

**AN INVESTIGATION INTO OUTSOURCING TOWARDS EFFICIENCY
IMPROVEMENT, SPAN OF CONTROL AND OPERATIONAL COSTS
REDUCTION IN PUBLIC UNIVERSITIES IN MOROGORO REGION**

BY

MIKIDADI IDD MUHANGA



**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN RURAL
DEVELOPMENT OF SOKOINE UNIVERSITY OF AGRICULTURE,
MOROGORO, TANZANIA**

2007

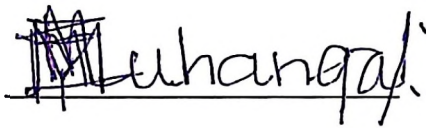
ABSTRACT

This study was conducted to investigate into outsourcing towards efficiency improvement, span of control and operational costs reduction in public universities (PUs) in Morogoro region Mzumbe University and Sokoine University of Agriculture. Specifically the study had the following objectives: (a) to investigate operationalization of outsourcing in PUs, (b) to assess the potentiality of outsourcing towards efficiency improvement and span of control reduction, (c) to assess cost effectiveness of outsourcing as a management strategy and (d) To review and compare the levels of outsourcing in PUs in Morogoro and recommend on the possibility of outsourcing for efficiency enhancing and lowering costs. The study is based on a survey of the Departments of Personnel, Finance, Planning and Admissions in PUs in Morogoro plus the private companies providing services in PUs in Morogoro. A checklist was used to collect information from the heads of departments plus the private services providers (PSPs) representatives. Data analysis entailed of a number of descriptive statistics and cross tabs. Results revealed that outsourcing in PUs in Morogoro is guided by the Public Procurement (Goods, Works, Non-consultant Services and Disposal of Public Assets by Tender) Regulations of 2005. Significant reductions in span of control has been registered through outsourcing management strategy, efficiency has been enhanced to those responsible for supervision, and it was further revealed that outsourcing is cost effective than “own managing” with respect to non core functions, PUs have registered significant reductions in operational costs. The study recommended that: PUs need to conduct organizational analysis and planning, merge cadres, establish secretarial pools

and insist on ICT competence among the Senior and Middle level Officers and pursue further outsourcing of their non core functions which constitute most of under qualified staff in PUs, this will enhance efficiency, reduce both operational costs and span of control. Overall the study asserts that outsourcing has a value to add in PUs management in Tanzania.

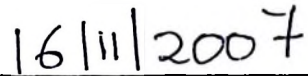
DECLARATION

I, **Mikidadi Idd Muhanga**, do hereby declare to the Senate of the Sokoine University of Agriculture that, this dissertation is my original work and has not been nor is it being submitted for a degree award to any other university.




Mikidadi Idd Muhanga

(Candidate)

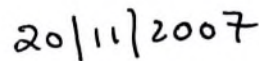


Date



Prof. A.E. Temu

(Supervisor)



Date

COPYRIGHT

No part of this dissertation may be reproduced, stored in any retrieval system, or transmitted in any form or by any means without prior written permission of the author or Sokoine University of Agriculture.

ACKNOWLEDGEMENTS

It is not possible to list all who willingly helped me in the course of carrying out this study, who offered me a great deal of their time and expertise on the subject matter. However, with great pleasure I shall make some exceptions.

The management of the Sokoine University of Agriculture which granted me a study leave and tuition fees waiver that enabled me to register for M.A (Rural Development) at SUA

In a very special way, my thanks go to my supervisor Prof. A.E. Temu for his guidance and very valuable constructive comments and suggestions which have impacted positively in shaping up my ideas through all stages in accomplishing this task. I feel privileged to work under him.

I am deeply indebted to the staff of Development Studies Institute at SUA, Prof. E. Mwageni, Mr. E. Chingonikaya, Mr. .A .B Mwakalobo and Mr. S. Mbwambo who in various ways contributed to this work. Also to Prof Z.S.K Mvena for his constructive remarks during my seminar presentation.

It would be very unfair if I don't acknowledge those who did help me in the course of data collection various civil servants at Mzumbe University, Mr. Baasha, Mr. Mbughuni, Mr. Mwamanga, and Mr. Simbakila, and at Sokoine University of Agriculture, I would

like to acknowledge Mr. D. Muyenjwa , Mr. P. Mwakiluma , Mr. C.W.A Itcha and Mr. G. Mhagama . I have to acknowledge for the technical assistance received from Mr. Heri Kayeye of SUA Centre for Sustainable Rural Development at SUA specifically for preparing the map of the study area, and Mr. J. Lugole from the Computer Centre at SUA who assisted in preparing templates for data collection.

I am grateful to my wife Aysha for her constant encouragement, understanding and support.

I am also grateful to Mr. Andrew Magoma Kajura who did a lot of facilitation to link me with various offices at SUA while I was in Norway, Ms. M. Banda and Mrs .E. Mtambo for secretarial work.

Last but not least, to my colleagues on PANTIL-UMB Young Professionals Exchange Programme at Norwegian University of Life Sciences, Ås, Norway, Mr Kizito Mwajombe and Mr Justus Nsenga who assisted me in the course of final corrections of my thesis. Despite the tight schedule we had at UMB, they were always willing to assist to the end.

DEDICATION

This work is dedicated to my parents Mr. and Mrs. Muhanga. It's through your inspiration and guidance I have made this a reality. To my wife Aysha and daughter Nadya for the endurance and care throughout. Thank you all!

TABLE OF CONTENTS

ABSTRACT	ii
DECLARATION	iv
COPYRIGHT	v
ACKNOWLEDGEMENTS.....	vi
DEDICATION.....	viii
LIST OF TABLES.....	xiv
LIST OF FIGURES.....	xvi
LIST OF APPENDICES.....	xvii
LIST OF ABBREVIATIONS AND ACRONYMS.....	xviii
CHAPTER ONE.....	1
INTRODUCTION.....	1
1.1 Background Information.....	1
1.2 Outsourcing in Tanzania.....	4
1.3 Definition of Terms.....	5
1.4 Problem Statement and Justification.....	8
1.4.1 Problem Statement.....	8
1.4.2 Justification.....	10
1.5 Objectives of the Study.....	11
1.5.1 Main objective of the study.....	11
1.5.2 Specific Objectives.....	11
1.6 Research Questions.....	12

1.7	Organization of the Study	12
CHAPTER TWO.....		14
LITERATURE REVIEW.....		14
2.0	Overview.....	14
2.1	The Concept and Practice of Outsourcing	14
2.1.1	Historical perspective.....	15
2.1.2	Types of outsourcing.....	18
2.1.2.1	Offshore outsourcing	18
2.1.2.2	Onshore outsourcing	18
2.1.2.3	Near shore outsourcing	19
2.2	Rationale for Outsourcing.....	19
2.3	PU's Reforms in Tanzania: An overview.....	22
2.4	Outsourcing in Higher Education	23
2.5	Outsourcing Decision Factors.....	25
2.6	Outsourcing Performance Monitoring and Contract Evaluation	26
2.7	Studies on Cost Reductions Attempts and Efficiency improvement	27
2.7.1	Oregon State University attempts on cost reductions	27
2.7.2	ANSTI study on constraints facing Science and Technology training institutions in Africa	28
2.7.3	Commonwealth Higher Education Management Services (CHEMS) study	29
2.8	Outsourcing, Retrenchment and Rightsizing in PUs	30

2.9	How Widespread is Outsourcing?	34
CHAPTER THREE		37
METHODOLOGY		37
3.0	Overview	37
3.1	Data sources	37
3.1.1	Secondary data	37
3.1.2	Primary data	38
3.1.2.1	Checklist designing	39
3.1.2.2	Personal interviews	39
3.1.2.3	Preliminary investigation	39
3.2	Instrumentation and the Data Collection Process	40
3.3	Data Analysis	41
3.4	Units of Measurement and Analysis	41
3.4.1	Span of control	42
3.4.2	Operational costs	42
3.4.3	Level and extent of outsourcing	43
3.4.4	Efficiency improvement	44
3.4.4.1	SSR	45
3.4.4.2	Span of control	45
3.5	Location of the Study Area	46
3.5.1	Sokoine University of Agriculture	46
3.5.2	Mzumbe University	47

CHAPTER FOUR	49
RESULTS AND DISCUSSION.....	49
4.0 Over View.....	49
4.1 Institutional Aspects and Capacities	49
4.1.1 Non –degree and degree programs offered by PUs in Morogoro	50
4.1.2 Academic and administrative units	50
4.1.3 Organizational structures	51
4.1.4 Manning levels.....	55
4.1.5 Students enrollment	58
4.1.6 Staff qualifications	59
4.1.7 Student –staff ratio	62
4.2 Challenges Facing PUs in Morogoro	64
4.2.1 Reliance on government funding	65
4.2.2 Administrative staff qualifications.....	66
4.2.3 Increased demand for university education	68
4.3 Operationalization of Outsourcing in PUs.....	69
4.3.1 Choice of PSPs.....	69
4.3.2 Types of outsourcing in place at the PUs in Morogoro	73
4.3.4 University policy for managing or coordinating contracted out services	75
4.3.5 The extent and levels of outsourcing	77
4.3.6 Performance monitoring and contract evaluation	79
4.3.7 Outsourcing implementation.....	81

4.3.7.1	Manning levels analysis	81
4.3.7.2	Retrenchment, rightsizing and outsourcing	81
4.4	Potentiality of Outsourcing Towards Efficiency Improvement and Span of Control Reduction	83
4.5	Cost Effectiveness of Outsourcing as a Management Strategy in PUs.....	88
CHAPTER FIVE		98
CONCLUSION AND RECOMMENDATIONS		98
5.0	Overview	98
5.1	Summary of the Major Findings	99
5.1.1	Operationalization of outsourcing in PUs.....	99
5.1.2	Efficiency improvement and span of control reduction.....	100
5.1.3	Cost effectiveness of outsourcing as a management strategy in PUs ...	101
5.1.4.	On levels of outsourcing comparison and the possibility of further outsourcing for efficiency enhancing and lowering costs.....	101
5.2	Conclusion	102
5.3	Recommendations	103
5.3.1.	Organizational analysis and planning	103
5.3.2.	Further outsourcing non core functions	104
5.3.3	Merging cadres.....	104
5.3.4	Establishment of secretarial pools and insisting on ICT competence among the Senior and Middle level Officers in the PUs	105
REFERENCES		106
APPENDICES		118

LIST OF TABLES

Table 1	Reasons for contracting out by CHEMS study	20
Table 2	Summary of the methodological aspects from the literature review	36
Table 3	Secondary data sources and types	38
Table 4	Level and extent of outsourcing scaling:	44
Table 5	Non degree and degree programs offered by PUs, 2007	50
Table 6	Academic and administrative units	51
Table 7	Manning levels in PUs in Morogoro, 2007	55
Table 8(a)	Workforce frequency distribution by cadre for the cadres with highest frequencies among the administrative staff cadres at SUA	56
Table 8(b)	Workforce frequency distribution by cadre for the cadres with highest frequencies among the administrative staff cadres at MU	58
Table 9	Students population in PUs in Morogoro, 2000/01-2005/06	58
Table 11(a)	Administrative staff by gender	60
Table 11(b)	Academic staff by rank and gender	60
Table 12	Administrative staff education level	61
Table 13	SSR in PUs in Morogoro, 2000/2001-2005/2006	63
Table 14	Recruitment levels administrative and academic staff	64
Table 15	Recurrent Budget trends in PUs in Morogoro, 2000/01-2005/06 Figures in Tshs. '000	65
Table 16	Cadres constituting under qualified staff and their frequencies	67
Table 17	Frequencies of qualified applicants versus admitted, 2000/01-2006/07	68

Table 18	Privatized facilities at PUs, 2007	70
Table 19	PSPs at SUA, 2006/07.....	72
Table 20	PSPs at MU, 2007	73
Table: 21	Other organization served by similar PSPs	75
Table 22	Policies on/related to outsourcing in PUs, June 2007	76
Table 23	Outsourcing level and extent in PUs in Morogoro, 2007.....	78
Table 24	Frequencies of administrative employees before and after retrenchment 1996 retrenchment.....	83
Table 25(a)	Workforce frequencies comparison at MU in the outsourced functions (before and after outsourcing).....	84
Table 25 (b)	Workforce frequencies comparison at SUA in the outsourced functions (before and after outsourcing)	85
Table 25(c)	Span of control comparison before and after outsourcing in PUs.....	86
Table 26(a)	Security services : PCs and number of staff at SUA	90
Table 26 (b)	MU Building and Estates department workforce and PCs, 2007	92
Table 26(c)	SUA Estates Departments workforce and PCs (p. m), 2007.....	94
Table 27	Manning Levels in non core functions potential for outsourcing.....	95

LIST OF FIGURES

Figure 1 A map showing geographical location of the study area48

Figure 2 Sokoine University of Agriculture organizational structure53

Figure 3 Mzumbe University organizational structure54

LIST OF APPENDICES

Appendix 1	Possible financing strategies for PUs strength and weaknesses	119
Appendix 2	SSR in selected PUs in Tanzania	120
Appendix 3	The budgetary trends in PUs in Tanzania 1990/91-2003/04	122
Appendix 4	List of key informants	123
Appendix 5	Checklist	124
Appendix 6	The detailed manning	129
Appendix 7	Evaluated reasonable tender prices for PSPs in PUs in Morogoro.....	133
Appendix 8	Cleanliness assessment procedures and criteria for the PSPs.....	134

LIST OF ABBREVIATIONS AND ACRONYMS

CHEDHA	-	Centre for Educational Development in Health Arusha
CSP	-	Corporate Strategic Plan
FY	-	Financial Year
ITP	-	Institutional Transformation Programme
MSTHE	-	Ministry of Science Technology and Higher Education
MU	-	Mzumbe University
OS	-	Organizational Structures
OUT	-	Open University of Tanzania
OWD	-	Own Managed
OWM	-	Own Managing
PCs	-	Predictable Costs
PGSS	-	Parastatal General Salary Scale
Ph.D	-	Doctor of Philosophy
POSS	-	Parastatal Operative Salary Scale
PPF	-	Parastatal Pension Fund
PPR	-	Public Procurement Regulations
PSPs	-	Private Services Providers
PU_s	-	Public Universities
SSR	-	Staff –Students Ratio
SUA	-	Sokoine University of Agriculture
SUASA	-	Sokoine University of Agriculture Academic Staff Association

SUZ	-	State University of Zanzibar
TNs	-	Training Needs
TTCL	-	Tanzania Telecommunications Limited
UDSM	-	University of Dar Es Salaam
URT	-	United Republic of Tanzania

CHAPTER ONE

INTRODUCTION

1.1 Background Information

Widespread university education in Africa is essentially a post-colonial phenomenon. Excluding North Africa with its different history, and South Africa with its special circumstances of both history and resources, only 18 out of the 48 countries of sub-Saharan Africa had universities or university colleges before 1960. With the political independence or immediately thereafter, many African countries regarded the establishment of local universities as a major part of the post-colonial national development strategy (Sawyer, 2002).

The new universities were to help the new nations build up their capacity to manage and develop their resources, alleviate poverty of the majority of their people, contribute to the development of society through appropriate research projects to rural population and close the gap between developing and the developed world (Rydhagen and Trojer, 2004).

In most African countries, the typically young and small university sector was invested with high national aspirations and supported from public resources just like any other national development initiatives. The situation is a good deal more problematic today, with reduced levels of public funding to a hugely expanded and considerably diversified sector, and a questioning of the mission and mandate, the character, and the proper place

of the sector and its institutions and their products in society (URT, 1999; Nsengiyumva, 2004; Mario, 2001; Mbemba, 2001; Mwamila and Diyamett, 2006).

The reduction in levels of public funding was due to the collapse of sub Saharan Africa (SSA) national economies accompanied by destabilization of social structures hence throwing all institutions, including those of higher education, into a prolonged crisis.

The reduction in funding to Public Universities (PUs) was followed by donor institutions attitudes of placing a greater emphasis on primary and, more recently, secondary education in their development assistance to SSA, neglecting higher learning institutions. Between 1985 -1989, 17% of the World Bank's worldwide education-sector spending was on higher education, declining to just 7% from 1995 to 1999, severely affecting higher education in Africa (Bloom *et al.*, 2006).

Obviously, PUs in Africa and Tanzania in particular are facing serious challenges partly due to various revolutionary changes in technology, communications, geo-politics etc. (Carnoy, 2000; Castells; 1996, 1997, 1998; Gibbons, 1998; URT, 1999; Uhlin and Johansen, 2001).

Tanzania's economy stagnation of 70s through 80s, and the donor funding drying up , that helped put up the infrastructure for education up to the level of university, led to under funding of university programmes, witnessed emigration of academicians to

countries where they receive higher salaries for their work due to stagnant and lower wages (brain drain) (ANSTI, 2005; Ajayi *et al.* 1996). UDSM, between 1990 and 1999 lost 85 faculty members while SUA between 1990 and 2005 had 45 members who left the university (UDSM, 2002; SUA, 2005b). The output of academic research in Tanzania also remains weak due to under funding. Less resource to PUs resulted to inadequacy of teaching facilities, technical equipment, outdated books in the libraries, few computers in comparison to student population and few hostels compared to the number of students.

All these amounted to deteriorating quality of university education and its product, and comparatively low enrolment ratios (URT, 1999; Mkapa, 1999). In 1984/85 the UDSM under funding was 4%, in 1994/95 it was a staggering 71%¹. Put differently in 1984/85, for every Tshs.100 the University asked for, was given Tshs.96. In 1994/95 for every Tshs.100 asked for, only Tshs.29 was given (Mkapa, 1999).

Increased demand for higher education (resulting into pressure to increase student enrollment) and maintain quality levels, without commensurate increases in resources i.e. without budget allocation being increased accordingly (UDSM, 2005; SUA, 2005b; Trojer, 2004; URT, 1999) is another challenge.

¹ Measured as the magnitude of the shortfall between the university's own budget and the actual amount of funds given to the university by the government

A number of strategies have been tried to top up the under funding in PUs including the initiation of income generation activities (IGAs). However the income generated from the IGAs was low compared to the top up needed and the PUs seemed to be diverting their attention from the core functions. Other strategies tried including education levy, external donors funds, contracted research and their limitations are listed in Appendix 1.

In the drive to improve efficiency and cut costs to meet the demands for greater accountability, one option that is increasingly under consideration is the 'outsourcing' of some non core services previously provided and managed by the university itself. This study focuses on investigating outsourcing and its effects on efficiency improvement, span of control and operational costs reduction in the PUs in Morogoro region.

1.2 Outsourcing in Tanzania

Outsourcing is an emerging concept and practice in Tanzania. According to Muhanga (2005), with globalization, the forms of work and employment are undergoing important changes. Outsourcing and other forms of works are now becoming a common phenomenon in Tanzania .Some signs of contracting out are showing up in Tanzania, even at the municipal councils and the central government too. Such outsourced services include tax collection, catering services, cleaning services and security related tasks. Dynamic organizations are focusing increasingly on outsourcing .Specialist firms and products have arisen to do business in outsourcing and related services, as outsourcing has become an industry in its own right. Some companies, notably in Dar es Salaam, are

providing such services especially on areas such as recruitment and personnel services, examples of such companies include PriceWaterHouseCoopers, AK Management and Personnel Services, Biz Online, to mention few. The nature of services being contracted out are extending into areas regarded as non-core to the organizations activities. Among other reasons, companies are outsourcing to reduce global property portfolio, freeing up time and resources so the company can focus on its main business.

1.3 Definition of Terms

Concepts in social sciences are context-sensitive; they denote different things to different people and at different times and places. There are a lot of subjectivity and objectivity in the study of social sciences. In undertaking this study a number of terms that are used in day to day conversations have been specifically used to quantify outsourcing and other aspects related to it. For the purpose of this study the following terms are conceived as follows:

Core functions are those that are part of the "academic mission": teaching, learning, advisory services and research.

Non core functions shall refer to the functions that support "*academic mission*": teaching, learning, research and advisory services provision to the public at an institution. These functions include, but not limited to the ensuing: cleaning of grounds,

security services, health services, running of students' hostels, building and estates related tasks.

Outsourcing can be defined as “the strategic use of outside resources to perform activities traditionally handled by internal staff and resources”. Sometimes also known as “facilities management”, “sub-contracting”, “privatization” or “contracting out”. Outsourcing is a strategy by which an organization contracts out major functions to specialized and efficient service providers, who become valued business partners. Outsourcing generally refers to the contracting out of a company's non core, non revenue-producing activities to firms to which those functions are core. Outsourcing for the purpose of this study occurs when a Registered Person decides to transfer, generally for a fixed period, the day-to-day running of some part of its business to another party. The activity outsourced can be either a part of the Registered Person's existing business or operations or an entirely new venture or operations system for which the Registered Person wishes to use outside expertise.

‘Outsourcing’ is used to describe a situation whereby someone who is not on the university payroll manages the whole or part of a specific university function, such as catering, in the sense of fulfilling all the operations of that function; employing staff (whether the university's or their own); using assets (whether the university's or their own).

Span of control for the purpose of this study shall refer to the number of subordinate employees being supervised by a superior. This is drawn from the well-known management principle on the size of the organization and the control. The assumption being a manager cannot supervise more than half a dozen subordinate managers. The fewer the points to supervise the higher the chances for effective supervision.

For the purpose of this study, Public universities (PUs) shall refer to the highest level of training institutions that are dedicated to the professional and intellectual development of mankind and the society in general, owned by the state. These institutions are expected to concentrate on teaching, conducting research and offering public advisory and or consultancy services.

*Predictable costs*² shall refer to the foreseen personnel costs, for the purpose of this study, employees' salaries and PPF employers' statutory contributions shall apply.

The following definitions have been adopted from the Public Procurement Act, 2005 and shall be used in this study:

Procuring entity means a public body or any other body, or unit established and mandated by the government to carry out public functions.

² Other personnel related costs such as travel assistance on annual leave, overtime, medical expenses were regarded as unpredictable and were not involved in this study.

Successful tender means selected tender by the procuring entity after an invitation to tender procedure.

Tender means a request drawn by a procuring entity for offers or quotations to be made by the supplier, service providers, contractors or asset buyers.

Tenderer shall mean any natural or legal person or group of such persons submitting a tender, with a view to concluding a contract.

The concepts/terminologies under (1.3) shall be used as defined above throughout this study.

1.4 Problem Statement and Justification

This section presents problem statement (1.4.1) and justification (1.4.2) of this study.

1.4.1 Problem Statement

Most of the PUs in Tanzania are overstaffed³; in terms of the total number of staff they employ compared to number of students they enroll. A good number of staff are performing non-core functions to the PUs as indicated in Appendix 2.

³ Evidenced by the total number of staff (taken together administrative and academic) employed by these PUs (see Appendix III)against the number of students enrolled

If an in depth assessment is made the same PUs are understaffed in their core functions⁴ areas, it is vivid that staff -students ratio (SSR) is below that recommended for universities by the MSTHE (URT, MSTHE, 2004) (Appendix 2).

Signs of being understaffed in core functions manifest itself by heavy teaching loads to the academic members of the staff. This in turn has a profound impact on efficiency, where as the class size has influence on lecturers –students contact and consulting and modes of examining students.

PUs are facing a problem of spending a lot of funds on paying personnel emoluments and a great deal of time on managing a large organization comprised of a good number of human resources attending to non-core functions , while the same PUs are faced with serious budgetary deficits, lacking facilities as indicated in Appendix 3 .

A survey⁵ made by SUA Management in 2005 revealed that some of the costs could be reduced by contracting out/outsourcing some of the non-core functions. During the financial year 2004/2005 SUA spent Tshs 143 568 160 compared to Tshs 131 497 680 that cleanliness companies required for the same work, a difference of Tshs 12 070 480 (SUA, 2005a).

⁴ Core functions are teaching ,research and advisory services

⁵ SUA Management conducted a survey in 2005 with an intention of comparing the costs incurred by the university specifically on the cleanliness activities when own managed vs the quotations received by the PSPs.

PU have in recent years, introduced outsourcing strategies as a means for increasing efficiency, reducing costs and span of control. While this strategy is considered to be good, there is no empirical evidence so far to assess the suitability of this strategy to the PUs. This study, therefore, attempts to investigate on the potentiality of outsourcing towards efficiency improvement, span of control and operational costs reduction in the PUs in Morogoro region.

1.4.2 Justification

University education is a costly enterprise. Cost reduction attempts in PUs in Tanzania are inline with various national programmes, i.e. one of the goals of the Education and Training Sector Development Programme (URT, 2001) strategy is to enable institutions to operate in a cost effective manner and generate income to supplement government subventions by 2015.

This study will contribute to the third goal of Cluster III of the NSGRP⁶ on Governance and Accountability whose strategies, among others, include strengthening the Public Service Reform Programme with particular attention to transparent recruitment, based on merit, ethics, skills and ability, institutional rules and incentives, institutional management, cost effectiveness, and customer service and responsiveness (URT, 2005).

⁶ National Strategy for Growth and Reduction of Poverty (NSGRP)

Budgetary cuts to PUs has several effects including deterioration of the quality of education delivered, slow expansion of students enrolment and lack of research funds plus slow infrastructure development (URT, MSTHE, 2004).

The PUs will also use the results of this study to justify their intention to further outsource non-core functions.

1.5 Objectives of the Study

PUs in Tanzania are in crisis. Enrollments rise as capacities for governments to support them declines. Talented staff are abandoning the campuses, libraries are outdated, research output is dropping, students are overcrowded in seminar rooms and halls of residence, and, educational quality is dropping. Efficiency and effectiveness of these PUs is declining, operational costs does not match with what the government provides to these PUs. PUs have turn to outsourcing for the efficiency improvement, span of control and operational costs reductions.

1.5.1 Main Objective of the Study

The main objective of this study is to investigate into outsourcing towards efficiency improvement, span of control and operational costs reduction in the PUs in Morogoro region.

1.5.2 Specific Objectives

Specifically the study addressed the following objectives:

- i) To investigate operationalization of outsourcing in the PUs.

- ii) To assess the potentiality of outsourcing towards its rationale (efficiency improving and span of control reduction).
- iii) To assess cost effectiveness of outsourcing as a management strategy.
- iv) To review and compare the levels of outsourcing at the selected PUs in Morogoro and recommend on the possibility of outsourcing for efficiency enhancing and lowering costs.

1.6 Research Questions

This study is aiming at giving answers to the following research questions:

- i). What are the procedures and types of outsourcing arrangements PUs put in place to effect outsourcing in Tanzania?
- ii). With outsourcing in place has PUs registered any significant efficiency improvement and span of control reduction?
- iii). With outsourcing in place has PUs registered any significant operational costs reductions?
- iv). At what levels/extent has the PUs in Morogoro instituted outsourcing of non-core services and what are the possibilities of further outsourcing?

1.7 Organization of the Study

This study is organized in five chapters. The first chapter presents an introduction to the study, highlighting some key issues justifying the research to be an important area for analysis. The second chapter presents a critical review of the existing literature. Chapter three covers the methodology used by the study. Chapter four presents results and

discussion of the findings obtained in the study, summary of results, conclusion, policy implications and recommendations are found in chapter five.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

This chapter presents literature covering issues related to outsourcing as a human resources strategy towards costs cutting and for reducing the span of control. The chapter commences with giving full description of the concept and practice of outsourcing (section 2.1), the same section reviews issues related to cost cutting strategies that are currently considered. Section 2.2 summarizes literature on the rationale for outsourcing; section 2.3 gives an overview on the PUs reforms in Tanzania, and a discussion on outsourcing in higher education is in section 2.4. Section 2.5 presents outsourcing decision factors, section 2.6 discusses outsourcing performance monitoring and contract evaluation, section 2.7 covers studies on cost reductions attempts and efficiency improvement in other universities in the world; section 2.8 presents literature on outsourcing and retrenchment or rightsizing in PUs, and section 2.9 is on how wide the practice of outsourcing has spread. A conclusion is given at the end on how the methodological aspects have been adapted or adopted from the literatures reviewed.

2.1 The Concept and Practice of Outsourcing

This section reviews the literature on historical perspective of outsourcing both as a concept and a practice, and, the various types of outsourcing practices in place.

2.1.1 Historical perspective

In the English language (and most likely in other languages), “outsourcing” is a relatively new term. Though the term is relatively new, the practice of outsourcing has been around for a long time. According to Maynard ⁷, outsourcing began to emerge a few thousand years ago; it started with the production and selling of food, tools and other household supplies. If you go back far enough in the history of humanity, each person or family provided everything for themselves. They gathered their own berries and nuts, hunted their own food, grew their own crops, skinned hides for clothing and so on. Then villages began to spring up, and people began to specialize. As such, they began to barter with each other for goods and services, and soon money was invented to help simplify the bartering process. In effect, each worker was outsourcing some activities to others workers.

Fast-forward a few thousand years to the industrial age. Very few companies, if any, in the 1800s and early 1900s outsourced any part of their processes; they were vertically integrated organizations. They may have produced or mined raw materials (steel, crops, rubber) and converted that raw material into finished products, and then shipped the finished goods on company owned trucks to company owned retail stores for sale to the public. They were self-insured, did their own taxes, employed their own lawyers, and designed and constructed buildings without assistance from other firms. In short, they outsourced very little or not at all.

⁷ As quoted in http://www.reliabilityweb.com/art04/outsourcing_101_1.htm

But specialization, especially of services, led to contracting, which eventually led to outsourcing. The first wave of outsourcing began during the boom of the industrial revolution, and fueled the large-scale growth of services such as insurance services, tax services, accounting services, legal services, architecture and engineering services, and others. The companies which performed this work were typically located in the same country, most likely the same city, as was the customer. In essence, this was onshore outsourcing.

Early outsourced functions were simple activities, such as security and janitorial services, but outsourcing has progressed to include many “higher order” functions including finance functions and even product development and design (EIU/AA, 1995). Basically any function could, hypothetically, be outsourced. One could envision “virtual enterprises” existing as a network of partners and allies, each a specialist in their respective areas, reliant on each other for the provision of all essential functions (EIU/AA, 1995).

Next came manufacturing outsourcing for low-tech items such as toys, trinkets, shoes, and apparel goods, and later, higher value manufactured items like high-tech components and consumer electronics. Manufacturing was the first activity to begin to move to offshore locations in search of lower costs. As transportation and logistics improved through improved infrastructure and the use of computer technology, the cost

of transportation went down, and offshore manufacturing went up. As education and skills improved in lower wage countries, manufacturers moved up the value-curve.

More recently, outsourcing has moved into the world of information technology, pension, data transcription, and call centre operations. This realm is made more and more possible by continued investment in education, improved information technology, the wide adoption of the Internet, and the broad, but still emerging, availability of low cost telecommunications and data communications in third world countries.

Since 1982, the term outsourcing has evolved to include all parts of the enterprise, not just manufacturing. In many ways, outsourcing is a synonym for sub-contracting. Literally any activity that is performed by a company can be, and probably has been, outsourced.

Companies have always hired contractors for particular types of work, or to level-off peaks and troughs in their workload, and have formed long-term relationships with firms whose capabilities complement or supplement their own. However, the difference between simply supplementing resources by “subcontracting” and actual outsourcing is that the latter involves substantial restructuring of particular business activities including, often, the transfer of staff from a host company to a specialist, usually smaller, company with the required core competencies.

2.1.2 Types of outsourcing

Three types of outsourcing practices or arrangements are discussed under this section: Offshore outsourcing (2.1.2.1); Onshore outsourcing (2.1.2.2); and, Near shore outsourcing (2.1.2.3).

2.1.2.1 Offshore outsourcing

Offshore outsourcing refers to the outsourced work that is performed in countries that are many time zones away or a long distance away, this can include the exporting of IT-related work from the developed countries to areas of the world where there is both political stability and lower labor costs or tax savings. For example, Marks (2004) documented that in the year 2003, some 100 000 U.S. federal and state tax returns were prepared in India.

2.1.2.2 Onshore outsourcing

Onshore outsourcing refers to the outsourced work performed locally (i.e. in the same country). Onshore outsourcing (also called domestic outsourcing) is the obtaining of services from someone outside a company but within the same country. A typical example is that of security services at Muslim University of Morogoro being outsourced to MOKU Security Guards.

2.1.2.3 Near shore outsourcing

Refers to the outsourced work performed in other countries that are in roughly the same time zone. Near shore outsourcing is the practice of getting work done or services performed by people in neighboring countries rather than in your own country. Many companies in the United States, for example, outsource work to Canada and Mexico. Geographic proximity means that travel and communications are easier and less expensive, there are likely to be at least some commonalities between the cultures, and people are more likely to speak the same language.

2.2 Rationale for Outsourcing

There are a number of reasons that drive companies to outsource some or many of the work activities. Except for two or three very specific examples, the number one reason that companies outsource is to reduce their costs for the same or better service or product. Lower costs (or lower total costs), sometimes achieved through lower wages costs, but also through economies of scale by providing the same service to multiple companies. Outsourcing can deliver considerable savings on office space, general overhead, company cars, pensions, insurance, and salaries (Petrie, 2000).

In the study by CHEMS⁸ (Lund, 1997), universities were asked to indicate, in order of importance, the criteria which informed their decision to outsource services. The suggested criteria were: lowering of costs; improvement of management; improvement

⁸ Commonwealth Higher Education Management Services

of quality of service; to gain a new source of income; to contain the growth of the university's own staff; to relieve pressures on accommodation just few to mention. Table 1 shows the results:

Table 1: Reasons for contracting out by CHEMS study*

Criterion	1 st priority	2 nd priority	3 rd priority	4 th priority	5 th priority
Lowering costs	48.4	12.9	12.9	6.4	-
Improving quality of services	25.8	12.9	16.1	12.9	3.2
Containing growth of staff	12.9	12.9	-	-	-
Improving management	9.6	12.9	-	-	-
Gaining new source of income	-	6.4	6.4	9.6	12.9
Other	6.4	6.4	-	-	-

Source: Lund (1997)

*The percentage do not add up to 100 in all cases, because not every box was ticked by all respondents

By far the highest priority is on lowering of costs. The comment of one Australian institution shows that cost-savings can be considerable; the contract cost on some of their campuses for cleaning per square meter/per year was 37.7% of the rate at the main campus where they used university staff. Containing growth of staff was either very or fairly important for approximately one quarter of respondents. Improvement of management came half-way down the list of priorities. Outsourcing was not generally seen as a means of gaining a new source of income; half of those who ticked this box put it either in fifth or sixth place. Relieving pressure on accommodation was likewise a low

priority. Other reasons for contracting out, cited by four different institutions were: a) to improve accountability; b) to ensure speed of provision *or* when the particular services/facilities were not already available in-house; c) a lack of confidence in in-house capacity; and, interestingly, (d) to promote a change in 'culture'. Reasons (b) and (c) were given top priority by the institution concerned, with (a) and (d) taking second place.

Another reason to outsource is that it allows a firm to focus its activities on its core competency (Petrie, 2000; EIU/AA, 1995). Improving services as often, better educated or skilled people perform the task, and thus perform it better. Simultaneously, the firm outsourced to will be acting in its core competency. That provider firm brings a number of advantages to the performance of its task including access to state-of-the-art technology; economies of scale with regard to hardware, software, and personnel; and aggressive use of low-cost labor pools (Antonucci *et al.*, 1998; Petrie, 2000; EIU/AA, 1995).

Outsourcing frees management from having to worry about the inner-workings of a non-core activity. The customer focuses on their core competence, the outsourcer focuses on theirs. This reduces the span of control as most work will be done by an outsider enabling a company to have a minimal number of staff concentrating on core activities. Allowing the management to improve focus on core activities.

2.3 PUs Reforms in Tanzania: An overview

Most of the universities in Africa are facing numerous challenges. Enrollments rise as capacities for governments support decline. Talented staff are abandoning the campuses, libraries are outdated, research output is dropping, students are overcrowded in seminars rooms and halls of residence and educational quality is dropping (Saint, 1992; Ishumi, 1994; Msolla, 2002).

Third World countries have had to seek better ways of organizing their educational systems especially at higher levels, in order to maximize benefits and minimize costs (Maliyamkono *et al.*, 1982), due to rising costs of education resulting from increasing school attendance on one hand and as a function of inflationary factors (including rising teachers wages) on the other hand, plus increased demand for higher education, rising costs of procuring equipments, without ignoring universities poor bargaining position vis a vis government policies (Ishumi, 1994).

Different approaches to overcome challenges facing PUs have been tried (Musisi and Muwanga, 2003; Mkude *et al.*, 2003; Mario *et al.*, 2003; URT, 1998; Mbwette, 2000; Omari, 1991; Jongbloed, 2000). Internal restructuring to minimize costs without jeopardizing the quality of output and relevance of academic programmes has been insisted by the educational planners. Coombs and Hallak (1987) assert that unlike the 50s and 60s where education budgets in almost all countries were expanding hence the concern being how best to allocate the sizeable annual increments among different

educational levels and uses, the current trend is faced with freezing and shrinking of educational budgets, thus the issue is where to make the cuts (or rather where to reduce costs).

Observations made by Ishumi (1994) and Luhanga *et al.* (2003), administrative and support services or rather personnel emoluments have been constituting a larger portion of the recurrent costs compared to what has been allocated to library, book stores and research in the university, basing on a survey⁹ made, on average the library and bookstore was allocated 4.3%, research 4.2%, teaching and academic 39.7% and administrative support services 51.6%

Public sector spending on education in Tanzania is low (only 2.6% of GDP) compared with other countries like Kenya (6.1), Uganda (2.9%) and South Africa (6.4%) (URT, 2001).

2.4 Outsourcing in Higher Education

The decade of the 1990s was one of financial constraints for higher education institutions. Declining student enrollments, state budget cuts, decreased funding for research, and increased pressure to limit tuition growth resulted in diminished revenue sources for colleges and universities (Ender and Mooney, 1994). To remain competitive and to improve service in the face of declining resources, higher education has

⁹ This survey was conducted in twelve universities in Eastern and Southern Africa region, including the University of Dar Es Salaam, ESAURP (1987)

increasingly turned to several popular management approaches, including outsourcing (Jefferies, 1996).

Outsourcing is a form of privatization that generally refers to a higher education institution's decision to contract with an external organization to provide a traditional campus function or service. The contractor either takes over the task of compensating and managing the employees of the university, paying the group according to its standards, or replaces the university employees with its own staff (Phipps and Merisotis, 2005).

Historically, outsourcing in higher education has been more often associated with the operation of bookstores and food service. However, many other support functions are now being contracted out as well; these include health services, computing, mail delivery, maintenance, printing, security and trade mark and licensing (Mercer, 1995). All of the mentioned services increasingly being contracted out are support services, they do not relate directly to providing instruction – the “core competency” of the higher learning institutions.

Outsourcing is being regarded as a part of the solution to the higher education costs dilemma. Outsourcing strategy has been utilized by the business sector for several years and there is some evidence that higher education institutions are exploring similar types of strategies. In theory, any function ,service or product can be considered for

outsourcing (Phipps and Merisotis, 2005), however successfully food service, bookstore sales, housekeeping, security services, billing and collection, legal services have been outsourced for years. Studies by Musisi and Muwanga (2003). Luhanga *et al.* (2003) have documented on the solutions rendered by outsourcing in cost dilemma in higher education. However Bhatia (2005) warn service receivers on considering outsourcing from three perspectives (legs of a three-legged stool): costs, quality and risk. Benefits of outsourcing should derive from all of the three “legs”. Thus, good outsourcing contract should lead to costs reductions, quality improvement and risk mitigation.

2.5 Outsourcing Decision Factors

The research literature offers some specific decision criteria for determining the need to outsource a particular service. Goldstein *et al.* (1993) is of the opinion that whether or not to outsource a function should not be the most important question an institution to ask itself, but what is of utmost importance is the evaluation of the full array of options and select the operating approach best for the institution . The most important issue is to focus on the areas earmarked for outsourcing and have an overview on how they are currently operating, followed by an examination of all its weaknesses and strengths hence enabling the management to make an informed choice. Rush *et al.* (1995) points out to a core set of issues and questions that must be explored when institutional management is deciding to outsource. These “decision factors” are grouped into six categories: (a) how employees will be affected : human resource aspect (b) financial factors: the direct and indirect cost to the institution, (c) service quality: how each

alternative will meet campus needs (d) legal and ethical considerations: the level of risk and potential liability posed by each option, any tax ramifications, any conflicts of interest (e) mission and culture: the effects of choosing an option inconsistent with the institution's culture and historical mission and (f) management control and efficiency. The likely effect of each option on the institution's ability to control the direction and priorities of the functional area.

2.6 Outsourcing Performance Monitoring and Contract Evaluation

Service receivers should consider outsourcing from three perspectives: costs, quality and risks. Thus, good outsourcing contract should lead to costs reductions, quality improvement and risk mitigation (Bhatia, 2005).

“A three-legged stool” approach (considering costs, quality and risk) could serve as a useful analytical tool helping in making decisions whether to outsource a certain function, with which vendor the relationship should be established as well as in evaluating current outsourcing contracts. “A three-legged stool” as an analytical tool concerning outsourcing could be compared to its counterparts in other areas of managerial decisions, like Strengths Weaknesses Opportunities Threats (SWOT) matrix in strategic management or Boston Consulting Group (BCG) matrix in product portfolio management. A -three -legged approach will be reflected to the study to see if the PUs in Morogoro took into consideration (costs, quality and risk) from their outsourcing contracts.

Stronka and Wienskowska (2005) warn against perceiving outsourcing only from the perspective of costs i.e. comparing costs of outsourcing (payments to the vendor) only to costs reductions being a result of an outsourcing application. However, agreeing that these reductions are very important benefits, Stronka and Wienskowska (*ibid*) indicate the areas of savings which emerge as a result of outsourcing application. Stronka and Wienskowska (*ibid*) point out, often underestimated, benefits on quality improvement (which concerns not only the function outsourced but also functions connected with it and the company as a whole). Factors potentially affecting (mitigating or increasing) the company's risk as the company outsource and conclude that good outsourcing contracts lower the risk. In the paper we present also a formal way to estimate money value of net benefits from an outsourcing contract.

2.7 Studies on Cost Reductions Attempts and Efficiency Improvement

This section presents a review on the studies on cost reductions and efficiency improvements in higher learning institutions. A review in this section is mainly on the key methodological aspects of these studies.

2.7.1 Oregon State University attempts on cost reductions

Coate (1993) indicated that Oregon State University having faced with financial difficulties had to adopt Total Quality Management (TQM) thus enabling to do more with less. The argument is that institutions become more productive when they either achieve results of the same quality at a lower cost or results of the higher quality at the same cost. TQM philosophy is credited with improving employees' morale, reducing

costs, increasing productivity, improving quality among other things (Elmuti *et al.* 1996). There is a need for PUs to strive to implement TQM practices into their administrative services.

Coate (1993) study used Meta –analysis, a form of research in which research reports or scholarly works on a similar topic are reviewed. Appropriate information about its characteristics and quantitative findings are coded. The resulting data are statistically analyzed to investigate and describe the patterns of findings in the selected set of studies. Lipsey and Wilson (2000) have documented Meta-Analysis fairly well. This study adapted the Meta –Analysis approach, a review of research reports and scholarly works in PUs in Morogoro was made to obtain some statistics necessary for this study.

2.7.2 ANSTI¹⁰ study on constraints facing Science and Technology training institutions in Africa

ANSTI undertook a study to highlight and make available, information on the constraints that encounter Science and Technology (S&T) training institutions. The study set out to assess the state of institutions offering training in Science and Technology. Specifically, the study was intended to determine the quality of the physical resources available in the various institutions (laboratories, library, teaching facilities and access to computers), the nature of the human resource available both at the level of

¹⁰ African Network of Scientific and Technological Institutions which was established in 1980 by UNESCO, has a mandate to facilitate human resource capacity building in Science and Technology (ANSTI, 2005).

academic staff and the technical support staff, financial support for the institutions, major areas of constraints (requiring urgent attention), intervention strategies for the strengthening of science and technology institutions in Africa.

The study focused only on basic and engineering sciences. Hence the survey was conducted in Faculties of Science and Engineering. The study used the questionnaire approach complemented with physical verification of the information through a few field visits. This approach was economical and more effective.

The student-staff ratio (SSR) is an important index for assessing the efficiency and effectiveness of staff utilization. A very low SSR may indicate inefficiency in resource utilization. It means staff are teaching fewer students. On the other hand a very high value of the same index suggests over-extension of staff leading to ineffectiveness of the individual staff members. The SSR concept was adopted and used as an indicator for efficiency. The SSR (academic staff) was analyzed.

2.7.3 Commonwealth Higher Education Management Services (CHEMS) study

In July 1996 CHEMS surveyed the actual experiences of Commonwealth universities in outsourcing, with the ultimate aim of producing some guidelines to 'best practice', which would be beneficial to higher education institutions, particularly those either in the early stages of outsourcing or still poised on the brink. A draft questionnaire was piloted among a small number of UK universities. The first section comprised general

questions on university policy: what criteria determined a decision to outsource; how potential suppliers were identified; impact of outsourcing on staffing arrangements; how a contractor's performance was monitored; if expected savings had been achieved; what universities' experience had taught them for the future; which services they thought unsuitable for outsourcing. There followed a table listing 30 specific functions or activities. Universities were asked to say which they currently outsourced, whether savings and/or better customer service had resulted, and which areas they had considered, but not actually outsourced (Lund, 1997). The checklist used in this study adapted some elements from the CHEMS survey study questionnaire.

2.8 Outsourcing, Retrenchment and Right-sizing in PUs

The current Outsourcing initiatives in PUs resulted from Civil Service Reforms (CSR) implemented in Tanzania between 1991-2000. Civil service reforms aimed at "smaller, affordable, well compensated, efficient and effective performing civil service" (Caulfield, 2004:233).

"Public Service Reform/Civil Service Reform then sought to make Government lean and affordable through cost reduction and containment measures, rationalizing the state machinery, divesting non-core government operations, retrenching redundant staff, removing ghost workers from the payroll, freezing employment and adopting measures to control the wage bill and other personnel-based expenditure"(Mutahaba and Kiragu, 2002: 52).

CSR started in the 1980s in advanced capitalist democracies as a response to the realization of poor performance of civil service as evidenced by expanded government size, over expenditure in wage bills, unaccountability of civil servants etc. The poor performance problems called for reform strategies. However, the strategies for dealing with this problem varied between nations considerably in scope, orientation, and accomplishments (Lane, 1997). Following its global spread, CSRs were increasingly being adopted in several African countries and in most cases were closely linked to structural adjustment efforts.

The main concern of CSR programs administered in various countries through entrusted bodies related to civil service was to deal with its weaknesses and inefficiencies to make it function more effectively in a dynamic environment. The weaknesses and inefficiency of civil service always resulted in too much public expenditure (Corkery and Land, 1997). In practice, this led to the need for the governments to implement this type of reform in an attempt to reduce the cost of the civil service, e.g. by reducing its size. In Tanzania the responsibility of civil service reform was entrusted to the President Office, Civil Service Department and the program was supported by several donors. Apart from being used as a tool for curbing government spending through personnel and wage cuts; CSR were also used as a tool for creating a skilled and efficient government workforce. Cost containment was an important aspect of civil service reform, also an efficient and motivated civil service was critical for governance, production and

distribution of public goods and services, formulation and implementation of economic policy, and management of public expenditure.

“The broader aim of civil service reform was therefore, the creation of a government workforce of the size and with the skills, incentives, ethos, and accountability needed to provide quality public services and carry out functions assigned to the state” (Schiavo, 1996: 1). Civil service reforms were in place to contribute to microeconomic stability through supporting downsizing programs that reduced the size and cost of civil service to an affordable and sustainable level (Lienert, 1998).

During the post-independence period, the Tanzanian public sector experienced a big growth and expansion of the civil service sector that made it unable to meet the public wage bills. According to the World Bank review, the civil service of Tanzania expanded twice as much as government revenue and hence necessitated the squeezing of public finance which caused the fall in salaries (Caulfield, 2004). Civil service reform in Tanzania was the result of “serious problems of overstaffing, low pay and under resourcing of basic services and crowding out of operational spending which resulted in the decline of real wage levels and the quality of government, collapse in services and a growth in maladministration and corruption” (Clarke & Wood, 2001: 71). The implemented civil service reform program had various aspects contained in it namely the creation of autonomous executive Agencies in some ministries, improving local governments, retrenchment (rightsizing), pay reform, capacity building, recruitment

process, and wage cost cut. In the implementation of the program according to Caulfield (2004), there was a reduction of 27% of civil servants in 1992-2000 (i.e. from 355 000 personnel to 260 000) and improvement of salaries to the upper echelons (Caulfield, 2004.). The main concern was to reduce government expenditures. In implementing such reforms, governments attempted to reduce the costs of civil service by trying to reduce the size of the government.

Initially, cost reductions in civil service were generally translated into retrenchment measures for governments to reduce its size with the hope that the resulting savings could be used to increase the salaries of those expected to remain in service and as well to attract and retain sufficient numbers of able people to providing better capacity for discharging core functions such as policy analysis (Cokery & Land, 1997). The experience learned from the developed countries was that, the emphasis shifted from public administration to public management with the belief that private sector management techniques were also needed in public sector if governments were to deliver better. Management practices used in private sector were considered to be equally appropriate to management of public affairs and were seen likely to lead to a more effective public service (Corkery & Land, 1997).

Retrenchment focused on poor performers, volunteers from central and local government, ghost workers and retrenchment of surplus employees identified by local government manning level (NORAD, 1995). The result of the whole retrenchment

process was the reduction of the civil service work force from 355 000 in 1993 to 270 000 in 1997. The employment in the civil service was successfully reduced by approximately 50 000 employees or 18.5% of the total and by the end of the reform program in 1999, a total of 80 000 government employees were removed from the government payroll, comprising 60 000 bona fide redundancies and about 20 000 ghost workers who were deleted from the payroll (Ntukamazina, 1998).

Outsourcing is linked to retrenchment where as companies are being contracted to do some jobs that were done by those retrenched (McCourt, 1998), on cost fact the private service providers would require less than what the public institution could spend on the same. Governments reduced their sizes, resulting savings could be used to increase the salaries of those expected to remain in service and as well to attract and retain sufficient numbers of able people to providing better capacity for discharging core functions (Cokery & Land, 1997). It is from these reforms the issue of insisting on core functions came in.

2.9 How Widespread is Outsourcing?

Statistics about outsourcing in higher education are few, but the need for such data has been recognized. The National Association of College Auxiliary Services has recently opened a center to try to track overall figures for outsourcing in higher education (van der Werf, 2000). Gilmer (1997) reports that a 1996 survey by American School & University found that colleges and universities are increasingly turning to outsourcing.

More than one-half expect to contract for more services in the coming years. Only 5.9% of colleges and universities produce all services in-house; 62.4 % of colleges contract for four or fewer services; 31.7 % outsource five or more services. The most popular outsourced services include food (74.3%), vending (65.3%), bookstore operations (33.7%), custodial work (30.7%), and laundries (18.8%). Recent figures also show that the building of on-campus housing by private companies was a \$500 million business in 1999, with no indication of a decrease in 2000 (van der Werf, 2000).

Pint and Baldwin (1997) as cited by Kaganoff (1998) reviewed the military's experience with contracting out and identified factors that contributed to its success, Lamminmaki (2007) conducted a transactions cost economics (TCE) study in Australian hotels partially investigating on agency theory and factors that may influence hotel outsourcing.

Many companies that have undertaken international outsourcing projects have found themselves struggling to control the activity they once controlled in-house. Experience has shown that the root of the problem is often that companies fail to recognize the importance of managing the relationship between the outsourcing organization and the service provider, or supplier, which performs the outsourcing activity. Both parties involved need to take appropriate measures to manage the outsourcing relationship and to develop capabilities to cope with internationalization.

Although the literature on outsourcing in higher education is limited, the process has been studied and implemented a great deal in other sectors, including industries. The

lessons learned from these other sectors can inform decision making in higher education. Some key methodological aspects will be borrowed from the studies (ANSTI, 2005; Coate, 1993; Lund, 1997; Bhatia, 2005, Urwick, 1955; Koontz and Weihrich, 1980) as summarized below in Table 2.

Table 2: Summary of the methodological aspects from the literature review

Source	Methodological aspects adapted/adopted
ANSTI (2005)	SSR as an important index for assessing efficiency and effectiveness of staff utilization was adopted.
Lund (1997)	Some of the items in the questionnaire used by CHEMS' study were adapted to the checklist in an investigation in PUs.
Bhatia (2005)	“A-legged –stool” approach was reflected in the study to see how the PUs took into consideration (the costs, quality and risk issues) as they decide to outsource.
Harper (2000)	Harper’s study used financial aspects (such as revenue, expenditure) comparison before and after outsourcing. The methodology was adapted, however this study used costs (PCs) unlike Harper’s study.
Coate (1993)	from this study the Meta analysis idea of reviewing previous research and scholarly works was adapted. A review of research reports and scholarly works in PUs in Morogoro was made to obtain some statistics necessary for this study.
Urwick (1955), Koontz and Weihrich (1980)	Span of control ratios concept was adapted

CHAPTER THREE

METHODOLOGY

3.0 Overview

This chapter describes the methodology used to conduct this study. This chapter is divided into five sections. Section 3.1 explains the sources of data used in this study whereas section 3.2 presents the survey instrument and reports on the process of data collection. Sections 3.3 and 3.4, describe the method of data analysis employed in the study and the unit of measurement and analysis for the study, study area location is described in section 3.5 of this chapter.

3.1 Data sources

The data used in this study are from both primary and secondary sources. The survey covered collection of both qualitative and quantitative information.

3.1.1 Secondary data

Secondary data used in this study were from various reports and publications as follows: Annual Financial Reports, various Task Force Reports, Seniority lists, Employees performance review reports, PUs' Facts and Figures, PUs' Basic Facts and Audited Accounts Reports. Most of these publications and reports were obtained at the Mzumbe University (MU) and Sokoine University of Agriculture (SUA). The use of various scholarly or research reports to review some basic facts has been adapted from the studies by Coate (1993) and Lipsey and Wilson (2000).

Table 3 Secondary data sources and types

Source	Type of data
Personnel and Administration offices (MU & SUA)	Workforce statistics, outsourcing operations, rationale for outsourcing, list of PSPs
Internal Auditing MU	General overview of the outsourcing operations.
Planning Departments: MU & SUA	Statistics on increased demand for university education and manning levels.
Finance (Supplies) Office –SUA	PSPs , cost implications and PSPs' operations .
Admissions Office SUA & MU	Degree and non-degree programmes offered at PUs and enrollment statistics.
Care Sanitation and Suppliers	Capability and experiences of the company.
Kuche Enterprises	Capability and experiences of the company.
Moku Security	Capability and experiences of the company
Stemo Security	Capability and experiences of the company.

3.1.2 Primary data

Primary data were sought from the Department of Finance, Admissions, Personnel and Planning from the PUs in Morogoro region. The information collected from these departments were on various aspects related to outsourcing in PUs in connection to how it has contributed to cost cutting, span of control reduction and efficiency improvement in the respective PUs in Morogoro region. The process of primary data collection involved both a checklist and personal interviews.

3.1.2.1 Checklist designing

The checklist presented in Appendix 5 was designed to capture both qualitative and quantitative information from the PUs.

3.1.2.2 Personal interviews

The checklist was complemented with personal interviews, at MU the researcher had personal interviews with the Head of Personnel and Administration, Chief Internal Auditor, Chief Planning Officer, Bursar and the Admissions Officer, personal interview at SUA involved the Principal Administrative Officer –Personnel, Admissions Officer, Estates Manager and Chief Supplies Officer and PSPs Representatives (List of key informants-Appendix 4).The checklist used (Appendix 5) by this study adopted and adapted some items from the study by Lund (1997).

3.1.2.3 Preliminary investigation

A preliminary investigation was carried out in March 2007 before the main investigation. The preliminary investigation covered some few offices at SUA .The major objectives of the preliminary investigation were: (i) to pre-test the checklist, (ii) to determine the approximate time will be needed to complete the data collection work, (iii) to ascertain the availability of data for the objectives of the research and (iv) to determine the most efficient way of carrying out the main investigation. Some of the experiences gained during the preliminary investigation are worth noting. First, it was discovered that PUs just like any organizations have problems related to record keeping

hence some of information needed could not be found if a trend was needed hence some modifications in the checklist. These were details on retrenchments both at SUA and MU. Second, time allocated previously for data collection had to be adjusted due to the fact that data collection involved some senior officers of these PUs who had always a tight schedule.

3.2 Instrumentation and the data collection process

The major investigation instrument used in the collection of primary information was a checklist .The checklist was designed for the purpose of collecting sufficient data intended to address the four objectives of the study .The checklist that was used was prepared in such a way that it enabled to collect various information that were required to address the research questions that were intended for this study (section 1.5) .The checklist that was administered to the HoDs of Personnel and Administration in PUs mainly comprised of some general enquiry on human resources aspects of outsourcing, enquiry on financial aspects of outsourcing was on the checklist administered to the Finance /Supplies /Internal Auditing Department(s) heads . There was also a checklist to the HoDs of Estates and Admissions that enabled collection of information on some cross cutting issues across the PUs.

The actual data collection commenced in April, 2007 ending in July, 2007, preceded by preparation of templates (in Microsoft Excel) for data collection , followed by trial run of the templates and final adjustment of the checklist after a pre investigation . The data

collection task was accomplished by the researcher, given the nature of the sensitivity of the information to be collected the task had to be handled by the researcher himself. The researcher had to acquaint himself with the template prepared for data collection and the checklist items. In some cases it was very difficult to get copy of some of the reports made to the higher university organs which were regarded as confidential .Attempts were made to request for some other reports available .Lack of appropriate information and records keeping in PUs in Morogoro worth noting.

3.3 Data analysis

Data analysis undertaken in this study involved a number of descriptive statistics and cross tabs. Descriptive statistics such as mean, frequencies, ratios and percentages were used to present the institutional aspects and capacities of the PUs investigated in Morogoro region. The same descriptive statistics were employed in the analysis of the extent and level of outsourcing in PUs.

3.4 Units of Measurement and Analysis

The study used a lot of quantitative data to assess associations of outsourcing with aspects such as operational costs reduction, span of control reduction and efficiency improvement in PUs in Morogoro ,namely MU and SUA.

3.4.1 Span of control

For the purpose of assessing span of control with introduction of outsourcing within and across the PUs, span of control shall refer to the number of subordinates responsible to one supervisor or manager. In personnel management studies (Urwick, 1955) and Koontz and Wehrich (1980) the recommended number of subordinates to one supervisor is 4 for subordinates for Upper levels (1:4) and 8 at Lower levels (1:8). Normally as the number of subordinates reporting directly to one person is increased, that person will find it difficult to deal adequately with all of them. At the same time if a manager has fewer subordinates than he can effectively manage them then he is being underutilized. Workforce reduction automatically implies span of control narrowing / reduction. The workforce performing non core (which are potential¹¹ for outsourcing) were identified and their frequencies computed. A workforce reduction comparison was made with and without outsourcing within the same PU, followed by a comparison across the PUs. Span of control ratios' comparison was made with and without outsourcing in the same PU.

3.4.2 Operational costs

Operational costs in PUs ranges from salaries, overtimes, medical allowances, travel on leave payment, employer statutory contributions such as PPF and other costs such as cost of purchasing working gears. For the purposes of this study predictable costs (PCs- (salaries and employer statutory contribution on PPF) were used as units of analysis on

¹¹ Potentiality for outsourcing based on the literature reviewed on the common non core functions outsourced by other universities and higher learning institutions.

cost items. The two cost items (salaries and employer statutory contribution on PPF) were termed predictable costs (PCs) on the fact that the items can be determined in advance or can be foreseen unlike the other cost items, normally in the public service salaries are spelt out by the Treasurer circulars the rates /scales are meant for the whole financial year, the case of PPF the percentage of the contribution is also emanating from the Act¹² that establishes the Fund hence predictable. Medical allowances leave payment, overtimes just to mention few have been treated as unpredictable costs hence have not been subjected as units of analysis /comparison in this study. The PCs related to non-core functions were identified and their cost structures were analyzed. A cost comparison was made on the PCs with and without outsourcing within the same PU, followed by a comparison across the PUs.

$$PCs = (\sum s_1, s_2, \dots, s_n) + [(\sum s_1, s_2, \dots, s_n) \times \frac{15}{100}]$$

Where : s_1, s_2, \dots, s_i = Monthly salaries of staff in Tshs

$\frac{15}{100}$ = 15% PPF employer statutory contributions

Mean spending per outsourced service basing on PCs' comparison with and without outsourcing within the same PU was calculated.

3.4.3 Level and extent of outsourcing

Literature reviewed identified the most common non core functions potential for outsourcing in universities and higher learning institutions at large, where core functions are teaching, research and consultancy. Seven non core functions potential for

¹² If any amendment to the Act normally there is a lapse of time for implementation

outsourcing were identified. Scaling was designed basing on the frequency and percentage) of the non core functions certain PUs is outsourcing .The rating was as follows:

Number of non core functions being outsourced by a certain PU determined the level and extent of outsourcing. A fully outsourced service was given one point, partially outsourced service was given a half score. Partially outsourcing is when the same non core function is both own managed by the PU and part of it has been contracted out to PSPs.

$$\frac{n}{N} \times 100 = \text{level and extent of outsourcing}$$

Where n frequencies of non core functions outsourced by a certain PU

N Total frequencies of non core functions potential for outsourcing

Table 4 Level and extent of outsourcing scaling:

Scaling:	Level and extent of outsourcing
0-25 %	Initial level of outsourcing
26- 50%	Low level of outsourcing
51-75%	Intermediate level of outsourcing
76-100%	Advanced Level of outsourcing

3.4.4 Efficiency improvement

Efficiency improvement was linked to the effective deployment of human resources towards the delivery of functions of a PU. SSR and span of control ratios were used to

measure efficiency improvement. The indicators have been adopted from the studies by ANSTI (2005), Urwick (1955), Koontz and Wehrich (1980). The study had to compare the SSR and span of control with and without outsourcing and assess if any significant changes have been registered.

3.4.4.1 SSR

The student-staff ratio (SSR) is an important index for assessing efficiency and effectiveness of staff utilization. A very low SSR may indicate *inefficiency* in resource utilization. It means staff are teaching fewer students. On the other hand a very high value of the same index suggests over-extension of staff leading to *ineffectiveness* of the individual staff members. The SSR concept will be adopted, modified and used as an indicator for efficiency. The SSR academic staff will be analyzed. MSTHE recommends 1: 15 (Arts and Humanities), 1:10 (Science and Agriculture), and 1: 35 (Traditional non residential programmes).

3.4.4.2 Span of control

Normally as the number of subordinates reporting directly to one person is increased, that person will find it difficult to deal adequately with all of them. At the same time if a manager has a fewer subordinates than he can effectively manage them then he is being underutilized. Management studies by Koontz and Wehrich (1980) and Urwick (1955) recommended on the standard span of control, being four subordinates to one supervisor for Upper levels (1:4) and eight subordinates to one supervisor for Lower levels (1:8).

3.5 Location of the study area

This study was conducted in PUs located in Morogoro region (Fig.1 presents geographical location of the study area), namely the Sokoine University of Agriculture (Main Campus and Solomon Mahlangu Campus) and the Mzumbe University (Main Campus) respectively. The two PUs were selected purposively to represent the rest of the PUs in Tanzania. SUA is among the oldest universities in Tanzania (established in 1984) whereas MU is a newly established university (2002). These two universities have been chosen so as to allow comparison on various aspects of outsourcing between an old university and a newly established university. Resources considerations to the researcher (time and financial aspects) and researcher's affiliation to these PUs contributed to their selection as case studies.

3.5.1 Sokoine University of Agriculture ¹³

The Sokoine University of Agriculture (SUA) is a public institution, established by the Parliament Act No. 6 of 1984 (now replaced by the Universities Act No. 7 of 2005.). The University's history goes back to 1965 when it started as an Agricultural College offering diploma training in Agriculture. With the dissolution of the University of East Africa and the consequent establishment of the University of Dar-es-Salaam in July 1970, the college became a Faculty of Agriculture of the University of Dar-es-Salaam until July 1984 when it was elevated to a full-fledged University.

¹³ SUA has other campuses in Olmotonyi, Arusha and Mazumbai ,Tanga also has one University college in Kilimanjaro region namely Moshi University College of Cooperatives and Business Studies (MUCCoBS). These campuses were not included in the study

Sokoine University of Agriculture is located in Morogoro region; its Main Campus is 5 kilometers South of Morogoro municipality. The Solomon Mahlangu Campus (SMC) is located at Mazimbu ward (Morogoro urban) 11 kilometers north west of Morogoro.

3.5.2 Mzumbe University ¹⁴

Mzumbe University (MU) was established in December 2001, by the now repealed Act of Parliament No. 21 of December 2001, which has been replaced by the Universities Act No. 7 of 2005. MU is a government institution under the Ministry of Science, Technology and Higher Education (MSTHE). Its establishment was by transformation of the former Institute of Development Management, IDM Mzumbe into a University. The former IDM Mzumbe was formed by amalgamation of the former Institute of Public Administration of the former University College of Dar es Salaam and the Local Government and Rural Development Training Centre, which was in existence since 1953.

Mzumbe University main campus is located 24 kilometers South-West of Morogoro Municipality in Mvomero district and about 225 kilometers from Dar es Salaam. The main campus is 5 kilometers off the Tanzania – Zambia Highway.

¹⁴ MU has other campuses in Dar Es Salaam and Mbeya . These campuses were not included in the study

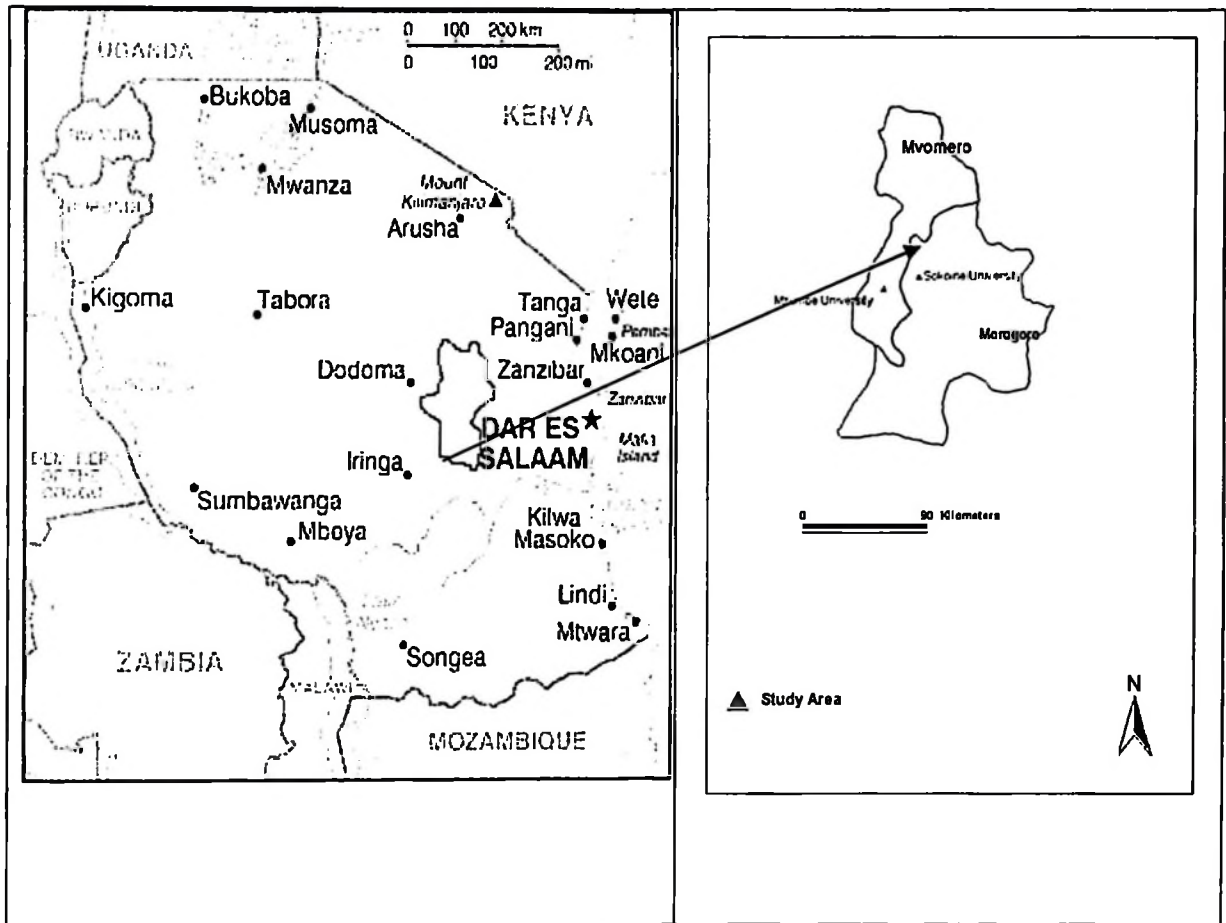


Fig 1: A map showing geographical location of the study area

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Over View

This chapter presents empirical findings of the study and observations made during the field surveys plus their discussion. The chapter is made up of four sections. Section 4.1 highlights relevant institutional aspects of the surveyed institutions, section 4.2 points out some of the challenges facing PUs in Morogoro, section 4.3 discusses operationalization of outsourcing in PUs in Morogoro, sections (4.5, 4.6, 4.7 and 4.8) present empirical findings of the study plus discussion basing on the four objectives of the study, responses to the research questions of this study are also given under these sections.

4.1 Institutional Aspects and Capacities

This section presents some general institutional aspects of the surveyed PUs in Morogoro region, Mzumbe University and Sokoine University respectively. The institutional aspects presented under this section include the non-degree and degree programs offered by these PUs, academic and administrative units making up the respective PUs, organizational structures (OS), manning levels, workforce frequency distribution across cadres among the administrative staff in PUs in Morogoro, students enrollment, staff qualifications in PUs and staff –students ratios.

4.1.1 Non –degree and degree programs offered by PUs in Morogoro

Total number of non degree and degree programs offered has an important cost and span of control implications for the PUs. The more the number of non degree and degree programs imply the more the cost and more the workforce for that PU. The number of degree programs offered by SUA and MU respectively are shown in Table 5 below:

Table 5: Non degree and degree programs offered by PUs,2007

Course category		MU	SUA
Non degree	Certificates	10	0
	Diplomas	1	0
Total		11	0
Degree	Bachelors	8	16
	Masters	6	16
	Ph.D	3	4
Total		17	36
Grand Total		28	36

The results in Table 5 reveals that SUA has 36 degree programs and currently that PU is not offering any non-degree program, while MU has 17 degree programs and 11 non degree programs.

4.1.2 Academic and administrative units

Academic and administrative units in universities has a contribution towards workforce composition and costs implications for the PUs. Academic and administrative units make up the organizational structure of a particular organization. Table 6 presents academic and administrative units in PUs in Morogoro.

Table 6: Academic and administrative units

	MU	SUA
Faculties	5	4
Directorates	4	4
Centers	9	3
Institutes	3	2
Administrative Departments	6	7

4.1.3 Organizational structures

Organizational structure (OS) is very crucial in assessing span of control of any organization. A wider or narrower span of control of an organization can be reflected from its organizational structure. This study had to review the OS of the PUs in Morogoro region to assess their span of control .Figure 2 and 3 presents the OS of PUs in Morogoro.

A wider span of control has been observed at SUA as compared to MU in their administrative units. At SUA seven departments are directly under DVC (A &F)¹⁵ , while under DVC (A&F) at MU there are six departments. The Administrative services department at SUA has four sub departments, namely Dispensary, Estates, Security, Games and Sports. The case at MU is different, the Games and Sports sub department unit falls under the Department of Students Welfare. SUA has both Students Welfare department as an independent department and Games and Sports as sub department under the Administrative services department, the issues related to health services and estates at MU have autonomous departments while at SUA the same are sub departments

¹⁵ Deputy Vice Chancellor (Administration and Finance)

under Administrative services department. Leaving alone the structure, the concern here is the workforce or span of control comparison in the non core functions potential for outsourcing in these PUs (security guards 1:82 at SUA , 1:5 at MU) , Estates departments artisans (1:45 at SUA, 1:19 at MU) .However the two Departments do not conform to the recommended span of control (Urwick ,1955; Koontz Weihrich,1980) the difference is accounted by the level and extent of outsourcing in these PUs.

The findings reveal that the extent and levels of outsourcing in PUs in Morogoro has an adverse impact on the span of control reduction as the comparison is drawn across the PUs, whereby SUA has outsourced less non-core services compared to MU .Observed that of the identified seven non –core functions, SUA is currently outsourcing (three functions fully and one partially) hence Own Managing (OWG) the remaining while MU is outsourcing (five services fully and some two services partially).

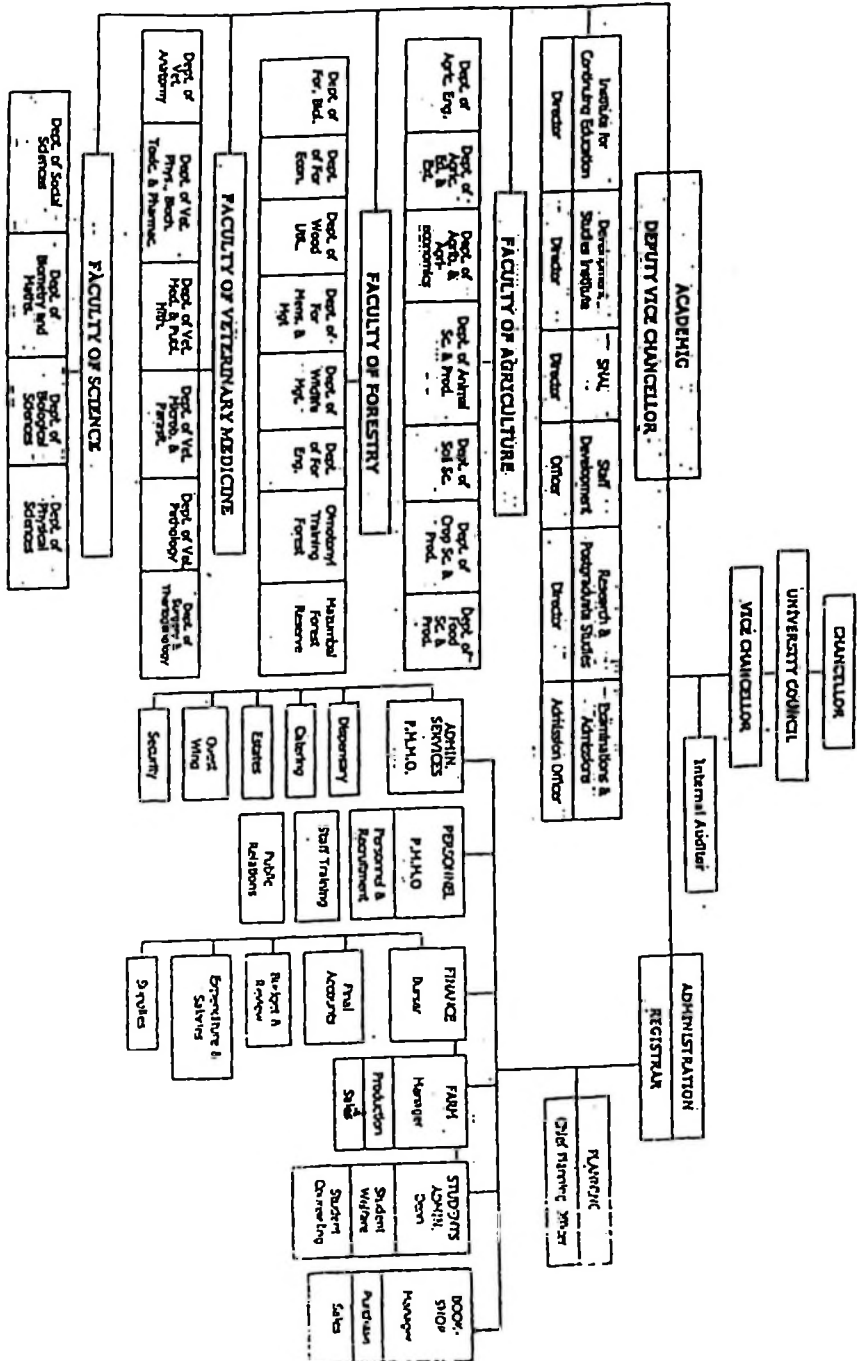


Fig. 1.1: SUA Organization Chart

4.1.4 Manning levels

Total number of employees engaged by these institutions has a very important implication in the cost aspects of these institutions. The more employees an institution deploys, the higher the operational costs. The cost implication manifests into salaries, annual leave travel costs, medical expenses and overtime payment. The manning level for SUA and MU respectively are presented in Table 7 below, detailed in Appendix 6 (a & b).

Table 7: Manning levels in PUs in Morogoro, 2007

PU	frequencies		percentages	
	Academic	Administrative	Academic	Administrative
MU	201	296	40.44	59.56
SUA	297	774	27.74	72.26

The table shows that administrative staff frequencies at SUA constitute 72.26% of the total frequency of staff, outranging the number of academic staff constituting 27.74%. The frequencies of the two categories of staff do not have a very big gap at MU (59.56% administrative staff and 40.44% academic staff respectively). The results show that 53.8% of administrative staff at SUA constitutes of staff in the cadres such as attendants, drivers, security guards, estates artisans, secretarial staff and medical staff. Luhanga *et al.* (2003) and UDSM (1996) documented similar findings with respect to the academic staff –administrative staff composition in their studies in the other PU in Tanzania namely the University of Dar Es Salaam .

Table 8 below presents the frequency distribution cadre wise of workforce among the administrative staff in the PUs in Morogoro ranking the first five cadres with highest frequencies. The intention is to establish the fact that which among the administrative cadres constitute the largest portion of the workforce.

Table 8 (a): Workforce frequency by cadre for the cadres with highest frequencies among the administrative staff cadres at SUA

Cadre	SUA	N=774
	Frequency	*Percentage
Attendants	173	22.35
Auxiliary police	82	10.59
Secretarial staff	68	8.78
Medical staff	49	6.33
Artisans	45	5.81
Total	417	
% age contribution **		53.8

*Percentage of the cadre to the total administrative workforce

**Percentage contribution of the 5 cadres to the total administrative workforce

Table 8 (b): Workforce frequency distribution by cadre for the cadres with highest frequencies among the administrative staff cadres at MU

Cadre	MU	N=288
	Frequency	*Percentage
Finance and Stores staff	53	18.4
Attendants	46	15.9
Secretarial staff	45	15.6
Medical staff	28	9.7
Drivers	28	9.7
Total	200	
% age contribution **		69.44

*Percentage of the cadre to the total administrative workforce

**Percentage contribution of the 5 cadres to the total administrative workforce

The finding in tables 8(a) and 8(b) does not conform to the findings by other studies (Sunderland-Addy, 2003; Saint, 1992) which identified students residential and dining facilities as promising areas constituting a large proportion of a university's non-academic staff. The findings do differ as a function of outsourcing in these PUs in Morogoro , due to the fact that halls of residence cleanliness and cafeteria services are among the outsourced services for both MU and SUA refer to tables 17, 18 and 19, this justifies outsourcing as a span of control reduction and operational costs reduction measure. The issue of efficiency comes in as now the PUs are only responsible for the supervision of a PSP instead of a certain number of university employees in the service

areas, service delivery improvement is a concern of the PSPs to remain competitive so as to win the tender when the contract ends.

4.1.5 Students enrollment

Table 9 below presents the number of students enrolled in PUs in Morogoro region between 2000/01 and 2005/06.

Table 9: Students population in PUs in Morogoro, 2000/01-2005/06

Year	MU	SUA
	Students	Students
2000/01	1 123	1 866
2001/02	1 158	2 051
2002/03	1 423	2 246
2003/04	1 725	2 291
2004/05	2 211	2 446
2005/06	3 205	2 260

For the past years the number of students enrolled in PUs in Morogoro has been increasing, despite the fact that these PUs have been under funded (Table 14), introduction of new degree programs is a contributory factor. The enrollment growth of these universities is also a function of increased social demand for higher education in Tanzania; Table 17 reveals the increasing social demand of higher education in Tanzania

and specifically in PUs in Morogoro. OUT (2006) and UDSM (2005) documented similar findings in other universities.

4.1.6 Staff qualifications

Staff qualifications have an implication on the PUs capacity to meet its objectives efficiently. Staff qualifications in an organization be it a university or any other plays a very vital role towards achieving the organizations' goals. Skills and educational qualifications increase working efficiency and productivity. In this study the education levels (qualifications) of staff (both administrative and academic) in PUs were analyzed and results are presented in Table 10 and 12.

Table 10 Academic staff qualifications by gender

Highest qualifications attained	MU			SUA		
	Male	Female	Total	Male	Female	Total
Ph.D	30	3	33	158	22	180
Masters	82	28	110	80	11	91
Bachelors	46	12	58	16	0	16
Total	158	43	201	254	33	287

Table 11(a): Administrative staff by gender

Sex of the employees' Administrative staff –frequencies and percentage

PU	Frequencies		N	Percentages	
	Male	Female		Male	Female
MU	168	120	288	58.3	41.7
SUA	519	255	774	67.05	32.95

Table 11(b): Academic staff by rank and gender

Rank	MU			SUA		
	Male	Female	Total	Male	Female	total
Professors	3	1	4	43	4	47
Ass. Professors	8	1	9	54	2	56
Senior Lectures	53	8	61	61	14	75
Lecturers	19	5	24	37	9	46
Assistant Lecturers	33	20	53	43	7	50
Tutorial Assistants	42	8	50	13	0	13
TOTAL	158	43	201	251	36	287
%	78.6	21.4		87.4	12.5	

Tables (10,11a and 11b) reveal under representation of women in PUs in Morogoro for both administrative and academic staff , at MU female staff constitute 41.7% and 21.4%

for administrative and academic staff respectively, while it is 12.55% and 32.95% for academic and administrative staff at SUA. Other studies (Musisi and Muwanga, 2003 ; Luhanga *et al.* 2003; Lund,1998) documented similar findings in other universities in Tanzania, Africa and the rest of the Commonwealth region. This is just another challenge to PUs in Morogoro.

Table 12 Administrative staff education level

Education level	Frequencies		Percentages	
	MU	SUA	MU	SUA
Primary education	99	368	34.4	47.5
Secondary education	29	45	10.1	5.8
Plus secondary education				
+short course(s)	77	177	26.7	22.9
Ordinary/Adv.Dip	43	103	14.9	13.3
1st degree	18	38	6.3	4.9
Postgraduate dip.	6	4	2.1	0.8
Masters degree	16	37	5.6	2.1
Ph.D	-	2	-	0.3

Source: Personnel records MU & SUA (2007)

PUs in Morogoro still have employees who have primary education level of education as revealed by Table 12, 34.4% and 47.5% for MU and SUA respectively. This has impacts on both operational costs and efficiency given the nature of the universities where those

performing core functions have higher educational qualifications, minimum entry qualification for the academic staff in universities in Tanzania is a Bachelor degree or its equivalent. Educational qualification has a lot of influence on increasing working efficiency and productivity. With the implementation of the Establishment Circular No.1 of 2004 which requires all civil servants to at least have secondary education, PUs will find themselves spending a lot to train its under qualified staff as the Circular requires.

4.1.7 Student –staff ratio

Student staff ratio (SSR) is a very important indicator for the effective deployment of both human and capital resources towards the delivery of functions of an organization. The student staff ratio is an important index for assessing efficiency and effectiveness of staff utilization. A very low student-staff ratio may indicate inefficiency in resource utilization. It means staff are teaching fewer students. On the other hand a very high value of the same index suggests over-extension of staff leading to ineffectiveness of the individual staff members. Table 13 presents SSR in PUs in Morogoro.

Table 13 SSR in PUs in Morogoro, 2000/2001-2005/2006

Year	MU			SUA		
	Students	Ac. Staff	SSR	Students	Ac. Staff	SSR
2000/01	1 123	112	1:10.0	1 866	225	1:8.3
2001/02	1 158	115	1:10.0	2 051	222	1:9.2
2002/03	1 423	122	1:11.7	2 246	243	1:9.2
2003/04	1 725	150	1:11.5	2 291	269	1:8.5
2004/05	2 211	184	1:12.0	2 446	272	1:8.9
2005/06	3 205	201	1:15.9	2 260	287	1:7.8

Source : SUA (2005 b) and MU (2005 a)

Table 13 reveals that SSR has been improving towards the recommended ratios by the Ministry of Science Technology and Higher Education (MSTHE,2004) in PUs in Morogoro.MSTHE recommends 1:15 (Arts and Humanities), 1:10 (Science`and Agriculture) .MU had 1:15.9 in the 2005/2006 academic year hence meeting the recommended ratio ,whereas SUA had 1:7.8 below the recommended ratio for Science and Agriculture (1:10).Findings revealed that at MU while Academic staff recruitment was expanding the Administrative staff number has been decreasing, 2002 retrenchment accounts for the decrease (from 375 in 2001/2002 to 209 in 2002 /2003), the administrative staff recruitment has been increasing there after at a lower rate than that of academic staff (i.e 6.2% against 22.9 % between 2002/03 and 2003/04 at MU).The recruitment situation at SUA portrays more or less similar picture (administrative staff

recruitment increase was at 6.4% between 2003/04 and 2004/05 compared to the Academic staff which was at 1.1%, and a change was noted in 2004/2005 where the recruitment of Academic staff stood at 5.2% against 4.4% for administrative staff). Table 14 presents the recruitment levels comparison (administrative and academic staff) at both MU and SUA .

However, the study could not obtain any evidence on direction of the costs reduced in the non core functions, specifically with respect to whether being directed to meeting recommended SSR in these PUs. The trends however depict that the rates of recruitment increase is in the core functions than in the non –core functions.

Table 14 Recruitment levels (administrative and academic staff :MU and SUA

Year	MU		SUA	
	Academic	Administrative	Academic	Administrative
2001/02	115	375	222	672
2002/03	122	209	243	688
2003/04	150	221	269	696
2004/05	184	288	272	741
2005/06	201	288	287	774

Sources : SUA (2003), SUA (2007), MU (2005 a)

4.2 Challenges Facing PUs in Morogoro

Due to various challenges that have been facing PUs in Morogoro outsourcing has increasingly been thought of as among alternatives to overcome such challenges. This section briefly discusses some of the challenges facing the PUs in Morogoro. The

challenges discussed here under are regarded to have contributed to the reduction of efficiency, widening span of control and increasing operational costs.

4.2.1 Reliance on government funding

PU's in Morogoro, just like any other in Tanzania rely heavily on government as its main source of fund on recurrent expenses. The trend has revealed that there has been a decreasing trend with respect to funding of PU's in Morogoro. The trend is assessed basing on the differences between what the respective university councils approved against what the government approved. The table below presents the recurrent budget funding trend in PU's.

**Table 15 Recurrent Budget trends in PU's in Morogoro, 2000/01-2005/06
Figures in Tshs. '000**

FY	SUA			MU		
	A	B	C	A	B	C
2000/2001	11 262 428	8 311 743	26.2			
2001/2002	10 817 027	9 184 380	15.1			
2002/2003	14 969 324	8 454 192	43.5	5 459	3 760	31.1
2003/2004	17 501 373	10 055 233	42.5	7 860	4 463	43.2
2004/2005	17 173 414	11 171 056	34.9	8 667	6 137	29.1
2005/2006	17 203 616	11 201 672	35.1	14 673	9 846	53.3

Source: SUA (2005 b)

Entries: A- Budget Approved by Council,
B- Budget Approved by Government
C- Deficit percentage

URT (1999) acknowledges the situation of under funding in PU's in Tanzania at large; other studies by Luhanga (2003) and UDSM (2005) recorded similar findings from the

other PU in Tanzania –the UDSM. Other studies (Musisi and Muwanga, 2001; Manuh, 2002) documented similar situations in PUs in Uganda, Ghana and Nigeria respectively. Under funding of these PUs has adversely affected the execution of the core functions , resulting into inadequacy of teaching facilities, technical equipment, outdated books in the libraries, few computers in comparison to student population and few hostels compared to the number of students. Hence likely to lower the quality of training in these PUs.

4.2.2 Administrative staff qualifications

Generally, the investigation revealed that despite the insistence made by the Civil Services Department on the need for the public servants to further their qualifications a good number of employees still hold Std VII qualification (Table 12 reveals) .PUs in Morogoro face challenges in connection with the implementation of the Establishment Circular No.1 of 2004 , the circular states categorically the minimum entry qualification to the public service which is at least a secondary school (Form IV qualification).A serious Training Needs (TN) arises to these PUs to elevate the qualification of its majority staff. Quality of the administrative staff in these PUs does not stand a significant contribution to the functioning of these PUs, where the minimum entry for the core functions staff (teaching-staff) is a Bachelor degree (for Tutorial Assistants). Interconnection between parts within the system for the functioning of the whole system is an issue of concern: the failure of one part to meet the required standard directly affects the functioning of the other interdependent part and ultimately the whole system

(Ntukamanzina, 1998) applies here. A study (NORAD, 1995) recorded similar findings with respect to qualifications of civil servants in Tanzania. Administrative staff qualifications pose a unique challenge to the PUs service delivery, many are under qualified and some are untrainable, this is in line with the findings of the Management effectiveness review (Mkude and Cooksey, 2000). SUA (2003) acknowledges the under qualification of majority of its administrative staff. Establishment Circular No. 1 of 2004 insists on the employers to fund for their employees training to reach the required qualifications, this is just another costlier undertaking to the already under funded PUs.

Table 16 Cadres constituting under qualified staff ¹⁶and their frequencies

Cadre	Frequencies	
	MU	SUA
Secretarial staff	10	25
Clerical Staff	2	4
Telephone Operators	2	2
Attendants	39	145
Drivers	8	34
Medical staff	14	26
Printing staff	2	-
Security guards	4	63
Library staff	3	-
Finance and stores staff	5	4
Artisans	10	37
Agric. Machinery Operators	-	6
Cooks	-	2
Day Care Assistants	-	2
Field Officers	-	2
Field Assistants	-	3
Sawyers	-	1
Laboratory assistants	-	12

Source: MU (2005 b), SUA (2007)

¹⁶ According to the Establishment Circular No. 1 of 2004 minimum entry qualifications to the public service is secondary education

Table 16 presents the frequencies of the under qualified administrative staff and their frequencies across the cadres in PUs in Morogoro region. The findings point out that outsourcing has had a significant contribution towards reduction of under qualified staff, if comparison is drawn in potential cadres for outsourcing MU has less under qualified staff compared to SUA, i.e. security guards MU has 5 while SUA has 63, artisans 10 against 37, attendants 39 against 145 respectively. Outsourcing is associated with retrenchment hence laying off some employees who are under qualified in these PUs hence the high the level of outsourcing is associated with lowering the number of under qualified staff.

4.2.3 Increased demand for university education

Increased demand for university education is witnessed in Africa (Saint, 1992; Musisi and Muwanga, 2003) and even in Tanzania (UDSM, 2005; OUT, 2006)

Table 17 **Frequencies of qualified applicants versus admitted, 2000/01-2006/07**

Year	MU			SUA		
	Applicants	Admitted	RR%*	Applicants	Admitted	RR
2000/01				1390	819	41.07
2001/02				1976	790	60.02
2002/03	8512	574	93.25	2268	842	62.87
2003/04	4482	822	81.65	2796	700	74.96
2004/05	6446	910	85.88	3396	769	77.35
2005/06	9836	1438	85.38	2906	802	72.40
2006/07	12,249	800	93.46			

Source: MU Records (Planning Office), SUA Records (Admissions Office)

*Rejection rate (RR) measured as the magnitude of the qualified applicants who could not obtain admission to these PUs in the respective year

4.3 Operationalization of Outsourcing in PUs

This section discusses the findings with respect to specific objective (1.5.2, i) of the study, similarly the section is aiming at giving answers to research question (1.6, i) of the study. Discussion presented under this section is on the operationalization of outsourcing in PUs in Morogoro region (objective 1.5.2, i of the study), and procedures and types of outsourcing arrangements in place at these PUs (research question 1.6, i of the study) is also presented.

4.3.1 Choice of PSPs

The investigation made has revealed that choice of PSPs in PUs has been following the normal tendering processes as stipulated in the Public Procurement (Goods, Works, Non-consultant Services and Disposal of Public Assets by Tender) Regulations of 2005, further the tendering process is guided by Tender Evaluation Guidelines: Procurement of Goods or Works and Standard Tendering Document: Procurement of Works prepared by the Ministry of Finance. PSPs shall be the successful tenderers who shall offer the lowest evaluated cost, in case the method of procurement used was competitive tendering, or the highest evaluated price, in case the method of disposal was a competitive tendering. PSPs found at these PUs included those who are managing these PUs' facilities through hiring (leasing out existing business ventures) and those who have been hired by the PUs to offer services which are non-core to these PUs. The table below shows the facilities/business ventures that have been leased out (privatized) by the PUs.

Table 18 Privatized facilities at PUs, 2007

MU facilities	SUA facilities
Lumumba complex	SUASA Club
Mzumbe Printing Unit	Guest Wing
Mzumbe Main Campus Cafeteria	SUA garage
	SUA Main Campus Cafeteria

The table above reveals that outsourcing is related to income generation as those PSPs hiring the PUs facilities are paying to the university either a certain percentage of the income accrued from those facilities or a flat rate. Luhanga *et al.* (2003) documented the relation between income generation and outsourcing in PUs in the Institutional Transformation Programme (ITP) carried out by the University of Dar Es Salaam (UDSM) commencing in 1991. With such income PUs are able to cut short or to top up the deficit finance from the government hence improving financial situation in various areas of the PUs operations. These outsourced areas that are now generating incomes previously were financial resources consuming areas.

Privatization of such services has witnessed not only reduction of costs to the PUs but also increasing the quality of such services through market competition, outstanding examples can be drawn from both MU and SUA with respect to how the joints such as the SUASA Club used to be managed and the way it is managed now, the case of Lumumba Complex at MU stands to justify this. Omari (1991) and Saint (1992) support the argument.

For the choice of PSPs ,the PUs adhere to the issues of qualification of the suppliers , contractors ,service providers or asset buyers as stipulated in the Public Procurement Regulations (2005) 14-1 (a, b, c, d) ;in summary the regulation provide for:

- (a) that they possess the necessary professional and technical qualifications , professional and technical competence, financial resources ,equipment and other physical facilities ,managerial capabilities ,reliability ,experience and reputation ,and the personnel to perform the procurement or disposal contract
- (b) that they have legal capacity to enter into the procurement
- (c) that they have fulfilled their obligations to pay taxes and social security contributions and that they abide to employment ,environmental ,health and safety requirements in Tanzania , where required ;

Section 15-(1) provides for pre-qualification requirements hence an intention to secure service from capable firms, section 15-(10) (c) requires a documentary evidence or other information that must be supplied by the suppliers, service providers, contractors or asset buyers to demonstrate their qualifications, section 15-(11) provides that :“When pre-qualification is undertaken, qualification of tenderers by a producing entity shall be based upon the capability and resources of the applicants to perform the particular contract satisfactorily, taking into account their :

-
- (a) experience and performance on similar contracts
 - (b) knowledge of local working conditions
 - (c) capabilities with respect to personnel ,equipment and construction or

manufacturing facilities

(d) financial position ; and

(e) current commitments”

Conclusively, the choice of PSPs for outsourcing in PUs through tendering process stands a way towards efficiency improving in the outsourced areas. PPR of 2005 insists on getting services not only from PSPs from which the outsourced are core to them, but also such PSPs should have a standing capability , experience (on similar undertakings) and resources to perform.

Table 19 and 20 below lists the PSPs at PUs in Morogoro and their service areas in the 2006/2007.

Table 19: PSPs at SUA, 2006/07

PSPs	Service area(s)
Kuche Enterprises	Lot 1: ground maintenance and garbage collection SMC Lot 2: students' hostels & classrooms cleanliness SMC
Care Sanitation Enterprises	Ground maintenance and garbage collection SUA Main campus General cleanliness off campus buildings (8 buildings) Cleanliness students' hostels and classrooms SUA Main campus
MOKU Security	Security services at SMC

Table 20: PSPs at MU, 2007

PSPs	Service area
Kuche Enterprises	Cleaning classrooms and offices
Care Sanitation and Suppliers	Cleaning halls of residence
Stemo Security	Security services
Love Catering	Catering services

4.3.2 Types of outsourcing in place at the PUs in Morogoro

As summarized in Tables (19 and 20) above, the PUs in Morogoro are engaging local companies to provide services. This type of outsourcing is known as Onshore outsourcing referring to the outsourced work performed locally (i.e. in the same country). Onshore outsourcing (also called domestic outsourcing) is the obtaining of services from someone outside a company but within the same country. PPR (2005), 26-1 and section 49 of the Act ¹⁷ insists on exclusive preference to local persons or firms specifically for the procurement of works or goods with a value not exceeding the values provided in the fourth schedule of PPR .The PUs decision to use this type of outsourcing advocates the government initiatives on job creation as stipulated in NSGRP and MDGs. The literature (Bryant, 2004; Myers, 2004; Little Snedonn, 2004; Eischen, 2007; Phipps and Merisotis, 2005) discuss the criticisms of the other types of outsourcing fairly well, the other types of outsourcing Near shore and Offshore have been criticized of creating political threat to citizens of the respective countries as they involve importation of jobs overseas to areas where low-wages could be paid hence denying citizens an opportunity for employment.

¹⁷ The Act refers to the Public Procurement Act of 2004

4.3.3 Performance, experiences history of the PSPs and the reputations of other organization being served by PSPs

The performance, experience, history and the reputation of the other organizations being served by PSPs has a very significant implication on the quality of service a certain PSPs will offer.

Table 21 reveals that most of PSPs serving PUs in Morogoro are also providing similar services in other reputable organizations other than the PUs in Morogoro, after having satisfied tender boards in the respective organizations. This is an evidence of their proven performance in their functions areas (which are non-core to the other organizations), hence the PUs are assured of high quality service delivery from these PSPs. Improvement of quality of services or rather efficiency improvement is among the reasons for outsourcing (Barterm and Manning, 2001; Lund, 1997; Petrie, 2000). The table below lists other organizations being served by PSPs providing services in the non-core activities in the PUs surveyed in Morogoro region.

Having almost the same PSPs providing services in almost all the other companies and organizations across the country leaves a lot for discussion and even open up an area for further research.

Table 21: Other organization served by similar PSPs

Name of PSPs	Organization served by the same PSPs
Moku Security	TTCL Morogoro Offices Muslim University of Morogoro campus Tanzania Tobacco Board Headquarters –Morogoro
Stemo Security	PRIDE (T) Morogoro Offices Mzumbe University
Care Sanitation and Suppliers	University of Dar Es Salaam, Institute of Finance Management Dar Es Salaam University College of Education Mbeya Institute of Science and Technology Mbeya Referral Hospital Mirembe Hospital Public Health College -Iringa National Assembly –Dodoma Technical College Arusha Ministry of Health –Headquarters CHEDHA ¹⁸ Kibong'oto Hospital National College of Tourism Ministry of Planning & Empowerment Tanzania Public Service College Tanzania Cotton Seed Board
Kuche Enterprises	Kilimanjaro International Airport University College of Land and Architectural Studies

4.3.4 University policy for managing or coordinating contracted out services

The extent to which outsourcing has become an institutionalized feature of PUs management may be reflected in aspects such as whether the university had a policy on:

¹⁸ Centre for Educational Development in Health Arusha

decisions to outsource; choice of contractor; evaluation of contracts later. Table 22 gives the results.

Table 22: Policies on/related to outsourcing in PUs, June 2007

University policy on	MU	SUA
Decision to outsource	No specific policy	No specific policy
Choice of a contractor	Public Procurement Act	Public Procurement Act
Evaluation of contracts	Performance based	Performance based with Specific procedures

An investigation made at these PUs revealed that currently no specific policy exists on the decision to outsource, but rather the non-core services that have been outsourced the decision was reached after the studies¹⁹ that were made following under-performance of those service areas. However at SUA, “The Work plans for Implementation of SUA Corporate Strategic Plan 2005- 2010” of 2005 mentions the operations that contribute to high costs as one of the outputs of Corporate Strategic Plan (CSP) and inline with that the document proposes identification of non-core activities that can be best outsourced

¹⁹ SUA management conducted a study in 2005 to assess the costs incurred for cleanliness in comparison with what the PSPs tendred for , Mzumbe did the same before outsourcing in 2002

to counteract against the high costs. The MU CSP²⁰ during the investigation was in the process of being approved by the University Council.

4.3.5 The extent and levels of outsourcing

The extent and levels of outsourcing has implications on the cost and span of control in an institution. The costs involved for own managing (OWG)²¹ the same service(s) or function(s) by the PUs far outranges those requested by the private services providers (PSPs). Normally, the PSPs win tenders on the basis of cost comparison²² made by these PUs basing on how much the PUs spent on the same versus how much the PSPs would demand for providing those services. This study assessed the extent and levels of outsourcing and relate it with operational costs and span of control reductions. The assumption being the higher the level of outsourcing, the higher the chances of cost reductions and the lower the span of control. Literature (Lund, 199; Musisi and Muwanga, 2003; Saint, 1992; Mercer, 1995; Luhanga *et al.*, 2003) identify the most common outsourced non-core functions in higher learning institutions.

According to the Unit of measurements and analysis (3.5.3), number of non core functions being outsourced by a certain PU determines the level and extent of outsourcing. A fully outsourced service is given one point, partially outsourced service

²⁰ During the data collection (June, 2007) Mzumbe University Corporate Strategic Plan was waiting for approval of the University Council

²¹ Own managing(OWG): non core function internally handled by the PUs

²² Cost comparison is based on the reasonable evaluated tender prices

is given a half score. Partially outsourcing is when the same non core function is both own managed by the PU and part of it has been contracted out to PSPs.

Table 23: Outsourcing level and extent in PUs in Morogoro, 2007

Non core function	MU		SUA	
	Outsourced	OWG	Outsourced	OWG
Cleanliness:	*		*	
Security services	*	*	*	*
Vehicles maintenance	*		*	
Students' cafeteria	*		*	
Estates works	*	*		*
Printing unit/services	*			*
Photocopy and binding	*			*

A star for both outsourced and OWG signifies partial outsourced functions

$\frac{n}{N} \times 100 =$ level and extent of outsourcing

Where n frequencies of non core functions outsourced by a certain PU

N Total frequencies of non core functions potential for outsourcing

Scaling: 0-25 % Initial level of outsourcing

26- 50% Low level of outsourcing

51-75% Intermediate level of outsourcing

76-100% Advanced Level of outsourcing

MU: 6 points hence: $\frac{6}{7} \times 100 = 85\%$

SUA 3.5 points hence: $\frac{3.5}{7} \times 100 = 50\%$

Table 23 above presents the most common outsourced non –core functions in most organizations. MU is at an advanced stage of outsourcing compared to SUA , MU is outsourcing fully five and two partially (85% of the identified services) of the non-core functions identified being potential for outsourcing compared to SUA, where only three of the most common outsourced services are fully outsourced (cleanliness, vehicles maintenance and students cafeteria) while security services is partially outsourced at

SMC and own managed at Main Campus (hence outsourcing only 50% of the identified most common outsourced non-core functions in universities are outsourced at SUA.

4.3.6 Performance monitoring and contract evaluation

Managing (PSPs) relationships is a key skill service receivers need to get right to ensure compliance at all times, prevent value leakage, and mitigate business interruption risk. The study revealed that both PUs in Morogoro had in place performance monitoring arrangements.

At SUA-SMC²³ performance monitoring is vested to the Directorate of SMC in collaboration with the Security Department²⁴ (for security services). SUA has instituted SUA Cleanliness Assessment Team which has been mandated to oversee the activities of the PSPs (specifically on cleanliness services); monthly reports are made available to DVC (A&F) .The reports made by this Team forms a basis of payment to PSPs based on performance. Estates Department and SUASAB are main stakeholders. Assessment sheets used attached as Appendices 8a, b & c.

Performance monitoring arrangement at MU involves the Chief Security Officer (for security services), the Building and Estates Department and the Department of Students Welfare (for lawn and ground works, cafeteria, garbage collection and halls of residence

²³ Solomon Mahlangu Campus

²⁴ Surprise checks are made sometimes by the security department

and offices cleanliness).The involved departments/personnel in the performance monitoring on a weekly basis report to the DVC (A&F).

The presence of performance monitoring arrangements in PUs conforms to the insistence made by other literatures (Bhatia, 2005; Lund, 1997) in outsourcing. Performance monitoring arrangements enables the service receiver to ascertain themselves on the quality of the service provided by the PSPs and on the goodness/worthiness of the outsourcing contracts (Stronka and Wienskowska, 2005).

Bhatia (2005) insists on “A three –legged stool approach²⁵” to any outsourcing contract, that is an organization should not think of the benefits of outsourcing (cost reduction and span of control reductions only), but rather look at the risk (such as having an under performing PSPs) as a company outsource. Performance monitoring arrangements do help in tracking down the performance of PSPs. Effectiveness of the performance monitoring and contract evaluation arrangements employed by the PUs in Morogoro is evident through the incidences of non renewal of contracts and functions re-arrangement for the PSPs. Property Market Consultancy (PMC)’s²⁶ contract at SUA could not be renewed on failure to deliver, the Savoy Catering at MU was not extended a contract due to its failure to win tender.

²⁵ A- three legged stool approach involves considering costs ,quality and risk

²⁶ PMC provided ground maintenance service at SUA in 2005 could not deliver within the probationary period, was notified and agreed to withdraw after accepting its failure to deliver

Satisfaction enquiry made at MU resulted into split /re-arrangement of the work done by Care Sanitation Suppliers which earlier involved both cleaning of halls of residence and classroom (between 2000-2005), Kuche Enterprises was given classroom and offices cleaning lot with effect from 2005. The enquiry involved students being the key stakeholders in the service area. This reveals that the PUs take into account the issues of risks (complaints from the services receivers) and quality hence conduct satisfaction enquiry, this conforms to what is insisted by “A three –legged analysis” (Bhatia, 2005).

4.3.7 Outsourcing implementation

Outsourcing in PUs has been preceded by manning levels analysis, cost implications studies and retrenchment. This section discusses implementation of outsourcing in PUs in Morogoro in the light of the above.

4.3.7.1 Manning levels analysis

It has been observed that the PUs before retrenchment had to conduct manning level analysis which gives a clear picture on the staffing levels in various departments. Retrenchment followed after optimum number of staff in each department has been agreed. Manning level analysis directed the PUs on the actual requirements of staff in the function area.

4.3.7.2 Retrenchment, rightsizing and outsourcing

Outsourcing is linked to retrenchment where as companies are being contracted to do some jobs that were done by those retrenched, and whereby retrenchment itself is a type

of reform in an attempt to reduce the cost on civil service, e.g. by reducing its size hence curbing government spending through personnel and wage cuts. Public institutions reduced their sizes, resulting savings could be used to increase the salaries of those expected to remain in service and as well to attract and retain sufficient numbers of able people providing better capacity for discharging core functions.

Outsourcing initiatives in PUs in Morogoro began with retrenchments, the PUs had to right size its workforce specifically in non core functions, partly being the Government directive along the Civil Service Reform Programs. The issue behind retrenchment was the size of the workforce and its resultant costs. However non core the functions found to be, normally those functions have contribution to the running of an organization hence a need to have companies contracted to do some jobs that were done by those retrenched.

Both PUs in Morogoro, namely MU and SUA had retrenched /laid off its employees in 1996, and later in 2002²⁷ MU had to retrench its employees once again. Unlike MU, SUA did not further retrench despite the fact that it has outsourced its cleanliness functions at the Main Campus and SMC with effect from 2005/2006.

²⁷ In 2002 MU retrenched 37 staff (Cafeteria), 26 staff (Halls of residence), 46 staff (Buildings and Estates), 11 staff (Day Care center), 10 staff (printing unit) and 26 security guards. Most of the works that were being handled by these staff were outsourced and ending up in abolishing some of the services

Table 24: Frequencies of administrative employees before and after retrenchment, 1996 retrenchment

PU	Before retrenchment	After retrenchment	Workforce reduction
MU	574	449	125 (21.77%)
SUA	1066	441	625 (41.36%)

By retrenching PUs manage to reduce PCs plus other personnel related costs, workforce reduction is also made possible. Through retrenchment, efficiency is attained as the PUs tends to leave behind skilled workers and performing. Efficient utilization of both human and financial resources is expected out of outsourcing. Retrenchment focused on poor performers, volunteers, ghost workers, staff with long illness and retrenchment of surplus employees identified by PUs manning level.

4.4 Potentiality of Outsourcing Towards Efficiency Improvement and Span of Control Reduction

This section discusses the findings with respect to specific objective (1.5.2, ii) of the study; similarly the section is aiming at giving answers to research question (1.6, ii) of the study. Discussion presented under this section is on the assessment of the potentiality of outsourcing towards its rationale (efficiency improvement and span of control reduction) in PUs in Morogoro region, and also giving a response to research question

(1.6, ii of the study) on whether with outsourcing in place has the PUs in Morogoro registered any significant efficiency improvement and reductions in span of control.

Outsourcing involves handing over the once in house managed functions to the PSPs.

Outsourcing involves in most cases retrenchment as the case has been in PUs in Morogoro (section 4.4.7.2 Retrenchment/rightsizing and outsourcing). This study looked into how outsourcing has had an impact in terms of reduction of workforce ultimately span of control reduction and efficiency improvement

$$Y = \sum f_1 + \sum f_2 + \dots + \sum f_n$$

Where

y= span of control

$\sum f_i$ = total number of workforce in a dept/function area i.e. Estates Dept

Reduction in f_1, f_2, \dots, f_n leads to reduction in Y and vice versa

Table 25 (a) Workforce frequencies comparison at MU in the outsourced functions (before and after outsourcing)

Non core function	A	B	C	D
Security services	50	5	45	90
Students welfare staff	78	7	71	91
Estates and building staff	72	19	53	73.6

Entries: A – frequencies of employees before outsourcing at MU, 2000
 B- frequencies of employees after outsourcing at MU, 2002 to date
 C-workforce reduction frequencies
 D-workforce reduction in percentages

Table 25 (b): Workforce frequencies comparison at SUA in the outsourced functions (before and after outsourcing)

Non core function	A	B	C	D
Students welfare staff (cafeteria)	70	2	68	97.1
Estates and building staff (Garage)	34	0	34	100

Entries: A- frequencies of employees before outsourcing at MU, 2000

B- frequencies of employees after outsourcing at MU, 2002 to date

C- workforce reduction

D- workforce reduction in percentages

Table 25 (a) reveals that outsourcing at MU accounted for the 90% reduction of workforce in security department, before outsourcing the Chief Security Officer was supervising 49 security guards (1:49); with outsourcing 4 security guards are under the same Officer (1:4). The case applies also to the student welfare department at MU which before outsourcing had 78 staff, following taking over of PSPs mostly of the halls of residence cleanliness activities, 71 staff in the department were laid off hence remaining with 7 staff. 100% workforce reduction has been registered with respect to garage services at SUA and 97.14% in the cafeteria (Table 25b). Luhanga *et al.* (2003) documented similar findings with respect to outsourcing at UDSM.

Span of control ratios reduction has also been registered, resulting from the reductions in workforce as revealed by Table 25(a) and 25 (b) and summarized below:

Table 25 (c): Span of control comparison before and after outsourcing in PUs

Outsourced function	Span of control ratios			
	Before outsourcing		After outsourcing	
	MU	SUA	MU	SUA
Security services	1:50	-	1:50	-
Students welfare staff*	1:78	1:70	1:70	1:2
Estates and building staff*	1:72	1:34	1:19	0

*Students welfare department at SUA had its cafeteria services outsourced and in Estates and building department the garage was outsourced.

The equation below summarizes the above explanations basing on the departments (listed in table 25 a) which had their functions outsourced at MU:

$$\begin{aligned}
 \text{A-Before outsourcing: } y &= \sum f_1 + \sum f_2 + \sum f_3 && = 200 \\
 Y &= \text{Span of control/ workforce} && = 200 \\
 \sum f_1 &= \text{workforce in security department} && = 50 \\
 \sum f_2 &= \text{workforce in students welfare department} && = 78 \\
 \sum f_3 &= \text{workforce in building and estates department} && = 72 \\
 \text{B-After outsourcing: } y &= \sum f_1 + \sum f_2 + \sum f_3 && = 31 \\
 Y &= \text{Span of control/ workforce} && = 31 \\
 \sum f_1 &= \text{workforce in security department} && = 5 \\
 \sum f_2 &= \text{workforce in students welfare department} && = 7 \\
 \sum f_3 &= \text{workforce in building and estates department} && = 19
 \end{aligned}$$

(A less B=workforce force reduction/span of control reduction)

Workforce reduction is linked to CSRP (Caulfield, 2004) whose objective was, *inter alia*, to achieve a “smaller, affordable, well compensated, efficient and effective performing civil service” (ibid, 2004:233), second phase of CSRP aimed at institutional improvements; among others strategies included restructuring for organizational effectiveness and efficiency, outsourcing certain services and managerial capacity building (Ntukamazina, 2000; Bana and Ngware, 2005).

Studies (Urwick, 1955; Koontz and Weihrich, 1980) linked span of control and efficiency in terms of supervising, the theory is, normally as the number of subordinates reporting directly to one person is increased, that person will find it difficult to deal adequately with all of them. At the same time if a manager has fewer subordinates than he can effectively manage them then he is being underutilized.

The study revealed (Table 13) that SSR at MU has been improving from 1:10 in 2001/02 and has reached the recommended ratios by the MSTHE for the Arts and Humanities 1:15.9 in 2005/06, therefore there is efficient utilization of academic staff at MU .SUA had 1:7.8 below the recommended ratio for Science and Agriculture (1:10) .Findings reveals that at MU while Academic staff recruitment was expanding the Administrative staff has been decreasing, the 2002 retrenchment reduced workforce from 375 in 2001/2002 to 209 in 2002 /2003), however the administrative staff recruitment has been increasing there after at a lower rate than of academic staff (i.e 6.2% against 22.9 % between 2002/03 and 2003/04 at MU).The recruitment situation at SUA portrays more or less the similar picture (administrative staff recruitment increase was at 6.4% between 2003/04 and 2004/05 compared to the Academic staff which was at 1.1 %, and a change was noted in 2004/2005 where the recruitment of Academic staff stood at 5.2% against 4.4% for administrative staff). Table 14 presents the recruitment levels comparison (administrative and academic staff) at both MU and SUA . However the study could not obtain any evidence on direction of the costs reduced in the non core areas if being

directed to meeting recommended SSR in these PUs. The trends however depicts that the rates of recruitment increase is in the core functions than in the non –core functions. With reduction of workforce the supervisors are relieved with supervisory function and concentrate with other managerial tasks this has implication on efficiency improvement. Implementation of outsourcing in PUs involved retrenchment , observation made has revealed that efficiency is also brought about as the PUs criteria for retrenchment involved poor performers, ghost workers, staff with long illness and retrenchment of surplus employees identified by PUs manning level.

4.5 Cost Effectiveness of outsourcing as a management strategy in PUs

This section discusses the findings with respect to specific objective (1.5.2, iii) of the study; similarly the section is aiming at giving answers to research question (1.6, iii) of the study. Discussion presented under this section is on the assessment of cost effectiveness of outsourcing as a management strategy in PUs in Morogoro region (objective 1.5.2, iii of the study), and also giving a response to research question (1.6,iii of the study) on whether with outsourcing in place has the PUs in Morogoro registered any significant reductions in operational costs.

For the purposes of this study predictable costs (PCs) - salaries and employer statutory contribution on PPF) were used as units of analysis on cost items. The two cost items (salaries and employer statutory contribution on PPF) were termed predictable costs (PCs) on the fact that the items can be determined in advance or can be foreseen, unlike

the other cost items, normally in the public service salaries are spelt out by the Treasury Registrar's circulars the rates /scales are meant for the whole financial year, the case of PPF the percentage of the contribution is also emanating from the Act²⁸ that establishes the Fund hence predictable. The PCs related to non-core functions were identified and their cost structures were analyzed. A cost comparison was made on the PCs with and without outsourcing within the same PU, followed by a comparison across the PUs. Security service was chosen at SUA and PCs for the cost item was computed and comparison was made between the Main Campus where the PU is OWG the service against the SMC where the service has been outsourced.

Salaries paid to the Auxiliary polices monthly and the employer statutory contributions such as the PPF²⁹ are very important predictable costs (PCs) incurred by the PUs in Morogoro and the whole country at large. Table 24 presents the salary costs incurred by SUA monthly for the Auxiliary polices (security guards) plus the 15% PPF employer contribution for the same cadre.

Table 26(a) reveals that SUA is currently engaging a total of 78 Auxiliary polices, hence SUA is spending Tshs 29 946 447 per month to pay salaries for the respective security guards plus Tshs 4 491 967 as employer statutory contribution to the PPF as the Act requires.

²⁸ If any amendment to the Act normally there is a lapse of time for implementation

²⁹ According to the Parastatal PensionFund Act

According to the survey, a private security company named MOKU which is providing security services at SMC is being paid Tshs 4 250 000, an average of Tshs 85 000 per month per security guard. Other evaluated reasonable tender prices for PSPs in other service items in PUs in Morogoro are presented in Appendix 7.

Table 26 (a): Security services : PCs and number of staff at SUA

Cadre	Number Of staff	Salary scale	Amount p.m Tshs	Total Tshs
Auxilliary police				
Superitendant of Police	4	PGSS 15.3	738 070	2 952 280
Assistant Superitendant	12	PGSS 14.3	659 330	7 911 960
Inspector of Auxilliary Police	5	PGSS 13.3	572 830	2 864 150
	1	PGSS 8.0	284 550	284 550
Assistant Inspector	..1	PGSS 12.2	483 820	483 820
	1	PGSS 8.3	304 830	304 830
	2	PGSS 8.2	298 070	596 140
	1	PGSS 8.4	311 590	311 590
	1	POSS 9.5	186 190	186 190
Sergent of Auxilliary Police	1	POSS 9.5	186 190	186 190
	1	PGSS 8.1	291 310 -	291 310
	12	POSS 8.5	167 590	2 011 080
	1	POSS 8.3	163 550	163 550
	1	POSS 8.1	159 510	159 510
Corporal Auxilliary Police	1	PGSS 7.2	264 750	264 750
	1	PGSS 7.5	277 890	277 890
	3	PGSS 7.3	269 130	807 390
	6	POSS 7.5	152 060	912 360
	1	POSS 7.4	150 240	150 240
	1	POSS 8.5	167 590	167 590
Auxilliary Police	6	PGSS 6.1	129 080	774 480
	1	PGSS 6.0	127 510	127 510
	1	POSS 6.1	129 080	129 080
	1	POSS 6.7	138 500	138 500
	1	POSS 7.0	142 960	142 960
	7	POSS 7.1	144 780	1 013 460
Assistant Auxilliary Police	4	PGSS 4.0	101 130	404 520
	1	POSS 4.1	102 360	102 360
	1	POSS 7.0	142 960	142 960
	1	POSS 7.1	144 780	144 780
	1	POSS 7.2	146 600	146 600
A:	Total salary costs			29 946 447
B:	15% of the total salary (Employer PPF contribution)			4 491 967
	A+B			34 438 414

The PSPs at the SMC is engaging fewer security guards than the number engaged by the PU at the Main Campus, PSPs operations are business oriented compared to the public institutions. The SUA tender board evaluated workforce requirement for the SMC was 50 security guards.

The findings reveal that outsourcing security services reduces costs than own managing security services. OWG basing on PCs only costs the PU Tshs 34 438 414 per month compared to Tshs 4 250 000 paid to the PSPs per month (87.56% operational costs reduction/difference is accounted for). While the PSPs require Tshs 85 000 per month per security guard, the university is on average spending Tshs 441 518 per security guard basing on PCs only (500% higher than the evaluated reasonable tender price). Findings by Harper (2000) at Kampala City Council on outsourcing cost effectiveness conform to findings of this study. Study by Louw (2001) documented similar findings with respect to operational costs reduction associated with outsourcing in South African defense forces (with commercialization of the armaments industry-Armcor) and local government (following privatization of emergency services at the City of Benoni).

Workforce mean spending P.M basing on PCs = $\frac{\sum PC_s}{N}$

Where

$\sum PC_s$ = Summation of predictable costs = 34 438 414

N = Total number of workforce engaged by a Department/ function area = 78.

Mean spending at security department at SUA = Tshs 441 518

Mean spending by PSPs = Tshs. 85 000

Stronka and Wienskowska (2005) identified costs comparisons of outsourcing (payments to the vendor) against costs spent by the organization as resulting into costs reductions being a result of an outsourcing application. Phipps and Meritosis (2005) associates outsourcing with cost reduction on various higher education functions and services.

Another cost comparison (as a function of outsourcing) basing on PCs was made between the two PUs on the Estates Department against the level and extent of outsourcing. Table 26(b) presents the workforce frequencies and PCs for the MU Buildings and Estates department, June 2007.

Table 26 (b): MU Building and Estates department workforce and PCs, 2007

Cadre	No. of staff	Salary scale	Amount p. m (Tshs)	Total costs (Tshs)
B& E Manager	1	PGSS 20.0	1 222 780	1 222 780
PMA	1	PGSS 17.0	867 190	867 190
Field Officer I	1	PGSS 16.3	839 780	839 780
Senior Artisan I	1	PGSS 7.2	264 750	264 750
I	6	PGSS 6.0	233 150	1 398 900
I	2	POSS 9.5	186 190	372 380
II	4	POSS 8.5	167 590	670 360
III	6	POSS 7.1	...144 780	868 680
III	1	POSS 7.0	142 960	142 960
Senior Attendant I	1	POSS 9.2	178 510	178 510
II	1	POSS 8.2	161 530	161 530
II	1	POSS 8.1	159 510	159 510
Senior Foreman I	1	PGSS 15.0	738 070	738 070
A:	Total salary costs			7 885 400
B:	15% of the total salary (Employer PPF contribution)			1 182 810
	A+B			9 068 210

PCs = $(\sum s_1, s_2, \dots, s_n) + [(\sum s_1, s_2, \dots, s_n) \times \frac{15}{100}]$ for Estates and building department at MU amounts to 9 068 210 p. m ,(table 26b), while for SUA is Tshs 25 441 829 p. m (table 26 a).

On comparison the SUA Estates department spending is higher than MU's Building and Estates Department, the differences in the level and extent of outsourcing between the two PUs account for difference in terms of the PCs. MU's Estate department is only responsible for some minor repairs and maintenance hence leaving behind some few staff and the rest of the works behind handled by private companies when need be. SUA is maintaining its Estates department to handle all activities or functions related to maintenance and repairs.

Table .26 (c): SUA Estates Departments workforce and PCs (p. m), 2007

Cadre	No. of staff	Salary scale	Amount p. m (Tshs)	Total costs (Tshs)
Estates Manager	1	PGSS 20.0	1 222 780	1 222 780
Senior Inspector of Works	1	PGSS 15.2	716 070	716 070
Principal Artisan	3	PGSS 15.3	738 070	2 214 210
	2	PGSS 15.1	694 070	1 388 040
Senior Artisan I	1	PGSS 14.3	659 330	659 330
	2	PGSS 13.2	554 830	1 109 660
	2	PGSS 13.1	536 830	1 073 660
	6	PGSS 11.1	167 590	670 360
	1	POSS 9.5	186 190	186 190
	10	PGSS 9.1	325 460	3 254 600
Artisan I	1	PGSS 7.3	269 130	269 130
	1	PGSS 8.4	311 590	311 590
	1	PGSS 8.2	298 070	298 070
	2	POSS 9.5	186 190	372 380
	1	POSS 9.3	181 070	181 070
Artisan II	2	POSS 9.5	186 190	372 380
	3	POSS 8.5	167 590	502 770
	1	POSS 8.1	159 510	...159 510
Artisan III	1	POSS 8.3	163 550	163 550
	1	POSS 7.4	150 240	150 240
	2	POSS 6.3	132 220	264 440
	1	POSS 6.4	133 790	133 790
	1	POSS 6.2	130 650	130 650
Senior Attendant I	12	PGSS 8.4	311 590	3 739 080
	4	PGSS 8.3	304 830	1 219 320
	1	POSS 8.4	159 510	159 510
Estates Attendant	2	POSS 5.3	117 850	235 700
II	2	POSS 5.0	113 590	227 180
Senior Foreman I	1	PGSS 15.0	738 070	738 070
A: Total salary costs				22 123 330
B: 15% of the total salary (Employer PPF contribution)				3 318 499
A+B				25 441 829

Table 26(c) presents both workforce frequencies and PCs across the cadres in the Estates Department at SUA.

4.6 Reviewing and comparing the levels of outsourcing

This section presents discussion basing on the objective (1.5.2, iv) of the study that requires to review and compare the levels of outsourcing at the selected PUs in Morogoro and recommend on the possibility of further cost cutting through outsourcing. Non-core functions to the PUs significantly constitute of a lager portion of the workforce engaged by the PUs in Morogoro, the higher the level of outsourcing the narrower the span of control. An investigation was made to find out the proportions of the workforce that performs the functions that are potential for outsourcing but are still own managed by the PU.

Table 27 presents frequencies and percentages of employees performing non core functions in PUs in Morogoro.

Table 27: Manning Levels in non core functions potential for outsourcing

Non-core functions	Frequencies	
	MU	SUA
Security services	5	82
Attendants	46	173
Artisans (Estates)	19	45
Day Care Assistants	0	3
Janitors	-	6
Health staff	-	-
Total	70	309

Source: MU (2006), SUA (2007)

The findings reveal that MU has a smaller number of employees performing non-core functions compared to SUA, that is due to the fact that MU has outsourced more non-core functions compared to SUA. The results show that 53.8% of administrative staff at

SUA constitutes of staff in the cadres such as attendants, drivers, security guards, estates artisans, secretarial staff and medical staff.

Security services are partially own managed at SUA at a higher level than MU; SUA can further outsource and reduce PCs on this non core service, further to that the Estates department can be outsourced partially as the case has been at MU. Estates department at SUA comprises of 22 attendants 47 artisans. However, both PUs can conduct studies and justify the need for outsourcing the health departments, students' accommodations and the computer related tasks (such as internet server maintenance and students computer services) in their campuses. Health departments in both PUs do comprise a lot of staff who are under qualified, students accommodation is also a consuming area.

SUA can further outsource its security services followed by its Estates department. The PUs should focus on merging cadres such transport cadre (drivers and attendants hence Drivers cum messengers).The health/medical and attendants cadres both PUs are among the cadres which comprise a lot of staff who are under qualified staff (Table 12 and 16) , at MU 39.4% and 14.1% respectively of under qualified staff are attendants and Medical /health staff, 39.4% of the under qualified staff at SUA are attendants followed by security guards (17.1%), Artisans (10 %), Drivers (9.2%), and Medical staff 7.1%.

These cadres apart from having under qualified staff also do contribute significantly to the total workforce and span of control widening at PUs, this is evident in Table 8(a) and 8(b).

Optimum Manning levels analysis should be conducted in some other non core cadres, such analysis were conducted in these PUs way back in 1996 when the government directed these PUs to right size their workforce. Through optimum manning level analysis staffing levels in the PUs will be rationalized to conform to the approved functions and structures.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.0 Overview

This study intended to investigate on outsourcing as a cost cutting measure for public universities in Tanzania .The Sokoine University of Agriculture and the Mzumbe University both located in Morogoro region represented the rest of the PUs in Tanzania in this study. This study was aiming at coming up with findings with respect to its four objectives which were (a) To investigate operationalization of outsourcing in the PUs, (b) To assess the potentiality of outsourcing towards its rationale (efficiency improving and span of control reduction),(c) To assess cost effectiveness of outsourcing as a management strategy and (d) To review and compare the levels of outsourcing at the selected PUs in Morogoro and recommend on the possibility of further outsourcing for efficiency enhancing and lowering costs.

The study further intended to answer the following research questions (a) what are the procedures and types of outsourcing arrangements PUs put in place to effect outsourcing in Tanzania?, (b) With outsourcing in place has PUs registered any significant efficiency improvement and span of control reduction?, (c) With outsourcing in place has PUs registered any significant operational costs reductions? and (d) At what levels and extent has the PUs in Morogoro instituted outsourcing of non-core services and what are the possibilities of further outsourcing?

5.1 Summary of the Major findings

This sub section highlights the results of the study. The results presented under this section are organized according to the objectives of the study. The results are summarized as follows:

5.1.1 Operationalization of outsourcing in PUs

PUs in Morogoro choose PSPs to outsource their non core services following the normal tendering processes as stipulated in the Public Procurement (Goods, Works, Non-consultant Services and Disposal of Public Assets by Tender) Regulations of 2005. PSPs chosen are the successful tenderers offering the lowest evaluated cost, in case the method of procurement used was competitive tendering, or the highest evaluated price, in case the method of disposal was a competitive tendering. When choosing PSPs the PUs adheres to the issues of qualification of the suppliers, contractors, service providers or asset buyers as stipulated in the Public Procurement Regulations (2005) 14-1 (a, b, c, d) . PSPs to which PUs in Morogoro have outsourced their non core functions have a standing capability and experience basing on past performance on similar contracts justified by their performances on similar undertaking in other organizations. The type of outsourcing in place in both PUs in Morogoro region is onshore type of outsourcing. Outsourcing in PUs in Morogoro currently is not an institutionalized management feature as these PUs do not have specific policies guiding decisions to outsource, evaluation of contracts later and choice of contractors, but rather depends on the Public Procurement Act . The level and extent of outsourcing in PUs in Morogoro do differ;

MU has outsourced more non core functions identified as potential for outsourcing than SUA, (85% and 50% of the identified non core functions potential for outsourcing for MU and SUA respectively). Performance monitoring at both PSPs involves the Office of the DVC (A&F) and the outsourced services area departments respectively, though differences exist on the modalities. Implementation of outsourcing was preceded by studies made on the manning levels and the financial implications on the entitlements of those to be retrenched, finally retrenchment. Unlike MU, SUA has recently (2005) outsourced some non core functions without retrenching.

5.1.2 Efficiency improvement and span of control reduction

Significant reductions in workforce and consequently span of control ratios reductions has been made possible through outsourcing management strategy/arrangements, hence relieving immediate Supervisors their supervisory burdens. Basing on the span of control theories, the fewer the number one supervises the effective the supervision. The study findings revealed significant span of control ratios reduction (in security services from 1:50 to 1:5, Students welfare department from 1:78 to 1:7, Estates and buildings Department from 1:72 to 1:19 at MU, 1:from 70 to 1:2 in the catering department at SUA and from 1:34 to 0 at the garage at SUA). SSRs have improved reaching at 1:15.9 in 2005/2006 at MU from 1:10 in 2001/2002; SUA has not reached the recommended SSR.

5.1.3 Cost effectiveness of outsourcing as a management strategy in PUs

Outsourcing is cost effective than own managing with respect to non core functions, with outsourcing in place, PUs in Morogoro have registered significant reductions in operational costs. PCs analysis at SUA has revealed that workforce mean spending for the security services at SUA when own managed by the university is Tshs 441 518 per security guard per month, while a PSP providing the same service at one of SUA' s Campus (SMC) requires Tshs 85 000 per security guard per month. A comparison between the PUs surveyed also reveals that own managing is costly than outsourcing, MU PCs on its building and estates is Tshs 9 068 210 compared to Tshs 25 441 829 per month spent by SUA (MU has partially outsourced its building and estates department while SUA is own managing).

5.1.4. On levels of outsourcing comparison and the possibility of further outsourcing for efficiency enhancing and lowering costs

Further outsourcing can be made possible, both PUs can conduct studies and justify the need for further outsourcing. MU can look into the health departments, students' accommodation and the computer related tasks (internet server maintenance and students computer services), while SUA can start with security services followed by its Estates department. The PUs should focus on merging cadres such transport cadre (drivers and attendants hence Drivers cum messengers).The health and medical and attendants cadres both PUs is among the departments which comprise a lot of staff who

are under qualified staff (Table 12 and 16) , at MU 39.4% and 14.1% respectively of under qualified staff are attendants and medical/health staff, 39.4% of the under qualified staff at SUA are attendants, followed by security guards (17.1%), Artisans (10%), Drivers (9.2%), and Medical /health staff (7.1%). These cadres apart from having under qualified staff also do contribute significantly to the total workforce and span of control widening at PUs, this is evident in Table 8(a) and 8(b). Optimum manning level analysis has to be conducted to determine the actual staff requirements hence a basis for further outsourcing.

5.2 Conclusion

PUs in Morogoro region, Mzumbe University and Sokoine University of Agriculture both practice outsourcing .Outsourcing practices do differ in terms of level and extent, despite their differences in terms of level and extent of outsourcing, these PUs share common modality with respect to choice of PSPs (being guided by the Public Procurement Regulations of 2005), some PSPs are serving both PUs, both PUs are practicing the Onshore type of outsourcing, to both PUs despite the presence of the practice, outsourcing is not yet institutionalized in these PUs evidenced by lack of policies pertaining to decision to outsource ,evaluation and performance monitoring of contract.

In the view of the finding, significant span of control or workforce and operational costs reduction has been registered.

It is logical to deduce that “three- legged –outsourcing contracts” led to efficiency improvement, span of control and operational costs reduction in PUs in Morogoro region. Overall the study asserts that outsourcing has a value to add in PUs management in Tanzania.

5.3 Recommendations

5.3.1. Organizational analysis and planning

PUs need to conduct organizational analysis and planning to get the clear picture of the present structure and come up with desirable future changes based on projected expansion ,mergers or expansion as well as on functions which may develop. Through organizational analysis and planning PUs can address issues of whether the current positions (all of them) are necessary, or can responsibilities be regrouped for effective operations now or are all positions so organized that individuals holding them know what is expected of them or having participated in setting their objectives, know their responsibilities. Analysis should be based on the current positions and the qualifications of individuals needed to fill them. Through the organizational analysis PUs can come up with some other functions to outsource, the PUs having further outsourced non core functions ,efficiency will be improved and span of control and costs reduced too. The costs reduced should be directed towards improving teaching, research and consultancy (the core functions of these PUs).

5.3.2. Further outsourcing non core functions

The Government issued a circular (Establishment Circular No.1 of 2004) which is insisting on employees who are under the Form IV qualification to obtain such qualifications. The Government issued that circular and gave a grace period of 3 years there after an employee who fails to secure those qualifications will neither be promoted nor given salary increment, this might result into job dissatisfaction. An investigation made by this study has revealed that most of the under qualified staff are mostly found in cadres such as auxiliary police, attendants, drivers and secretarial staff. These cadres are performing non-core functions to PUs and they are potential for outsourcing hence the PUs should opt to outsourcing them and get not only outside expertise but also reduce cost and the time management spent on issues related to these cadres.

5.3.3 Merging cadres

Another recommendation which can be put into place by the PUs to cut costs, reduce span of control and improve efficiency which is currently under consideration by some other organization is cadres merging. Staff in cadres such drivers spent very little driving as it has been observed that some of them hardly travel outside their stations of duty in a month or even do not drive in a day. These PUs could merge the drivers' cadre and the attendants cadre hence coming up with Drivers cum Messengers. Employment for the attendants can be frozen and gradually phase out the cadre. This will both cut cost and reduce span of control

5.3.4 Establishment of secretarial pools and insisting on ICT competence among the Senior and Middle level Officers in the PUs

Another cost cutting measure and span of control reduction initiative is through the establishment of secretarial pools within the PUs. With this initiative the PUs will reduce the number of employees in the secretarial cadre (remain with few competent secretaries) and insist amongst its officers to handle some of the tiny secretarial duties (i.e. typing letters of a page or two). An investigation has revealed that a good number of these secretaries in the PUs are under qualified and chances are even the manuscripts they type; there will be a substantial time an officer will spend to proof read hence better remain with few who are competent. Each Faculty/Center /Directorate could establish secretarial pool made up of some two or three secretarial staff that will be responsible for handling bulky typing .Advanced computerization in the Finance departments in these PUs can also reduce span of control and hence reduction in PCs. Finance departments in these PUs can further reduce costs with advanced computerization

REFERENCES

- AAU. (1991). *Study on Cost-effectiveness and Efficiency in African Universities*. Association of African Universities, Accra. 120pp.
- Ajayi, J.F.A, Lameck, K.H.G. and Johnson, G.A. (1996). *The African Experience of Higher Education*. Association of African Universities, James Currey and Ohio University Press, Ohio. 276pp.
- Anderson, D.M. (2005). Outsourcing: The Reality for Cost Reduction
[<http://www.halfcostproducts.com/outsourcing.htm#Outsourcing%20Article>] site visited on 23/07/ 2007.
- ANSTI (2005). *State of Science and Technology in Training Institutions in Africa*. UNESCO Regional Bureau for Science in Africa., Nairobi. 141pp.
- Antonucci, Y. L; Lordi, F. C. and Tucker, J. J. (1998). The Pros and Cons of IT Outsourcing. *Journal of Accountancy* 185 (6): 26-31.
- Bana, B.A. and Ngware, S.S.A (2005). Reforming the Public Service: The Tanzanian Experience In: *Third Regional Consultative Workshop on Public Service Reform in Eastern and Southern Africa*, (Edited by Kiragu, K. and Mutahaba, G.),5-8 June 2005, Dar-Es-Salaam, Tanzania. 198-223pp.
- Bartem, R. and Manning, S. (2001). Outsourcing in Higher Education; *Change* 33(1):42-47.
- Bhatia, U (2005). Outsourcing– A 3-Legged Stool: Cost, Quality and Risk, Leg 1 – Costs of Outsourcing. [<http://www.fsoutsourcing.com>] site visited on 14/05/2007.

- Bloom, D; Canning, D and Chan, K (2006). *Higher Education and Economic Development in Africa*. Harvard University Press, Harvard. 90pp.
- Bryant, B. (November 2004). Offshore outsourcing affects American workers
[<http://wistechology.com/article.php?id=603>] visited on 23/05/2007.
- Carnoy, M. (2000). Globalization and Higher Education. *Perspectives in Education* 18(3): 29-37.
- Castells, M. (1996). *The Information Age: Economy, Society and Culture: The Rise of the Network Society (Vol. I)*. Blackwell Science Ltd., Oxford. 958pp.
- Castells, M. (1997). *The Information Age: Economy, Society and Culture: The Power of Identity (Vol.2)*. Blackwell Science Ltd., Oxford. 820pp.
- Castells, M. (1998). *The Information Age: Economy, Society and Culture: End of Millennium*. Blackwell Science Ltd., Oxford. 350pp.
- Caulfield, J. (2004). New Public Management in a Developing Country: Creating Executive Agencies in Tanzania. In: *Unbundled Government: A Critical Analysis of the Global Trend to Agencies, Quangos and Contractualisation*. (Edited by Pollit, C. and Talbot, C.), Rutledge, London. pp. 447-462.
- Clarke, J. and Wood, D. (2001). New Public Management and Development: the case of public service reform in Tanzania and Uganda. In: *The Internationalization of Public Management: Reinventing the Third World States*. (Edited by McCourt, W. and Minongue, M.), Edward Elgar Ltd, Cheltenham. pp. 70-89.
- Coate, E. (1993). The introduction of total quality management at State University of Oregon. *Higher Education* 25(4): 303-320.

- Coombs, P.H. and Hallak, J. (1987). *Cost Analysis in Education: A tool for policy and planning*. Johns Hopkins University Press, Baltimore and London. 161pp.
- Corkery, J. and Land, A. (1997). Civil Service Reform in the Context of Structural Adjustment: A Triangular Relationship. *Policy Management Brief* 10(7): 4-5.
- Davenport, T.H., Long D.W. and de Beers, M.C. (1998). Successful knowledge management projects. *Clean Management Review* 39(2):43-57.
- Economist Intelligence Unit and Andersen, A. (1995). *New Directions in Finance: Strategic Outsourcing*. Economist Intelligence Unit., New York. 130pp.
- Eischen, K. (2007) .Working Through Outsourcing: Software Practice, Industry Organization and Industry Evolution in India. *CGRIS Working Paper Series* WP 2004(4): 4-10.
- Elmuti, D.; Kathawala, Y. and Manippallili, M. (1996). Are TQM programmes in Higher Education worth the effort?. *International Journal of Quality and Reliability Management* 13(6): 29-44.
- Ender, K.L. and Mooney, K.A. (1994). From Outsourcing to Alliances: Strategies for Sharing Leadership and Exploiting Resources at Metropolitan Universities. *International Forum* 5(3): 51-60.
- ESAURP (1987). *University capacity in eastern and southern African countries*. James Currey, London. 259pp.
- Gibbons, M. (1998). *Higher Education Relevance in the 21st Century*: The World Bank; Washington- DC. 76pp.
- Gilmer, S.W. (1997). The Winds of Privatization: A Typology for Understanding the Phenomenon in Public Higher Education. In: *Proceedings of 22nd Annual Meeting of the*

- Association for the Study of Higher Education* . (Edited by Shawn, J), 6-9 November, 1997, Albuquerque, Portugal. 5-6pp.
- Goldstein, P.J.; Kempner, D.E.; Rush, S.C. and Brookman, M. (1993). *Contract Management of Self-Operation: A Decision-Making Guide for Higher Education*. CHEMA, Virginia. 240pp.
- Harper, M. (2000). *The Market Management in Kampala City Council* (unpublished report). 24pp.
- Hayes, R.H. and Pisano, G.P. (1994). *Beyond World Class: the new manufacturing strategy*. *Harvard Business Review* 72: 77-85.
- Institute of Development Management. (1994). *Ripoti ya Utekelezaji wa Maagizo ya Baraza la Uongozi wa Chuo Kuhusu Ajira Chuoni* (unpublished). 15pp.
- Institute of Development Management. (1993). *Manning levels Report*. Institute of Development Management, Morogoro, Tanzania. 25pp.
- Ishengoma, J. (2004). *Cost Sharing in Higher Education in Tanzania: Fact or Fiction?*. *Journal of Higher Education in Africa* 2(2): 19-27.
- Ishumi, A. G. M. (1994). *30 Years of Learning: Educational Development in Eastern and Southern Africa from Independence to 1990*. IDRC, Ottawa. 220pp.
- Jefferies, C.L. (1996). *The Privatization Debate: Examining the Decision to Outsource a Service*. *Business Officer* 29(7): 26-30.
- Jongbloed, B. and Teekens, H. (2000). *The Financing of Higher Education in Sub Saharan Africa*. Utrecht, LEMMA BV. 123pp.

- Kaganoff, T (1998). *Collaboration, Technology and Outsourcing Initiatives in Higher Education: A Literature Review*. A report prepared by RAND for the Foundation for Independent Higher Education. RAND Education, Washington-DC. 39pp.
- Koontz, H. and Weihrich, H. (1980). *Principles of Management: An Analysis of Managerial Functions*. McGraw Hill, London. 497pp.
- Lamminmaki, D. (2007). Outsourcing in Australian Hotels: A Transaction Cost Economics Perspective. *Journal of Hospitality and Tourism Research* 31(1): 73-110.
- Lane, J. E. (1997). *Public Sector Reform: Rationale, Trends and Problems*. Sage Publications, London. 168pp.
- Lienert, I. (1998). Civil Service Reform in Africa: Mixed Result After 10 Years. *Finance and Development* 35(2):10-13.
- Lipsey, M.W. and Wilson, D.B. (2000). *Practical Meta –Analysis*. Sage Publications, Thousand Oaks, California. 227pp.
- Little-Snedonn, J. (2004). A cause for concern? In Outsourcing jobs overseas: Perspectives. *Regional Review Q2/Q3*:1-5.
- Louw, L (May 2001). Economic Reform Today: Making Privatization Work in South Africa. [<http://www.cipe.org>] site visited on 23/06/ 2007.
- Luhanga, M.L ., Mkude ,D.J., Mbwette, T.S., Chijoriga ,M.M. and Ngirwa, C.A. (2003). *Higher Education Reforms in Africa: The UDSM Experience*. Dar Es Salaam University Press, Dar Es Salaam. 160pp.

- Luhanga, M. L. and Mashalla, J. S. (2005). *Reforms and Innovations in Higher Learning Education: Reflection on the initiatives and Lesson at the University of Dar Es Salaam*. Dar Es Salaam University Press, Dar Es Salaam. 105pp.
- Luhanga, M. L. (2003). *Strategic Planning and Higher Education Management in Africa*. Dar Es Salaam University Press., Dar Es Salaam. 225pp.
- Lund, H (1997). Outsourcing in Commonwealth Universities. *CHEMS 18*: 1-14.
- Lund, H (1998). *A Single Sex Profession? Female Staff Numbers in Commonwealth Universities- 1998: Commonwealth Higher Education Management Report* .CHEMS, London. 200pp.
- Maliyamkono, T.L., Ishumi, A. G. M. and Wells, S. J. (1982). *Higher education and Development in Eastern Africa*. Heinemann, London. 150pp.
- Manuh, T, Budu, J and Gariba, S (2002). *Change and Transformation in Ghana's Public Universities: A study of experiences, challenges and opportunities* .Centre for Research on Science and Technology ,University of Stellenbosch. 48pp.
- Mario, M.; Fry, P.; Levey, L.and Chilundo, A. (2001). *Higher Education in Mozambique: Partnership for Higher Education in Africa*. 114pp.
- Marks, J (2004). The Outcry over Outsourcing: A debate rages throughout state capitols over the loss of American jobs to foreign countries. *State Legislatures 4*: 30-31.
- Mbwette, T.S. (2000). *Managing University Crisis*. Dar Es Salaam University Press Ltd., Dar-es-Salaam. 116pp.

- McCourt, W. (1998). Civil Service Reform Equals Retrenchment? The Experience of Rightsizing and Retrenchment in Ghana, Uganda and the UK. In: *Beyond the New Public Management: Changing Ideas and Practices in Governance*. (Edited by Minogue, M., Polidano, C. and Hulme, D.), Edward Elgar Ltd, Cheltenham. pp 89-92.
- Mercer, J. (1995). Contracting Out: Colleges Are Turning to Private Vendors for More and More Campus Services. *Chronicle of Higher Education* 41(43): 37-38.
- Mkapa, B.W. (March 1999) A Speech by the President of the United Republic of Tanzania, UDSM, Nkrumah Hall, 16th Feb 1999.
[<http://www.bu.edu/aparc/resources/tanzania/Tanzania%20Speeches%201999/mkapa%20univ.%20dar%20es%20salaam%2016%20feb%201999.html>] site visited on 23/05/2007.
- Mkude, D., Cooksey, B. and Levey, L. (2000). *UDSM-2000 and Beyond: A Situation Analysis of the University of Dar Es Salaam's Institutional Transformation*. Dar ES Salaam University Press, Dar Es Salaam. 126pp.
- Mkude, D.; Cooksey, B. and Levey, L.A. (2003). *Higher Education in Tanzania: A Case Study*. Clarendon Press., Oxford. 114pp.
- Msolla, P. M. (2002). Undergraduate Training at SUA. In: *A Proceeding of the 1st stakeholders Conference*. (Edited by Turuka, F.M. et al.), 25 January 2002, Morogoro, Tanzania. 17-23pp.
- Muhanga, M. I (2005). Labour Laws in Tanzania: A Turning Point. *Kola Hill Digest* 9(1): 11-17.

- Musisi, N.B. and Muwanga, N.K. (2003). *Makerere University in Transition 1993-2000: Opportunities and Challenges*. Partnership for Higher Education, Fountain Publishers, Kampala. 103pp.
- Mutahaba, G. and Kiragu, K. (May 2002). Lesson of International and African Perspectives on Public Service Reform. [www.codesria.org/Links/Publications/ad3_04/mutahaba.pdf] site visited on 23/01/2007.
- Mwamila, B .L .M and Diyamett, B. D (2006). *The Position of Higher Education in the National System of Innovation: The Case of Tanzania*. A paper presented at “UNIVERSIDAD 2006” -5th International Congress on Higher Education Cuba, 13-17 February 2006
- Myers, L (2004). U.S. underestimates jobs lost to outsourcing, labor experts assert. *Cornell Chronicle* 36(10): 12-14.
- Mzumbe University. (2005a). *Mzumbe University Basic Facts*. Mzumbe University Printing Press, Morogoro. 32pp.
- Mzumbe University. (2005 b). Seniority list (unpublished) .155 pp.
- Mzumbe University. (2005c). *Annual Report and Accounts for the Year Ended 30th June 2004*. Mzumbe University Printing Press, Morogoro, Tanzania. 17pp.
- NORAD. (1995). NORAD-report: Civil Service Reform in Tanzania. [<https://bora.uib.no/bitstream/1956/1560/>] site visited on 23/05/2007.
- Nsengiyumva, A (2004). ICT & Innovation Systems in Developing countries: Rwanda case study In: *ICT, Innovation systems and the Role of Universities in Societal Development*

–A (Post) Colonial Strain ?. (Edited by Gulbrandsen, E; Nsengiyuma A; Rydhagen, B and Trojer ,L), National University of Rwanda, Butare. pp 20-25.

Ntukamanzina, D. (1998). Civil Service Reform in Tanzania: A Strategic Perspective. In: *Civil Service Reform in Tanzania: Proceedings of the National Symposium*. (Edited by Rugumamu, S.), 5-8 May 1998, Dar Es Salaam, Tanzania. 23-34pp.

Omari, I.M. (1991). *Higher Education at the Crossroads in Africa*. Man Graphics Ltd, Nairobi. 102pp.

Petrie, D (2000). Does Outsourcing Make Financial ‘Cents’?. *Accounting and Auditing Solutions* 8(4): 23-27.

Phipps, R. and Merisotis, J. (2005). *Is outsourcing part of the solution to the higher education cost dilemma? A preliminary Examination*. Institute for Higher Education Policy, Washington-D.C. 240pp.

Pint, E. M. and Baldwin, L. H. (1997). *Strategic Sourcing: Theory and Evidence from Economics and Business Management*. RAND., California. 333pp.

Prahalad, C. K. and Hamel, G. (1990). The core competence of the Corporation. *Harvard Business Review* 68: 2.

Rydhagen, B. and Trojer, L. (2004). ICT, Innovation systems and the Role of Universities in Societal Development –A (Post) Colonial Strain?. In: *ICT, Innovation systems and the Role of Universities in Societal Development –A (Post) Colonial Strain ?(Edited by Gulbrandsen, E., Nsengiyuma, A.; Rydhagen., B and Trojer, L.)*. National University of Rwanda, Butare. pp 45-67.

- Rush, S.C., Kempner, D.E. and Goldstein, P.J. (1995). Contract Management: A Process Approach to Making the Decision. *Eric Digest* ED 446726:5-9.
- Saint, W. (1992). *Universities in Africa: Strategies for Stabilization and Revitalization*. World Bank, Washington,-DC. 140pp.
- Sawyerr, A. (1999). Globalisation and the Social Sciences in Africa. *African Sociological Review* 3(1): 1-19.
- Sawyerr, A. (2002). Challenges Facing African Universities: Selected Issues.
[<http://www.aau.org>] sited visited on 27/01/2007.
- Schiavo, S. (1996). Reforming the Civil Service. *Finance and Development* 33(3): 10-13.
- Schreiber, W. (1994). A Shop Divided: What's At Stake in Privatizing Publications Work and What Such Cutbacks Might Mean to You. *Currents* 20(3):8-12.
- Shittu, M (1990). National University Reform and Rationalization: The Nigerian Experience.
[www.fordfound.org/eLibrary/documents/0131/082.cfm] site visited on 24/05/2007.
- Shivji, I. (1993). *Intellectuals at the Hill: Essays and Talks*. Dar Es Salaam University Press, Dar Es Salaam. 20pp.
- Stronka, W. and Wienskowska, M. (February 2005). Is Outsourcing 'A Three-Legged Stool'?!
[<http://ssrn.com/abstract=673529>] site visited on 12/06/2007.
- SUA. (2003). *Facts and Figures 2002/2003: Corporate Strategic Plan Implementation Coordination Committee*. Inter Press (T) Ltd., Dar Es Salaam .43pp.
- SUA. (2005a). Ripoti ya Kamati Ndogo ya Tenda ya Usafi kwenye Hosteli za Wanafunzi pamoja na mazingira ya Chuo, Januari 2005 (unpublished). 5pp.

- SUA. (2005b). *Facts and Figure, Second Edition*. Inter Press Tanzania Limited., Dar Es Salaam.46pp.
- SUA. (2005 c). *Corporate Strategic Plan, Corporate Strategic Plan Implementation Coordination Committee*. Interpress Tanzania Limited.,Dar Es Salaam. 50pp.
- SUA. (2007). Waraka Na. 101.4 Tathmini ya Utendaji Kazi kwa Wafanyakazi Waendeshaii kwa Kipindi cha Januari-Desemba 2006 (unpublished report).146pp.
- Thahaine, T. (1995). A vision for Africa in the 21st Century. *DAE Newsletter* 7(4): 23-28.
- Trojer, L. (2004). ICT and the Role of Universities-a Techno political and Postcolonial challenge. In: *ICT, Innovation systems and the Role of Universities in Societal Development –A (Post) Colonial Strain ?(Edited by Gulbrandsen, E; Nsengiyuma, A; Rydhagen ,B. and Troje, L. s)*, National University of Rwanda, Butare 67-72.
- UDSM. (1994). *UDSM Corporate Strategic Plan: Strategic Development Programme. Institutional Transformation-UDSM 2000*. University of Dar Es Salaam, Tanzania.89pp.
- UDSM (1997). *UDSM Facts and Figures: Institutional Transformation Programme UDSM – 2000*. Dar Es Salaam University Press Ltd. 88pp.
- URT-MSTHE. (1998). *Financial Sustainability of Higher Education in Tanzania*. Dar Es Salaam University Press., Dar Es Salaam. 141pp.
- URT. (1999). *National Higher Education Policy*. Dar Es Salaam University Press Ltd, Dar Es Salaam. 28pp.
- URT. (2001). *The Education and Training Sector Development Programme*. Government Printers, Dar Es Salaam. 72pp.
- URT. (2002). *Some Basic Statistics on Higher Learning Institutions in Tanzania*

1997/98- 2001/2002. Ministry of Science, Technology, and Higher Education.,Dar Es Salaam. 67pp.

URT. (2004a). *The Public Procurement Act of 2004*. Government Printers, Dar Es Salaam. 56pp.

URT. (2004b) .Public Service Circular No.1 of 2004. (unpublished). 7pp.

URT –MSTHE. (2004c). *Some Basic Statistics on Higher Learning Institutions in Tanzania 2001/2002-.2005/2006*. Ministry of Science, Technology, and Higher Education., Dar Es Salaam. 85pp.

URT. (2005a). *The Public Procurement (Goods, Works, Non-consultant Services and Disposal of Public Assets by Tender) Regulations of 2005*. Ministry of Finance, Government Printers., Dar Es Salaam. 27pp.

URT. (2005b). *National Strategy for Growth and Reduction of Poverty*. Vice President's Office, Government Printers, Dar Es Salaam. 24pp.

URT –Ministry of Finance. (2006). *Waraka wa Msajili wa Hazina Na.3 wa Mwaka 2006* , Ministry of Fiance (unpublished). 15pp.

Urwick, L. F. (1955). The Management Span of Control. *Harvard Business Review* 34: 39-47.

van der Werf, M (2000). How the University of Pennsylvania Learned that Outsourcing is no Panacea. *Chronicle of Higher Education* P.A38: 5-9.

World Bank (1988). *Education in Sub Saharan Africa, Policies for Adjustment Revitalization and Expansion*. Washington-DC. 58pp.

World Bank. (1992). *World Bank Support for Agricultural Higher Education, Report No. 1075*. Operations Evaluation Development, Washington. 71pp.

APPENDICES

Appendix 1: Possible financing strategies for PUs in Tanzania: strength and weaknesses

Type of Strategy	Strength	Weakness
Students loans	Equity More participation Develop sense of ownership	No means testing yet Higher default rate High administrative costs Attribution of value
Income Generation	Supplementary income	Low collection Diversion of attention
Education Levy	Equitable to users of high education	Double taxation
External Donor Funds	Large sums can be received	Dependence syndrome Not always predictable
Contracted Research	Improved quality and quantity of research Identifying with the industry Market positioning of the institution	May divert interest from teaching
Government funding	Main source of funds Large sums can be received Can be the most reliable	Declining economic ability Adhoc allocation Too much time for negotiation

Source: URT, MSTHE (1998)

Appendix 2: SSR in selected PUs in Tanzania

Year	UDSM		
	No. of students	No. of staff	Staff –student ratios
		Academic staff	
1991/92	2 801	589	1:4.7
1992/93	2 992	692	1:4.3
1993/94	2 968	681	1:4.4
1994/95	3 459	520	1:6.6
1995/96	3 901	510	1:7.6
1996/97	4 089	488	1:8.4
1997/98	4 389	507	1:8.6
1998/99	4 396	491	1:8.9
1999/00	4 973	581	1:8.5
2000/01	5 279	591	1:09
2001/02	6 117	539	1:11
2002/03	1 048	545	1:19
2003/04	10 866	549	1:19
2004/05	12 144	610	1:20
2005/06			

SUA			
No. of students	No .of staff	Staff –student ratios	
	Academic staff		
525	239		2.20
542	242		2.24
788	234		3.37
743	250		2.97
909	237		3.84
916	228		4.02
1 296	228		5.7
1 072	228		4.7
1 154	212		5.4
1 436	234		6.1
1 866	225		8.3
2 051	222		9.2
2 246	243		9.2
2 291	269		8.5
2 446	272		8.9
2 260	287		7.8

Sources: UDSM (1996/97), UDSM (1990); SUA (2005 b)

Appendix 3: The budgetary trends in PUs in Tanzania 1990/91-2003/2004 in Tshs 000

Year	UDSM		SUA	
	Proposed	GoT Approvals	Proposed	GoT Approvals
1990/91	4 801 596	2 003 770	1 240 056	764 955
1991/92	6 646 992	3 295 663	1 544 068	961 064
1992/93	9 401 322	3 295 663	2 518 074	1 116 094
1993/94	8 149 135	3 065 900	2 507 821	1 519 920
1994/95	10 441 897	3 009 916	2 877 007	1 466 624
1995/96	14 013 691	4 559 755	3 060 930	2 690 807
1996/97	23 791 290	6 372 447	4 135 711	2 332 043
1997/98	28 345 567	7 345 876	5 135 752	3 005 733
1998/99	28 657 334	8 382 234	5 980 911	4 541 015
1999/00	28 340 045	10 224 764	9 734 184	6 797 620
2000/01	26 971 097	23 295 585	11 262 428	8 311 743
2001/02	41 873 725	21 864 972	10 817 027	9,184,380
2002/03	38 533 827	22 159 923	14 969 324	8 454 192
2003/04	44 836 240	26 772 382	17 501 373	10 055 233
2004/05	44 761 130	26 112 112	17 173 414	11 171 056
2005/06			17 203 616	11 201 872

SOURCES: UDSM (2000), SUA (2005 b)

Appendix 4: List of key informants

No.	Institution /person	Position (s) held	Remarks
	Sokoine University	Head of Personnel and Administration ,Acting Chief Supplies Officer, Admissions Officer and Estates Manager	Provided information on various aspects related to outsourcing in PUs in connection to how it has
	Mzumbe University	Head of Personnel and Administration ,Chief Planning Officer , Admissions Officer, Chief Internal Auditor	contributed to efficiency enhancement, span of control and operational costs reductions in the respective PU in Morogoro region.
	PSPs	PSPs representatives / supervisors in PUs	Provided information on capability and experiences of the company

Appendix 5: Checklist

SOKOINE UNIVERSITY OF AGRICULTURE

DEVELOPMENT STUDIES INSTITUTE

Checklist designed for data collection on investigation into outsourcing towards efficiency improvement, span of control and operational costs reduction for the PUs in Morogoro region. The checklist has been divided into four sections.

Section I: Administered to Personnel department(s)

1. Outsourcing is a common management practice today. Does your university outsource any function currently, if any, give us the details.

2. When did outsource start in this university and what were the first functions to be outsourced?

3. How was outsourcing kick started?

4. What were the reasons for outsourcing those services?

5. How is outsourced operationalized in PUs?

6. How is the contractor chosen? Is the university having any policy on deciding which contractor to use, monitoring performance of contractors, and review of contracts (or for coordinating or managing contracted out services) ?
7. Provide details on the academic and administrative staff employment (recruitment) trends
8. Gender aspects in employment ,if any specific gender policy or consideration i.e. statistics on gender im/balance
9. Kindly describe the organizational structure of your university
10. Kindly provide the manning levels trend in your university (give details of the levels in terms of the gender, qualifications and cadre) for both administrative and academic staff
11. Which private service providers are currently handling some outsourced functions (plus their services areas)?
12. How many employees were laid off to accommodate outsourcing if any?

13. What are the control arrangements made to ensure the “outsourced- to companies” are performing?

14. What are the limitations in terms of outsourcing? Are there possibilities of outsourcing some other functions?

15. At what extent has the university utilized outsourcing management strategy

16. What were the procedures that were followed to contract out the services?

17. Who are the decision makers in the PU with regard to outsourcing?

18. What does the institution need to know to make a decision to outsource?

19. How successful is outsourcing in achieving reduced staffing levels?

20. How successful is outsourcing in achieving enhanced user satisfaction?

Section II: Administered to Finance department(s)³⁰ and Planning department

1. How much are the service providers paid i.e monthly or annually?

³⁰ Some of the financial aspects of outsourcing were obtained the Supplies section at SUA and Internal Auditing at MU

2. What is recurrent budget financing trend (figures for what the university council has been approving vs what the government approved)?
3. What are the current costs in the outsourced services areas?
4. What are the costs the university incurs in other areas which are potential for outsourcing but still own managed by the university i.e. security department, building and estates department?
5. Is there notable savings recorded with respect to out sourcing?
6. Where does the savings from outsourcing are directed to?
7. How successful is outsourcing in achieving worthwhile financial benefits?
8. What are the targeted cost reductions?

Section III: Administered to the Admissions Offices

1. Kindly provide us with statistics on the students population degree wise i.e. from 1st year to 3rd year , postgraduate degrees and diplomas
2. Statistics on the number of qualified candidates who applied for admission versus those who were admitted from 2000-todate

3. Kindly provide us with the list of the courses offered by the university now (degree and non degree courses)
4. Statistics on heavy teaching loads to the academic members of the staff ,if any (MSTHE recommends 18 hours per week)
5. Students- staff ratio statistics ,If there are computed SSR (MSTHE recommends 1:15 for Arts and Humanities,1:10 for Science and Agriculture)
6. Gender aspects in admissions ,if any specific gender policy or consideration i.e. Female pre-entry programmes or lower cut off points ,statistics on gender im/balance

Section IV: PSPs

1. What other organization(s) do you serve leaving the PUs in Morogoro region?
2. What are your company initiatives to make sure that your clients receive quality services?

Appendix 6: The detailed manning level for SUA**6(b) SUA Administrative staff frequencies by cadre and gender, 2007**

Cadre	Male	Female	Total
Accounts staff	21	12	33
Administrative Officers	16	4	20
Agricultural Officers	11	1	12
Agricultural Machine Operators	9	0	9
Artisans	40	4	45
Attendants	126	51	173
Cooks	1	2	3
Computer Technicians/ Systems Analysts/Operator	5	1	6
Bookshop Assistants	1	1	2
Day Care Assistants	3	0	3
Drivers	44	0	44
Field Officers	14	2	16
Field Assistants	11	0	11
Foresters	4	0	4
Inspector of works	1	0	1
Internal Auditors	3	1	4
Janitors	6	3	9
Laboratory Assistants	11	12	23
Legal Officers	0	1	1
Library Assistants	13	7	20
Medical cadre	9	18	27
Office Supervisor & Clerical Staff	9	7	16
Secretarial staff	1	67	68
Planning officers	4	1	5
Public Relations Officers	1	1	2
Sawyers	1	0	1
Auxiliary police	72	7	79
Sports and Game tutors	1	0	1
Supplies staff	12	6	18
Technicians	62	11	73
Telephone Operators	1	3	4
Wardens	3	2	5
Television Announcers/Producers/Cameraman	2	0	2
	518	225	774

Source: SUA (2007)

6(b) MU Administrative staff frequency and percentages cadre wise

	Frequency	Percent	Valid Percent	Cumulative Percent
Public Relations	2	.7	.7	.7
Manpower management	11	3.8	3.8	4.5
Admin. officers	3	1.0	1.0	5.6
HCO	5	1.7	1.7	7.3
Clerks	10	3.5	3.5	10.8
Secretaries	45	15.6	15.6	26.4
System administrator	6	2.1	2.1	28.5
Telephone op	3	1.0	1.0	29.5
Attendants	46	16.0	16.0	45.5
Drivers	28	9.7	9.7	55.2
Medical staff	28	9.7	9.7	64.9
Students welfare	7	2.4	2.4	67.4
Printing	2	.7	.7	68.1
Security guards	5	1.7	1.7	69.8
Library staff	12	4.2	4.2	74.0
Finance and stores staff	53	18.4	18.4	92.4
Planning	3	1.0	1.0	93.4
Estates ,building and garage	19	6.6	6.6	100.0
Total	288	100.0	100.0	

Appendix 6(c): MU Sex of the employee

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid female	120	41.7	41.7	41.7
male	168	58.3	58.3	100.0
Total	288	100.0	100.0	

Source: MU (2006)

**Appendix 7: Evaluated reasonable tender prices for PSPs in other service items in
PUs in Morogoro, 2007.**

7 (a): MU

PSPs name	Service provided	Contract durations ³¹
Care & Sanitation	Cleaning halls of residence and initially classrooms ³²	
Kuche Enterprises	Classrooms + few offices ³³	
Stemo Security	Security services	
Love Catering ³⁴	Catering services	

7(b) SUA

PSPs name	Service provided	Contract durations
Kuche Enterprises ³⁵	Hostels (24 staff)+ surroundings (40) , salary T. Shs 50,000.00/- @	
Moku Security	Security services (60 Staff), salary T. Shs 50,000.00/- @	

³¹ All contracts are on two years basis

³² Between 2002-2005 the company was handling both Cleaning halls of residence and classrooms, due to the volume of work it was proposed that the work should be split. unsatisfaction on the side of the students revealed through satisfaction enquiry

³³ Offices of the VC, DVCs (A and A-F), Confidential Registry and the office of the CIA are cleaned by the MU staff.

³⁴ Savoy initially provided catering services could not win the tender hence Love Catering took over in 2005

³⁵ PSP at SMC

6(b) MU Administrative staff frequency and percentages cadre wise

	Frequency	Percent	Valid Percent	Cumulative Percent
Public Relations	2	.7	.7	.7
Manpower management	11	3.8	3.8	4.5
Admin. officers	3	1.0	1.0	5.6
HCO	5	1.7	1.7	7.3
Clerks	10	3.5	3.5	10.8
Secretaries	45	15.6	15.6	26.4
System administrator	6	2.1	2.1	28.5
Telephone op	3	1.0	1.0	29.5
Attendants	46	16.0	16.0	45.5
Drivers	28	9.7	9.7	55.2
Medical staff	28	9.7	9.7	64.9
Students welfare	7	2.4	2.4	67.4
Printing	2	.7	.7	68.1
Security guards	5	1.7	1.7	69.8
Library staff	12	4.2	4.2	74.0
Finance and stores staff	53	18.4	18.4	92.4
Planning Estates	3	1.0	1.0	93.4
,building and garage	19	6.6	6.6	100.0
Total	288	100.0	100.0	

Appendix 6(c): MU Sex of the employee

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid female	120	41.7	41.7	41.7
male	168	58.3	58.3	100.0
Total	288	100.0	100.0	

Source: MU (2006)

Appendix 8a **SOKOINE UNIVERSITY OF AGRICULTURE**
STUDENTS ACCOMODATION BUREAU (SUASAB)
PROPOSAL FOR ASSESSMENT FOR CLEANLINESS AT SUA

PERIOD OF ASSESSMENT _____ **SERVICE PROVIDER /COMPANY** _____ **UNIT/HOSTEL** _____

NO	Description of cleaning activities (Total score 100%)	Evidence		Score	Remarks
		N	M		
i.	Cleaning of all floors (concrete, terrazzo and parquet)-15% Scrubbing floors : concrete, terrazzo-5% Use of appropriate cleaning materials ,tools and equipments -5%	0	2.5	A	
		0	2.5	5	
		0	2.5	5	
		0	2.5	5	
ii.	Skirting and stairs (10%) Cleaning stairs and stairs case balustrade -2.5% Scrubbing stairs edges, junctions and corners (with appropriate cleaning materials and tools)-5% Cleaning areas with concrete ,terrazzo ,tiles and parquet floors	N	M	A	
		0	1.25	2.5	
		0	2.5	5	
		0	1.25	2.5	
iii.	Walls (10%) Removing cobwebs, dust and scale deposits on all walls ,ceramic tiles ,ceilings, edges, junctions and corners -5% Dusting, wiping and cleaning louvers, windows , wire mesh , ventilations ,grilles and doors -5%	N	M	A	
		0	2.5	5	
		0	2.5	5	
		0	2.5	5	
iv.	Wash rooms (15%) Scrubbing floors with appropriate cleaning materials ,tools and equipments(detergents and disinfectants ,scrubbing brushes ,scrappers ,squeezers, drainers , mops etc)-5% Cleaning toilets pans, urinals and hand wash basins with detergents and disinfectants -5% Soaking ,draining of water from floor and cleaning of waste water gutters/drainage systems Placing mothballs in urinals ,placing detergents in hand wash basins-2.5 %	N	M	A	
		0	2.5	5	
		0	2.5	2.5	
		0	1.25	2.5	
0	1.25	2.5			

Appendix VIII continuation

NO	Description of cleaning activities (Total score 100%)	Evidence			Score	Remarks
		N	M	A		
v.	Furniture (5%) Dusting, wiping anti dust spray on furniture and fittings (chairs ,desks, tables) -5%	0	2.5	5		
vi.	Pavements, corridors, walkways, balconies, roof tops and canopies (10%) Cleaning of ceilings ,floors ,walls -5% Cleaning slabs ,walkways ,roof tops balconies ,concrete and brick paves -5%	0	2.5	5		
vii.	Waste (10%) Sufficient provision of dust/water bins -3% Placing of waster in dust /waste bins -3% Emptying dust bins and keeping dustbins clean-4%	0	2.5	5		
viii.	Evacuation of waste (10%) Waste packaging -2.5% Frequency and timely evacuation of waste -2.5 Condition of premises &surroundings at waste storage bays (refuse at dump site -5%	0	1.5	3		
ix.	Supervision (10%) Monitoring & reporting in writing of faults and defects of services, facilities /equipments-2.5% Provision of adequate supervision /overseeing good house keeping and clean-as -you-go discipline(uniform and protective gears and I.D)-2.5 Adequacy, availability, condition & state of cleaning facilities (Mechanical &non mech.)-2.5% Adequacy & availability of non toxic cleaning agents -2.5%	0	2	4		
TOTAL						

Key: N-Note attended M-Moderately attended A -Attended

Assessed by: Unit/Hostel _____ Title _____ Signature _____ Date _____

Assessor: _____ Title _____ Signature _____ Date _____

**Appendix 8b SOKOINE UNIVERSITY OF AGRICULTURE
STUDENTS ACCOMODATION BUREAU (SUASAB)
PROPOSAL FOR LANDSCAPE ASSESSMENTSHEET**

Name of company assessed: _____

Date: _____ Area: _____

Contracted area: _____

Assessment for the month: _____

1.	Environment cleaning :30%	Score	Marks	Remarks
	(i) Sweeping and making the open areas- 10%			
	(ii) Litter collection & placing in waste disposal site-5%			
	(iii) Waste removing from site -7%			
	(iv) Unblock storm water drainage system -5%			
	(v) Collection bay condition -3%			
2.	Garden maintenance : 35%			
	(i) Lawn mowing, edge cutting ,irrigation and fertilizer .manure application- 15%			
	(ii) Pruning of trees ,shrubs and hedges -5%			
	(iii) Filling of depressed & eroded areas in lawns -5%			
	(iv) Undesirable materials removing in gardens :stones and weeding -10%			
3.	Plants replacement, addition and garden innovation: 15%			
	(i) Plant and grass turf addition and replacement on various places on site - 10%			
	(ii) Innovation by designing new features and gardens- 5%			
4.	Provision of adequate supervision :10%			
	(i) Distribution of labor power on working site - 5%			
	(ii) Proper reporting and making follow ups for various broken and damaged systems on working area i.e. water pipes ,sewage ,electrical cables e.t.c-5%			
5.	Assessment of working personnel's : 10%			
	(i) Working tools and gears - 5%			
	(ii) Proper uniforms wearing -3%			
	(iii) Wearing identities -2%			
	TOTAL MARKS			

Assessor _____ College/Faculty/Institute _____

Name of the personnel _____ Title _____ Signature _____

**Appendix 8c: SOKOINE UNIVERSITY OF AGRICULTURE
STUDENTS ACCOMODATION BUREAU (SUASAB)**

**PROPOSAL FOR PERFORMANCE BASED PAYMENT
FOR OUTSOURCED TO COMPANIES**

Performance range (Total score)	Payments based on percentage of the contract sum
Greater than or equal to 90% up to 100% (90 %\geqScores \leq100%)	Full payment as per contract sum
Greater than or equal to 80 % but less than 89.9 % (80 %\geqScores \leq89.9 %%)	Ninety five percent (95 %) of the contract sum paid
Greater than or equal to 70 % but less than 79.9 % (70 %\geqScores \leq79.9 %)	Ninety percent (90 %) of the contract sum paid
Greater than or equal to 60 % but less than 69.9 % (60 %\geqScores \leq69.9 %)	Eighty five percent (85 %) of the contract sum paid and a warning
Less than 60% (\leq 60 %)	Eighty percent (80 %) and termination