UCT

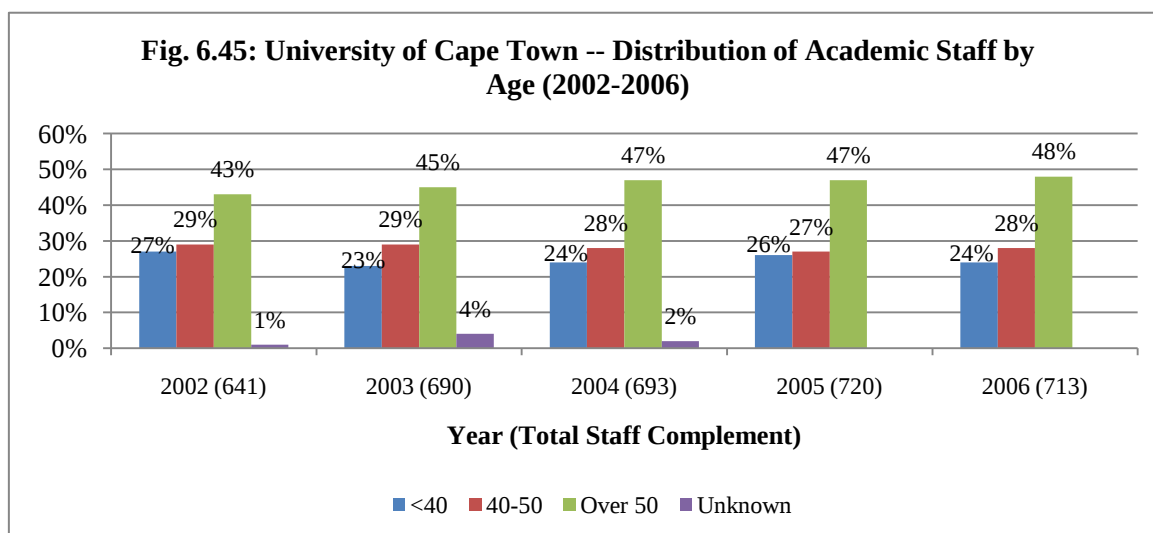
Student-staff ratios at the institutional level, therefore, improved slightly from 32:1 in 2003 to 30:1 in 2006. It must be pointed out that the ratio in some faculties exceeded the institutional average by large margins. The comparative figures for the Faculty of Commerce in 2002 and 2006 were about 63:1 and 62:1, respectively. The ratios for the Faculty of Law were about 60:1 in 2002 and 50:1 in 2006. So, while the overall staff capacity seems to have coped quite well with student expansion, it is obvious that some teaching units have not benefitted enough from the increase in staff complement to offset enrolment pressures.

Distribution of Academic Staff by Gender

Fig. 6.43 shows the distribution of academic staff, by gender, between 2002 and 2006. It is clear that male staff constituted a significant majority over these years. They made up 72% of the total staff complement in 2002, but their proportion went down to 68% in 2006, while that of their female counterparts increased from 28% in 2002 to 32% in 2006. The commendation above, regarding the success of the University of Cape Town in building its staff capacity to address growth in student enrolment, can, thus, not be replicated in terms of the gender composition of staff. Progress is, nevertheless being made as the proportion of female staff inches up. More efforts need to be made to sustain and enhance the incremental progress by opening up opportunities for a new generation of female academics.

Distribution of Academic Staff by Age

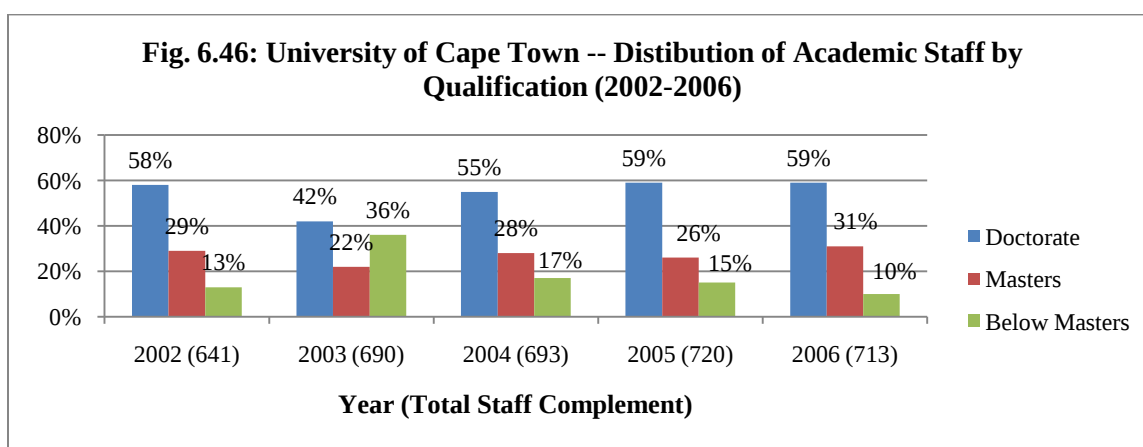
During the 2002-2006 period, the University of Cape Town had a significant proportion of academic staff in the over-50 age range. The extent to which the professoriate at the institution is aging is borne out by the fact that the proportion of staff over 50 years went up from 43% in 2002 to 48% in 2006. Thus, by 2006, almost half the staff was over 50 years old.



Source: University of Cape Town (2004, 2005, 2006) and from data provided by UCT

Distribution of Academic Staff by Qualification

Fig. 6.46 shows that, between 2002 and 2006, majority of academic staff held doctoral degrees, with their proportion going from 58% to 59% during the period (fig. 6.45). The only exception was 2003, when doctoral degree holders stood at 42% of all staff. Masters holder increased from 29% of the total in 2002 to 31% in 2006. It is significant to point out that the proportion of staff with less than a masters degree was relatively significant over the period. This group hit its lowest, though not insignificant, proportion of 10% in 2006. The fact that a tenth of staff members had either an honors or lower qualification is worrisome and needs to be addressed.

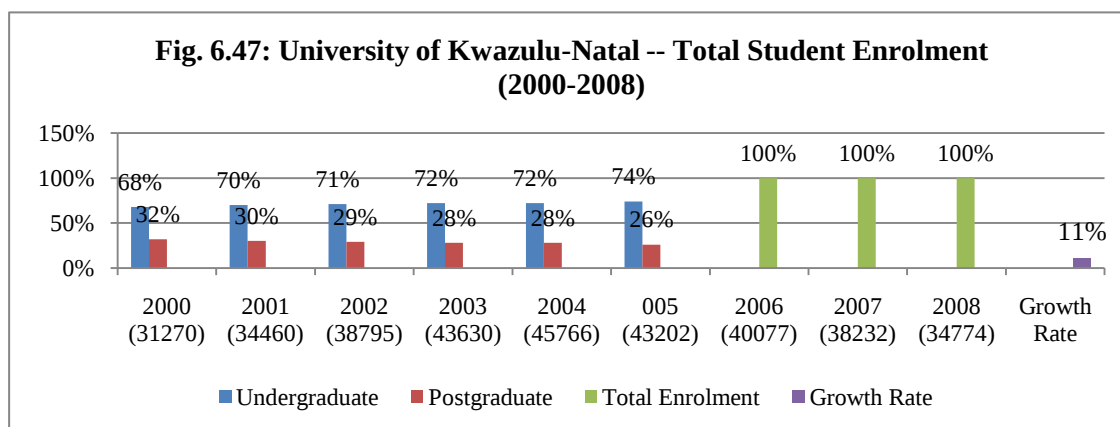


Source: University of Cape Town (2004, 2005, 2006) and from data provided by UCT

University of Kwazulu-Natal Student Profile

Total Student Enrolment by Program Level

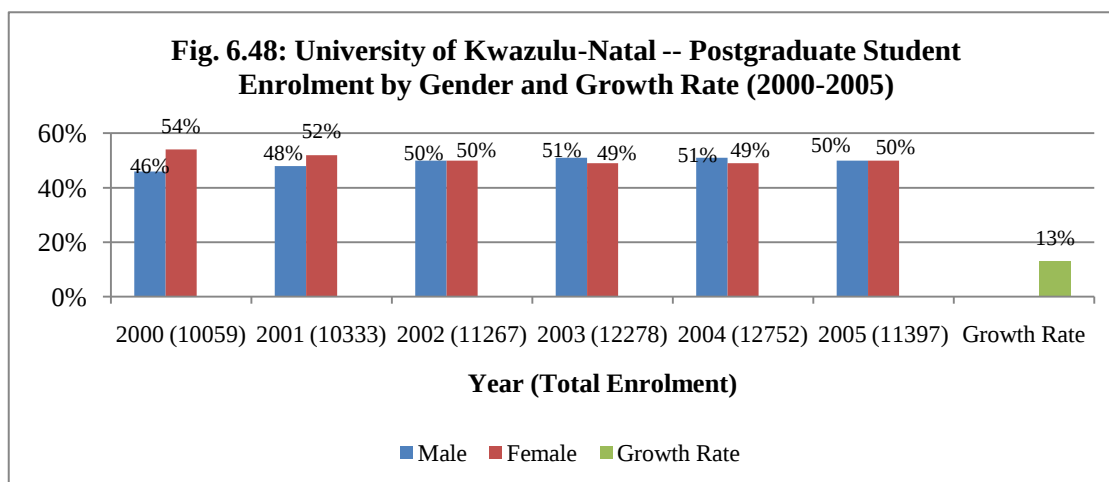
Student enrolments went up from 31270, in 2000, to 34774 in 2008, representing an 11% growth. It is important to note the 2008 figures belie huge expansions in the intervening years (fig. 6.47). The university had healthy proportions of postgraduate students, based on the years for which such data is available. Their proportion, however, went down from 32% in 2000 to 26% in 2005 (fig. 6.4).



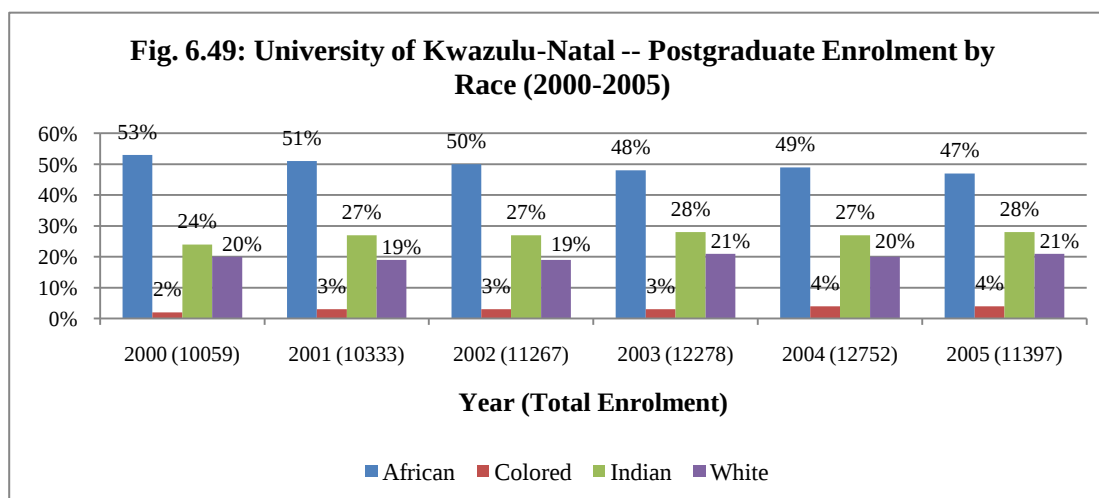
Source: University of Kwazulu-Natal (2008)

Postgraduate Student Enrolment by Gender

Postgraduate student enrolments increased by 13% from 10059 in 2000 to 11397 in 2005. It is significant to note that between 2000 and 2001, there were more females enrolled in postgraduate programs than males (fig. 6.48). In 2000, females constituted 54% of students but this number fell every subsequent year, to about 49% in 2004, before recovering to near parity in 2005 (fig. 6.48). Like other cases in South Africa, it will be useful to explore how the significant representation of females in postgraduate enrolments maps onto their representation in the professoriate.



Source: University of Kwazulu-Natal (2008)



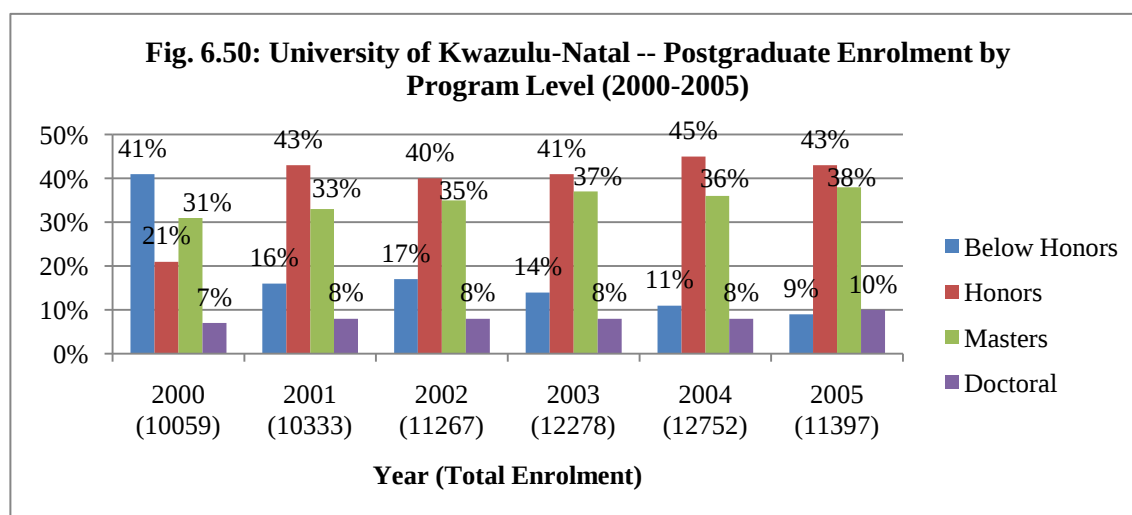
Source: University of Kwazulu-Natal (2008)

Postgraduate Student Enrolment by Race

The majority of postgraduate students during the 2000-2005 period were African (fig. 6.49), even though their proportion of the total enrolment went down by 6% between 2000 and 2005. The proportion of Indian students increased over the 2000-2005 period, from 24% to 28%, while the percentage of Whites has held steady at about 20%. Colored students are the least represented group, with about 2% of postgraduate enrolments in 2000 and about 4% in 2005, meaning that their representation in the next generation of academics is likely to be very small.

Postgraduate Student Enrolment by Program Level

In 2000, only 7% of postgraduate students were registered in doctoral programs and about 31% at the Masters level. By 2005, the proportion of doctoral students had increased to about 10% of postgraduate enrolments, while masters enrolments stood at about 38% (fig. 6.50). The corresponding growth in absolute numbers were 58% and 38%, respectively. These are, obviously, positive trends. However it is clear that the proportion of postgraduate students constituting the potential pool from which to attract the next generation of academics (i.e, doctoral and masters students) is less than half of the total postgraduate student complement. In fact, the vast majority of postgraduate students, between 2001 and 2005, were registered in honours programs (fig. 6.50).



Source: University of Kwazulu-Natal (2008)

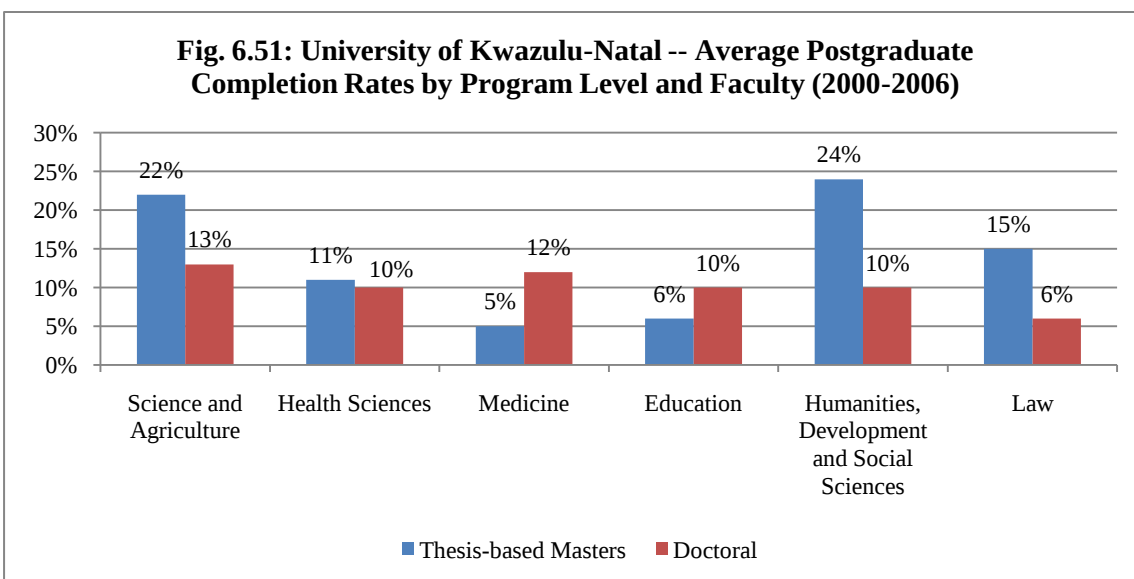
Post-Graduate Completion and Drop-Out Rates

While postgraduate enrolments are a useful proxy for determining the potential pool of future academics, even more crucial determinants are the percentage of those enrollees who complete their programs within designated periods (fig. 6.51) or drop out (fig. 6.52). An analysis of the completion rates in the Faculty of Science and Agriculture shows that the average completion rate

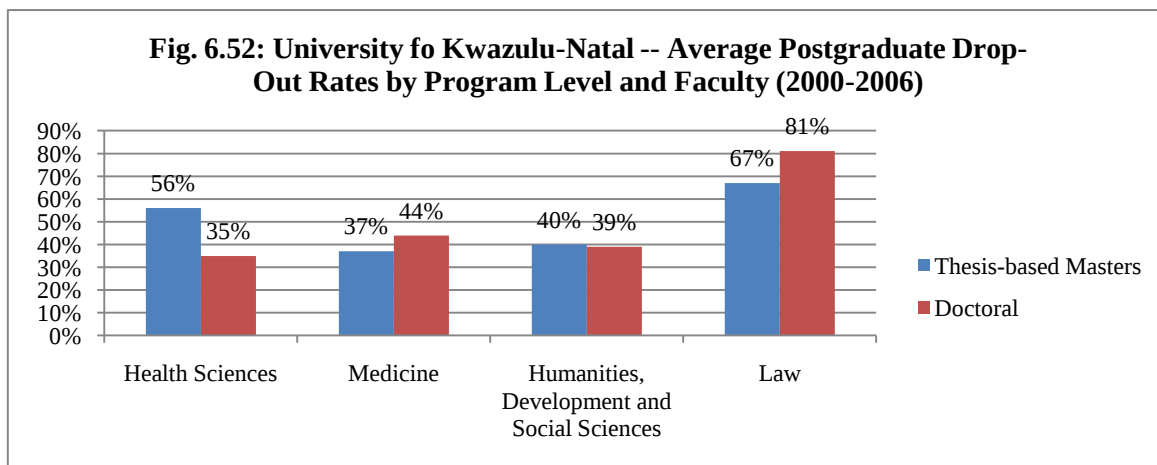
for the two programs that are likely to produce future academics -- i.e., thesis-based masters and doctoral -- stood at 22% and 13% respectively.

In the Faculty of Health Sciences, the average drop-out rates for thesis-based Masters students was about 56% while the corresponding figure for their doctoral counterparts was about 35%. With more than half of Masters students and over a third of doctoral students dropping out of their programs, the potential pool of the next generation of academics is significantly impacted in a negative direction.

The statistics for the Faculty are even more worrisome when the related indicator of completion rates is assessed. The rates for thesis-based masters and doctoral students average about 11% and 10% , respectively With only a tenth of these cohorts completing their programs on schedule, there is obviously a huge disconnect between intake and output, with serious implications for replenishing the professoriate with requisite numbers and appropriate levels of training.



Source: University of Kwazulu-Natal (2008)



Source: University of Kwazulu-Natal (2008)

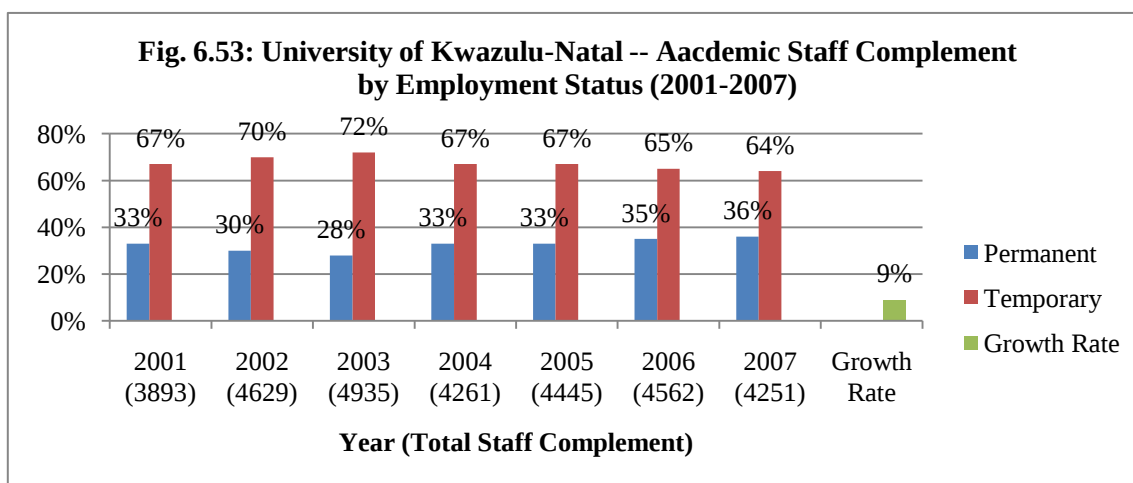
The trend for drop-outs is the same in the Faculty of Medicine where about 37% of thesis-based Masters students and 44% of doctoral students abandoned their programs. The completion rates are even more astonishing as only about 5% of thesis-based Masters students and 12% of doctoral students completed their programs on schedule. Drop-out rates for thesis-based masters and doctoral students in Humanities, Development and Social Sciences are also relatively high, at about 40% and 39% respectively. Completion rates for the two programs were about 24% and 10%. In the Faculty of Law, drop-out rates were extremely high at about 67% for thesis-based Masters programs, and 81% for doctoral programs. The corresponding averages for the two groups, with respect to completion rates were about 15% and 6%, respectively.

University of Kwazulu-Natal Academic Staff Profile

Academic Staff Capacity and Enrolment Pressures

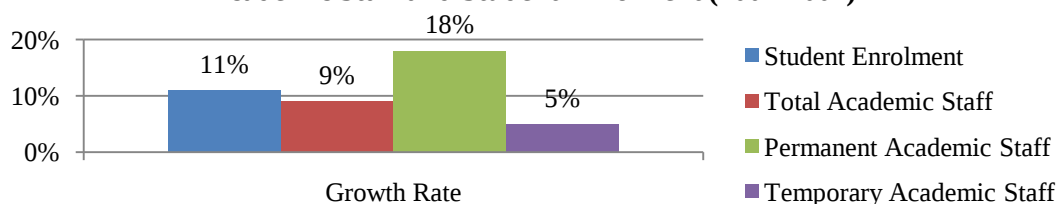
Between 2001 and 2007, total staff numbers grew by 9% (fig. 6.53), a couple of points behind the growth in student enrolment of 11% (fig. 6.54). The university has a significant number of temporary academic staff relative to permanent staff. Out of the 4,251 academic staff members at post in 2007, 64% of them were temporary staff (fig. 6.53). It is worth noting that over time the institution has increased its permanent staff numbers by a larger percentage than it has temporary staff, with the former going up by 18% between 2001 and 2007, while the latter increased by 5% (fig. 6.54).

Notwithstanding these developments, however, the fact that the university still depends on temporary staff for 64% of its academic staff indicates that the need for an expanded and sustainable pool of permanent staff to support its mandate is far from being addressed. A huge temporary staff complement may provide fleeting, but uncertain, relief from enrolment pressures, but is not a panacea for developing the overall capacity of the institution to deliver its teaching and research mandates.



Source: University of Kwazulu-Natal (2008)

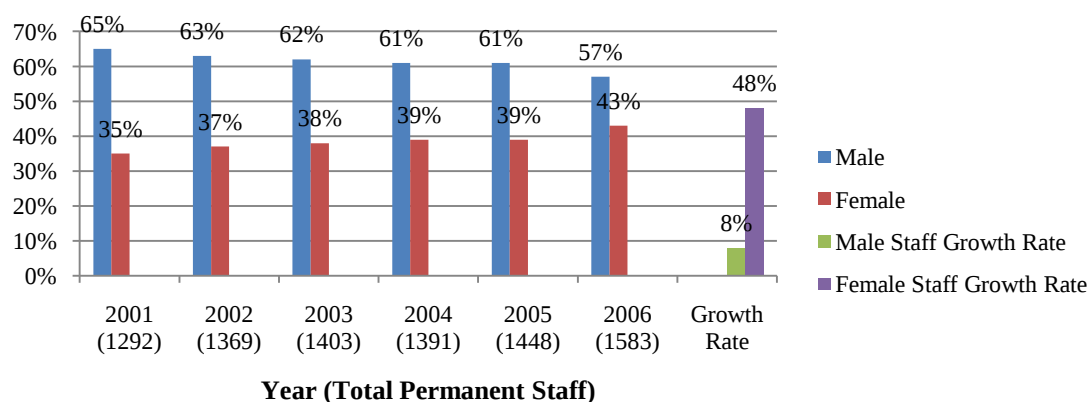
Fig. 6.54: University of Kwazulu-Natal -- Growth Rates for Academic Staff and Student Enrolment (2001-2007)



Distribution of Academic Staff by Gender and Race

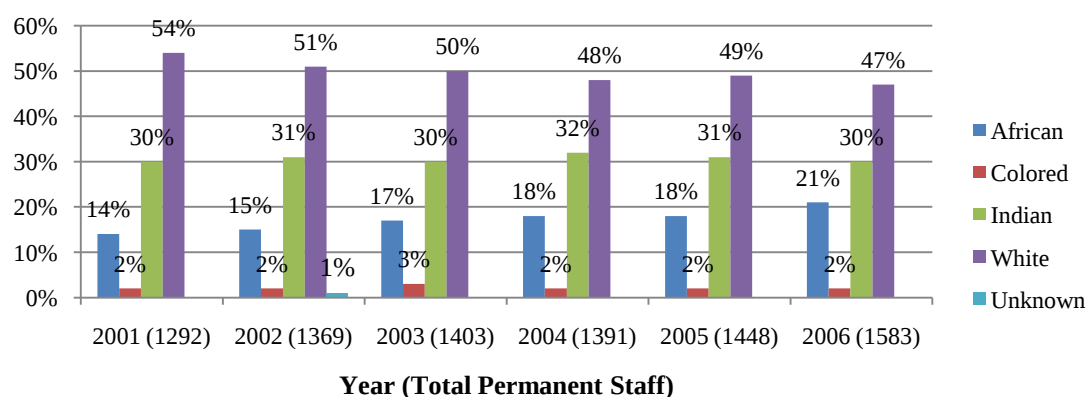
While the number of permanent male academic staff has consistently outstripped that of their female counterparts (fig. 6.55), it is commendable that the gap has steadily decreased over the 2001-2006 period, with the proportion of females increasing from 35% in 2001 to 43% in 2006. This is due to the fact that while permanent male academic staff increased by 8% between 2001 and 2006, the female staff complement increased by 48% during the period (fig. 6.55).

Fig. 6.55: University of Kwazulu-Natal -- Distribution of Permanent Academic Staff by Gender (2001-2006)



Source: University of Kwazulu-Natal (2008)

Fig. 6.56: University of Kwazulu-Natal -- Distribution of Permanent Academic Staff by Race (2001-2006)

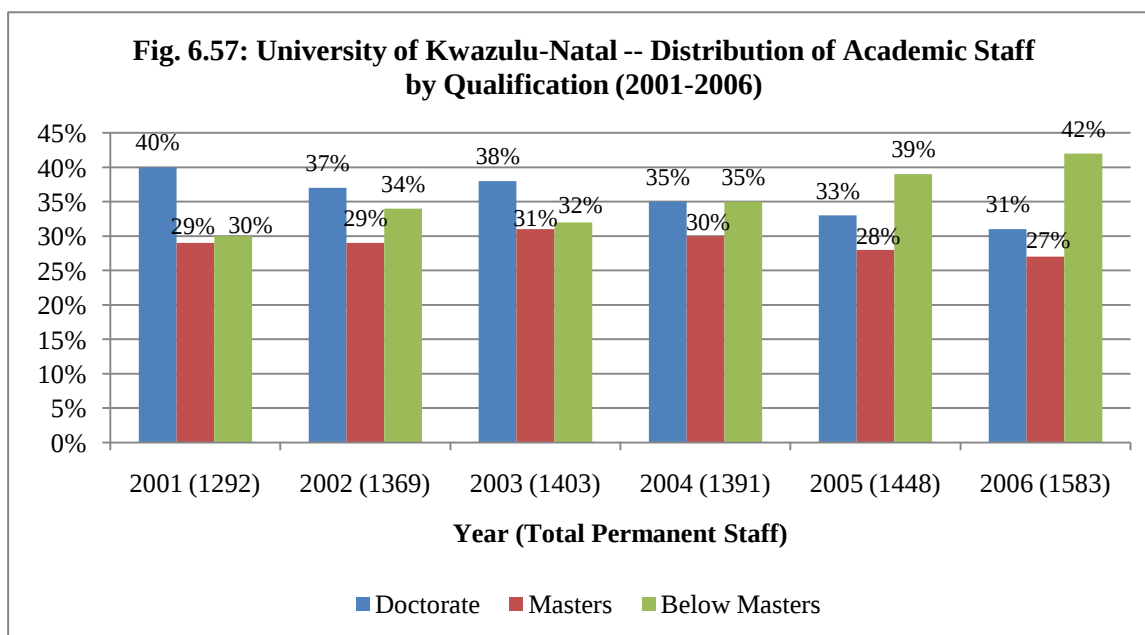


Source: University of Kwazulu-Natal (2008)

White staff have traditionally been the majority group, a reality that continued to endure over the course of the 2001-2006 period, when they comprised close to half the staff complement. Indian staff, who constitute the next largest group after Whites have maintained a steady proportion, around 30%, over the period (see fig. 6.54 and Table 6.49). It is instructive to note, however, that the number of White staff, as a proportion of total staff numbers, has decreased over time, and by 2006 was 47% compared to 54% in 2001. The most significant increase occurred among Africans, who experienced an 81% growth over the period and constituted 21% of staff in 2006, compared to 14% in 2001. While Colored staff grew by 38% between 2001 and 2006, they still remain the smallest group. They did not experience a significant change in terms of their proportion of the total staff complement, stagnating at about 2% over the period.

Distribution of Academic Staff by Qualification

The university registered a decreasing proportion of doctoral and masters degree holders (fig. 6.56). From a high of 40% in 2001, the proportion of staff members with doctoral degrees went down to 31% in 2006. The proportion of staff with Masters degrees also dropped from 29% in 2001 to 27% in 2006. Contrary to the foregoing, the proportion of staff with qualifications below the masters level increased from 30% in 2001 to 42% in 2006. The troubling nature of these trends is brought into closer perspective when we consider the fact that masters and doctorate holders, who comprised almost 70% of academic staff in 2001, saw their proportion dwindle to 58% in 2006. The fact that 42% of academic staff have less than a masters-level qualification requires urgent attention and redress if the institution's academic profile is to be enhanced and its scholarly capacity strengthened.



Source: University of Kwazulu-Natal (2008)

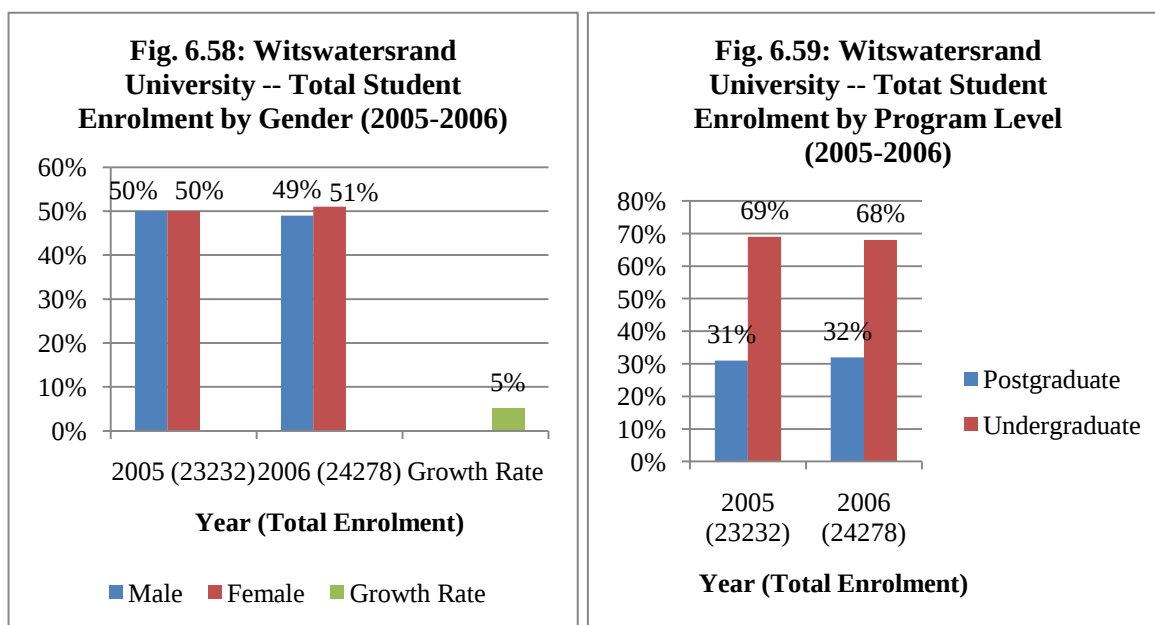
Distribution of Academic Staff by Age

Between 2001 and 2006, academic staff between the ages of 20 and 40 represented about 20% of the total number. This number, together with their counterparts in the 41-50 year bracket, constituted about 73% of academic staff in 2001 and 70% in 2006 (See fig. 6.58). This suggests that UKZN has a healthy dose of academics who are likely to sustain its mandate over the next decade, as long as efforts are made to ensure that increased numbers of younger staff are not traded for qualifications below the masters level and opportunities are provided for those who are currently without, at least, a masters degree to gain them.

Witswatersrand University Student Profile

Total Student Enrolment by Gender and Program Level

Overall student enrolment increased from 23,232 in 2005 to 24,278 in 2006, representing about a 5% rise (fig. 6.58). While there was near parity between female students and their male counterparts in terms of the proportion of total enrolment in 2005, the former exceeded the latter in absolute numbers by 198. The proportions of males and females were again very close in 2006, though females had a two-point advantage (fig. 6.58). In 2005 and 2006, postgraduate students represented 31% and 32%, respectively, of the total student body (fig. 6.59).

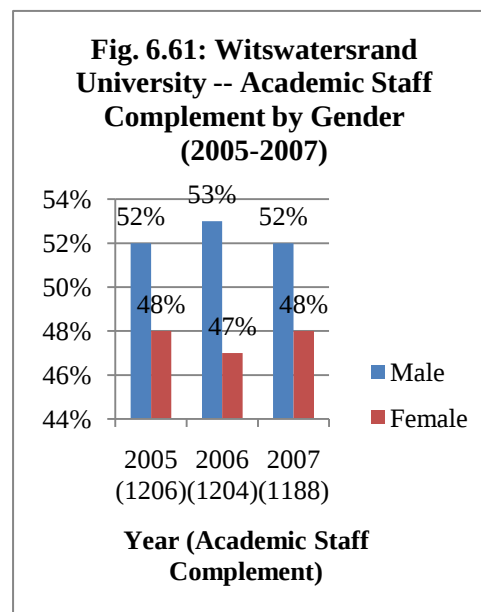
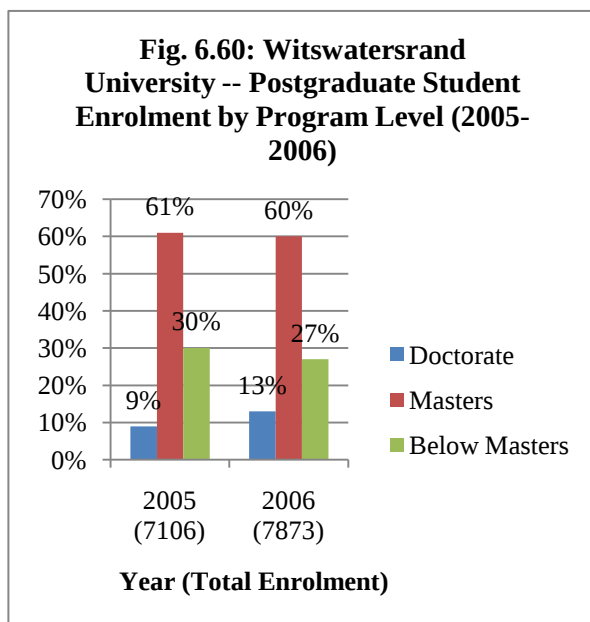


Source: University of the Witwatersrand (2007) and data provided by the WITS

Postgraduate Student Enrolment

Postgraduate student enrolments increased by 767 between 2005 and 2006, a growth of 10% (fig. 6.60). Majority of postgraduate students were enrolled at the Masters level, representing 61% and

60% of the cohort in 2005 and 2006, respectively (fig. 6.60). Doctoral students made up 9% of the postgraduate student body in 2005, increasing to 13% in 2006.



Source: University of the Witwatersrand (2007) and data provided by the WITS

Witswatersrand University Academic Staff Profile

Academic Staff Capacity and Enrolment Pressures

The overall complement of staff decreased from 1206 in 2005 to 1188 in 2007, a drop of 1.5%. When growth in staff numbers is compared to growth in student numbers between 2005 and 2006 (years for which data is available for both groups), we see that staff complement registered minimal negative growth of less than one percent while student enrolments increased by 5% (fig. 6.58). This, obviously, puts additional stress on staff capacity, as evidenced by the increase in student-staff ratios, albeit marginally, from 19:1 to 20:1.

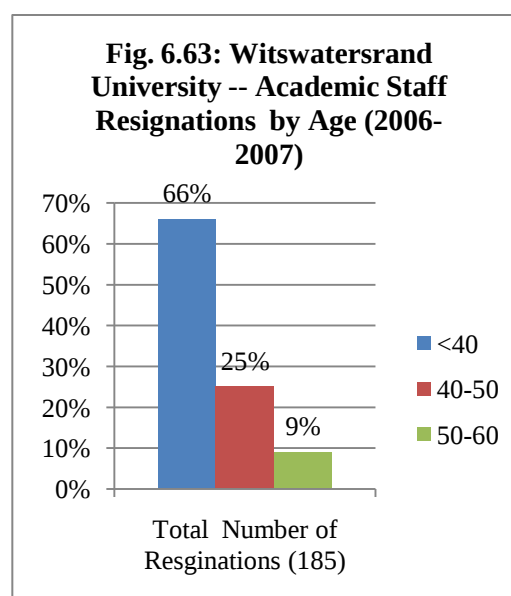
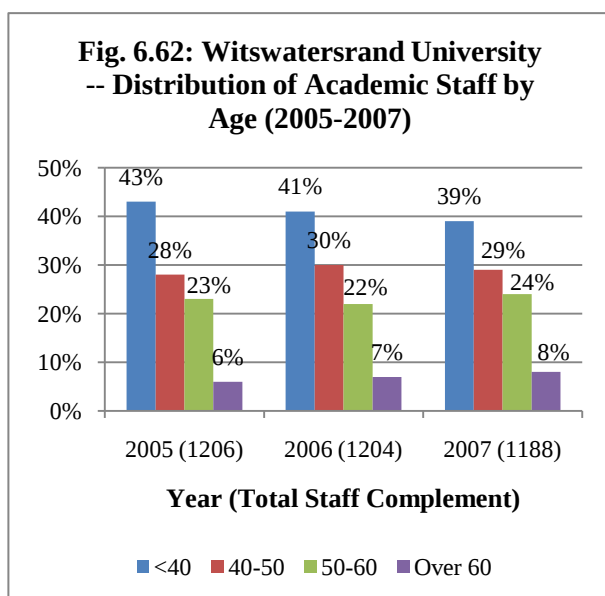
Distribution of Academic Staff by Gender

As shown in fig. 6.61, there were more male than female staff each year, from 2005 to 2007. Out of the 1206 academic staff at post in 2005, 53% were male and 48% female. Those proportions held steady over the period, changing only minimally in 2006, and are commendable in the context of the low female proportions that exist in other institutions that were part of this study. The prospects for closing the gap further are good, if trends in the gender composition of new hires in 2006 and 2007 are anything to go by. The number of men hired exceeded the number of women hired in 2006. However, the reverse was the case in 2007. Men made up 54% of staff hired in 2006, while women constituted 59% of new hires in 2007.

Distribution of Academic Staff by Age

Academic staff below the age of 40 constituted the highest proportion of the total complement between 2005 and 2007. Their proportion of the total has, however, gradually gone down over the period, from 43% in 2005 to 39% in 2007 (fig. 6.62). At the same time, the proportion of staff above 50 years has crept from 29% to 32%. The trend suggests an ageing professoriate even though the overall distribution does not give cause for alarm in the short-term. There is, therefore, the need to sustain the strategic direction that the institution is pursuing with regard to hiring, a direction that will ensure that as the number of those in the 50+ group grows, there are enough people ready to take their place at the other end of the age pipeline. It is noteworthy that 71% and 75% of those hired in 2006 and 2007, respectively, were less than 40 years old.

It is instructive that most resignations between 2006 and 2007 were by people under 40 years old. Of the 185 people who resigned in 2006 and 2007, 66% were in that group. If we expand the number of resignations to include those below 50 years old, the population is a colossal 91%. What these figures point to is the fact that a number of staff members who could contribute to the institution for many more years are choosing to leave and to seek opportunities elsewhere. The institution, therefore, has to contend with this continuing flux in its professoriate and the attendant challenges that come with it.

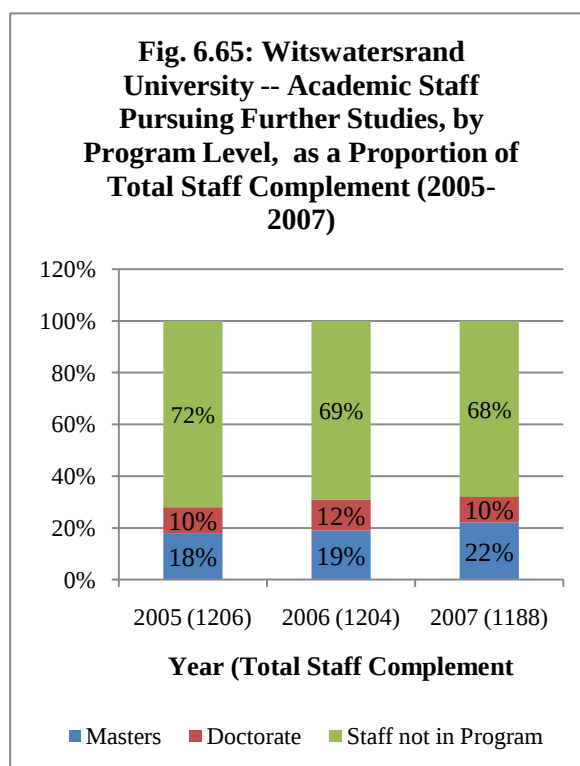
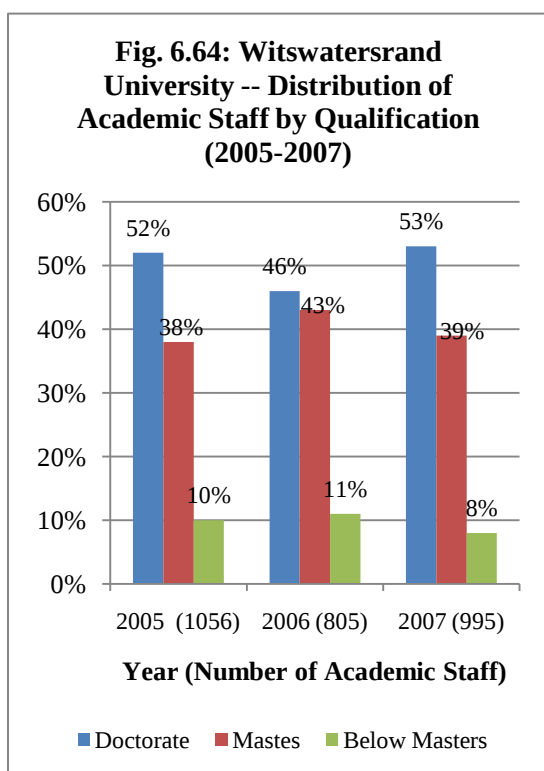


Source: University of the Witwatersrand (2007) and data provided by the WITS

Distribution of Academic Staff by Qualification

In 2005, 52% of staff, for whom data is available, had doctoral degrees, compared to 38% and 10% who had masters and undergraduate degrees, respectively (fig. 6.64). The following year, doctoral degree holders went down to 46% of the total complement while masters and undergraduate degree holders climbed up to 43% and 11% respectively. By 2007, the proportion of doctoral degree holders had gone up to 53%, slightly above what it was in 2005. The proportion of Masters degree holders went down from what it was in 2006 to 39% in 2007,

representing a slight increase over its 2005 share. Undergraduate degree holders also went down to 8%, compared to 10% and 11%, respectively, in the previous two years. It is commendable that the university has been able stem the decline in the number of doctoral degree holders, between 2005-2006, and, by 2007, succeeded in increasing their proportion of the total staff complement past where it was a couple of years earlier. The success is partly due to the professional development activities outlined below.



Source: University of the Witwatersrand (2007) and data provided by the WITS

Professional Development

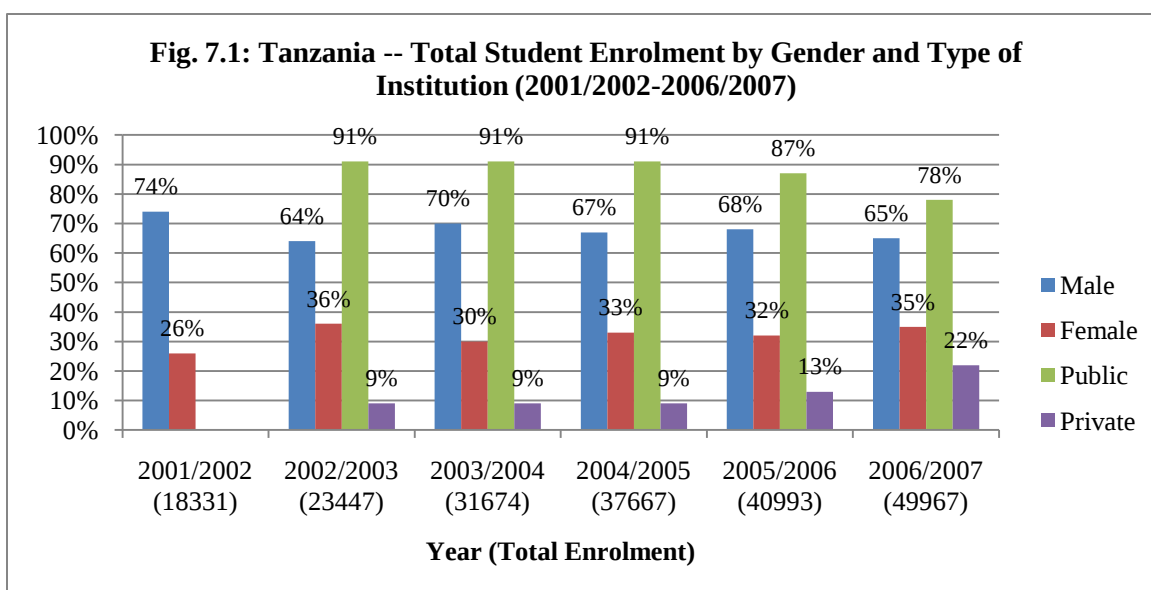
In 2005, 2006, and 2007, 10%, 12% and 10%, respectively, of all staff were undertaking doctoral programs (fig. 6.65). This effort at professional development helps to strengthen the quality of the academic staff at the same time as it aims at developing the next generation of academics. It is worth noting, however, that with a little over a fifth of staff pursuing masters programs, it can be fairly argued that a large proportion of staff members have not obtained the minimum qualification needed to effectively undertake academic work at a university.

SECTION 7 – TANZANIA

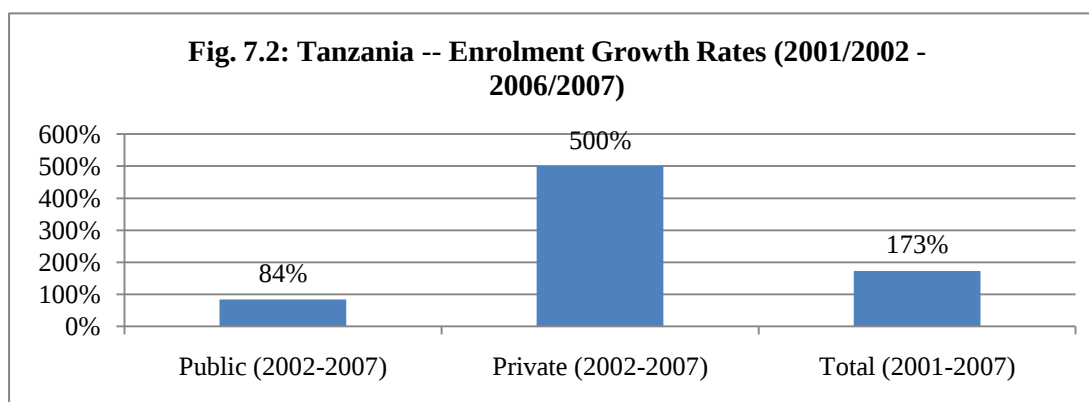
National Student Profile

Total Student Enrolment and Distribution by Gender

Total student enrolment increased from 18,331 in 2001/2002 to 49,967 in 2006/2007, representing a 173% growth (fig. 7.2). Males constituted the majority of the student population over the years. The female population went up from 26% of total enrolments in 2001/2002 to 35% in 2006/2007 (fig. 7.1). Majority of students were enrolled in public universities during this period. It needs to be noted, however, that the proportion of students in private universities increased from 9% of the total in 2002/2003 to 22% in 2006/2007 (fig. 7.1). This increase is the result of a whopping 500% leap in private university enrolments, from 1792 to 10794, compared to an 84% growth in public institutions enrolments, from 21334 to 39218 (fig. 7.2).



Source: Adapted from Tanzania Commission for Universities (2008); Ministry of High Education, Science and Technology (2008)

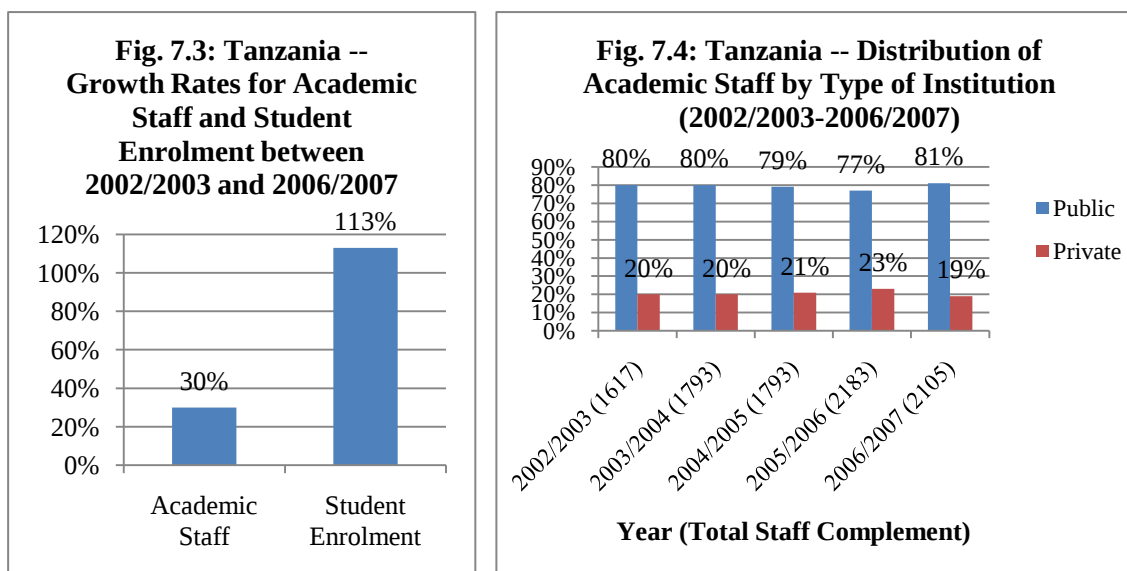


Source: Adapted from Tanzania Commission for Universities (2008); Ministry of High Education, Science and Technology (2008)

National Academic Staff Profile

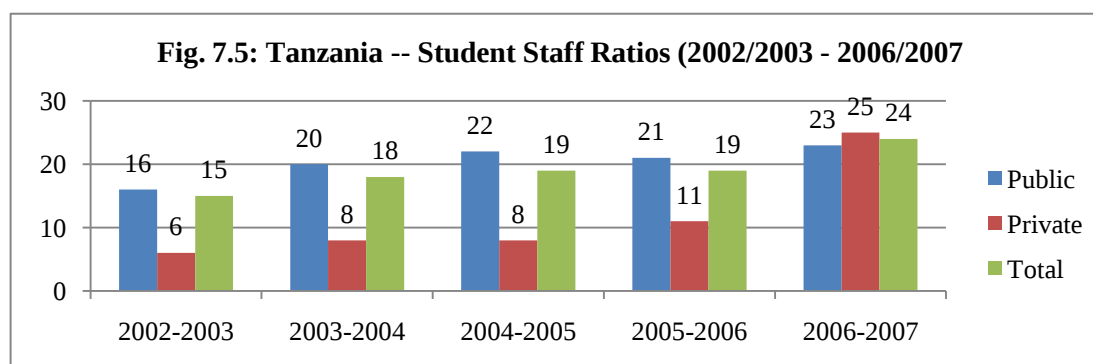
Academic Staff Capacity and Enrolment Pressures

The number of academic staff grew by 30% from 1617 in 2002/2003 to 2105 in 2006/2007. This compares to 113% growth in student enrolment during the same period (fig. 7.3). Majority of staff were employed in public universities, which also shouldered the biggest burden of enrolments, as indicated in fig. 7.1 above. The proportion of staff in private institutions grew incrementally from 20% in 2002/2003 to 23% in 2005/2006, before dropping to 19% in 2006/2007 (fig. 7.4).



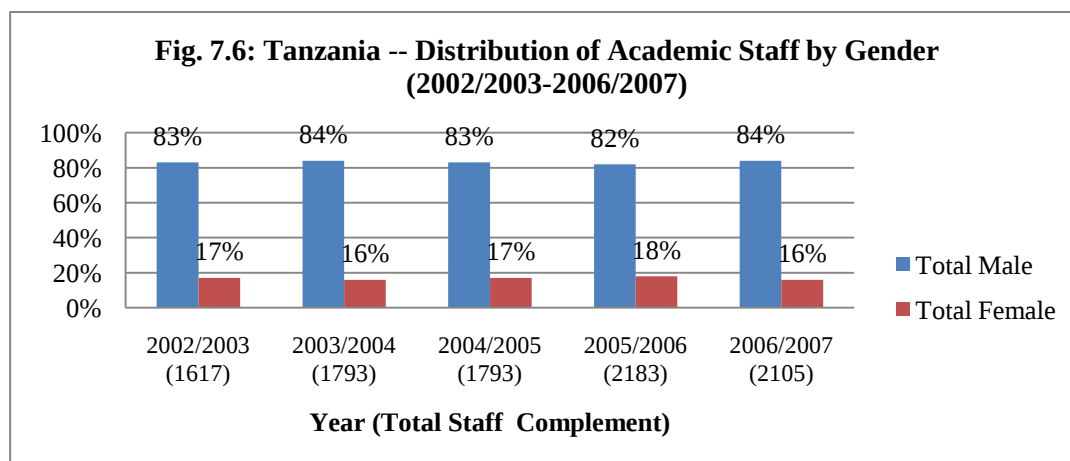
Source: Tanzania Commission for Universities (2008); Ministry of High Education, Science and Technology (2008)

Fig. 7.5 shows that student-staff ratios significantly increased between 2002/2003 and 2006/2007, for all institutions. The ratio for the country as a whole went up from 15:1 to 24:1 over that period. Public institutions, on their part, saw their ratios increase from 16:1 to 23:1, whereas their private counterparts registered a whopping increase from 6:1 to 25:1 (Table 7.5). The numbers for the private institutions that while they are helping absorb the increasing demand for tertiary education, they are doing so with mounting pressure on their academic staff.



Academic Staff Distribution by Gender

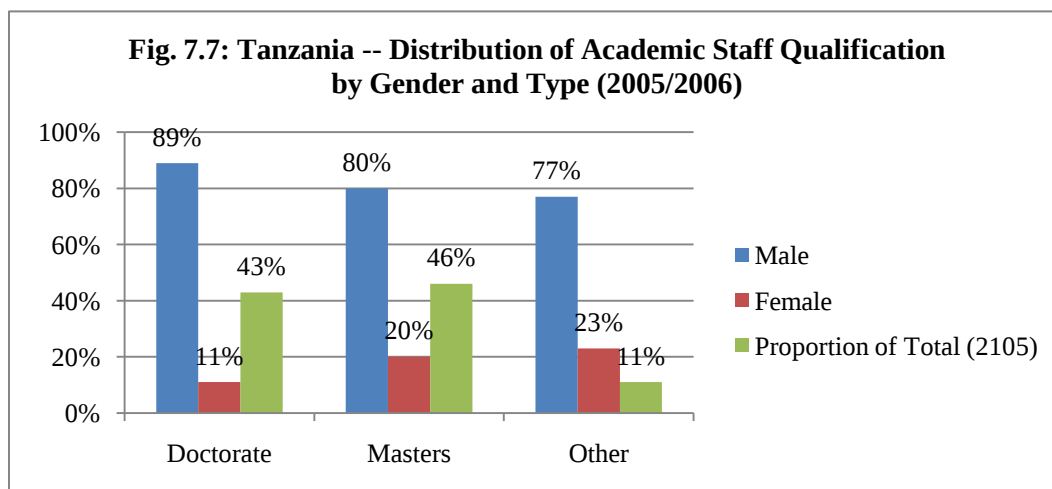
As illustrated in fig. 7.6, a significant majority of staff, each year between 2002/2003 and 2006/2007, were male. The proportion of female staff, in fact, dropped albeit minimally, between those years, going from 17% to 16%.



Academic Staff Distribution by Qualification

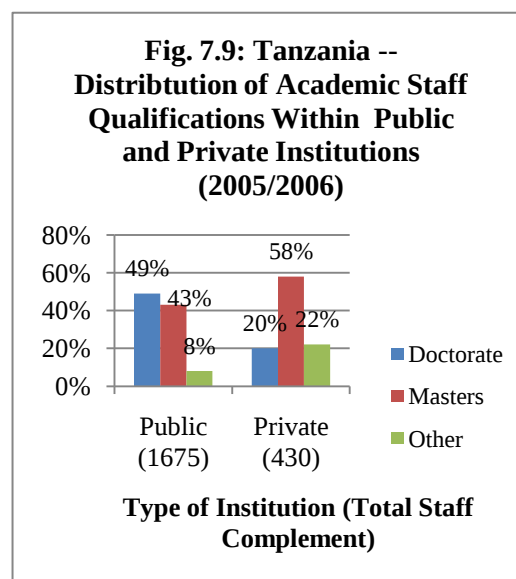
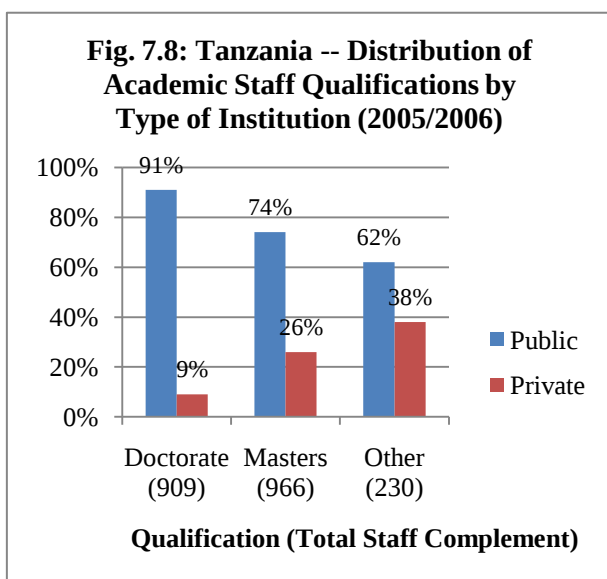
In 2005/2006, 43% of all staff in Tanzanian Universities had doctorate degrees, compared to 46% with masters degrees, and 11% with less than a masters degree (fig. 7.7). The extent to which those with less than a masters degree make up an important part of the overall professoriate, and the large proportion of masters holders, is a clear indication that the country needs more qualified staff, if the teaching and research mandates of universities are to be enhanced. The shortage of doctoral degree holders also limits the extent to which high quality doctorate students can be trained.

It is significant to note that 11% of staff had qualification below the Masters level and only 11% of doctoral degree holders were female (fig. 7.7).



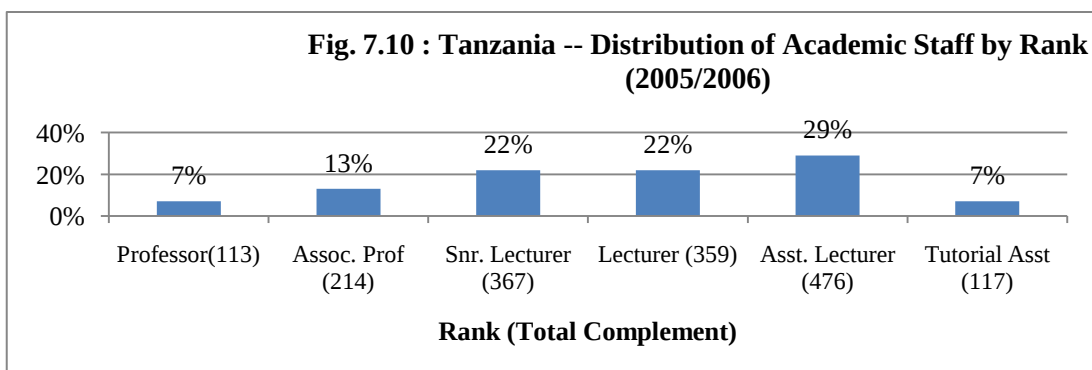
Only 9% of doctoral degree holders in the country's institutions are in the private system (see fig. 7.8) This very low proportion of doctorate degree holders severely limits the ability of these fast-expanding institutions to contribute to the development of the next generation of academics in the country.

While an analysis of the distribution of staff qualifications in public universities reveals more doctoral degree holders (49%) than masters degree holders (43%), it is troubling that the proportion of the former is less than half the professoriate (fig. 7.8). The proportion of doctoral degree holders within private universities leaves even more to be desired, at only 20%. Moreover, the fact that more than a fifth of staff in these institutions (22%) had less than a masters degree is even more worrisome (fig. 7.8).



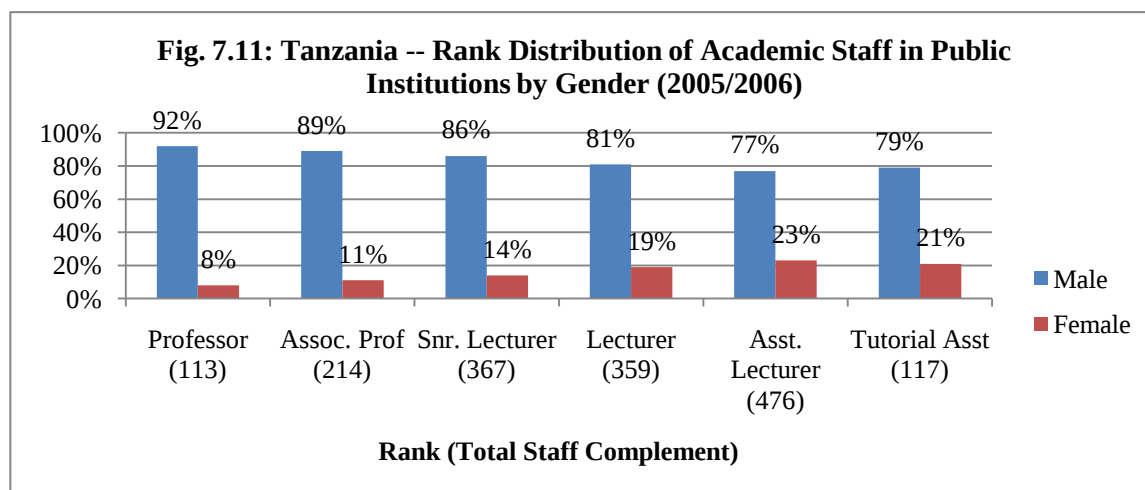
Distribution of Academic Staff by Rank

Fig. 7.10 shows that assistant lecturers made up 29% of academic staff in public institutions, in 2005/2006 while tutorial assistants constituted 7% of the total. In view of the fact that those appointed to these two ranks do not normally have postgraduate degrees, it can be reasonably asserted that 36% of staff have undergraduate qualifications -- a worrisome scenario for these institutions.



Source: Tanzania Commission for Universities (2008); Ministry of High Education, Science and Technology (2008)

Male staff dominate the various ranks in public institutions. Only 8% and 11% of full professors and associate professors, respectively, were female (fig. 7.11). The proportion of females is relatively higher at the junior ranks -- 19% of lecturers; 23% of assistant lecturers; and 21% of tutorial assistants (Table 7.4). Such a skewed distribution, in favor of males, raises questions about why females are a small proportion of academic staff and about their under-representation, particularly at the senior ranks. These questions, and their implications for developing the next generation of female academics, will be addressed later.



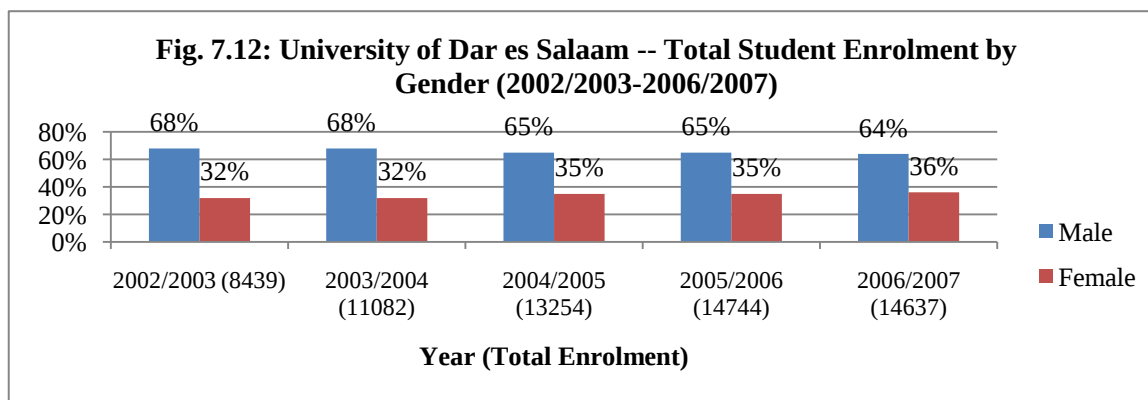
Source: Tanzania Commission for Universities (2008); Ministry of High Education, Science and Technology (2008)

Institutional Profiles

University of Dar es Salaam Student Profile

Total Student Enrolment and Distribution by Gender

Total student enrolment increased from 8439 in 2002/2003 to 14637 in 2006/2007, representing a 73% expansion. Male students constituted the majority of the total student population over the years, even though the proportion of females increased slightly from 32% in 2002/03 to 36% in 2006/07 (fig. 7.12).

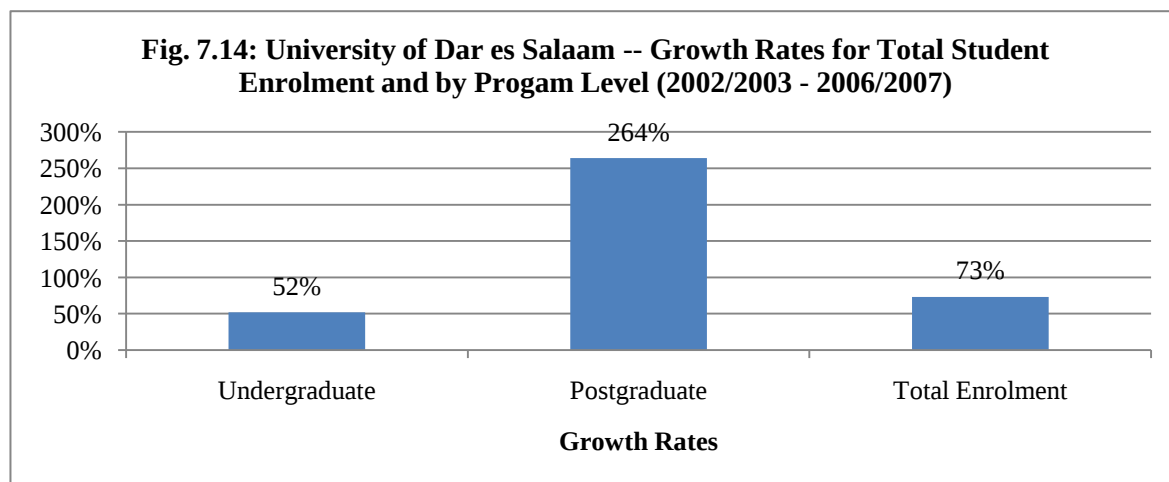
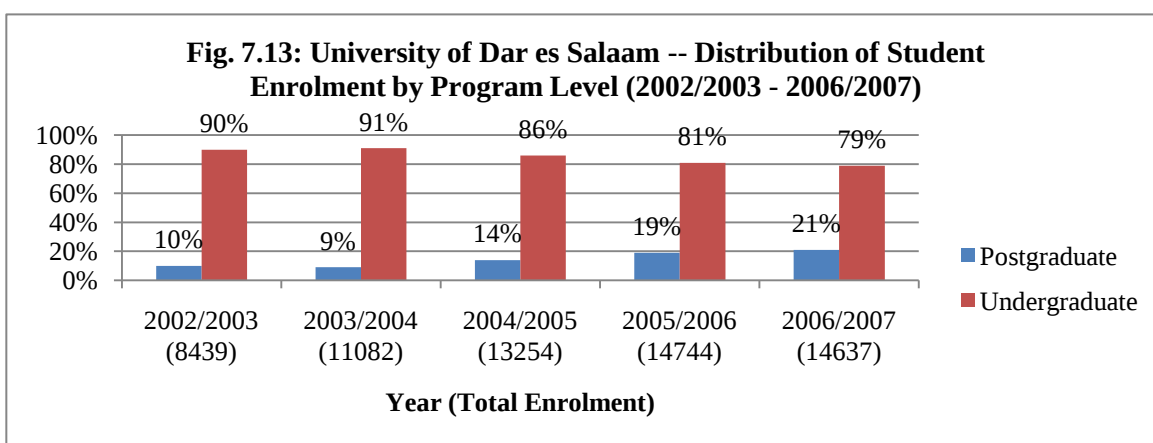


Source: University of Dar es Salaam, 2007

Distribution of Student Enrolment by Program Level

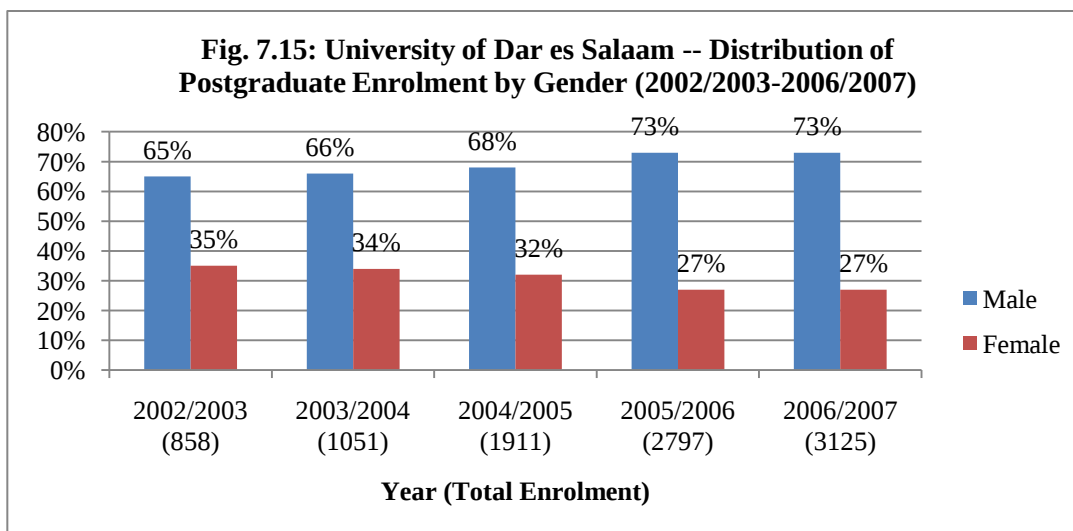
The proportion of postgraduate students, out of the total student population, increased from 10% in 2002/03 to 21% in 2006/07 (7.13). While total undergraduate enrolment increased by 52%, from 7581 in 2002/03 to 11512 in 2006/07, postgraduate enrolments jumped from 858 in 2002/03 to 3125 in 2006/07, representing a phenomenal growth of 264% (fig. 7.14).

On the surface, this is an encouraging trend. It is, however, difficult to ascertain the impact on the development of the next generation of academics since we did not get access to disaggregated data that would have allowed us to determine the proportion of students in programs that have a high likelihood of leading to an academic career.



Distribution of Postgraduate Students by Gender

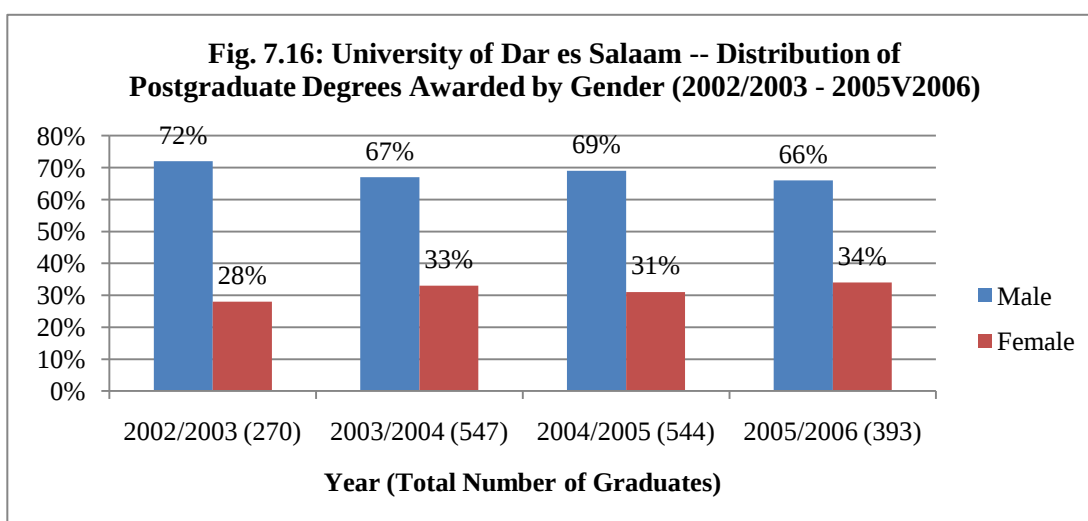
Although the absolute number of female postgraduate students increased over 2002-2007 period, their proportion of the total postgraduate population went down from 35% to 27% (fig. 7.15).



Source: University of Dar es Salaam 2007

Distribution of Postgraduate Degrees Awarded by Gender

The number of students graduating with postgraduate degrees increased from 270 in 2002/03 to 393 in 2005/06, though the numbers in the intervening years were much higher (fig. 7.16). Over the period, the proportion of females receiving postgraduate degrees, generally, hovered around a third of the total (fig. 7.16).



Source: University of Dar es Salaam 2007

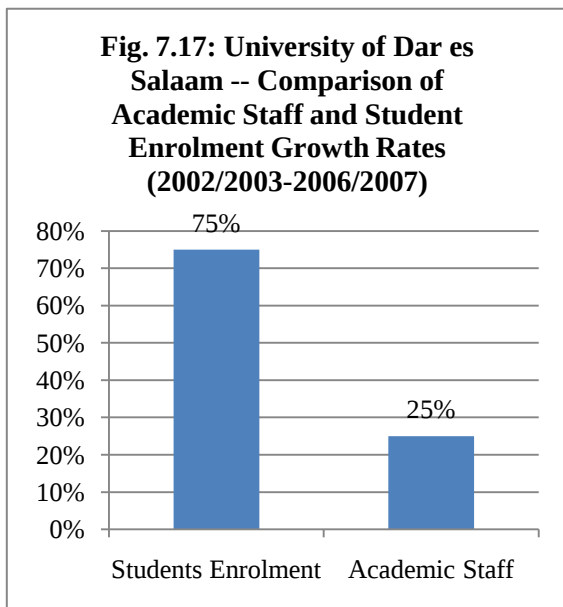
University of Dar es Salaam Academic Staff Profile

It is important to point out at the very beginning of analyses of the academic staff profile that there are major discrepancies in the data provided by the University of Dar es Salaam for different indicators relating to its academic staff. As will become evident in the ensuing

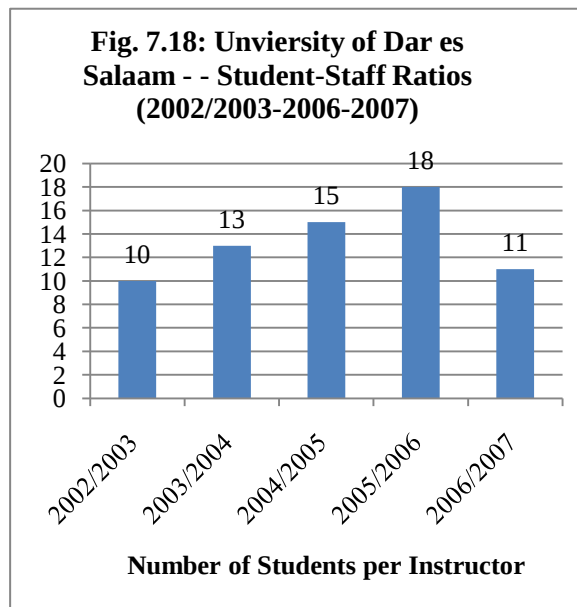
discussion, therefore, there will be inconsistencies in overall staff numbers across various categories of analysis. The issue of data integrity within African institutions will be addressed later on in this report.

Academic Staff Capacity and Enrolment Pressures

Between 2002/2003 and 2006/2007, academic staff numbers went up steadily from 872 to 1094, representing a 25% increase. This growth rate pales in comparison to the rate at which student enrolments expanded over the same period -- i.e., 75% (fig. 7.17).



Source: University of Dar es Salaam 2007



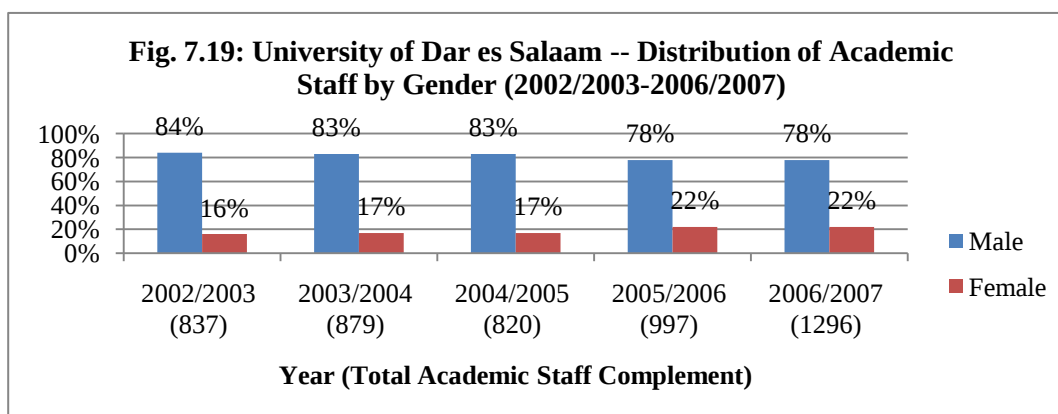
Source: University of Dar es Salaam 2007

At the same time, student-staff ratios also rose from 10:1 in 2002/03 to 18:1 in 2005/06, before slipping to 11:1 in 2006/07 (fig. 7.18). While the significant drop in 2006/2007 looks like a positive reversal of the growing pressure on staff, the reality is that the improvement in the ratio is accounted for mainly by the infusion of a significant number of first degree holders into the professoriate, a move which raises other capacity issues that will be addressed below.

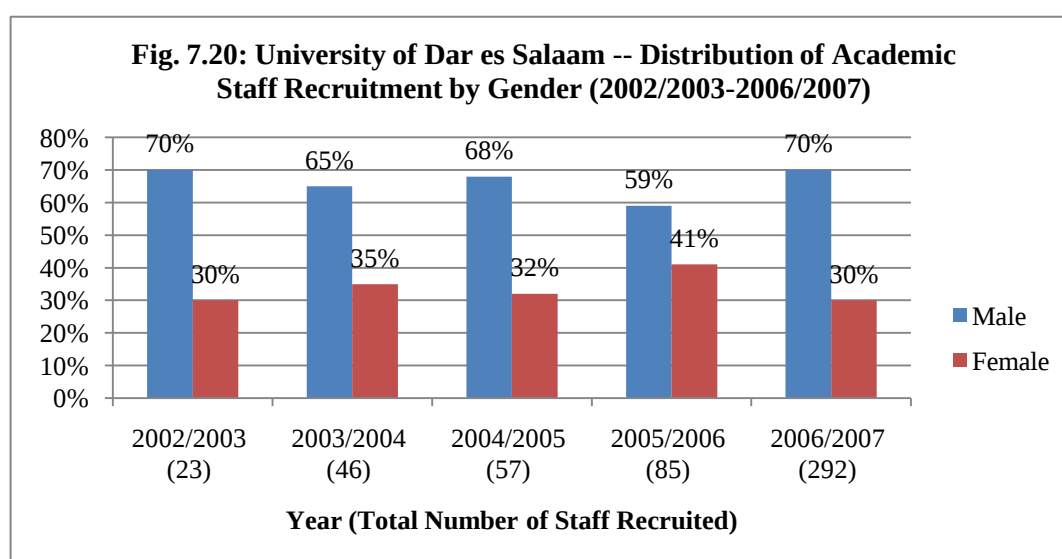
Distribution of Academic Staff by Gender

Male staff made up the majority of academic staff over the 5-year period under review. Until 2005/06, they constituted over 80% of all academic staff. The number of female staff inched up after that date, comprising 22% of the total in 2005/06 and 2006/07 (fig. 7.19).

Analyses of recruitment trends (fig. 7.20) show that the gap between male and female staff may not be closed any time soon. Even though the proportion of females recruited showed some promise, particularly in 2005/2006, the reversal of relative proportions to 2002/2003 levels, in 2006/2007, makes one wonder how sustainable the gains are.



Source: University of Dar es Salaam 2007

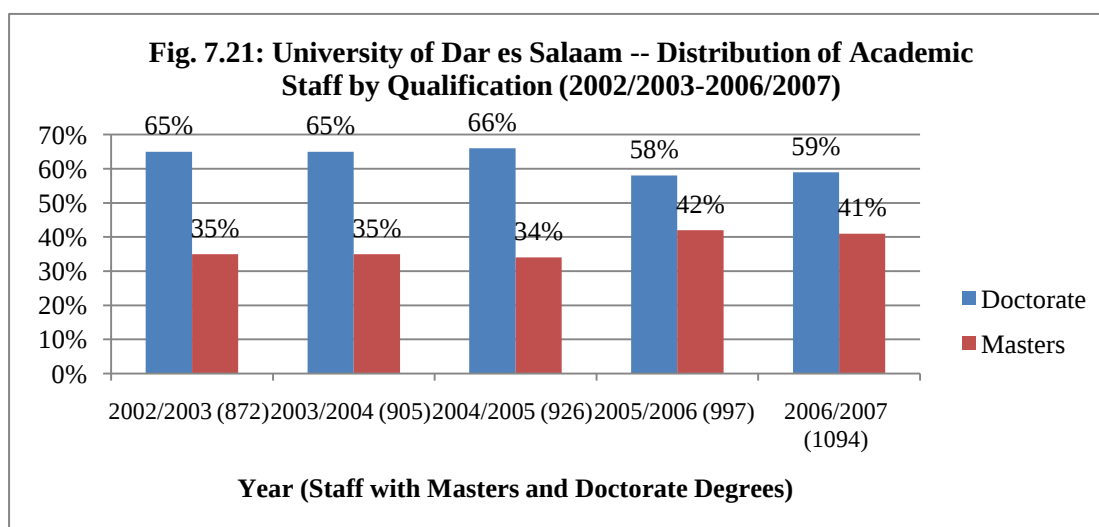


Source: University of Dar es Salaam 2007

Distribution of Academic Staff by Qualification

Available data from the University of Dar es Salaam only provides information on academic staff with doctorate and masters degrees. Our analysis of staff qualifications is, thus, based on that information even though, as will become clear in the discussion of academic staff ranks, there is a large complement of staff with lower qualifications. We cannot, however, include them in the analysis of qualifications because there are discrepancies in the available data sets on qualifications and ranks that make it difficult to isolate those with less than a masters degree or to reconcile the data provided.

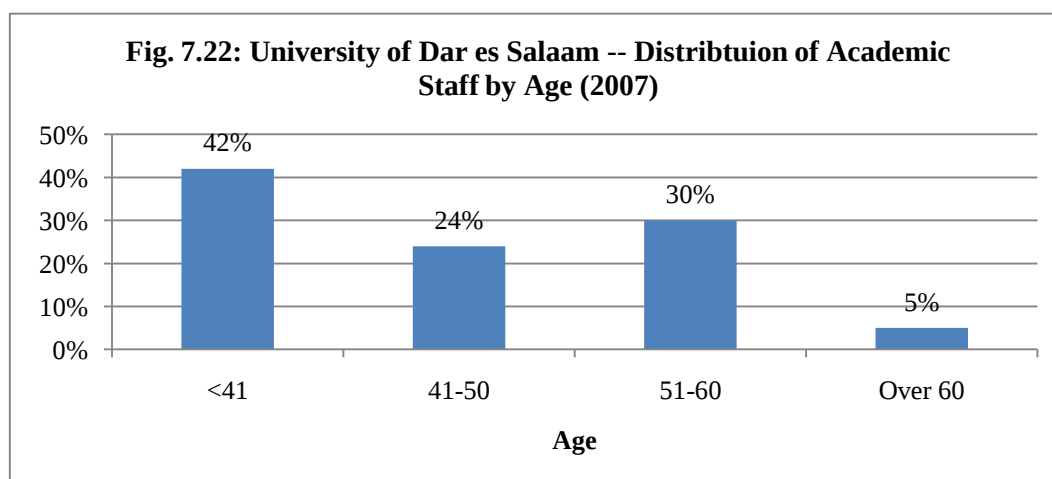
With the preceding caveat having been stated, we will focus on the category of staff with masters and doctorate degrees. In 2002/03, the former made up 35% of this category of staff, while those with doctorate degrees comprised 65% of the number. By 2006/07, doctoral degree holders had decreased to 59% while their counterparts with Masters degrees had climbed up to 41% (fig. 7.20).



Source: University of Dar es Salaam 2007

Distribution of Academic Staff by Age

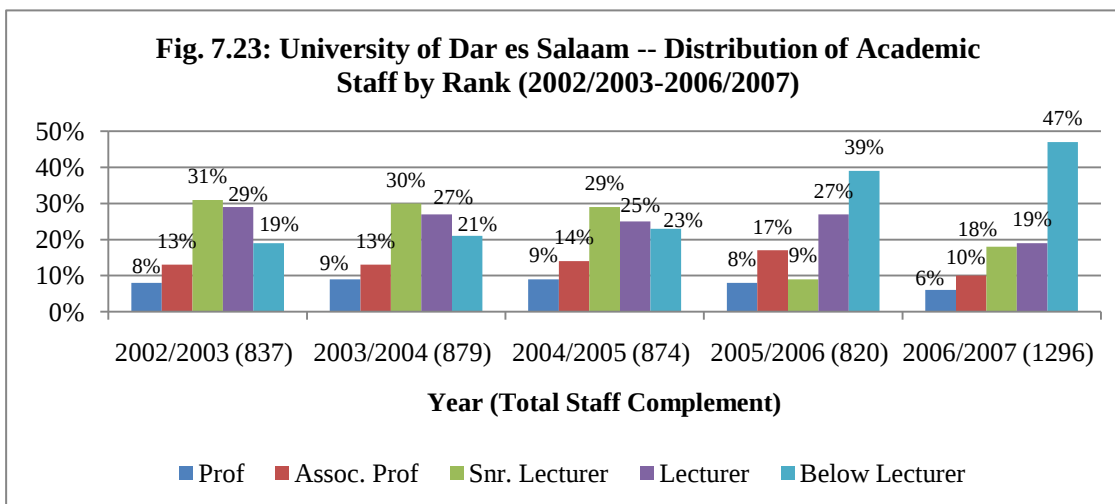
In 2007, 42% of staff was below 41 years of age (fig. 7.22). This represented a significant number of an academic staff complement of 1319, and is a very positive picture. It is, nevertheless, important not to lose sight of the fact that over a third of academic staff were over 50 years old, making it necessary to continue efforts to replace this latter group over the next few years. It will be useful to critically review the qualification of staff members in the under-41 age category to ensure that shortfalls in academic staff complement are not being addressed through a process that brings in a lot of young people without the requisite qualifications. As alluded to earlier, and supported by evidence from the analysis of ranks below, this may, in fact, be happening.



Source: University of Dar es Salaam 2007

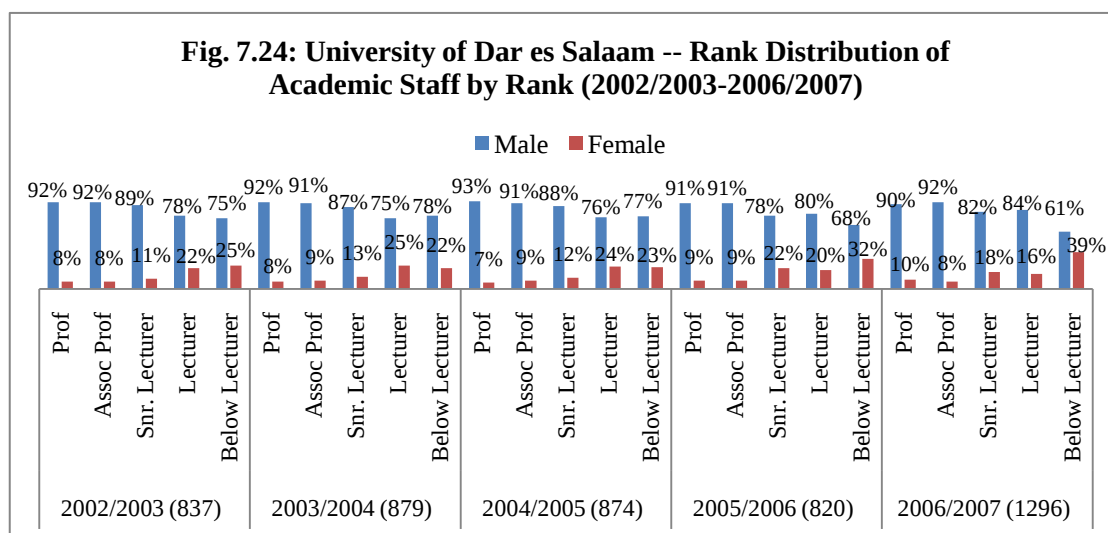
Distribution of Academic Staff by Rank

Over the years, the proportion of staff below the rank of lecturer has increased significantly, outstripping the other ranks in 2005/06 and 2006/07 (fig. 7.28). Their proportion of total staff numbers went from 19% in 2002/03 to 47% in 2006/07 (fig. 7.23). The observations here may be related to those made in respect of the age of academic staff. UDSM seems to be beefing up its staff numbers with first-degree holders. While this may constitute part of the institution's strategy to recruit new and younger staff, the fact that almost half of staff in 2006/07 were at ranks below lecturer may not augur well for the quality of instruction.



Source: University of Dar es Salaam 2007

It is significant to note that females were under-represented at all ranks, and extensively so from Lecturer to Full Professor (fig. 7.24). In 2006/07, they represented only 10% of Full Professors, 8% of Associate Professors, 18% of Senior Lecturers, and 16% of Lecturers (Table 7.16). These

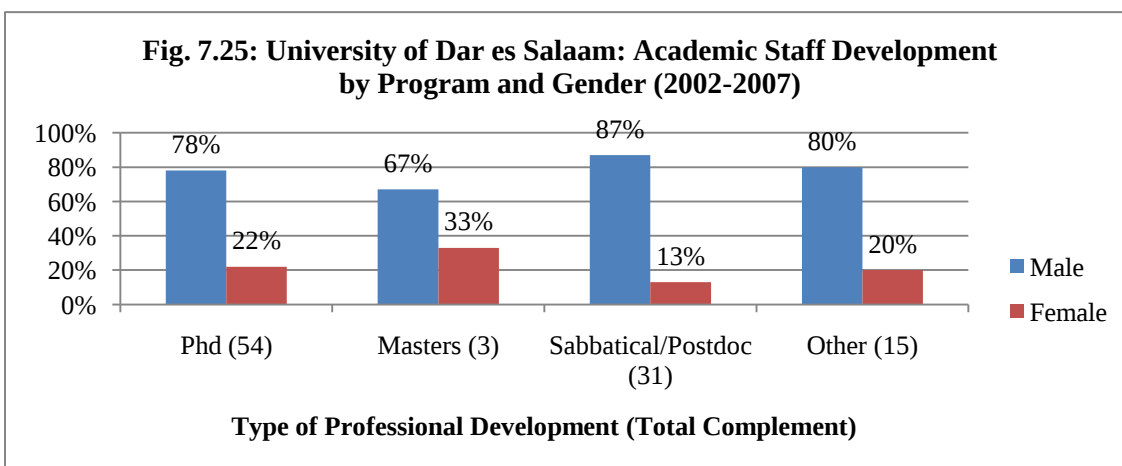


Source: University of Dar es Salaam 2007

represent only marginal changes since 2002/2003. The proportion of females goes up significantly among those with ranks below lecturer, where they constituted 39% of the total in 2006/2007. Over the 5-year period, from 2002-2007, there have been only 33 female Full Professors, out of 372 males; 53 female Associate Professors out of 615; and 155 Senior Lecturers out of 1097. These statistics raise questions about why females are proportionately less represented in academia and why they seem confined to the lower rungs, when they do become academic staff. These questions will be explored later on in the report.

Academic Staff Development

University of Dar es Salaam opportunities for staff development. Between 2002-2007, 54 staff members obtained doctoral degrees, out of which 22% were females (fig. 7.25). Over the same period only 3 staff members obtained Masters degrees. This seems to suggest that, in spite of hiring many staff members without postgraduate degrees, there has not been much success in getting these individuals to obtain advance degrees.



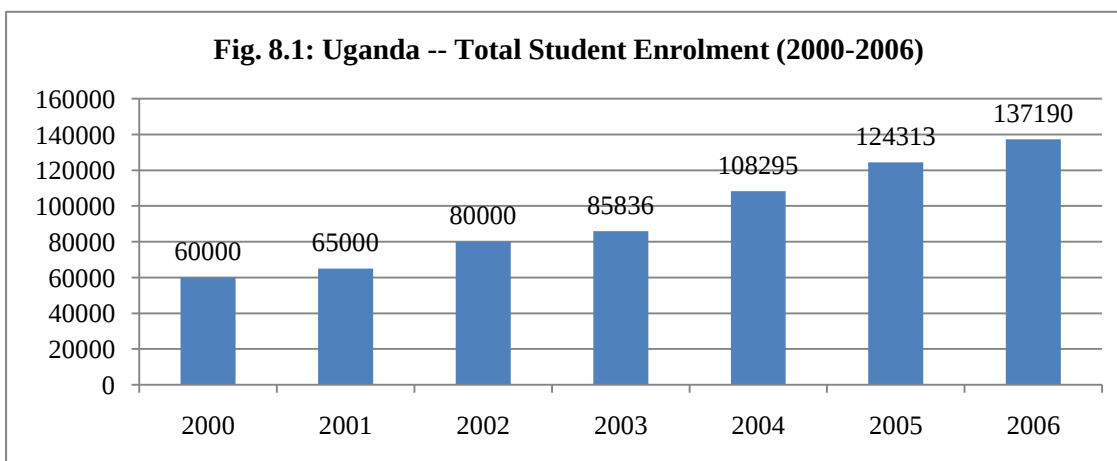
Source: University of Dar es Salaam 2007

SECTION 8 – UGANDA

National Student Profile

Total Student Enrolment

As shown in fig. 8.3, enrolment in Uganda's institutions of higher education increased every year between 2000 and 2006, growing by 129% during the period.



Source: Uganda National Council for Tertiary Education (2007)

National Academic Staff Profile

Academic Staff Capacity and Enrolment Pressures

In 2006, there was a total of 3927 academic staff in universities and affiliated colleges. As illustrated in fig. 8.2, at least 59% of staff were male while, at least, 19% were female. At least 56% of the total number of staff were full-time employees, whereas 21% worked part-time (fig. 8.3). It is not clear from the data what the employment status of the other 23% was. The part-time complement of, at least, 21% indicates that tertiary education institutions are struggling to attract a dedicated complement of staff to meet their teaching and scholarly needs.

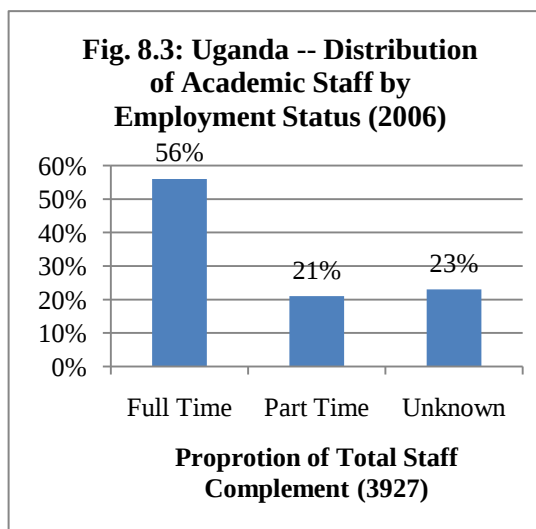
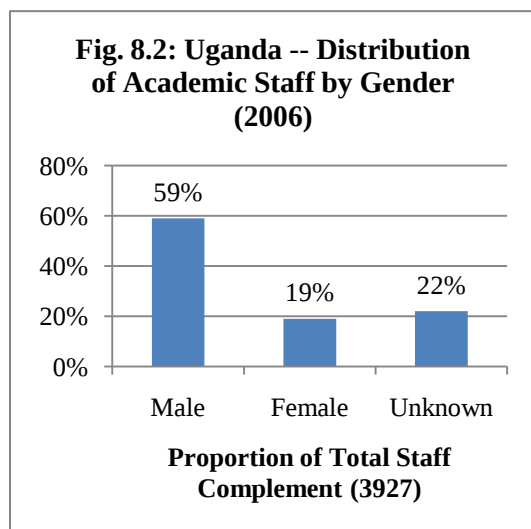
The student-staff ratio in 2006 for universities and affiliated colleges as 49:1, when this is measured based on full-time academic staff. It improves to 24:1 when the total complement of part-time and full-time instructors is used. Clearly, full-time staff are under pressure to cope with expansion in enrolments and institutions are depending on part-time staff to ease the burden.

Distribution of Academic Staff by Qualification

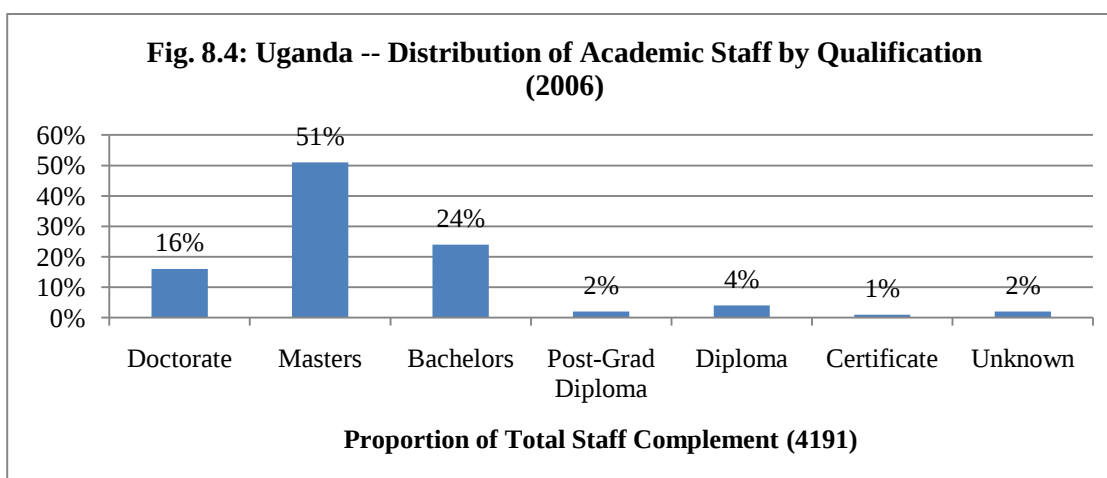
Data published by the Uganda National Council for Tertiary Education (2007) indicates that there were 4,191 academic staff members in universities and affiliated colleges. There is a discrepancy between this figure and the one provided above, by the same institution, in respect of gender and

employment status. As has been mentioned before, the problem of data inconsistency is common among various institutions, and will be addressed later on.

With the recognition of this problem in mind, our analysis shows that the proportion of doctoral degree holders was 16%, compared to 51% for those with masters degrees. It is instructive to point out that almost a quarter of staff had only bachelors degrees (fig. 8.4). The large percentage of staff holding bachelors degrees suggests that the country is facing a significant shortage of staff with the requisite qualifications needed to run credible programs in these institutions. In fact a third of the professoriate, in 2006, had qualifications below the masters level.



Source: Uganda National Council for Tertiary Education (2007)

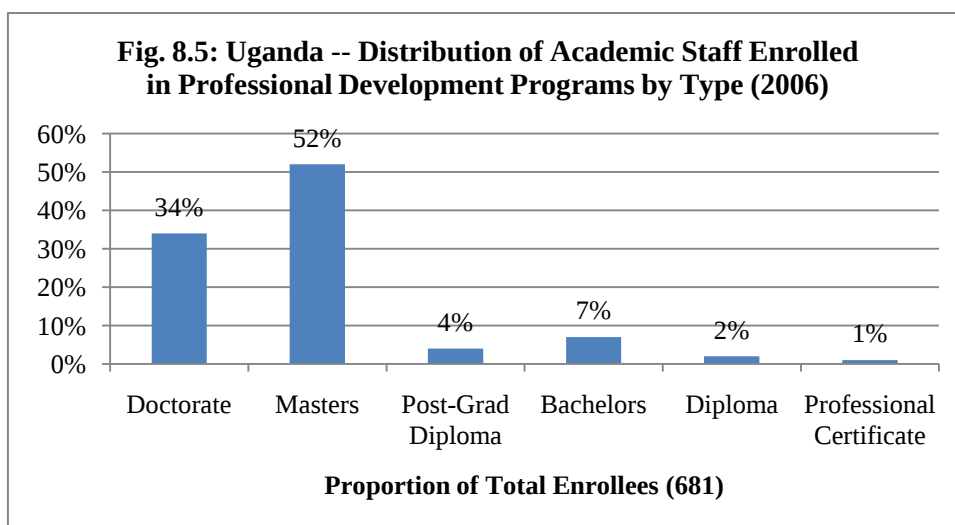


Source: Uganda National Council for Tertiary Education (2007)

Professional Development

In efforts to address this shortage of qualified staff, there are professional development opportunities for staff. This initiative has allowed staff to enroll in various programs, from the

professional certificate level to the doctoral level. In 2006, 34% of those benefiting from professional development initiatives were in doctoral programs while 52% were enrolled in masters programs (fig. 8.5)



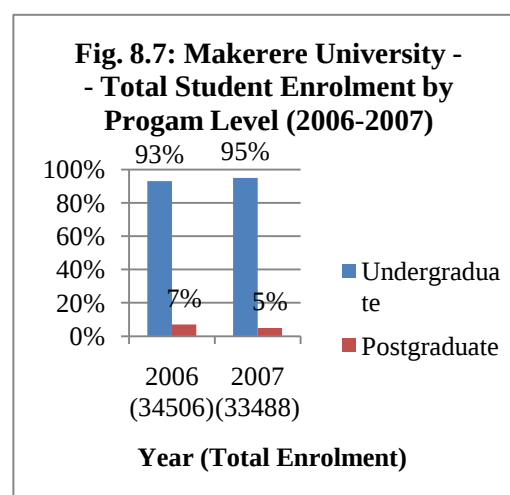
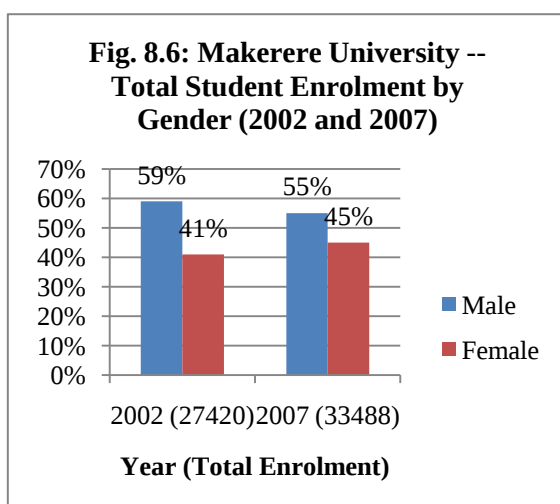
Source: Uganda National Council for Tertiary Education (2007)

Institutional Profiles

Makerere University Student Profile

Total Student Enrolment and Distribution by Gender and Program Levels

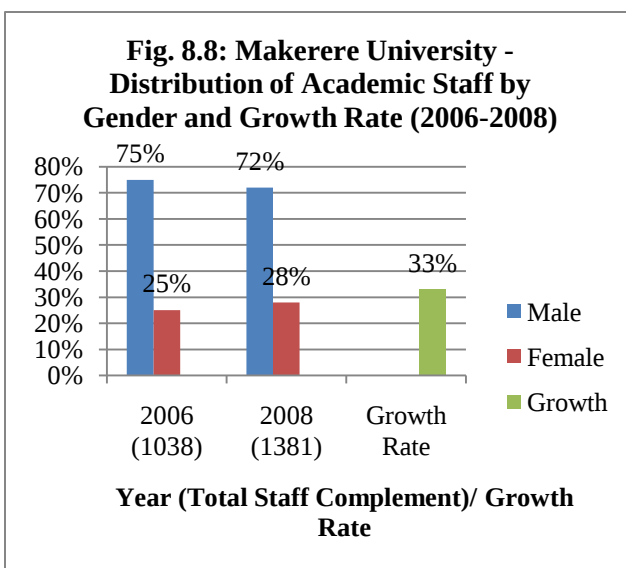
Total Student enrolment at Makerere increased by 22% from 27420 in 2002 to 33488 in 2007. Female enrolment, as a proportion of total enrolment, increased from 41% in 2002 to 45% in 2007 (fig. 8.6). Fig. 8.7 shows postgraduate and undergraduate enrolment for 2006 and 2007, and reflects a drop of postgraduate enrolments from 7% of the total to 5%.



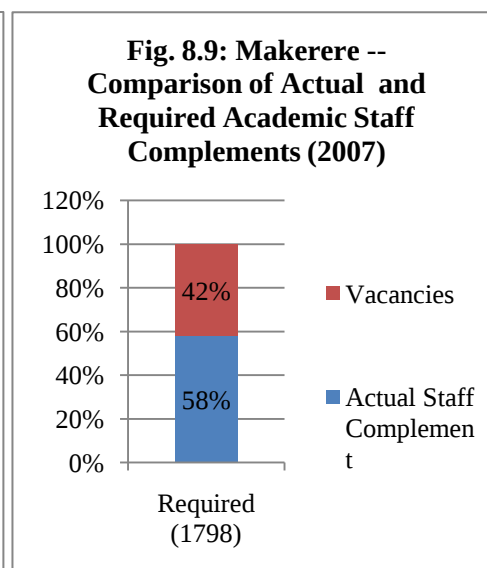
Makerere University Academic Staff Profile

Academic Staff Capacity and Enrolment Pressures

In 2006, Makerere University had a total staff complement of 1038. Of these, 75% were male, compared to 25% female (fig 8.8). By 2008, the total staff complement had increased to 1381, representing a 33% increase over the two-year period. The increase also led to an expansion in the proportion of female staff to 28% (fig. 8.8).



Source: Makerere University (2007)

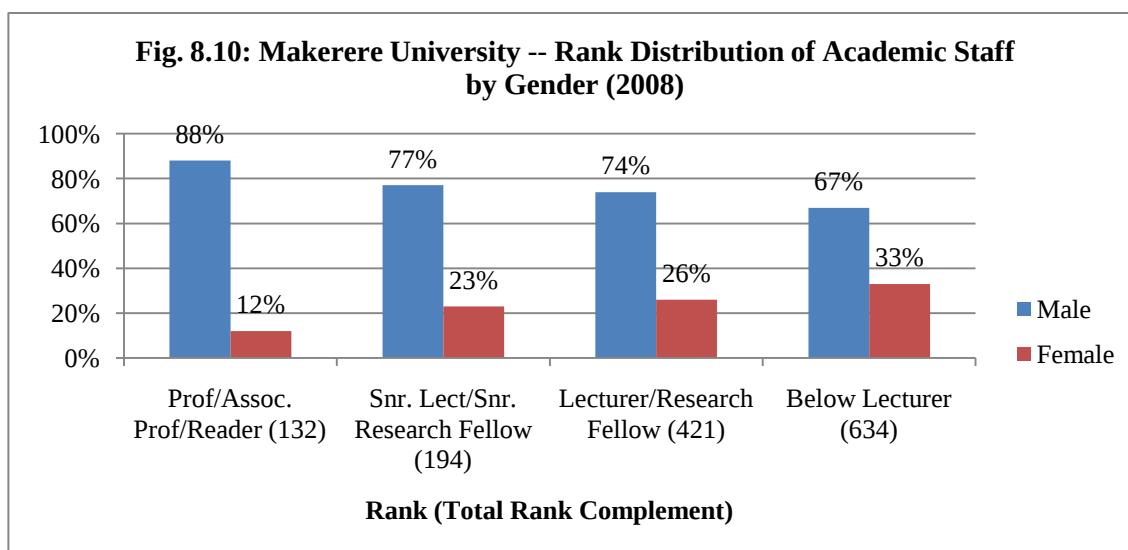


Source: Makerere University (2007)

Unfortunately, we are unable to compare student and staff growth rates because the institution was unable to provide us with data, that showed the complement of the two for two comparable years. Consequently, we are unable to determine the extent to which staff growth kept up with student growth. While an overall student-staff ratio of 32:1, in 2006, was considered "acceptable" by the Ugandan National Council for Higher Education (2007), the vacancy rates at Makerere suggest that the staff complement falls short of what is required to effectively run programs at the university. As fig. 8.9 shows, there was a 42% vacancy rate for academic staff positions across the university in 2007.

Distribution of Academic Staff Rank by Gender

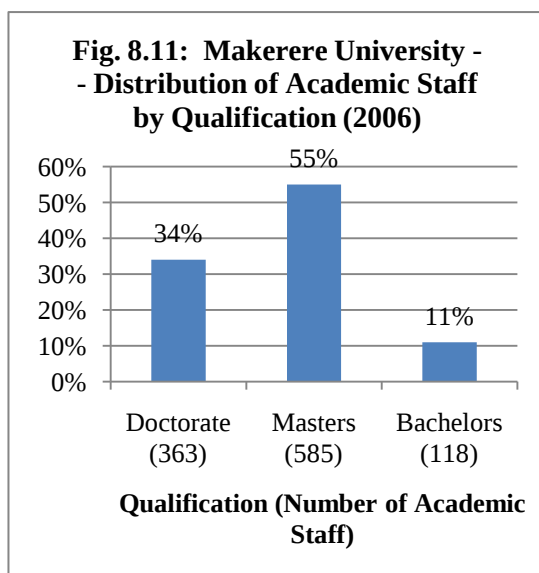
Data for 2008 shows that male staff dominated the senior ranks at Makerere. Only 12% of staff in the professorial ranks were female, while the female composition of the senior lecturer/senior research fellow rank was 23% (fig. 8.10). This skewed rank distribution, as well as the relatively small proportion of female staff, overall, raises questions about the attractiveness and prospects of academic careers for females.



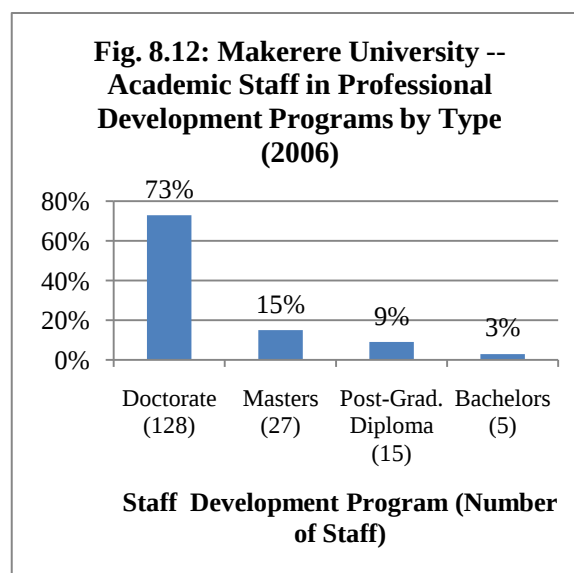
Source: Uganda Tibatemwa-Ekirikubinza (2008)

Distribution of Academic Staff by Qualification

Masters degree holders constituted a significant majority of staff at Makerere in 2006 (fig. 8.11). They made up 55% of the total complement, compared to 34% of their counterparts who had doctoral degrees. It is worth noting that 11% of staff had only bachelors degrees (Table 8.13). The fact that, in 2008, 46% of staff were in a rank category below lecturer (fig. 8.10) clearly indicates that the proportion of staff with less than a masters degree grew significantly between 2006 and 2008. This is because appointments to that rank will generally not be made for someone with masters or doctoral degree.



Source: Ugandan National Council for Higher Education (2007)



Source: Makerere University (2007)

Staff Development

The institution has been making efforts to enhance the qualification of its staff. The emphasis seems to be on doctoral training, as illustrated in fig. 8.12. In 2006, there were 175 staff members enrolled in different programs. Out of these, 73% were enrolled in doctoral programs, 15% in masters programs, and 3% in bachelors programs.

SECTION 9 – COMPARATIVE ANALYSIS

Introduction

Over the last decade, student enrolment in African universities has grown by significant amounts in order to absorb the increasing demand on higher education. "Participation rates are rising and there was a dramatic hike in student numbers in Sub-Saharan Africa in the six years to 2005: from 2.1 to 3.5 million. Mauritius has the highest gross enrolment ratio in the region, 17%, followed by South Africa, while Nigeria's tertiary student numbers nearly doubled to 1.3 million during the six-year period" (MacGregor, 2008).

These developments are reflected in data captured for this study. Enrolments at Stellenbosch University, for example, jumped from 20,421, in 2000, to 23,439, in 2007 – an increase of over 15% in 7 years. Makerere University saw a four-year increase of 22% from 27,420, to 33,488, between the 2002 and 2007. The statistics for the University of Dar es Salaam (UDSM) are even more striking, as student numbers exploded by 73%, from 8,439, in 2003, to 14,637, in 2007. The growth rate for the University of Ghana, between 2000 and 2008 was an astronomical 167%. The only institutions that registered negative growth in student numbers (for the period between 2000 and 2008, for which data is available) were the University of Ibadan (-21% between 2001 and 2006) and Nelson Mandela Metropolitan University [NMMU] (-2% between 2005 and 2006).

The reasons for the drop at NMMU are not immediately clear, but the significant decline at the University of Ibadan appear to be due, to a large extent, on the conscious decision of the institution to reduce undergraduate intake while gradually expanding postgraduate education and the proportion of postgraduate enrolments.

Comparison of enrolment figures at the national level indicates trends similar to the general picture for institutions. In Kenya, for example, enrolment expanded significantly from 59,195, in 2001, to 91,541, in 2005 -- a growth rate of 55%. There were also huge jumps in annual enrolment growth in Uganda between 2000 and 2006, where the number of students registered in universities and colleges expanded by 54% from 60,000 to 92,605. In Mozambique and Tanzania, the respective growth rates were 64% between 2000 and 2004, and 173 between 2002 and 2007.

The expanding enrolments are not necessarily a problem in themselves. They have become challenging because they expose the extent of the capacity deficits that African institutions of higher education face on key indicators that measure their ability to absorb expanding enrolments and to deliver an acceptable quality of education and level of research. In the ensuing sections, we explore some of these key indicators.

Staff Capacity Deficits Vis-a-Vis Enrolment Pressures

The pressure of enrolment growth on the capacity of universities to provide quality education is, undoubtedly, dire, especially as there is no commensurate expansion in academic staff numbers in most institutions. The difference between staff establishment and vacancies is a very good indicator of gaps in human resource capacity and the extent to which existing academic staff are able to meet the institution's own assessment of the complement of staff it needs to carry out its research and teaching responsibilities. Unfortunately, while anecdotal evidence from all the institutions suggest that they do not have a full complement of staff needed to carry out their academic missions, we did not get the relevant information except for one institution – Makerere. Many institutions indicated that the establishment levels that they have were put in place many

years ago and have not caught up with the reality of rapid growth in student numbers over the last couple of decades. The inability to provide up-to-date figures is another manifestation of the dearth of data collection capacity in African institutions, with negative implications for strategic planning around recruitment and retention of staff.

Analysis of the Makerere data is, therefore, based on very conservative numbers. Those numbers are, nevertheless, very significant. The fact that the institution cannot even meet outdated establishment levels says a lot about the depth of the problem. While the establishment for the university in 2004/2005 was 1796, the actual number of staff stood at 1052, showing a deficit of 41%. The deficit is much higher for particular units such as Public Health, Medicine, East African School for Library and Information Science (EASLIS), and Psychology with gaps of 54%, 57%, 62%, and 62%, respectively.

It is clear that total academic staff growth has generally lagged behind student enrolment growth (see figs. 9.1-9.7). Thus, while student numbers at the University of Ghana went up by 167%, between 2000 and 2008, staff numbers only went up by 40% (fig. 9.1). At UDSM, student numbers grew by 73% between 2003 and 2007, compared to a 25% growth in staff numbers (fig. 9.2), while the University of Winneba had a student growth of 54% versus staff growth of 36% between 2004 and 2008 (fig. 9.3). The only exception to the general trend was at the University of Kwazulu-Natal where staff growth outstripped student growth between 2001 and 2007 (fig. 9.4). National level data reflects the general trend found in institutions, as illustrated by Mozambique, South Africa, and Tanzania (figs. 9.5-9.7).

Fig. 9.1: University of Ghana - Growth rates for Students and Staff between 2000 and 2008

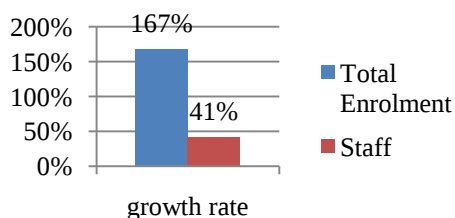


Fig. 9.2: University of Dar es Salaam - Growth Rates for Students and Staff between 2003 and 2007

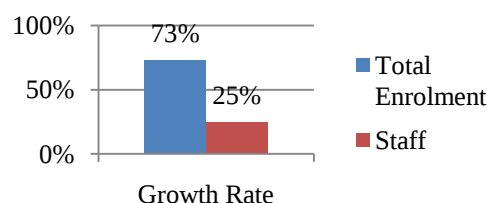


Fig. 9.3: University of Education - Growth Rates for Students and Staff between 2004 and 2008

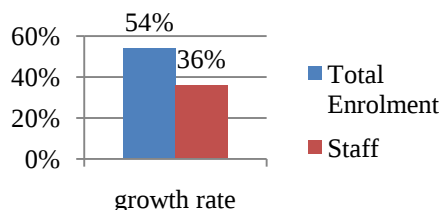
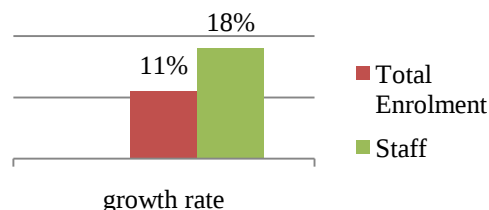
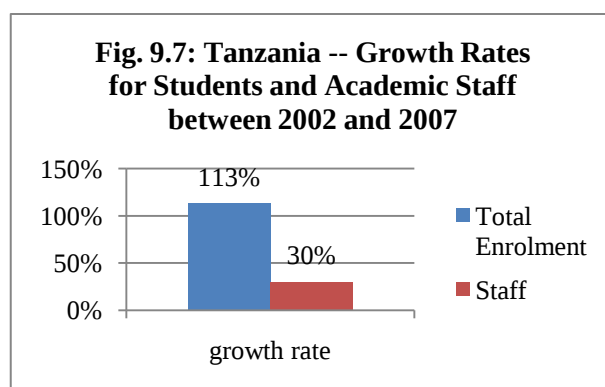
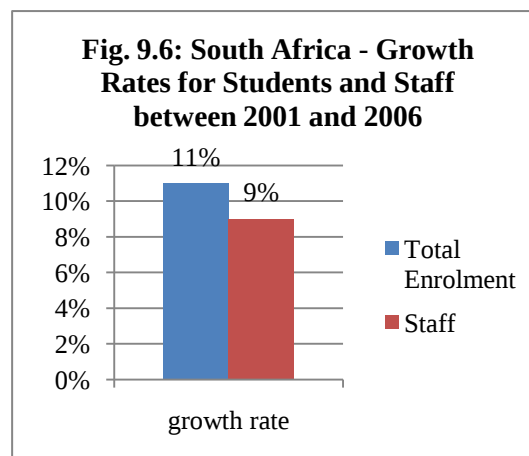
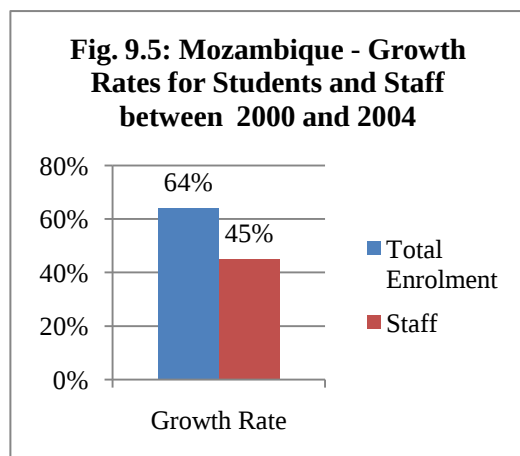
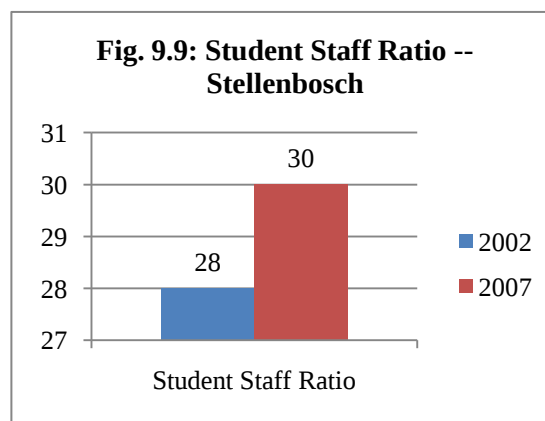
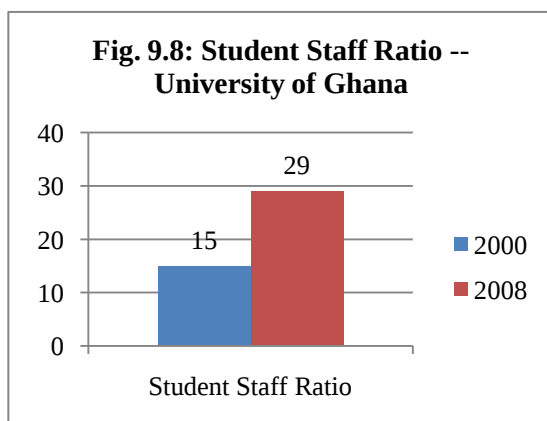


Fig. 9.2: University of Kwazulu-Natal - Growth Rates for Students and Staff between 2001 and 2007

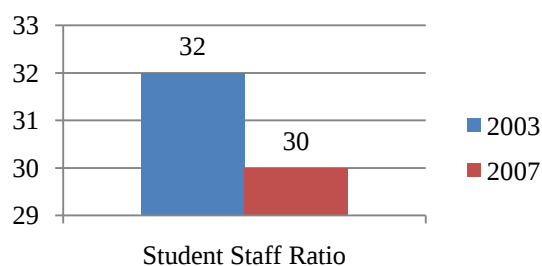




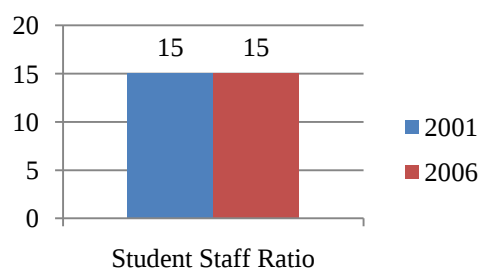
As an inevitable consequence of the incommensurability of student enrolment growth and the absorptive capacity of academic staff, student-staff ratios in various institutions have generally gone up over the years, with a few exceptions. For example, student-staff ratios increased at the University of Ghana (fig. 9.8) and Stellenbosch University (fig. 9.9), decreased at the University of Cape Town (fig. 9.10), and remained constant at the University of Ibadan (fig. 9.11). Table 9.3 and 9.4 show the ratios for several institutions and countries. Country-level data reflect increasing trends as well. In Mozambique, the ratio increased from 26:1 in 2000 to 32:1 in 2004 (fig. 9.12). The comparative ratio for South Africa was 45:1, in 2001, and 46:1 in 2006 (fig. 9.13). In Tanzania, the ratio went from 15:1 in 2003 to 24:1 in 2007 (fig. 9.14).



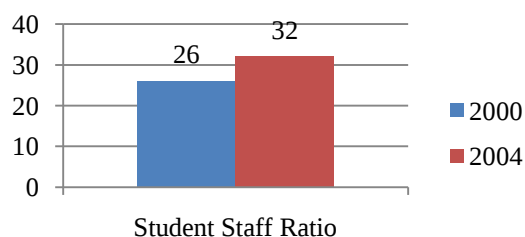
**Fig. 9.10: Student Staff Ratio --
University of Cape Town**



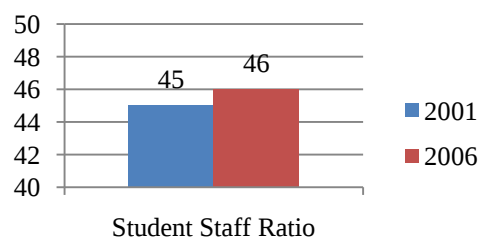
**Fig. 9.11: Student Staff Ratio --
University of Ibadan**



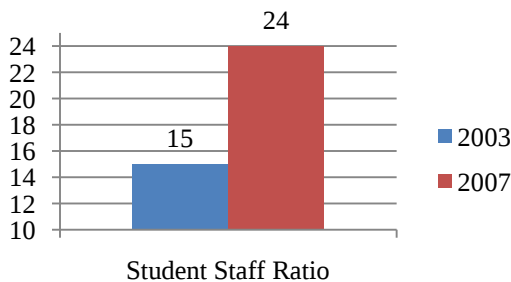
**Fig. 9.12: Student Staff Ratio --
Mozambique**



**Fig. 9.13: Student Staff Ratio --
South Africa**



**Fig. 9.14: Student Staff Ratio --
Tanzania**



Incommensurate staff and student growth rates, as well as high and increasing student-staff ratios put a tremendous burden on academic staff, a factor that has been noted to discourage people from entering the academy, thereby creating a vicious cycle. It must be pointed out that institutional and national ratios tend to belie the fact that there are variations across institutions, faculties and disciplines and so the problem may be more serious in some units.

The student-staff ratios provided in fig. 9.11, above, for the University of Ibadan may give the impression of a very positive situation, but such an impression will not take cognizance of other developments. This is because the steady ratio has been achieved partly as a result of the university authorities refusing to expand intake in the context of crumbling infrastructure, dwindling staff numbers, and inadequate budgetary support from government (Tettey, 2006). In

fact, what has happened is a reduction in overall student numbers over several years, as authorities at the institution strive to maintain a modicum of quality education. The University of Ghana (UG) made a similar decision in 2006.

While the strategy of reducing, or freezing, enrolment might help address the needs of specific institutions at particular moments, the implications at the national level are, obviously, portentous. This is because, notwithstanding the expansion in the number of students attending Africa's institutions of higher education, the enrolment ratios on the continent are significantly lower than that of any other region of the world, with only 5% of Africa's eligible age group having the opportunity to pursue tertiary education (UNESCO, 2007, p. 59). With increasing demand for tertiary education and the need for requisite human resources, for socio-economic development at home and global competitiveness in a variety of areas, reductions in intake will be a disaster over the medium- to long-term.

However, the ability of existing or new institutions to absorb the increasing numbers will depend, to a very large extent on an adequate pool of instructors, something that is not available in Africa countries. Julius Okojie, Executive Secretary of Nigeria's National Universities Commission (NUC), lamented recently that "universities in Nigeria lack the needed qualified manpower [sic] to steer the academic system to a level where they could produce quality graduates" (This Day, 2008). In the next section, we explore the capability of African universities to address this deficit through their current postgraduate programs.

Cultivating the Next Generation of Academics -- An examination of the Current Pipeline

Postgraduate students constitute the pool from which the next generation of academics will be drawn. It is important, therefore, to evaluate not only their overall numbers but, more critically, how many of them are registered at levels that are necessary to ensure a high caliber future professoriate, i.e., masters and doctoral levels. While it is encouraging that most institutions have seen an increase in the proportion of postgraduate students, relative to undergraduates, the trend in others is toward a reduction in that proportion.

Proportion of Postgraduate Enrolments

For example, the University of Ibadan increased the percentage of postgraduate students from 18% of the total student population in 2001 to 35% in 2006 (fig. 9.15), whereas the University of Ghana saw a 50% reduction in that proportion from 14% in 2000 to 7% in 2008 (fig. 9.16). The University of Kwazulu-Natal also saw a drop in the proportion of postgraduates from 32% in 2000 to 26% in 2007 (fig. 9.17). The proportion of postgraduates across various countries was generally low – with Ghana, Nigeria and South Africa showing figures of 4%, 7% and 15%, respectively (fig. 9.18)

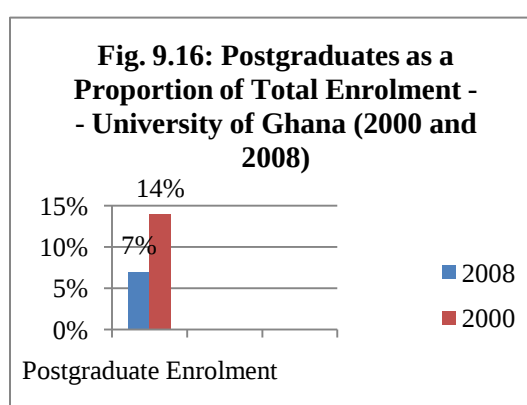
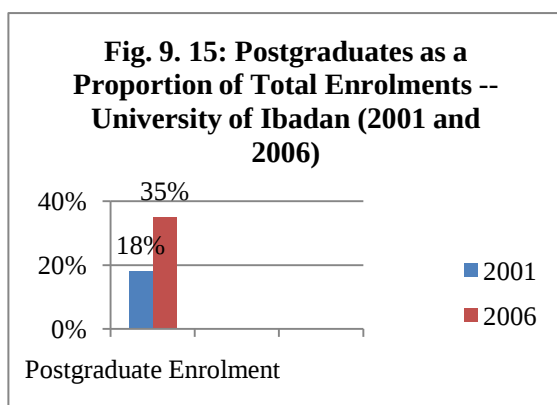


Fig. 9.17: Postgraduates as a Proportion of Total Enrolments -- University of Kwazulu-Natal (2000 and 2007)

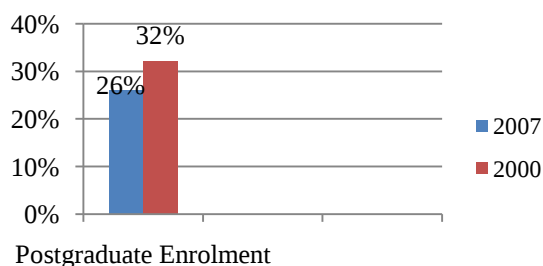
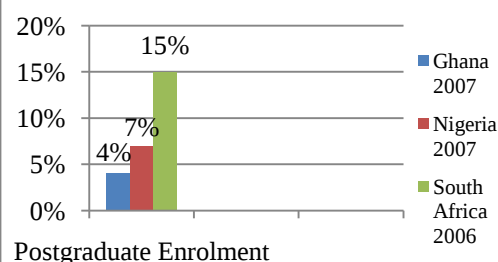


Fig. 9.18: Postgraduates as a Proportion of Total Enrolments -- Country Comparisons for Latest Year Available



Analysis of Doctoral and Masters Enrollees as a Proportion of Total Postgraduate Enrolments

When postgraduate students are disaggregated according to masters and doctoral enrollees, an instructive picture emerges. Only 5% of postgraduate students at the University of Ghana were enrolled in doctoral programs in 2000, with their numbers increasing marginally to 6% in 2008 (fig. 9.19). The proportions for the University of Kwazulu-Natal were 7% and 10% in 2000 and 2005, respectively (fig. 9.20). National data for South Africa shows that only 1% of postgraduate enrolments were at the doctoral level in 2000 and 2006 (fig. 9.21). Masters enrolments have,

Fig. 9.19: Masters and Doctoral Enrolment as a Proportion of Total Postgraduate Enrolment -- University of Ghana

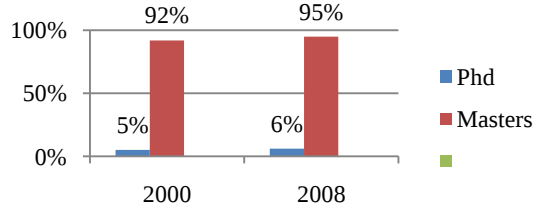


Fig. 9.20: Masters and Doctoral Enrolment as a Proportion of Total Postgraduate Enrolment - University of Kwazulu-Natal

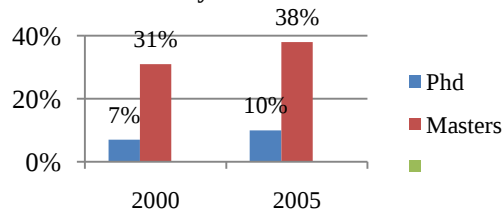
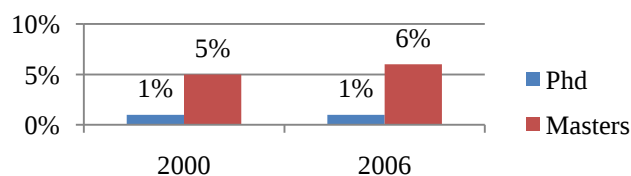


Fig. 9.21: Masters and Doctoral Enrolment as a Proportion of Total Postgraduate Enrolment -- South Africa



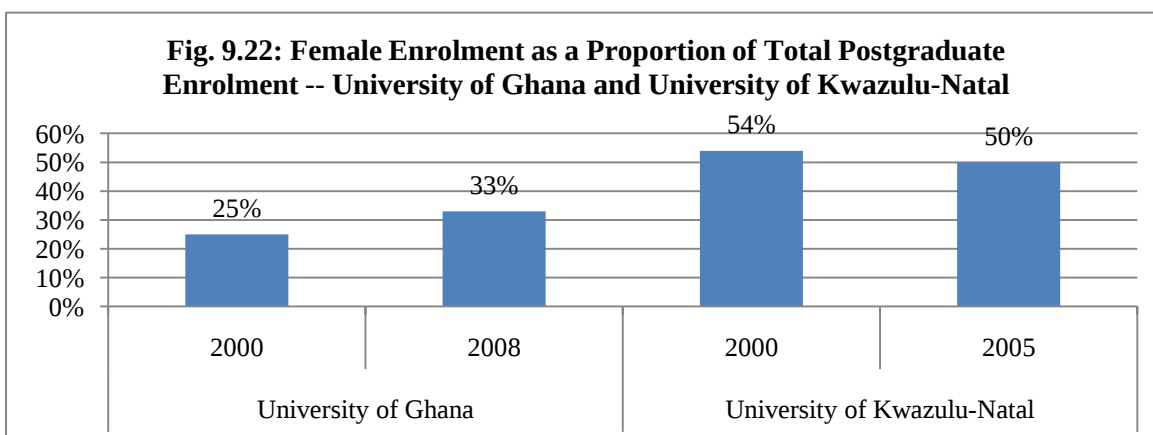
generally, increased over the years. However, as data from South African universities show, the combined proportion of masters and doctoral enrollees makes it clear that the percentage of postgraduate students constituting the potential pool from which to draw the next generation of academics is still very limited. They constitute less than half of the total postgraduate student complement at the University of Kwazulu-Natal, and less than 2/3 at Nelson Mandela University and the University of Cape Town. Their proportions are higher at Witswatersrand where they make up around 3/4 of the postgraduate complement.

Analysis of Postgraduate Enrolments by Type of Programs

Another important consideration -- beyond the level at which students are enrolled -- is the programs in which they are enrolled. The kinds of programs in which students are enrolled provide a good indication of whether graduates are likely to complement the existing pool of the professoriate in the future. The institutional profiles show that the majority of postgraduate students are pursuing programs at levels, and in fields, that are meant to provide them with opportunities for career advancement outside of the academy, with little potential to regenerate the professoriate by a significant factor. A significant number of postgraduate enrolments, over the past decade, has, for example, been in professional business and management programs (eg. MBA). This trend is not unique to African institutions, as universities in various countries respond to market demands (Canadian Association of Graduate Studies. As noted in the Canadian context, “driving this demand the need for highly-skilled graduates in professionally-oriented disciplines such as business and management, architecture, engineering, mathematics, and computer and information sciences. Education and humanities disciplines have seen decreases in master’s-level enrolment” (Canadian Association of Graduate Studies, 2006, pp. i and ii).

Disaggregating Postgraduate Enrolment by Gender

Available data show that postgraduate enrolments are dominated by males, even though South African institutions are closer to parity. At the University of Ghana, females made up 25% of postgraduate enrolments in 2000, growing to 33% in 2008 (fig. 9.22). The University of Kwazulu-Natal saw a reduction in the proportion of postgraduate females, between 2000 and 2005, from 54% in 50% (fig. 9.22). Hopefully, the UKZN trend will recover upwards, instead of going further down. Any hope of increasing the low proportion of females in the academy has to start with efforts at improving their numbers in postgraduate programs.



Post-Graduate Completion and Drop-Out Rates

While postgraduate enrolments are a useful proxy for determining the potential pool of future academics, an even more crucial determinant is the percentage of those enrollees who complete their programs. While we do not have data for all the institutions and countries studied, the following illustration from the University of Kwazulu-Natal is instructive in alerting us to the need for such data and its importance for any strategic plans at growing the number of future academics.

In the Faculty of Health Sciences, at UKZN, the average drop-out rates for thesis-based Masters students, for 2000-2006, was about 56% while the corresponding figure for their doctoral counterparts was about 35%. With more than half of Masters students and over a third of doctoral students dropping out of their programs, the potential pool of the next generation of academics is significantly impacted in a negative direction.

The statistics are even more worrisome when the related indicator of completion rates is assessed. The rates for thesis-based masters and doctoral students average about 11% and 10%, respectively, for the 2000-2006 period. With only a tenth of these cohorts graduating, there is obviously a huge disconnect between intake and output, with serious implications for replenishing the professoriate with requisite numbers and appropriate levels of training. The situation described above shows that there has not been much change in Subotzky's (2003, p. 375) assessment that South African graduation rates "are generally low against NPHE benchmarks, and need to be enhanced."

Analysis of Output Data for Masters and Doctoral Programs

While enrolment figures are useful in telling us about the potential pool from which we can draw future academics, they do not provide good insights into how many bodies are actually qualified and available to fill places in the academy.

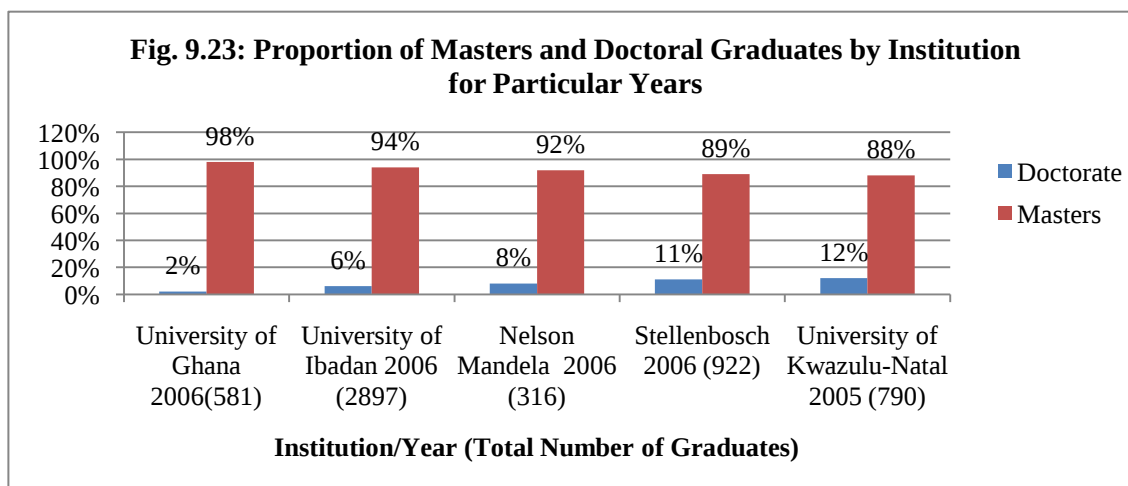


Fig. 9.23 shows the number of graduates at doctoral and masters levels for several institutions. It illustrates the fact that only 2% of graduates at the postgraduate level received doctorate degrees

at the University of Ghana in 2006. This represents 11 students out of 581 graduates. Of these, only 18% were female (fig. 9.24). The number of masters graduates was higher at 570, but only 32% of them were female (fig. 9.24). Only 30% of the 182 doctoral graduates at the University of Ibadan, in 2006, were female (fig. 9.24). It is clear that the proportion of doctoral graduates, relative to their masters counterparts, is quite small.

To put the total numbers of masters and doctoral graduates, as a proportion of total postgraduate output, in perspective, let's draw from South African data. In 2006, only 6% of postgraduates from Nelson Mandela Metropolitan University obtained masters degrees, while just 1% received doctoral degrees. The corresponding proportions for Stellenbosch University, in the same year, was 14% and 2%, respectively. Of the total number of postgraduate degrees given country-wide in 2001 and 2006, just a quarter was for masters programs and only a mere 1% was for doctoral programs.

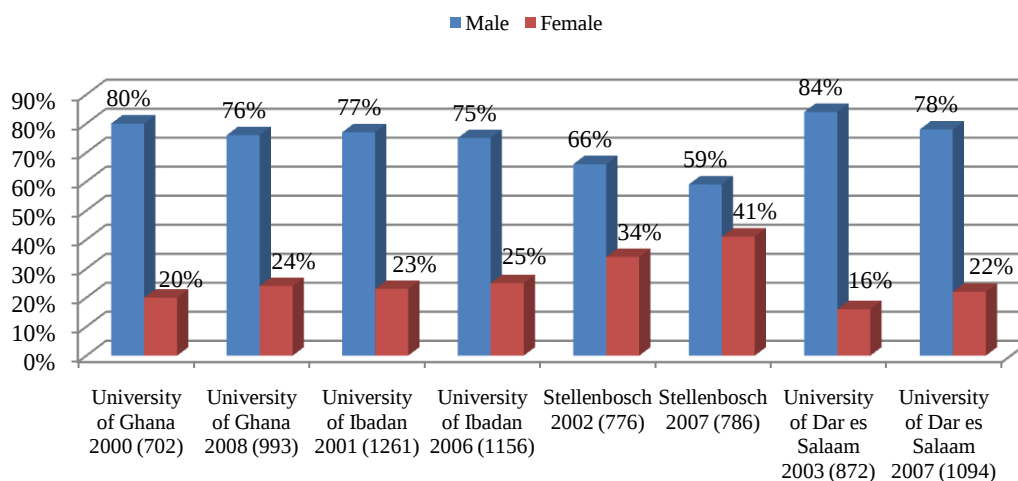
Analysis of Existing Staff Complement and Implications for Developing the Next Generation of Academics

In this section we take a very close look at various dimensions of the current staff composition of the institutions studied and explore the implications for growing the next generation of academics within the African academy. We also examine the extent to which these dimensions make it imperative that the development of the next generation of African academics be a urgent priority for all stakeholders.

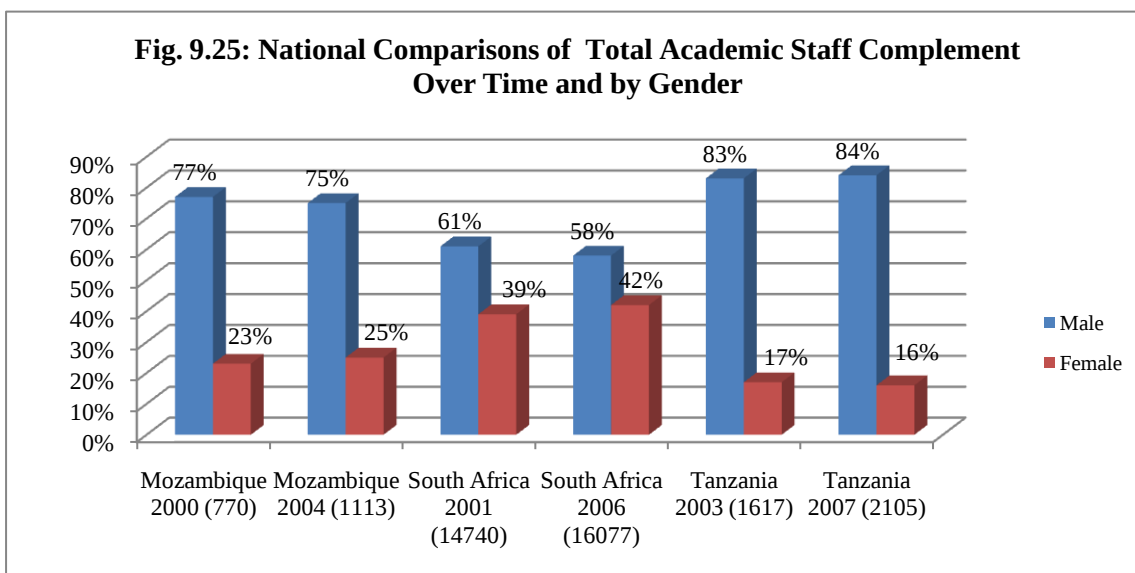
The Gender Gap in Academic Staff Complement as Lost Potential

One of the gaps that African Universities need to close, as they struggle with staff shortages and think about regenerating the professoriate, is the gender gap. While the proportion of female staff in various institutions has improved over the years, it is clear, from fig. 9.24, that they still constitute a small fraction of academic staff. At the University of Ghana, the proportion went from 20% in 2000 to 24%, in 2008. At the University of Ibadan (UI), the respective numbers were 23% and 25% in 2001 and 2006. Stellenbosch University saw a significant jump in female staff proportion, which sat at 41% in 2007. University of Dar es Salaam saw a significant jump in female staff proportion, which sat at 16% in 2003 and 22% in 2007.

Fig. 9.24: Institutional Comparisons of Total Academic Staff Complement Over Time by Gender



Available national-level data corroborates the evidence from the institutional data (see fig. 9.25). Females made up only 23% and 25% of academic staff in Mozambique, in 2000 and 2004 respectively. In Tanzania, the proportions even dropped, from 17% in 2003 to 16% in 2007. The trend in South Africa is very encouraging with the percentage of female staff going up from 39% in 2001 to 42% in 2006.



The gender gap is significant for a variety of reasons, not the least of which is the fact that a potential source of academic staff is not being tapped. A second significance of the gender gap, which is also related to graduate student output, is the fact that there are not enough females in the professoriate to serve as role models who can attract prospective female academics or mentor those already in their institutions. The disparities between male and female staff numbers are brought into sharper relief when we look at certain faculties or fields of study. For example, only 6% of academic staff at both the Business School and the Faculty of Engineering Sciences, at the University of Ghana, are female (University of Ghana Basic Statistics 2006).

An Ageing Professoriate and the Need for Replenishment

The urgency of the need for initiatives that help to build the next generation of academics in African universities is made clear by the fact that the current crop is aging very fast, with no commensurate expansion in the numbers of young scholars entering the profession. Only 20% of Obafemi Awolowo University's staff in 2006/2007 were 40 years old or younger, compared to 39% over 50 years old. In view of the fact that the mandatory retirement age is 65, these figures give cause for concern about the future of the academy. The fact that around 11 %of staff at OAU, in the two years for which data is available, were past the retirement age just amplifies the extent of the problem. Figs. 9.26-9.28 provide illustrations of age distribution within various other institutions and the range across them.

Data for University of Education – Winneba (UEW) is very disheartening, as only about 8% of staff are under 40 years of age, while a little over 57% were above 50 years of age in 2008 (fig. 9.27). A cursory look at UKZN elicits optimism, because 41% of staff was under 40 years in 2001 as well as in 2006 (fig. 9.29). However, the fact that 42% of academic staff here had less than a master's-level qualification, and that many of these individuals are in this age group, requires that we critically interrogate positive age-related numbers in the context of academic staff qualifications. After all, increased numbers, without the requisite quality and level of training, is not enough to build the capacity necessary to provide appropriate instruction and training for students, thereby ensuring a suitable caliber of next generation academics needed for the 21st century. Expansion in bodies without attention to staff development, to ensure quality, does not augur well for the future. Witswatersrand University is better positioned, with almost 40% of staff under 40 years of age in 2008, and a significant number of staff with masters or higher degrees. It is important to point out, however, that, even at Witswatersrand, about a third of staff (32%) were over 50 years. This means that a significant number of senior scholars will be retiring in the next decade. National-level data for Ghana echoes the general concern about an ageing professoriate, with 41% of staff over 50 years (fig. 9.31).

Fig. 9.26: University of Education Winneba -- Academic Staff by Age

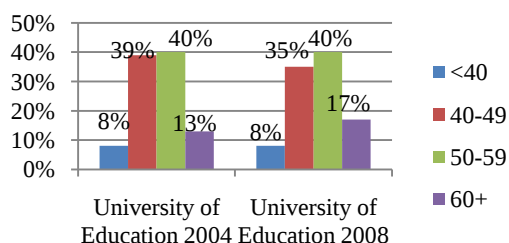


Fig. 9.27: University of Kwazulu-Natal Academic Staff by Age

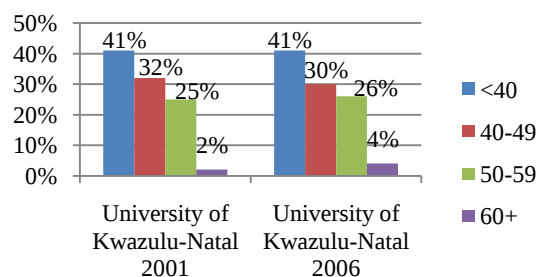
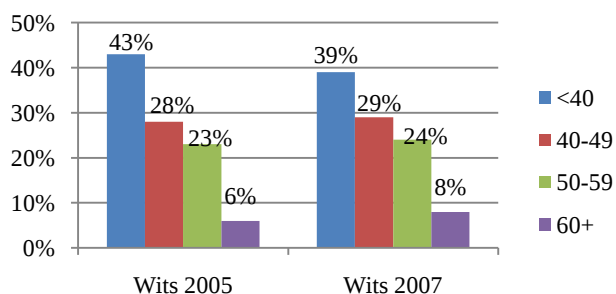


Fig. 9.28: University of the Witswatersrand Academic Staff by Age



In the midst of these staff shortfalls, it is worrying that institutions are losing current staff through resignations, mostly, in order to explore better employment opportunities elsewhere. Data for the University of Witswatersrand for 2006 and 2007 show a worrying pattern where most of the resignations are by staff who are under 40 years of age. About two-thirds of those who resigned

in 2006 and 2007 were under 40 years of age. In view of the fact that the people in this age category constitute the relatively new scholars, their departure raises questions about the ability of the institutions to attract and retain the next generation of African scholars if the trend continues.

Academic Staff Qualifications and Implications for Developing a High-Caliber New Generation

The quality of any higher education system is determined, not only by the number of people teaching in it, but even more importantly, by the qualifications of its academic staff. One significant measure of the capability of the professoriate to provide quality research and instruction is doctoral level certification.

Fig. 9.29 shows that most universities had relatively fewer doctoral degree holders than masters degree holders. Only 19% of staff at the University of Education -- Winneba had doctorate degrees in 2008. It is instructive that in 2006, masters and doctoral degree holders, together, constituted only 58% of the total staff complement at UKZN. There were exceptions to the above pattern of more masters, than doctorate, holders. These were Rhodes University in 2005, with 49% of staff having doctorates; University of Cape Town in 2006, with 9%; and University of the Witswatersrand in 2007, with 53%. Clearly, all these institutions have to redouble their efforts to ensure that they are staffed by academics with the highest terminal degrees in their fields.

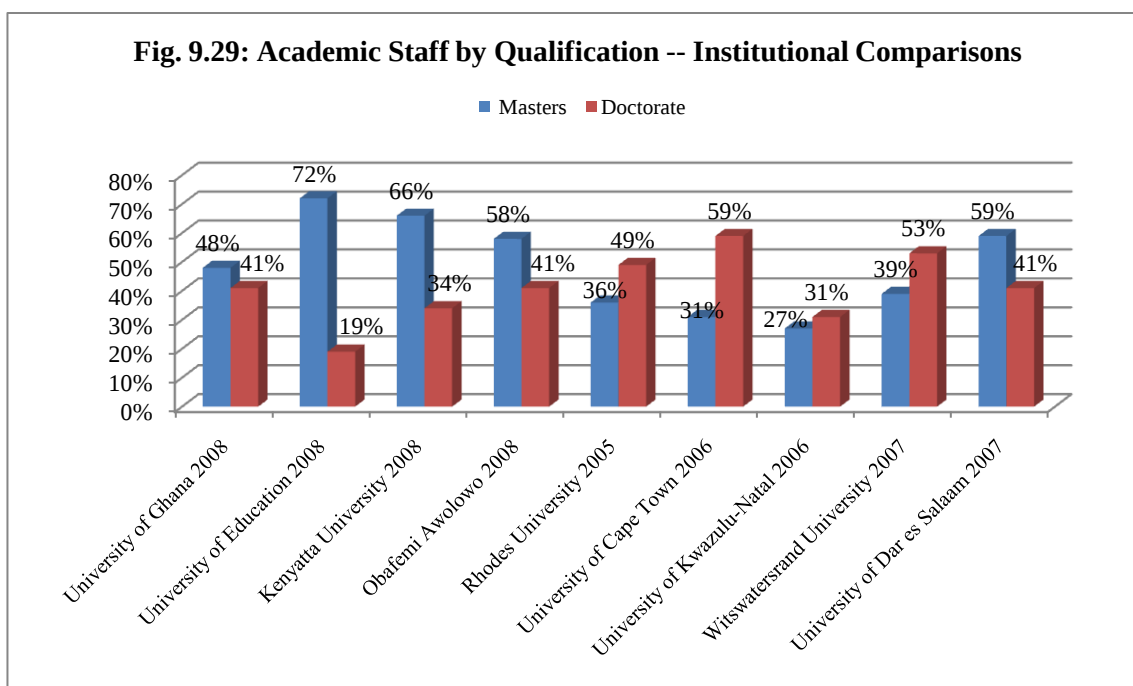
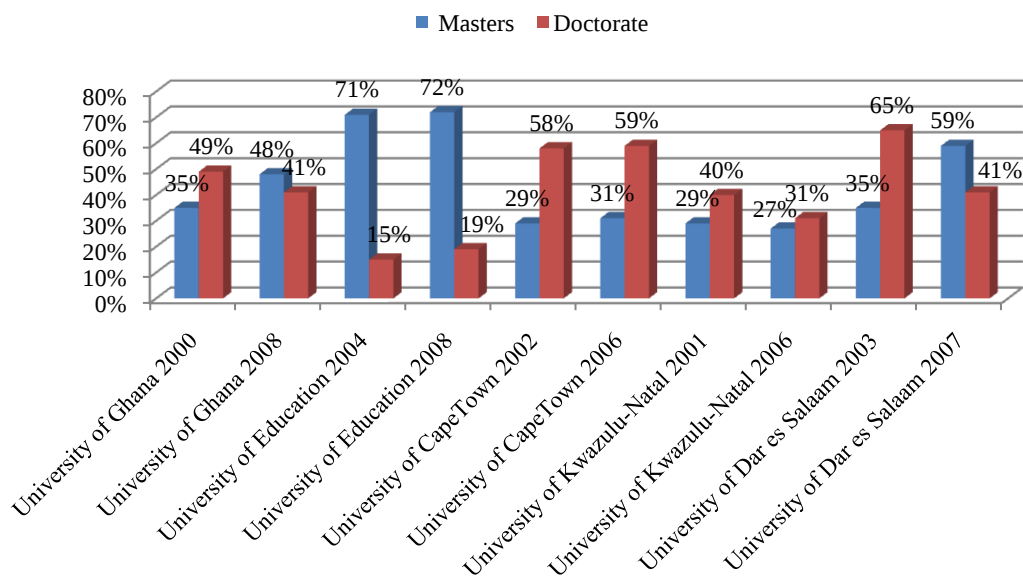


Fig. 9.30 allows us to see trends in the proportion of staff with different qualifications. It shows some worrying trends. The University of Ghana, for example, saw the percentage of staff with doctorates go down from 49% in 2000 to 41% in 2008. In the same vein, the University of Kwazulu-Natal registered a drop from 40% in 2001 to 31% in 2006. The University of Dar es Salaam also experienced a downward slide from 65% in 2003 to 41% in 2007.

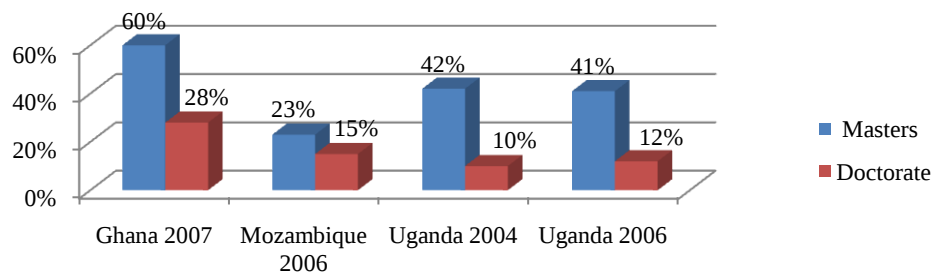
Fig. 9.30: Trends in Academic Staff Qualification by Institution, Different Years



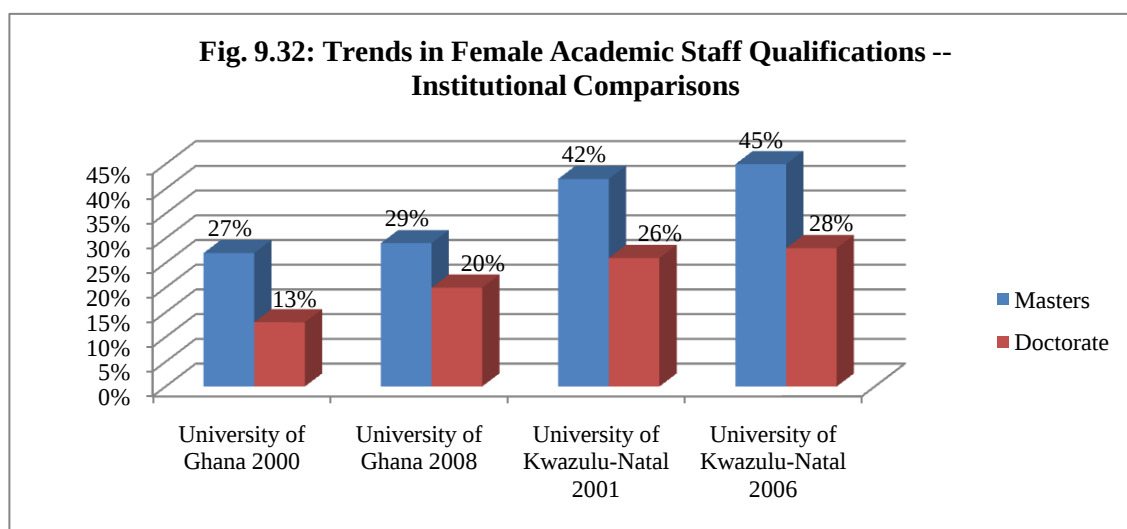
There are, at least, three significant implications to these trends. The first is that there is a new generation of staff being hired who do not have the best possible qualifications to undertake their teaching and research mandates. The second is the potential for these trends to perpetuate a vicious cycle whereby institutions in these countries are incapable of training many doctoral level students, because they do not have the human resource capacity to do so, or do a poor job if they try to. Either way, the quality of the next generation of the professoriate may be compromised in some way, especially since many of these institutions are not in a financial position to train many of their potential members abroad. Finally, the potential for intra-regional doctoral training is severely handicapped by the fact that, apart from Witswatersrand, there is no institution with a doctoral complement of, at least, half of its staff.

The picture is even more sobering when we analyze staff qualifications at the national level. Only 28%, 15%, and 12 %, respectively, of staff in Ghana, Mozambique and Uganda had doctorates in the latest year for which data is available (fig. 9.31).

Fig. 9.31: Academic Staff by Qualification -- National Comparisons



Proportions of males with masters and doctorate degrees have been consistently higher than those of females with such degrees (fig. 9.35), even though the proportion of the latter has been increasing as illustrated by the University of Ghana and the University of Kwazulu-Natal. In the former, females made up 27% and 13%, respectively, of masters and doctorate holders in 2000. By 2008, these proportions had increased to 29% and 20%. In the case of the University of Kwazulu-Natal, the percentage of masters degree holders who were female went up from 42% in 2001 to 45% in 2006. The percentage of doctorate staff who were female also improved marginally from 26% to 28% during the period. The implications of the relatively low proportions of female staff with these degrees are similar to those discussed in relation to the skewed gender distribution of academic staff as a whole.



Professional Development for Staff Capacity Building

Various universities have staff development initiatives that are meant to cultivate the next generation of academics and to improve on the qualification of staff in general. Kenyatta university had 191 of its staff enrolled in doctoral programs in 2006, out of which 33% were female. At the University of Witswatersrand, 10%, 12% and 10%, respectively, of all staff were undertaking doctoral programs in 2005, 2006, and 2007, while 18%, 19%, and 22% of staff were enrolled in masters programs. Data from UDSM shows that 15 staff members were enrolled in doctoral programs in 2007, of which 20% were female. Makerere had 27 of its staff in masters programs and 128 in doctoral programs, in 2006. Uganda's national-level data for the same year indicates that 52% of staff pursuing further studies were in masters programs, compared to 34% in doctoral programs. The foregoing not only shows a continuing need for staff development to shore up capacity, but reveals the extent of the need for some institutions such as Witswatersrand where the proportion of current staff enrolled in programs is quite significant.

Significance of Rank Distribution for Regenerating the Academy

As we discuss the next generation of academics, we should not lose sight of the fact that a reasonable distribution of scholars across the various ranks helps to build a solid community of scholarship. Established scholars mentor younger/newer ones, thereby helping to build or maintain a culture of excellence within an institution. Julius Okojie, Executive Secretary of

National Universities Commission of Nigeria, points out the consequences of not having this reasonable distribution of ranks:

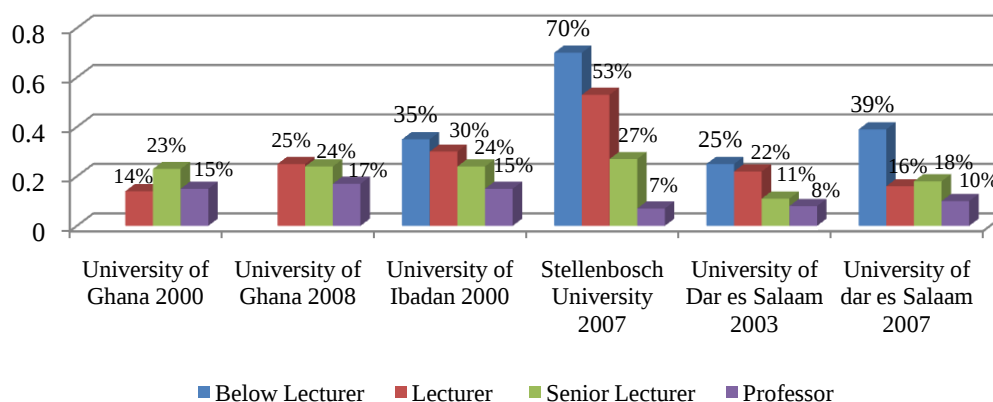
“Today we are talking of the issue of the quality of teachers in the system, a survey which is the pyramid structure, revealed that the system is deformed. Today, we are expecting 20 per cent of the staff to be reader and above, 45 per cent to be senior lecturer and others, lecturer grade 1 and below, but what do we have, 61per cent are lecturer grade 1 and below, so how can you fight a battle with scout masters?” he said (This Day, 2008).

In all the institutions for which data is available, apart from UDSM, lecturers made up the majority of staff. At the University of Ghana, 48% of staff, in 2008, were at the rank of lecturer. The figure at the University of Ibadan, in 2006, was 43%, while those for Rhodes and UKZN were 38% and 36%, respectively. At UDSM, the majority of staff (47%) was made up of those below the rank of lecturer. In 2007, those below the rank of lecturer constituted 56% of academic staff in Nigerian universities, a picture that, obviously, explains the concern expressed above by Okojie.

Another significance of looking at rank is to get a sense of how it correlates with gender. As noted earlier, there is value to having female academics in universities to serve as role models and mentors. Even more important is the need for them to be established in their professions. This gives them the clout to push for gender-sensitive initiatives and to provide leadership on a variety of fronts. Furthermore, if upward mobility for female staff is seen as a difficult proposition, there is a strong likelihood that women will not see academia as a career worth pursuing, further diminishing the capacity of these institutions to increase the number of qualified staff. Fig. 9.34 vividly portrays the extent to which women at various institutions are consistently under-represented within all ranks, but especially so at the Professorial ranks. The latest data show that only 17%, 15%, 7%, and 10% of staff at the professorial ranks were female at the Universities of Ghana, Ibadan, Stellenbosch and Dar es Salaam.

It is interesting to note that their highest proportion is at the level below lecturer, for those institutions that have this rank. It was most staggering at the University of Stellenbosch in 2007. This pattern suggests that females are either unable, for whatever reasons, to gain upward mobility from this rank, or that institutions are making strenuous efforts to increase the pool of female staff by providing them with the opportunity to enter the academy at this level. Further research is needed to ascertain which of these scenarios is reflected by the data.

Fig. 9.33: Proportion of Female Academic Staff at Various Ranks -- Institutional Comparisons



Conclusion and Recommendations

The foregoing analyses reveal clearly that huge expansions in overall student enrolment are increasingly overwhelming African institutions in the absence of a corresponding increase in academic staff capacity. The resultant capacity deficit means "vacancy rates in university staff positions frequently run between 25 percent and 50 percent" (World Bank, 2008, p. 53).

This discrepancy in growth rates can be attributed to a variety of factors. Among these is the unattractiveness of academic positions as conditions of service in universities fall behind those in other sectors of the economy and opportunities outside the continent beckon some of its brightest minds (see Tettey, 2006; Mihyo, 2007). The data also reveals a relationship between postgraduate student enrolment, graduation rates, and injection of fresh blood into the academy. Clearly, the proportion of postgraduate students in many African universities is low and decreasing in some cases. Mouton (2008, p. 29) notes, for example, that of the 31,229 students enrolled at the University of Cape Coast during the 2005/2006 academic year, only 17 and 172 were in doctoral and masters programs, respectively. To make matters worse, there are low graduation rates and high drop-out rates in several fields, meaning that the output of graduates vis-a-vis intake leaves a lot to be desired. Under these circumstances, the capacity of Africa's institutions of higher education to serve as vessels for generating appropriate numbers of good quality products to shore up their own capacity for intellectual sustainability is diminished. Consequently, institutions are having difficulty replenishing academic staff numbers at requisite levels, leading to a situation where the current age distribution is skewed towards those who are in the twilight of their careers.

The gender dimension of postgraduate enrolments and their implications, not only for the composition of the future professoriate but also its absolute numbers, cannot be gainsaid. Data adduced for this study show significant gaps in the proportion of male and female enrolments at the postgraduate level. This skewed distribution is, unsurprisingly, replicated in the make-up of academic staff. Concerted efforts have to be put in place to encourage female enrolment in postgraduate programs, support them to stay in those programs, ensure that they are able to complete their programs successfully, and mentor them to pursue academic careers. These efforts will lead to growth in female staff who can then serve as role models and mentors for subsequent generations of female students, and help them sustain their careers when they become academics.

The large discrepancy between postgraduate intake and output numbers can be attributed to several factors (see Koen, 2007), among which are the following. There is insufficient funding for postgraduate studies, which means that many students are unable to focus on their studies, thereby forcing them to take a long time to complete or dropping out. Part of the blame can also be laid on the shoulders of supervisors who do not provide adequate and constructive guidance to students, leading to frustration and loss of interest in academic careers. Furthermore many institutions do not have clearly articulated and transparent expectations of students and supervisors, and do not have mechanisms in place to effectively track progress. As has been noted in other countries, "the additional workload that graduate students generate for faculty is generating concerns on many campuses regarding the ability of faculty to take on and adequately support and supervise even more graduate students" (Association of Universities and Colleges of Canada, 2007, p. 37). Some observers have also argued that the deterioration in the human resource and infrastructural capacities of institutions have led to poor quality graduates who are unable to cope with the rigors of postgraduate education.

Related to the problems of postgraduate training is the question of whether there should not be a rethinking of graduate program accreditation to ensure that resources are concentrated in certain

institutions that have the potential or capabilities to offer good quality programs. Many institutions offer postgraduate programs for which they do not have the appropriate caliber of staff and resources to meet the intellectual needs of their students. It will be useful to explore options that allow the development and support for centers of excellence in particular fields at national and regional levels, instead of the increasing ubiquity of programs devoid of quality – a phenomenon that will only get worse if privatization of tertiary education is not accompanied by stringent regulations and quality standards.

We must hasten to add that quality problems are not the exclusive domain of private institutions. There are several programs in established public universities that have not been reviewed in years to ascertain their quality, relevance and relative position vis-à-vis competitor programs. They are, therefore, unable to attract excellent students who can constitute a pool of potential academics, or only draw mediocre intakes who face difficulties in-program and/or lack the competence needed to advance the intellectual mission of their institutions. The success of universities in fulfilling their academic mandate is critical to the enjoyment of public support for their needs, state responsiveness to their request for financial assistance, and synergies with other stakeholders such as business and industry. Failure to meet the expectations of these groups only erodes the institutions' credibility and, hence, ability to build collaborative networks needed to facilitate their goals.

Even regions of the world that are far advanced in higher education and postgraduate training recognize the imperative of shoring up their capacities in these areas because they know the tremendous catalytic potential of such training in helping advance human development in the 21st century. Such an imperative is even more salient for African countries if they are to make even modest progress in the areas defined in the Millennium Development Goals. It, therefore, behooves governments, national tertiary education bodies, universities, and the private sector to work together to develop creative and complementary funding models that promote high quality postgraduate training. As noted by the World Bank (2008, p. 109),

national R&D efforts are more likely to be sustainable when they are grounded in national postgraduate programs and the professional networks that emerge around them. This linkage has borne fruit in Brazil, Chile, and India, where coordinated government policy initially fostered master's (and subsequently PhD) programs, actively encouraged research, and tied these expanding research capacities to their national agricultural research programs. ... Here, also, competitive funding mechanisms are an effective means of developing programs of strength in postgraduate teaching and research.

It is commendable that various institutions are already engaged in revenue-generating initiatives that have led to some expansion in postgraduate training. There is, however, a need to be cautious in pursuing these efforts so avoid the perpetuation of skewed trends whereby these expansions are taking place in narrowly, short term, market-determined fields such as business. This requires strategic graduate program planning that ensures a healthy balance between revenue-generating motivations behind postgraduate program development and the urgency of building excellent, capacity-sustaining and -enhancing areas of research and teaching. Support for postgraduate program development should not be exclusively or overly determined by serendipity or market-driven exigencies.

African institutions and countries have to acknowledge the fact that they do not have the ability to, individually, develop expertise in all fields. They should, therefore, work together to expand and improve on existing initiatives that seek to build regional and sub-regional nodes of research

and training. Among such initiatives are the Africa Health and Population Research Center, the Africa Economic Research Consortium, and the West African Postgraduate Medical College

So far, we have discussed the foundational issues that need to be addressed in order to develop and enrich the pool from which future generations of academics can be drawn. The next crucial issue is to explore what needs to be done to attract them to, and retain them within, the universities.

Just as mentoring of undergraduate and postgraduate students is a very important mechanism for getting them through their programs and interested in an academic career, it is also of vital importance in sustaining young scholars as they make their way through their professional careers (Klasen and Clutterbuck, 2002; Mathews, 2003). Institutions need to have well-organized mentoring programs in place, within each department or faculty, that match new colleagues with committed, exemplary mid-career and/or established ones. The established academics will help the their new colleagues acquaint themselves with important career-advancing and career-fulfilling strategies, provide them with guidance and support as they navigate the challenges of the academy, and involve them as collaborators in various research endeavors.

The increasing student-staff ratios outlined in the national and institutional profiles present a daunting challenge to the professoriate, as a whole, but particularly so for those at the early stages of their career. The workload that comes with responsibility for large student numbers imposes significant career-stalling burdens on young scholars. The anxiety that comes with such a burden, in a context that demands high standards of research productivity, can discourage potential academics. In order to address this concern, institutions need to provide relief to those in the early stages of their careers while helping them to gain skills needed to meet career expectations. This can be done by giving them course releases, not assigning them the most highly-subscribed courses, and give them access to professional development opportunities that enable them to acquire useful pedagogical skills, including those needed for handling large classes, and to obtain an aptitude for balancing the multiple demands of academia and personal life (see Austin, 2002, p. 99. Institutions' sensitivity and responsiveness to young employees' work-life circumstances is particularly helpful in attracting and retaining female academics whose careers tend to be significantly compromised by the contending demands of home and work.

The evidence presented in this study suggests that there is a relative paucity of doctoral degree holders in the African academy. Apart from the University of the Witwatersrand where 53% of staff held doctoral degrees, less than half of all staff in the remaining institutions had doctorates. Of even more concern is the trend of declining proportions of doctorate holders over the years. A University of Ghana Visitation Panel (2007, pp. 44-45) provides a context for the problem:

This situation of non-Ph.D. staff is partly a legacy of a period in the early 1980s where there was a mass exodus of university staff to countries in West Africa and beyond due to the political and economic situation in the country and the very poor conditions of service at that time. The result was that some staff employed to fill the critical teaching needs of the University were individuals who under normal circumstances would not have been considered to be of the calibre required for a career in the University of Ghana. Those faculty members have done their best, but the loss of so many experienced staff who served as role models weakened the University and also resulted in the start of the breakdown of mentoring and the departmental tutorial system.

The shortage of doctoral degree holders raises questions of research credibility and capability that need to be urgently addressed if these institutions are to gain acceptance as reputable members of

the global intellectual community. Such recognition is necessary in order to foster collaborative initiatives and build equitable partnerships with counterparts in other parts of the world. In this era of globalization collaboration across boundaries and participation in them are critical to path-breaking intellectual inquiry. If African institutions want to attract young academics, particularly those trained and/or working abroad, to come back as, either as regular staff or visiting scholars, they will have to make sure that the appropriate environment exists for nurturing a critical epistemic community. An increase in the number of staff with doctoral degrees is a crucial, though not the only, ingredient in spawning such a community. The shortage of doctoral degree holders in the professoriate also constrains the ability of the universities to generate high caliber academics to staff the expanding higher education sector.

The institutional and national profiles show that the number and proportion of females in the African academy are showing an upward trend. While this is commendable, we should not lose sight of the fact that the rates of growth in both absolute numbers and proportions, across many countries, are very minimal. In the midst of staff shortages, it is unfortunate that the potentials of a significant part of the continent's population are not being harnessed, developed and tapped for capacity building within universities. Any effort to address this situation will need to be pursued in tandem with the discussion above about female postgraduate student complements.

It is indicated above that mentoring is key part of the strategy that universities must adopt to support and grow the next generation of academics. Building the pool of appropriate mentors is, however, constrained in many institutions where a huge percentage of staff is at the rank of lecturer or below. This rank distribution will obviously limit the number of people who can be mentors for the large pool of younger scholars, put a huge burden on the few established scholars who may want to take on mentees, and/or water down the quality of the mentoring relationship if the mentors are over-extended (Buetel and Nelson, 2006). These challenges are even more constraining in relation to female academics. There are significantly few of them with senior ranks and so the pool of mentors is relatively shallow. Cultivating senior female academics who can advance gender-sensitive institutional policies and provide mentorship to their junior colleagues should, therefore, become a cardinal goal of all universities which should be manifested in verifiable, measurable, and recognized policies and programs.

In concert with efforts to increase the number of young people entering the academy, it will be useful for various governments and universities to reassess the relative value of mandatory retirement ages -- a feature of all African institutions. It is clear from the institutional profiles that many institutions are depending on a sizeable number of retired staff to keep their programs afloat. If these individuals are considered a necessary part of the institutions' operations, then it may be useful to give some consideration to extending the retirement age. If the universities are governed by performance indicators which ensure that continued appointment for any staff member is conditional on meeting the expectations of his/her position, then advanced age should not pose any major problems for research and teaching contributions. In fact, productive older colleagues could be assets in a variety of ways.

As noted in the introduction, our ability to make major deductions from this study in comparative institutional and national terms, across different variables, and from a longitudinal perspective has been severely constrained by the lack of relevant, and in some cases consistent, data. Universities will not be able to undertake credible and feasible programs to address the issues raised by the study if they do not have the appropriate data from which to design strategies. They are also unlikely forge common purpose with other stakeholders (such as governments, the private sector, and bilateral/multilateral partners) to address the problem of academic staff shortage and the

development of a new generation of academics if they cannot support the existence of the problem and base solutions on concrete evidence.

Institutions should embark on efforts to shore up their information capture capabilities and systems, establish offices of institutional analysis to mine relevant data for particular purposes on a consistent and continuing bases, make data easily accessible, and be ready to respond expeditiously to requests for data. Many South African universities and the Council on Higher Education have made substantial progress in this area, through the Higher Education Management Information System (HEMIS), and their counterparts from other parts of the continent can learn from them. Donors and partners should make information capture, organization, analysis and dissemination a key part of their institutional support programs. Ad hoc scrambling for data, in response to requests from the latest donor or researcher, is cumbersome, unreliable, and tedious for staff.

In addition to the capacity for data capture, analysis, and dissemination, universities and national tertiary education bodies should develop a common template for collecting information. This is helpful for undertaking comparative analyses across different institutions in respect of common indicators, and devising appropriate interventions. Many national bodies have complained that they do not have relevant data because institutions are unresponsive to their requests. This is an untenable situation. Appropriate regulations should be put in place, as part of statutes governing institutions of higher education, to make the completion and submission of the template a mandatory performance indicator, with clearly established deadlines and appropriate sanctions for institutions which default. To avoid the controversy that surrounded UDSM staff data, which was alluded to in the introduction to this report, and to ensure that all institutions are measuring and reporting the same indicators, unambiguous guidelines should be developed to operationalize the indicators. Major donors and partners should also leverage their influence to make the provision of regular data on the indicators established by the national bodies a condition for support.

While the findings from this study have been illuminating in laying the broad strokes of the issues impacting the recruitment and development of the next generation of academics in Africa, more thorough field research will be needed to uncap the specific circumstances behind the quantitative data in particular contexts. Among issues to be explored might be the extent to which the supposed unattractiveness of academia is affecting the quality of and size of postgraduate enrolment in particular fields and what their implications for the intellectual integrity of the professoriate and universities might be.

Critically worth exploring are postgraduate drop-out/time-to-completion/graduation/ rates for particular countries and institutions in various fields, the gender dimensions of these indicators, and reasons for them. Surveys of those who quit as well as those who made it through will help shed light on the statistical data. There is currently no reliable data on research and graduate student funding for many institutions and countries, thereby making it difficult to assess any correlations with enrolment, time-to-completion and graduation rates in specific fields. A comprehensive study examining graduate studies, particularly doctoral studies, as a process of socialization for the professoriate will provide critical ideas for understanding whether current practices are appropriate or adequate for developing and attracting to the academy the kind of scholar needed for the university of the 21st century (see Austin, 2002).

It is quite astounding that many countries have no credible data on their nationals studying abroad, in spite of their significant numbers. In 2004/2005, there were 15,245 African postgraduate students studying in various universities in the United Kingdom alone (Universities

UK, 2006, p. 81). While part of the reason for this may be the fact that many of these individuals gained access to foreign institutions through their own efforts, thereby leaving no bureaucratic trails in their countries of origin, it is not an insurmountable task to maintain a database of such nationals. African missions abroad can liaise with relevant agencies in receiving countries to access information on their nationals studying and working as academics abroad. They can also maintain their own databases of such persons through concerted efforts. The value of such a database lies in the ability of institutions at home to tap into them and negotiate with those they may be interested in for employment and engagements of various sorts that enhance teaching and research capacity. Programs such as Nigeria's *Linkage with Experts and Academics in the Diaspora* [LEAD] (see Saliu, 2007, pp. 8-11) and the *Ghana Diaspora Professionals Educational Network* are a good beginning which should be sustained and enhanced. There is strong commitment on the part of African academics in the Diaspora to contribute to capacity building in universities and it is important that their desire and enthusiasm are not dampened back a lack on reciprocity on the part of their compatriots at home (Tettey, 2002; Tettey, 2003).

Finally, a focused study on early career academics, to understand not only the challenges that they face but also what attracts them to, and keeps them in, the academy will be useful. This can cover such issues as institutional governance, remuneration, research support, hiring processes, collegiality, workload, and non-monetary reward systems (see Johnsrud and Rosser, 2002; Puplampu, 2004; Rosser, 2004). Insights from such a study will be a useful source of ideas for developing efficacious strategies to recruit and retain the next generation (see Tettey, 2006).

It is imperative that national tertiary bodies, universities, governments, and development partners come together to address the problem of staff shortage because in spite of the huge expansion in student enrolments over the last decade, a significant number of qualified applicants are unable to avail themselves of tertiary education in a continent where human resource capacity is sorely lacking. As revealed in a recent publication by the *Punch* newspaper (2008) in Nigeria, "more than four million qualified candidates have failed to secure admission to Nigeria's universities in the last five years, The figure represents 88% of the total number of candidates who sought admission within the period." Of course, there are myriad reasons for the inability of institutions to absorb all qualified applicants (Mouton, 2008), and one of the most critical is academic staff shortage which requires immediate attention.

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