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universities association

Towards a Common Future: Higher Education in the SADC Region
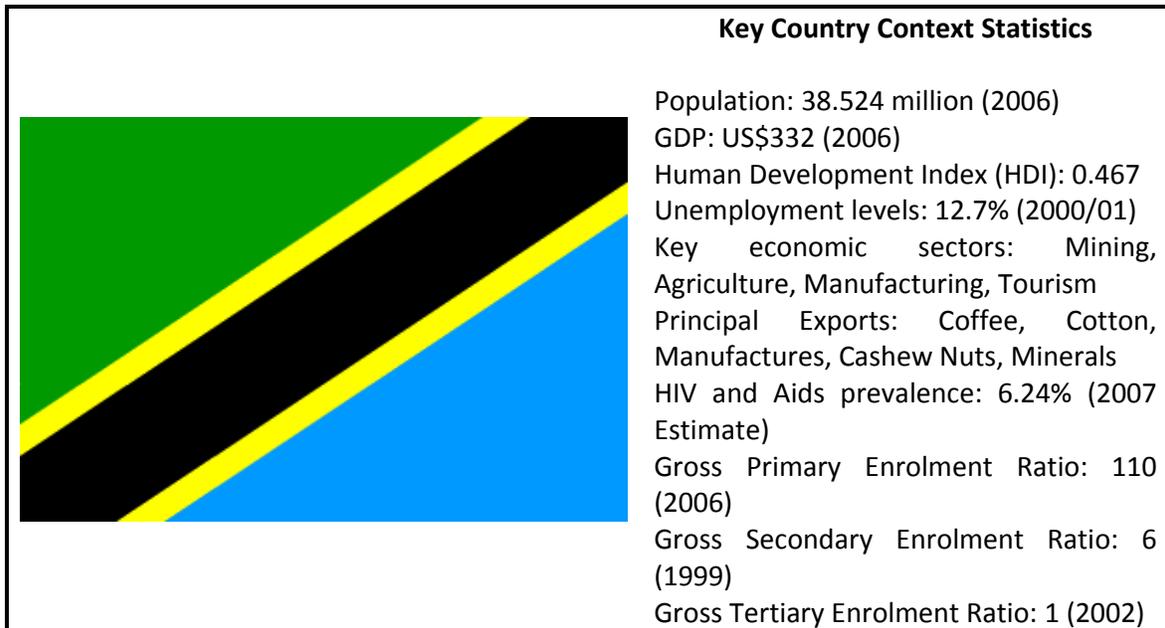
Regional Country Profiles

The country study presented here was prepared as a part of the study "A Profile of Higher Education in the Region" published in "Towards a Common Future: Higher Education in the SADC Region" (SARUA, 2009). It is published here as an appendix to that report.

The methodology used to obtain the data presented here is described in full in "Towards a Common Future" (see page 63 – 68). This methodology relied on surveys sent both to the relevant Ministry of Education, and to individual institutions in the region. Where data from the two sources did not match, a follow-up process of data confirmation was undertaken, until agreement was reached.

Although the data obtained via this method does not necessarily match data obtained using different methodologies (some differences are evident between the data presented here and that presented in other SARUA studies), in order to retain integrity of the data gathering process, no attempt has been made to manipulate the data artificially to reflect similar findings. Rather, the data must be read as having arisen from, and being true to, the particular methodology used in this study. The problems of obtaining accurate data from the region are well documented (mentioned in all SARUA studies, see particularly p. 65 of this report), and speaks to the urgent need for a process for regular maintenance of such data.

We publish these country studies as supplemental information to that presented in the report itself, and hope that they will be of value to other researchers in the region.

United Republic of Tanzania: Review of Public Higher Education

	Key Country Context Statistics Population: 38.524 million (2006) GDP: US$332 (2006) Human Development Index (HDI): 0.467 Unemployment levels: 12.7% (2000/01) Key economic sectors: Mining, Agriculture, Manufacturing, Tourism Principal Exports: Coffee, Cotton, Manufactures, Cashew Nuts, Minerals HIV and Aids prevalence: 6.24% (2007 Estimate) Gross Primary Enrolment Ratio: 110 (2006) Gross Secondary Enrolment Ratio: 6 (1999) Gross Tertiary Enrolment Ratio: 1 (2002)

Source: Country context data was obtained from a variety of sources: (Tanzania National Bureau of Statistics, 2003; SADC, 2007; UNAIDS, 2008; UNDP, 2006; UNESCO Institute for Statistics, 2006)

1. NATIONAL LEVEL OVERVIEW

In the United Republic of Tanzania, primary education lasts for seven years and is divided into two stages – the first comprising four years, from age 7 to 11, and the second, three years, from age 11 to 14 – culminating in the Primary School Leaving Certificate. This is mainly used for selecting pupils to advance to secondary school (International Association of Universities (IAU) World Higher Education Database, 2006).

Secondary education is divided into six forms. Lower secondary school incorporates Forms I to IV (from ages 14 to 18) and ends in a national examination. Pupils that pass graduate with a Certificate of Secondary Education (CSE) – or GCE 'O' levels. Pupils who do not continue to the next level, upper secondary, may continue their studies at technical colleges in certificate and diploma-level training. Upper secondary school incorporates Forms V to VI (ages 18 to 20) and ends with a national examination, those passing achieve the Advanced Certificate of Secondary Education (ACSE), which secures access to higher education. Some secondary schools have a technical orientation (International Association of Universities (IAU) World Higher Education Database, 2006).

Higher education is provided by training colleges and institutes, university colleges and universities. Non-university-level post-secondary studies (technical and vocational) have experienced a significant increase in the past decade. These are the responsibility of the relevant government ministry. The schools award certificates (two to three years of study), diplomas (two years of study, entry dependent on Form VI and work experience), advanced diplomas (three years' study, requires Form VI and work experience) and postgraduate diplomas. The technician's certificate is a two-year programme and the full technician's certificate a three-year programme.

University studies are divided into three levels. The undergraduate level leads to a Bachelor's Degree, usually lasting three years except for pharmacy, nursing, veterinary science and engineering degrees, which take four years to complete, and medicine, which takes five years. Open University degree courses usually take six years to complete. The graduate level is a further one to three years of study and results in a Master's Degree. Postgraduate Diplomas involve one year of study and the entry requirement is a Bachelor's Degree. Postgraduate degrees involve at least two years of original research and the submission of a thesis, culminating in a PhD (International Association of Universities (IAU) World Higher Education Database, 2006).

Non-traditional studies: The Open University of Tanzania offers distance education courses in law, science, arts and education, leading to Bachelor's, Master's and PhD degrees, plus distance teacher training programmes for untrained teachers (International Association of Universities (IAU) World Higher Education Database, 2006).

Lifelong higher education: More than 300 institutions offer specialist training in a wide variety of disciplines at post-Form IV level, resulting in certificates or diplomas at a semi-professional level (International Association of Universities (IAU) World Higher Education Database, 2006).

The higher education sector is broken down as follows in Tanzania:

Table 1   Overview of HE Sector (2006/2007)

Type of Higher Education Institution	Number of institutions	Estimated % of HE students enrolled in this type of institution
Publicly funded universities	8	52%
Publicly funded polytechnics or specialized colleges	13	29%
Privately funded, accredited universities or colleges	12	14%
Other (Technical Institutions)	Number Not Supplied	5%
TOTAL		**100%**

Source: Tanzania MoE questionnaire response

The following statutory bodies play a signification role in HE in Tanzania:

- *Tanzanian Education Authority (TEA)*: this agency provides development grants and loans to institutions, assists institutions to purchase equipment, and conducts pre-entry programmes for girls.
- *Tanzanian Commission for Universities (TCU)*: the Commission provides quality control on programmes offered, accredits HEIs, and coordinates student admissions.
- *Higher Education Students Loan Board (HESLB):* the Board issues loans to needy and eligible students, as well as recovering loans from debtors once their studies are complete.
- *National Council for Technical Education (NACTE)*: Performs a similar function to TCU, but for HEIs that are not universities.

According to questionnaire responses provide by the MoE, the primary goals and objectives of higher education in the country are to:
- Expand student enrolment to enable people access to and the benefit of opportunities offered by HE, to prepare more middle- and higher-level professionals, and to offer opportunities for intellectual and technological excellence.
- Prepare students for the world of work, for self-actualization, and to be able to compete globally, in line with the objectives of the Vision 2025 Policy Document.
- Rationalize the sub-Sector through involvement of the private sector and use of existing buildings for HE.
- Redress gender imbalances, in order to empower women to take part in different elements of the economy.
- Revitalize and improve quality, through the establishment of TEA, TCU, and NACTE.
- Address and combat HIV and AIDS through the establishment of the Tanzanian Commission for AIDS (TACAIDS).

These goals have been extracted from such policy documents as the Millennium Development Goals, Tanzania Vision 2025, and Mkukuta Goals (the sub-Master Plan that sets goals for education). These documents set priorities which HE institutions use to set targets to be achieved annually. The MoE reports that HE Institutions are 'usually successful' in achieving these targets. Systems have been established to monitor attainment of these targets, including quarterly implementation reports and institutional annual reports, the annual budget system and the Minister's budget speech in Parliament, and the Ministry's Annual Meeting.

The main challenges reported by the MoE as faced by higher education in Tanzania are tabulated below:

Table 2   Main Challenges Faced By Higher Education in Tanzania

Main Challenge	Ministry initiatives/ interventions undertaken to address the challenge
Increased numbers of students demanding HE due to successful implementation of Primary Education Development Programme (PEDP) and Secondary School Development Programme (SEDP).	Open up new Public Institutions and encourage the Private sector to build more Higher Education Institutions. Establish HESLB.

Main Challenge	Ministry initiatives/ interventions undertaken to address the challenge
Inadequate numbers of staff in HEIs due to increased number of students and Higher Education Institutions (HEIs).	Set aside Staff development funds to train Academic staff and encourage staff to seek loans from HESLB.
Inadequate funds to run institutions, employ more staff, construct new infrastructure, implement Science and Technology Innovations, and conduct basic and applied research activities.	Encourage Institutions to seek funds elsewhere and encouraged to improve their internal income generations. Involve development partners who offer grants or soft loans.
Poor learning and teaching environment in HEIs.	Government setting aside reasonable amount of funds to Higher education sub sector
Inadequate students loans.	Government encouraging Banks and the Private sector to assist HESLB to issue loans to students.
No Higher Education Management Information System.	Preliminary preparations have been undertaken to establish a system, such as buying computers for institutions.

Source: Tanzania MoE questionnaire response

The MoE has identified the following as the key areas with skills shortages and capacity constraints:
- Medical doctors, where there are only 1,200 available in the face of a requirement of 6,000;
- Veterinarians, in which students have limited interest due to the duration of studies and few opportunities to study;
- Dentists and pharmacists, due to limits of teaching facilities and institutions;
- Graduates trained in agricultural sciences, due to limited student applications and inadequate teaching and learning facilities;
- Engineers and graduates from other technology-based programmes, due to limited student applications and inadequate teaching and learning facilities; and
- Academics for Health Sciences, Law, Natural Sciences, and Technologies, where the average teacher:student ratio is 1:20, compared to a recommended ratio of 1:10 for Natural Sciences and 1:15 for Social Sciences.

The following capacity development mechanisms are in place to support the development of human capacity in Tanzania:
- *Support from the Ministry of Education:* The Ministry sets aside about $400,000 annually for staff development in Public Universities.
- *Support from HESLB:* The HESLB issues loans to staff in Public Universities for Masters and PhDs.
- *Support from Development Partners (DPs):* Universities have Programme agreements with DPs as part of which there is a component of staff training.
- *Support through collaborative research projects:* By participating in collaborative research projects (north-south cooperation), staff earn degrees.
- *Reintroduction of recruitment and training of tutorial assistants:* this entails recruitment of academics with first degree qualifications to act as tutorial assistants.

No data is currently recorded on the employment rate of recent higher education graduates in Tanzania. However, Science and Technology have been identified as priority areas for

higher education in the country, as is clearly stated in the Higher Education Policy of 1999. To give expression to this, all students taking science programmes get loans irrespective of whether or not they scored Division I or II in their Form six national examinations. For social science programmes, one has to achieve Division I and II to qualify for a loan from HESLB.

1.1   POLICY CONTEXT[1]

In Tanzania, education is treated as a strategic agent for mindset transformation and for the creation of a well educated nation, sufficiently equipped with the knowledge needed to competently and competitively solve the development challenges facing the nation. This notion has been incorporated into *Tanzania Vision 2025*, which sets the overall strategic direction for development of the country. This document places strong focus on promoting a science and technological culture from the lowest levels, and providing high quality education to all children between the ages of 6 and 15. The Vision emphasizes the need to ensure that science and technology education and their application for promoting and enhancing productivity permeates the whole society through continuous learning and publicity campaigns.

The 1995 Education and Training Policy emphasizes the creation of partnership between the state and the other providers, encouraging them to establish and manage schools and other institutions; cooperation with the private sector in the provision of education, decentralization and streamlining of the management of education to schools, districts, Regions and in communities. It also addresses quality control and assurance measures, including curriculum review, examination reforms, teacher management and inspection; holistic and integrative approach to facilitate mobility between formal and non-formal education. Broadening access and ensuring equity by gender, disability, geographical location, and class; and improving the relevance of education for enhancing employment and vocational training are also its basic considerations.

The Higher Education Policy (1998) has its major thrusts as follows: creation of a higher education council for accreditation purposes; dramatic expansion of enrolments; institutionalization of cost sharing; correcting the gender imbalances in enrolments; improving female participation rates in science, mathematics and technology; encouraging the establishment of private institutions; improving the funding of higher education, being responsive to market demands in the enterprise training; increasing autonomy of institutions of higher learning; improving coordination and rationalization of programmes and sizes; and promoting of cooperation among institutions of higher learning. This Policy is currently under review through a process of consultation, and the revised policy is expected to be released in 2009. This would have been completed already, but has been delayed by the merger of the two Ministries responsible for Education into a single Ministry. The review of higher education policy is thus now taking place as part of a broader sector review, which will lead to one education policy.

The National Science and Technology Policy issued in April 1996 has 16 objectives which include: promotion of science and technology as tools for economic development;

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[1] Data in this section is taken directly from (Umlilo weMfundo, 2007, pp. 31-32).

promotion of scientific and technological self-reliance; stimulation of the generation of scientific and technological knowledge; inculcation of scientific and technological culture in the Tanzanian society; strengthening of relevant institutions and the provision of conducive environment for scientific and technological development; establishment of appropriate legal framework for technology transfer and adoption; Institutionalization of mechanisms for identification, promotion, and development of special talents and aptitudes for science and technology (Umlilo weMfundo, 2007, pp. 31-32).

1.2   GOVERNANCE AND MANAGEMENT

The Ministry of Education, through its Higher Education Department, is responsible for policy formulation and monitoring of higher education in Tanzania. The Ministry also coordinates all overseas scholarships. The TCU is responsible for registration, quality assurance, awards, and accreditation of Universities, while NACTE is responsible for registration, quality assurance, awards and accreditation of Technical institutions.

Management of Institutions is responsible for the day-to-day running of their institutions (i.e., training, recruitment and promotion of their staff). However, the Ministry is responsible for paying salaries to staff and provision of both recurrent and development funds, and is also responsible for appointment of top executives of Public institutions. The Ministry, through the relevant regulatory bodies (TCU and NACTE), coordinates student admissions and controls quality and awards of degrees and diplomas offered by these institutions. It monitors governance and management of higher education at the institutional level through receipt of regular institutional reports and representation in Senate and Council meetings of the public Institutions.

All of the following stakeholders play a meaningful role in HE governance at the national level:

Table 3   Tanzania: role played by stakeholders in HE governance at national level

Stakeholder	Play a meaningful role (yes/no)
Students	Yes
Graduates	Yes
Employers	Yes
Community Members	Yes
Members of Parliament	Yes

Source: Tanzania MoE questionnaire response

The MoE reports the following as the main challenges faced in governance and management:

Table 4   Main Governance and Management Challenges

Main Challenge	Ministry initiatives/ interventions undertaken to address the challenge
Few and qualified staff to teach and conduct research.	Both the Government and Institutions employing and training young staff.

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Main Challenge	Ministry initiatives/ interventions undertaken to address the challenge
Pressure from the society/public for more and better education.	More HEIs are being built.
Frequent students strikes due to lack of loans and learning environment.	The HESLB is being strengthened and other alternatives to issue students loans are being sought.
Unfulfilled requests/demands for staff.	The Government is trying to meet some of the demands
Inadequate budget (subvention) from the Government.	Institutions are being encouraged to generate more income and look for other sources of funds

Source: Tanzania MoE questionnaire response

1.3 FUNDING

National education budget allocations to higher education over the past five years are listed below:

Table 5   Tanzania: Percentage of national education budget spent on HE

Year	Budget spent on HE
2003	Shs 101,695,000,000
2004	Shs 85,891,000,000
2005	Shs 158,245,000,000
2006	Shs 231,357,000,000
2007	Shs 287, 875,000,000

Source: Tanzania MoE questionnaire response

The MoE does not currently use a funding model or formula to allocate public funds to higher education institutions. Macro level processes determine the basis for budgeting, based on the National Strategy for Growth and Reduction of Poverty. The cycle starts with the Strategic Budget Allocations System, which is driven by consultative meetings. Here, a Sector-Wide Approach (SWAP) is adopted to funding and the requirements defined by the Ministry are tabled. Budget ceilings are defined by General Budgetary Support allocations, while the process is also informed by the Public Sector Budgetary Review. The goal is to use the SWAP to come up with implementable, realistic programmes.

In order to assist poor students to gain access to higher education, the Government has established the Higher Education Students Loans Board (HESLB). Due to limited funds given to HESLB, only students scoring Div I and II qualify, although all science students are eligible for loans. Each student receives loans according to his or her needs, based on Means Testing system.

The MoE reports the following as the main challenges faced regarding funding:

Table 6   Main Funding Challenges

Main Challenge	Ministry initiatives/ interventions undertaken to address the challenge

Main Challenge	Ministry initiatives/ interventions undertaken to address the challenge
1. More students are demanding loans due to the increased number of students in higher education institutions	• The Public are being educated on the cost-sharing concept. • The Means Testing System is being improved to identify needy students only. • Alternative sources of loan funds for students are being sought.
2. Difficulty in recovery of student loans and in tracing graduates with loans	• Employment opportunities need to be increased. • Employers are encouraged to supply accurate information about their employees.
3. Institutions require more funds to run and support more students.	• Institutions are encouraged to seek other sources of funding and to engage in income generation activities. • There are efforts to involve the private sector in HE provision.
4. More staff members need to be recruited and trained.	• The Government has and continues to allow institutions to recruit new staff. • The Ministry has a small grant for staff development in Public institutions. • Staff members in Public Institutions are allowed to acquire loans for postgraduate studies from the HESLB.
5. More buildings and infrastructure need to be built and rehabilitated.	• About 50% of the Ministry's development budget is set aside for infrastructure development in Public higher institutions. • Sometimes external support is sought to rehabilitate and construct new infrastructure in institutions.
6. Inadequate funds for research and teaching facilities.	• Institutions are encouraged to seek research funds from external funding agencies and Development Partners. • Institutions encouraged to seek grants or loans from TEA to purchase teaching materials and facilities.

Source: Tanzania MoE questionnaire response

The involvement of business and industry in the financing of higher education is not currently part of the overall funding strategy, but there are plans to include this in the funding strategy in the future.

1.4   QUALITY ASSURANCE

The Tanzania Commission for Universities (TCU) was enacted by Act No 7 of the Parliament in 2005. This followed the transformation of what used to be the Higher Education Accreditation Council (HEAC) established in 1995. The TCU is responsible for registration and monitoring of institutions, accreditation and quality control on programmes, courses and awards for both Public and Private Universities. In addition, a proposal to establish a Qualifications Framework has been developed, and public consultation on it will commence in the second half of 2008. The objective of the MoE is to ensure that establishment of this framework is in line with timeframes being established by SADC for the establishment of a Regional Qualifications Framework.

In addition, higher education institutions are required to monitor quality internally on an ongoing basis. There is a Quality Assurance Department in each Institution, while Institutional Quality on programmes and awards is monitored and controlled through Faculty Boards, Senates and External Examiners. Institutions not funded by government are also subject to the same quality assurance procedures as government-funded institutions, as each institution is supposed to have a Quality Assurance Department and to monitor and

control quality on programmes and awards through Faculty Boards, Senates and External Examiners.

The MoE does provide support to HEIs in the development of institutional quality assurance policies and procedures. It does this by supporting the TCU's effort to work with the Inter-University Council of East Africa (IUCEA) and DAAD (the German Academic Exchange Service) in organizing quality assurance workshops for University Senior administrators. It also supports TCU's efforts to establish Institutional quality assurance units or departments in each institution. Finally, it provides financial resources for institutions to implement their quality assurance policies and procedures.

The MoE reports the following as the priority areas for quality improvement in higher education in Tanzania:

Table 7   Priority Areas for Quality Improvement

Priority Areas for Quality Improvement	Interventions to Address these Priorities
1. Quality of both teaching and supporting staff.	• The Ministry has set aside funds to train academic staff. • Academic staff members are allowed to get loans for postgraduate studies from the HESLB.
2. Quality of students joining Universities.	• Pre University programmes are conducted by some Universities. • Introduction of Communication Skills in most institutions.
3. Quality of teaching and learning environment.	The Government trying its best to set aside some funds to improve the situation.
4. Quality of programmes and awards offered.	Possibility of establishing a National Qualification Framework.

Source: Tanzania MoE questionnaire response

1.5   REGIONAL COLLABORATION

The MoE attaches value to Regional collaboration and integration in the higher education sector. It has also considered Regional development priorities in the development of national higher education policy, while the SADC Protocol on Education and Training has explicitly influenced national higher education policy and practice, as the following table illustrates:

Table 8   Regional Development Priorities

Regional Development Priorities	How the priority was considered in the development of national HE policy and practice
1. Collaborative research activities.	Staff members are encouraged to undertake collaborative research regionally and internationally.
2. Exchange of students and staff.	Institutions are encouraged to change curricula to enable exchange of students and credits.
3. Harmonization of academic programmes and awards.	Possibility of establishing a National Qualification Framework.

Regional Development Priorities	How the priority was considered in the development of national HE policy and practice
4. Gender balance and accessibility of disadvantaged groups to higher institutions.	Policy emphasizes on gender policy and equity.
5. Joint publication and exchange of teaching materials.	Staff encouraged to publish jointly and to exchange teaching materials with neighboring/Regional institutions.

Source: Tanzania MoE questionnaire response

The MoE notes the importance of capacitating the SADC Secretariat to drive Regional collaboration in HE.

Finally, the MDGS have also explicitly influenced higher education planning in the country, as follows:

Table 9   Tanzania: Influence of Millennium Development Goals (MDGs) on HE planning

MDGs	Description of how this MDG influenced planning (where relevant)
1. Eradicate extreme poverty and hunger	Open more access and equity to higher education.
2. Achieve universal primary education	Expand higher education enrolment.
3. Promote gender equality and empower women	Promote and expand female enrolment in higher education.
4. Reduce child mortality	More primary school children enrolled
5. Improve maternal health	More primary school children enrolled.
6. Combat HIV and AIDS, malaria and other diseases	Establishment of HIV/AIDS prevention programmes, care, and treatment.
7. Ensure environmental sustainability	Reviewing the curriculum to include elements of environmental protection/conservation.
8. Develop a global partnership for development	Collaboration with other partners regionally and internationally.

2. PUBLIC UNIVERSITIES

2.1   ARDHI UNIVERSITY

Ardhi University (ARU) is one of the new public Universities in Tanzania formed from the transformation of the then University College of Lands and Architectural Studies (UCLAS), which was a constituent College of the University of Dar es Salaam. It started operations in 2007. As a public higher education institution, ARU's primary business is teaching, research and public services to improve the quality of life of Tanzanians. Ardhi University has six schools, one Institute and four Centres, through which it offers a range of both Undergraduate and Postgraduate Programmes in the following fields: Architecture; Building Economics; Urban and Regional Planning; Land Management and Valuation; Geomatics; Environmental Engineering; Interior Design; Landscape Architecture; Construction Management; Building Survey; Geodetic Sciences; Real Estate (Finance and Investment); Property and Facilities Management; Housing and Infrastructure Planning and Management; Disaster Management; Geographic Information Systems (GIS); Geoinformatics; Human

Settlement Studies; Environmental Science and Management; and Municipal and Industrial Services Engineering In total, the University has 26 academic programmes of which 20 are undergraduate and 6 postgraduate. It also has many more short courses.

The Institution breaks down its core institutional focus as follows:

Table 10   Ardhi University: Institutional Focus

HE Function	Approximate Percentage Of Institutional Focus
Teaching and Learning	70%
Research	20%
Community Service Activities	10%

Source: Ardhi University questionnaire response.

2.1.1   Student Data

Ardhi University has enrolled 1,602 students in the 2007/2008 academic year, all of whom all full-time students. Of these, 1,569 are from Tanzania, 28 from other SADC countries, and 5 from international countries outside the SADC Region. Given the specialized focus of the institution, all students are enrolled in the Science, Engineering, and Technology Field of Study, broken down as follows:

Table 11   Ardhi University: Summary of Enrolment Numbers (Actual data, 2007/2008)

Major Field Of Study	Total Number Of Students (Headcount)	Number female students	Number male students	Number of students enrolled per level of study				
				Under-graduate degree/ diploma	Post-graduate degree/ diploma	Masters Degree	Doctoral Degree	Other qualifications (short courses, certificates etc)
Science, Engineering & Technology	1,602	281	1,321	1,487	21	87	7	0
TOTALS	**1,602**	**281**	**1,321**	**1,487**	**21**	**87**	**7**	**0**

Source: Ardhi University questionnaire response

Again, all qualifications awarded during this academic year are in Science, Engineering, and Technology Field of Study, predominantly in the area of undergraduate qualifications.

Table 12   Ardhi University: Summary of Qualifications Awarded (Actual data, 2006/2007)

Major Field Of Study/Faculty	Number of Qualifications awarded at this level					
	Total Qualifications Awarded	Under-graduate degree/ diploma	Post-graduate degree/ diploma	Masters Degree	Doctoral Degree	Other qualifications (short courses, certificates etc)
Science, Engineering & Technology	251	218	9	22	0	2[2]
TOTALS	**251**	**218**	**9**	**22**	**0**	**2**

Source: Ardhi University questionnaire response.

ARU reported that it has the following facilities for students:

Table 13   Ardhi University: Student Services

Type Of Student Service	Service Provided (Yes/No)
Academic orientation services	Yes
Academic support services (e.g. writing centres, study skills etc)	Yes
Accommodation facilities	Yes
Career guidance services	Yes
Psychological counselling services	Yes
Sports facilities	Yes
Information on study opportunities in other institutions	Yes
Language training	Yes
Social and cultural activities (bars, clubs, theatre, music etc)	Yes
Health Services	Yes

Source: Ardhi University questionnaire response

2.1.2   Staff Data

In 2007/2008, ARU has employed a total of 174 staff, 172 of whom are from Tanzania and 2 from other countries outside of the SADC Region. The staff breakdown is as follows:

Table 14   Ardhi University: Academic and Research Staff (Actual data, 2007/2008)

Major Field Of Study	Total Number (headcount)	Number of females	Number of males
Science, Engineering & Technology	174	40	134
TOTALS	**174**	**40**	**134**

Source: Ardhi University questionnaire response.

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[2] These were certificates provided to students who did not pass the Undergraduate Diploma at a high enough level to earn a Diploma

Table 15   Ardhi University: Academic and Research Highest Level of Qualification (Actual data, 2007/2008)

Major Field Of Study	Number of Academic and Research Staff with as this as their HIGHEST qualification			
	Undergraduate degree/diploma	Postgraduate degree/diploma	Masters Degree	Doctoral Degree
Science, Engineering & Technology	52	0	79	43
TOTALS	**52**	**0**	**79**	**43**

Source: Ardhi University questionnaire response.

There are 193 management and administration staff at the University, all of whom are from Tanzania, broken down as follows:

Table 16   Ardhi University: Management and Administration Staff (Actual data, 2007/2008)

Major Field Of Study	Total Number (headcount)	Number of females	Number of males
Science, Engineering & Technology	193	90	103
TOTALS	**193**	**90**	**103**

Source: Ardhi University questionnaire response.

The Institution does have a defined research policy, which is the same as that of the University of Dar es Salaam. There is also a concept paper which defines the University's competency areas in teaching, research, and public services delivery, from which individual schools will develop their own research agenda, programmes, and proposals. Between them, the academic and research staff have been responsible for generating the following research output during 2007/2008.

Table 17   Ardhi University: Research Output (Actual data, 2006/2007)

Major Field Of Study/Faculty	Number Of			
	Publications in internationally accredited journals	Publications in locally accredited journals	Books Published	Other research activities
Science, Engineering & Technology	27	27	0	10[3]
TOTALS	**27**	**27**	**0**	**10**

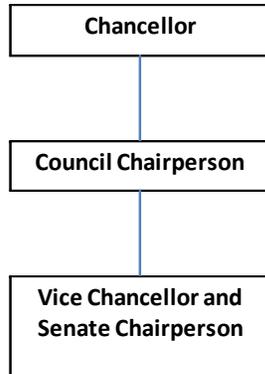Source: Ardhi University questionnaire response.

The ARU reported critical staff shortages in the area of Science, Technology, and Engineering.

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[3] These include technical reports, research reports, and conference papers.

2.1.3   Governance and Management

Ardhi University's Management Structure comprises of a Vice Chancellor, Deputy Vice Chancellor Academic Affairs, Deputy Vice Chancellor Planning, Finance and Administration, Deans of Schools, Directors of Administrative Units, Directors of Academic Units, and Heads of Departments.

The University is governed by the Ardhi University Charter. Its governance structures can be represented as follows:

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┌─────────────────────────┐
│       Chancellor        │
└─────────────────────────┘
            │
┌─────────────────────────┐
│   Council Chairperson   │
└─────────────────────────┘
            │
┌─────────────────────────┐
│  Vice Chancellor and    │
│   Senate Chairperson    │
└─────────────────────────┘
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The Organizational Structure can be represented as follows:

Vice Chancellor	

Chief Internal Auditor	**Corporate Counsel**

Public Relations Officer

Deputy Vice Chancellor - Academic Affairs

Deputy Vice Chancellor –
Planning, Finance and Administration

Dean of Students	Bursar	Directors of Administrative Units	Deans of Schools	Directors of Institutes & Library	Directors of other Academic units

Heads of Departments
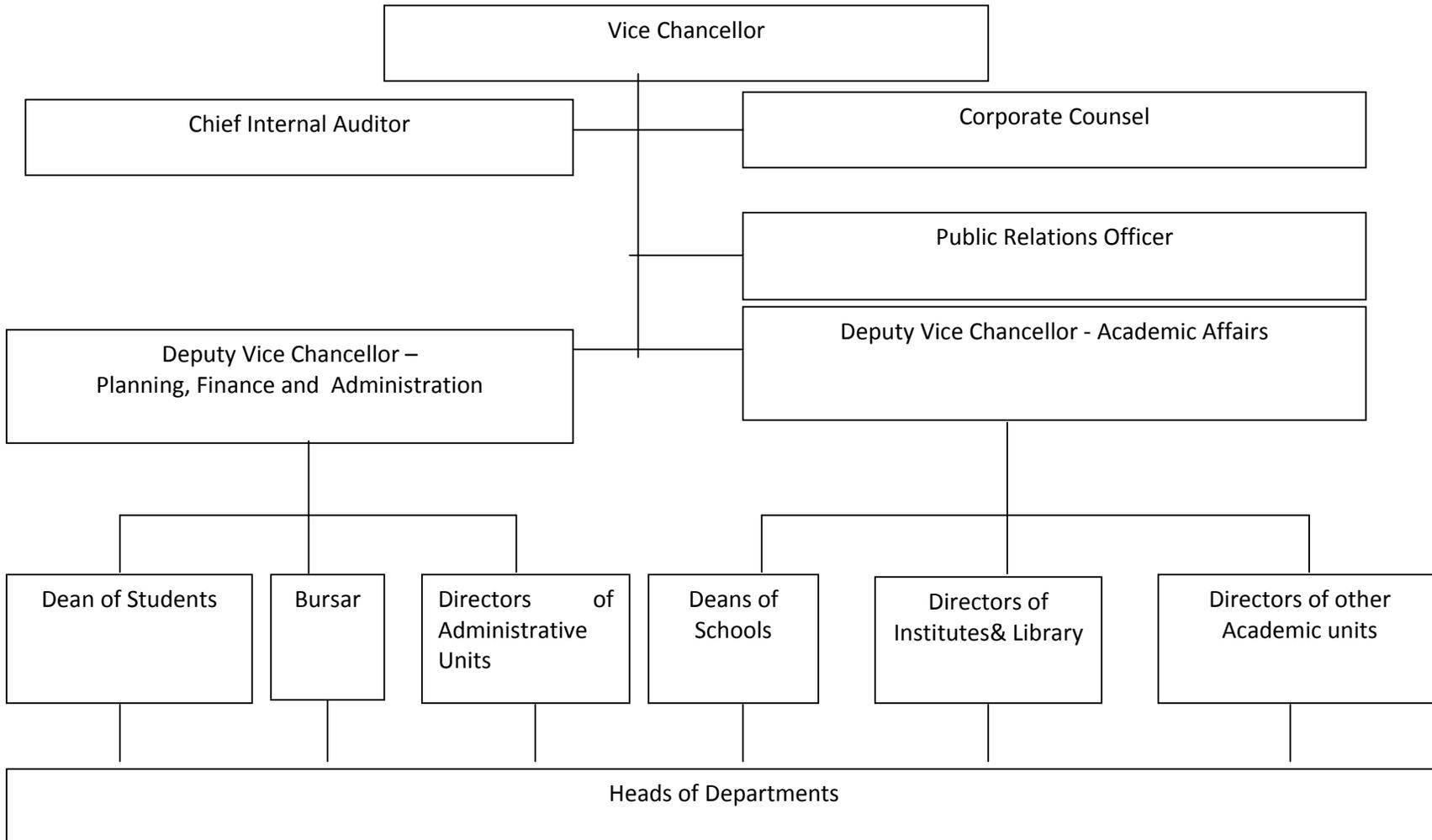
The University's governing body (the Permanent Council) includes the following representation.

Table 18   Ardhi University: Governing Body Representation

Governing Body Representation	Number Of Members Representing This Group
Number of members who come from or represent the business/industry sector	2
Number of members who come from or represent the community sector (includes two Members of Parliament)	3
Number of members who come from our represent the community sector	5
Number of students representatives	2
Number of staff representatives	4
TOTAL	**16**

Source: Ardhi University questionnaire response.

The ARU notes that, as one of the six accredited public universities inTanzania, it does play a significant role in shaping/informing national higher education policy.

2.1.4   Funding

ARU receives the most substantial proportion of its income from government. A breakdown of funding received for the 2006/2007 academic year is presented below:

Table 19   Ardhi University: Funding Sources (Actual data, 2006/2007)

Sources of Funding	Percentage of total funding/income
Student fees	10.4%
Government subsidy/grants	81.4%
Donations – International funders/donors	2.4%
Loans	1.6%
Medical Capitation Fee – a contribution by students to their medical costs	2.1%
Consultancy Revenue	1.5%
Other (Miscellaneous Revenue)	0.6%
Total	**100%**

Source: Ardhi University questionnaire response

These sources of funding have not changed significantly over the last ten years. However, the Institution notes that it does not currently receive sufficient funds for it to operate effectively. For example, in the academic year 2007/2008 the University requested Tshs.8,007,731,830. However, only Tshs.5,101,638,000 was approved, which is approximately 63.7% of the requested budget. Furthermore, in the financial year 2006/2007:
- ARU requested Tshs 1.5 billion for capital development expenditure, however it received Tshs 0.6 billion only.
- The University requested Tshs 3.2 billion from the government for recurrent expenditure other than personnel emoluments but it received Tshs 1.06 billion only.

- ARU received very little allocation of funds from the government for research and staff training and scholarship.

The University has recently completed a calculation of the average tuition costs for students, which are estimated as follows in 2007/2008:
- For undergraduate students, an annual cost of US$1,300.
- For Tanzanian postgraduate students:
  – A cost of US$1,770 for a postgraduate Diploma;
  – A cost of US$2,090 for a postgraduate Master's Degree;
  – A cost of US$2,730 for a Doctoral Degree.
- For foreign postgraduate students:
  – A cost of US$2,950 for a postgraduate Diploma;
  – A cost of US$4,530 for a postgraduate Master's Degree;
  – A cost of US$7,330 for a Doctoral Degree.

It is estimated that 14.3% of students receive additional financial support (excluding financial support from their families) to enable them to attend university. However, the other 85.7% receive government loans to support their studies. The University is not able to comment on the rate of repayment of these loans as it does not manage or administer them.

Ardhi University does experience infrastructure constraints that have a negative impact on the institution's ability to achieve its goals and objectives. These include:
- Lecture theatre facilities are not adequate; as there are only two lecture theatres one of which has seating for 110 students and the other seating for 30.
- There are inadequate studio and laboratories facilities in terms of number and size. For example, the Architecture studio classes cannot accommodate more than 50 students although the required enrolment is 80 students.
- There are inadequate offices for academic staff. Currently, 63 staff member have no offices.
- There is inadequate furniture for both academic and administrative staff members.
- There are no conference facilities.
- Available hostels can accommodate up to 400 students but the current enrolment is 1,602 students.
- There is inadequate ICT infrastructure (particularly internet connectivity and wireless internet).
- Library facilities are inadequate.
- There are no standby generators.
- There is insufficient residential accommodation for staff members.
- There are poor roads within the University grounds.

ARU was not able to quantify all sources of research funds. However, the University received Tshs. 117,999,106.73 from the government and Tshs. 284,521,728.00 from Sida/SAREC in the 2007/2008 financial year. These are just a few sources of research funds.

In summary, the Institution notes the following major challenges to financial sustainability:

Table 20   Ardhi University: Main Challenges to Financial Sustainability

Main Challenges to Financial Sustainability	Institutional initiatives/interventions undertaken to address challenges
1. Under funding of University infrastructure.	A small part of consultancy fees have been used for infrastructure. The Institution has formed a University Fund Promotion Committee, which drives fundraising processes.
2. Paying indirect costs in training the students (for example, utilities such as electricity and water).	The University is working with other public Universities through the Council of Vice-Chancellors and Principals to lobby government to allocate the funds in accordance with optimum student unit cost. The University is increasing admission in order to decrease student unit costs (for example, this is done through the initiatives of starting evening class programmes and expanding these to other areas.).
3. Very little funding is provided for research activities.	The University encourages staff members to do externally funded research. The University has solicited links with foreign Institutions especially in the USA and Europe, for example, Sida/SAREC

Source: Ardhi University questionnaire response

The Institution does have a strategic plan to develop additional income sources. It also has a Strategic Plan for collaboration/cooperation with Business and Industry. This has resulted in the Institution securing consultancy projects from the private and public sectors. As has been noted, consultancy income is 1.5% of total ARU yearly income.

2.1.5   Quality Assurance

Ardhi University does have internal quality assurance processes, but these are relatively new and are currently being piloted in one degree programme. The quality assurance processes are intended to cover teaching, research, administrative, and community service activities, as well as student performance, external relations, facilities and infrastructure, and staff development. The institution does allocate a specific budget to cover the cost of carrying out these processes, most notably in the form of a foreign grant to the Inter-University Council for East Africa (IUECA). The Institution uses the IUCEA Quality Assurance Toolkit to guide its work, and is expected to report on quality assurance issues to authorities at the national level. The Tanzanian Commission of Universities organizes a five-yearly peer review process, which is mandatory. It is also expecting to participate in a voluntary external quality assessment towards the end of 2008.

The Institution does have mechanisms in place to provide ongoing staff development, approximately 15% of which is done internally and the balance by external service providers. It also has mandatory processes in place for evaluating the performance of individual teaching staff, the last of which was implemented in 2004/2005. In addition:
- Processes are in place for evaluating student learning services;
- All research activities are subject to processes for evaluating the performance of research teams;
- External moderators are involved in the setting and marking of student examinations;

- The Institution actively seeks student feedback on academic, governance, and student services issues, as well as on matters associated with the Students' Association.

The main challenges experienced by the University in quality assurance are tabulated below:

Table 21   Ardhi University: Challenges and Interventions in the Area of Quality Assurance

Main Challenges	Initiatives/interventions undertaken to address challenges
Lack of regular stake holder involvement.	Institution of regular stakeholder surveys.
Lack of Quality Assurance and relevance to staff.	Running sensitization workshops for staff and students.
Resistance from staff (academic and support).	Running sensitization workshops for staff.
Opportune time to do quality assurance exercise.	Running Quality Assurance exercise at time of reduced academic load.
Lack of accountability leading to non-objectivity.	Running sensitization workshops to staffs.

Source: Ardhi University questionnaire response

2.1.6   Regional Collaboration

Collaboration with other higher education institutions in the SADC Region is valued by the ARU. There are academic staff and students exchange programmes, as well as examiners exchange programmes between ARU and other higher education institutions in the region (for example, the University of Cape Town and University of Botswana). Likewise value is attached to enrolment by students from other countries in the SADC Region, with the ARU advertising admissions in some media in SADC region and embassies. However, the Institution notes that more efforts are needed in this area, as there has been no significant change in the number of students from foreign countries studying at ARU in the last five years.

The following table maps out some of the university's links:

Table 22   Ardhi University: National and International Links and Networking

Link	Area of Collaboration
Sida-SAREC	Capacity Building through research and training of academic staff at MSc. And PhD levels.
CARNEGIE	Support project.
DANIDA	Support project.
NORAD	Support project.
ARU and VLIR-Cathortic University of Leuven (KULeuven) – Belgium	Training of Masters and PhD Degree.
ARU and Harbour City University of Hamburg-German	Scientific and Academic exchange of Staff and Student in research and training.

Link	Area of Collaboration
ARU and Dortmund University,German	• Exchange of information, publication, teaching, research staff, students and trainees. • Conduct joint seminars, workshops and conferences. • Promotion of renewable energy in Africa (PREA). • Alumni cooperation.
Association of Universities of Nairobi,Makerere, Addis Ababa, Jomo Kenyatta and Kigali Institute of Technology	Scientific and Academic exchange. To create harmonized of the training and research in Architecture within the East African region.
Association of Universities of Oslo(Norway), Cape town (South Africa), Addis Ababa (Ethiopia), Nairobi (Kenya), Makerere (Uganda), Jomo Kenyata University of Agriculture (Kenya)	Scientific and Academic exchange. Conduct a joint Masters Course in Urban Design.
South and East Africa Research Cooperation for Habitat (SEARCH) Project	Training of Masters and PhD Degree.
NOMA Project	Training of PhD and Masters Degrees.
ARU and Association of Architects Tanzania	• Training of Architecture Profession in Tanzania. • Accreditation of SADE allied training programmes.
Hampton University (USA)	Scientific and Academic exchange of Staff and Student.
The Royal Danish Academy of Fine Art School of Architecture Copenhagen- Denmark	Scientific and Academic exchange of Staff and Student in research and training.
ARU and Africalia La Cambre Institute of Architecture – BELGIUM	Research on Africa Contemporary Architecture.
Enhancement of Research Capacity (ENRECA) under DANIDA Support	Enhancement of Research Capacity at ARU.
ARU and Dortmund University (under DAAD support)	Conducting MSc. Programme jointly, undertaking Research and Publications, supporting Staff Development through PhD studies, Staff exchange, Facilitating Summer Schools and Retraining of practitioners and alumni.
ARU and International Institute for Geo-Information Science and Earth Observation (ITC_ The Netherlands)	Joint educational programmes. Exchange of staff and students. Collaborate in the organization of continuing education programmes, conduct and seek fund for research activities.
ARU and University of Applied Sciences, Berlin	• Joint study course leading to BSc. Cartography and GIS. • Staff/student exchange. • Collaborative research.
ARU and University of Purdue, USA	Joint Research in Geodynamics.
ARU and Royal Institution of Chartered Surveyors (RICS) Universities Partnership	Promotion of Surveying Education.
ARU and Royal Institute of Technology (KTH) Sweden	Training and promoting establishment of undergraduate Programme in Land Administration at ARU.
ARU and Commonwealth Association of Surveyors and Land Economy (CASLE)	Promoting of Surveying Education.

Link	Area of Collaboration
ARU and African Real Estate Society (AfRES)	Promote research on real estate issues, organize annual conferences for AfRES members and facilitate linkages with International Real Estate.
ARU and International Real Estate Business School, Germany	• Joint Authorship of publications. • Exchange of staff. • Promote young researchers.
The African (NEPAD)	Geospatial Data Linkage and Infrastructure Development Support Project.
ARU – Wageningen University	Research and Staff Capacity building.
ARU – ITC	Joint MSc course.
ARU – AIDA Project	Study on ICT and disaster in Tanzania.
University of Cape Town and USAID	Short course, formal programmes, exchange visits.
ARU – UNEDRA	University network.
ARU – DeLPHE – British Council	Joint research Proposal.
ARU – Carnegie – IAS Regional Initiative in Science and Education (RISE)	Joint research, exchange programmes, Masters and PhD scholarships.
ARU and PMO's	Disaster Management.
ARU and ITC	Joint Professional Master of Science courses in Urban Planning and Land Administration (UPLA).
ALAT-ARU- Mzumbe- ITC	Capacity building for local authorities.

Source: Ardhi University questionnaire response

The Institution is convinced it can derive tangible benefit from Regional collaboration, particularly:
• Provision of postgraduate studies for academic staff members within the Region;
• Harmonization of higher education in the Region;
• Specialized equipment exchanges; and
• Exchange in staff/student research results and publications.

However, there are also key challenges, notably:
• The need to regularize University output in the Region (as a consequence, Ardhi University is a member of the IUCEA);
• The need to expand research cooperation in the Region;
• Lack of funding to finance collaboration; and
• Lack of awareness of the benefits of Regional collaboration.
Ardhi believes that it has the necessary ICT infrastructure to facilitate collaboration, but lacks the necessary technical support.

Specific steps that the University feels government could take to facilitate Regional collaboration are to:
• Promote harmonization and accreditation through the formal establishment of joint boards and provision of seed financing;
• Provide support to regional institutions such as SARUA and IUCEA through subscription fees;
• Provide in the budget for joint, research, publications, conferences, and so on; and

- Implement/operationalize existing SADC/EAC protocols on student fees to promote student exchange.

2.2   MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES (MUHAS)

The Muhimbili University of Health and Allied Sciences (MUHAS) is a successor to the Muhimbili University College of Health Sciences (MUCHS), which was a constituent College of the University of Dar es Salaam. MUCHS was established by an Act of Parliament, Act No 9 of 1991, when the then Faculty of Medicine was upgraded to a College. The Faculty of Medicine originated from the Dar es Salaam School of Medicine, which was established in 1963 by the Ministry of Health with the primary aim of training clinical health staff. In 1968, the Dar es Salaam School of Medicine was upgraded to a Faculty of Medicine of the Dar es Salaam University College of the University of East Africa. In 1976 the Faculty of Medicine was incorporated into Muhimbili Hospital to form the Muhimbili Medical Centre (MMC).

In 1991, the Faculty of Medicine was upgraded to a constituent College of the University of Dar es Salaam, with the aim of nurturing it to a full-fledged university. In 2000, the Government by Act of Parliament disestablished MMC and created two closely linked but autonomous public institutions; namely MUCHS and the Muhimbili National Hospital (MNH). Over the years MUCHS made significant achievements in terms of increased student enrollment and development of several new academic programmes. The Parliament Act No 9 of 1991 that established MUCHS was repealed in 2005. Subsequently, in 2007, MUHAS was established by Article 1 of the Charter of Incorporation, in line with the recommendations of the Tanzania Commission of Universities (MUHAS, 2008).

The Institution's Vision is to:
> *Become a centre of excellence for training health professionals, quality research and public service, located in a spacious area, with a state of the art University hospital, conducive learning environment and sustainable resource generation (MUHAS, 2008).*

Its mission is to:
> *Seek for quality health through education, training, research and health services for attainment of equitable socio-economic development (MUHAS, 2008).*

The Institution breaks down its core institutional focus as follows:

Table 23   Muhimbili University of Health and Allied Sciences: Institutional Focus

HE Function	Approximate Percentage Of Institutional Focus
Teaching and Learning	45%
Research	40%
Community Service Activities	15%

Source: Muhimbili University of Health and Allied Sciences questionnaire response.

2.2.1 Student Data

MUHAS has enrolled 2,212 students in the 2007/2008 academic year, all of whom all full-time students. Given the specialized focus of the institution, all students are enrolled in the Health Sciences Field of Study, broken down as follows:

Table 24 Muhimbili University of Health and Allied Sciences: Summary of Enrolment Numbers (Actual Data, 2007/2008)

Major Field Of Study	Total Number Of Students (Headcount)	Number female students	Number male students	Number of students enrolled per level of study				
				Under-graduate degree/ diploma	Post-graduate degree/ diploma	Masters Degree	Doctoral Degree	Other qualifications (short courses, certificates etc)
Health Sciences	2,212	1,502	710	2,044	0	168	0	0
TOTALS	**2,212**	**281**	**1,321**	**2,044**	**0**	**168**	**0**	**0**

Source: Muhimbili University of Health and Allied Sciences questionnaire response.

Again, all qualifications awarded during this academic year are in Health Sciences:

Table 25 Muhimbili University of Health and Allied Sciences: Summary of Qualifications Awarded (Actual data, 2006/2007)

Major Field Of Study/Faculty	Number of Qualifications awarded at this level					
	Total Qualifications Awarded	Under-graduate degree/ diploma	Post-graduate degree/ diploma	Masters Degree	Doctoral Degree	Other qualifications (short courses, certificates etc)
Health Sciences	71	23	0	43	5	0
TOTALS	**71**	**23**	**0**	**43**	**5**	**0**

Source: Muhimbili University of Health and Allied Sciences questionnaire response.

MUHAS reported that it has the following facilities for students:

Table 26 Muhimbili University of Health and Allied Sciences: Student Services

Type Of Student Service	Service Provided (Yes/No)
Academic orientation services	Yes
Academic support services (e.g. writing centres, study skills etc)	No
Accommodation facilities	Yes
Career guidance services	Yes
Psychological counselling services	Yes
Sports facilities	Yes
Information on study opportunities in other institutions	Yes
Language training	No
Social and cultural activities (bars, clubs, theatre, music etc)	No

Source: Muhimbili University of Health and Allied Sciences questionnaire response.

2.2.2   Staff Data

In 2007, MUHAS had employed a total of 317 staff, 316 of whom are from Tanzania and 1 from other SADC countries. The staff breakdown is as follows:

Table 27   Muhimbili University of Health and Allied Sciences: Academic and Research Staff (Estimate, 2007)[4]

Major Field Of Study	Total Number (headcount)	Number of females	Number of males
Health Sciences	316	92	224
TOTALS	**316**	**92**	**224**

Source: Muhimbili University of Health and Allied Sciences questionnaire response.

Table 28   Muhimbili University of Health and Allied Sciences: Academic and Research Highest Level of Qualification (Estimate, 2007/2008)[5]

Major Field Of Study	Number of Academic and Research Staff with as this as their HIGHEST qualification			
	Undergraduate degree/diploma	Postgraduate degree/diploma	Masters Degree	Doctoral Degree
Health Sciences	94	0	140	82
TOTALS	**94**	**0**	**140**	**82**

Source: Muhimbili University of Health and Allied Sciences questionnaire response.

There are 334 management and administration staff at the University, all of whom are from Tanzania, broken down as follows:

Table 29   Muhimbili University of Health and Allied Sciences: Management and Administration Staff (Actual data, 2007/2008)

Major Field Of Study	Total Number (headcount)	Number of females	Number of males
Health Sciences	334	130	204
TOTALS	**334**	**130**	**204**

Source: Muhimbili University of Health and Allied Sciences questionnaire response.

The Institution does have a defined research policy

Between them, the academic and research staff have been responsible for generating the following research output during 2007/2008.

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[4] Still to be verified, as total disagrees with main total.
[5] Still to be verified, as total disagrees with main total.

Table 30   Muhimbili University of Health and Allied Sciences: Research Output (Estimate, 2007)

Major Field Of Study/Faculty	Number Of			
	Publications in internationally accredited journals	Publications in locally accredited journals	Books Published	Other research activities
Health Sciences	146	4	16	48
TOTALS	**146**	**4**	**16**	**48**

Source: Muhimbili University of Health and Allied Sciences questionnaire response.

MUHAS reported critical staff shortages in the area of Health Sciences.

2.2.3   Governance and Management

MUHAS is governed by a University Council, which has different working committees. The management structure can be represented diagrammatically as follows:
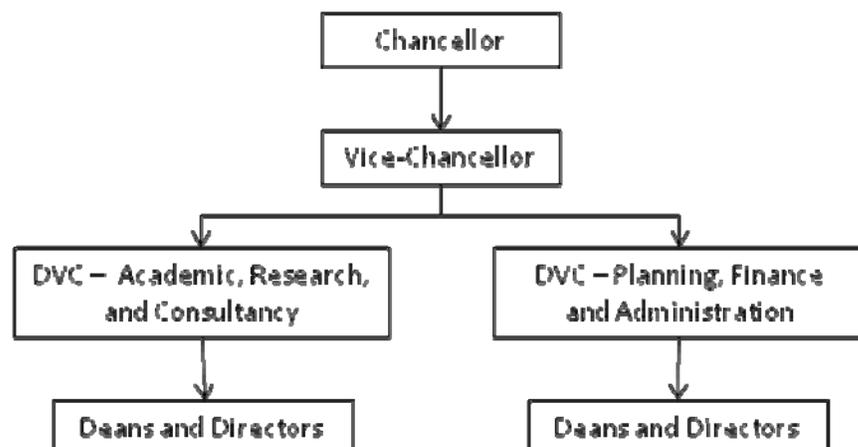
The University's governing body includes the following representation.

Table 31   Muhimbili University of Health and Allied Sciences: Governing Body Representation

Governing Body Representation	Number Of Members Representing This Group
Number of members who come from or represent the business/industry sector	0
Number of members who come from or represent the community sector (includes two Members of Parliament)	0
Number of members who come from our represent the community sector	10
Number of students representatives	2
Number of staff representatives	6
TOTAL	**18**

Source: Muhimbili University of Health and Allied Sciences questionnaire response.

MUHAS indicates that it plays a marginal role in shaping/informing national higher education policy.

2.2.4 Funding

MUHAS receives the most substantial proportion of its income from government. A breakdown of funding received for 2007 is presented below:

Table 32   Muhimbili University of Health and Allied Sciences: Funding Sources (Estimate, 2007)

Sources of Funding	Percentage of total funding/income
Student fees	11%
Government subsidy/grants	69%
Donations – Private Individuals/Trusts	14%
Other (Internally Generated Revenue)	6%
Total	**100%**

Source: Ardhi University questionnaire response

It was estimated that donations from private individuals and Trusts made up 100% of research funds in 2007. These sources of funding have not changed significantly over the last ten years. However, the Institution notes that it does not currently receive sufficient funds for it to operate effectively. Currently, the University is struggling to generate its own income to assist to meet other costs, and sometimes this revenue is being used for capital development.

The Institution does not calculate its average annual tuition costs per Faculty. It is estimated that 99.5% of students receive additional financial support (excluding financial support from their families) to enable them to attend university.

MUHAS does not report any infrastructure constraints that have a negative impact on the Institution's ability to achieve its goals and objectives. However, it does note resource constraints that have such an impact. MUHAS is a public Institution that depends on funds from the Government. The University receive insufficient money from the Government to fund all research and other academic activities. In response to this challenge, MUHAS seeks to generate some revenue internally, and has a plan to develop additional income sources.

2.2.5 Quality Assurance

MUHAS does have internal quality assurance processes, and allocates a specific budget to cover the cost of carrying out these processes. The quality assurance processes are intended to cover teaching and research activities, as well as student performance. The national quality assurance framework does prescribe the quality assurance procedures that institutions must follow, and MUHAS is required to report on quality assurance issues to authorities at the national level.

The Institution does not, however, participate in peer review quality assessments. However, it does sometimes conduct internal evaluations of its academic programmes. The Institution did not report any specific challenges regarding quality assurance in its questionnaire response.

The Institution does have mechanisms in place to provide ongoing staff development, 100% of which is done internally. It also has mandatory processes in place for evaluating the performance of individual teaching staff. In addition:
- Processes are in place for evaluating some student learning services;
- All research activities are subject to processes for evaluating the performance of research teams;
- External moderators are involved in the setting and marking of student examinations;
- The Institution actively seeks student feedback on academic issues and student services.

2.2.6   Regional Collaboration

Collaboration with other higher education institutions in the SADC Region is valued by MUHAS. Likewise value is attached to enrolment by students from other countries in the SADC Region. However, the Institution notes that there has been no significant change in the number of students from foreign countries studying at MUHAS in the last five years. The Institution does not provide language or cultural support to incoming international students.

MUHAS does have a strategic plan for collaboration with business and industry, which covers the period 2008/2009 to 2012/2013.

MUHAS provided the following breakdown of collaborative projects:

Name Of Research	Title Of Research/ Project Background	Funding Agency	Research Objective
Child 1	Trial of vitamins among children of HIV- infected women, RCT (multivitamins (B, C, E) vs. placebo)	NIAID- National Institute of Allergic and infectious diseases	To examine the effect of micronutrient supplementation on morbidity and mortality outcomes among infants born to HIV- positive women
Child 1 Sub - study	Body composition among pregnant Tanzanian women: The role of HIV infection	International Atomic Energy Association- IAEA	1. To measure total body water using deuterium dilution among two groups of pregnant women (i.e., HIV-positive and HIV-negative) matched for gestational age
			2. To validate the use of Bioelectric Impedance Analysis as a measure of body composition during pregnancy

HPTN 046 (HIV Prevention Trial Network)	A phase III trial to determine the efficacy and safety of an extended regimen of Nevirapine in infants born to HIV positive women to prevent HIV transmission during breastfeeding	DAIDS, NIH	To assess if Nevirapine administered to children of HIV-positive women throughout breastfeeding for six months (or until cessation of breastfeeding) reduces mother-to-child transmission of HIV *via* breastfeeding compared to placebo
Child 2	A trial of Zinc and micronutrients in children	National Institute of child Health and Human Development, NIH	To determine whether the oral administration of zinc and/or a micronutrient supplement (including vitamins C, E, B1, B2, niacin, B6, folate, and B12) to Tanzanian infants and children
			1) reduces the incidence of diarrheal and respiratory illnesses and 2) results in improved growth (weight and length for age Z scores) compared with placebo
Child 3	A trial of Zinc in HIV progression in HIV infected children	Trasher Foundation/MDH	
HIVIS	HIV Vaccine Immunogenity Study at Muhimbili University of Health and Allied Sciences	European Union/ Swedish Embassy	HIVIS project is a phase I/II HIV Vaccine trial aimed at determining the safety and immunogenicitiy of a candidate HIV vaccine consisting of DNA priming, MVA- DNA boosting.
Reproductive Health Project	Sub- project:	Sida/ SAREC	
	i. Obstetrics database at Muhimbili National Hospital		
	ii. Quality of maternal Health care in Rufiji District		
	iii. Violence against women in children, including rape against adult women, child sexual abuse and domestic violence		
	iv. Postpartum experience of first time fathers		
Improving malaria case management in children under five years: A multicomponent and multidisciplinary approach	Sub- project:	Sida/ SAREC	To improve malaria case management based on accurate diagnosis and correct treatment. The research priority is the implementation of existing guidelines by research aimed at improving diagnosis and studying behavior to promote good practices, case management at community and health care facilities level to effectiveness of the newly launched drug Coartem
	i. Use of rapid diagnostic tests (RDT) to diagnose malaria parasites.		
	ii. Coartem use for children at community (CCC study) level including resistance markers, drug levels and consequences of retreating Coartem for parasite reappearance.		
	iii. Comparison of supervised VS unsupervised intake of Coartem at health facilities		

The TANSWED HIV Programme	Sub- projects: i. TANSED project B: Studies on improving laboratory diagnosis and monitoring of HIV-1 infection	Sida/ SAREC	The programme aims at addressing various HIV and AIDS intervention activities in Dar es Salaam and Kagera regions
	ii. TANSWED projectC1: Study on feasibility and acceptability of youths for HIV Vaccine and microbicides trials		
	iii. TANSWED projectC2: Management of asymptomatic STIs amongst women in Dar es Salaam		
	iv. TANSWED project D: Epidemiology towards evaluation and monitoring of HIV infection in the Kagera Region of Tanzania		
	v. TANSWED project E: Diagnostic and therapeutic characterization of HIV/AIDS related pathology		
	vi. TANSWED project F: Studies of mother to child transmission of HIV-1 infection		
	vii. TANSWED project J1: The incidence of HIV infection among police officers in Dar es Salaam Tanzania in preparation for HIV Vaccine studies		
	viii. TANSWED project J2 Monitoring of immune responses in phase !/II HIV vaccine trials in Sweden and Tanzania		
	ix. TANSWED project J3: Perception and social responses towards HIV Vaccine trials in the cohort of police officers (Pos)in Dar es Salaam Tanzania		
	x. TANSWED project K: Strengthening of laboratory capability to support SAREC funded HIV related projects in the department of microbiology and immunology		
	xi. TANSWED project L: Common costs for all projects		
	xii. TANSWED project M: Study of the use of anti-retroviral drugs in the management of HIV infection in Tanzania		
Research Capacity Strengthening	Sub- Studies: i. Design synthesis and biological evaluation of novel Acridine and quinone linked Imidazole conjugates via substituted Aniline against *Plasmodium falciparum* parasites	Sida/ SAREC	Capacity building

	ii. Assessment of awareness, perception and satisfaction with cross infection control measures used in dentistry among dental patients in DSM		
	iii. Investigation if any correlation between adverse drug reactions and metabolic capacity of malaria patients experiencing adverse reactions after treatment with Amodiaquine		
	iv. Stigma related factors and the use of ART clinics in Tanzania		
	v. Time and pattern of tooth eruption in Tanzania populations		
	vi. Factors correlating to patient satisfaction with health care delivery at OPD of Temeke Municipal Hospital, DSM, Tanzania		
	vii. Hand hygiene practice and molecular characteristics of isolates from patients staff environment in the ICU, Muhimbili National Hospital		
	viii. Assessment of intentional non adherence to ARV therapy due to adverse drug symptoms amongst patients at MNH		
	ix. Oral health status, oral hygiene practices, dental related knowledge and awareness on radiotherapy of patients with or without HIV infection treated with radiation for head and neck malignancies at ORCI, DSM		
	x. Examining the context of HIV sexual risk in marriage: The case of Kagera and Rukwa regions		
	xi. Assessment of sexual harassment at MUCHS		
	xii. Formulation of herbal product from leaves of *Warbugia ugandensis* for symptomatic relief against candida among people living with HIV/AIDS		
	xiii. Capacity building of pharmaceutical dispensing personnel on basis of HIV/AIDS as an important strategy for the improved care and treatment of HIV infected individuals in Tanzania		
	xiv. Gender Analysis of sexual and reproductive health information		

	xv. To describe clinical and laboratory features of HIV infection among sickle cell disease patients at Muhimbili National Hospital Dar es Salaam, Tanzania		
	xvi. Can surgery for glaucoma be combined with cataract surgery		
Library support	Library support to scientific libraries	Sida/SAREC	To increase the number of journals and reference/ reading materials for the library
			To improve the quality of research teaching and learning at MUHAS
			To acquire enough computers for library staff and patrons use
			To train library staff in ICT and current awareness services
MDH HIV/AIDS Care and Treatment Program	President Emergency Plan For Aids Relief (President Bush offer)	PEPFAR	To provide high quality treatment and care to patients with HIV/AIDS, and to undertake operations research on various aspects of HIV/AIDS management; and to provide tuberculosis care and treatment and broader pediatric health services to HIV-infected and HIV-uninfected populations at facilities in Dar es Salaam, Tanzania
TB2	Effect of Multivitamins Supplements on Clinical and Immunological response in Childhood Tuberculosis (TB2)	National Institute of Allergic and Infectious Diseases – NIAID	To evaluate the efficacy of a multivitamin supplement containing vitamins B, C and E on weight gain in childhood tuberculosis at two months after start of anti-tuberculosis therapy to compare treatment arms with respect to immunological markers (e.g., HIV viral load, CD4 counts), and to examine the utility of immune response parameters as surrogate markers for treatment efficacy in tuberculosis
Selenium: Evaluation of effect of selenium supplementation of pregnancy outcomes in HIV – infected women –	Partnership on Nutrition and HIV/AIDS Research in Tanzania: Exploratory Study on Selenium in HIV Infection	NIH- National Institute of Health	To determine the influence of selenium on pregnancy outcomes in HIV infected women.

TOV3	A Trial of Vitamins and HAART in HIV Disease Progression (TOV3)	NIH	To examine the effects of multivitamins (including B, C, and E) on HIV disease progression among HIV-positive Tanzanian adult men and women taking highly active anti-retroviral therapy (HAART)
Zinc Pneumonia	Effect of Zinc Supplementation on Pneumonia in Children	National Institute of Allergic and Infectious Diseases (NIAID)	
Gates	Gates Grand Challenge 13: Population Health Metrics Research Consortium	(GATES)	To improve strategies for population health measurement, providing researchers and policymakers with innovative, field-tested and practically applicable instruments to measure population health indicators in resource poor settings *via* two strategies: verbal autopsy and plasma protein signatures
Breast Milk	Vitamins, Breast milk HIV Shedding, and Child Health- breast milk	NIH	To examine the effects of vitamin supplementation administered to HIV-infected women during pregnancy on a number of immunological and virological parameters in breast milk
TB3	Novel Diagnostic methods for Pediatric Tuberculosis	NIH	To evaluate the validity of polymerase chain reaction and sputum induction for diagnosis of tuberculosis among children
Ethnographic Study	A Comparative Ethnographic Study of Influences on Adherence to Antiretroviral Therapy in Jos, Nigeria and Dar es Salaam, Tanzania.	HUPA- Harvard University Programme on AIDS	Collect information that will support adherence strategies using qualitative interviews, participant observations of formal adherence supports and subjective (self-report) and objective (pill count) measures of adherence.
Group counseling	Innovative Approaches to Groups Counseling with HIV positive Women	(National Institute of mental Health – NIMH)	To compare the effectiveness of an innovative group counseling program with individual supportive counseling (standard of care) among women infected with HIV in Dar es Salaam. Tanzania, in facilitating: I) acceptance of HIV testing and return for testing results; and 2) safe disclosure of sero-status to significant others, 3) reduction in depressive symptomatology and 4) increase in perceived social support in this population

Schizophrenia	An examination of the candidate gene and susceptibility Loci for schizophrenia in Dar es Salaam and Kilimanjaro regions in Tanzania	AMC (Amsterdam Medical Center)	The primary objective is to identify SNPs associated with schizophrenia in a population of Bantu persons of chagga and pare parentage living with Schizophrenia and in ethnicity and sex matched controls without schizophrenia in the Kilimanjaro region.
MAN Study	Social and contextual predictors of male heterosexual risk behavior in Africa	NIH through Family Health International	Describe social networks of heterosexual men at high risk for HIV acquisition and transmission in Ghana and Tanzania; to identify short term contextual risk triggers in the three hour window preceding sexual encounters; to identify respondents characteristics (gender role beliefs) and long term social contexts associated with HIV risk behaviors and high risk local social networks; to assess the interaction effects of short term risk triggers, respondent characteristics, high risk local social networks and long term social contexts
HIV Stigma Indicators		Population Council USA	To develop and pilot HIV/AIDS stigma indicators that would be programmatically important
Pathways to adolescence health in Tanzania	The MUHAS, in partnership with the University of California, San Fransisco (UCSF) nad other Tanzanian and International collaborators propose the dvt and evaluation of an innovative concept to simultaneously address Tanzanias urgent healthcare services and workforce needs	United States, National Institute for Health	To develop and evaluate an innovative concept of simultaneously address Tanzania's urgent healthcare services and workforce needs: The Youth Health Corps (YHC) for Integrated Community – based Prevention, Care, and Treatment.
Sickle cell Study	Defining the spectrum of sickle cell disease in East Africa: A clinico epidemiological Study Sub- study: The role of micronutrients and genes affecting their metabolism, as determinants of the severity of sickle cell disease in East Africa	The Wellcome Trust UK	
Project Accept	Community based voluntary counseling and testing: multisite project	NMH through JHSPH Baltimore, USA	To determine the impact of mobile VCT, post-test support services (PTSS) and community mobilization activities on HIV incidence rates in communities.
HIV and violence prevention project (implementation)		JHU/CCP, Baltimore, USA	

Student Exchange Program- Global Health Programme		University of Gothenburg and Karolinska Institute – 8Sweden	
NUFU	Sub- projects: <u>i. Norwegian Volunteer exchange Programme</u>	Norwegian Government	Support specialist Training
	ii. Adolescent health project (Afya kwa Vijana)		Promotion of Health among School aged adolescents
	iii. Assessment of dust exposures and respiratory health problems among miners in Kiwira coal mine		To determine the association between coal dust exposure and respiratory health problems.
Drug Sexual Behavior	<u>Sub- projects:</u> i. Peer delivered self-efficacy study (Tanzania AIDS Prevention Project)	University of Texas	To determine factors influencing heroin injection practices in order to describe processes and inform prevention.
MUCHS Dar Dar Health Project	<u>Sub- projects:</u> i. Phase III clinical trial evaluating the efficacy of M. vaccae vaccine in preventing disseminated TB in HIV infected adult patients	NIH/NIAID	Aims to provide quality comprehensive care to HIV-infected children; train health care workers in pediatric HIV care; counsel patients and their families regarding HIV care, treatment and prevention and to promote healthy lifestyle practices
	ii. Dar Dar Pediatrics Program		
University Of California at San Francisco (UCSF - MUHAS Collaboration)	Planning Grant for Global Health	MUHAS- UCSF/ FIC/NIH	Plan a Curriculum for Global Health Studies
PEERCON		European Union	
Mitra plus	Studies of mother to child transmission of HIV-1 infection		MITRA plus study – prevention of mother to child transmission of HIV/AIDS
Perceived AIDS stigma		Tanzania, Malawi, South Africa, Lesotho, UCSF & University of Kwazulu – Natal	To develop and validate two linguistically and culturally appropriate measures of perceived HIV/AIDS stigma appropriate for persons living with HIV/AIDS
Streptococci	An exploratory study to isolate group a beta hemolytic streptococci in the tonsilopharynx among children and correlation with their clinical features in DSM,Tanzania	HARVARD	
Malariagen	Characterizing the genetic variation in malaria endemic populations to determine the presence of malaria candidate genes in Muhimbili, Dar es Salaam, Tanzania	Wellcome Trust	

Impact of HIV AIDS on health system	A comparative research study in South Africa, Tanzania and Zambia		
Corruption in health Services	A survey on corruption in the health services systems in Kinondoni, Ilala, Temeke and Kibaha district		
Fogarty Ellison Fellowship Program		Forgarty Foundation	The main objectives is to allow Tanzania young scientist (Fellows) to work together with US fellows as part of their research training within the MUCHS-Harvard Collaboration
MUHAS-Harvard Public Health Informatics Training Program		Harvard School of Public Health – USA	Train Tanzanian professionals in epidemiology, biostatistics, data management, public health surveillance and other aspects of health informatics.
MAMOP (Mujinja, PGM)		Karolinska Institute (Sweden)	Improve under-five malaria case management
		Heidelberg University (Germany)	
Leadership initiative for public health in Africa (LIPHEA) (Killewo, J.Z.J)		MUHAS- SPHSS, Makerere University (Uganda), Johns Hopkins University (USA), Tulane University (USA) and George Washington University (USA).	To: Initiate activities focusing on leadership training in the health system; Teach public health leadership to both undergraduates and postgraduates; Facilitate inter-instituional collaboration to optimize resources; Disseminate research findings to a wider audience.
Health insurance in the developing countries (Kiwara, A.D)		University of Aarhus (Denmark)	Establish reasons for low uptake of NHIF

The Institution is convinced it can derive tangible benefit from Regional collaboration, particularly:
- Sharing of human resources and technical know-how;
- Assistance with financial resources, equipment, and other facilities; and
- Technology transfer.

However, there are also key challenges, particularly in sustaining and expanding relationships between partners. MUHAS believes that it has the necessary ICT infrastructure to facilitate collaboration, but lacks the necessary technical support.

2.3   Mzumbe University[6]

Mzumbe University was established in December 2006 in accordance with section 4(1) of the Mzumbe Charter of 2007. This University is the successor to the Mzumbe University which was established by the Mzumbe University Act. No. 9 of 2001, but which was repealed by the Universities Act. No. 7 of 2005. The University was established through the transformation of a management training institute (MTI) known as the Institute of Development Management (IDM) Mzumbe. IDM had been established by the Government by Act No. 15 of 1972. The University is situated about 22km south-west of the Morogoro Municipality and about 220km from Dar es Salaam. The University is fully registered with the Tanzania Commission of Universities (TCU).

According to the University's website, its mission is 'to provide opportunities for acquisition, development, preservation and dissemination of knowledge and skills through training, research, technical and professional services' (Muzumbe University, 2005). Its vision is to be a centre of excellence in management sciences for knowledge acquisition and adaptation through training research, consultancy, public service and outreach activities in Africa and beyond by the year 2015' (Muzumbe University, 2005).

The Institution's primary focus is broken down as follows:

Table 33   Mzumbe University: Institutional focus

HE function	Approximate percentage of institutional focus
Teaching and learning	80%
Research	15%
Community service activities	5%

Source: Mzumbe University questionnaire response

2.3.1   Student Data

Out of a total student body of 3,474 contact students, the majority are enrolled at the University as full-time students (3,323), while the remainder are part-time. Of the total, 3,470 students are national citizens and four are from outside of the SADC region.

Table 34   Mzumbe University: Summary of Enrolment Numbers (Actual data, 2006/07)

Major field of study	Total number of students (headcount)	Number female students	Number male students	Number of students enrolled per level of study				
				Under-graduate degree/ diploma	Post-graduate degree/ diploma	Master's Degree	Doctoral Degree	Other qualifications (short courses, certificates etc)

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[6] Mzumbe University completed a questionnaire response. This section is primarily based on the questionnaire response, as well as the University's website (http://www.mzumbe.ac.tz).

Major field of study	Total number of students (headcount)	Number female students	Number male students	Number of students enrolled per level of study				
				Under-graduate degree/ diploma	Post-graduate degree/ diploma	Master's Degree	Doctoral Degree	Other qualifications (short courses, certificates etc)
Science, Engineering & Technology	157	30	127	147				10
Business, Management & Law	3,123	1,242	1,881	2,381		596	7	139
Humanities and Social Sciences	194	62	132	180		10	4	
TOTALS	**3,474**	**1,334**	**2,140**	**2,708**		**606**	**11**	**149**

Source: Mzumbe University questionnaire response

The majority of students in 2006/07 were enrolled in undergraduate courses, with a much smaller proportion reading for Master's Degrees, Doctoral Degrees, and other qualifications. The majority studied in the field of Business, Management and Law. There were more male students than female students enrolled across all three major fields of study. The students' male-female ratio was 57% to 43%.

A total of 799 qualifications was awarded by the university in 2006/7, broken down as follows:

Table 35 Mzumbe University: Summary of Qualifications Awarded (Actual data, 2006/07)

Major field of study/faculty	Number of qualifications awarded at this level					
	Total qualifications awarded	Under-graduate degree/ diploma	Post-graduate degree/ diploma	Master's Degree	Doctoral Degree	Other qualifications (short courses, certificates etc)
Science, Engineering & Technology	48	37	0	0	0	11
Business, Management & Law	713	496	0	131	0	86
Humanities and Social Sciences	38	38	0	0	0	0
TOTALS	**799**	**571**	**0**	**131**	**0**	**97**

Source: Mzumbe University questionnaire response.

The majority of qualifications awarded in 2006/07 were undergraduate degrees, with the field of Business, Management and Law contributing a large proportion of these.

The University provides the following services to students to support their studies.

Table 36   Mzumbe University: Student Services

Type of student service	Service provided (yes/no)
Academic orientation services	Yes
Academic support services (e.g. writing centres, study skills etc)	Yes
Accommodation facilities	Yes
Career guidance services	Yes
Psychological counselling services	Yes
Sports facilities	Yes
Information on study opportunities in other institutions	Yes
Language training	Yes
Social and cultural activities (bars, clubs, theatre, music etc)	Yes

Source: Mzumbe University questionnaire response

2.3.2   Staff Data

The majority of the 207 members of academic and research staff are national citizens, with three members coming from outside of the SADC region (actual data, 2006/07). All of the 300 members of management and administrative staff are national citizens (actual data, 2007/08).

Table 37   Mzumbe University: Academic and Research Staff (Actual data, 2006/7)

Major field of study	Total number (headcount)	Number of females	Number of males
Science, Engineering & Technology	20	1	19
Business, Management & Law	150	54	96
Humanities and Social Sciences	37	7	30
TOTALS	**207**	**62**	**145**

Source: Mzumbe University questionnaire response.

There are significantly more males than females employed among the academic and research staff, with females holding just 20% of the posts. Only 5% of the academic and research staff in the fields of Science, Engineering, and Technology is female. There are also more males employed among the management and administrative staff, where women comprise 41% of the total (actual data, 2007/08).

The breakdown of staff by qualification is as follows:

Table 38   Mzumbe University: Academic and Research Staff Highest Level of Qualification (Actual data, 2007/08)

Major field of study	Number of academic and research staff with as this as their HIGHEST qualification			
	Undergraduate degree/ diploma	Postgraduate degree/ diploma	Master's Degree	Doctoral Degree
Science, Engineering & Technology	10	0	7	3

Major field of study	Number of academic and research staff with as this as their HIGHEST qualification			
Business, Management & Law	48	0	82	20
Humanities and Social Sciences	4	0	24	9
TOTALS	**62**	**0**	**113**	**32**

Source: Mzumbe University questionnaire response.

Academic and research staff research output is summarized below.

Table 39   Mzumbe University: Research Output (Actual data, 2006/07)

Major field of study/faculty	Number of			
	publications in internationally accredited journals	publications in locally accredited journals	Books published	Other research activities
Science, Engineering & Technology	0	0	1	1
Business, Management & Law	0	0	0	9
Humanities and Social Sciences	2	9	8	5
TOTALS	2	9	9	15

Source: Mzumbe University questionnaire response.

Mzumbe University reported critical staff shortages in the following areas:
- Science, Engineering and Technology, and
- Business, Management and Law.

2.3.3   Governance and Management

The governance structure of the University comprises: a council; a senate; management committee team; directorates, faculties and institutes; department and centre heads; and lecturers and officers.

The University's governing body comprises the following representation:

Table 40   Mzumbe University: Governing Body Representation

Governing body representation	Number of members representing this group
Number of members who come from or represent the community sector	4
Number of members who come from or represent the public (i.e. government) sector	10
Number of students representatives	1

Governing body representation	Number of members representing this group
Number of staff representatives	2
TOTAL	**17**

Source: Mzumbe University questionnaire response.

Mzumbe University recognizes the inadequate standard and size of its classrooms as an infrastructure constraint, which has a major negative impact on the institution's ability to achieve its goals and objectives. Similarly, insufficient funding for research and staff training to PhD levels is recognized as a resource constraint. Each Faculty of the University has a priority theme with regards to a defined research policy/strategy, and the Corporate Strategic Plan enshrines the institution's plan for collaboration and cooperation with business and industry. Mzumbe University actively participates in the process of policy formation and evaluation, in order to have a significant influence on the shaping and informing of national higher education policy.

2.3.4   Funding

Most funding for the University is sourced from Government subsidies and grants (75%), while student fees make up 17%.

Table 41   Mzumbe University: Funding Sources (Actual data, 2006/07)

Sources of funding	Percentage of total funding/income
Student fees	17%
Government subsidy/grants	75%
Other (other funds)	0.83%
Other (owner's equity)	7.17%
Total	**100%**

Source: Mzumbe University questionnaire response

The insufficient level of funding received by Mzumbe University means that its financial resources are unable to meet the cash flow requirements. The University points out that funding from the Government has decreased in recent years.

The vast majority of research funding and income for the University is provided by international funders through donations. The remainder of this funding is provided by owner's equity. The average annual cost of student tuition per faculty was calculated as being TZS 750,000 for undergraduate students and TZS 1,250,000 for postgraduate students. These figures refer to the fields of Science, Engineering, and Technology, as well as the fields of Business, Management, and Law. About 60% of students receive additional financial support, excluding financial support from their families.

The University's main challenges to financial sustainability are identified as: competition, option enrolment, brain drain, labour market, and product life span. The institution has undertaken to address these challenges through market penetration, diversifying

programmes, staff motivation policy, qualified graduates, and reviewing courses, respectively. Mzumbe University has a strategic plan to develop additional income sources.

2.3.5 Quality Assurance

The University has internal quality assurance processes in place, and it allocates a specific budget to cover the cost of carrying out these processes. This quality assurance framework includes the areas of teaching activities, research activities, community service activities, student performance, administrative processes, entrepreneurial activities and external relations (namely local, regional, national and international).

Table 42   Mzumbe University: Challenges and Interventions in the Area of Quality Assurance

Main challenges	Initiatives/interventions undertaken to address challenges
1. Competition	Quality of product
2. Product quality	Diversifying courses
3. Staff qualifications	Training to highest qualifications
4. Staff options	Conducive learning environment
5. Student enrolment	Expanding MU campuses

Source: Mzumbe University questionnaire response

The quality assurance procedures for the University are prescribed by the national quality assurance framework, and the institution is required to report on quality assurance issues to authorities at the national level. The University also participates in mandatory peer review quality assessments; that is, external quality assessments. Internal evaluations of academic programmes are conducted regularly.

Mechanisms are in place to provide ongoing staff development, all of which is done internally by the University. In addition, there are mandatory processes in place for evaluating the performance of individual teaching staff. No processes are in place at the University for evaluating student learning services. There are processes to evaluate the performance of research teams in all research activities, and independent external moderators are involved in the setting and marking of student examinations. Mzumbe University actively seeks feedback from its students in the areas of academic issues, governance, and student services.

2.3.6 Regional Collaboration

Collaboration with other higher education institutions in the SADC Region is valued by Mzumbe University's management and senior academic staff, as is enrolment of students from other countries in the SADC Region. In the past five years, there has, however, been no significant change in the number of foreign students studying at the University. Mzumbe University provides language and/or cultural support to incoming international students.

The University currently has two collaborative academic or research programmes with foreign HEIs. The first is an undergraduate LLB programme administered by the Faculty of

Law, in collaboration with Kunnar University in India. The second is a BSc (Economics) programme at postgraduate level, which is administered by the Faculty of Social Science in partnership with Agder University in Norway.

The University also has three community and development projects that it is currently conducting with other institutions or organizations. All three are administered by the DVC (Academics) Faculty. The first is the Academic Improvement project that is funded by the Norwegian Government. The second is the MU-NEBET project, which funded by the Dutch Government through NUFFIC and aims at building the capacity of Mzumbe University to improve the business environment in Tanzania. Another project funded by NUFFIC is the Governance and Decentralization project, which aims at building the capacity of Mzumbe University to improve the governance and decentralisation issues in the country.

Mzumbe University is currently conducting two collaborative projects with local business/industry. The MU SBD Development project is administered by the DSBD faculty in partnership with other public and private organizations. The University also runs a bookshop.

The University expects to achieve a number of tangible benefits from regional collaboration, including the following:
• Student exchange programmes;
• Pooling intellectual resources for mutual benefits e.g. in supervision of Ph.D.;
• Quality assurance through peer publication reviews;
• Enhancing training opportunities;
• Maintaining academic staff-to-student ratios;
• Facilitating joint research; and
• Inter-university skills exchange.

The main challenges faced by the University with respect to Regional collaboration are identified as competition, labour market, technology, student enrolment and brain drainage. The University hopes to tackle these problems by addressing the real needs of the market in reviewing it curriculum, market penetration, product improvement, increasing market share and ICT facilities, increasing the number of programmes, and offering incentives packages. The University currently has the necessary ICT infrastructure and technical support needed for effective collaboration with other regional institutions.

In order to facilitate Regional collaboration among HEIs, the University feels the Government needs to take specific steps that include financing the development of domestic universities, increasing Government subventions, supporting universities in the training of academic staff, enhancing inter-university activities, and facilitating infrastructure development in universities. This facilitation of Regional collaboration can be further assisted by donors and other international organizations if they increase financial support, increase supervision of project funds, enhance good collaboration, and offer mutual assistance and joint ventures in consultancies.

2.4 OPEN UNIVERSITY OF TANZANIA[7]

The Open University of Tanzania (OUT) was established by an Act of Parliament No. 17 of 1992. The First Chancellor was officially installed in a full ceremony on 19th January, 1994. Act No.17 of 1992 has now been replaced by the Open University of Tanzania Charter which is in line with the University Act No.7 of 2005. The Charter was signed by the President of the United Republic of Tanzania on 28th March, 2007.

Headquartered in Dar es Salaam, The OUT is a single-mode institution offering its certificate, diploma, degree and postgraduate courses through distance learning systems such as broadcasting, telecasting, Information and Communication Technologies (ICT), correspondence courses, seminars, contact programmes or the combination of any two or more of such means. Its mission is to continuously provide quality open and distance education, research and public service for sustainable and equitable social economic development of Tanzania in particular and the rest of Africa. Its vision is to be a leading world class university in the delivery of affordable quality education through open and distance learning, dynamic knowledge generation and application (Open University of Tanzania, 2008).

The OUT breaks down its institutional focus as follows:

Table 43   The Open University of Tanzania: Institutional focus

HE function	Approximate percentage of institutional focus
Teaching and learning	75%
Research	15%
Community service activities	10%

Source: The Open University of Tanzania questionnaire response

2.4.1 Student Data

Due to the nature of the Open University system, all 5,176 students are distance students, all of whom are from Tanzania. (actual data, 2006). These students are spread as follows:

Table 44   The Open University of Tanzania: Summary of Enrolment Numbers (Actual data, 2006)

Major field of study	Total number of students (headcount)	Number female students	Number male students	Number of students enrolled per level of study				
				Under-graduate degree/ diploma	Post-graduate degree/ diploma	Master's Degree	Doctoral Degree	Other qualifications (short courses, certificates etc)

[7] The Open University of Tanzania issued a response to the questionnaire and this section is based primarily on this, as well as a web search and the literature search. The University's web site was unavailable at the time of writing this report.

Major field of study	Total number of students (headcount)	Number female students	Number male students	Number of students enrolled per level of study				
				Under-graduate degree/ diploma	Post-graduate degree/ diploma	Master's Degree	Doctoral Degree	Other qualifications (short courses, certificates etc)
Science, Engineering & Technology	416	123	293	415	0	1	0	0
Business, Management & Law	1,497	282	1,215	1,106	34	357	0	0
Humanities and Social Sciences	2,068	688	1,380	1,946	66	53	3	0
Other (Institute of Continuing Education)	1,195	505	690	1,195	0	0	0	0
TOTALS	5,176	1,598	3,578	4,662	100	411	3	0

Source: The Open University of Tanzania questionnaire response

The vast majority of students are thus undergraduates, with a smaller minority reading for a Master's Degree. The highest enrolment figures are in the fields of Humanities and Social Sciences, followed by similar enrolment figures for the fields of Business, Management and Law, and the Institute of Continuing Education. Gender disparities are evident, with more men than women registered in all of the major fields of study. Women comprise 31% of the total student enrolment.

Table 45   The Open University of Tanzania: Summary of Qualifications Awarded (Actual data, 1999-2006)

Major field of study/faculty	Number of qualifications awarded at this level					
	Total qualifications awarded	Under-graduate degree/ diploma	Post-graduate degree/ diploma	Master's Degree	Doctoral Degree	Other qualifications (short courses, certificates etc)
Science, Engineering & Technology	29	29	0	0	0	0
Business, Management & Law	153	152	0	1	0	0
Humanities and Social Sciences	114	105	3	1	5	0
Other (Institute of Continuing Education)	398	15	0	0	0	383
TOTALS	694	301	3	2	5	383

Source: The Open University of Tanzania questionnaire response.

The majority of qualifications awarded in 2006 were from the Institute of Continuing Education. Most awards were for undergraduate degrees/diplomas.

The Open University of Tanzania provides the following services to students to support their studies.

Table 46 The Open University of Tanzania: Student Services

Type of student service	Service provided (yes/no)
Academic orientation services	Yes
Academic support services (e.g. writing centres, study skills etc)	Yes
Accommodation facilities	No
Career guidance services	Yes
Psychological counselling services	Yes
Sports facilities	Yes
Information on study opportunities in other institutions	Yes
Language training	Yes
Social and cultural activities (bars, clubs, theatre, music etc)	Yes

Source: The Open University of Tanzania questionnaire response

2.4.2   Staff Data

The Open University of Tanzania employs 206 members of academic and research staff, all of who are national citizens. Similarly, all 200 members of the management and administrative staff are national citizens.

Table 47 The Open University of Tanzania: Academic and Research staff (Actual data, 2007)

Major field of study	Total number (headcount)	Number of females	Number of males
Science, Engineering & Technology	55	14	41
Business, Management & Law	42	10	32
Humanities and Social Sciences	109	33	76
TOTALS	**206**	**57**	**149**

Source: The Open University of Tanzania questionnaire response.

A gender disparity exists, with more males than females making up the academic and research staff. Females comprise just 28% of the total number of staff, a figure which is representative of gender divide across all major fields of study.

Amongst management and administrative staff, however, the numbers of males and females employed are equal when looking at the total figures. Slightly more females than males are employed in the fields of Humanities and Social Sciences. With respect to management and administration staff, the breakdown is as follows:

Table 48 The Open University of Tanzania: Management and Administration Staff (Actual data, 2007

Major Field Of Study	Total Number (headcount)	Number of females	Number of males
Science, Engineering & Technology	34	15	19
Business, Management & Law	25	5	20
Humanities and Social Sciences	141	83	58
TOTALS	**200**	**103**	**97**

The breakdown of qualifications amongst academic and research staff is as follows:

Table 49   The Open University of Tanzania: Academic and Research Staff Highest Level of Qualification (Actual data, 2007)

Major field of study	Number of academic and research staff with as this as their HIGHEST qualification			
	Undergraduate degree/ diploma	Postgraduate degree/ diploma	Master's Degree	Doctoral Degree
Science, Engineering & Technology	20	0	17	21
Business, Management & Law	21	0	22	6
Humanities and Social Sciences	15	0	49	23
Other (ICE)	3	0	7	2
TOTALS	**59**	**0**	**95**	**52**

The majority of staff members have a Master's Degree as their highest level of qualification, with a large proportion of the remainder holding Doctoral Degrees.

The academic and research staff research output is summarized below.

Table 50   The Open University of Tanzania: Research Output (Estimate data, 2006)

Major field of study/faculty	Number of			
	publications in internationally accredited journals	publications in locally accredited journals	Books published	Other research activities
Science, Engineering & Technology	5	30	2	0
Business, Management & Law	6	20	4	0
Humanities and Social Sciences	10	40	15	0
Health Sciences	2	2	0	0
TOTALS	**23**	**92**	**21**	**0**

The OUT reports no critical staff shortages.

2.4.3   Governance and Management

The governance structures of the University comprise the Council, the Senate HRMC, the FP and DC, the EC, the MC, and the Faculty Boards.

The University's governing body includes the following representation.

Table 51   The Open University of Tanzania: Governing Body Representation

Governing body representation	Number of members representing this group
Number of members who come from or represent the community sector	2
Number of members who come from or represent the public (i.e. government) sector	8
Number of students representatives	2
Number of staff representatives	4
TOTAL	**16**

Source: The Open University of Tanzania questionnaire response.

The University's management structures include the Chancellor, the Vice-Chancellor, three Deputy Vice-Chancellors, the Deans and Director (headquarters), and 25 Directors (Regional Centres).

The institution is not currently facing any infrastructure or resource constraints. The University has a clearly defined research policy/strategy, as well as a strategic plan for collaboration with business and industry. No further details were supplied with regard to these strategies. The University states that its influence in shaping and informing national HE policy is marginal.

2.4.4   Funding

Most funding for the University is sourced from Government subsidies and grants (53.2%) and student fees (35.2%).

Table 52   The Open University of Tanzania: Funding Sources (Actual data, 2006/7)

Sources of funding	Percentage of total funding/income
Student fees	35.2%
Government subsidy/grants	53.2%
Donations – international funders/donors	8.0%
Loans	1.79%
Total	**98.19%**

Source: The Open University of Tanzania questionnaire response

The level of funding currently received by the University is not sufficient for it to operate effectively. The University reports that its sources of funding and income have not changed significantly over the past 10 years, these currently being donations from international funders (the highest contributor at 50%), internal sources (25%), and Government grants (15%) (estimate data, 2006). The University does not calculate the average annual cost of student tuition per faculty. About 40.3% of students of the OUT receive additional financial support (excluding financial support from their families).

The main challenges to the institution's financial sustainability are: increase of admissions; retention of professional staff; application of ICT to teaching and learning; and the

increasing cost of printing. Initiatives undertaken to combat these problems include raising fees to reasonable levels, training more staff, use of solar energy, and establishment of partnerships in printing. The University also has a strategic plan to develop additional income sources.

2.4.5   Quality Assurance

The institution has internal quality assurance processes, but no information was supplied regarding whether or not a specific budget has been allocated to cover the costs of these processes. The University's quality assurance framework comprises several areas, including teaching and research activities, community service activities, student performance, administrative processes, entrepreneurial activities and external relations (that is, local, regional, national, and international).

Table 53   The Open University of Tanzania: Challenges and Interventions in the Area of Quality Assurance

Main challenges	Initiatives/interventions undertaken to address challenges
1. Management of student records	Use of ICT
2. Complex arrangement of student assessment	Advanced timetabling and use of part-time staff
3. Many stakeholders	Collaboration initiatives
4. Cheating with use of ICT	More and tighter regulations
5. Clear guidelines	Formulating Quality Assurance Policy (QA)

Source: The Open University of Tanzania questionnaire response

The National Quality Assurance Framework prescribes the quality assurance procedures which the University must follow, and the Institution is required to report on quality assurance issues to authorities at the national level. The University participates in mandatory peer review quality assessments, and also conducts internal evaluations of its academic programmes. The OUT has mechanisms in place to provide ongoing staff development, with this development being provided by external service providers 60% of the time. There are mandatory processes in place for evaluating the performance of individual teaching staff, but there are no processes which evaluate the student learning services. The performance of research teams is evaluated on all research activities, and independent external moderators are involved in the setting and marking of student examinations. The University actively seeks student feedback on academic issues, governance and student services.

2.4.6   Regional Collaboration

The University's management and senior academic staff value collaboration with other HEIs in the SADC region, as well as enrolment by students from other countries in the SADC region. In the past five years, the University has noted a significant increase in the number of students from foreign countries enrolled in the institution. The institution does not provide language and/or cultural support to incoming international students.

The OUT currently has eight collaborative academic/research programmes with HEIs outside of the country, seven of which are at undergraduate level. Three of the programmes are administered by the Institute of Continuing Education (ICE), whilst the remainder are linked with the Faculties of Social Sciences and Education. Partner institutions are from various countries, including the United States of America, United Kingdom, Finland, and the Netherlands, as well as other African countries such as Kenya and Uganda. In addition, the University has two collaborative community development projects with other organizations. These are the National AIDS Control Programme – which is administered by the Institute of Continuing Education in conjunction with the Ministry of Health – and the Cultural Factors Influencing Youth Condom Use Against HIV/AIDS project, which is administered by the Arts and Social Sciences faculty, together with a non-governmental organization called Research on Poverty Alleviation (REPOA). There are currently no collaborative projects between the University and business/industry.

The University expects to achieve a number of tangible benefits from regional collaboration, including the following:
• Expansion of knowledge;
• Research experience;
• Linkage of researchers;
• Dissemination of research findings through publications; and
• Provision of solutions to social issues.

The OUT notes two primary challenges regarding Regional collaboration, these being communication and inadequate funding. No institutional initiatives have been undertaken to counter these challenges. The University currently has the necessary ICT infrastructure and technical support to collaborate effectively with other Regional institutions. It states that, in order to help facilitate regional HE collaboration, the Government should establish a national fibre optic network, offer bandwidth support for educational institutions, and fund budgets for research. In addition, donors and other international organizations could help to support ICT capacity building in the country and offer support to intra-Regional research undertakings.

2.5   SOKOINE UNIVERSITY OF AGRICULTURE

Sokoine University of Agriculture was established near the Morogoro Municipality centre, about 200km west of Dar es Salaam, in 1984 by the Parliamentary Act No. 6 of 1984. It was created out of the University of Dar es Salaam's former Faculty of Agriculture, Forestry, and Veterinary Science. The University has four campuses: the Main Campus and Solomon Mahlangu Campus in Morogoro; the Olmotonyi Campus in Arusha, and the Mazumbai Campus in Lushoto. It also has a constituent College, the Moshi University College of Cooperative and Business Studies (MUCCoBS), in Moshi.

The University has four Faculties and six Directorates/Institutes, excluding those in the constituent College. They are the Faculty of Agriculture, Faculty of Forestry and Nature Conservation, Faculty of Veterinary Medicine, and Faculty of Science, the Institute of Continuing Education (ICE), the Development Studies Institute (DSI), and the Directorate of

Research and Postgraduate Studies (DRPGS). Others are the Computer Centre, Sokoine National Agricultural Library (SNAL), SUA Centre for Sustainable Rural Development (SCSRD), and SUA Pest Management Centre (SPMC).

The Institution did not provide a standardized breakdown of its key institutional focus areas. However, its vision is as follows:

> *To become a centre of excellence and a valued member of the global academic community in agriculture and other related fields, with emphasis on implementing practical skills, entrepreneurship, research and integration of basic and applied knowledge in an environmentally friendly manner (Sokoine University, 2005, p. xiv).*

Its mission is to:

Promote development through training, research, and provision of services to the public and private sector in an environmentally friendly manner (Sokoine University, 2005).

2.5.1   Student Data

In 2007-2008, the University had a student population of 2,856, of whom two were part-time students. Of these students, ten were students from SADC countries other than Tanzania, while ten were international students from countries outside of the SADC Region. Given the specialized focus of the Institution, all students are enrolled in an Agriculture Field of Study, broken down as follows:

Table 54   Sokoine University of Agriculture: Summary of Enrolment Numbers (Actual data, 2007/08)

Major Field Of Study	Total Number Of Students (Headcount)	Number female students	Number male students	Number of students enrolled per level of study				
				Under-graduate degree/ diploma	Post-graduate degree/ diploma	Masters Degree	Doctoral Degree	Other qualifications (short courses, certificates etc)
Agriculture	2,856	861	1,995	2,217	0	584	55	0
TOTALS	**2,856**	**861**	**1,995**	**2,217**	**0**	**584**	**55**	**0**

Source: Sokoine University of Agriculture questionnaire response

Again, all qualifications awarded during this academic year are in the Agriculture Field of Study, predominantly in the area of undergraduate qualifications.

Table 55   Sokoine University of Agriculture: Summary of Qualifications Awarded (Actual data, 2006/2007)

Major Field Of Study/Faculty	Number of Qualifications awarded at this level					
	Total Qualifications Awarded	Under-graduate degree/ diploma	Post-graduate degree/ diploma	Masters Degree	Doctoral Degree	Other qualifications (short courses, certificates etc)
Agriculture	812	648	0	151	13	0
TOTALS	**812**	**648**	**0**	**151**	**13**	**0**

Sokoine University reported that it has the following facilities for students:

Table 56   Sokoine University of Agriculture: Student Services

Type Of Student Service	Service Provided (Yes/No)
Academic orientation services	Yes
Academic support services (e.g. writing centres, study skills etc)	Yes
Accommodation facilities	Yes
Career guidance services	Yes
Psychological counselling services	Yes
Sports facilities	Yes
Information on study opportunities in other institutions	No
Language training	Yes
Social and cultural activities (bars, clubs, theatre, music etc)	No
Health Services	Yes

Student support services at the main campus include banking services, postal services, conference halls, bookshop, cafeteria, printing press, a veterinary clinic, SUATV (a television facility to broadcast academic and outreach programmes), business centre, soil analysis services, sports facilities, Nane Nane exhibition ground, Geographical Information Systems (GIS) and offices. There are also farm-based income generation activities such as feed mill, pasture production, piggery, horticulture, floriculture, poultry farming, and dairy production (Sokoine University of Agriculture, 2006).

2.5.2   Staff Data

In 2007/2008, Sokoine University of Agriculture has employed a total of 333 academic and research staff, all of whom are from Tanzania. The staff breakdown is as follows:

Table 57   Sokoine University of Agriculture: Academic and Research Staff (Actual data, 2007/2008)

Major Field Of Study	Total Number (headcount)	Number of females	Number of males
Agriculture	333	54	279
TOTALS	**333**	**54**	**279**

Table 58   Sokoine University of Agriculture: Academic and Research Highest Level of Qualification (Actual data, 2007/2008)

Major Field Of Study	Number of Academic and Research Staff with as this as their HIGHEST qualification			
	Undergraduate degree/ diploma	Postgraduate degree/ diploma	Masters Degree	Doctoral Degree
Agriculture	22	0	75	236
TOTALS	**22**	**0**	**75**	**236**

Source: Sokoine University of Agriculture questionnaire response.

There are 801 management and administration staff at the University, all of whom are from Tanzania, broken down as follows:

Table 59   Sokoine University of Agriculture: Management and Administration Staff (Actual data, 2007/2008)

Major Field Of Study	Total Number (headcount)	Number of females	Number of males
Agriculture	801	270	531
TOTALS	**801**	**270**	**531**

Source: Sokoine University of Agriculture questionnaire response.

The Institution reported having a defined research policy. According to its Corporate Strategic Plan:

> *The research is largely donor-funded and is biased towards applied research with little basic research being supported. Donor-driven research, particularly research with a short to medium time scale, must be supplemented by longer term, basic research, for which there is little or no funding at present (Sokoine University, 2005, pp. 21-22).*

Between them, the academic and research staff have been responsible for generating the following research output during 2007/2008.

Table 60   Sokoine University of Agriculture: Research Output (Actual data, 2007/2008)

Major Field Of Study/Faculty	Number Of			
	Publications in internationally accredited journals	Publications in locally accredited journals	Books Published	Other research activities
Science, Engineering & Technology	73	181	0	0
TOTALS	**73**	**181**	**0**	**0**

Source: Sokoine University of Agriculture questionnaire response.

The University reported critical staff shortages in the area of Agriculture.

2.5.3   Governance and Management

The University is governed by a Council, which establishes the institution's rules and regulations, according to which its affairs are conducted. While there is an honorary Chancellor, it is the Vice-chancellor who sees to the day-to-day running of the University, assisted by the Deputy Vice-Chancellor, the Registrar and a number of other senior officers. A number of university committees tackle all important matters in the university and report on or recommend to Council the course of action to be taken. One of the most prominent committees is the Senate, which deals mainly with issues pertaining to academics.

The University's governing body includes the following representation.

Table 61   Sokoine University of Agriculture: Governing Body Representation

Governing Body Representation	Number Of Members Representing This Group
Number of members who come from or represent the business/industry sector	1
Number of members who come from or represent the community sector (includes two Members of Parliament)	1
Number of members who come from or represent the community sector	17
Number of students representatives	1
Number of staff representatives	2
TOTAL	**22**

Source: Sokoine University of Agriculture questionnaire response.

Sokoine University of Agriculture reported playing a significant role in shaping and informing higher education policy at a national level, but did not provide any additional information on how this was achieved.

2.5.4   Funding

According to its questionnaire response, Sokoine University of Agriculture receives the most substantial proportion of its income from government. A breakdown of funding received for the 2006/2007 academic year is presented below:

Table 62   Sokoine University of Agriculture: Funding Sources (Actual data, 2007/2008)

Sources of Funding	Percentage of total funding/income
Student fees	16%
Government subsidy/grants	45%
Donations – International funders/donors	39%
Loans	0%
Consultancy Revenue	0%
Total	**100%**

Source: Sokoine University of Agriculture questionnaire response.

The University is diversifying its funding sources in an attempt to ensure its financial sustainability. In terms of its Corporate Strategic Plan 1997 – 2005, considerable changes were for the Institution to become a reputable and sustainable centre of academic excellence. Subventions provided by the Government and donor funding are inadequate for the University to fulfil its mission. Thus the Institution began exploiting commercial ventures in an attempt to diversify its funding sources in order to reduce its existing budgetary gap and dependence on Government and donor funding. The Institution formulated an income-generation policy, which was approved by the University Council in September 2001. Its investment policy was approved by the University Council in September 2005. These policies set out guidelines for the University's income generation and investment activities.

These sources of funding have changed significantly over the last ten years, particularly as donor support has grown. In particular, it noted that, in 2007/2008, only 1% of research

funding comes from Government, with 99% coming from international funders/donors. The Institution does not calculate the average annual cost of student tuition per Faculty.

The University notes that it does not currently receive sufficient funds for it to operate effectively. The Institution reported facing infrastructure constraints. It noted a requirement particularly for more tarmac roads, more student accommodation, more office space (buildings), and transport for the Dean of Students' Office. It also noted resource constraints as follows:
- Need for more professional personnel in counselling services;
- Inadequate funds to run the Students' Office;
- A need to establish a Students Information Desk in the Office of the Dean of Students; and
- A need to detach various functions which are not logically harmonized (for example, provision of counselling services by the same person responsible for taking disciplinary action).

2.5.5   Quality Assurance

Sokoine University of Agriculture does have internal quality assurance processes, and reports allocating a specific budget to cover the costs of carrying out these processes. These quality assurance processes cover teaching, research, and community service activities, as well as student performance, administrative processes, and external relations. It notes that the national quality assurance framework does prescribe the quality assurance procedures that institutions must follow, and that is it required to report on quality assurance issues to authorities at the national level. The Institution also participates in mandatory peer review quality assessments, and reports regularly conducting internal evaluations of its academic programmes.

The Institution does have mechanisms in place to provide ongoing staff development, approximately 20% of which is done internally and the balance by external service providers. It also has mandatory processes in place for evaluating the performance of individual teaching staff, student learning services, and research teams. External/independent moderators are involved in the setting and marking of examinations. Finally, the Institution does actively seek student feedback on academic, governance, and student services issues.

The main challenges experienced by the University in quality assurance are tabulated below:

Table 63   Sokoine University of Agriculture: Challenges and Interventions in the Area of Quality Assurance

Main Challenges	Initiatives/interventions undertaken to address challenges
Inadequate Funding.	Increase internally generated funds.
Class boycotts/strikes.	Streamline communications process.

Source: Sokoine University of Agriculture questionnaire response.

2.5.6   Regional Collaboration

Sokoine University of Agriculture did not provide responses to the section of the questionnaire focusing on Regional collaboration. However it did provide a list of collaborative academic and research projects in which it is engaged, which is presented below:

Table 64   Sokoine University of Agriculture: Collaborative Research and Academic Projects

Name of Programme	Faculty that administers the programme	Name(s) of partner institution(s)	Country of partner institution(s)
1. ENRECA (Enhancement of Research Capacity in Developing Countries)	Directorate of Research and Postgraduate Studies (DRPGS)	UC-LIFE	Denmark
2. Programme for Agricultural and Natural Resources Transformation for Improved Livelihoods (PANTIL)	DRPGS	UMB	Norway
3. ASARECA (Association for Strengthening Agricultural Research in Eastern and Central Africa)	DRPGS	University of Nairobi and Makerere University	Kenya/Uganda
4. NUFU (Norwegian Programme for Development Research and Education)	DRPGS	UMB	Norway
5. VICRES (Victoria Research Institute)	DRPGS	Various	Kenya/Uganda
6. AICAD (African Institute for Capacity Development)	DRPGS	Various	Kenya/Uganda

Source: Sokoine University of Agriculture questionnaire response.

2.6   UNIVERSITY OF DAR ES SALAAM [8]

In 1970, the East African Authority took a decision to split the then University of East Africa into three independent universities for Kenya, Uganda, and Tanzania. It was out of this move that the University of Dar es Salaam was born. The University admits students from other East African countries, mainly Kenya and Uganda, through the Inter-University Council for East Africa (IUCEA), which was established in 1970 to maintain East African inter-university academic cooperation and communication.

Table 65   University of Dar es Salaam: Institutional focus

HE function	Approximate percentage of institutional focus
Teaching and learning	60%

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[8] A questionnaire was completed by the University and this section is based mainly on information contained in the questionnaire response, the institutional website (www.udsm.ac.tz), as well as the literature search.

HE function	Approximate percentage of institutional focus
Research	20%
Community service activities	20%

Source: University of Dar Es Salaam questionnaire response

2.6.1   Student Data

The University has a total of 18,100 students, the majority of whom are full-time students. There are no distance students and only 115 students study part-time. The majority (17,916) are national citizens and the remainder (184) are international students from outside of the SADC region.

Table 66   University of Dar es Salaam: Summary of Enrolment Numbers (Actual data, 2006/7)

Major field of study	Total number of students (headcount)	Number female students	Number male students	Number of students enrolled per level of study				
				Under-graduate degree/ diploma	Post-graduate degree/ diploma	Master's Degree	Doctoral Degree	Other qualifications (short courses, certificates etc)
Science, Engineering & Technology	3,307	757	2,550	3,037	48	788	4	0
Business, Management & Law	3,432	511	2,921	2,834	6	1,102	6	598
Humanities and Social Sciences	4,556	2,328	2,228	4,556	6	615	5	0
Health Sciences	1,779	534	1,245	1,779	12	113	3	0
Other (Architecture, Land Use, Planning, and Management)	1,261	204	1,057	1,261	0	0	0	0
Other (Occasional College of Education)	3,765	1,497	2,268	3,765	10	286	3	0
TOTALS	**18,100**	**5,831**	**12,269**	**17,232**	**82**	**2,904**	**21**	**0**

Source: University of Dar es Salaam questionnaire response

The majority of students are enrolled in undergraduate degrees, and a far smaller percentage in Master's Degrees. In terms of field of study, the largest number of students is enrolled in Agricultural Resources, followed by Humanities and Social Sciences. There is a significant gender disparity in enrolment figures, with male students comprising more than 66%. The disparity is large in almost all fields of study. Women outweigh men only in Humanities and Social Sciences.

In 2006/7, the university awarded 3,513 qualifications.

Table 67   University of Dar es Salaam: Summary of Qualifications Awarded (Actual Data, 2006/7)

Major field of study/faculty	Number of qualifications awarded at this level					
	Total qualifications awarded	Under-graduate degree/ diploma	Post-graduate degree/ diploma	Master's Degree	Doctoral Degree	Other qualifications (short courses, certificates etc)
Science, Engineering & Technology	669	501	24	191	1	0
Business, Management & Law	716	586	4	122	1	0
Humanities and Social Sciences	1,218	1,131		83	4	0
Health Sciences	464	430	3	29		0
Other (Architecture, Land Use, Planning, and Management)	236	236	0	0	0	0
Other (Occasional College of Education)	210	173	6	30	1	0
TOTALS	**3,513**	**3,057**	**37**	**455**	**7**	**0**

Source: University of Dar es Salaam questionnaire response.

Most students in 2006/07 were awarded degrees at the undergraduate level (87%), followed by Master's Degrees (13%). Only a small minority of qualifications awarded were Doctoral Degrees.

The University of Dar es Salaam provides the following services to students to support their studies.

Table 68   University of Dar es Salaam: Student Services

Type of student service	Service provided (yes/no)
Academic orientation services	Yes
Academic support services (e.g. writing centres, study skills etc)	No
Accommodation facilities	Yes
Career guidance services	No
Psychological counselling services	Yes
Sports facilities	Yes
Information on study opportunities in other institutions	Yes
Language training	Yes
Social and cultural activities (bars, clubs, theatre, music etc)	Yes
Other (Medical facilities)	No

Source: University of Dar es Salaam questionnaire response

2.6.2   Staff Data

Of the academic and research staff complement, 1,311 are national citizens, while 12 are from non-SADC countries (actual data, 2006/07). The University employs 959management and administrative staff, all of who are national citizens.

Table 69   University of Dar es Salaam: Academic and Research Staff (Actual data, 2006/07)

Major field of study	Total number (headcount)	Number of females	Number of males
Science, Engineering & Technology	317	26	291
Business, Management & Law	92	22	70
Humanities and Social Sciences	374	143	231
Health Sciences	217	65	152
Other (Architecture, Land Use, Planning, and Management)	156	21	135
Other (Occasional College of Education)	167	47	120
TOTALS	**1,323**	**324**	**999**

Source: University of Dar es Salaam questionnaire response.

There is a significant gender disparity among the academic and research staff at the institution. Women comprise fewer than 25% of the overall staff complement and in the area of Science, Engineering & Technology, fewer than 10%. However, there is a fairly even split among management and administrative staff.

Table 70   University of Dar es Salaam: Academic and Research Staff Highest Level of Qualification (Actual data 2006/o7)

Major field of study	Number of academic and research staff with as this as their HIGHEST qualification			
	Under-graduate degree/ diploma	Post-graduate degree/ diploma	Master's Degree	Doctoral Degree
Science, Engineering & Technology	0	0	50	267
Business, Management & Law	0	0	31	61
Humanities and Social Sciences	0	0	72	506
Health Sciences	0	0	34	183
Other (Architecture, Land Use, Planning, and Management and Occasional College of Education)	0	0	81	38
TOTALS	**0**	**0**	**268**	**1,055**

Source: University of Dar es Salaam questionnaire response.

Most staff (80%) have a Doctoral Degree as their highest level of qualification.

The academic and research staff research output is summarized below; however, no breakdown according to field of study was available.

Table 71   University of Dar es Salaam: Research Output (Actual data, 2006/07)

Major field of study/faculty	Number of			
	Publications in internationally accredited journals	Publications in locally accredited journals	Books published	Other research activities
TOTAL	287	69	22	0

The University of Dar es Salaam reported critical staff shortages in the following areas:
• Science, Engineering & Technology
• Business, Management & Law
• Humanities & Social Sciences
• Health Sciences.

2.6.3   Governance and Management

The University of Dar es Salaam is governed by three main structures: the UDSM Council, the Vice Chancellor and DVCs, and the financial departments.

Representation on the governing body is as follows:

Table 72   University of Dar es Salaam: Governing Body Representation

Governing body representation	Number of members representing this group
Number of members who come from or represent the business/industry sector	4
Number of members who come from or represent the community sector	3
Number of members who come from or represent the public (i.e. government) sector	4
Number of students representatives	2
Number of staff representatives	2
Other (Management)	5
TOTAL	20

Source: University of Dar es Salaam questionnaire response.

The University is managed principally by the Vice Chancellor, thereafter by the DVC-ARC and DVC-PFA, and finally, by the functional departments.

The University reports constraints in two areas, both of which have a negative effect on the institution's ability to achieve its goals and objectives. These are infrastructure (limited accommodation, limited teaching space, inadequate ICT facilities, unreliable municipal services, and inadequate office space for staff) and resources (only 25% to 49% of resources

requested for operational expenses are approved, with actual disbursement being less than approved ceilings).

The University has a clearly defined research policy in place. The research agenda takes into account the institution's aspirations and national policy. There is a strategic plan in place for collaboration with business/industry. This is based on the current environmental scan and has taken on board certain national needs contained in Vision 2025 and the Poverty Alleviation Strategy policies. The University plays a significant role in shaping and informing national HE policy. For instance, it played a pivotal role in establishing new institutions, participated in policy development in education and other sectors, and plays a role in education sector reforms.

2.6.4   Funding

Most funding for the University is sourced from government subsidies/grants:

Table 73   University of Dar es Salaam: Funding sources (Actual data, 2006/07)

Sources of funding	Percentage of total funding/income
Student fees	20%
Government subsidy/grants	65%
Donations – international funders/donors	15%
Total	**100%**

Source: University of Dar es Salaam questionnaire response

The level of funding the institution receives is inadequate. Allocation approvals are between 25% and 40% of its submitted budget. The institution's sources of funding have changed significantly over the past 10 years. Cost-sharing in fees from students and other sources bring in about 15% to 20% of the operational budget. The establishment of new universities has increased pressure on Government resources, with more institutions now competing for the little that is available to them all. UDSM benefits from grants provided by the education authority. Postgraduate training is largely funded by development partners, as is research.

The main challenges faced by the institution in terms of financial sustainability are decreasing funding from the Government and dependence on development partners for research and training.

2.6.5   Quality Assurance

The University of Dar es Salaam has internal quality assurance processes in place, but no specific budget to cover the costs of carrying out these processes. The quality assurance framework covers teaching activities and student performance.

Table 74 University of Dar es Salaam: Challenges and Interventions in the Area of Quality Assurance

Main challenges	Initiatives/interventions undertaken to address challenges
1. Limited financial resources	Increase effort to generate own income
2. Poor reward for academic staff	Support from development partners
3. High labour turnover	Negotiate with Government to improve pay package Improve working environment

Source: University of Dar es Salaam questionnaire response

The quality assurance framework does not prescribe procedures that individuals should follow, nor is the institution required to report on quality assurance issues to authorities at the national level. The institution does, however, participate in external quality assessments and regularly conducts internal evaluations of its academic programmes. Mechanisms are in place to provide ongoing staff development, 70% of which is conducted internally and 30% by external service providers. There are also mandatory processes in place to evaluate the performance of individual teaching staff members, as well as limited processes in place for evaluating some student learning services. Research teams are evaluated on all of their research activities, and external moderators are involved in the setting and marking of student examinations. Student feedback is actively sought on academic issues, governance and student services.

2.6.6   Regional Collaboration

Collaboration with other higher education institutions within the SADC Region is valued by the University. Allocations are made for this at individual and department levels, and many of the external examiners are from SADC countries. While enrolment from other SADC countries is valued, the institution does not currently have any students from these countries. There had been no significant change in the past five years in the number of students from foreign countries. The institution provides language and/or cultural support to incoming international students by providing opportunities to learn Swahili for general communication purposes.

The University anticipates achieving a number of tangible benefits from regional collaboration, including the following:
• Training staff at a lower cost;
• Undertaking joint research with regional institutions; and
• Exchange of faculty and students.

The main challenges faced in Regional collaboration are increased demand, management pressure, declining budget, infrastructure and programmes. Initiatives undertaken by the Institution to address these challenges are enrolment expansion, automation of processes and decentralization, stepping up efforts to generate income, borrowing funds from financial and government agencies for expansion, and establishing new programmes and deleting obsolete ones.

2.7   UNIVERSITY OF DODOMA

Despite several attempts, it was not possible to make contact with the University of Dodoma. The information presented below is taken from its website, but no data could be sourced on student enrolments in 2007/2008. The Institution is, however, still new, so it is believed that there were only a few programmes offered during that academic year, with more planned for 2008/2009.

The Government decided to establish a new and modern university in Dodoma known as The University of Dodoma. Establishment of the University is in line with the ruling Party Election Manifesto as well as the National Development Vision 2025. The University of Dodoma (UDOM) is designed to be a comprehensive University, which will train and produce human capital in the major professions for economic development. UDOM will enrol 40,000 students when fully operational. The University will have its strengths mainly in information and communication technology (ICT) and science-based programmes and will offer training in specialized science areas, such as, molecular biology, genomics, and nuclear sciences, areas that have been shown to play key roles in many life applications including medicine and engineering. UDOM will provide a base for establishment of an ICT Centre of Excellence (College of Informatics and Virtue Education). The College will provide a solid foundation for ICT development and application in the country and implementation of Tanzania Education Network (TENET) for enhanced access to higher education, research and quality services delivery.

UDOM is located at Chimwaga area about 8 kilometres East of Dodoma town centre. The University is within Dodoma district, and it covers an area of about 15,000 acres which is approximately 6,000 hectares. The site has a very prominent view as it is situated in high hilly area.

As an Institution of higher learning offering comprehensive education, UDOM will have diversified academic programmes geared towards the realization of national strategic goals that are guided by the country's sector policies and will operate on college mode.

The University will operate in college mode with each college being autonomous under a college principal assisted by two deputy principals. Coordinated decentralized system will be enhanced. From 2008, The University is expected to establish the following colleges and schools:
• College of Education;
• College of Humanities and Social Sciences;
• College of Informatics and Virtual Education;
• School of Life Sciences; and
• School of Health and Allied Sciences (University of Dodoma, 2008a).

2.7.1   Student Data

Of about 1,100 students enrolled at UDOM in 2007/2008, more than half are from the School of Social Sciences (University of Dodoma, 2008b). Students have enrolled during

2007/2008 in programmes in the School of Humanities, School of Social Sciences, College of Education, and College of Informatics and Virtual Education.

2.7.2 Staff Data

In June 2007, the Government approved a total of 97 positions for academic staff. Although the total number of academic staff seems to be optimal in relation to the total student enrolment for the academic year 2007/08, the percentage distribution across the academic ranks and disciplines is skewed. Female staff members constitute about 31 percent of the total. Of these staff, 18 are in the School of Humanities (University of Dodoma, 2008c) and 37 in the School of Social Sciences (University of Dodoma, 2008b).

The majority of the academic staff are assistant lecturers and tutorial assistants. As a matter of policy, tutorial assistantship is a training post. All tutorial assistants are required to embark on master's degree programmes at the earliest opportune time. Upon award of a master's degree qualification, they are promoted to assistant lecturers and thereafter, they can be formally allowed to teach. However, assistant lecturers are also people in transition, because they need to be trained at PhD level. Thus, over 70% of staff are people who require further training, at masters and PhD levels. Efforts are underway to mobilize assistance from various sources to support the staff development agenda. Another option that has been contemplated and needs to be pursued is recruitment of temporary staff from outside the country to fill the current staff shortfall.

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