COST-SHARING AND STUDENTS' AFFORDABILITY AT SELECTED PUBLIC COLLEGES OF EDUCATION

BY

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A Dissertation Submitted to the University of Zambia in Partial Fulfilment of the Requirements for the Award of the Degree of Master of Education in Education and Development

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DECLARATION

I, **Betty Zulu,** do hereby declare that this dissertation represents a product of my own work and that it has not been submitted at this or any other university. All scholarly work used in this dissertation has been duly acknowledged.

Signature: …………………………… Date: ………………………………………………..

Supervisor: **Dr. Tomaida C. Milingo**

Signature: …………………………… Date: ………………………………………………..

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APPROVAL

This dissertation of **Betty Zulu** has been approved for the partial fulfillment of the requirements for the award of the Degree of Master of Education in Education and Development by the University of Zambia.

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ABSTRACT

The study investigated Cost-Sharing at Public Colleges of Education as a mechanism being implemented to respond to diminishing government funds. Specifically, the study sought to establish the extent to which sources of funds contributed to colleges' budgets and students' affordability in the era of Cost-sharing and reduced government funding. An Embedded mixed method design in which qualitative data played a supplementary role to quantitative data was used where questionnaires and document analysis were used for quantitative data while qualitative methods used semi-structured interviews, focus group discussions and observations. Quantitative data were analysed using SPSS through which Statistical Tables, Means, Standard Deviations, Charts, Chi-square Tests and Tests of Correlations were generated. Qualitative data were analysed in line with quantitative data.

The study comprised 248 respondents; two principals, two accountants, eleven heads of departments, 27 lecturers and 205 students from two Colleges and one planner from Ministry of General Education. Purposive sampling was used to select respondents under qualitative data and stratified random sampling was used for quantitative data. Meanwhile, convenient sampling was used to select two public colleges in the Copperbelt Province.

The key findings of the study indicated that user fees contributed more to institutional budgets ranging from 45% to 88% than government grants ranging from 12% to 46%.There was no direct donor contribution towards colleges' budgets for the years considered except the NIF III Fund that was received in 2010. Furthermore, 70.73% of student and 63% of lecturer respondents indicated that user fees were not affordable for the majority of students at the two colleges. The study established that 59% of the students' respondents had faced difficulties in paying user fees promptly and 81.5% had similar challenges in financing for their living expenses. Poor socio-economic status especially low income levels were major constraints on students' affordability. The findings further indicated that the funding mechanism at the two public colleges was not sustainable since user fees were the major source of income. It was further established that the two colleges raised funds mainly through parallel and distance education programmes to supplement government grants and user fees. Finally, the study established that cost-sharing could be made sustainable if various stakeholders came on board to bail out tertiary institutions.

The challenge of affordability and financial austerity has been compounded by the lack of financial aid to students at public colleges. Therefore, students' affordability and financial sustainability can be realised if there is a reform to the tertiary education financing framework that is backed by sustained political will coupled with sustainable resources. The study made the following recommendations to government that it should consider: introducing a funding formula based on unit cost, extending financial assistance to needy students in form of students' loans to public colleges and it should prioritise funding to capital projects and equity concerns. Further research should examine government funding modalities towards public colleges in Zambia.

DEDICATION

This dissertation is dedicated to my bundle of joy; Chisomo Wangu-Wangu. I further dedicate this work to my mum and dad (Mary and Daniel), my brothers (Thomas, Andrew and Wamemba), my sisters (Chiluba and Ezelia), and to all those who value education.

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LIST OF ACRONYMS/ABBREVIATIONS

CBU	: Copperbelt University
CMEC	: Council of Ministers of Education
FAWEZA	: Forum for African Women Educationists in Zambia
GRZ	: Government of the Republic of Zambia
HE	: Higher Education
HEIs	: Higher Education Institutions
IMF	: International Monetary Fund
MESVTEE	: Ministry of Education, Science, Vocational Training and Early Education
MOE	: Ministry of Education
MoGE	: Ministry of General Education
MU	: Mulungushi University
NGOs	: Non-Governmental Organisations
NIF III	: National Implementation Framework Level Three
OVC	: Orphaned and Vulnerable Children
SPSS	: Statistical Package for Social Sciences
UNZA	: The University of Zambia
USAID	: United States Agency for International Development
USDM	: University of Dar es Salam
VVOB	: Belgium organisation responsible for aid in the education sector in Africa
YWCA	: Young Women Christian Association
ZICTA	: Zambia Information Communication Technology Authority

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CHAPTER ONE

INTRODUCTION

1.0 Overview

The chapter presents an introduction to the study of Cost-sharing in higher education. The first part deals with the background to the study explaining the views and arguments that have been posited regarding Cost-sharing in higher education finance across the world, Africa and in Zambia. This chapter also presents the statement of the problem, purpose of the study, research objectives and questions, significance, scope and delimitations of the study. The other parts deal with theoretical and conceptual frameworks, ethical considerations and clarification of key terms. The last section wraps up the chapter.

1.1 Background to the Study

Recent years have witnessed dramatic changes coupled with contested shift in the burden of higher education costs from being borne predominately by government or tax payers to being shared with parents and students (Johnstone, 2006). Consequently, Cost-sharing has taken a centre stage in higher education financing as a policy alternative that has been put in place to respond to diminishing government (tax) funds. As a result, higher education institutions (HEIs) are steadily being required to raise significant shares of their revenue from private sources as opposed to relying on public funding (Johnstone: 2003; 2006; World Bank, 1994; 2010).

Cost-sharing is defined as the introduction of, or especially sharp increases in tuition to cover part of the costs of instruction or of user charges to cover more of the costs of lodging, food, and other expenses of student living that may previously been borne substantially by governments (taxpayers) or institutions (Johnstone, 2006:16). According to Oketch (2003), the term 'Cost-sharing' was introduced in Africa's education policy in the 1980s and encompasses private as well as public services. Thus, the burden of higher educational costs worldwide is being shifted from tax payers to students and families. In the face of these increasing expenses borne by students and parents, national systems and individual institutions face the challenge of maintaining higher education accessibility especially for the poor, minority, rural and other traditionally underserved populations (CMEC, 2007). Consequently, affordability on the part of the learners becomes a great concern as the burden is more often than not being shifted to students/parents. This challenge is necessitated by the increasing income disparities being experienced in most countries.

However, in the US and other developed countries, the principle of expanding higher educational opportunity and affordability is being met among other ways with government guaranteed and generally available student loans, and tradition of philanthropic giving (CMEC, 2007), and also an economy with abundant part-time employment possibilities, the general availability of need-based grants and easily accessible higher education alternatives with commuting range of home (Johnstone, 2006). Unfortunately, elsewhere in the absence of these opportunities, and of public policies to maintain accessibility as well as affordability, there is reason to believe that higher education will become increasing unattainable to all but the affluent (CMEC, 2007). Particularly, it is in countries such as Zambia where the absence of such opportunities would exclude students from disadvantaged backgrounds to afford higher education. Moreover, in the absence of alternative public revenue, it would mean that either that the colleges and universities would have to limit enrolments and continue to serve only the elites or would be maintained at such levels of overcrowding due to over enrolments and that would compromise quality (CMEC, 2007).

In Zambia, the education system was crippled by the late 1970s due to the decline in the economy resulting from the dramatic fall in copper prices caused by world economic recession, as well as the closure of the traditional export/import routes and rampant world inflation (Kelly, 1991; Gillies, 2010; Whitworthy, 2013). These economic crises lead to many policy shifts so as to respond to diminishing government funds. Therefore, Cost-sharing was introduced at higher education level in 1989, from a government policy on the financing of higher education that was heavily subsidized (Mweemba, 2003).The introduction of Cost-sharing was met with resistance from students across the country (Mweemba, 2003). This was reflected by demonstrations staged by students at both colleges and universities. For example in Kabwe, the police detained 210 students from Nkrumah Teacher Training College on 13thof April 1989 for demonstrating against the Cost-sharing scheme (Mweemba, 2003).

However, the World Bank (2010) states that Cost-sharing was introduced to respond to the Structural Adjustment Programmes (SAPs) that were prescribed on Zambia by the International Monetary Fund (IMF) and the World Bank in the early 1990’s. Structural Adjustment Programmes were anchored on Neo-Liberal Ideologies that considered higher education as a private good to be purchased by a student, (Wellen, 2005). The basic assumption behind structural adjustment was that an increased role for the market would bring benefits to both the poor and the rich since systems would be efficient, accountable and because the market plays a central role (Gillies, 2010; World Bank, 1994). As a result, the government of the Republic of Zambia crafted the new education policy guidelines regarding financing of higher education based on Cost-sharing (MOE:1996). The policy states; 'The financing of higher education will be on a shared basis between the government, the institutions themselves, and students (MOE: 1996).

However, the World Bank (2010) states that the introduction of Cost-sharing without financial aid would exacerbate existing disparities between the well-off and the much larger numbers of the poor, between urban and rural populations, and the marginalised groups. Regrettably for Zambia, the bursary scheme, the only financial aid available to students is discriminatory against students in other higher learning institutions for its potential beneficiaries are only some of those admitted at the University of Zambia and the Copperbelt University (Mukanga, 2013). It is from this background that this study was undertaken at Public Colleges of Education where students did not have access to the bursary scheme.

1.2 Statement of the Problem

Growing demand for postsecondary education has placed increased pressure on public finances and has led to greater Cost-sharing. From an international perspective, increased parental savings, income from part-time work, private debt, and student loan contributions all attest to this shift (CMEC, 2007). In Zambia, it was not clear how students and higher education systems particularly public colleges have sustained themselves against a backdrop of a greater Cost-sharing and reduced government funding.

While numerous studies have been undertaken to examine Cost-sharing in higher education (Oketch, 2003; Mweemba, 2003; Chihombori, 2013; Masaiti and Shen, 2013; Mwelwa, 2014; Masaiti, 2015); it appears students' affordability has remained a challenge especially for the underprivileged in Zambia. Moreover, there are limited measures that have dealt with students' affordability at public colleges where students have no access to financial aid. This study, therefore, is a response to the knowledge vacuum on students' affordability at public colleges. Consequently, if nothing is done to bail out HE systems in Zambia, HE will increasingly become a preserve for the haves while neglecting the have-nots.

1.3 Purpose of the Study

The purpose of this study was to examine students' affordability in the era of Cost-sharing and reduced government funding at Public Colleges of Education.

1.4 Research Objectives

The specific objectives of the study were:

i. To assess the extent to which user fees contributed to institutional budgets at Public Colleges of Education.
ii. To establish funding contributions from government and other sources of funds to Public Colleges of Education in the era of Cost-sharing.
iii. To establish if students can afford the current user fees at Public Colleges of Education.
iv. To ascertain how public colleges could be made sustainable in the era of cost-sharing and reduced government funding.

1.5 Research Questions

The study was guided by the following questions in line with the objectives:

i. How far do user fees acquired contribute to institutional budgets at Public Colleges of Education?
ii. How far do government grants and other sources of funds contribute to Public Colleges of Education in the era of Cost-sharing?
iii. How affordable are the current user fees to students at Public Colleges of Education?
iv. How can public colleges be made sustainable in the era of cost-sharing and reduced government funding?

1.6 Significance of the Study

It was hoped that the findings of the study would be beneficial particularly to Public Colleges of Education, other HEIs, and students at tertiary institutions, Ministry of General Education, Ministry of Higher Education and other stakeholders in the education sector. The study would be beneficial as it would provide practical insights that would be useful and that would improve higher education systems as well as national higher education financing policy framework anchored on Cost-sharing in Zambia. It was also hoped that the findings would be beneficial to the stakeholders in the education sector because higher education promotes social, political and economic development which in turn can steer economic growth and poverty reduction. Moreover, the study supported and enriched the theory on Cost-sharing in financing tertiary institutions.

1.7 Delimitations

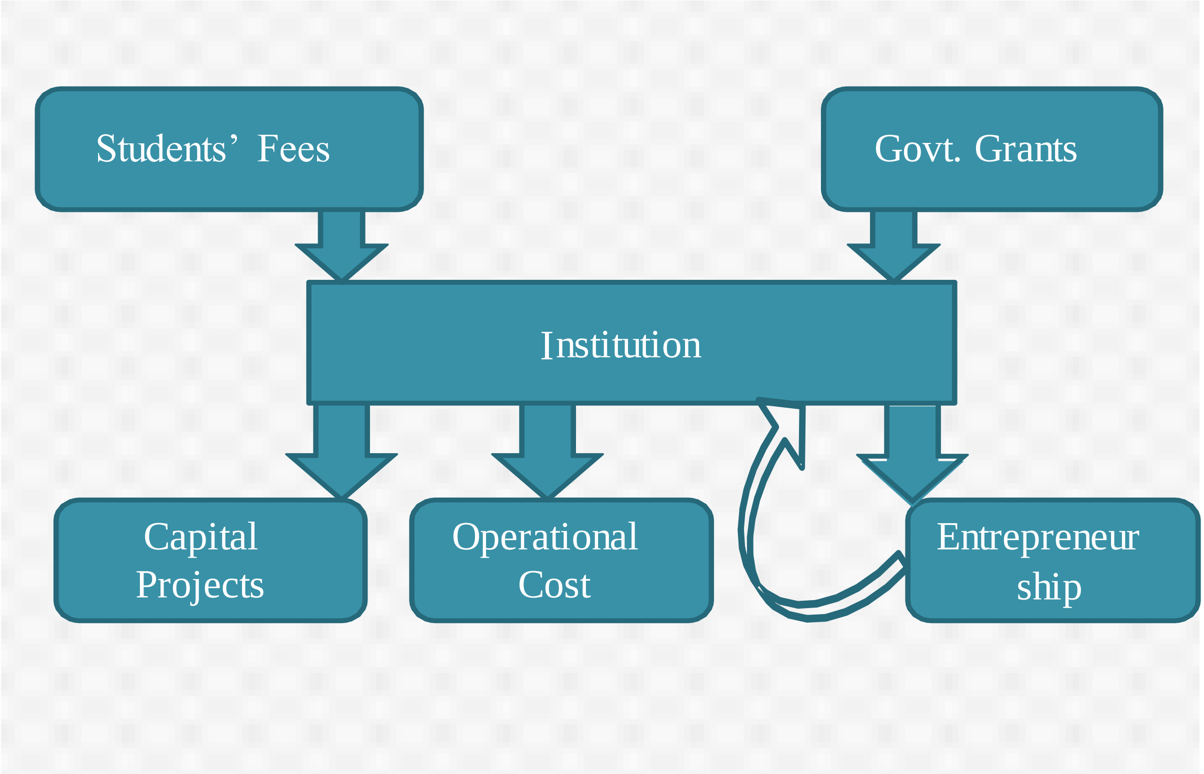
The study focussed on Cost-sharing at Public Colleges of Education in Zambia. However, the study was delimited to two Districts of the Copperbelt Province due to inadequate resources and limited time available. Provided that funds and time were available, data for the study were to be collected from all the districts that had public colleges of education. Pseudo names have been used for public colleges from which the study was conducted for ethical reasons.

1.8 Theoretical framework

This study was guided by Neo-Liberal Ideology as propounded by Levidow. The Neo-liberal framework had become the reform agenda of the International Monetary Fund (IMF) and the World Bank (WB) in the early 1990s which was prescribed to Zambia in the form of Structural Adjustment Programs (SAPs) (Masaiti and Shen, 2013). The basic assumption behind structural adjustment was that an increased role for the market would bring benefits to both poor and rich since systems would be efficient, accountable because the market plays a central role (Gillies, 2010; World Bank, 1994). Levidow argues that the ongoing developments in higher education and the pressure on universities and colleges to generate additional sources of income has forced these institutions into marketizing higher education Levidow (2005). His argument forces higher learning institutions to adopt marketing strategies to generate income in order to supplement the diminishing state financial resources earmarked for higher education (Masaiti and Shen, 2013).

Figure 1.1 illustrates how the institution can generate extra income in order to supplement diminishing government funds earmarked for higher education. Thus, part of students' fees and government grants that public colleges receive could be used to finance college enterprises such as large scale (commercial) farming. Erring students could be used as labour. By so doing, the college could raise funds to supplement government grants for its capital and operational costs. Consequently, it is hoped that students' affordability would be enhanced with the hope that user fees would be reduced.

Figure 1.1 Theoretical Framework



(Source: compiled by author)

1.9 Clarification of Key Terms

- **Affordability**-ability to pay for education and this includes expenditures for tuition, housing, food, books, transport, groceries and general living expenses (Driscoll, 2013).
- **Capital (physical or human)** – assets that will generate income in the future.
- **Cost of education** – include direct fees (tuition and auxiliary fees, books etc) and indirect fees (transport, clothing etc.).
- **Cost-sharing**–sharing of cost of tertiary/higher education amongst students, institution and the government.
- **Financing** – provision of money and other material resources.
- **Higher/tertiary education -** postsecondary education offered at colleges and universities.
- **Investment/capital budgets -** expenditures that increase assets such as buildings.
- **Operating budgets -** expenditures that occur each year (recurrent expenditure).
- **Sustainable-** ability for a scheme to be used and continue for a long time.

1.10 Ethical Considerations

Ethical clearance was obtained from the Humanities and Social Sciences Research Ethics Committee (HSSREC) during the course of the fieldwork. Moreover, throughout the research, ethical principles stipulated in the HSSREC (UNZAREC Form 1b) were adhered to and these included issues of informed consent, non-deception and confidentiality of participants, voluntary participation, and right of withdrawal at any time. Participants were told about the importance of participating in the study, and the names of participants were with-held in order to protect their privacy. The information collected for the study was used purely for academic purposes.

1.11 Chapter Summary

The chapter introduced the study on Cost-sharing in higher education and how a shared responsibility amongst stakeholders can enhance the financing of public higher institutions. The chapter also presented the problem statement, research objectives and questions, significance of the study, conceptual and theoretical perspectives. The next chapter provides a review of literature relevant to the study of Cost-sharing and students' affordability.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

Chapter two presents the review of literature on Cost-sharing in higher education. The first part will present general considerations on education in Zambia. Relevant literature on aspects of Cost-sharing in higher education financing with regards to the extent to which sources of funds contribute to HEIs, students' affordability and Cost-sharing will then be reviewed from global, Africa and within Zambia.

2.1 Education in Zambia

In Zambia, the transfer of knowledge and skills is done through both formal and informal education systems. The formal education system ranges from pre-school to the tertiary level of education (Mwelwa, 2014). The formal education system in Zambia consists of the following subsectors; Early Childhood Education (ECE), Primary Education (Grades 1-7), Secondary Education (Grades 8-12) and Tertiary Education (GRZ, 2013).

Zambia has made efforts to ensure that many children access education at various levels. For instance, the basic education sector saw an increase in the number of basic schools from 8,150 in 2011 to 8,360 in 2012 (GRZ, 2013).The growing enrolments and participation in primary education in Zambia for various age-groups, regional and income groups coupled with improved gender parity can be attributed mainly to free primary education policy and the expansion of physical space through infrastructure development among others (GRZ, 2013).

Unlike primary education, secondary education in Zambia is not free and compulsory for all (Mwelwa, 2014). Therefore, beyond primary education, access and participation have been lower than desirable and gender and regional disparities have remained high (UNDP, 2011; Mwelwa, 2014). To improve on access and participation in secondary education, government had embarked on infrastructure development and training of more teachers at universities and other tertiary institutions in order to cushion the shortages especially in the areas of mathematics and science (GRZ, 2013). Although government embarked on constructing more secondary schools and training more teachers, the majority of the poor Zambians may still not access secondary education due to lack of finances (Mwelwa, 2014). Therefore, access and participation at secondary education level is limited only to those who can afford to pay.

Regrettably, the inequalities in terms of access and participation are even more pronounced at tertiary level, where exorbitant tuition fees have to be paid for one to access tertiary education (Mwelwa, 2014). The challenge of inequality is also compounded by the rise in demand for higher education against plummeting government funds. For instance, only 8 percent of the secondary school leavers access post-secondary education in Zambia (GRZ, 2013). The higher education sector in Zambia comprises universities, technical and vocational colleges and colleges of education. In 2012, Zambia had over seventeen (17) universities of which three (3) were public and the rest were private (SARUA, 2012; GRZ, 2013). In addition, there were 31 Colleges of Education under the MOE of which 14 were public and 17 were privately owned (GRZ, 2013). There were also 300 Technical and Vocational Institutions registered by TEVET (GRZ, 2013). Since most studies on the subject matter have been conducted at public universities, where students can access government scholarships/bursaries, this research focussed on two of Zambia's Public Colleges of Education where such opportunities do not exist.

2.2 Sources of funds and their contribution to institutional budgets

Historically, public institutions have largely been funded by the state, with about three quarters of the total expenditure being borne by government (Magara (2009). However, as a result of the increase in the number of tertiary institutions coupled with the increase in the number of students desirous of accessing higher education, most governments cannot afford to adequately finance public higher learning institutions hence the introduction of Cost-sharing. The concept of Cost-sharing was strongly opposed especially by students in most African public institutions especially universities including University of Makerere students (Magara, 2009).

The research carried out by Magara (2009) adopted a qualitative research design that entirely employed a review of documents, both published and unpublished, regarding higher education in general and Makerere University in particular. The documents reviewed consisted of books, dissertations, newspaper articles, workshop and conference papers (Magara, 2009). The author also participated in a number of specific meetings and workshops that were intended to discuss the funding of Makerere University. Some of these included two consultative meetings of Deans and Directors, regarding bridging the budget gap. The author was also privileged to give an input to the Ad Hoc Committee on bridging the deficit gap, the content of which provoked the author to write on the matter (Magara, 2009).

Therefore, Magara's 2009 study revealed that there were three sources of funds for Makerere University in Uganda and these were government funding, donor contributions and appropriation in aid (institutional contribution) also called non-tax revenue. In this study it was found out that government funding was on the decrease; 15% of the education sector budget was allocated to higher education in the 2004-2005 education budget while in 2005-2006 budget it accounted for only 14.3% (Magara, 2009). The researcher compared these figures with non-African countries and it was discovered that the level of funding to higher education at Makerere University was far less compared to most countries in the world that included China, India, Australia, USA and New Zealand (Magara, 2009).

The study revealed that in China 81.8% of public higher education institutions revenue came from government grants; in Australia, the funding from federal and state governments accounted for 49.1% whereas in New Zealand, government funding accounted for 51.1% whereas in the United States of America, the public funds from federal, state and local governments accounted for 50.5% of total university finances (Magara, 2009).

The other source of funds for higher education was through donor contributions. The study revealed that there were a number of donors from overseas and within Uganda that funded Makerere University. These included NORAD, the Rockfeller Foundation, the Belgian Technical Corporation, the Norwegian government, Ford Foundation, the John D, and Catheline T, MacArthur Foundation, Kresge Foundation, NUFFIC, JICA, Bank of Uganda, MTN, Shell Uganda, and the World Bank (Magara, 2009). Although there were many donors, the study further revealed that there were strict conditions on where and how these funds were to be spent and that resources were only released according to the planned activities (Magara, 2009).However, a number of these development partners had significantly contributed to the funding of research and innovations at Makerere University and that in a few cases, funds were integrated in the general university budget (Magara, 2009).

According to Magara (2009), public institutions were allowed to generate more funds to supplement government and donor contributions. These included fees from students, profit from commercial activities, endowments and funding from alumni. However, such funds are realised on the basis of student enrolments or work performed and the challenge with such funds were that they are subjected to agreed levels to be charged by stakeholders; also affected by defaults payments and required expanded facilities such as human resources, infrastructure and equipment (Magara, 2009).

However, despite the funding sources, Makerere University was still faced with problems of financing its activities and programmes. Therefore, the study recommended that a strategy for the appropriate allocation of the university resources would significantly impact on its sustainable funding (Magara, 2009). The World Bank (2006) stated that counting only on public funding for higher education leads to a blind alley.

> The financing of education does not need to be limited to the public purse. In fact higher education can be provided and financed either entirely publicly or entirely privately (including by non-governmental organisations), or by some combination of the two (World Bank: 2006:55-56).

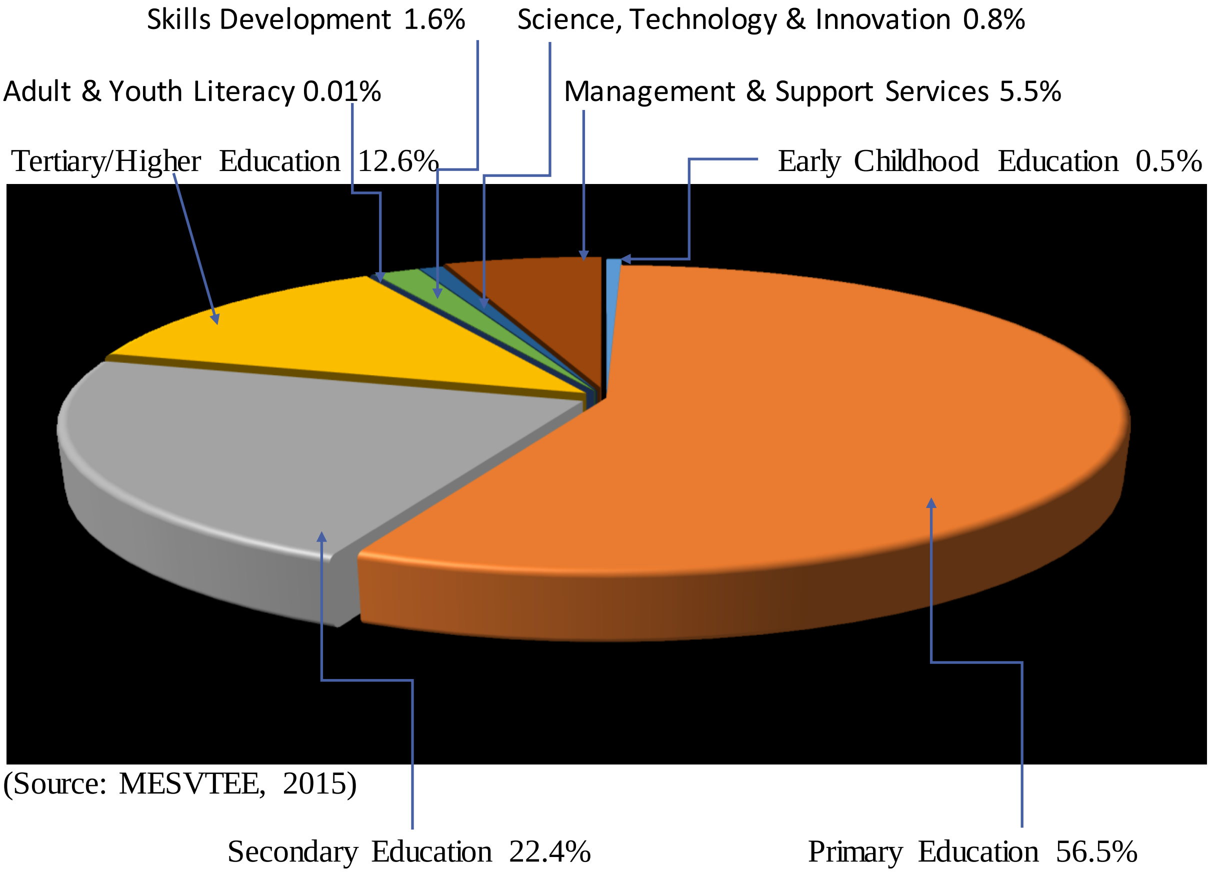
The study by Magara did not reveal the extent to which user fees and donor contributions contributed towards the institutional budget at Makerere University as it only focussed on the extent to which the government funds contributed to the institutional budget. Moreover, the research by Magara (2009) did not reveal any information with regards to students' affordability hence this study was inevitable.

In Zimbabwe, government funding of the university sector constitutes about 40% of the institutions' income. The balance is raised by the institutions from dividends on investments, cost-sharing, and income generating activities, among others (Chihombori, 2013). The study by Chihombori (2013) did not reveal the extent to which user fees contributed to institutional budgets, and did not focus on students' affordability as its focus was on shift of one Cost-sharing model to another hence this study was inevitable.

Funding of the education sector in Zambia has been sourced from different avenues among them being government, individual households, bilateral and multilateral donor agencies, corporate and private investors, local communities, non-governmental organisations, faith based organisations and others (MOE, 2009). However, government fund makes up the bulk of funds that are allocated and spent on education, although most of it is spent on personal emoluments (Tembo, 2014). For example, in 2009, more than half of the funds were spent on salaries (58%) where as 19% was budgeted for infrastructure and 10% was allocated to university education and research (MOE, 2009). This trend continued even for the years that followed. For instance, figure 2.1 shows programme allocation for the 2015 budget, and table

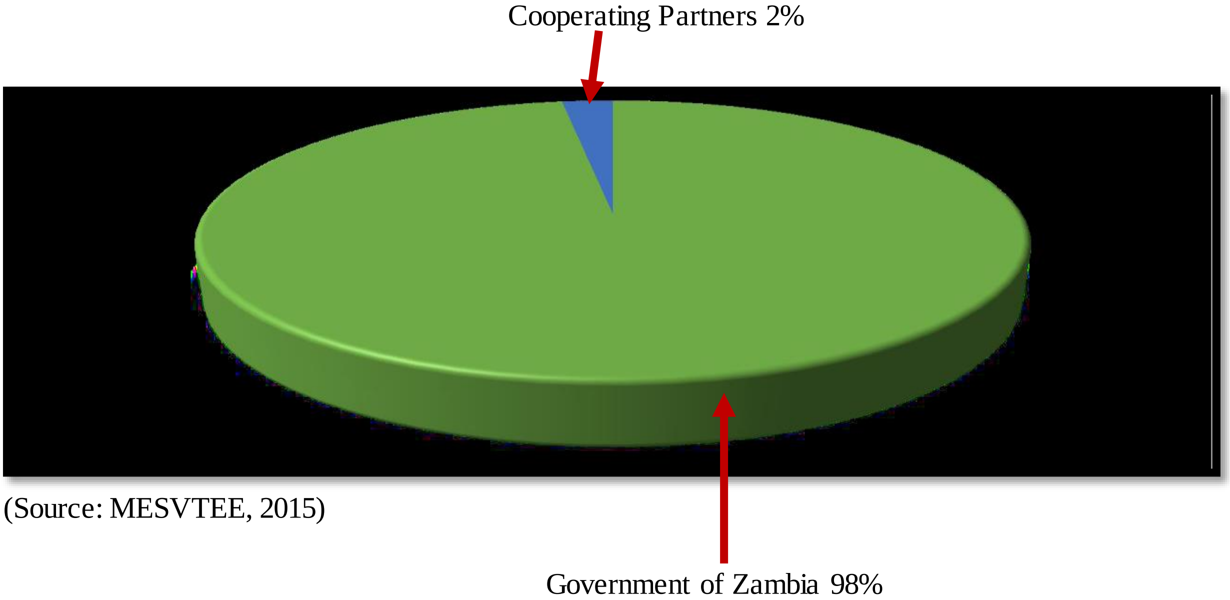
2.1 shows budget allocation by economic classification for 2015 where 68% of the funds were spent on personal emoluments.

Figure 2.1 Programme Allocation for 2015 Budget



(Source: MESVTEE, 2015)

Figure 2.2 Budget financing for Ministry of Education 2015



(Source: MESVTEE, 2015)

The 2015 budget for the then Ministry of Education, Science, Vocational Training and Early Education (MESVTEE), currently split into Ministry of General Education and Ministry of Higher Education was estimated at K9.4 billion, reflecting an increase of about 13.3% from the 2014 allocation. Figure 2.2 shows that 98% of the budget was projected to be financed by the Government of Zambia while 2% was budget support to the education sector from various cooperating partners (MESVTEE, 2015).Furthermore, figure 2.2 illustrates that there is less dependency on donor agencies in the financing of the education sector in Zambia. However, the major challenge has been unbalanced allocation of resources in favour of personnel emolument and students' bursaries while neglecting infrastructure development, education materials and other goods and services.

Table 2.1 Budget Allocation by Economic Classification for 2015

	Item	**2015 Budget (K)**		**Percent**
1	Personnel Emoluments	ZMK 6,420,714,241	**($714, 206, 256)**	68
2	General Operations	ZMK 330,083,520	**($ 36, 716, 743)**	3.5
3	Grants and Other Payments	ZMK 826,902,960	**($ 91, 980, 307)**	9
4	Capital Expenditures	ZMK 1,837,453,723	**($ 204, 388, 623)**	19.5
	Total	ZMK 9,415,154,444	**($ 1, 047, 291, 929**	100

(Source: MESVTEE, 2015)

(Bank of Zambia exchange rate of US \$1= ZMK 8.99 as at 1st, September, 2015)

Table 2.1 shows an increase in the allocation of funds to personnel emoluments from 58% in 2009 to 68% in 2015 while there was a reduction in the allocation of funds to other services. Unfortunately, this trend seems to be getting steeper year in year out and the budget projections for 2016 point to a worse scenario than the previous as shown on **table 2.2**. This implies that there has been declining investment in the education sector since more funds are spent on personal emoluments than on developmental aspects such as infrastructure development, learning/teaching materials and equipment among others.

Table 2.2 Budget Allocation Comparison - 2015 Versus 2016

Item		2015 Budget		2016 Budget	
		Amounts (ZMK/$)	Percent	Amounts (ZMK/$)	Percent
1	Personnel Emoluments	ZMK6,420,714,241 **($ 714, 206, 256)**	**68**	ZMK6,705,731,184 **($ 745, 910, 032)**	**84**
2	Goods and Services	ZMK 330,083,520 **($ 36, 716, 743)**	**3.5**	ZMK 239,978,646 **($ 26, 693, 954)**	**3**
3	Transfers and Other Payments	ZMK 826,902,960 **($ 91, 980, 307)**	**9**	ZMK 321,376,603 **($ 35, 748, 232)**	**4**
4	Capital Expenditures	ZMK1,837,453,723 **($ 204, 388, 623)**	**19.5**	ZMK 731,325,937 **($ 81, 348, 825)**	**9**
	Total	ZMK 9,415,154,444 **($ 1, 047, 291, 929)**	**100**	ZMK 7,998,412,370 **($889, 701, 042)**	**100**

(Source: MoGE, 2016)

(Bank of Zambia exchange rate of US $1= ZMK 8.99 as at 1st, September, 2015)

As already alluded to by Magara (2009), Sub-Saharan Africa spends far much less on the higher education subsector as compared to the developed countries such as Singapore, China, and Norway to mention some of them. In addition, in Zambia, inadequate finances are compounded by other factors such as unbalanced allocation, uncoordinated and undirected budgeting (Tembo, 2014) as shown by **figure 2.1 and table 2.1**. At institutional level, just like at Makerere University, there are basically three sources of funds and these are government funds, donor contribution and funds raised by the institution through mainly tuition fees. Thus, a study by Tembo (2014) showed that the main source of funds for Chipata College of Education for the 2012 and 2013 operating budgets were user fees which accounted up to 75% followed by government funds at 20% and other sources accounted for only 5%. User fees are the major sources of funds for public colleges in Zambia as shown on **table 2.3**.

Table 2.3 Chipata College of Education Sources of Funds

Chipata College of Education		
Source of funds	**2012**	**2013**
User fees	83%	50%
Govt. funds	12%	135.5%
Donor agencies and others	5%	13.8%

Source: Tembo, 2014 (Chipata College of Education Financial Records)

The study also revealed that donor contributions mainly came from organizations such as Non-Governmental Organisations concerned for the welfare of orphans and other vulnerable children (Tembo, 2014). The study further revealed that government funds were always disbursed late to the college and they didn't usually meet institutional budgets hence affecting planning and executing of college activities. As shown below; government funding has not been desirable.

> The college receives funds from the government as grants which are perceived to be the main source by most people and education policy documents. However, the truth is that we manage to raise more funds from user fees which are tuition and boarding fees than we do receive from the government...Let me note that the funds from government do not only come very late, but also they fail to meet the demands of the budget (Tembo, 2014:30-31).

Furthermore, the study by Tembo (2014) revealed that there were massive budget deficits at Chipata College of Education for the two years for which data were available; 83% and 85% for the 2012 and 2013 respectively.

The study by Tembo (2014) revealed useful information regarding the extent to which student fees contributed to institutional budget. She also indicated budget deficits as a result of the ever reducing tax funding as shown by low percentages. However, the research did not reveal any information with regards to students' affordability. In addition, the research did not bring out issues on how college education could be financed sustainably. Therefore, the need for a more comprehensive study was necessary.

2.3. Students' Affordability

A study conducted by Long and Riley (2007) revealed that there were many barriers to college access and success for low-income and minority students and they categorised these barriers into three; cost, academic preparedness and the complexity of the college admissions process and financial aid system. The research revealed that for the 2006-2007 school year, the average cost of tuition and fees at public four-year colleges and universities was at $5, 836; with average total charges amounting to $12, 796 (Long and Riley, 2007). This increase was as a result of skyrocketing prices over the last several decades. For example, from 1976 to 2005, the average cost of public four-year institution increased from $617 to $5, 491 in nominal terms, or by 270% when adjusted for inflation (Long and Riley, 2007). On the other hand, the median family income did not keep pace with the growing tuition costs; income levels increased only by 23% in real terms during the same period. Such trends led the federal Commission on the future of Higher Education, which was appointed by Secretary of Education Margaret Spelling to conclude: 'There is no issue that worries the American public more about higher education than the soaring cost of attending college' (Long and Riley, 2007).

The study by Long and Riley (2007) further revealed that the other major impediment to higher educational affordability for many students, particularly those from low-income families was the complexity of the college admissions process and financial aid systems as well as a lack of accurate information about higher education costs (Long and Riley, 2007). The study by Long and Riley revealed important impediments to higher education accessibility and affordability. However, the study was biased towards student loans or scholarship as the only way of helping the disadvantaged groups yet there exist other ways of affording the unaffordable in the era of Cost-sharing hence the need for this study.

A study by Morely (2012) revealed that higher education is highly inequitable as it is skewed towards the males, richer families and urban households (Morely, 2012). Three important determinants of inequity have been noted and these are gender, socio-economic status, and region. For example, women students often have higher dropout rates than men due to the cultural emphasis on family obligations, which is often in conflict with their desire to pursue advanced studies (Morely, 2012).Thus, higher education is often dependent on one's socio-economic status as observed from the study conducted by Morely (2012). In Ghana and

Tanzania, Morely (2012) found that students from low socio-economic backgrounds were under-represented in higher institutions in virtually all disciplines.

Furthermore, Morely (2012) demonstrated that current schemes to assist young people from disadvantaged backgrounds to enter higher education were not working, and that the marginalised groups must be targeted more effectively. Often, public funding mechanisms act to exacerbate such inequities by providing free higher education to the 'best' students who consistently come from the wealthiest households which had access to the best secondary schools (Morely, 2012; Pillay, 2009). On the other hand, students from rural households face enormous barriers to accessing higher education in general, and the higher quality higher education institutions in particular (Gurgand et al., 2011; Boit, 2012). Therefore, three stratifying factors; gender, socio-economic status, and region or location of origin act to skew the already low participation rate in favour of males, richer families, and urban households.

It should be emphasized that while gender affects female participation in higher education to a lesser extent, access to this form of education is often dependent upon one's socio-economic status. In countries such as Kenya, Tanzania, Namibia, Malawi, Zambia and others, participation in higher education is often dominated by students from the highest income quartiles of the population (Woodhall, 2004). The study by Morely (2012) is relevant to the current study because it revealed pertinent factors that hinder higher education participation but the study was not comprehensive enough to ascertain practical ways in which HE can be made affordable especially to the disadvantaged populations. Hence the need for this study.

Meanwhile some HEIs have taken keen interest in catering for the needs of the disadvantaged populations and their approaches have included the elimination of parental contributions for families below a certain level of income as implemented by Harvard University and the University of Virginia to decisions that match the federal government's need-based grants and the need to reduce home equity consideration in their need analysis by higher learning institutions such as Stanford and Princeton Universities (Tilghman, 2007).

A paper presented by Tilghman at the symposium on equity and access in higher education revealed that Princeton had dedicated itself to making college affordability one of its foremost priorities (Tilghman, 2007). This financial support was intended to help needy students to access higher education. In his introduction, Tilghman (2007) stated that Princeton commitment to offer financial support to students stretched back to the eighteenth century when the first known scholarship was awarded to James Leslie of the class of 1759 who returned the favour by endowing a fund for ‘the education of the poor and pious youth’. However, it was not until the 1970s and 1980s that Princeton undertook to meet the entire financial need of every student it admitted when the federal government sought to sharply reduce its expenditures on student financial aid (Tilghman, 2007). By the closing years of the twentieth century, Princeton financial well-being had been greatly strengthened by the successful 250-anniversary capital campaign, the growth in the size of its endowment through the late 1990s, and the consistent generosity of alumni in providing unrestricted operating funds through annual giving. This prosperity led to a view among stakeholders that Princeton had a responsibility to use its resources both to educate more students and to ensure that no student was discouraged from attending college for a lack of funds (Tilghman, 2007).

The climax of Princeton success was witnessed in 2001 when the institution introduced no-loan policy to every student in need of financial aid in which financial aid is provided solely on the basis of need as opposed to merit, and grants are designed to meet full financial need (Tilghman, 2007). The university application of Princeton’s no-loan policy is consistent with the university commitment to treat every student who qualifies for assistance in an equitable fashion. In his speech, Tilghman stated that;

> In the coming years, the success of financial aid programs will be increasingly measured not simply by how well we serve our poorest students but by the provisions we make for those with incomes above the national median (Tilghman, 2007:439).

The major changes of the institutional financial aid program had been; the elimination of loans, creation of institutional specific financial aid calculator, elimination of financial aid application fees, removal of the value of a student’s family home from the institutional need analysis (Tilghman, 2007). The no-loan policy has had tremendous impacts especially on students, Princeton and the federal government. The policy had reduced the burden of students and the federal government (Tilghman, 2007). Table 2.4 compares the impact of Princeton financial aid program for the class of 2001 and 2010 class.

Table 2.4 Impact of Princeton's financial aid enhancements

	Class of 2001	**Class of 2010**
Students on Financial Aid	432 (38%)	682 (55%)
Low-Income Students	88 (8%)	182 (15%)
Minority students	290 (26%)	456 (37%)
Average Scholarship	$15, 064	$29,786
Percentage of Tuition Covered by average Scholarship	65%	90%
Average Loan	$3.455	$0
Expected Debt at Graduation	$13, 820	$2,500 (for education-related expenses)

(Source: Adapted from Tilghman, 2007)

Tilghman (2007) further recommends a no-loan policy although caution must be taken on how an institution crafts its financial aid packages on meeting student needs in a generous, equitable and transparent manner. He further stated that when a no-loan policy is impractical, an incremental approach should be considered along with a broad array of financial aid enhancements that reduce the obligations and strain placed on students and their families if higher education is to be accessed equitably (Tilghman, 2007). The paper presentation by Tilghman is an exceptional achievement in the field of higher education finance in that very few if not none of such remarkable performance on higher education finance has been sustainable. However, there are also loopholes in their system in that there is a general neglect or a lack of mention of sustainable ways of outsourcing funds such as entrepreneurships and student loans hence making this study unavoidable.

Another classic example of affordable higher education was that noted at Baba Aya Singh Riarki College in rural India. The college is located in a remote village of Gurdaspur district of Punjab, bordering international border with Pakistan, and the college was catering to the higher education needs of rural girls who otherwise might not have dreamt of attaining higher education (Ghuman and Singh (2013). The uniqueness of the college lies in (i) access to reasonable level of quality education at an affordable cost; (ii) no donation or outside financial help; (iii) teaching by senior class students to junior class students; (iv) management by students and (v) absence of copying in examination (Ghuman and Singh (2013). The study of Baba Aya Singh Riarki College used the data gathered from college records and answers of 75 random selected college students to the survey questionnaire. Access to and affordability of higher education was the uniqueness of the college. The student had to pay only Rs. 800 (about US $ 15) as the annual tuition fee and Rs. 5,500 (about US $ 100) as the annual payment for hostel and food, and that the entire expenses of the college were met by that amount and the produce of agricultural land of the college (Ghuman and Singh (2013). The product of the college had proved to be the agents of change and rural transformation (Ghuman and Singh (2013). Despite the fact that the study was conducted at a private college, the study provides valuable insights towards affording college education in a rural set-up. The study has shown how college management and students contribute to affordable college education. However, the study is biased towards students and college's management contribution hence overlooks other possible ways of outsourcing funds. Hence this study was necessary.

In the Zambian context, challenges associated with students' ability to pay for higher education are not very different with those indicated above. According to Masaiti (2015), Zambia's higher education sector especially public university is faced with a multitude of problems and challenges, ranging from access and affordability, participation and enrolment, finance among others. However, the study by Masaiti (2013; 2015) focussed on public universities where students had access to financial aid on the other hand the focus of this study was on public colleges where students had no access to financial aid. Moreover, the study by Masaiti (2015), did not focus on students' affordability hence this study was inevitable.

2.4 Cost-sharing

2.4.1 Students/parents

The American literature shows a growing shift toward students taking on jobs to compensate for decreasing aid and rising tuition (CMEC, 2007). For instance, Choy et al (2003) found that full-time, low-income students covered 60% of their costs from student aid, and made up the shortfall from part-time work (CMEC, 2007). In 2001-02, income from employment was the second most common source of postsecondary funding for full-time students between the ages of 18 and 24(CMEC, 2007). Even so, they concluded that improvements in the labour market for youth had been insufficient to offset the rising costs of postsecondary education. The study further revealed that females were more likely to work than males (50.5% compared to 40.7%), as were older students who relied less on their parents (CMEC, 2007). Hence, increasing student employment may fill the gap left by insufficient alternative sources of funding, as the case for the United States (CMEC, 2007).

Savings and parental support is yet another way in which students use to make higher education financing affordable and sustainable. Thus, parents can contribute to postsecondary education costs by drawing upon savings, to provide loans and monetary gifts to their children throughout the course of participation, by subsidizing living costs, or by providing support such as a car or computer (CMEC, 2007). Eighty-four per cent of parents with children aged 13 to 18 believed they would contribute to their children's postsecondary costs by drawing on their own earnings, 71% said that they would provide room and board, and 86% believed they would contribute through other means. Notably, 28% reported that they would take out personal loans to finance their children's higher education costs (CMEC, 2007).These findings demonstrate that the majority of parents are currently contributing or are planning to contribute to their children's postsecondary costs. Parental contributions are primarily in the form of room and board, although savings increase with income and with the value placed on higher education and decrease with age (CMEC, 2007). The above findings show a growing need for parental and students' efforts in order to make tertiary education affordable to students. However, some of the ways in which students used to cope with Cost-sharing would not be appropriate to the Zambian economy that has less potential for savings and part-time income hence the need to investigate other possibilities applicable to the Zambian economy. This study was intended to fill this knowledge gap.

Meanwhile a study by Some (2010) revealed that several students were in a situation of dire poverty and they ended up engaging in parallel activities such as petty trading, private tutoring to meet their share of the costs. Some students even resorted to some acts of stealing things like bikes; don't pay their way into the university restaurants or student cafeteria. The study by Some (2010) has shown that students were involved in some income generating activities in order to meet their share of the costs. This study intended to establish how various stakeholders contributed towards providing an affordable higher education.

In Zambia, Mweemba (2003) revealed that the students were involved in various ways of income generating activities in order to cope with the Cost-sharing program at the University of Zambia. The coping strategies included saving from the student allowance, part time jobs, business ventures, seeking assistance and borrowing from various sources. Others included hiring/renting out study rooms, prostitution, fighting for 100% bursary, tuition waive and writing assignments for other students at a fee. Borrowing and financial assistance took the form of general financial assistance from relatives, church, fellow students, financial institutions, university of Zambia student union, and Ministry of Education and to some extent from lecturers. The study further revealed that money raised from various coping strategies were used to meet either part of tuition fees, auxiliary fees, stationery and other educational materials. The research by Mweemba (2003) provides relevant literature to the current study especially on how students can cope with Cost-sharing, however, the study by Mweemba (2003) lacks an examination of higher education affordability and an investigation on of how Cost-sharing can be used to make higher education financing sustainable in higher learning institutions.

2.4.2 Institution and Government

There are several ways in which higher learning institutions can help bail out higher education systems to make higher education more affordable (Some, 2010), as well as higher education financing sustainable. Thus, a considerable amount of outsourcing of municipal services such as telephones, electricity, cleaning services have been implored in higher learning institutions world over. The practice of user charges has also seen the light of the day as well as the development of technical training and distance education (Some, 2010, Johnstone, 2009). Public institutions are more sensitive to the demands of their constituencies and so develop courses that address the here and now situation of the job market. As part of innovation most higher learning institutions have developed strong links with business as a means of providing service to the community, raising income for their institutions and providing hands-on experience for students. It is also evident that services that were initially free such as the student cafeteria, photocopying and production of transcripts for students, among others are no longer free in many universities and other public higher learning institutions (Some, 2010). Since the study by Some (2010) was conducted in Burkina Faso, there was need to investigate whether such factors were obtaining at Zambia's public colleges hence the need for this study.

The experience of Tanzania in making sure that higher education financing is affordable and sustainable is quite different from that taken by other countries. Thus, the University of

Dar es Salaam (UDSM) employed both cost-side solutions and revenue supplementation strategies through the implementation of new management and financial reforms. These reforms include university finance management study, computerisation of financial operations, establishment of the UDSM level of external finance administration unit, computerisation of external finance operations and implementation of the financial information system (Some, 2010). Other pertinent measures include the diversification of sources of funds, the introduction of a formula for internal allocation of the government subvention, the rationalisation of services, and staff retrenchment (Some, 2010). Some (2010) further stated that the rationalisation of the services has tremendously reduced overhead costs. For example, the lay-off of administrative and technical staffs coupled with income generating activities has paid off. Also investors have been wooed to take over commercial places on campus. Additionally, USDM has gone as far as setting up two companies solely owned by the university; DUP Ltd and UCC Ltd. The intention of these companies is to ensure that the facilities are operated commercially and do not cost the university any funds. The ultimate goal is to see these companies offer subsidized services to USDM in a sustainable way by generating income through their commercial activities (Some, 2010). The study by Some (2010) generated insightful ways of sustainable higher education financing. Since the study was conducted in Tanzania, there was need to ascertain the availability of such outsourcing means at Zambia's public tertiary institutions.

Furthermore, the case for Uganda seems to be an exceptional one in that other sources of financing higher education have been successful. Makerere University has been the respectable higher education institution over the years and has poised to enter the pantheon of the best higher education centres in Africa. Its relative financial autonomy has made it flourish. For Makerere University, broad-based management style and bold administrative, academic and financial reforms have been very beneficial to the university.

> At council level, inclusive representation and authority by all stakeholders has been introduced. The New Universities and Other Tertiary Institutions Act now provides for election of the members from among the University staff, whereas in the past, the council was primarily composed of government appointees. Council will now include representatives from the business and industrial sector. The consultative and participatory management maximizes the involvement of different segments of the university community. It encourages participatory decision-making (Some, 2010: 88).

The outcome was that student and staff protests have been drastically reduced because of the open channel of communication. As a result, the university is expanding in quality and resources, compared to most campuses on the continent. Makerere University has successfully diversified its revenue sources and shifted the burden of education from excessively government provision to parents, students, business and partners in cooperation (Some, 2010).

In addition, Makerere has introduced Cost sharing measures with great success mainly due to transparency that has constantly accompanied the process. The sense of belonging and ownership from the part of all the stakeholders has minimised the distrust between the administration of the university and the other stakeholders. The university has been able to keep afloat financially, and its credit, it has resorted to a policy of shared prosperity, consequently the faculty members have seen consistent increases in their salaries (Some, 2010). The case for Makerere University can inspire other African tertiary institutions and can instil a new sense of hope. In summary, it can be said that the secret of Makerere has been the far-reaching financial and administrative reform, optimal use of resources and an increase in fee-paying students (Sichermen, 2008). Other favourable factors included existence of enlightened university leadership who believed in the virtues of the market, the political stability coupled with the government's readiness to grant the university autonomy, and more importantly the macro-economic reform that has made possible steady economic growth. Despite all this success other scholars have argued that the current achievement of Makerere University may not be all rosy because other negative issues have surrounded the university in such cases as worsening the gap between the haves and have-nots. Makerere has also been accused of commercialization, an abandonment of planning on national need and academic competence in favour of short-term responses to a crudely defined market (Sichermen, 2008). Although, Makerere has been praised for its financial success, higher education affordability especially for the disadvantaged groups may not be guaranteed.

In Zambia, anecdotal evidence as well as academic research shows that several measures have been exploited by higher learning institutions including the University of Zambia, Chipata College of Education, Copperbelt University and Mulungushi University and many other public tertiary institutions to make higher education affordable and its financing sustainable. A study conducted by Masaiti (2015) on revenue diversification revealed that the three public universities; University of Zambia, Copperbelt University and Mulungushi University were involved in sourcing other funds other than governmental. The study explored a quantitative methodology through the use of self-administered questionnaire based on convenient sampling to collect data from 200 faculty respondents in three public universities. Data were then subjected to descriptive statistics and Exploratory Factor Analyses. Revenue diversification initiatives that include tuition fees and revenue income generating activities have in a small way increased the amount of disposable incomes of UNZA and CBU thereby enabling them meet part of the ever escalating budgetary deficits in these institutions (Masaiti and Shen, 2012; Masaiti, 2015). Mulungushi University has been in operational for 5 years on an economic tuition model (SARAU, 2012; Masaiti, 2015). Revenues in this institution come from tuition and other entrepreneurial activities contribute up to 60% to 70% of recurrent expenditure making it the most successful public university in sourcing non-governmental funds in Zambia (Masaiti, 2015).

The study by Masaiti (2015) also revealed that about 50 percent of the total non-governmental revenues for Zambian's public universities accrue from academic related income generating initiatives. External sources of revenue for these institutions, which include donor grants and university linkage programs account for far less (Masaiti, 2015).Other notable ways in which institutions of higher learning, particularly the University of Zambia is outsourcing funds is through the creation of East Park Mall (built within institutional premises), where up to 15% of the mall's proceeds is given to the institution. However, Masaiti (2015) further noted that there are many problems affecting the sourcing of non-governmental funds in Zambia, among the notable ones include; existing management structure of public universities. More specifically, the constraints which affect the generating of private sources of revenue in these public institutions include among others; inadequate operational capital, the usage of unskilled management and lack of skilled manpower, lack of clear internal autonomy, lack of direct access to the revenue generated and in some cases low staff morale especially in the two oldest universities (SARAU, 2012; Masaiti, 2015). Although the study by Masaiti (2015) showed that public universities were engaged in revenue diversification, anecdotal evidence still suggested that public higher education institutions were still not affordable to most students and would be students, but especially the low-income groups in Zambia. Therefore, this study intended to fill the gap by determining whether college education was affordable to students and how the financing of college education could be made sustainable in the era of Cost-sharing since the study by Masaiti focussed on universities.

2.4.3 Donor Funding

Apart from government grants, user fees and institutional contribution, the other source of funds for higher education is through donor contributions. In a study by Magara (2009), there were a number of donors from overseas and within Uganda that funded Makerere University as earlier alluded to. The current study sought to establish if donors contributed to college education in any way as the case for Makerere University and to some extent UNZA and the other two public universities in Zambia.

2.5 Chapter Summary

This chapter presented a review of literature relevant to the study. The literature reviewed has provided an understanding of cost-sharing in higher learning institutions from both local and global perspectives. The literature reviewed has indicated the gaps in information on the subject matter particularly in Zambia. The subsequent chapter will present the methodology used in the study.

CHAPTER THREE

METHODOLOGY

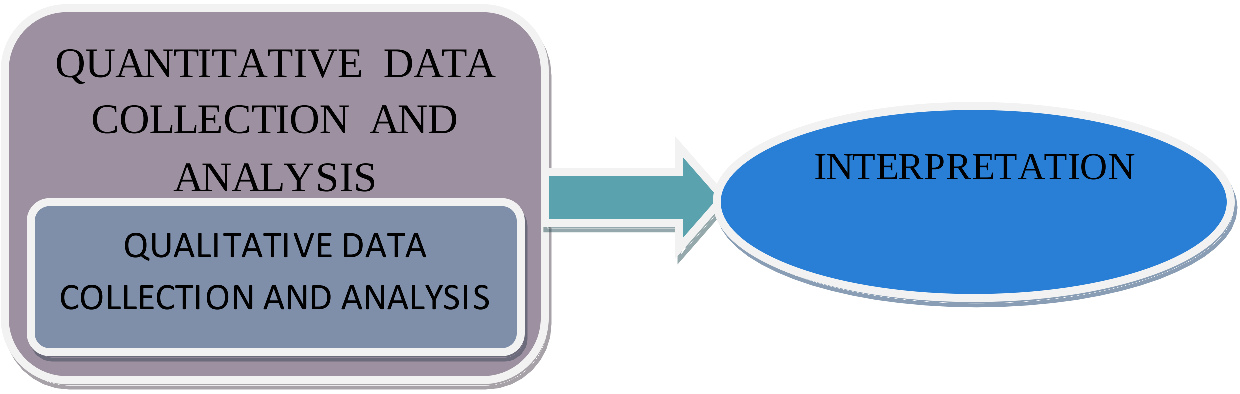
3.0 Overview

The previous chapter reviewed literature relevant to the study. Chapter three outlines the methods and procedures that were used in the study. It highlights the research design, study area, target population, sample size and sampling techniques. This chapter also explains research instruments, data collection procedure and time line and data analysis instruments. It wraps up with the limitations, and validity and reliability of the study.

3.1 Research Design

Research design refers to a plan or framework within which research must be carried out so that the desired information can be obtained with greater precision. It is the glue that holds the research project together (Kasonde-Ng'andu, 2013). According to De Vaus (2001:9) "The function of a research design is to ensure that the evidence obtained enables us to answer the initial question as unambiguously as possible." Obtaining relevant information, therefore, entails specifying the type of evidence needed to answer the research question, to test a theory, to evaluate a programme or to accurately describe some phenomenon. Therefore, in this study a mixed method research was used. Mixed method research is defined "as a method that focuses on collecting, analysing, and mixing both quantitative and qualitative data in a single study or series of studies (Creswell and Plano Clark, 2011). Its central premise is that the use of quantitative and qualitative approaches, in combination, provides a better understanding of research problems than either approach alone. In this study, an Embedded Design was adopted. The Embedded Design is a mixed methods design in which one data set provides a supportive, secondary role in a study based primarily on the other data type (Creswell, Plano Clark, et al., 2003). The premises of this design are that a single data set is not sufficient and that different questions need to be answered by different types of data (Creswell and Plano Clark, 2007). The purpose of this design is to answer different questions that require different types of data. Researchers use this design when they need to include qualitative or quantitative data to answer a research question within a largely quantitative or qualitative study. Therefore, this study embedded a qualitative component within a quantitative design in which qualitative datum was used to answer research questions within a highly quantitative study. The Embedded Design used in this study involved the collection of both quantitative and qualitative data, but the qualitative data type played a supplemental role within the quantitative data type. Hence the Embedded design was appropriate for the collection of data from different groups of respondents. The exploratory nature of qualitative research permitted the gathering of new information and revealed valuable attitudes and perspectives that could hardly be accessed through the traditional quantitative approach alone (Creswell, 2008). In addition, Sambili (2000:163) supports the combination of these methods in order to 'reveal several dimensions of a phenomenon, to deal with shortcomings of each approach and to double -check the findings by examining them from several different vantage points.' Below is the framework of the Embedded Design as used in this study.

Figure 3.1 The Embedded Design



(Source: Creswell and Plano Clark, 2011)

3.2 Study Area

The study was conducted at two districts of the Copperbelt Province. The two research sites were selected on the basis that they were public colleges of education that were initially fully funded by the government yet today Cost-sharing has taken a centre stage since its introduction in the early 1990s. Moreover, little information on public colleges has been documented on the subject matter. The two research sites were also selected because of their proximity to each other and that they offered different programmes; College A offered primary and pre-school teacher programmes while College B offered a secondary teacher programme.

3.3 Target population

The study population is defined as all the individuals the researchers are interested in studying who have specific characteristics in common (Macnee and McCabe, 2008). Therefore, the study population was the entire population of Colleges A and B which included the principals/vice principals, accountants, heads of sections/departments, lecturers and the students. The study also included a planner from the Ministry of General Education. These groups of people were deemed to be the information rich cases for the study hence they provided valuable and required information on the subject matter.

3.4 Sample size

A sample size is a smaller group or a subset of a group of interest which is studied in a research (Macnee and McCabe, 2008). The sample consisted of two principals/vice principals, two accountants, eleven heads of departments/sections, 27 lecturers and 205 students derived from the two colleges and one planner from the Ministry of General Education. Therefore, the total sample size was 248 respondents; 131 from College A, 116 from College B and one respondent from the Ministry of General Education Headquarters. For the quantitative data, a formula was used to come up with the sample size. The following formula by Yamane Taro (1967) was used to come up with the students' and lecturers' sample size.

The formula: $$n = \frac{N}{1 + N(e)^2}$$

Whereas: N= Target population

n=Total sample size

e = Desired margin error

Students Sample size for both colleges

Target population (N) =2400, desired margin error (e) = (0.05)

$n = 2400/1+2400\ (0.05)^2 = 343$ respondents

Lecturers Sample size for both colleges

N=95, desired margin error (0.05)

$n = 95/1+95\ (0.05)^2 = 77$

However, the researcher used 205 student respondents and 27 lecturer respondents because data were collected at the time when both lecturers and students were preparing for end of year examinations hence it was a challenge for the researcher to have access to more respondents than the number used. In addition, the target population was less variable (more homogeneous) hence respondents had similar socio-demographic characteristics. Lastly, and most importantly regarding the sample size used; if descriptive statistics are to be used such as the mean, frequencies, then nearly any sample size will suffice. On the other hand, a good sample size of about 200-500 is needed for multiple regressions, analysis of covariance, or log-linear analysis, which might be performed for more rigorous state impact evaluations (Yamane, 1967). Therefore, Yamane (1967) concludes that the sample size should be appropriate for the analysis that is planned. In this study, descriptive statistics were mostly used hence a smaller sample size was adequate.

Students were the main participants in this study because they were the individuals that were heavily encroached by the policy of Cost-sharing hence information from these respondents was crucial to the study especially on facets of students' affordability. The principals, accountants and heads of sections/departments were included in the research because they were engaged in the daily operations of the institutions as such they provided their experiences on financing of their institutions through the cost-sharing model, anchored on the neo-liberal ideology. A planner from the Ministry of General Education was included in order to validate the findings obtained from the two colleges and also provided information related to funding modalities as executed by the Ministry. Lecturers as well as students were included for their objectivity on the subject matter as well as to cover up for any information gaps not availed to the researcher by colleges' management.

3.5 Sampling Techniques

Sampling is a way of choosing a subject that makes a population sample (Tembo, 2014). Different sampling techniques were implored as outlined below. Thus, both probability and Non-probability sampling techniques were implored by the researcher. Under the probability sampling technique, stratified random sampling was used to select respondents under quantitative method and these were students and lecturers at Colleges A and B. Thus, the stratified random sampling technique was used at both institutions to come up with a stratified sample of students and lecturers and to avoid biasness in the sample. Under non-probability, purposive and convenient sampling techniques were used to select respondents under qualitative method. According to Kombo and Tromp (2006), the power of purposive sampling, though a non-probability sampling technique, lies in selecting information rich cases for in-depth analysis related to the central issue being studied. The purposive sampling technique was used to select other important informants in financing of the two colleges and these were college principals, accountants, heads of section/department and a planner. Meanwhile, convenient sampling was used to select the two colleges as research sites.

3.6 Research Instruments

Data collection tool in quantitative research employed semi-structured questionnaire and document analysis while semi-structured interview guides and focus group discussions were used for qualitative data.

3.6.1 Questionnaire

Questionnaires were administered to 232 respondents by the researcher. In this study questionnaires were used to collect data since all the participants were literate and easy to use on such a large sample size. Two forms of questionnaires designed to suit participants were administered; one type for lecturers and another for students. Both questionnaires had four sections; **A** for demographic information; **B** students' affordability, **C** for financial sustainability measures employed and **D** for financial sustainability measures suggested. In Section **A**, respondents either ticked or indicated their appropriate response (s) in the spaces provided while Sections **B, C** and **D** were answered using the **5-point Likert scale** to determine respondents' level of agreement to their perceptions and or experiences on some aspects of cost-sharing. On the scale, 1 represented extreme negative while 5 represented extreme positive. The rankings were graded as follows; **1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Strongly Agree**. Lecturers and students responded to each statement by means of ticking one of the five (5) rankings appearing next to it (see appendixes E and F respectively).

During data collection, 130 questionnaires were administered to students at College A and 120 at College B. However, only 108 and 97 questionnaires were collected from College A and College B respectively that represented 82% questionnaire retention from the 250 that were initially administered. On the other hand, 40 questionnaires were administered to lecturers (20 at College A and 20 at College B) but only 16 and 11 were collected respectively) representing 67.5% questionnaire retention from the 40 that were administered. Some questionnaires were not returned because the fieldwork was done at a time when most students and members of staff were very busy preparing for end of year examinations.

3.6.2 Semi-Structured Interview Schedule

The study also used semi-structured interview guides to collect data from college principals, accountants and heads of sections/departments from the two colleges and the planner from Ministry of General Education headquarters. Using the interview guide, one-on-one interviews were conducted and tape-recorded to collect data on Cost-sharing in line with the research questions. Open-ended questions were used in the interviews to collect in-depth information in order to have a detailed understanding of the subject matter. Interview guides were used on these categories of research participants so that the researcher could gain insights into the subject matter and also tape-recorded them for purposes of verbatim.

3.6.3 Document Analysis Checklist

Documents from the colleges containing required information on financing of the two colleges of education were reviewed. These documents included colleges' cash books and funding profiles. Other documents relevant to the study were also examined to collect vital secondary data and these included official reports, annual budgets' allocation, budget speeches, publications and other important secondary sources.

3.6.4 Focus Group Discussion Guide

Focus group discussions were conducted and tape-recorded to collect further detailed information on the subject matter from students' respondents who were willing to participate in the focus group discussions after answering the questionnaires. Two focus group discussions were conducted; one group with students at College A and another group at College B, each group consisting of 8 students. On both occasions, the researcher facilitated the discussions to ensure students focused on the topic being investigated. Focus group discussions were conducted in order to gain insights into the issues affecting students' welfare as a result of the Cost-sharing. As alluded to by Kombo and Tromp (2006), when properly planned and facilitated, focus groups can produce a lot of information quickly and are good for identifying and exploring participants' beliefs and perceptions.

3.6.5 Observation

Observations were also done in order to counter check information collected from the other methods of data collection. The researcher was taken round the colleges' premises for purposes of observation.

3.7 Data Collection Procedure and Time Line

Before embarking on data collection, permission was sought in advance from the relevant authorities to access and conduct research at public institutions. The researcher also carried an official introductory letter from the Directorate of Research and Graduate Studies at University of Zambia (UNZA) for identification purposes. Both quantitative and qualitative data collection for the study took place from 1st November, 2015 to 15th November, 2015. Additionally, another set of quantitative data was also collected from 7th, March 2016 to 15th, March 2016.

3.8 Data Analysis Instruments and Procedures

Data analysis is the process of bringing order, structure and meaning to the mass collected data (Kombo and Tromp, 2006). A mixed method (embedded) was used in which mainly quantitative data were analysed and were being supplemented by qualitative data as explained below.

3.8.1 Quantitative Data Analysis

Quantitative data were collected through a questionnaire. Information from 232 questionnaires was entered and analysed using Statistical Package for Social Sciences (SPSS). Descriptive statistics in form of frequency tables, means, standard deviations, charts and tests of correlation and chi-square tests were generated using SPSS software and in some instances Microsoft excel was used. Quantitative data through document analysis were also collected and used for purposes of comparison from interviews and also to show trend analysis for the period for which data were provided.

3.8.2 Qualitative Data Analysis

Qualitative data from semi-structured interviews were transcribed and embedded into quantitative data. This was done by carefully recording conversations in order to interpret, reduce and code key responses to supplement quantitative data and for purposes of discussion. Some responses were also isolated and have been used as original quotes for verbatim to highlight important findings of the study.

3.9 Limitations

Notable limitation to the study was that the use of a mixed design was quite cumbersome to be operationalised. However, through the help of research experts, information from both qualitative and quantitative was well synchronised. In addition, the study was conducted at two of Zambia's Public Colleges of Education. Despite these limitations, the findings of the study would be reliable and be generalised to the two Public Colleges of Education from which data were collected.

3.10 Validity and Reliability

The validity of a test concerns what the test measures and how well it does so (Anastasi and Urbina, 1997:113). Therefore, validity is concerned with the integrity of the conclusions that are generated from a piece of research (Bryman, 2008:3). On the other hand, 'Reliability is refers to the consistency of scores obtained by the same persons when they are re-examined with the same test on different occasions…' (Anastasi and Urbina, 1997:84). Therefore, reliability is concerned with the consistency of the results obtained from a measuring instrument.

There are various ways by which research information can be validated. Some of these ways are triangulation and member checking. Denzin and Lincoln (2000) identified four basic types of triangulation and these are data; investigator; theory and methodological triangulation. Methodological triangulation involves using more than one method to gather data, such as interviews, observations, questionnaires and documents to enhance confidence of the data (Denzin and Lincoln, 2000).

To ensure validity and reliability of this study, the researcher used methodological triangulation, which enabled the researcher to collect data through questionnaires, interviews, focus group discussions, document analysis as well as observation. Research instruments were examined by research experts before embarking on the research in order to cross-examine the appropriateness of the instruments. In addition to methodological triangulation, member checking method was also involved in which an expert in the area of higher education finance was requested to go through the work. The use of two colleges and a relatively large sample size enhanced the reliability and validity of the results.

3.11 Chapter Summary

The chapter presented the methods used in conducting the study from data collection to data analysis. It outlined the research design, sampling techniques and procedures, sample size, instruments and the methods used to collect and analyse the findings of the study and provided justification for the methods and procedures used. Chapter three has also explained the limitations and validity and reliability of the study. The next chapter will present the findings of the study.

CHAPTER FOUR

PRESENTATION OF FINDINGS

4.0 Overview

The preceding chapter provided the methodology employed for collection and analysis of data in the study. The data were collected from various groups of people; college principals, accountants, heads of departments/sections, lecturers and students. This chapter presents the results on the experience of cost-sharing at the two selected Zambia's public colleges. The results are presented in line with the four study questions outlined in chapter one of this dissertation. These questions are;

i. How far do user fees acquired contribute to institutional budgets at Public Colleges of Education?
ii. How far do government grants and other sources of funds contribute to Public Colleges of Education in the era of Cost-sharing?
iii. How affordable are the current user fees to students at Public Colleges of Education?
iv. How can public colleges be made sustainable in the era of cost-sharing and reduced government funding?

In this chapter, the demographic characteristics of the participants in the study are displayed. Thereafter, quantitative and qualitative results are presented side by side. The background information is necessary for the purposes of understanding the dynamics of respondents.

4.1 Demographic Characteristics of Respondents

Figure 4.1.1 Gender of all respondents

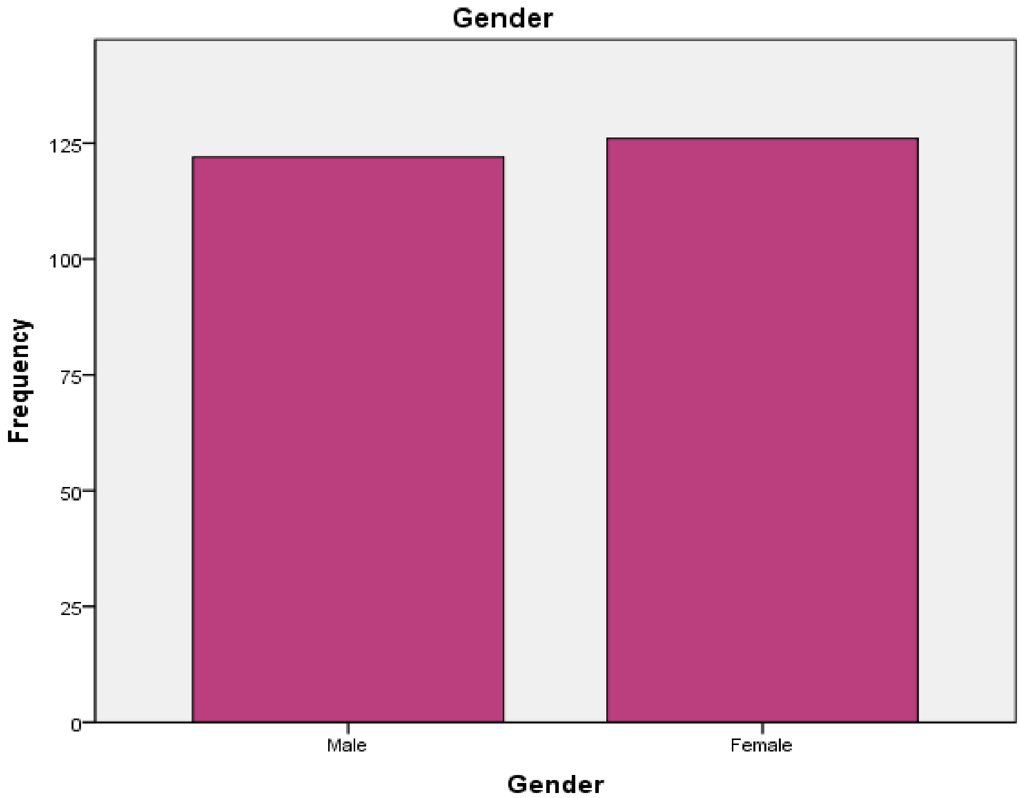


Figure 4.1.1 shows that there were 122 male respondents representing 49.2%and 126 female respondents representing 50.8%. Hence the total sample size was 248 respondents.

Table 4.1.1 Percentage Distribution of Gender and Category of Respondents

	Category of Respondents						
Gender	Planner	Principal	Accounts assistants	Heads of departments	Lecturers	Students	Total
Male	1	1	2	10	13	95	121 (49.2%)
Female	0	1	0	1	14	110	126 (50.8%)
Total	1 (0.4%)	2 (0.8%)	2 (0.8%)	11(4.4%)	27 (10.9)	205(82.7%)	248 (100%)

Table 4.1.1shows the categories of respondents by gender.

Table 4.1.2 Percentage Distribution of Respondents' Category and College

	College		
Respondents' Category	College A	College B	Total
Principal	1	1	2 (0.8%)
Accounts assistants	1	1	2 (0.8%)
Heads of Sections	5	6	11 (4.5%)
Lecturers	16	11	27 (10.9%)
Students	108	97	205 (83%)
Total	131 (53%)	116 (47%)	247 (100%)

Table 4.1.2 shows the number of respondents in relation to the college from which respondents were derived from.

Age of Students' Respondents

In Zambia, the transfer of knowledge and skills is done through both formal and informal education system. This is done in order to equip young people with knowledge and skills needed to spearhead social, economic and political development of the country. Therefore, the age of the students was an important aspect in the study in order to ascertain if the two colleges were responding to the aspirations of young people and that of national development goals.

Table 4.1.3 Age of Students' Respondents

Age	Mean	Mode	Standard Deviation	Minimum	Maximum
Valid N- 205	24.25	22	3.020	19	34

The findings from **table 4.1.3** indicate that the age of respondents was appropriate since most of them were around the mean age of 24 which is ideal for tertiary education level.

STUDENT FEES VERSUS ENROLMENT

There were basically three types of fee schedules for the two colleges from which data were collected. These were categorised according to the enrolment type; the regular, parallel and distance education. The regular category was further divided into two; the boarders and the day scholars.

Table 4.1.4 Students' average fee schedules and enrolments for 2015

	College A			**College B**		
	Regular	**Parallel**	**Distance education**	**Regular**	**Parallel**	**Distance education**
Fees	K1,200&1,900* ($133& $ 211)*	K1,850 ($ 206)	K1,500 ($ 167)	K1,300&2,080* ($145& $231)*	K1,820 ($ 202)	K1,500 ($ 167)
Enrolment	1200	1115	432	1200	1100	1500

**Fees* of K1200/$133& K1300/$145 for day-scholars, &K1900/$211 and K2080/$231 for boarders.*

(Bank of Zambia exchange rate of US $1= ZMK 8.99 as at 1st, September, 2015)

Table 4.1.4 shows termly fee schedules for the different categories of students at the two colleges. The parallel programme was running side by side with the regular programme while distance education was normally conducted during the time when the other two categories of students were on vacation.

SPONSOR OF COLLEGE FEES

Table 4.1.5 Sponsor of college fees statistics

Total number of respondents	Mean	Standard deviation	Mode
205	1.67	.872	1

Table 4.1.5 shows the sponsor of college fees. The mean implied that on average most respondents were sponsored by their guardians since the mean was closer to 2 (a value for guardian) and the standard deviation implied that the responses were clustered towards the mean and that the responses were close to each other.

4.2 The Extent to which Sources of Funds Contributed to Institutional Budgets

The first and second objective of the research were to assess the extent to which various sources of funds contributed to institutional budgets at College A and College B. Table 4.2.1shows the contribution of various sources of funds towards colleges' budget for the years for which data were available.

Table 4.2.1 Source of Funds and its Contribution to Institutional Budget

	College A			**College B**		
Year	**Govt. Funds**	**User fees**	**NIF III**	**Govt. funds**	**User fees**	**NIF III**
2010	ZMK 577,262 **$64, 212**(23%)	ZMK 1,101,376 **$122, 511**(45%)	799,488 **$88,931** (32%)	ZMK 176,266 **$19, 607**(21%)	ZMK 650,156 **$72, 320**(79%)	-
2012	ZMK 1,094,689 **$121, 767**(46%)	ZMK 1, 271, 634 **$141, 450** (54%)	-	ZMK 377,092 **$41, 946**(35%)	ZMK 705,960 **$78, 527**(65%)	-
2013	ZMK391,112 **$43, 505**(12%)	ZMK 2, 984, 634 **$ 331, 995** (88%)	-	ZMK 335,932 **$37, 367**(21%)	ZMK 1,289,313 **$143, 416**(79%)	-
2014	ZMK 802,026 **$89, 213**(20%)	ZMK 3, 148, 694 **$ 350, 244** (80%)	-	ZMK 659,334 **$73, 341**(28%)	ZMK1, 664, 051 **$185, 100**(72%)	-
2015	ZMK 1, 196,225 **$133, 062** (25%)	ZMK 3, 591, 051 **$ 399,449** (75%)	-	ZMK 1,020,576 **$113, 523**(37%)	ZMK 1,715,469 **$190, 820**(63%)	-

(Source: College A and College B Cash books)

(Bank of Zambia exchange rate of US $1= ZMK 8.99 as at 1st, September, 2015)

Table 4.2.1 shows the extent to which sources of funds contributed to Colleges' budgets. According to data collected it was clear that there were two major sources of funds and these were government grants and user fees. However, in 2010 there was an addition source of fund to College A which was referred to as NIF III. NIF III was some donor fund which was to be received by the colleges regularly but it was only received in 2010 by College A and since then there has not been any such funds received by the two colleges. The study further showed that of the two sources of funds, user fees contributed more to the institutional budgets than government grants. For the years for which data were available (2010, 2012-2015), user fees contributed to College A budget as follows; in 2010 it contributed up to 45%, in 2012 it accounted up to 54% meanwhile in 2013 user fees contributed to as high as 88% of the total funds received. In 2014 and 2015, it contributed to 80% and 75% respectively. On the other hand, government grants only contributed to as low as 23% in 2010, 46% in 2012 and barely a 12% in 2013. For the years that followed 2014 and 2015, government grants only contributed up to 20% and 25% respectively. The NIF III fund was only received in 2010 by college A and it contributed up to 32% of the college's budget. One head of department had this to say;

> I may not have accurate figures or percentage at hand but what I know is that students' fees are the major source of funds especially from the distance and parallel students. Government grants are usually not sufficient and are very erratic. However, I can safely say that it's about 75% and 25% from students' fees and government grants respectively (10/11/2015).

The funding status for College A was not very different from the situation at College B. In 2010, user fees (79%) contributed more to college budget as compared to government grants which stood at 21%. In 2012, user fees accounted for 65% while government grant was at 35% and in 2013 user fees contributed to as a high as 79% as compared to 21% by the government. For the 2 years that followed (2014 and 2015), user fees contributed up to 72% and 63% meanwhile government grants stood at 28% and 37% respectively. There was no other source of fund that was received by College B for the years that were considered. Income generating activities employed by the colleges did not significantly contribute to colleges' budget. For instance, proceeds from poultry farming were mainly used to supplement students' boarding needs. The study further revealed that the colleges raised funds through distance and parallel programmes. Student fees contributed more to the institutional operating costs. One of management staff stated the following;

> Student fees contribute more to the institutional operating costs. Government grants are usually not sufficient and erratic hence we don't depend on it. The funds received from government are not enough to cater for students' academic and

> boarding needs. Despite the fact that government grants are not adequate, I feel that the government meets its obligation because it's like we are funded by the government through infrastructure that we use because it would have been difficult to think of tertiary education without the government infrastructure (11/11/2015).

However, what has been tabulated under user fees were the collections from regular students only. It was also revealed that government grants were meant to cover for the cost of regular students hence funds collected from parallel and distance education students were considered as a way in which institutions raised funds to cushion the ever-increasing budgets deficits due to plummeting government funds year in year out. One of the principals' states:

> The understanding that full time students are subsidized by government hence they pay a lesser amount as compared to parallel students may not be true because parallel programmes were initially introduced by members of staff as an initiative to make an extra income... (11/11/2015).

The study further revealed that the funds received were meant for running costs such as staff allowances, teaching and learning materials, feeding as stipulated in the activity based annual budget. Apart from the statistical data, information collected from the various participants revealed that user fees contributed more than government funds to institutional budgets as the former was received timely and consistently as compared to the later that was erratic. **Figure 4.2.1** shows the funding profile for the two public colleges from which the study was conducted.

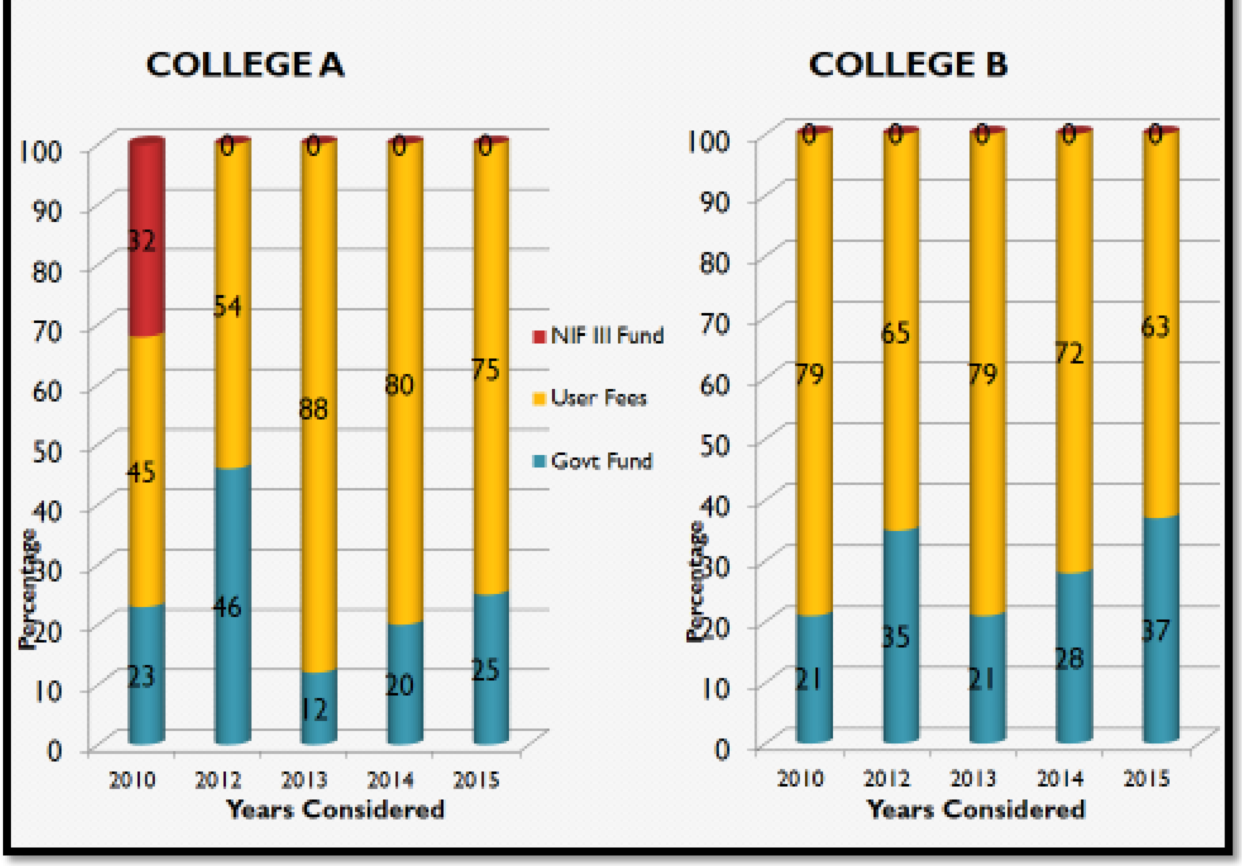


Figure 4.2.1 Funding Profile for Public Colleges of Education

Figure 4.2.1 illustrates the extent to which sources of funds contributed to colleges' budget at both college A and B**.** Three sources of funds were unveiled as shown above. User fees made up the bulk of colleges' budget for all the 5 years for which data were available.

Table 4.2.2 The extent to which government grants received met the proposed annual budget- College A

	COLLEGE A		
	Annual Budgets	**Govt. grants**	**Budget deficit**
2010	ZMK 1,706,865 **($189, 863)**	ZMK 577,262 (**$64, 212)**	ZMK 1,129,603 **($125,651)**
2012	ZMK 1,706,865 **($189, 863)**	ZMK1,094,689 (**$121, 767)**	ZMK 612,176 **($68,096)**
2013	ZMK1,706, 865 **($189, 863)**	ZMK 391,112 (**$43, 505)**	ZMK 1,315,751 **($146,357)**
2014	ZMK 1,296,515 **($144, 217)**	ZMK 802,026 (**$89, 213**)	ZMK 494,489 **($55,004)**
2015	ZMK 1,296,516 **($144, 218)**	ZMK1,196,225 (**$133, 062)**	ZMK 100,291 **($11,156)**

(Source: Extracted from College A Cash book and Activity Based Annual Budget)

(Bank of Zambia exchange rate of US $1= ZMK 8.99 as at 1st, September, 2015)

Table 4.2.3 The extent to which government grants received met the proposed annual budget-College B

	COLLEGE B		
	Annual Budgets	**Govt. grants**	**Budget deficit**
2010	ZMK 1,176,745 **($130,895)**	ZMK 176,266 (**$19, 607)**	ZMK 1,000,479 **($111,288)**
2012	ZMK 1,176,745 **($130,895)**	ZMK 377,092 (**$41, 946)**	ZMK 799,653 **($88,949)**
2013	ZMK 1,176,745 **($130,895)**	ZMK 335,932 (**$37, 367)**	ZMK 840,813 **($93,528)**
2014	ZMK 1,055,222 **($117,377)**	ZMK 659,334 (**$73, 341)**	ZMK 395,888 **($44,036)**
2015	ZMK 1,055,222 **($117,377)**	ZMK1,020,576 (**$113,523**)	ZMK 34,646 **($3,854)**

(Source: Extracted from College B Cash books and Activity Based Annual Budget)

(Bank of Zambia exchange rate of US $1= ZMK 8.99 as at 1st, September, 2015)

Tables 4.2.2 and 4.2.3 shows the proposed budgets (government funds allocated to colleges), funds received and expensed and the budget deficit for the years for which data were available. **Tables 4.2.2 and 4.2.3** clearly indicates annual budgets for the stated years and what was received by the colleges. The columns labelled annual budgets shows the yearly budget for the colleges and the columns labelled government funds shows the actual government funds that were received by the colleges. The column labelled budget deficit shows the difference between what was allocated (annual government budgets) and what was received (government funds) hence making budget deficits since what was received by the colleges were less than what was budgeted for by the government for all the years that were considered.

Figure 4.2.2 illustrates what is contained on **tables 4.2.2 and 4.2.3**(in Zambian Kwacha only).

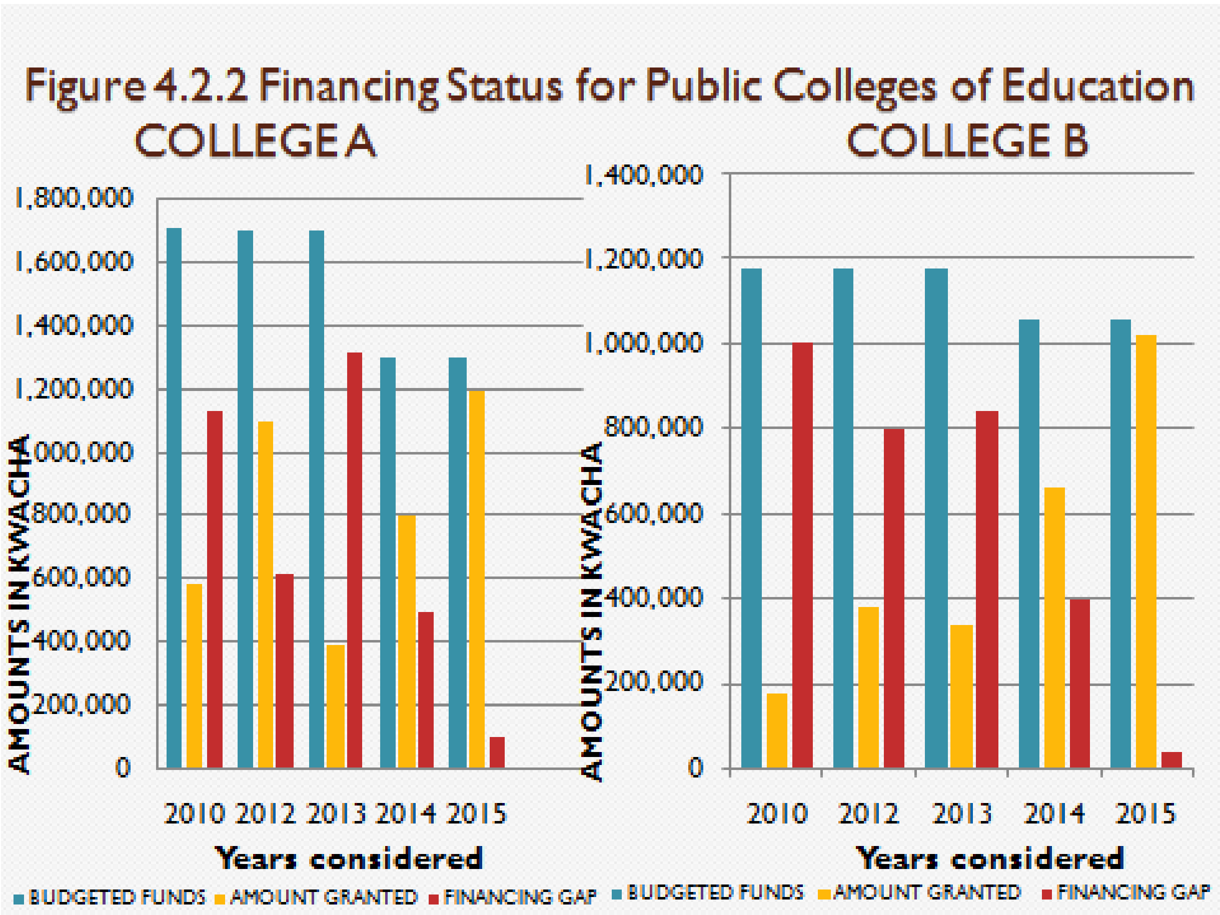


Figure 4.2.2 above illustrates the extent to which government funds met institutional budget at the two public colleges. From **figures 4.2.1 and 4.2.2**, government funding had been reducing for the years considered hence budget deficits were inevitable.

4.3 Students' Affordability

The third objective was to establish if students could afford user fees at the two colleges. To get views on this matter a questionnaire was used for students and lecturers. A 5-point Likert scale with the following ranks; **1= Strongly disagree**, **2 = Disagree, 3 = Neutral, 4= Agree, 5= Strongly agree** were used to express the level of agreement with the factors concerning affordability. Below were the findings.

Firstly it was important to understand the socio-economic background of students that may have difficulties in paying for their education cost. In this regard, the study investigated eight factors and these included rural, low income levels, gender, minority tribe, single-parented, orphaned, low education level and physical disability.

Table 4.3.1 Barriers to students' affordability – students' responses

	Rural	Low income level	Female	Male	Minority tribe	Orphaned	Single parented	Low education level	Physical disability
N Valid	205	205	205	205	205	205	205	205	205
Missing	0	0	0	0	0	0	0	0	0
Mean	3.79	4.11	3.70	2.81	1.99	3.81	3.34	3.77	3.10
Mode	5	4	4	2	1	5	4	4	3
Standard deviation	1.184	0.797	1.069	1.093	1.133	1.243	1.197	1.062	1.315

Table 4.3.1 shows some of the factors that may hinder students from affording college education. The study revealed that students of rural-background, low income levels, females, single-parented, orphaned and those coming from a family of low education background were perceived to be the ones heavily affected by cost-sharing policy. On the other hand the study also revealed that students' affordability was perceived not to be affected by the ethnic tribe from which one came from. Meanwhile most respondents were indifferent concerning factors

such as physical disability, single-parented and being male as indicated by the mean scores. Minority tribe had a mean score of 1.99 implying that most respondents disagreed to this factor.

Additionally, certain social factors that were considered to have had more direct negative effects to students' affordability were further interrogated. These included level of education, number of dependents and monthly income of college sponsors.

Figure 4.3.1 Sponsor's Level of Education

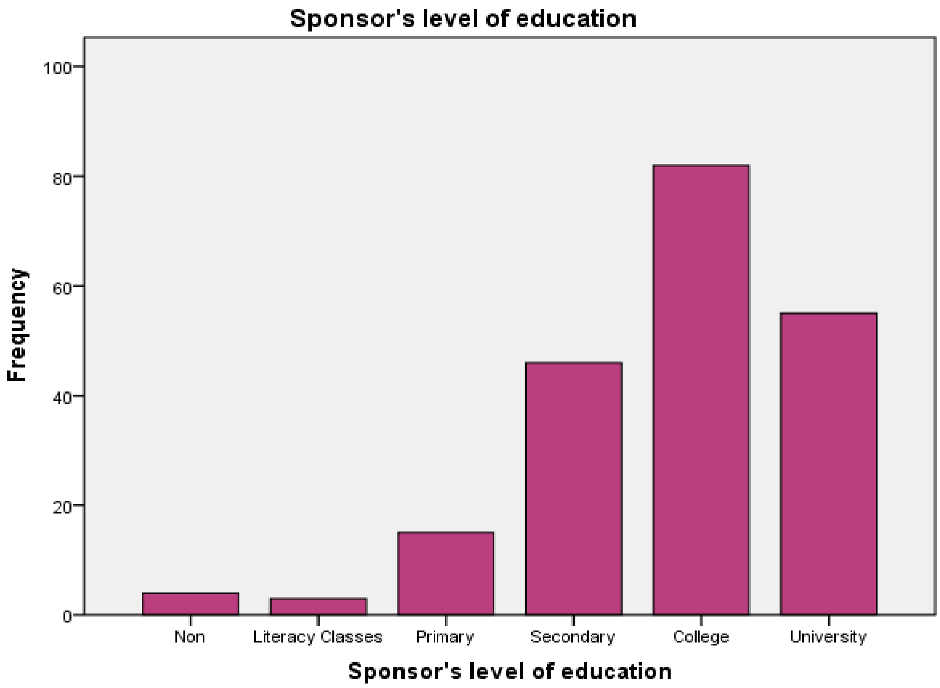


Figure 4.3.1 shows that most students had sponsors with college level of education represented by 40%. Meanwhile very few students were being sponsored by someone with non to primary level of education as represented by a cumulative figure of 10.7%. Sponsors' of university and secondary level of education represented 26.8% and 22.4% respectively.

Figure 4.3.2 Sponsor's number of dependents

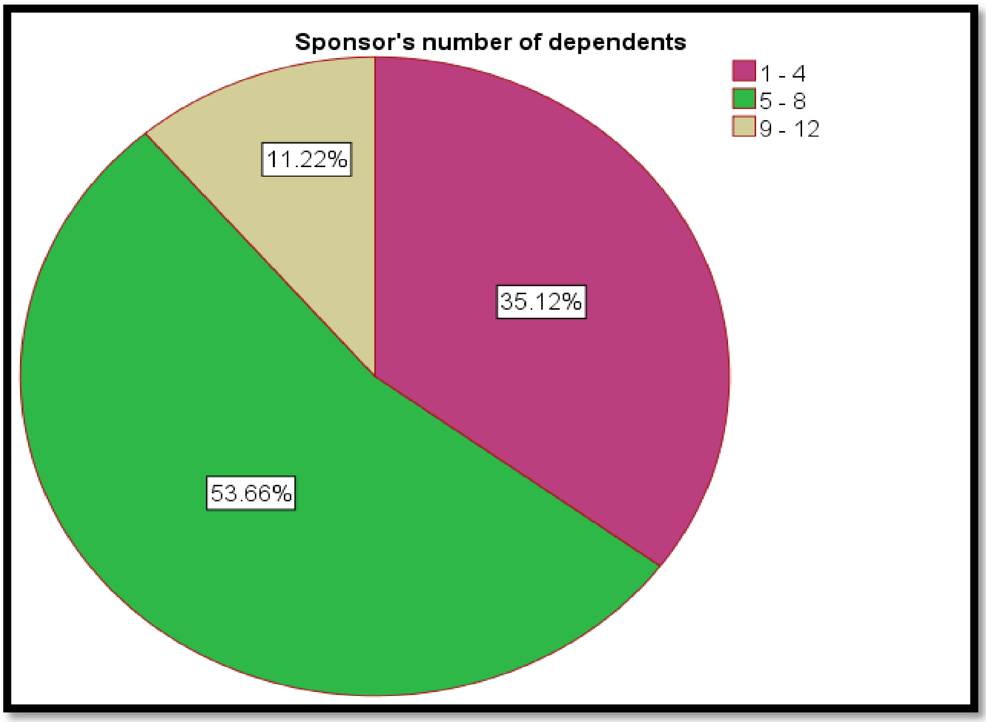
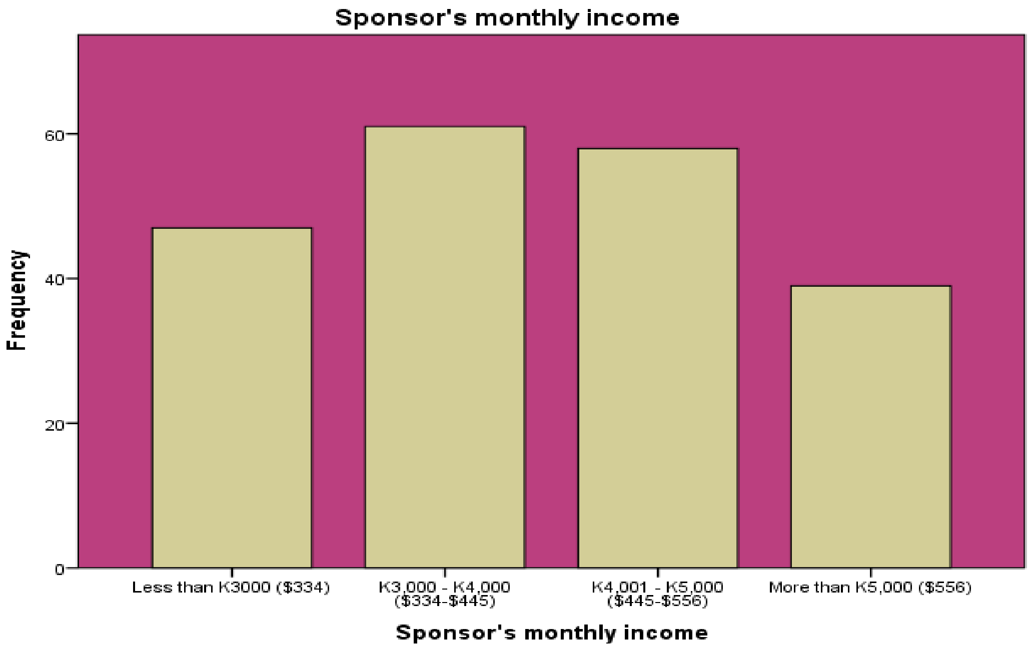


Figure 4.3.2 indicates that the majority of the sponsors of college fees had on average 5 to 8 dependents representing 53.7%. Meanwhile those with less 5 dependents represented 35.1% and the sponsors with more than 8 dependents represented 11.2%.

Figure 4.3.3 Sponsor's monthly income



(Bank of Zambia exchange rate of US $1= ZMK 8.99 as at 1st, September, 2015)

Figure 4.3.3 shows that most students had sponsors of monthly salary of less than K5, 000 ($556). Only 19% of the students had sponsors of monthly salary of more than K5, 000 ($556). All the three factors (level of education, number of dependents and monthly income of college sponsors) were subjected to different tests such as Anova, Chi-Square, Spearman and Pearson Correlations, only sponsor's monthly income was statistically significant as shown on **table 4.3.2.** This implied that monthly income was a major hindrance to students' affordability.

Table 4.3.2 Correlations between sponsors' monthly income and students'/parents' ability to pay user fees

Spearman's rho			Sponsor's monthly income	Parents/students can afford to pay user fees
	Sponsor's monthly income	Correlation coefficient	1.000	.236**
		Sig. (2tailed)	.	.001
		N	205	205
	Parents/student can afford to pay user fees	Correlation coefficient	.236**	1.000
		Sig. (2tailed)	.001	.
		N	205	205

*. Correlation is significant at the 0.01 level (2-tailed).

To start with, Spearman's Rho was appropriate for this variable because the data set used were categorical or a ranking based on the level of agreement (strongly agree, agree, neutral, disagree and strongly disagree). On the other hand, Pearson is appropriate for continuous variables such age and weight. The results from **table 4.3.2** indicate that there is a correlation between sponsors' monthly income and parents/students ability to pay user fees. Thus, the correlation coefficient of .236 shows that there is a positive correlation and that the correlation is weak as it is close to 0 (0 implies no correlation and 1 implies perfect positive correlation). The positive association implies that if sponsor's monthly income increases then parents/students' ability to pay user fees also increases. In addition, the Spearman Correlation test also show that there is a statistically significant association between sponsor's monthly income and parents/students ability to pay user fees at the confidence level of 0.01 and significance value of .001.

Table 4.3.3 Correlations between sponsor's monthly income and parents/students inability to pay for living expenses

Spearman's rho			Sponsor's monthly income	Parents/students cannot afford to pay for living expenses
	Sponsor's monthly income	Correlation Coefficient	1.000	-.156*
		Sig. (2-tailed)	.	.025
		N	205	205
	Parents/students cannot afford to pay for living expenses	Correlation Coefficient	-.156*	1.000
		Sig. (2-tailed)	.025	.
		N	205	205

*. Correlation is significant at the 0.05 level (2-tailed).

The results from **table 4.3.3** indicate that there is a correlation between sponsors' monthly income and parents/students inability to pay for living expenses. Thus, the correlation coefficient of -.156 shows that there is a negative correlation and that that the correlation is weak as it is close to 0 (0 implies no correlation and -1 implies a perfect negative correlation). The negative association implies that if sponsor's monthly income increases then parents/students' inability to pay for living expenses decreases and if sponsor's monthly income reduces then parents/students inability to pay for living expenses increases. In addition, the Spearman Correlation test also show that there is a statistically significant association between sponsor's monthly income and parents/students inability to pay for living expenses at the confidence level of 0.05 and significance value of .025.

Furthermore, the study investigated whether user fees and other expenses were affordable to students. The responses from students and lecturers are shown in **figure 4.3.4**

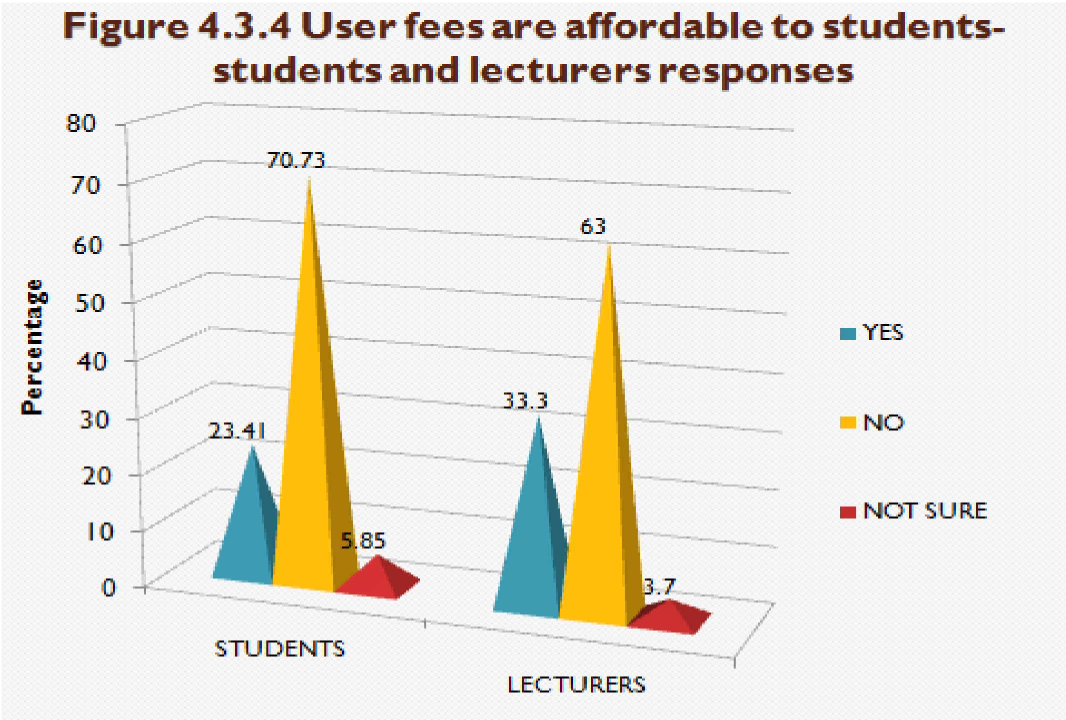


Figure 4.3.4 shows that the majority indicated that user fees were not affordable to students. Concerning the issue of affordability, one student under focus group discussion bitterly complained over fee schedules as stated below;

> Fees are only affordable to the boarders but not to day-scholars because we also have to pay for accommodation and food in addition to tuition fees. For example, am a day-scholar and I paid K1, 200 ($117) as fees and also paid K1, 200 ($117) for my accommodation and I also have to buy food meanwhile those in boarding only paid K1, 820 ($177) as their total fees which is inclusive of their tuition, accommodation and food (10/11/2015).

In addition to information collected through questionnaires, interviews conducted revealed similar results since most of them indicated that college education was not affordable because some students struggled to raise money for their education cost. Thus, some students could not afford probably due to various social challenges such as low income level, poor education background, rural-background among others. One of the heads of department had this to say;

> The fees are not affordable to all students and some of those who claim not to have problems in paying fees are just forced to pay through the use of threats and this leads to students facing challenges of financing for living expenses (10/11/2015).

However, some management staffs held slightly different perspectives on the matter as they felt that user fees were affordable considering that it was tertiary education although they also indicated that some students were vulnerable hence the college management assisted them by a way of engaging them into ongoing projects within the college. In relation to this, one of the management staffs stated the following;

> The fees are affordable because we do not have many problems when it comes to payments by students. Most students are able to pay but the only challenge we face is that at times some parents take it for granted that it's a government institution hence they should pay in instalments. For those that are unable to pay promptly, we give them chance to write deferred examinations. We encourage our students (vulnerable) not to overburden their parents but to do some piece works to help their parents...' (11/11/2015).

Furthermore, the study investigated whether students had challenges in paying user fees and financing for living expenses. The responses from student respondents are shown in **figure 4.3.4.**

Figure 4.3.5 Students have had challenges in paying user fees and financing for other expenses – students' responses

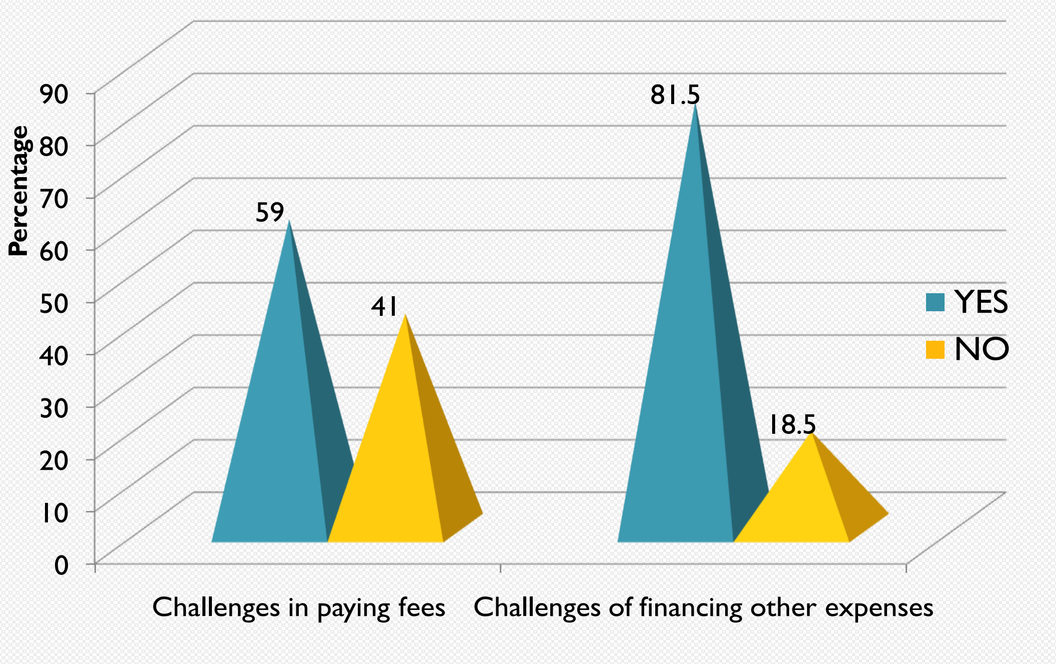


Figure 4.3.5 shows that 121 (59%) students had problems in paying user fees while 84 (41%) students indicated that they had not experienced problems in paying fees. **Figure 4.3.5** further shows that most students were having problems of financing for their living expenses. In addition, information collected through qualitative methods was similar to what students indicated.

> Most students are faced with challenges to cater for other expenses that come along when schooling hence some may not have problems in paying fees but may have problems of financing for other expenses (5/11/ 2015).

From the responses from the students and members of staff, it was obvious that user fees were not affordable to most students. Some students were even forced to write deferred examinations as they could not pay fees on time. In addition when these variables were cross tabulated against gender, the result showed that there was no significant statistical difference between gender on one hand and student's ability to pay fees and finance for living expenses on the other hand. However, the findings showed a significant statistical difference between gender and students having had difficulties in paying fees (**refer to table 4.3.4**).

Table 4.3.4 Gender * Students have had problems in paying fees Cross tabulation

		Students have had problems in paying fees				Total
		Strongly disagree	Disagree	Agree	Strongly agree	
Gender	Male	37	29	15	14	95
	Female	32	22	31	25	110
Total		69	51	46	39	205

Table 4.3.5 Chi-Square Tests Decision Box

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.941[a]	3	.030
Likelihood Ratio	9.056	3	.029
Linear-by-Linear Association	7.027	1	.008
N of Valid Cases	205		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 18.07.

i. **Null hypothesis (H_0):** There is no association between gender and students faced difficulties in paying fees.

ii. **Alternative Hypothesis (H_1):** There is an association between gender and students faced difficulties in paying user fees.

iii. **Interpretation of Chi-Square results from table 4.3.5:** The results show the p-value of 8.941[a] which is associated with the significance value of 0.030. Therefore, since the significance value (0. 030) is less than 0.05 we reject the null hypothesis and accept the alternative hypothesis. To this end there is an association between gender and students had difficulties in paying fees.

The association entails that more females faced challenges in paying fees promptly than males. However, it must also be understood that even though gender affects female participation in tertiary institutions, this study has shown that students' affordability to this form of education is often dependent upon one's income levels.

In addition, the colleges were also alive to the fact that some students were vulnerable. To this end, some measures were put in place in order to cater for the needs of the disadvantaged groups. For example, students were allowed to pay user fees in instalment although the scheme was not open to all students. The study revealed that the college management had a system in which they identified students that were genuinely handicapped and allowed them to pay fees in instalment. It was also discovered that the colleges, more especially college B had done a lot in making college education affordable. For example, the construction of the new hotel block, upgrading of the library and home economics department were done at college B. Other notable contributions by the college management was in form of in-kind mostly assisting those students that come from rural areas or whose sponsors were farmers by allowing them to pay in kind through food commodities such as maize or meal samp.

4.4 Cost-sharing

The final objective of this research was to ascertain how the two colleges could be made sustainable in the era of cost-sharing and reduced government funding. Therefore, under this objective sub-headings were used as follows; students/parents, institution/government, donor funding and making cost-sharing sustainable.

4.4.1 Students/Parents

Under student/parents' contribution, six factors were investigated and **figure 4.4.1** illustrates the findings.

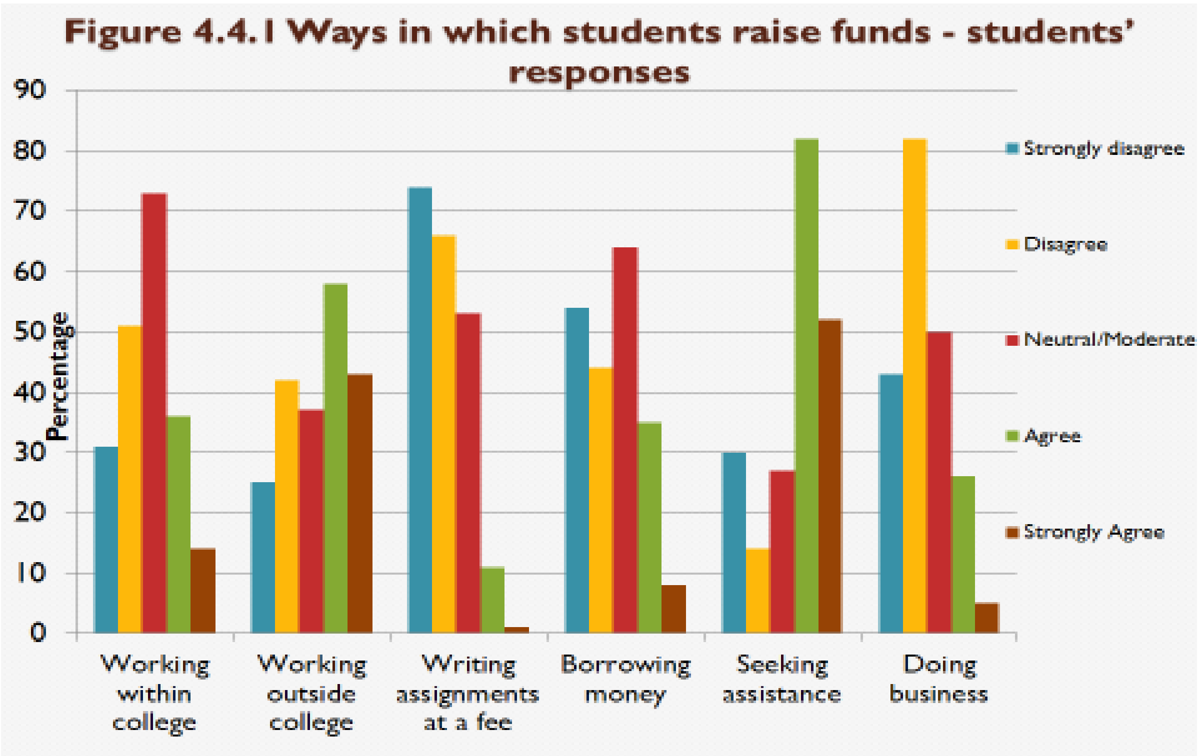


Figure 4.4.1 Ways in which students raise funds - students' responses

Figure 4.4.1 shows some of the ways in which students raise money. Information obtained from interviews revealed that some students work at the colleges during holidays, while others do some piece works outside the colleges' premises. Meanwhile others engaged in small businesses and small-scale farming while others sought help from their friends who came from families that were able to afford. In relation to the findings from quantitative data, one head of department stated the following;

> I overhead about a student who works in the mines (night shift) during the academic session and this could have a negative impact on him. There are also those that work during the holidays (11/11/2011).

Information obtained from focus group discussions revealed the following;

- Some students do some work during the holidays in order to raise money for fees or for groceries; such jobs includes tutoring the secondary school going pupils.
- Some students are given piece works by college management during the holidays; to work in the library, garden, poultry.

- As for me I know a friend who works as a security guard outside the college during the school term.
- As for me, am just paid by someone so I don't do anything.

However, some members of staff felt that there was little time for students to engage into serious business or work during the college session. Other respondents particularly students stated that it was difficult to find part-time jobs during the holiday as most companies were not willing to employ someone just for a month. As a result, very few students were engaged in some income generating activities either during the term or the holiday. At the same time very little income was generated from such ventures by students engaged in such activities.

4.4.2 Institution

Revenue supplementation strategies

Revenue supplementation is an alternative to cost cutting solutions and it presents a preferred route to financial viability. It may take such forms as: (i) faculty and institutional entrepreneurship (selling specialized and marketable teaching or scholarship); (ii) renting college facilities to commercial entities; (iii) commercially marketing research discoveries; or (iv) fund raising, by appealing to alumni and other donors (Johnstone, 2009).

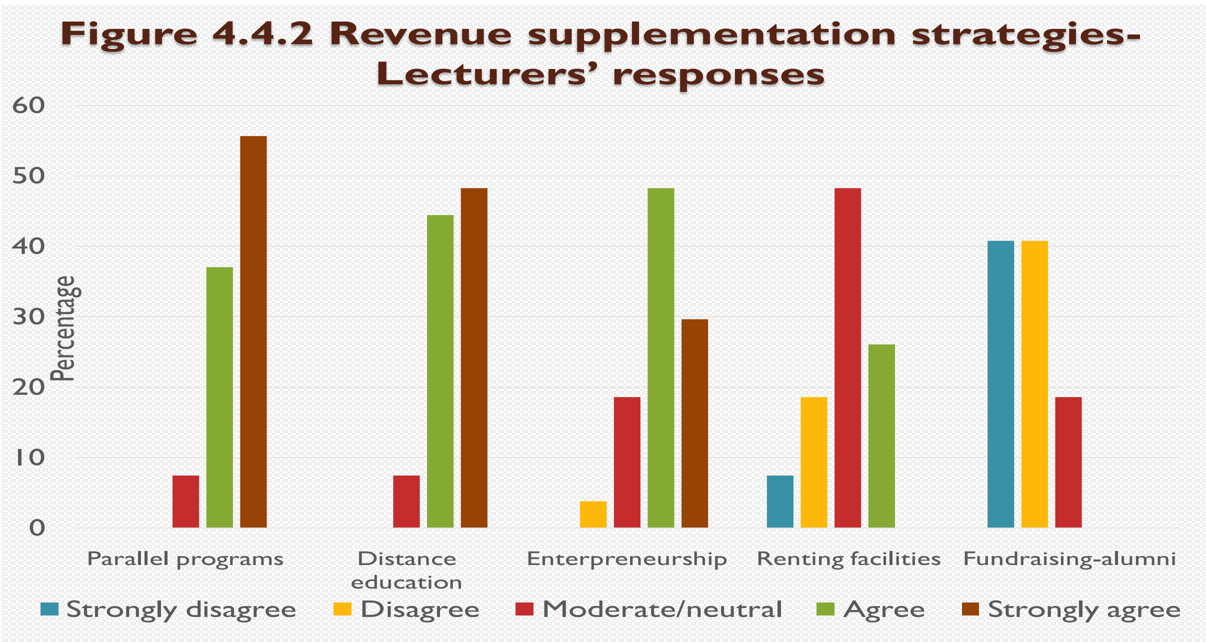


Figure 4.4.2 illustrates that College A and College B were implementing revenue supplementation strategies such as introduction of parallel and distance education and college

business ventures as shown in the graph. Renting college facilities was still in its infancy while fundraising by appealing to alumni and other donors were not being exploited.

Table 4.4.1 Revenue supplementation strategies-mean scores and standard deviations

Strategy	Mean	Standard Deviation
Parallel programs	4.48	.643
Distance education	4.41	.636
Entrepreneurship	3.70	.775
Renting facilities	2.93	.874
Fundraising –alumni	1.78	.751

Table 4.4.1 shows that the mean scores indicated that respondents agreed that parallel programmes, distance education and college business ventures were being employed by colleges in order to raise funds for the colleges. Mean score for raising funds by appealing to alumni indicates that this strategy was not being exploited at both colleges. Therefore, parallel programmes and distance education were the main ways in which the colleges were raising money as colleges' entrepreneurship activities and renting facilities were not significantly contributing to colleges' budgets.

4.4.3 Donor Funding

Under this subheading, what came out clearly was that there was no direct support from NGOs and other private entities.

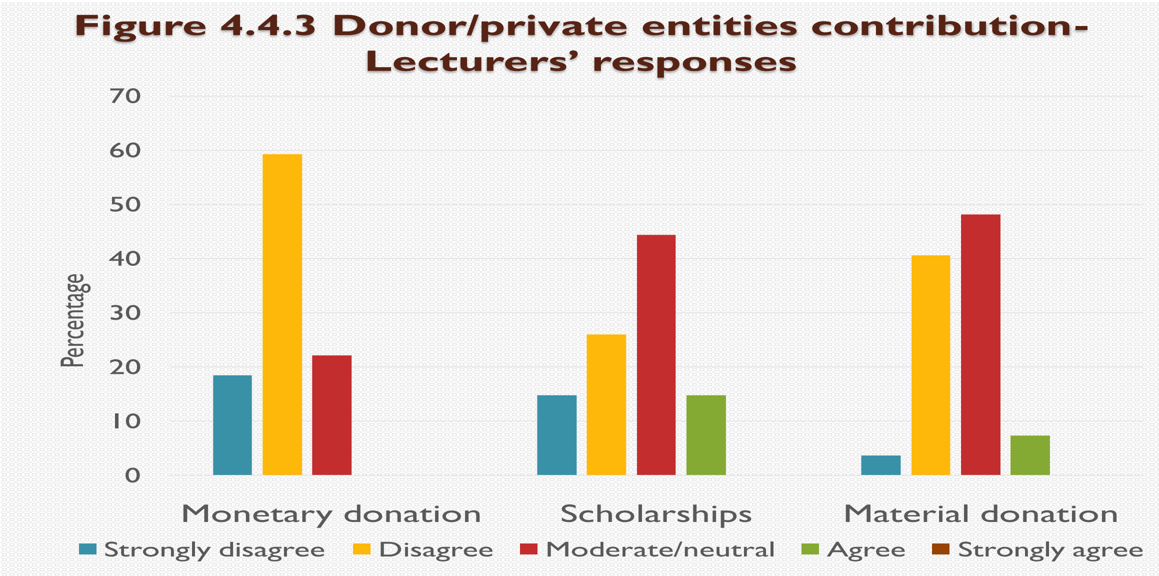


Figure 4.4.3illustrates that there was little to almost no direct assistance of the corporate world to the public colleges as shown in figure 4.4.3 and on the table 4.4.2.

Table 4.4.2 Donor/private entities' contribution-mean scores and standard deviations

	Mean score	Standard deviation
Monetary donations	2.04	.649
Scholarships	2.59	.932
Material donations	2.59	.694

On **table 4.4.2,** the mean score shows that there were no monetary donations by NGOs and other donors to the colleges. Further, most respondents were indifferent about scholarships and material donation. Among the eleven respondents that were interviewed only two stated that there were some students that were being sponsored by private entities otherwise most of them stated that there was no direct assistance as such private companies were only seen coming on board during graduation ceremonies where they just offered presents to the graduating students. At College B, one of the head of department stated the following;

> VVOB had donated 5 small computers for the e-granary project some time back and also ZICTA had donated 30 computers 2 years ago and these are computers that students are using in the library; some companies also come in during graduation ceremonies to provide awards to deserving students (11/11/2015).

On the contrary, most respondents had not seen such assistance from NGOs and other donors in a long time hence one of the principals had this to say;

> '...In terms of sponsorship, FAWEZA and CAMFED used to sponsor but they have not renewed their sponsorship otherwise at the moment there is none. It's like most organisations have stopped sponsoring students at tertiary institutions; they actually do a lot of sponsorship in secondary schools nowadays (11/11/2015).

4.4.4 Making Cost-sharing sustainable at public colleges

Under this subheading, measures which could make cost-sharing sustainable at the two colleges were considered.

Figure 4.4.4 Cost-sharing Measures-students responses

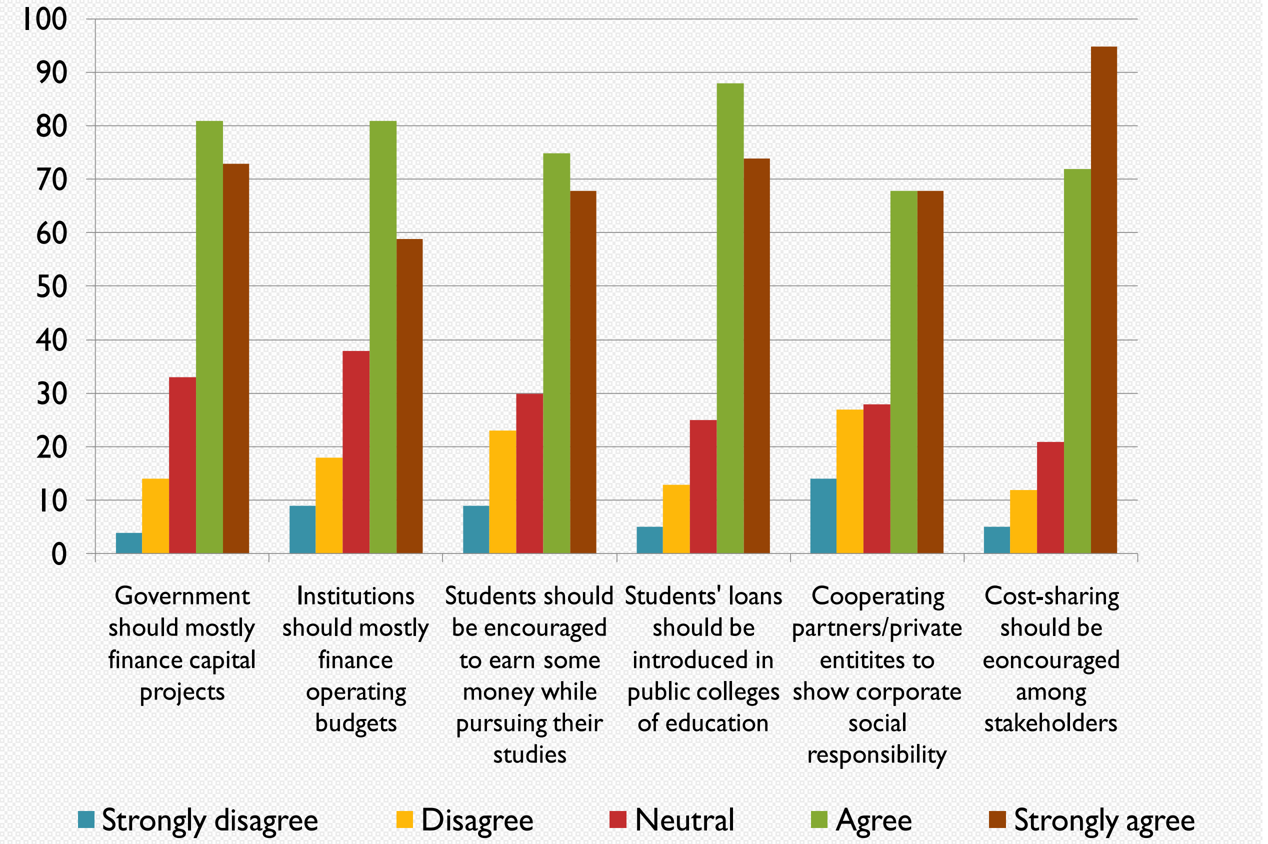


Figure 4.4.4 illustrates that students were in support of all the tenets of cost-sharing going by their level of agreement on the 5-point Likert scale. One head of department stated the following;

> There is need that management should take a consultative approach where top management should always work in conjunction with middle management in decision making because it provides for checks and balances rather than a situation where an institution is a one man's show...subordinates and committees should work independently without interference from top management; management should only be consulted when necessary (11/11/2015).

In addition, most members of staff held similar views and stressed the need for attitude change amongst various stakeholders if cost-sharing had to be sustainable. For example, it was stated by most respondents that government should construct more lecture rooms, hostels and staff houses in order to increase tertiary education capacity and accessibility. The study also revealed that there was need to encourage students to work in order to raise money. Most respondents also stressed the need to educate the community on the need for them to be responsible for the government institutions that operated in their community because tertiary education does not only accrue personal benefits but also social benefits.

4.5 Chapter Summary

This chapter presented the results of the study of Cost-sharing as mechanism used to bring about financial vibrancy in tertiary institutions in Zambia. The results have been presented in line with the four study questions. The key findings of the study indicated that user fees contributed more to institutional budgets ranging from 45% to 88% than government grants ranging from 12% to 46%. On students' affordability, 70.73% of student and 63% of lecturer respondents indicated that user fees were not affordable for the majority of students at the two colleges. The study further established that 59% of the students' respondents had faced difficulties in paying user fees promptly and 81.5% had similar challenges in financing for their living expenses. Poor socio-economic status especially at low income levels were major constraints on students' affordability. On Cost-sharing, the study indicated that the funding mechanism at the two public colleges was not sustainable since user fees were the major source of income. It was further established that the two colleges raised funds mainly through parallel and distance education programmes to supplement government grants and user fees. Chapter five will present the discussion of the findings.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.0 Overview

The previous chapter presented the results of the study. The present chapter discusses the findings presented in chapter four by marrying hem to the reviewed literature and the theory used. The major findings are discussed under four (4) sub-headings derived from the study questions.

5.1 The extent to which user fees contributed to institutional budgets

The extent to which user fees contributed to institutional budgets indicated that user fees contributed more to institutional budgets than other sources of funds which were mainly government grants. User fees' contribution to the college's budget ranged from 45% in 2010 to as high as 88% in 2013 at **College A**. Meanwhile, at **College B** user fees' contribution to institutional budget ranged from 63% in 2015 to 79% in 2010 and 2013. On the other hand, government grants' contribution to college's budget ranged from 12% in 2013 to 46% in 2012 at **College A** while at **College B** government grants contribution towards college's budget ranged from 21% in 2010 and 2013 to 37% in 2015.This meant that user fees made up the bulk of funds that public colleges received and expensed. The obvious implications were that students were overburdened with fee payments making it very difficult for them to finance for living expenses that came along with college education such as food, clothing and other living costs. Moreover, the subsidy (government grants) that colleges received tended to benefit students in terms of subsidized fees but it did not lower the actual cost of education that included books, food, transport and most importantly personal expenses associated with college life. In this case, affording college education was a challenge to students.

According to the literature reviewed the extent to which user fees contributed to institutional budgets were similar to those unveiled by Tembo (2014). The study by Tembo (2014) revealed that user fees contributed up to 83% and 50% to Chipata College budgets for 2012 and 2013 respectively. The findings of the study by Tembo (2014) are similar to the findings of the study under investigation in that the contribution of user fees to colleges' budgets ranged from 45% in 2010 to as high as 88% in 2013. Although government grants make up the bulk of funds that are allocated and spent on education, the challenge has been that most of it is spent on personal emoluments as shown by the ever-increasing allocation of government funds to personnel emoluments. For example, 58% of the government funds were spent on personal emoluments in 2009 while 68% were spent on the same in 2015 and it was projected that 84% of the 2016 budgetary allocations to education would be spent on personal emoluments (MOE, 2009; 2015; 2016).

In addition, a study by Chihombori (2013) revealed that 40% of Zimbabwe's public university's income comes from government implying that the remainder - 60% comes from students' fees and other income generating activities undertaken by public universities. The findings of the study by Chihombori (2013) are also in line with those of the current study since his findings pointed to the fact that more funds were raised at public university from other sources other than government funds.

Despite the general increases in the government grants allocated to public colleges, the study revealed that there was no well-defined funding mechanism used to allocate government funds to public colleges in Zambia. According to information collected, budgetary practices have remained largely traditional. Thus, public colleges' operating budgets have been largely traditional in that the government use previous year budgets as a baseline and make incremental changes based on general considerations such as government revenues, number of students and political priorities without necessarily considering the magnitude of the institutional financial needs. These findings are contrary to what Some (2010) revealed about the use of funding formula for internal allocation of the government subvention in Tanzanian public universities.

In supporting the theory used for this study, the findings of the study under objective number one are backed by the theory. The theory suggests that there is need to supplement diminishing tax funds earmarked for higher education through the use of marketing strategies which includes user fees, entrepreneurships, staff consultancy, and research/project's dissemination among others. The theory also takes higher education to be a private good that must be purchased by the consumer who is the student. Based on these assumptions of the theory, it can be safely stated that non-governmental funds that included user fees and income generated from distance and parallel programs made up the bulk of funds received and expensed by the colleges as opposed to government grants hence blending with the Neo-Liberal ideologies that support marketing strategies and the need for consumer to purchase higher education. Therefore, objective number one has been fully achieved as discussed under this section.

5.2 Contributions from government and other sources of funds to institutional budgets

The study revealed that government grants only contributed to as low as 23% in 2010, 46% in 2012 and barely a 12% in 2013 for College A. For the years that followed 2014 and 2015, government funds only contributed up to 20% and 25% respectively for College A. In 2010, College A received NIF III fund which accounted up to 32% of the college's budget. Meanwhile, government funds for **College B** were at 21% in 2010 and in 2012 it stood at 35% and 21% in 2013. For the 2 years that followed (2014 and 2015), government grants stood at 28% and 37% respectively. There was no other source of fund that was received by **College B** for the years that were considered in this study.

In relation to the literature, the findings of the current study are contrary to what Magara (2009) found out in developed countries in that government funding were the bulk of institutional budgets. Thus, the study revealed that in China 81.8% of public HEIs revenue came from government grants; in Australia, the funding from federal and state governments accounted for 49.1% whereas in New Zealand, government funding accounted for 51.1%. Meanwhile Singapore universities were receiving about 90% of the operating budget in 1990 but after 1995 they received only 60% through government funding Magara (2009). In the United States of America, the public funds from federal, state and local governments accounted for 50.5% of total university finances. From the literature reviewed, it was clear that government grants in the developed countries were relatively higher than what was obtaining in the third-worlds as observed by studies done by Tembo (2014) in Zambia and Chihombori (2013) in Zimbabwe as well as this study.

The study also established that there were no direct donor contributions towards the two colleges. More specifically, there was no direct financial assistance from donors or other private entities. According to the information collected from the interviews, there were very few students that were being sponsored by NGOs as most of the NGOs that were initially sponsoring had stopped sponsoring students at the two colleges. Under material donations by NGOs, the findings show that respondents were indifferent. However, from the interviews, it was stated that VVOB and ZICTA had donated some computers to **College B** in 2013 but they had not received such assistance since then. It was also noted that in most cases, NGOs came in during graduation ceremonies to provide awards to deserving students. These findings are contrary to what Magara (2009) discovered at Makerere University where a number of donors from overseas and within Uganda funded Makerere University.

The theory used was appropriate for this objective since the theory acknowledges the issue diminishing tax funds towards higher/tertiary education. Therefore, tertiary institutions must market their institutions and their faculties through the services they offer in order to raise funds to supplement the ever-decreasing government funds.

5.3 Students' Affordability

From the information collected from various respondents, the study established that user fees were not affordable to the majority of college students at the two colleges. Thus, the study established that 70.73% (students) and 63% (lecturers) indicated that user fees were not affordable to students while 23.41% (students) and 33.3% (lecturers) stated that user fees were affordable and the rest of the respondents were indifferent about the matter. While some students could afford to pay user fees promptly, there were a considerable number of students that struggled to raise funds for them to pay fees. The study also established that while some students struggled to raise funds to pay user fees, most students had serious challenges in financing for their living expenses hence compromising on students' welfare. The study further established that 59% of the students' respondents had faced difficulties in paying user fees promptly and 81.5% had similar problems in financing for their livings expenses while 41% and 18.5% did not face challenges in paying fees and financing for living expenses respectively. These findings although similar to Oketch (2003), they are however different in that Oketch (2003) did not show us the extent to which students were impacted by user fees or indeed Cost-sharing as a whole. However, Oketch (2003) clearly indicated that higher education affordability had remained a challenge for most of the Sub-Saharan African region. However, Oketch (2003) was optimistic that opportunities existed in which we could afford the unaffordable.

Furthermore, the study established that there were socio-economic factors that hindered students from affording college education and these included families of low income level, low education background, rural background, being orphaned and single-parented, and the females. Although different on some factors, the findings of this study were also in line with those of Long and Riley (2007) that revealed three major barriers to college access and success and these were issues relating to cost and financial aid systems. The findings are similar to those of Long and Riley (2007) in that the issue of cost was very close to the findings of the current study in that tertiary education at the two colleges was established to be unaffordable due to the cost.

The findings of the study were also similar to those unveiled by Morely (2012) who propounded that there were several challenges to higher education accessibility. Morley (2010) stated that apart from low participation rates, access to higher education was highly inequitable as it was skewed towards the males, richer families and urban households (Morely, 2012). Thus, three important determinants of inequity were noted and these were gender, socio-economic status, and region. This implies that these factors act as barriers to some prospectus students as well as prospective students from accessing and affording college education. For example, women students often have higher dropout rates than men due to the cultural emphasis on family obligations, which is often in conflict with their desire to pursue advanced studies (Morely, 2012).

Additionally, Morely (2012) further found out that in Ghana and Tanzania students from low socio-economic backgrounds were under-represented in higher institutions in virtually all disciplines. What is even more worrying was the fact that most governments implore funding mechanisms that exacerbate such inequities by providing free higher education to the 'best' students who consistently come from the wealthiest households (Pillay, 2009) who inevitably had access to the best secondary schools. The implication was that students from poor socio-economic status faced enormous barriers in their quest to access higher education in general and to those that were able to access it had challenges of affording it. Information obtained from the literature reviewed and from the current study sufficiently stressed that students' affordability was often dependent on one's socio-economic status. Unfortunately, for Zambia, the lack of financial aid to students at public colleges exacerbate the situation since the bursary scheme was discriminatory against students in other tertiary institutions as its potential beneficiaries are only some of those admitted at the UNZA and CBU (Mukanga:2013).

The study established that in order to make college education affordable to the disadvantaged populations, students were allowed to pay user fees in instalments and in-kind (in form of farm produce such as maize). College scholarship/bursary was limited to very few students and funds were not enough to cater for the needs of the students hence its contribution was not very significant. Tuition waiving was not in existence at the two colleges. The findings of this study were contrary to what Tilghman (2007) unveiled about Princeton that dedicated itself to making college affordability one of its foremost priorities (Tilghman, 2007). Thus, Princeton provided financial aid (grants) to meet full financial need in order to help the needy access higher education. The no-loan policy was also implemented to educate more students and to ensure that no student was discouraged from attending college for a lack of funds (Tilghman, 2007). This study is also contrary to what Ghuman and Singh (2013) revealed about affordable higher education at Baba Aya Singh Riarki College in rural India. Ghuman and Sigh (2013) revealed that the college was catering to the higher education needs of rural girls who otherwise might not have dreamt of attaining higher education (Ghuman and Singh, 2013).

The findings of this study supported the Neo-Liberal ideology in that Neo-Liberal ideologies are concerned with the needs of both the poor and the rich with the hope that systems would be efficient and accountable as the market would play a central role (Gillies, 2010; World Bank, 1994). Therefore, if the market forces are left to determine the demand and supply of higher education, HEIs and higher education systems would be efficient and accountable hence the needs of the underprivileged would be catered for. To this end, objective number three was achieved as respondents particularly the students that were affected by the cost-sharing strategy indicated that user fees were not affordable and that the situation was compounded by the need to finance for their living expenses against the lack of financial aid.

5.4 Cost-sharing

The study established that the current funding mechanism at the two public colleges under investigation were not sustainable in that what was obtaining at the colleges was not desirable. The challenge was that user fees were the major source of income for the years that were considered in this study. The obvious implications were that Cost-sharing heavily encroached on students' welfare thereby making them vulnerable while colleges were strained due to limited funds. The study established that colleges mainly depended on funds raised from user fees since government funding was inadequate and erratic, and this situation posed a serious challenge of sustainable financing of the two colleges since user fees were realised on the basis of students' enrolments among other factors. These findings are similar to what Magara (2009) revealed about public higher education institutions in Uganda. Magara (2009) alluded to the fact that public institutions are allowed to generate more funds to supplement government and donor contributions through fees from students, profit/commercial activities, endowments and funding from alumni. However, Magara (2009) was quick to point out that such funds were realised on the basis of student enrolments or work performed, were subjected to agreed levels to be charged by stakeholders; affected by defaults payments and required expanded facilities such as human resources, infrastructure and equipment.

Furthermore, the study further revealed that not all the government grants that were allocated to the public colleges were disbursed to the colleges. What was obtaining in most cases was that the money stated on paper was not received by the colleges and it was common to find that by the end of the year only two-thirds of the amount that was initially allocated was received by the colleges. Moreover, government funds were usually received very late in that sometimes the first disbursement of funds could have been done around April for the academic year that commenced in January. These findings are similar to those unveiled by Tembo (2014) who indicated that government funds were always disbursed late to the college and they did not usually meet institutional budgets hence affecting planning and executing of college activities.

The study further established that very few students were involved in income generating activities to cushion their sponsors' burden. Mainly these income generating activities took the form of petty trading, doing some piece works within the college such as working in the library, garden, and the poultry and also outside the college as security guards, cashiers, shop-keepers as well as tutoring the secondary school pupils. The findings of this study have been supported by the study done by CMEC (2007) where it was established that part time jobs helped to compensate for decreasing aid and rising tuition. Therefore, increasing student employment may fill the gap left by insufficient alternative sources of funding, as the case for the United States (CMEC, 2007). However, anecdotal evidence points to the conclusion that part time jobs (merely piece works) available in third world countries like Zambia leaves much to be desired as money realised from such activities did not contribute much to the needs of the students. On the other hand, developed countries have economies with abundant part-time employment opportunities that students can take advantage of and help offset the rising costs of postsecondary education (Johnstone, 2006).

In addition, other scholars also had similar findings regarding students' coping strategies. Some (2010) discovered that several students were in a situation of dire poverty and they ended up engaging in parallel activities such as petty trading, private tutoring to meet their share of the costs. The findings of the study are also similar to those of Mweemba (2003) who revealed that students were involved in various income generating activities in order to cope up with the cost-sharing program at the University of Zambia. The coping strategies included saving from the student allowance, part time jobs, business ventures, seeking assistance and borrowing from various sources. Others included hiring/renting out study rooms, prostitution, fighting for 100% bursary and tuition waive, and writing assignments for other students at a fee. Despite the similarities, certain strategies such as saving from meal student allowances, hiring study rooms, fighting for 100% bursary were not applicable to the current study as students in the this study did not have such privileges.

It was also further established that the two colleges under this study mainly raised funds through parallel and distance education programmes in order to supplement government grants and fees collected from regular students. From the information collected, parallel and distance education programmes were the main ways through which the two colleges raised funds for their operating budgets as well as other projects such as hostel construction. These findings although different in some respects, they are consistent with previous studies that were done by other researchers in Zambia and elsewhere. The literature reviewed showed some outsourcing of funds by higher learning institutions and these ranged from placing charges on photocopying, transcripts production, cafeteria, among others (Some, 2010). In addition, the practice of user charges has also seen the light of the day as well as the development of technical training and distance education (Some, 2010, Johnstone, 2009). Similarly, a study conducted by Masaiti (2015) on revenue diversification revealed that the three public universities; University of Zambia, Copperbelt University and Mulungushi University are involved in sourcing other funds other than government funds. Revenue diversification initiatives that include tuition fees and revenue income generating activities had in a small way increased the amount of disposable incomes of UNZA and CBU public universities thereby enabling them meet part of the ever escalating budgetary deficits in these institutions (Masaiti, 2015).

On the contrary, some of the findings are different from those by Some (2010) who pointed out that institutions are raising funds by setting up companies solely owned by the higher learning institution such as DUP Ltd and UCC Ltd at University of Dar es Salam. The ultimate goal was to see these companies offer subsidized services to USDM in a sustainable way by generating income through their commercial activities (Some, 2010). Furthermore, Some (2010) noted that other strategies used by public universities included the implementation of new management and financial reforms, diversification of sources of funds, the introduction of a formula for internal allocation of the government funding, the rationalisation of services, and staff retrenchment (Some, 2010). Additionally, Some (2010) stated that HEIs have flourished in accessing other sources of funding such as Makerere University. Makerere University has been using a broad-based management style and bold administrative, academic and financial reforms have been very beneficial to the university making it the pantheon of the best higher education centres in Africa. Thus, Makerere University had successfully diversified its revenues sources and shifted the burden of education from excessively government provision to parents, students, business and partners in cooperation (Some, 2010). However, such opportunities did not exist at the two colleges since these colleges did not operate as autonomous bodies like Makerere University.

Finally, the study established that cost-sharing can be made sustainable if various stakeholders come on board to bail out higher education systems. Specifically, colleges can be made sustainable if the following tenets of Cost-sharing are in effect: Government should mainly finance capital projects and salaries whereas colleges should finance operating budgets and staff allowances. Students' loans should be introduced and students must also try to find ways of raising money for their education cost, and finally private entities must be challenged to show social responsibility in the community they operate from. These findings are in line with the findings of Mwelwa (2014) who stressed the need for students' loan as a viable Cost-sharing measure in promoting equitable access to higher education and maintenance of financial sustainability. The idea behind students' loans is that they would increase disposable income that is much needed by universities and other higher learning institutions. Therefore, the need for students' loans at public colleges of education is inevitable in order to bring about the much needed financial sustainability at the public colleges.

The findings of this study are also similar to those unveiled by Masaiti and Shen (2013) who stressed the need for government to finance mostly capital projects and that universities should finance mostly operating budgets and personal emoluments. Although the study by Masaiti and Shen (2013) is similar to the current one, there is a difference in that this study stressed the need for government to finance mostly capital projects and salaries whereas institutions should finance operating budgets and other allowances that may be due to members of staff.

In supporting the theory that has been used for this study; the Neo-Liberal Ideology, it can be argued that as a result of diminishing tax funds towards HE, public colleges are compelled to adopt marketing strategies to generate income in order to supplement the diminishing tax funds earmarked for higher education. In this case, the two colleges were involved in revenue supplementation strategies such as distance education and parallel programmes as well as other income generating activities such as running the tuck shop, poultry and piggery farming. Although these measures were not adequate to bail out the institutions, they had in a substantial way increased disposable incomes that were needed to run the institutions. It is hoped that if colleges could be involved in more rewarding marketing strategies such as faculty and institutional entrepreneurships, financial sustainability can be achieved at the two colleges

Therefore, objective three has been answered because respondents provided their views on how financing of colleges could be made sustainable in the era of cost-sharing. The study has also revealed what various stakeholders had done to make higher education affordable in the face of financial sustainability. The study established that various stakeholders must take keen interest in public affairs particularly issues to do with financing of HEIs. Moreover, public colleges can be made sustainable if the main stakeholders; government, students and colleges meet their obligations and expectations in the financing of these institutions.

5.5 Chapter Summary

This chapter has discussed the major findings of the study. User fees were the main source of funds for the two colleges. Fees were not affordable to most students and the main barrier to students' affordability was income level. The study also pointed out that Cost-sharing could be sustainable if concerned stakeholders met their obligations. The next chapter will conclude and provide recommendations to the study. Chapter six will also give suggestions for further research.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.0 Overview

The preceding chapter discussed the major findings of the study in line with the four study questions. The present chapter will conclude and provide recommendations to the study on students' affordability in the era of Cost-sharing at two public colleges of education. Finally, based on the findings, the chapter will wrap up by making suggestions for further research.

6.1 Conclusion

In conclusion, the following were the major findings of the study:

The extent to which user fees contributed to institutional budgets indicated that students' (user) fees contributed more to institutional budgets than other sources of funds which was mainly government grants. User fees' contribution to the college's budget ranged from 45% in 2010 to as high as 88% in 2013.

Secondly, the study established that government funding was low in terms of its contribution to institutional budget at the two colleges. Moreover, government funds were erratic and inconstancy hence colleges did not depend on it. The study revealed that there was no well-defined government funding mechanism used to allocate tax funds to public colleges in Zambia. The study further revealed that not all government grants that were allocated and due to the two colleges were disbursed to the colleges for the years considered. The study also established that there was no direct donor contribution towards colleges' budget for the years that were considered. What came out clearly on this matter was that NGOs such as FAWEZA, YWCA that initially sponsored some students at the two colleges were no longer doing so.

The study established that user fees were not affordable to the majority of college students at the two colleges in that 70.73% (students) and 63% (lecturers) indicated that user fees were not affordable to students. The study also established that while some students struggled to raise funds to pay user fees, most students had serious challenges in financing for their living expenses. The study established that 59% of the students had faced difficulties in paying user fees promptly and 81.5% had similar problems in financing for their livings expenses. The study further established that there were socio-economic factors that hindered students from affording tertiary education and these included students from families of where there many dependents, low income level, low education background, rural background, orphaned and single-parented and to a lesser extent the females. However, low income level was the main hindrance. The study established that in order to make college education affordable to the disadvantaged populations, students were allowed to pay user fees in instalments and in-kind (in form of farm produce such as maize).

The study established that the current funding mechanism at the two public colleges under investigation were not sustainable in that user fees were the major source of income for the years that were considered. Thus, the two colleges mainly depended on funds raised from user fees since government funding was inadequate and erratic. The study further established that very few students were involved in income generating activities to cushion their sponsors' burden. It was also further established that the two colleges under this study mainly raised funds through parallel and distance education programmes in order to supplement government grants and fees collected from regular students. Finally, the study established that cost-sharing can be made sustainable if various stakeholders come on board to bail out higher education systems.

In conclusion, the contribution of user fees to colleges' budget was too high for the students to be able to afford college education. While some students were able to pay user fees promptly, most students were unable to adequately cater for their living expenses hence compromising their livelihood while attending college. Students' affordability continues to be a challenge for most students due to poor socio-economic particularly low income levels. Financial sustainability has been a challenge at public HEIs due to poor government funding policies. The challenge of students' affordability and financial austerity at the institutions has been compounded by the lack of financial aid to students in public colleges in Zambia. Therefore, affordability and financial sustainability can only be realised if there is a reform to the higher education financing framework that is backed by sustained political will coupled with sustainable resources.

6.2 Recommendations

Based on the findings of the study, the following recommendations have been proposed

i. Government should introduce a formula for allocation of government funding to public colleges of education. Such a formula should take into consideration pertinent factors such as per student cost (unit cost).

ii. Government's plan to replace the bursary scheme with students' loans at public universities should be extended to public colleges of education.
iii. Government should focus/prioritise public financing on capital projects such as infrastructure and aspects that promote access by the disadvantaged students. This implies that government should reduce expenditure on personnel emoluments (as observed from the 2015 and 2016 education sector budgets) and direct more resources to capital projects and equity concerns.
iv. Public colleges and their faculties should engage in more productive entrepreneurships such as large scale farming and consultancy respectively.

6.3 Suggestions for Further Research

Based on the outcome of this research, further research must focus on the following topic;

i. Examine government funding modalities towards Public Colleges of Education in Zambia.

REFERENCES

Anastasi, A and Urbina, S. (1997). *Psychological Testing*. Prentice-Hall Inc: Upper Saddle River.

Atuahene, F. (2006). "*A Policy Analysis of Financing of Tertiary Education Institutions in Ghana: An Assessment of the Objectives and the Impact of the Ghana Education Trust Fund*". PhD dissertation presented to the faculty of the College of Education of Ohio University.

Boit, M. (2012).*Equity Implications of Financing Students in Higher Education through a Student Loan Scheme: The case of Kenya Higher Education Loans Board*. International Journal of Current Research, Vol.4 (3), 247-251.

Bryman, A. (2008). Social Research Methods. Oxford: Oxford University Press.

Chihombori, D. (2013).*Cost-Sharing in Higher Education Financing in Zimbabwe, 1957-2009*. Unpublished Master's Thesis; University of the Western Cape.

Choy, S P; Ali M. B; and Dennis, C (2003). How families of low- and middle-income undergraduates pay for college: Full-time dependent students in 1999–2000. (http://nces.ed.gov/pubs2003/2003162.pdf)

CMEC, (2007).*Literature Review of Postsecondary Education Affordability in Canada*. Tandem Social Research Consulting: Toronto.

Creswell, J.W. (2008).*Mapping the Field of Mixed Methods Research*. Journal of Mixed Methods Research, Vol.3, 95–108.

Creswell, J. W., Plano Clark, V. L., Gutmann, M., & Hanson, W. (2003).*Advanced mixed methods research designs*. In A. Tashakkori& C. Teddlie (Eds.), Handbook of mixed methods in social and behavioral research (pp. 209–240). Thousand Oaks, CA: Sage.

Creswell J and Plano Clark V. (2007).*Designing and Conducting Mixed Methods Research*. Thousand Oaks CA: Sage.

Creswell, J. W., & Plano Clark, V. L. (2011).*Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Denzin, N. K. and Lincoln, Y. S. (eds). (2000). *Handbook of Qualitative Research* (2nd ed.). Sage Publications: London.

DE Bloom, M Hartley, and H Rosovsky. (2006).*"Beyond Private Gain: The Public Benefits of Higher Education"***.** In James J. F. Forest and Philip G. Altbach, eds., International Handbook of Higher Education**.**

De Vaus, D. (2001).*Research Design in Social Research*. London: Sage Publications.

Driscoll, E. (2013).*Higher Education: A Perspective of Administration, Access, Affordability and the Policy that drives it*. An unpublished Master's essay of Liberal Studies Degree, Kent State University.

Ghuman, R. S and Singh, I. (2013).*Providing affordable higher education to rural girls in Indian Punjab: A case study of Baba Aya Singh Riarki College*. In Annals of the University of Petroşani, Economics, 13(2), 2013, 61-84.

Gillies, J. (2010).*The power of persistence: Education system reform and Aid Effectiveness*. EQUIP 2: 99-111.

Government of the Republic of Zambia, (2013).*Revised Sixth National Development Plan 2013-2016*. Lusaka: MOFNP.

Gurgand, M; Lorenceau, J.S.A and Melonio, T. (2011).*Student Loans: Liquidity Constraints and Higher Education in South Africa*. Agence Française de Dévelopement Working Paper No. 117. Retrieved on 19/12/15 from SSRN: http://ssrn.com/abstract=1969424.

Johnstone, D. B.(2003). "*Cost-Sharing in Higher Education: Tuition, Financial Assistance, and Accessibility in a Comparative Perspective*", Czech Sociological Review. 39, 3: 351-374.

Johnstone, D. B.(2006). "*Financing Higher Education: Cost-sharing in International Perspective*". In Altbach, P.G. (ed.) Global Perspectives on Higher Education. Boston: College Centre for International Higher Education.

Jonstone, D.B. (2008).*Financing Higher Education: Some Special features of Formerly Socialist Europe*. Buffalo: University at Buffalo Center for Comparative and Global Studies in Education Project.

Johnstone, D. B. (2009).*Worldwide Trends in Financing Higher Education*. In Knight, J. (ed). (2009) Financing Access and Equity in Higher Education: Global Perspectives on Higher Education. Taipei: Sense Publishers, 1-8.

Kasonde-Ngandu, S. (2013).*Writing a Research Proposal in Educational Research*. Lusaka: UNZA Press.

Kelly, M.J. (1991).*Education in a Declining Economy: The Case of Zambia, 1975-1985*. Washington, DC: World Bank.

Kombo, D.K and Tromp, D.L.A. (2006).*Proposal and Thesis Writing: An Introduction*. Nairobi: Paulines Publications Africa.

Leedy, P. D. and Ormrod, J. E. (1989).*Practical Research: Planning and Design* (7thed.). Merrill Prentice Hall: New Jersey.

Levidow, L. (2001).*Marketizing Higher Education: Neo-liberal Strategies and Counter Strategies*. Education and Social Justice, 3, 2: 12-24.

Long, B. T and and Riley, E. (2007).*Financial Aid: A Broken Bridge to College Access?* Harvard Educational Review, Vol. 77, 1.

Macnee, C and McCabe. (2008).*Understanding Nursing Research; Reading and Using Research in Evidence-Based Practice*. Philadelphia: Uppincott Williams and Wilkins.

Magara, E. (2009).*Financing a Public University: Strategic Directions for Makerere University in Uganda,* in Journal of Higher Education in Africa. Vol. 7, 3.

Masaiti, G and Shen, H. (2013).*Cost-Sharing in Zambia's Public Universities: Prospects and Challenges*. European Journal of Educational Research, Vol.2, 1.

Masaiti, G. (2015).*Effectiveness and Viability of Revenue Diversification in Sub-Saharan Africa's Higher Education: Examining Zambia's Public Universities*. In International Journal of Humanities Social Sciences and Education (IJHSSE) Vol. 2, 5.

Ministry of Education, (1989).*New Policy Measures for the Financing of Higher Education*. Lusaka: Ministry of Education.

Ministry of Education, (1996).*Educating Our Future*: National Policy on Education. Lusaka: Zambia Education Publishing House.

Ministry of Education, (2009).*Annual Work Plan and Budget*. Lusaka: Ministry of Education Sector Plan.

Morely, L. (2012).*Widening participation in higher education in Ghana and Tanzania*. International Higher Education, 67 (Spring), pp 21-23.

Mukanga, C. (2013).*Funding Higher Education in Zambia: Zambia Economist*. Retrieved on 04/09/2015 from http://www.zambia_economist.com

Mulamfu, J. (1998).*Empirical Evaluation of Financing University Education in Zambia*. Unpublished Master's Dissertation, University of Zambia, Lusaka.

Mweemba, D. (2003).*The Coping Strategies of the University of Zambia Students with Cost-Sharing in Financing Higher Education*. Unpublished Master's Dissertation, University of Zambia, Lusaka

Mwelwa, K. (2014).*Implementation of the Student Loans Scheme as a Viable Cost-Sharing Measure in promoting equitable access to Higher Education in Zambia: Perspectives of selected stakeholders in the education sector*. Unpublished Master's Dissertation, University of Zambia, Lusaka.

Oketch, O. M. (2003).*Affording the Unaffordable: Cost Sharing in Higher Education in Sub-Saharan Africa*. In Peabody Journal of Education. Vol. 78, 3: 88-106.

Sambili, H. (2000). "*Characteristics of Quantitative Research Methodology*", Egerton University Journal of Humanities, Social Sciences and Education Series, Vol. 3, 1: 157-165.

SARUA, (2012).*Financing Higher Education in Southern Africa: A guide to Public Universities-Zambia*. Retrieved on 11/11/2015 fromhttp://www.sarua.org/files/Handbook/SARUA%20Handbook_Zambia.

Sicherman, C. (2008).*Makerere's Myths, Makerere's History: A Retrospect*, JHEAR/RESA. Vol. 6,1: 11-39.

Some, T. H. (2010).*In search of Sources other than Governmental in the Financing of Higher Education in Sub-Saharan Africa: A word of Caution Beyond the Gains*, Journal of Higher Education in Africa. Vol. 8, 1.

Tembo, P. (2014).*Financial and Administrative Investment: Examining Sources, Institutional Budgets and Outcomes*. Unpublished Master's Dissertation. University of Zambia.

Tilghman, S, M. (2007).*Expanding Equal Opportunities: The Princeton Experience with Financial Aid*. Harvard Educational Review, Vol. 77, 4.

USAID, (2014). African Higher Education: Opportunities for Transformative Change for Sustainable Development. Washington DC: Knowledge Center on Higher Education for African Development

Wellen, R. (2005).*The University Student in a Reflexive Society: Consequences of Consumerism and Competition*. Higher Education Perspectives, 2(1), 24-36.

Whitworthy, A. (2013).*Explaining Zambian Poverty: A History of (non-agriculture) Economic Policy since Independence*. Zambian Voice: Lusaka.

Woodhall, M. (2004). Student Loans: Potential, Problems and Lessons from International Experience. JHEA/RESA Vol.2, 37-51.

World Bank, (1994).*Development in Practice: Higher Education - The Lessons of Experience*.

World Bank, (2010).*Financing Higher Education in Africa*. Washington D.C: World Bank.

Yamane, T (1967). Statistics, An Introductory Analysis, 2nd Ed., New York: Harper and Row.

APPENDICES

Appendix A: Consent Form

THE UNIVERSITY OF ZAMBIA

DIRECTORATE OF RESEARCH AND GRADUATE STUDIES

Dear interviewee,

I am a post-graduate student at the University of Zambia, School of Education under Education and Development Programme. I am conducting a research on Cost-sharing and Students' Affordability at Selected Public Colleges of Education as part of my studies. The purpose of this study is to examine stakeholders' (students, lecturers, accounts officers and college principal) experience on Cost-sharing in tertiary institutions. Specifically, the study aims at assessing the extent to which sources of funds contribute to institutional budget, establish if students' can afford the current user fees and to ascertain how colleges of education can be made sustainable in the era of Cost-sharing. You have been purposively selected to voluntarily take part in this study as one of the key informants by means of this interview. The information supplied will be considered confidential and used purely for academic purposes. You reserve the right to accept or refuse to participate in this study. You may terminate your participation in this study at any time without having to give an explanation. Your identity as a participant will be kept confidential as per legal requirement. If you are willing to participate in the interview, kindly write down your details on the spaces provided below.

....

Betty Zulu (Student/Researcher)

(+260 977 169 225).

Voluntary Consent

I………...of..........…………..

voluntarily consent to be interviewed by the said Betty Zulu. I understand the purpose of the study as explained to me. I also understand that I have the right to end the interview at any time and choose not to answer particular questions that are asked during the interview. I further understand that the information I will give will be used purely for academic purposes.

Interviewee's Signature:………................…………...Consent Date: …………………………..

Appendix B: Interview Guide for College Principal

Interviewee's Details

Name of institution: …………………………………………………………………………

Gender: ……………………………………………………………………………………

Position held: ………………………………………………………………………………..

Questions

1. How long have you been on this position at this college?
2. In brief, tell us about your institution; yearly enrolments and total number of students for the past five years.
3. What are the sources of funds for your institution?
4. To what extent do these sources of funds contribute to institutional budgets?
5. How much do students pay per term?
6. How affordable are the user fees at this institution?
7. Are there students at this institution that have difficulties in paying user fees?
8. Are there students at this institution that have challenges of financing for living expenses (food, transport, and clothing)?
9. What strategies have students at this institution used to make college education affordable and its financing sustainable?
10. What contributions has this institution provided in order to make college education affordable and its financing sustainable?
11. What contributions have other stakeholders (donors/cooperating partners) provided to make college education affordable and its financing sustainable?
12. What do you think should be done by various stakeholders in order to make tertiary education affordable and its financing sustainable at this institution and in Zambia?

Appendix C: Interview Guide for Accounts Officer

<u>Interviewee's Details</u>

Name of institution: ………………………………………………………………………
Gender: ………………………………………………………………………………….
Position held: ……………………………………………………………………………..

Questions

1. How long have you been on this position at this college?
2. What are the sources of funds for your institution? Kindly explain in percentage form with regards to their contribution to institutional budget.
3. How much do students pay per term?
4. How affordable are the user fees at this institution?
5. Are there students at this institution that have difficulties in paying user fees?
6. Are there students at this institution that have challenges of financing for living expenses (food, transport, and clothing)?
7. What strategies have students at this institution used to make college education affordable and its financing sustainable?
8. What contributions has this institution provided in order to make college education affordable and its financing sustainable?
9. What contributions have other stakeholders (donors/cooperating partners) provided to make college education affordable and its financing sustainable?
10. What do you think should be done by various stakeholders in order to make tertiary education affordable and its financing sustainable at this institution and in Zambia?

Appendix D: Interview Guide for Head of Department/Section

<u>Interviewee's Details</u>

Name of institution: …………………………………………………………………………
Gender: ………………………………………………………………………………………
Name of Department: ………………………………………………………………………..

Questions

1. How long have you been on this position at this college?
2. What are the main sources of funds for this college?
3. To what extent do these sources of funds contribute to institutional budgets?
4. How much do students pay per term?
5. How affordable are the user fees at this institution?
6. Are there students at this institution that have difficulties in paying user fees?
7. Are there students at this institution that have challenges of financing for living expenses (food, transport, and clothing)?
8. What strategies have students at this institution used to make college education affordable and its financing sustainable?
9. What contributions has this institution provided in order to make college education affordable and its financing sustainable?
10. What contributions have other stakeholders (donors/cooperating partners) provided to make college education affordable and its financing sustainable?
11. What do you think should be done by various stakeholders in order to make tertiary education affordable and its financing sustainable at this institution and in Zambia?

Appendix E: Questionnaire for Lecturers

THE UNIVERSITY OF ZAMBIA

DIRECTORATE OF RESEARCH AND GRADUATE STUDIES

I am a master's student at the University of Zambia, School of Education under the programme called Education and Development. I am conducting a research on Cost-sharing and Students' Affordability at Selected Public Colleges of Education as part of my studies. The purpose of this study is to examine stakeholders' (students, lecturers, accounts officers and college principal) experience on Cost-sharing in tertiary institutions. You have been randomly selected to take part in this study voluntarily by means of this questionnaire. The questionnaire has five (5) sections; **A**, **B, C, D** and **E**. You are requested to respond to all sections and questions of this questionnaire as truthfully as possible. Indicate your responses as instructed. The information supplied will be considered confidential and used **only** for academic purposes.

You reserve the right to accept or refuse to participate in this study. You may terminate your participation in this study at any time without having to give an explanation. Please do not indicate your name or contact details on the questionnaire. Your identity as a participant will be kept confidential as far as the law allows. To declare your willingness to freely take part in this study, sign and indicate name of college below.

Your participation is deeply appreciated.

Yours sincerely,

…………..

Betty Zulu (Student/Researcher)

(+260 977 169 225)

I…………………………..of ....do hereby declare that I have voluntarily accepted to provide responses to the questionnaire administered to me by the said Betty Zulu. I understand the purpose of the study as explained to me. I also understand that I can withdraw from the study at any time without having to give any prior notice and that participation in this study is purely voluntary. I further understand that the information I give will be used for purely academic purposes.

SECTION A: Social Demographic Characteristics

Instruction: Kindly tick [√] or indicate your appropriate response (s) in the spaces (…) provided.

1. Gender: i. Male [] ii. Female [ ]
2. Marital Status: i. Single [ ] ii. Married [ ] iii Divorced [ ] iv. Widowed [ ]
3. Teaching course and section/department..
4. Name of college where you are currently working i. College A [ ] ii. College B [ ]
5. Indicate length of service with the college..

SECTION B: Students' Affordability

6. Do you think student fees are affordable **for all students** at this institution? i. Yes [ ] ii. No [ ] iii. Not sure [ ]

Which group of students do you think have problems with paying fees? Below is a list of some of the disadvantaged populations. On a scale of 1 to 5, where 1=strongly disagree (**SD**), 2=disagree (**D**), 3= neutral (**N**), 4=agree (**A**) and 5= strongly agree (**SA**), indicate your level of agreement against each factor concerning students at this college.

Some Disadvantaged populations		**SD**	**D**	**N**	**A**	**SA**
		1	2	3	4	5
7	Rural					
8	Income level					
9	Females					
10	Males					
11	Minority tribe (ethnic grouping)					
12	Orphans and other vulnerable children					
13	Single-parented					
14	Parent/guardian/spouse of low education background					

15	Physically challenged/disabled					

SECTION C: Ways used by students to raise money. Tick those you have seen/witnessed by students at this college.

On a scale of 1 to 5, where 1=strongly disagree (**SD**), 2=disagree (**D**), 3= neutral (**N**), 4=agree (**A**) and 5= strongly agree (**SA**), how would you rate the following students' income generating activities concerning this college.

Ways used to raise money by students		SD	D	N	A	SA	Item Description such as type of job or business e. t. c
		1	**2**	**3**	**4**	**5**	
16	Part-time jobs within the college						
17	Part-time jobs outside the college						
18	Writing assignments for other students at a fee						
19	Borrowing money (state where they borrow e.g. bank, friends, relatives)						
20	Seeking financial help (e.g from relatives, friends)						
21	Engaged in business						

SECTION D: Ways in which other stakeholders have contributed towards making college education affordable and its financing sustainable at this college.

On a scale of 1 to 5, where 1=strongly disagree (**SD**), 2=disagree (**D**), 3= neutral (**N**), 4=agree (**A**) and 5= strongly agree (**SA**), how would you rate the following concerning your college.

	Stakeholders' Contributions	SD	D	N	A	SA
	Description	**1**	**2**	**3**	**4**	**5**
	AFFORDABILITY MEASURES BY THE COLLEGE					
22	Efficient (good) use of college money and assets					
23	Paying user fees in instalments					
24	Offering sponsorships to needy students by your college					
25	Tuition waiving (some vulnerable students allowed to learn without paying fees).					
	COST-CUTTING MEASURES					
26	Increasing class sizes and teaching loads					
27	Postponing maintenance of infrastructure such as buildings					
28	Hiring of part-time or temporary staff					
	REVENUE SUPPLEMENTATION STRATEGIES					
29	Introduction of parallel programmes					
30	Introduction of distance education					
31	College business activities such as farming, tuck shops					
32	Renting/hiring college hall, facilities to other institutions					
33	Fundraising through use of alumni (former students associations)					
	DONOR FUNDING					
34	Monetary donations by NGOs and other well-wishers					
35	Offering scholarships by NGOs and other well-wishers					
36	Material donations (e. g computers, books, paints etc) by NGOs and other well-wishers					

SECTION E: Making Cost-sharing sustainable at public colleges

On a scale of 1 to 5, where 1=strongly disagree (**SD**), 2=disagree (**D**), 3= neutral (**N**), 4=agree (**A**) and 5= strongly agree (**SA**), indicate your level of agreement concerning the following factors of Cost-sharing.

	Cost-Sharing Factors	**SD**	**D**	**N**	**A**	**SA**
	Description	**1**	**2**	**3**	**4**	**5**
37	Government should mostly finance capital projects and salaries					
38	Institutions should mostly finance operating budgets and allowances					
39	Students should be encouraged to earn money while pursuing their studies					
40	Students loans should be introduced in public colleges					
41	Private entities should show corporate social responsibility					
42	Cost-sharing should be encouraged among stakeholders					

Thank you very much and God Bless!

(Zikomo Kwambiri)

Appendix F: Questionnaire for Students

THE UNIVERSITY OF ZAMBIA

DIRECTORATE OF RESEARCH AND GRADUATE STUDIES

I am a Master's student at the University of Zambia, School of Education under the programme called Education and Development. I am conducting a research on Cost-sharing and Students' Affordability at Selected Public Colleges of Education as part of my studies. The purpose of this study is to examine stakeholders' (students, lecturers, accounts officers and college principal) experience on Cost-sharing in tertiary institutions. You have been randomly selected to take part in this study voluntarily by means of this questionnaire. The questionnaire has five (5) sections; ***A***, ***B***, ***C***, ***D*** and ***E***. Answer all questions and all questions. You are requested to respond to all questions as truthfully as possible. Indicate your responses as instructed. It should take no longer than 15 minutes of your time. The information given will be considered confidential and used **only** for academic purposes.

You reserve the right to accept or refuse to participate in this study. You may terminate your participation in this study at any time without having to give an explanation. Please do not indicate your name or contact details on the questionnaire. Your identity as a participant will be kept confidential as far as the law allows. To declare your willingness to freely take part in this study, sign and indicate name of your college below.

Your participation is deeply appreciated.

Yours sincerely,

…………..

Betty Zulu (Student/Researcher)

I…...........................of..do hereby declare that I have voluntarily accepted to provide responses to the questionnaire administered to me by the said Betty Zulu. I understand the purpose of the study as it has been explained to me. I also understand that I can withdraw from the study at any time without having to give any prior notice and that participation in this study is purely voluntary. I further understand that the information I give will be used for purely academic purposes.

SECTION A: Social Demographic Characteristics

Instruction: Kindly tick [√] or indicate your appropriate response (s) in the spaces (…) provided.

1. Gender i. Male [ ] ii. Female [ ]

2. Year of study i. 1st year [ ] ii. 2nd year [ ] iii. 3rd year [ ]

3. Indicate your age..

4. Name of college where you are currently studying. i. College A [ ] ii. College B [ ]

5. How much are your fees per term? ....

6. Who pays your college fees? i. Parents [ ] ii. Guardian [ ] iii. Spouse [ ] iv. NGO [ ] others (specify) ....

7. Highest education level attained by parents/guardian/spouse. i. Non [ ] ii. Literacy classes [ ] iii. Primary [ ] iv. Secondary [ ] v. College [ ] vi. University [ ]

8. Occupation/job of parents/guardian/spouse. Please specify ....

9. What is your parent/guardian/spouse's monthly income? i. Less than K 3,000 [ ]

ii. K 3,000 - K4, 000 [ ] iii. K 4,001- K 5,000[ ] iv. More than K 5000 [ ]

10. Indicate number of children and/or dependents of your parent/guardian/spouse..................

SECTION B: Student's Affordability

11. Do you think user fees are affordable **for all students** at this college?

i. Yes [ ] ii. No [ ] iii. Not sure [ ]

12. Have you ever had any problems in paying your fees? i. Yes [ ] ii. No [ ]
13. Have you ever had any problems of finances to cater for other expenses (such as text books, food, transport, hair do, clothing) since you started your program at this college? i. Yes [ ] ii. No [ ]

14. Which group of students do you think have problems with paying fees? Below is a list of some of the disadvantaged populations. On a scale of 1 to 5, where 1=strongly disagree (**SD**), 2=disagree (**D**), 3= neutral (**N**), 4=agree (**A**) and 5= strongly agree (**SA**), indicate your level of agreement against each factor concerning students at this college.

Some Disadvantaged Populations		**SD**	**D**	**N**	**A**	**SA**
		1	**2**	**3**	**4**	**5**
15	Rural					
16	Income level					
17	Females					
18	Males					
19	Minority tribe (ethnic grouping)					
20	Orphan					
21	Single parented					
22	Parent/guardian/spouse of low education background					
23	Physically challenged/disabled					

SECTION C: Ways used by students to raise money

What are some of the ways that students at this college have used to raise money? On a scale of 1 to 5, where 1=strongly disagree (**SD**), 2=disagree (**D**), 3= neutral (**N**), 4=agree (**A**) and 5= strongly agree (**SA**), indicate your level of agreement against each factor. Give details under ***'Item Description'*** and ***'Type of Company'*** if possible**.**

Ways used to raise money by students		**SD**	**D**	**N**	**A**	**SA**	**Item description or type of company or business etc.**
		1	**2**	**3**	**4**	**5**	
24	Part-time jobs within the college (state type of job)						

25	Part-time jobs outside the college (state type of job)						
26	Writing assignments for other students at a fee						
27	Borrowing money (state where you borrow e.g. bank, friend)						
28	Seeking financial help; state the source e.g from friends, relatives						
29	Doing business (state type of business)						

SECTION D: Ways in which the other stakeholders have contributed towards making college education affordable and its financing sustainable at this college.

On a scale of 1 to 5, where 1=strongly disagree (SD), 2=disagree (D), 3= neutral (N), 4=agree (A) and 5= strongly agree (SA), how would you rate the following concerning your college?

	Stakeholders' Contributions	**SD**	**D**	**N**	**A**	**SA**
	Description	**1**	**2**	**3**	**4**	**5**
	AFFORDABILITY MEASURES BY THE COLLEGE					
30	Efficient (good) use of college money and assets					
31	Paying user fees in instalments					
32	Offering sponsorships to needy students by your college					
33	Tuition waiving (some vulnerable students allowed to learn without paying fees).					
	COST-CUTTING MEASURES					
34	Increasing class sizes and teaching loads					

35	Postponing maintenance of infrastructure such as buildings					
36	Hiring of part-time or temporary staff					
	REVENUE SUPPLEMENTATION STRATEGIES					
37	Introduction of parallel programmes					
38	Introduction of distance education					
39	College business activities such as farming, tuck shops					
40	Renting/hiring college hall, facilities to other institutions					
41	Fundraising through use of alumni (former students associations)					
	DONOR FUNDING					
42	Monetary donations by NGOs and other well-wishers					
43	Offering scholarships by NGOs and other well-wishers					
44	Material donations (e. g computers, books, paints etc) by NGOs and other well-wishers					

SECTION E: Making Cost-sharing sustainable at public colleges

On a scale of 1 to 5, where 1=strongly disagree (**SD**), 2=disagree (**D**), 3= neutral (**N**), 4=agree (**A**) and 5= strongly agree (**SA**), indicate your level of agreement concerning the following factors of Cost-sharing.

	Cost-Sharing Factors	**SD**	**D**	**N**	**A**	**SA**
	Description	**1**	**2**	**3**	**4**	**5**
45	Government should mostly finance capital projects and salaries					
46	Institutions should mostly finance operating budgets and allowances					
47	Students should be encouraged to earn money while pursuing their					

	studies					
48	Students loans should be introduced in public colleges					
49	Private entities should show corporate social responsibility					
50	Cost-sharing should be encouraged among stakeholders					

Thank you very much and God Bless!

(Zikomo Kwambiri)

Appendix G: Document Analysis

THE UNIVERSITY OF ZAMBIA

DIRECTORATE OF RESEARCH AND GRADUATE STUDIES

Activity:

1. Researcher to collect information on college financial records for the period 2010 to 2014.
2. Financial records on sources of funds, source of funds as a percentage of its contribution to institutional budget/expenditure from January 2010 to December 2014.
3. Researcher to make reference to Annual Budgets (yellow books for the period 2010-2014.
4. Researcher to show trend analysis for the five-year period clearly indicating the extent to which sources of funds contributed to institutional budget.
5. Researcher to show trend analysis for the five-year period clearly indicating institutional budget deficit or surplus.
6. Researcher to carry out an observation tour around the colleges' premises such as the library, class rooms and general colleges' conditions.

Appendix H: Focus Group Discussion Questions for students

THE UNIVERSITY OF ZAMBIA

DIRECTORATE OF RESEARCH AND GRADUATE STUDIES

Details of Participants

Name of Institution: ....

Number of Participants: ....

Date: ....

Questions

1. How much do you pay per term?
2. How affordable are the fees at this college?
3. What are some of the ways in which students raise money to make college education more affordable at this college?
4. What do you think are some of the things that this college (management) has done to make college education more affordable to students?
5. What do you think are some of the contributions of government to this college?
6. What do you think are some of the contributions of other stakeholders such as N.G.Os, private companies to this college?
7. What do you think should be done in order to make college education more affordable to students at this college/in Zambia at large?

Appendix I: Interview Guide for Planning Officer

Interviewee's Details

Name of institution: …………………………………………………………………………

Gender: ……………………………………………………………………………………

Position held: ………………………………………………………………………………..

Questions

1. How long have you been on this position at this institution?
2. What are the criteria used to allocate government grants to Public Colleges of Education?
3. Are the government grants allocated to Public Colleges of Education intended to cater for both operational costs and capital projects?
4. Are the government grants allocated to Public Colleges of Education adequate to meet colleges' budgets?
5. What should the various stakeholders in the education sector do in order to enhance Cost-sharing in institutions of higher learning in Zambia?

Appendix J: Authorisation Letter - Ministry Of General Education

MOGE/101/9/4

17th December, 2015

The Provincial Education Officer
Copperbelt Province
NDOLA

RE: FIELD WORK FOR MASTERS / STUDENTS

My office is in receipt of a letter from Betty Zulu, computer number 514706881, who is a teacher at Moomba Secondary School and is a registered student at the University of Zambia, School of Education. Ms. Betty Zulu is taking a Masters programme in Education. The programme has a fieldwork component which she has to complete.

She has expressed interest to visit your institution to conduct research on the aspects of Cost Sharing. You are therefore urged to accord her the necessary support during her time of research.

Owen Mgemezulu
Director – Planning and Information
FOR/PERMANENT SECRETARY
MINISTRY OF GENERAL EDUCATION

Cc. The Principal, Mufulira College of Education, Mufulira
Cc. The Principal, Kitwe College of Education, Kitwe

Appendix K: Authorisation Letter from the College

Communications should be addressed to the Principal

Cell No: 0966903929/0979903929
0962342464/0977871407

Our reference : ....
Your reference : ....

REPUBLIC OF ZAMBIA

MINISTRY OF EDUCATION, SCIENCE, VOCATIONAL TRAINING AND EARLY EDUCATION

MUFULIRA COLLEGE OF EDUCATION
P.O BOX 40400
- MUFULIRA

9th November, 2015

Ms Zulu. B
University of Zambia,
Lusaka.

FIELD WORK FOR MASTERS PROGRAMME

The above captioned matter refers.

Reference is made to a minute from The assistant Dean (PG) school of education on a request for you to undertake your field work at Mufurila college of Education. I am pleased to inform you that permission has been granted to you to carry out your research effective 9th November, 2015.

D.Siampwizi

REGISTRAR

/nm

Appendix L: Ethical Clearance Certificate

THE UNIVERSITY OF ZAMBIA

DIRECTORATE OF RESEARCH AND GRADUATE STUDIES

Telephone: +260 -1- 290258/291777 Ext. 2208
Fax: +260-1-290258/253952
E-mail drgs@unza.zm

P O Box 32379
Lusaka, Zambia

25th February, 2016

Ms. Betty Zulu
C/o University of Zambia
Department of Religious Studies
P.O Box 32379
LUSAKA

Dear Ms. Zulu,

RE: EXEMPTION FROM FULL ETHICAL CLEARANCE

With reference to your research proposal entitled:

"Cost-sharing in Higher Education: Examining students' ability to pay for education and stakeholders' contribution at Kitwe and Mufulira Colleges of Education."

As your research project does not contain any ethical concerns, you are hereby given an exemption from full clearance to proceed with your research.

ACTION:	**APPROVED**
DECISION:	**25th February, 2016**
EXPIRATION DATE:	**24th February, 2017**

Please note that you are expected to submit to the Secretariat a Progress Report and a copy of the full report on completion of the project.

Finally, and more importantly, take note that notwithstanding ethical clearance given by the HSSREC, you must also obtain authority from the Permanent Secretary of the appropriate Ministry before conducting your research.

Yours sincerely,

Prof. C. M. Namafe
ACTING CHAIRPERSON
HUMANITIES AND SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE

cc: Director, Directorate of Research and Graduate Studies
Assistant Registrar (Research), Directorate of Research and Graduate Studies