

**SELECTED FACTORS INFLUENCING PRINCIPALS' MANAGEMENT OF  
INCOME GENERATING ACTIVITIES IN PUBLIC SECONDARY SCHOOLS  
OF MUMIAS DISTRICT, KENYA**

**BY**

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**DECLARATION**

**DECLARATION BY CANDIDATE**

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**DEDICATION**

This work is dedicated to my parents, Betty and Jamin Lunani and all my family members for their support and encouragement during the course of the research.

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## ABSTRACT

The purpose of this study was to investigate the selected factors influencing principals' management of income generating activities in public secondary schools of Mumias District. The specific objectives of the study were to find out the types of Income Generating Activities that are being implemented in public secondary schools of Mumias District, to determine the contribution of teachers in the management of income generating activities in public secondary schools of Mumias District, to find out the challenges faced by Principals in managing income generating activities in public secondary schools of Mumias District, to determine the contribution of income generating activities in financing of public secondary schools and lastly to explore possible solutions to the challenges faced by principals in managing income generating activities in public secondary schools. The study was anchored on the Cost Benefit Analysis as the broader theoretical framework to achieve its objectives. It adopted a descriptive survey research design since the results are to be generalized over a large population. The study targeted all the 33 registered public secondary schools in the District. The sample size consisted of 11 secondary schools. Stratified random sampling was used in dividing the schools as per the administrative divisions and later the simple random sampling technique was used in determining the schools to be used in determining the schools to be used in the study. Once the schools had been identified, all the principals in the sampled schools were purposively selected for the study since they are the finance managers of the schools. The simple random sampling technique was used to get 13 teachers from each school that was visited. The study used of questionnaires, interviews and document analysis as data collection instruments. Document analysis as a method of data collection was used to verify some of the information given in the questionnaires. Experts from the education department of Moi University were consulted to ascertain the validity of the questionnaires and interview schedule tools. The Pearson Product moment correlation coefficient for reliability of the questionnaires was calculated and found to be 0.7. Basic descriptive statistics such as frequency tables and percentages were used to present the data and findings. The study found out that the major income generating activities that are practiced in the district are crop farming and dairy farming. The key challenges that face principals in the management of income generating activities include land limitation, inadequate capital and maintenance funds, lack of entrepreneurial skills, poor record keeping and principals' negative attitude. The study has practical implications for teachers, school administrators ,parents and education officials. Auditing of school records should be enhanced .Consequently business and entrepreneurship courses should be integrated in teacher training curriculum. Schools should adopt modern farming methods to enhance productivity. In addition schools should look for innovative ways of reducing operating costs, by for example involving students in agricultural activities .Income generating activities should be included in the schools' strategic plans and students and teachers who help in the management of the income generating activities should be given some form of motivation so as to increase their output.

**TABLE OF CONTENTS**

<a href="#"><u>DECLARATION</u></a>	.....
<a href="#"><u>DEDICATION</u></a>	.....
<a href="#"><u>ACKNOWLEDGMENT</u></a>	.....
<a href="#"><u>ABSTRACT</u></a>	.....
<a href="#"><u>TABLE OF CONTENTS</u></a>	.....
<a href="#"><u>LIST OF TABLES</u></a>	.....
<a href="#"><u>LIST OF FIGURES</u></a>	.....
<a href="#"><u>LIST OF ABBREVIATIONS AND ACRONYMS</u></a>	.....
<b><a href="#"><u>CHAPTER ONE</u></a></b>	.....
<a href="#"><u>1.0 Overview</u></a>	.....
<a href="#"><u>1.1 Background to the study</u></a>	.....
<a href="#"><u>1.2 Statement of the problem</u></a>	.....
<a href="#"><u>1.3 Purpose of the study</u></a>	.....
<a href="#"><u>1.4 Objectives of the study</u></a>	.....
<a href="#"><u>1.5 Research Questions</u></a>	.....
<a href="#"><u>1.6 Assumptions of the study</u></a>	.....
<a href="#"><u>1.7 Significance of the study</u></a>	.....
<a href="#"><u>1.8 Justification of the study</u></a>	.....
<a href="#"><u>1.9 Limitations of the study</u></a>	.....
<a href="#"><u>1.10 The scope of the study</u></a>	.....
<a href="#"><u>1.11 Theoretical framework</u></a>	.....
<a href="#"><u>1.12 Conceptual framework</u></a>	.....
<a href="#"><u>1.13 Operational definition of key terms</u></a>	.....
<b><a href="#"><u>CHAPTER TWO</u></a></b>	.....

## **LITERATURE REVIEW** .....

- 2.1 Introduction.....
- 2.2 Economic and social justification for investment in secondary education.....
- 2.3 Alternative ways of financing schools in other countries of the world.....
- 2.4 Financing of secondary education in Kenya.....
- 2.5 School based investments as a way of financing secondary education in Kenya.....
- 2.6 Challenges faced by secondary school principals in Kenya.....
- 2.7 Summary of the Chapter.....

## **CHAPTER THREE**.....

### **RESEARCH DESIGN AND METHODOLOGY** .....

- 3.1 Introduction.....
- 3.2 Research Design .....
- 3.3 Area of study.....
- 3.4 Target Population.....
- 3.5 Sample and Sampling Procedure .....
- 3.6 Instruments of Data Collection.....
- 3.6.1 Questionnaires for principals and teachers.....
- 3.6.2 Interview Schedule for the District Education Officer.....
- 3.7 Validity and Reliability of the Research Instruments.....
- 3.7.1 Validity of the data collection instruments.....
- 3.7.2 Reliability of the data collection instruments .....
- 3.8 Data Collection Procedure.....
- 3.9 Data Analysis and Presentation .....
- 3.10 Ethical Considerations.....

## **CHAPTER FOUR** .....

## **DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION....**

<a href="#"><u>4.1 Introduction</u></a> .....	
<a href="#"><u>4.2 Return rate</u></a> .....	
<a href="#"><u>4.3 Demographic characteristics of the respondents</u></a> .....	
<a href="#"><u>4.3.1 Gender of the respondents</u></a> .....	
<a href="#"><u>4.3.2:Age of the respondents</u></a> .....	
<a href="#"><u>4.3.3: Work experience</u></a> .....	
<a href="#"><u>4.4 Types of income generating activities</u></a> .....	
<a href="#"><u>4.4.1 Bus hire</u></a> .....	
<a href="#"><u>4.4.2 Crop farming</u></a> .....	
<a href="#"><u>4.4.3 Poultry keeping</u></a> .....	
<a href="#"><u>4.4.4 Dairy farming</u></a> .....	
<a href="#"><u>4.4.5 School canteens</u></a> .....	
<a href="#"><u>4.4.6 Facilities hire</u></a> .....	
<a href="#"><u>4.5 Contribution of teachers to income generating activities</u></a> .....	
<a href="#"><u>4.5.2 Organising students to participate in income generating activities</u></a> .....	
<a href="#"><u>4.5.3 Training students and staff on suitable income generating activities</u></a> .....	
<a href="#"><u>4.5.4 Actively participating in the income generating activities</u></a> .....	
<a href="#"><u>4.5.5 Coming up with suitable income generating ideas</u></a> .....	
<a href="#"><u>4.6 Challenges faced by principals in the management of the income generating activities</u></a> .....	
<a href="#"><u>4.6.1 Land limitation</u></a> .....	
<a href="#"><u>4.6.2 Unsupportive staff</u></a> .....	
<a href="#"><u>4.6.3 Inadequate funding</u></a> .....	
<a href="#"><u>4.6.4 Lack of skilled manpower</u></a> .....	

<a href="#">4.6.5 Record keeping</a>	.....
<a href="#">4.6.6 High maintenance costs</a>	.....
<a href="#">4.6.7 Unsupportive Boards of Governors</a>	.....
<a href="#">4.6.7 Unsupportive parents</a>	.....
<a href="#">4.6.8 Principals' negative attitude</a>	.....
<a href="#">4.7: Contribution of Income Generating Activities to the financing of secondary education</a>	.....
<a href="#">4.8: Solutions to the challenges faced by principals in managing income generating activities</a>	.....
<a href="#">4.8.1: In service courses</a>	.....
<a href="#">4.8.2 Better crop and animal breeds</a>	.....
<a href="#">4.8.3: Co-operative societies</a>	.....
<a href="#">4.8.4: Teacher and student involvement in the income generating activities</a>	.....
<a href="#">4.8.5: Business strategic plans</a>	.....
<a href="#">4.8.6: Auditing of records</a>	.....
<b><a href="#">CHAPTER FIVE</a></b>	.....
<b><a href="#">SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS</a></b>	.....
<a href="#">5.0 Introduction</a>	.....
<a href="#">5.1 Summary</a>	.....
<a href="#">5.2 Conclusion</a>	.....
<a href="#">5.3 Recommendations</a>	.....
<a href="#">5.4 Suggestions for further research</a>	.....
<b><a href="#">REFERENCES</a></b>	.....
<a href="#">APPENDIX I: INFORMED CONSENT LETTER</a>	.....
<a href="#">APPENDIX 2: TIME SCHEDULE</a>	.....
<a href="#">APPENDIX 3: BUDGET</a>	.....
<a href="#">APPENDIX 4: PRINCIPALS' QUESTIONNAIRE</a>	.....

[APPENDIX 5: QUESTIONNAIRE FOR TEACHERS](#).....

[APPENDIX 6: EDUCATION OFFICER'S INTERVIEW SCHEDULE](#).....

## LIST OF TABLES

<u>Table 1.1: Role of education stakeholders in Kenya</u> .....	
<u>Table 1.2: Public and household financing ratios, 2003/4</u> .....	
<u>Table 2: Number of secondary schools in Kenya</u> .....	
<u>Table 2.1: Gross Enrolment Rates (percent) at Secondary school by gender 2000-2006</u> .....	
<u>Table 3.1: sample population characteristics</u> .....	
<u>Table 4.1 Demographic characteristics of respondents as indicated by principals (n=11), teachers (n=138) and the D.E.O (n=1)</u> .....	
<u>Table 4.2 shows the frequency of income generating activities in public secondary schools of Mumias district as per the responses of the participants</u> .....	
<u>Table 4.2: Income generating activities in schools</u> .....	
<u>Table 4.3: Teacher contributions to income generating activities</u> .....	
<u>Table 4.4: Challenges of managing Income Generating Activities as indicated by principals (n=11)</u> 79	
<u>Table 4.5: Average Annual Income from Income Generating Activities for the period 2010 to 2012</u> .....	
<u>Table 4.6: solutions to the challenges faced by principals in managing income generating activities as indicated by principals (n=11) and teachers (n=143)</u> .....	

## LIST OF FIGURES

<a href="#"><u>Figure 1.0: Conceptual framework showing the factors that influence principals' management of income generating activities</u></a> .....	
<a href="#"><u>Figure 4.1 :Teacher contributions to income generating activities</u></a> .....	
<a href="#"><u>Figure 4.2 Challenges faced by principals as reported by teacher respondents</u></a> .....	



**LIST OF ABBREVIATIONS AND ACRONYMS**

GER	-	Gross Enrolment Rates
IGA	-	Income Generating Activities
MOE	-	Ministry of Education
NGO	-	Non-Governmental Organization
ROK	-	Republic Of Kenya
SPSS	-	Statistical Package for Social Sciences Program
TSC	-	Teachers' Service Commission
UNESCO	-	United Nations Education Science and Cultural Organization

## **CHAPTER ONE**

### **INTRODUCTION TO THE STUDY**

#### **1.0 Overview**

This chapter contains background of the study, statement of the problem, purpose of the study, research objectives, research questions, assumptions of the study, significance of the study, justification of the study, limitations, theoretical framework, conceptual framework and operational definitions of the central terms.

#### **1.1 Background to the study**

In 1963, when Kenya attained independence, the then ruling party Kenya African Union (KANU) came up with the KANU manifesto in which the government committed itself to the provision of Universal Free Primary Education in tandem with the Addis Ababa conference of African Ministries held in 1960 (Sifuna,1990), as quoted by Chabari (2010). The conference had promised to offer Universal Primary Education within twenty years. In 1963, the government declared a fight against three enemies of development, ignorance, disease and poverty. In light of this, the government adopted a policy of universal primary education.

The first commission, after independence came up with the report of the Kenya Education Commission (Republic of Kenya, 1964) that sought to reform the education system inherited by the colonial government to make it more responsive to the needs of independent Kenya (Chabari, 2010). The Commission proposed an education system that would foster national unity and the creation of sufficient human capital for national development.

The report of the National committee on educational objectives and policies (Republic of Kenya, 1976) focused on redefining Kenya's educational policies and economic, social and cultural aspirations of the Kenyan people. It resulted in Government support for "Harambee schools and also led to the establishment of the National Centre for Early Childhood Education (NACECE) at the Kenya Institute of Education (K.I.E).

During the 1960s and 1970s there was a rapid expansion in Secondary school education, largely in response to the high demand in secondary education following increased enrolment in primary schools (Omukoba, 2011). Student enrolment in Primary and Secondary schools increased from 90,000 and 30,000 in 1963, to 7.4 million and 926,149 in 2004, respectively (Republic of Kenya, 2006). The number of primary and secondary schools also increased from 6058 and 150 in 1963 to about 9713 and 4111 in 2004, respectively.

The report of the presidential working party on education and manpower training for the next decade and beyond (Republic of Kenya, 1988) focused on improving education financing quality and relevance. This was at a time when the government scheme for the provision of instructional materials through the national textbook scheme was inefficient and therefore adversely affected the quality of teaching and learning (Rotich, 2004). From the recommendations of the working party in 1988, the government produced Sessional Paper No. 6 on Education and Training for the next decade and beyond.

This led to the policy of cost sharing between the government, parents and communities. This cost sharing policy in the provision of social services, including education was

consistent with the structural adjustment programmes introduced in the 1980 (KIPPRA, 2006). The cost sharing policy required that parents and communities meet the costs of key non-salary inputs like tuition, textbooks and uniforms.

The main aim of cost sharing was to reduce the education cost burden on the government while ensuring cost effectiveness in the utilization of educational facilities, equipment, materials and personnel, with a view to maintaining the growth, quality and relevance of education and training (KIPPRA, 2006). Thus, the government and other stakeholders have been having specific financing responsibilities as dictated by the cost sharing policy as listed in the table below.

**Table 1.1: Role of education stakeholders in Kenya**

No	Government responsibility	Responsibilities for government partners
1.	Provision of grants for specialized equipment (for service and practical subjects) in marginalized secondary schools.	Provision and maintenance of facilities, equipment and instructional materials in public and private secondary schools.
2.	Professional support; curriculum development, teacher education, inspection and public examinations.	Fees for public examinations.
3.	Administration and management and bursary and scholarships for needy students.	Catering and accommodation in boarding schools and post-school institutions.
4.	Teacher remuneration in public institutions	School amenities (transport, water, energy and communication) and student personal expenses.
5.	In-service training (e.g strengthening of Mathematics and Science subjects, SMASSE)	Remuneration of school/college, non-teaching staff and temporary teachers.

**Source: Government of Kenya, 2005d**

On average, household funding of secondary education takes 60%, while government financing of institutions takes 40% percent of the aggregate secondary financing as shown in the table below.

**Table 1.2: Public and household financing ratios, 2003/4**

Sub-sector	Public Schools		Private schools	
	Government %	Household %	Government %	Household %
<b>ECDE</b>	5	95	0	100
<b>Primary</b>	80	20	0	100
<b>Secondary</b>	40	60	0	100
<b>TIVET</b>	25	75	0	100
<b>University</b>	92	8	0	100

**Source: Government of Kenya, 2005d**

To a large extent, the implementation of the cost sharing policy at secondary school level gives a leeway for schools to charge higher fees compared to the fees guidelines provided by the Ministry of Education, Science and Technology. Thus, secondary education has continued to increase the cost burden to households despite the levels of public funding (KIPPRA, 2006).

Trends in educational development in Kenya point to the need for competence of management at the school level (Omukoba, 2011). This is due to the increased student enrolment at the individual schools and structural changes that impose new strategies. First, there has been a move by the government to abolish the categorization of schools into high cost and low cost. According to the Sessional Paper No. 6 of 1988 (Republic of Kenya, 1988), schools were to be either public or private. Further, the government adopted a policy of expansion of existing secondary schools.

By this policy, the single stream schools were required to increase their capacities to at least a minimum of three streams. This was seen as a cost effective way of increasing enrolment.

In the cost sharing policy, apart from shifting the responsibility of acquiring resources to the local communities and schools, the government emphasized that resources need to be acquired and put to the best use in a judicious management process (Ojwang, 2011). As regards to this, the government (Republic of Kenya, 1988) says in part; ‘The government expects that various resources available to education including land, finances, teachers, time facilities and equipment are managed properly and utilized in the most cost effective manner to bring about efficient provision of quality and relevance in education’.

The Board of Management, school committees and managers of educational institutions should plan the most economic way off utilizing available institutional land (Omukoba, 2011). The World Bank (1990) emphasized sourcing of additional sources of financial support or reducing the unit cost through greater efficiency as the solution to the increasing demands of education on public finance at a time when government funds are stagnant or even declining in many developing countries.

The launch of Free Secondary Education (FSE) in 2008 was meant to address illiteracy, low quality education and low completion rates at the secondary level, high cost of education and poor community participation (Republic of Kenya, 2005).

Unlike the FPE initiative which had reference to enormous conventions, resolutions and literature, free secondary education initiative could have been triggered by the politically

charged climate that engulfed the country during the 2007 general election which implied that the country may not have been very prepared for its implementation.

However, there was government commitment to increase transition from Primary to secondary by seventy percent in all districts (Ohba, 2009).

According to the Free Secondary Education policy, the government was expected to meet the tuition fees of kshs. 10,265 per student, while the parents were required to meet other requirements like lunch, transport and boarding fees for those in boarding schools for those in boarding schools, besides development projects. This was in line with the government commitment to ensure that regional special needs and gender disparities were addressed (Ohba, 2009). These efforts were a positive move towards the realization of the millennium development goals (MDGs) and Education for All.

Based on the experience on the implementation of FPE, it would be expected that implementation of the Free Secondary Education was to be faced with a myriad problems. Research on FPE indicated that there were many challenges facing its implementation (Republic of Kenya, 2005). For example; UNESCO (2005) carried out an assessment of the Free Primary Education programme in 2005. The assessment found out that some of the major challenges facing free primary education initiative were increased student numbers, shortage of teachers, lack of clear guidelines on admission, lack of consultation with teachers and parents, delay in disbursement of funds by the government and expanded roles for head teachers.



It was however not clear about the challenges that were being faced in the implementation of free secondary education.

The Kenya government has recently come up with a move to control the burden of financing education on the parents by providing fees-guidelines (Omukoba , 2011). Principals have found it difficult to run schools with the limited amount that will be collected from school fees.

In response to this issue, most principals have tried to initiate appropriate institutional strategies such as income generating projects aimed at enhancing resource mobilization in order to run their schools effectively. In the financial year 2007/08, when the government introduced free secondary education, the national budgetary allocation to the program was between sh. 25 to sh. 39.7 billions. However, the figures were projected to rise to between sh. 28.3 billion and sh. 74.3 billion in 2011 (Republic of Kenya, 2008). This heavy commitment has contributed significantly to the government deficit and hence becoming a major constraint on the government efforts to stabilize the economy.

The rapid increase in enrolment in primary school due to the Free Primary Education program also affected secondary school enrolment (Ojwang, 2011). This high enrolment put a lot of pressure on the limited and already overstretched school facilities and resources for provision of quality education. However the income generating projects that have been initiated by school management boards as a means of enhancing the financing of education in order to supplement the government and parents' efforts have faced a

myriad of problems. Some of these bottle necks include inadequate capital and lack of entrepreneurial skill to manage them professionally.

Therefore it was necessary to carry out a study to establish the selected factors influencing secondary school principals' management of income generating projects in public secondary schools of Mumias District.

### **1.2 Statement of the problem**

While the Kenya government is committed to implementation of Free Primary Education and Free secondary education, there are financial deficits which undermine the full implementation of free secondary education (Ndolo , 2011).

In view of this, the government advised educational institutions to establish new sources of finance aimed at reducing the financing burden currently weighing down on the government. Several studies including Getange (2005) have shown that income generating activities contribute significantly in financing secondary education. However, many secondary schools in several parts of the country are still undergoing severe financial constraints. Therefore, the focus is on how effective is the contribution of the income generating activities in financing secondary school education .A study by Ndolo (2011) on the effects of school based investments on access and financing of secondary education in Homa Bay District showed that the contribution of the income generating activities in the financing of education was only 2.0%. It is therefore imperative that studies should be done to find out the bottlenecks that hinder the implementation of the

income generating activities. It is for this reason that this study aims at investigating the selected factors that influence the principals' management of the income generating activities of public secondary schools of Mumias District.

### **1.3 Purpose of the study**

Based on the problem stated, the purpose of this study is to establish the selected factors that influence principals' management of income generating activities in public secondary schools of Mumias District, Kakamega County.

### **1.4 Objectives of the study**

The specific objectives are:-

- i. To establish the types of income generating activities that are being implemented in public secondary schools of Mumias district.
- ii. Determine the contribution of teachers in the management of income generating activities in public secondary schools of Mumias district.
- iii. To find out the challenges faced by principals in managing income generating activities in public secondary schools of Mumias District.
- iv. To establish the contribution of income generating activities to the financing public secondary schools of Mumias district.
- v. Explore possible solutions to the challenges faced by principals in managing Income Generating Activities in public secondary schools.

### **1.5 Research Questions**

The study was guided by the following research questions:-

1. What are the types of income generating activities that are being implemented in public secondary schools of Mumias District?
2. What is the contribution of teachers in the management of income generating activities in public secondary schools of Mumias district?
3. What are the challenges faced by principals in managing income generating activities in public secondary schools of Mumias District?
4. What is the contribution of income generating activities to the financing of public secondary schools of Mumias district?
5. What are the possible solutions to the challenges faced by principals in managing income generating activities?

### **1.6 Assumptions of the study**

The study was carried out on the assumption that all respondents will be co-operative and provide reliable responses. Consequently, it was assumed that schools have income generating activities that help to reduce their financial deficits. It was also assumed that the data available may be appropriate for the study.

### **1.7 Significance of the study**

The study is of much significance in that it will help to provide educational planners and the government, information on income generating activities in the study district that can be used for future policy formulation. In addition, the findings of the study may help to establish the specific challenges faced by principals in managing income generating activities in the study district with a view of identifying possible solutions. The study also sought to look at ways of improving the capacity of principals in public secondary schools so that they can effectively deal with the challenges that they encounter while managing income generating activities.

### **1.8 Justification of the study**

Large scale demand side response to the abolition of primary fees is evidence that one of the main hurdles of education access is the cost burden to households for basic education. Income generating activities are intended to contribute to the financing of secondary school education. However, most studies have shown that many public secondary schools have not fully embraced these activities. In addition, it has also proved that the contribution of this IGAs does not compare favorably with other sources of school finance, for example parents' fees. Therefore, the question that arises is what are the constraints that hinder the effective implementation of IGAs in public secondary schools? This forms the basis of this study.

### **1.9 Limitations of the study**

The study limited itself to schools in only one district. However, the results will most likely show the picture of the other parts of the country. In addition, the subject of finance

is quite sensitive; hence there is a possibility of getting altered information which may interfere with the validity. However, many methods were employed in collecting data so as to verify the information provided by the respondents.

### **1.10 The scope of the study**

The study investigated the selected factors influencing principals' management of income generating activities in public secondary schools of Mumias district. In addition, the principals and teachers that were included in the sample were those in session in the respective institutions by the time of the study.

### **1.11 Theoretical framework**

This study is anchored on the concept of Cost Benefit Analysis (CBA) that dates back to an 1848 article by Jules Dupuit and was formalized in subsequent works by Alfred Marshall which was later extended by Boardman, N. E. (2006). Cost-benefit analysis is often used by governments and other organizations, such as private sector businesses, to evaluate the desirability of a given policy. It is an analysis of the expected balance of benefits and costs, including an account of foregone alternatives and the status quo. CBA helps predict whether the benefits of a policy outweigh its costs, and by how much relative to other alternatives (i.e. one can rank alternate policies in terms of the cost-benefit ratio). Generally, accurate cost-benefit analysis identifies choices that increase welfare from a utilitarian perspective. Assuming an accurate CBA, changing the status quo by implementing the alternative with the lowest cost-benefit ratio can improve Pareto efficiency.

An analyst using CBA should recognize that perfect evaluation of all present and future costs and benefits is difficult, and while CBA can offer a well-educated estimate of the best alternative, perfection in terms of economic efficiency and social welfare are not guaranteed.

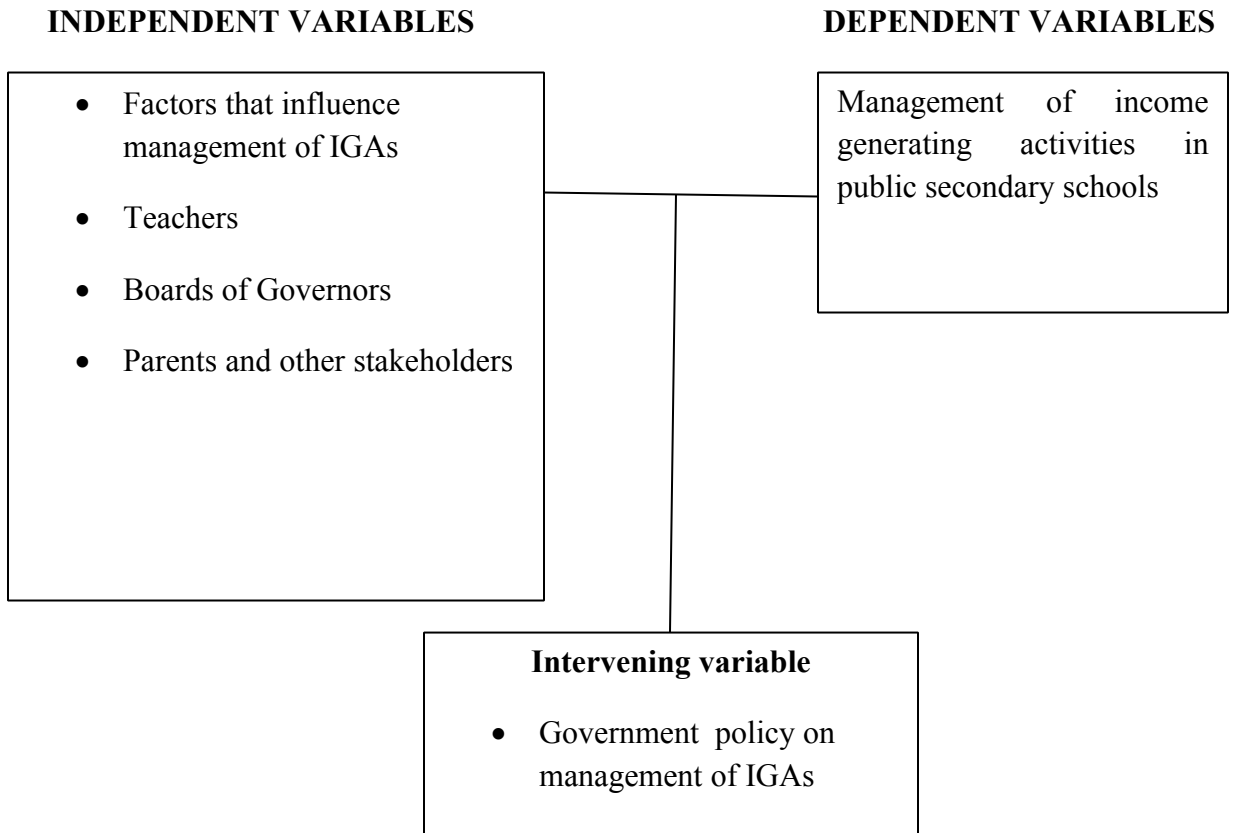
CBA usually tries to put all relevant costs and benefits on a common temporal footing using time value of money calculations. This is often done by converting the future expected streams of costs and benefits into a present value amount using a discount rate. All forms of investment involve a sacrifice of present consumption in order to secure benefits in the form of higher levels of output or income. The purpose of the analysis is to provide a measure of the expected yield of the investment as a guide to rational allocation of resources.

Most secondary school principals supplement their schools' income by engaging in income generating activities. Therefore they must be able to apply the economic tool of CBA so as to identify the most viable projects that have limited hurdles or challenges to be overcome.

### **1.12 Conceptual framework**

The study was based on the concept that income generating activities like any other business enterprise have inbuilt challenges that principals might encounter while managing them. See the figure 1.0 :

**Figure 1.0: Conceptual framework showing the factors that influence principals' management of income generating activities**



**Source, Author, 2013**

These include financial related challenges like limited land, lack of start up capital etc, we also have technical based challenges like lack of entrepreneurial training, lack of qualified personnel. Lastly, there also environmental related challenges that include inadequate support from relevant stakeholders like teachers, parents, B.O.G and subordinate staff.



In this conceptual framework, the independent variables are the factors that influence principals management of income generating activities .The dependent variable is the management of the income generating activities in public secondary schools. The intervening variable for this study is the government's policy on the management of IGAs.

### 1.13 Operational definition of key terms

**Challenges:** These are constraints that hinder the attainment of set goals or objectives. In this case, they are the constraints that hinder the implementation of the income generating activities.

**Income Generating Activities:** These are alternative sources of generating income for the educational institutions.

**Management:** Refers to the act of a principal engaging in planning, organizing, staffing, directing, controlling and budgeting in a school. It refers to a system of working with and through individual personnel and groups for the purpose of achieving the established goals of an organization.

**Perception:** An individual's personal view or opinion

**Principal:** Refers to the administrator of a school appointed by the Teachers Service Commission in accordance with Education Act Cap 211.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The purpose of this section is to provide the needed background information on the challenges faced by principals in managing income generating activities in public secondary schools. Further it is designed to help the researcher formulate a defensible thesis statement and substantiate his arguments in order to design a reliable and dependable research instrument. The review of literature for this study was derived from books, journals, newspapers, internet and other documents. Related studies were critically evaluated to provide rationale for this study, the finding and recommendation of the various studies formed the basis of the review.

The following are topics under which the literature was reviewed; economic and social justification for investment in secondary education, alternative ways of financing schools in other countries of the world, financing of Secondary Education in Kenya, school based investments as a way of financing secondary education in Kenya, challenges faced by secondary schools principals in Kenya and finally a summary of the chapter.

A feature of Kenya's formal education and training system since independence has been the rapid growth of enrolment at all levels resulting to high increase in education expenditure (Eshiwani 1993) as quoted by Njeri (2008). This has been mainly due to increasing demand for more education and training opportunities for fast growing population, the government's commitment to making education accessible to all

Kenyans, developmental needs of the country and the participation of the community, in providing educational facilities and infrastructure (ibid,1993).

As per a prediction by Coombs (1985) as quoted by Njeri (2008),the halcyon days are over for virtually all education systems in both industrially advanced and the developing nations. This is because education managers and their systems are caught up in a squeeze between rising unit costs and resisting budget ceilings. The education system therefore cannot continue to command a rapidly increasing share of available resources without producing serious stress and distortions in the whole society and economy.

Besides, secondary education is now emerging as the cornerstone of the transformation process of education. Given its ability to change lives for the better, it is apparent that for young people all over the world, primary education is no longer enough. They need secondary education to give them the technical ability and the academic and life skill to the most of their schooling and contribute to the societies (Fretwell, 2006).

Coombs (1985) as quoted by Njeri (2008), further asserts that claims of education on national resources encounter increasing competition from the claims of other important needs and areas such as agriculture, industry, infrastructure, health and others. This has forced education's share of national resources to stop growing though the demand for the same education has increased. This problem is compounded by the fact that educational costs per student tend to keep rising especially because of built-in cost escalators in teachers' salary structures (Republic of Kenya, 2005a).

The contexts and imperatives for education reform have changed considerably due to various factors, such as globalization of the world economy and the impact of new technologies. This new environment has necessitated rethinking the traditional way of providing secondary education and training.

Both industrialized and industrializing countries are grappling with how best to prepare their youth to become a productive work force as well as responsible citizens (Guden and Toby, 2001).

Such developments have huge resource implications that need urgent and sustainable intervention measures. On the other hand, globalization, the increased importance of knowledge as a driving force in economic development and the consequent skill biased nature of technological changes in the work place are putting additional pressure on national governments to modernize and revamp their secondary education systems in order to produce graduates who are well prepared for work and further learning. This is because; secondary education contributes to economic growth and formation of social capital (Fretwell, 2006). This development has led to some schools investing heavily in information communication and technology (ICT) programs while a vast majority is yet to embrace the current change due to resource constraints.

## **2.2 Economic and social justification for investment in secondary education**

Education is related to improve microeconomic performance in the form of higher levels of growth rate through the appreciated levels of productivity and per capital income at the

country level (UNESCO, 2005). However, Bray (2002) notes that the levels of education financing, both by public and private sector (including households) indicate a range of priorities. To a large extent, such financing priorities are based on the political, social and economic factors. Arguments on possible impact on education investment on economic growth and development are mainly based on social and economic returns of human capital development.

It is argued that there may be a vicious cycle of greater investment in education leading to higher economic growth, which in turns provides financial support for even greater investment in education as it happened in East Asia (Bray, 2002).

There may also be a vicious cycle in which inattention to education ensures that a country remains poor like in Latin America [US department of labour, 2000].

Mingat and Tan (1996) estimated the full social returns to education in various economies between 1960 and 1985. The study allowed for many externalities that normally accrue to the society, such as spillover effects of the workers' enhanced productivity and the general level of education of the work force. It concluded that education of the work force expands productivity by facilitating the discovery, adaptation and use of more economically rewarding processes. This study concurred with Brays (2002) study. The generalized recommendation from the two studies is that low – income countries tend to benefit more from primary education investment, while middle income countries, including those about to achieve universal primary education, tend to gain

highest social returns from expansion of secondary education. On the other hand, high-income countries derive highest returns from tertiary education.

This is however complicated by the weak labour structures in most low-income countries. Wei, Tsang and Chen (1999) as quoted by KIPPRA (2006) established that rates of return to education vary across countries and tend to be high in developed economies where secondary education has higher returns compared to primary education.

Bray (2002) advances the argument that the level of education requires public spending on the levels of education for which social returns exceed private returns for example; basic education and increased private spending on investments that yields higher private returns (higher and continuing education). The total social benefits of educating children equal the sum of the benefits that accrue individually to the children and the families plus benefits to society that arise from interaction with educated individuals.

The benefits to education have been shown as going directly from individual and the society. This includes such benefits as increased adult wages and income, increased participation in the political process, greater charity donations, reduced dependency on social support programmes, reduced criminal activity, increased savings, better health lower mortality rates and increased life expectancy. Bray (2002) also outlines other factors to be considered, including adopting sustainable cost-effective strategies that ensure strong linkage between formal education, their costs, labour market outcomes and international flexibility. Indeed, if secondary education is linked to labour market then

returns would be higher, hence justifying increased public financing of secondary education.

In Kenya, private returns to education generally increase with the level of education as revealed in Manda, Mwabu and Kimenyi (2002). Human capital externality for male and female students has a positive impact on earnings for all workers. This analysis gives strong justification for design of sustainable financing mechanisms for post-primary education particularly secondary education, which is a transitional level to tertiary and university education.

This study notes that the government should always be the principal investor in education. Such a role cannot be left entirely to the private sector because future objectives of human resource development involve long-term planning and large financial resources outlays which only the government is capable of mobilizing (KIPPRA, 2006).

### **2.3 Alternative ways of financing schools in other countries of the world**

In Britain's education system (Knight and Sabaot, 1990; Kiogora, 1990) as quoted by Njeri (2008) note that in addition to finances from the state, charitable organizations, parents, associations and teaching staff operated activities such as fairs, concerts and others.



Pupils contributed some fees for swimming sessions, use of school facilities and to watch matches. There were also commercially promoted schemes to raise funds by collecting labels and coupons. Knight also contends that few schools have experimented with large lotteries and that most schools have a draw from time to time. From such contributions, the schools managed to supplement their development by 10% to 20%. Knight and Sabaot (1990) thus give an insight on how schools can initiate projects which can supplement insufficient funds or revenue.

In Barrio High school of Philippines, production was made part of the broader curriculum and a mechanism through which pupils could pay their fees. There are similar projects in China ( Njeri, 2008).

Mahatma Gandhi's famous experiment in India showed that if children worked for 3 hours a day, a class of 30 pupils could raise enough money to pay for their teachers' salary and still have something over for contingencies. Though this is not practiced even in India, Nayar and Vermanis (1978) noted that small-scale operations are very wide spread and they do provide supplementary income. O'Donogue (1975) as cited by Njeri (2008), while studying the problems of financing the then educational systems contended that, it is important that a spirit of self reliance be developed and that pupils learn how to earn money to support their own education. Bennett estimated that by using these fund raising activities, 2.64% of total education expenditure in Thai was financed in 1980. He however argues that if there was total mobilization of pupils in schools, the revenue from such sources would be much larger.

For instance, in financing education in ancient India, (Misra, 1967; Kiogora, 1990) contend that it was part of the students' duty to go about begging for the teachers' salaries. This method was also prevalent in Kenya in the 1980s and 1990s where it was common to see students/pupils along the streets, in bars, hotels etc. begging for donations or selling raffle tickets to the members of the public. This system has however slowly fizzled out. The funds generated forthwith were used for school development projects. However, such sources are neither reliable nor sustainable and the running of schools cannot be pegged on them. Ozigi (1977) as cited by Njeri (2008) discusses the sources of revenue of schools in grants from state, school fees grants from philanthropic organizations on individuals and other school based sources.

The school based revenue sources included for instance, drama performance which denotes that they form an important supplementary source of revenue for schools. Kyalo (1999) in his study on identifying alternative ways of raising revenue in technical institutions found out that technical institutes had internal income generating units that they used to supplement their revenue. Among the units identified in his study were dairy farming, welding, joinery and carpentry among other activities. However, the study noted that there were various constraints that hampered the development of these ventures; for instance lack of capital and poor market for the yielded products.

Tan, Lee and Mingat (1984) in identifying probable sources of supplementary income to aid financing of University education in Nigeria came up with two main sources; the federal/state generated income and the university generated income. Of particular interest is the latter which he categorized into miscellaneous economic activities and endowments. They observed that the financial crisis at universities could be averted by exploiting several areas of economic activities that could help to generate extra income to supplement grants received.

Boit (1998) noted that public universities had undertaken income generating activities to broaden and diversify their financial base in order to supplement government funding. The same can be adopted by secondary schools to supplement the revenue raised through school fees. Nyaigotti (2004) observed that due to harsh economic situations witnessed in Kenya in the recent past, government support to universities had seen a steady decline, universities have therefore been forced to rethink their strategy and possibly look for extra sources of financing including establishing income generating activities.

For instance, Moi University has embraced IGAs by integrating them with the academic culture. Some of the popular IGAs are the privately sponsored student program; distance learning, production units, contract research, sponsored research, commercialization of the results of research and development, laboratory services, consultancy and university companies among others (Moi University holding limited, 2006).

Keith (1987) as cited by Njeri (2008) in his proposal for educational support in Ghana suggested that schools should be conducted under a variety of auspices including private enterprises operated for profit and non-profit institutions. This was seen as a way in which schools could generate enough funds and even make profit to enhance their learning activities.

Alternative sources of financing education are not a new development in education. As it is, countries have for a long time continued to experience a shortage of resources for education and as such have explored and ventured into their fields of income generation. Lilis and Bray (1988) while dealing with community financing of education in less developed countries assert that one of the bodies that can actively raise funds for the school is the pupils.

They contend that many schools raise money through their own production activities. They give an example of a school in Rwanda where the use of organic fertilizers on a small plot enabled eight and nine year old pupils to grow potatoes worth the equipment of US\$120 and used the profit (which was six fold what the school received from the government) for equipment.

Brown(1993) in a study on a case in Zimbabwe Tshalanyimba secondary school found that parents contributed to the construction of school classrooms, toilets, teachers' houses, providing building materials, molding bricks and paying builders.

They also participated in the meetings of the P.T.A and had income generating projects to raise money for the school. They kept poultry, rabbits and an orchard and used the proceeds to buy desks and other school equipments. Other projects included basketry and wood carving. Parents who could not afford to pay were expected to offer labour instead. Income Generating Activities and community development projects around the country were found to be developed and were encouraged.

Bray (1987) notes that schools economic activities may include running shops as observed in Nigeria, selling fuel, repairing tyre punctures, renting out school facilities to sports groups, adult education classes, meetings and many others. Secondary school expansion in Zimbabwe can be attributed to high level of policy and financial government commitment and prioritized expenditures sustained for a long period (Lewin and Caillods, 2001).

During the expansion period, budgetary allocation to education was maintained at 8 to 9 percent of Gross National Product while secondary allocation increased with tertiary allocation held to less than 10 percent. At the same time the unit cost of primary and secondary education remained stable and in small multiples of unit cost recorded at 1:2 respectively.

This contributed to financial sustainability of enrolment growth at secondary school cycle.

Towards expanding secondary education in Malawi, the major policy and investment commitments included increasing transition rates from primary to secondary to 30 percent through building of more secondary schools, encouraging the development of

private secondary schools; reduction in double shift system, curriculum review and rationalization to ensure quality, deliberate efforts towards increasing girls enrolment in secondary schools and improved in-service and pre-service training and establishment of textbook fund to improve textbook provision in secondary schools (Onsomu et.al; 2006).

From the foregoing literature, it is evident that educational systems the world over have for a long time recognized the need and importance of raising supplementary funds. In Kenya, the responsibility of financing education has been the government and community for a long time though some schools have tried to venture into Income Generating Activities on a small-scale. However, it is also important that the challenges facing schools which are trying to implement the IGAs be adequately addressed.

#### **2.4 Financing of secondary education in Kenya**

Secondary education is the second level in the formal education system in Kenya and caters for students aged 14-17 years (Oyugi, 2010). Secondary education policies have evolved over time with the government of Kenya addressing the challenges facing the education sector through several commissions, committees and task forces.

The first commission, after independence came up with the Report of the Kenya Education Commission (The Ominde Report, 1964) that sought to reform the education system inherited from the colonial government to make it more responsive to the needs of the country.

The report of the presidential working party on the second university in Kenya (The Mackay Report 1981) led to the removal of A level–secondary education and the introduction of the 8:4:4 system which is currently in place.

Secondary education is characterized by low participation rates, as attested by low transition rates, low gross enrolment rate and low net enrolment rate, which have been partly attributed to the high cost of secondary education (Oyugi, 2010). One of the factors constraining secondary school enrolment is that the growth in the number of secondary schools has not matched that of primary schools. For instance, by the end of 2008, the number of primary schools stood at 26,104 compared to 6485 secondary schools, 12 percent of which are private. Further increase enrollment has been hindered by the high cost of secondary education, and the low participation of private providers of post-primary education. In recognition of the problem, the government in 2008 commenced provision of free secondary education (FSE) except for boarding expenses. With the imminent rise in the number of students completing primary and secondary education as a result of state financed education at those levels, preparations will have to be made to expand tertiary and higher education enrolment. Although boarding schooling is a popular phenomenon in the country, most students (approximately 58 percent in secondary schools) are actually enrolled in day schools and or in mixed day and boarding schools. The table below provides a summary of the distribution of secondary schools in Kenya.

**Table 2: Number of secondary schools in Kenya**

Province	2004			2005			2006			2007		
	Public	Private	Total	Public	Private	Total	Public	Private	Total	Public	Private	Total
<b>Coast</b>	143	43	185	144	42	186	145	43	188	145	135	280
<b>Central</b>	683	65	748	668	80	748	690	81	771	695	367	1062
<b>Eastern</b>	713	90	803	664	194	858	691	196	887	707	571	1278
<b>Nairobi</b>	48	47	95	48	47	95	48	47	95	48	290	338
<b>Rift valley</b>	818	164	982	778	220	998	785	223	1008	806	746	1552
<b>Western</b>	452	17	469	414	52	466	397	52	449	429	261	686
<b>Nyanza</b>	740	62	802	725	75	800	741	75	816	746	485	1231
<b>N.Eastern</b>	25	2	27	25	15	40	28	15	43	36	21	57
<b>National</b>	3621	490	4111	3466	725	4191	3525	732	4257	3612	2876	6484

**Source: Ministry of Education 2009**



The table reveals that the number of secondary schools remained almost static between 2004 and 2006. However, due to increased demand for secondary facilities, arising from the high level of transition from primary school to secondary school following the introduction of Free Primary education (FPE), private provision of such facilities increased by 292 percent from 732 schools in 2006 to 2876 schools in 2007. Though the increase in the number of facilities is not uniform across provinces, overall the number of secondary schools increased by 52.33 percent between 2006 and 2007 (Oyugi 2010). The increase in the number of facilities notwithstanding the level of enrolment has not been sufficient to improve participation rates. The table below shows changes in enrolments in secondary schools between 2000 and 2008.

**Table 2.1: Gross Enrolment Rates (percent) at Secondary school by gender 2000-2006**

	2001	2002	2003	2004	2005	2006	2007	2008
<b>Boys</b>	27.1	27.2	29.7	31.7	31.3	34.6	40.4	46.3
<b>Girls</b>	24.2	24.2	27.4	27.3	29.1	29.9	33.3	38.8
<b>Total</b>	<b>25.6</b>	<b>25.7</b>	<b>28.6</b>	<b>29.8</b>	<b>30.2</b>	<b>32.2</b>	<b>36.8</b>	<b>42.5</b>

**Source: Statistics section – Ministry of Education**

Gross and Net enrolment rates were recorded at 42.55 percent and 28.9 percent, in 2008 18.2 percent in 2002 respectively. In absolute numbers enrolment in secondary schools grew from 851,836 students in 2002 (451,362 boys and 400,474 girls) to 1,382,211 (746,513 boys and 638,698 girls) students in 2008. This implies that for every 100

secondary school age children, about 57 are not enrolled in any secondary school. This notwithstanding transition from primary to secondary has improved from 47% in 2003 to 70% in 2008.

This implies that about 30% of pupils who completed primary school in year 2007 could not actually access secondary education, majority due to limited place available in secondary schools (Oyugi, 2010).

This is a high wastage of both human and financial resources, more so taking into account that primary education in Kenya is government financed using both public and donor resources. Unlike primary education, secondary education is on a cost sharing basis between the government and parents. However, given the high poverty rate in Kenya, currently estimated at 46%, the financing of secondary education poses affordability problems.

A historical analysis of patterns and trends of education financing in Kenya reveals existence of partnership between the government, communities and households. However, in most developing economies, public spending on social services has all along been rising without achievement of the desired outcomes such as quality and quantity (Oyugi, 2012). In Kenya for instance public expenditure on education has had the highest budget allocation relative to other social services (MPER 2006/7). In the financial year 2010/11, the government increased the financial allocation to education by 9.2% to 14.1% of its budget (Republic of Kenya, 2010). This translates into one of the highest expenditure levels per student out of the education GDP in Africa. The share of education

out of the government budget and commitment to education is comparable to that of a middle income country.

The cost sharing policy requires that parents/communities meet the costs of key non-salary inputs like tuition, textbooks and uniforms (KIPPRA, 2006). The main aim of cost sharing policy was to reduce education cost burden on the government while ensuring cost effectiveness in the utilization of educational facilities, e.g. equipment, materials and personnel with a view to maintaining the growth, quality and relevance of education and training in addition to cost sharing in the financing of public systems, partners, especially NGOs, communities and the private sector are expected to continue providing private education services at all levels including pre-primary education technical education and informal and tertiary education.

## **2.5 School based investments as a way of financing secondary education in Kenya**

The biggest challenge with respect to secondary education in Kenya is how to satisfy the increasing demand for limited places in secondary schools (Ndolo et.al; 2011). It is against this background that a number of studies have been undertaken. For instance, Olembo (1985) as quoted by Ndolo et al. (2011) examined the financing of secondary education in Kenya. He reported that about K£3.4million was spent as recurrent expenditure in 1977/78. The figure was about k\$11.5 million 1979 (Olembo, 1985). This sum of money indicates that education accounts for a good proportion of government budget. The Kenyan government has already allocated over 20% to 40% of her budget to

the Ministry of Education in her budget to the Ministry of education in the last 20 years. The government therefore saw the need to reduce expenditure on education by 10% from 40% to 30% (Republic of Kenya, 1997 b) as quoted by Ndolo et.al (2011).

Unfortunately reducing the high costs of education only addresses one issue amongst myriad of problems facing educational attainment and access in Kenya. Despite these measures, a study done by World Bank cautioned that secondary education is expensive in Africa. For example, public recurrent expenditure per secondary school student ranged from less than US\$50 in Ghana and Guinea Bissau to more than US\$100 in Cote D'voire and Tanzania (World Bank, 1988). Therefore given the tight limits on public resources in Africa and soaring poverty levels in Kenya, enrolment is declining at secondary school level because ability to pay is now a condition that determines access for example, world education report indicates that enrolment has gone down by about 14% in Kenya in the past one decade (UNESCO, 1989).

Todaro (1994) as quoted by Ndolo et.al (2011) reckons that inspite of the existence of free and universal primary education in the less developed countries, children of the poor, especially in rural areas are seldom able to proceed beyond the first few year of schooling and that their relatively poor school performance may have nothing to do with the lack of cognitive abilities (i.e may merely reflect their disadvantaged economic circumstances). It has also been observed that the soaring poverty levels in Kenya have ensured that some children go without meals, which affect their enrolment and participation.

A running story in the local media warned, “school fees to go up by 28% due to increased costs of food, electricity and transport; parents should brace for harder times ahead.”(The Standard 27<sup>th</sup> November 2008) There is therefore need to explore alternative methods of financing education and more specifically if schools themselves could raise additional revenue by engaging in income generating activities.

Income Generating Activities affect access to secondary education in Homa Bay District (Ndolo et.al, 2011). A study carried out in this District showed that 84.9% of teachers mentioned that profits from school investments contributed to the lowering of cost of education and thus increased enrolment. This result was in agreement with Olel (2000) who established that schools which mobilized resources to generate income experienced reduction in unit cost. Sika (2003) and Kiage (2003) in their studies in Siaya and Nyamira respectively concurred that schools should be encouraged to venture in Income Generating Activities to subsidize on fees paid to enhance access.

Kiage (2003) from his findings further reported that the total number of dropouts for the period of study (1999-2002) against other various factors indicated that drop out due to lack of fees and other levies led as the major factor influencing school dropouts in Nyamira District. Subsequently the Republic of Kenya (1999), report on the inquiry into the education system in Kenya, observed that providing quality, relevant and equitable education to an increasing number of children is both a challenge and opportunity for Kenya (Ndolo et.al 2011). It reiterated that it is a challenge because of the persistent disequilibrium between the rates of economic growth which limits the government

budgetary allocation to meet the increasing demands for education. This mismatch it argues has delayed the achievement of education for all. The document suggests that there is need to mobilize alternative sources of funding for the expansion and development of education at all levels. This scenario calls for a different approach to the provision, delivery, management and financing of education to ensure access, equity, relevance and quality.

From this perspective it is evident that the government alone cannot fulfill all the financial needs of education. In view of the prevailing economic situations in the country; that is late remittance of FSE and acute shortage of teachers, new methods of financing education must be intensified hence the idea of income generating activities. Even the Free Primary Education which was thought to be a panacea to the problem of financing education is in serious trouble following cases of massive fraud in the Ministry of Education (Nyaga, 2011). In the provision of education the following are necessary for curriculum delivery, namely; learning and teaching materials, physical facilities, teachers' support services like; electricity and water, support staff. The cost off all these is enormous and some scholars have suggested that the following sources can supplement the government efforts in financing education. Parents, communities, Non-Government Organizations, private sectors, students work programme, education levies, Free Primary Education, Free Secondary Education and Income Generating Activities.

Gogo (2003) in his study established that various sources of revenue were used in financing secondary education in Rachuonyo District.

Fees paid by parents accounted for 46.41%; followed by Government subsidies 47.3%, bursaries 0.45% and income generating activities; 0.30%. Getange (2005) supported the

argument that income generating activities contribute significantly in financing secondary education. In this study of Kisii Central District, he examined institutional initiatives in supplementing financing of secondary education. His findings revealed that schools in Kisii Central District initiated diversified income resourcing activities. Total annual average income realized from those income generating activities per school was Kshs. 825,176, kshs. 309,971 and kshs. 252,689 in Provincial boarding schools, provincial day schools and district day schools respectively. Getange (2005) reported that headteachers interviewed indicated that IRAs and Income Generating Activities had played a significant role in reducing fee deficits hereby making the management of schools easier.

Ojwang et.al (2011) assessed the contributions of Income Generating Activities to financing secondary school education in Eldoret, Kenya and she did not indicate the percentage contribution of income generating activities to financing off education. However, she concurred with Getange that income generating activities have a significant contribution to financing of secondary education. Between sh. 280,000 to sh. 400,000 was spent by two (22.2%) schools to purchase land for school expansion. Six (66.7%) of the schools had constructed classrooms from money generated through income generating activities amounting to Kshs. 92,000 to Ksh.2.2 million. Seven (77%) of the schools had acquired computers used in information communication technology classes.

Between kshs. 23,000 to shs. 750,000 were raised through income generating activities for this project. All the schools, nine (100%) had purchased furniture and laboratory equipments from finances generated through Income generating activities. Concerning school buses, four (44.4%) of the schools had purchased school buses from Income Generating Activities at a cost off between Ksh. 5.6 million to 8 million.

Hence income generating activities have a significant contribution in financing secondary education especially with regard to purchases and establishment of physical facilities, learning and other financial needs. In contrast to this study, Ojwang (2011) went further to explore the challenges faced by Principals in managing income generating activities in public secondary schools in Eldoret Municipality. It established that lack of qualified personnel; land limitation, lack of support from staff, inadequate funds and lack of support from Board of Governors are serious challenges facing management of Income Generating Activities in secondary schools.

A study by Muriungi (2012) established that although secondary schools in Mulot Division of Narok south district have made some effort to generate income to supplement what they get from traditional sources, not all opportunities had been utilized. The schools earned between sh.160000 and sh.180000 annually from IGAs which is an indication that school based IGAs can be profitable ventures; that schools can tap into extra funds for financing educational programmes. Instead of overrelying on the government and parents to raise funds for schools, headteachers should become more innovative and lead their schools to initiate activities that would be profitable for the schools. Furthermore, some of the initiatives are important learning opportunities for the students. By incorporating participatory planning and innovative technologies, school headteachers will be able to overcome most of the challenges faced in implementation and management of school based IGAs.

A study by Lichoro (2012) on income generating activities and their influence on academic performance in public secondary schools in Tigania East District, found that



the main source of funds was school fees paid by parents. Staffing topped the list of the most inadequate resource followed by physical infrastructure. This clearly showed the need for schools to generate additional funds through IGAs so as to enhance academic performance. The study showed that most IGAs were related to farming while few were based on hire of school facilities. The study established that IGAs played an insignificant role in contributing to school resources and academic performance but noted that there was great potential to turn IGAs into a reliable source of additional funding for public secondary schools. Capital shortage and lack of managerial capacity were the main challenges faced.

A study by Obadha (2012) on the impact of income generating activities on financing secondary schools education in Migori County revealed that all the stakeholders were positive on the idea of introducing IGAs in secondary schools. It was also revealed that money realized from these IGAs were to be used in availing physical facilities, maintaining them , paying recurrent expenditures e.g teachers employed by the B.O.M and others including paying fees for the bright but needy students. These IGAs identified included sugarcane cultivation,maize cultivation ,rearing dairy cows ,hiring out school facilities for different purposes. The findings also revealed that these IGAs could give substantial amount of money that would contribute significantly towards development of the schools.

A study by Rambo (2012) on the influence of IGAs on teaching –learning environment in public secondary schools in Bungoma South District found that factors relating to adoption of income generating activities in schools are categorized in three broad

categories, namely; teacher working conditions, student learning factors and improvement in curriculum.

Consequently , a study by Nyandema (2014) on the determinants of IGAs in secondary schools in Kenya, a case of Nyamira District revealed that there was no relationship between the schools' operation, gender, headteacher's age, professional qualifications with the income generation choices. In light of the findings it was recommended that emphasis should be placed on identifying factors that lead to better income generating choices. When identified, ways and means should be put in place to maximize these factors so as to enhance income generation in secondary schools.

School managers should look for ways that improve the financial ability of schools with regard to availing the initial capital for project initiation. The government should look for a way of assisting schools to access funds once they have initiated income generating projects in their schools. This will lead to a mode of financing which gives due considerations to the aspect of sustainability of the projects.

## **2.6 Challenges faced by secondary school principals in Kenya**

First of all, appointment to school leadership in Kenya has undergone several phases. Initially, principals were appointed on recommendation of stakeholders (Nandwa, 2011) later their appointment was based on seniority and currently it is based on merit where they have to be interviewed before appointment. After graduation from colleges with Diplomas or Degrees in Education, teachers are posted to various Public Secondary schools in the country by the Teachers Service Commission. Their promotion to leadership depends on their seniority and performance. According to the National Policy

on Appointment, Deployment and Training of school administrators and managers (1999), upto 1987,

the TSC used to appoint Principals who were identified as suitable by the principal, politician, school sponsor or TSC field agents. Additionally, the teacher had to be excellent in teaching with a minimum of three years experience as well as good moral behavior and integrity (Nandwa, 2011).

However, such arrangement could be abused by principals, politicians or sponsors picking on a person of their choice who may be lacking the qualities cited.

Studies have also shown that being a good classroom teacher does not automatically mean one can make an effective school leader (Bush & Oduro, 2006; Harber & Davies 1997, Njeri 1994). Nonetheless in 1988 after the implementation of the schemes of service for graduate and graduate approved teachers, principals positions became deployable after promotion to job groups L to R where a teacher becomes a head of department, deputy principal, principal, senior principal and chief principal (ibid). Currently, headship positions are advertised and teachers subjected to vigorous interviews before they are appointed by the Teachers Service Commission (Rarieya, 2007). The National policy on appointment, deployment and training of school administrators and managers (1999) says that principals have to be trained before and after appointment to school leadership. They can only become principals if they have a certificate in Education Management (ibid).

The vast and rapid expansion of education has led to the appointment of heads who have little experience to fit them completely for the work they are required to do and this is a major cause of ineffective leadership in secondary schools (Griffin, 1996) as quoted by

Simatwa and Atieno (2012). A survey study using questionnaires was used to establish problems facing beginning school principals in Kenya, involving 142 beginning and experienced principals drawn from eight provinces revealed that they face challenges such as failure by students to pay school fees and buy books, shortage of school equipment and physical facilities, lack of staff accommodation, lack of play grounds, students traveling long distances with a major outcry on school fees and money matters (Kitari and Westhuizen, 1997) as quoted by Simatwa and Atieno (2012).

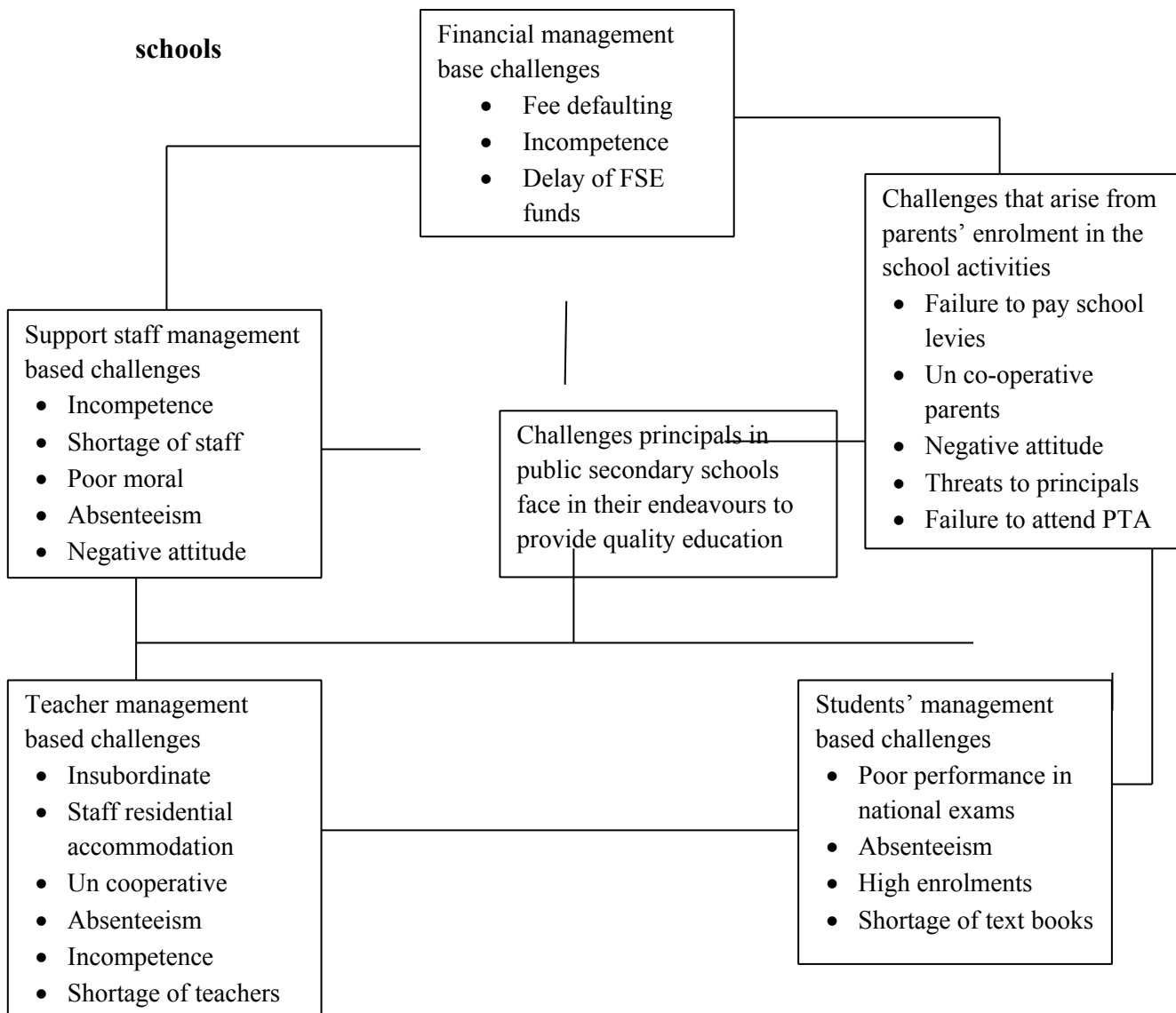
Likewise, head teachers are exposed to many challenges in financial management as the existing preparation measures and support for head teachers in financial management are basically weak and do not sufficiently prepare potential head teachers for responsibilities in financial management (Irungu, 2002). Some of these challenges that newly appointed principals face are therefore brought forth by the means by which principals are identified, appointed and trained which do not prepare them to become effective managers (Simatwa and Atieno, 2012).

The dominant tradition for identification and appointment of heads has been based on good classroom teaching, active participation in co-curriculum activities and teaching experience which has resulted into ineffective leadership and subsequently a number of challenges in institutional management (Republic of Kenya, 1988). As Mosomi (2008) notes, their ill preparedness for management duties prior to their appointments have made school principals vulnerable to making blunders which sponsors capitalize on to demand for their removal. In January 2010, as schools in Kenya reopened for first term, shock hit the whole country as eleven secondary school head teachers in Nyanza province, Kenya were demoted for ineffectiveness, something attributed with ill

preparedness prior to appointments and lack of commitment to their appointments (Simatwa and Atieno, 2012).

The figure below shows a summary of the challenges that principals face in the management of public secondary schools (Simatwa and Atieno, 2012).

**Figure 2.1: Challenges faced by principals in the management of public secondary schools**



**Source: Simatwa and Atieno (2012)**

The same study by Simatwa and Atieno (2012) showed that poor performance in national examinations was rated as one of the biggest challenge for newly appointed principals because national examinations is a measuring tool for effectiveness of principalship. This finding concurred with the findings of Leu and Byron (2005), who found in their study done in six sub-Saharan African countries that new principals face serious problems of poor performance in examinations.

The study by Simatwa & Atieno (2012) also found that absenteeism due to poor fee payment was also another major challenge. This was in line with the findings of Bush and Oduro (2006), who established that newly appointed principals faced the challenge of students' continuous absenteeism resulting from poverty levels in Africa.

Another challenge is that of less motivated students. Notably, less motivated students lack a learning culture and this result into students' poor performance in national examinations (Kitavi and Westhuizen, 1997). Parents' failure to buy textbooks is also a challenge (Simatwa and Atieno, 2012). When students fail to buy the necessary textbooks, effective learning cannot take place. Shortage of textbooks is also high due to high losses made by students when they fail to replace. Usually, the government provides funds for buying textbooks but parents are expected to buy particular textbooks for example; Literature and Fasihi books.

Students' unrest is also a real challenge for newly appointed principals as it is a sign of resistance for new leadership (Simatwa & Atieno, 2012). When students destroy school property, then this interferes with teaching and learning process and is also a sign of undisciplined students. High drop outs are another challenge for principals. This is usually due to failure to failure to pay levies, teenage pregnancies and long period of

absenteeism on the side of students. High enrolment on the other hand leads to overstretched teaching and learning resources such as overcrowded classrooms (Kitari and Westhuizen, 1997). High enrolments reflect schools' growth but at the expense of the resources available thus making management difficult.

According to a study by Simatwa and Atieno (2012), parents failed to pay levies due to high levels of poverty index showing that they were poor parents and this in turn affected management of the schools. These findings concurred with Leu and Bryen (2005) who established that new principals are faced with the challenge of parents who are reluctant to pay fees. Running of schools depends on funds and when parents fail to pay levies; this interferes with effective learning and management.

A study by Kitavi and Westhuizen (1997) also found that beginning principals in Kenya are faced with problems such as parent's illiteracy, inaccessible parents and parents ignorant of other parental duties. Failure by parents to attend meetings makes it very difficult for these principals to manage schools since a school has three pillars for management; that is the parent, the teacher and the student (Simatwa and Atieno, 2012). It has also been discovered that most of the indiscipline cases at school usually originate at home and parents always support their children and accuse the teachers when called to school to discuss such issues. The delay in disbursement of free secondary education funds is a challenge in school management as most transactions' settlement time would not be met.

The study by Simatwa and Atieno (2012) in Bondo District found that poor budgeting made it difficult for newly appointed principals to effectively run their schools as some

were overspending on some voteheads and under spending on some leading them into other problems such as misappropriation and mismanagement of school funds, a mistake punishable by interdiction and demotion as per the Teachers Service Commission code of regulations. This was in agreement with the findings of Irungu (2002), who established that preparation measures and support systems for head teachers in public secondary schools is basically weak and does not sufficiently prepare them for responsibilities in financial management. It was also noted that incompetent clerks and bursars with low professional qualifications contributed to poor budgeting which impacted negatively on school management.

Teachers play a core role in implementation of the curriculum and therefore teacher shortage contributes to student's poor performance in exams and at the same time the principals are forced to employ untrained teachers to do the work besides having very minimal finances for doing the same. Leu and Bryen (2005) found out that in six sub-Saharan countries, new principals are faced with teacher shortage. Poor morale of teachers results from poor motivation in areas like lack of accommodation and low remuneration by Teachers Service Commission and at school level by the school administration (Simatra and Atieno, 2012). This concurs with the findings of Kitavi and Westhuizen (1997), who found that beginning principals in Kenya are faced with the problem of working with poorly motivated teachers working in overcrowded classrooms.

## **2.7 Summary of the Chapter**



The importance of education in socio-economic development need not to be overemphasized. Basic education an investment in human capital is highly associated with overall economic growth (World Bank, 2005). Njeri (2008) observes that self help has great potential as an educational financing method because it can provide extra resources and ensure that they are used effectively and flexibly. Therefore, engagement in income diversification strategies could be a noble way of generating resources to cushion schools from financial constraints.

In this literature review, the following topics were covered; economic and social justification for investment in secondary education, alternative ways of financing schools in other countries of the world, financing of secondary education in Kenya, school based investments as a way of financing secondary education in Kenya and lastly the challenges faced by secondary school principals in Kenya.

From the foregoing discussion it is evident that few studies have been done on the challenges facing principals while managing income generating activities in secondary schools in Kenya. The few studies done have shown that the income generated from IGA's does not compare favourably with other sources, for example the school fees paid by the parents. It is for this reason that this study aims at investigating the challenges faced by principals in managing income generating activities in public secondary schools.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 Introduction**

Methodology describes the approach to research design. It is a plan of action that links methods to outcomes (Kindiki, 2009). In this chapter, the design and methodology used for the study has been described. The research design, target population, sample size and techniques, research instruments, data collected procedures, validity and reliability of research instrument and methods of data analysis have also been discussed.

#### **3.2 Research Design**

The study adopted a descriptive survey research design. Schneider (2003) defines a research design as a blueprint for fulfilling objective and answering questions. Survey studies are conducted to collect detailed description of existing phenomena with the intent of employing data to justify current conditions and practices or to make more intelligent plans or improving them. The choice of descriptive survey research method was based on the fact that survey is generally used as a method in studies which have individuals as units of analysis. This method was chosen since the finding are to be generalized over a large population.

#### **3.3 Area of study**

The study was carried out in Mumias District (formally of Butere-Mumias District). Mumias District borders Butere District to the North Matungu District to the South, Siaya District to the East and Kakamega East District to the West. The District is composed of

three divisions namely; East Wanga division, South Wanga Division and Mumias Central Division.

Data from the Mumias District of Education Office indicates that the District has 33 registered public Secondary Schools and 2 Private Secondary schools. The District was chosen for the study since the Researcher lives in this District and therefore he will not be a stranger to most of the research subjects. Mumias town, a major town in District is approximately at distance of 315km from Nairobi, the Capital City of Kenya. The District is at an altitude of 1301 meters above the sea level. It is situated on the latitude  $0.293^{\circ}$  North and longitude  $34.573^{\circ}$  East. A map of the district has been attached to the appendix.

### **3.4 Target Population**

The study targeted all the registered public secondary schools in the district. There are 33 registered public secondary schools in the district.

### **3.5 Sample and Sampling Procedure**

Sampling is the selection by a systematic or random procedure of research subjects out of a larger population relevant to the research project (Kothari, 2009). The basic idea of sampling is that by selecting some of the elements in a population conclusions can be drawn. The sample size was determined by calculating more than 30% of the accessible population which is deemed to be representative.

Since the accessible population is 33 schools, then 11 schools were selected which is 33.33% of the accessible population. Stratified random sampling was used in dividing the

schools as per the administrative divisions and later the simple random sampling technique was used in determining the schools to be used in the study. Once the schools had been identified all the principals in the sampled schools were purposively selected for the study since they are the finance manager of the schools. Data from the Mumias district education office shows that there are about 460 teachers in the district and therefore 143 teachers was used in the study, since this represents 30% of the total. The simple random sampling technique was used to get 13 teachers from each of the schools that were visited.

**Table 3.1; sample population characteristics**

<b>DIVISION</b>	<b>NO. OF SCHOOLS</b>	<b>SAMPLE</b>	<b>PERCENTAGE</b>
<b>Mumias</b>	11	4	36.36
<b>Central</b>			
<b>South Wanga</b>	10	3	30
<b>East Wanga</b>	12	4	33.33

**Source: Mumias District Education Office, 2012**

### **3.6 Instruments of Data Collection**

Questionnaires for principals and teachers were developed. An interview schedule for the District Education Officer was also developed. Document analysis of IGAs records in respective schools was done.

### **3.6.1 Questionnaires for principals and teachers**

A Questionnaire is a device consisting of a series of questions dealing with some topic with the objective of obtaining data with regard to some issues under investigation (Kothari, 2009). The choice of a questionnaire was appropriate since it enabled the researcher to reach more respondents. The questionnaire was semi-structured. It solicited information in the following areas;

- i. Types of income generating activities being implemented in public secondary schools of Mumias District.
- ii. Contribution of teachers in the management of the income generating activities.
- iii. Challenges faced by principal in managing income generating activities.
- iv. Contribution of the income generating activities to the financing of public secondary schools.
- v. Solutions to the challenges faced by principals in managing income generating activities in public secondary schools.

### **3.6.2 Interview Schedule for the District Education Officer**

The interview schedule technique was used since it allowed for in depth probing for more information and also provided for clear expressions of feeling, opinions and attitudes. It gave chance to the interviewer to clarify the purpose of the research and then affectively convince the respondent about the importance of the research. Note taking as a method of recording the respondents responses was used. The interviewer recorded the respondents' answers exactly as expressed. Attempts were not made to summarize ,paraphrase or correct bad grammar.

### **3.7 Validity and Reliability of the Research Instruments**

#### **3.7.1 Validity of the data collection instruments**

Kothari (2009) states that validity is the accuracy and meaningfulness of inferences which are based on the research results. That is, the degree to which results obtained from the analysis of data actually represents the phenomena under study. In view of this, the developed instruments were given to the experts in research methodology of Moi University to assess suitability of vocabulary, concepts and phraseology used. This method was used to verify content validity.

#### **3.7.2 Reliability of the data collection instruments**

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trial (Mugenda, 2003). In order to test reliability, the following steps were followed;

- a. The developed questionnaire was piloted in some selected schools.
- b. The answered questionnaires were then scored manually..
- c. The same questions were administered to the same group of subject after a period of two weeks.
- d. The questionnaire responses were then scored manually again.
- e. A comparison between answers obtained in (b) and (d) above was made.

A Pearson's Product Moment correlation for the test-retest was employed to compute the extent to which the constants of the questionnaire are consistent in eliciting the same responses every time the questionnaire is administered. A correlation of 0.7 was obtained

and according to Mugenda (2003) ,it was considered high enough to judge the instrument as reliable for the study.

The developed questionnaires were piloted in 4 schools in the neighboring Matungu district to establish if they could be used to collect relevant data and identify relevant problems likely to occur at the time of actual data collection process .It also aimed at checking whether instructions on the questionnaires were clear to respondents .The pilot revealed that the anticipated analytical techniques were appropriate.

### **3.8 Data Collection Procedure**

Authority to conduct the research was sought from the National Council of Science and Technology. The Mumias District Commissioner and District Education Officer were informed of the research The researcher then visited the individual schools personally to conduct the research study after booking an appointment with the selected respondents.

### **3.9 Data Analysis and Presentation**

Once the questionnaires had been administered, the raw data collected was organized in a manner that facilitated analysis. The data collected from the closed ended items was assigned numerical values (coded) and analyzed by use of a computer package-statistical package for social scientists (SPSS). Responses from open-ended questions were categorized and assigned numerical values too (coding). Analysis of the data was done using SPSS software where descriptive statistics, tabulations, percentage, frequencies and mean generated. Other theatrical attributes were dealt within content analysis.

The responses give in the interview schedule was systematically organized in a manner that facilitated analysis. Data collected from the interview schedule, was assigned numerical values (coding) and analyzed by use of SPSS-statistical package from social scientists. After coding the raw data collected, the responses were summarized using descriptive statistics like percentages, frequencies and means.

### **3.10 Ethical Considerations**

The researcher ensured the respondent's confidentiality. The participants were not expected to write their names on the questionnaire. The participants were informed that the information they gave was treated with confidentiality and for the purpose intended only. They were allowed freedom to withdraw from the study at any point of time. In addition, the researcher intends to share the results of the study with the respective schools and the academic fraternity as a whole.



## **CHAPTER FOUR**

### **DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION**

#### **4.1 Introduction**

This chapter deals with data analysis, presentation and interpretation.

#### **4.2 Return rate**

The return rate of the questionnaires was 100%. This was made possible by the fact that the questionnaires were admitted in person.

#### **4.3 Demographic characteristics of the respondents**

The respondents included teachers, principals and a District Education Officer. Table 4.1 summarizes demographic characteristics of the respondents.

**Table 4.1 Demographic characteristics of respondents as indicated by principals (n=11), teachers (n=138) and the D.E.O (n=1)**

<b>Characteristic</b>	<b>T F%</b>	<b>P F%</b>	<b>D.E.O F%</b>
<b>Gender</b>			
<b>Male</b>	88(46)	9(81.8)	1(100)
<b>Female</b>	50(54)	2(18.8)	0
<b>Age of respondents</b>			
<b>20-30</b>	25(18)	0	0
<b>31-40</b>	72(52)	1(9.1)	0
<b>41-50</b>	36(26)	10(90.9)	1(100)
<b>Above 50 years</b>	5(3.6)	0	0
<b>Work experience</b>			
<b>0-4</b>	33(23.9)	1(9.1)	0
<b>5-9</b>	89(64.5)	2(18.2)	1(100)
<b>10 years and above</b>	16(11.6)	8(72.7)	0

F-frequency, T-Teachers, D.E.O-District Education Officer ,P-Principals

#### **4.3.1 Gender of the respondents**

The teacher respondents consisted 88(46%) male and 50(54%) female. Of the 11 principals, 9(81.8%) were male while 2(18.2%) were female. Majority of the principals were therefore males .Consequently there was 1(100%) male District Education Officer as shown in table 4.1 above. These findings show that there is gender imbalance in headship among the schools in Mumias district.A study by Omukoba et al (2011) in Eldoret Municipality revealed that 55.6% of the principals were male.

#### **4.3.2: Age of the respondents**

From table 4.1 , in the 20-30 age bracket there were 25(18%) teachers. In the 31-40 age bracket there were 72(52%) teachers and 1(100%) principal. In addition, from the same table 4.1 above, in the 41-50 age bracket there were 36(26%) teachers and 10(90.9%) principals. There were only 5 teachers who were above 50 years. The District Education Officer was in the age bracket of 41-50. The high ages of the principals are in agreement with the findings of Place et al (2007) who established that age is one of the greatest determinants of decision making. Given that most of the principals are in the age bracket of 41-50 years, there is a likelihood that they make sound decisions in the running of the school activities.

#### **4.3.3: Work experience**

From table 4.1, in the category of 0-4 years there were 33(23.9%) teachers and 1(9.1%) principal. In the 5-9 years work experience category, 89(64.5%) were teachers and 2(18.2%) were principals. In addition ,in the 10 years and above category there were 16(11.6%) teachers and 8(72.7%) principals. The District Education Officer was in the 5-9 years work experience. Since most principals have an experience of more than 10 years, they are in a position to make better management decisions. This findings concur with the findings of Ojwang et al (2011) who established that experienced principals understood the needs of schools and are therefore able to initiate income generating activities or run existing ones competently.

#### 4.4 Types of income generating activities

Table 4.2 shows the frequency of income generating activities in public secondary schools of Mumias district as per the responses of the participants.

**Table 4.2: Income generating activities in schools**

<b>IGA</b>	<b>Frequency</b>	<b>Percent</b>
Bus hire	5	45.5
Crop farming	8	80
Poultry keeping	3	27.3
Dairy farming	7	63.6
Hiring chairs	3	27.3
School canteen	10	90.9
Seminars and conferences	2	18.2

#### IGA-Income Generating Activity

This results concur with the findings of Ndolo et al (2003) who established that income generating activities were practiced in 45.5% of schools in Homa bay district. Income generating activities in educational institutions in Kenya is an initiative that is considered to be invaluable in supplementing financing of education at all levels from pre-school to university .In response to the government initiative of cost sharing, most education institutions have operationalised this initiative (Republic of Kenya,1988).

#### **4.4.1 Bus hire**

From table 4.2 above, the study identified bus hire 5(45.5%) as a form of income generating activity carried out in schools. This shows that the five schools owned buses. Probed further most principals indicated that school buses can be reliable sources of income .In the interview with the District Education Officer, he asserted that the government through the Ministry of Education has issued guidelines to schools on how they are supposed to operate their buses. The cost of transport and fuel are high while quite a number of activities that require transport are carried out in schools like sports, academic tours and motivational tours for teachers and students. Olel (2000) found that schools have resorted to purchases of these buses purposely to cut cost of transport and raise additional money through bus hire ;but Ojwang et al (2011) asserts that from her findings ,school bus was a sign of prestige and status.

#### **4.4.2 Crop farming**

From the findings,8 schools(80%) practice crop farming. Crop farming is predominant in the district because of the favorable weather conditions.This result implies that these schools have enough land to practice farming. The District Education Officer also reiterated during the interview that most schools practiced crop farming.These results are in agreement with the findings of Ndolo et al(2011) who established that crop farming was practiced in 41.4% of the schools that he studied in Homa Bay district. A report of the taskforce in affordable Secondary Education also found out that in Rongai Secondary School in Nakuru, Kenya. The school grew maize and beans which were consumed by

students and excess sold for cash .The cash crops were sold to various cooperative societies for processing (Ndolo et al,2011).

#### **4.4.3 Poultry keeping**

From table 4.2 ,3 schools(27.3%) rear poultry. When probed further the principals admitted that though poultry farming was lucrative the risk associated with diseases was high. This result proves that few schools in the district have ventured into poultry farming probably due to the fear of the risks involved. These findings are in contrast with the findings of Getange (2005) which revealed that in Kisii Central District , Kenya ,school initiatives in supplementing finances of secondary education included poultry keeping. However ,these results are in agreement with the findings of Ndolo (2011) who established that poultry keeping was practised in 3.5% of the schools that were studied in Homa Bay district.

#### **4.4.4 Dairy farming**

From the findings 7 schools (63.6%) practice dairy farming. The District Education Officer stated in the interview that most schools in Mumias district practiced both dairy and crop farming because they had adequate land. This finding shows that dairy farming is popular activity in the district due to good weather conditions and adequate land. According to Republic of Kenya (2006) many schools practiced livestock and poultry keeping as a source of income and increased food production for schools involved.

#### **4.4.5 School canteens**

From the findings, 10 schools (90.9%) run canteens. Apart from the purpose of generating income, most principals added that school canteens greatly assisted in reducing the incidences of students seeking for permission to go outside the school to purchase necessary items. This implies that canteens are operated in most schools in the district since they require little start up capital. On the contrary, a study by Omukoba et al (2011) in Eldoret Municipality established that only 11.1% of schools in Eldoret Municipality operated school canteens.

#### **4.4.6 Facilities hire**

From the findings of the study it was also revealed that 3 schools (27.3%) hired out chairs while 2 schools (18.2%) always hired out their facilities especially over the school holidays to obtain income. These schools hosted activities such as church seminars, teachers marking exercises e.t.c. From these findings it can be deduced that there are very few boarding schools in Mumias District. These results agree with Ho Ming Ng's (2000) findings that high status schools normally make good profits. He further points out that rentals received by schools located in remote areas is insignificant. He further adds that in the 'creation of income' the best thing to do is to be landlord and avoid worry about market sales, recruiting and managing workers and quality control which are always problematic.

#### 4.5 Contribution of teachers to income generating activities

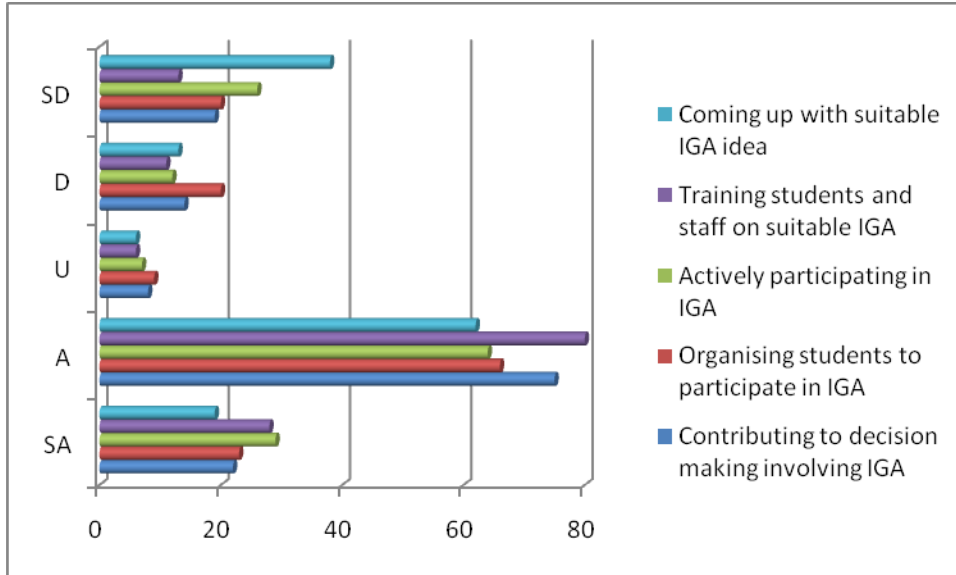
Table 4.3 below shows teacher's contributions to income generating activities as per the responses of the participants.

**Table 4.3: Teacher contributions to income generating activities**

	SA	A	U	D	SD
	F %	F %	F %	F %	F %
Contributing to decision making involving IGA	22(15.4)	80(55.9)	8(5.6)	14(9.8)	19(13.3)
Organizing students to participate in IGA	23(16.1)	66(46.2)	9(6.3)	20(14)	20(14)
Actively participating in IGA	29(20.3)	64(44.8)	7(4.9)	12(8.4)	26(18.2)
Training students and staff on suitable IGA	33(23.1)	75(52.4)	6(4.2)	11(7.7)	13(9.1)
Coming up with suitable IGA idea	19(13.3)	62(43.4)	6(4.2)	13(9.1)	38(26.6)

Table 4.3 shows that teachers are actively involved in income generating activities in most public secondary schools of Mumias district. Figure 4.1 also shows the same. The success of any income generating activity depends on the invaluable contribution of teachers right from the decision making process to the implementation phase. A study by Omukuba et al (2011) in Eldoret Municipality established that all schools reported that they got the appropriate support from teachers. This was because they benefitted from the income generating activities through free lunches, trips and seminars.



**Figure 4.1 :Teacher contributions to income generating activities**

#### 4.5.1:Contributing to decision making involving income generating activities

From the findings, a high percentage of teachers 80(55.9%) agreed that they were involved in the decision making process.Only a small percentage 14(9.8%) disagreed.The diversity of income generating activities in Mumias district greatly alludes to the fact that teachers are actively involved.From the study results ,the teacher’s contributions were

mainly limited to their specific fields of specialization. For example, agriculture teachers contributed immensely to agricultural related income generating activities.

#### **4.5.2 Organising students to participate in income generating activities**

From table 4.3 66(46.2%) alluded to being actively involved in organizing students to participate in income generating activities .From the interview with the District Education Officer, most schools involved students especially in the agriculture related activities, for example weeding maize .This helps to reduce maintenance costs.

#### **4.5.3 Training students and staff on suitable income generating activities**

From table 4.3, 75(52.4%) agreed that teachers contributed immensely in the training of students and other staff on suitable income generating activities .This occurs mainly in the teachers' specific areas of specialization .Only 11(7.7%) disagreed with this statement. This shows that the teachers' expert knowledge is greatly utilized in the income generating projects.

#### **4.5.4 Actively participating in the income generating activities**

From table 4.3, 64(44.8%) of respondents agreed that teachers were actively involved in the whole process of the income generating activities. A paltry 12(8.4%) disagreed. This implies that right from decision making to marketing of products, there is some teacher involvement. From the interview with the District Education Officer, in some schools teacher welfare associations run school canteens.

#### 4.5.5 Coming up with suitable income generating ideas

From table 4.3, 62(43.4%) agreed that they were involved in the initial process of determining the income generating activities that their schools should engage in. Only 13 (9.1%) disagreed. This occurs mainly in the teachers' areas of specialization. The study revealed that most principals lack the expertise to run the income generating activities. This result implies that schools that offer more technical courses, for example agriculture, business studies, home science e.t.c have the added advantage of many teacher experts.

**4.6 Challenges faced by principals in the management of the income generating activities** Table 4.4 shows the challenges faced by principals in the management of the income generating activities as per the responses of the participants.

**Table 4.4: Challenges of managing Income Generating Activities as indicated by principals (n=11)**

Challenge	SA	A	U	DA	SD
	F%	F%	F%	F%	F%
Land limitation	2(18.2)	6(54.5)	1(9.1)	1(9.1)	1(9.1)
Inadequate funding	2(18.2)	5(45.5)	1(9.1)	2(18.2)	1(9.1)
Lack of skilled manpower	1(9.1)	6(54.5)	2(18.2)	1(9.1)	1(9.1)
Unsupportive parents	2(18.2)	2(18.2)	1(9.1)	4(36.4)	2(18.2)
Unsupportive B.O.G	3(27.3)	3(27.3)	1(9.1)	3(27.3)	1(9.1)
Negative attitude	2(18.2)	4(36.4)	2(18.2)	2(18.2)	1(9.1)

Unsupportive staff	2(18.2)	3(27.3)	1(9.1)	4(36.4)	1(9.1)
High maintenance costs	3(27.3)	5(45.5)	1(9.1)	1(9.1)	1(9.1)
Record keeping	4(36.4)	3(27.3)	1(9.1)	2(9.1)	1(9.1)

SA-Strongly Agree ,A-Agree ,U-Undecided, DA-Disagree, SD-Strongly Disagree,F-Frequency

The findings on the challenges faced by principals in the management of the income generating activities are similar to those found by Ho Ming Ng (2000) in his study where he noted that managing income generating activities like any other business venture faces certain challenges. According to Cunningham and cordeiro (2006), it is from such challenges that leaders gain knowledge, order and renewal. This gives them the strength and confidence to undertake their duties stronger and rejuvenated. Some of these challenges have been discussed below.

#### **4.6.1 Land limitation**

From the findings ,6(54.5%) principals agreed that land limitation was a challenge that faced their schools. This implies that most schools don't have enough space to establish the income generating activities .This may call for principals to start projects that do not require big space, for example poultry keeping, bee keeping e.t.c. These findings are in agreement with the findings of Omukoba et al (2011) who established that land limitation was a challenge in 44.4% of schools that were studied in Eldoret Municipality.

#### **4.6.2 Unsupportive staff**

Majority of the principals, 4(36.4%) disagreed that their staff were unsupportive. Teachers especially are crucial for the success of any income generating activity. These findings show that most schools depended on the support of both the teaching and the non teaching staff. This finding implies that principals should consider ways of motivating their staff so that they can play an active role in the income generating projects. In most cases, the staffs are usually beneficiaries of the income generating activities through for example, free lunches.

#### **4.6.3 Inadequate funding**

From the findings ,most of the principals 5(45.4%) agreed that inadequate funding was a challenge that they faced in the management of income generating activities .From the interview with the Mumias District Education Officer, he reiterated that most schools lacked the start up capital for the income generating activities, for example buses. This was also coupled with the fact that most of them lacked title deeds for their land which they could use as collateral to obtain credit facilities from financial institutions like banks. Therefore schools without deeds may be required to look for them.This finding implies that principals should devise innovative ways of raising start up and maintenance funds by for example, involving old students of their respective institutions. A study by Ojwang et al (2011) also established that lack of sufficient funds to run the income generating activities was a challenge to many schools in Kenya.

#### **4.6.4 Lack of skilled manpower**

From the findings, 6(54.5%) principals agreed that lack of skilled manpower was a challenge that they faced. Many teacher training colleges and universities only prepare teachers for classroom teaching. Therefore many of them lack specialized entrepreneurial knowledge. According to Nandwa (2011) the in-service courses offered by the ministry of education are few and irregular and cannot be fully depended on for preparation and development of secondary school principals. This calls for principals to take their own initiatives and register for relevant courses especially during school holidays. This may also imply that principals make adequate use of the available teacher expertise, for example agriculture teachers for agricultural based projects.

#### **4.6.5 Record keeping**

From the findings, 4(36.4%) of the principals strongly agreed that record keeping was a challenge that they encountered in the management of income generating activities. Consequently, in the interview with the Mumias District Education Officer it was revealed that poor record keeping was a challenge that faced many public secondary schools. This might be one of the major reasons why the income generating activities are performing dismally. He suggested that frequent auditing of school records could assist in improving record keeping. On the other hand this finding implies that principals should be more prudent with keeping of financial records if they hope to yield maximum returns from the business ventures.

#### **4.6.6 High maintenance costs**

From the findings 5(45.5%) of the principals agreed that high maintenance costs was a challenge that they faced in the management of income generating activities. When probed further, the principals stated that farming activities are usually labour intensive. The cost of treating diseases is also high. This may call for principals to diversify their cost cutting measures, by for example involving students in providing the much needed labour. Ojwang (2011) in the study of Eldoret also found out that high maintenance costs was a challenge affecting many income generating activities.

#### **4.6.7 Unsupportive Boards of Governors**

From the findings it was revealed that 3(27.3%) principals strongly agreed that lack of support from Boards of Governors was a challenge that they faced. When the principals were probed further, it was established that most boards of governors were wary of how profitable the income generating activities would be. Some were also wary of how the income from these activities would be utilized .Findings from the interview with the District Education Officer indicate that most boards are usually skeptical about income generating activities because they are usually not given all the intricate details of how these activities are performing. This calls for principals to be transparent and give these boards all the necessary information pertaining to these income generating activities.

#### **4.6.7 Unsupportive parents**

From table 4.4, 2(18.2%) of the respondents agreed that unsupportive parents was a challenge. This implies that the parents were skeptical about these income generating activities since they were worried that the levies that they are charged would increase .From the interview with the District Education Officer, he stated that while making decisions pertaining to income generating activities ,parents through the parents and teachers association (P.T.A) should be involved. This finding implies that parents should be involved at all stages of the income generating projects by mainly being continually informed of their progress.

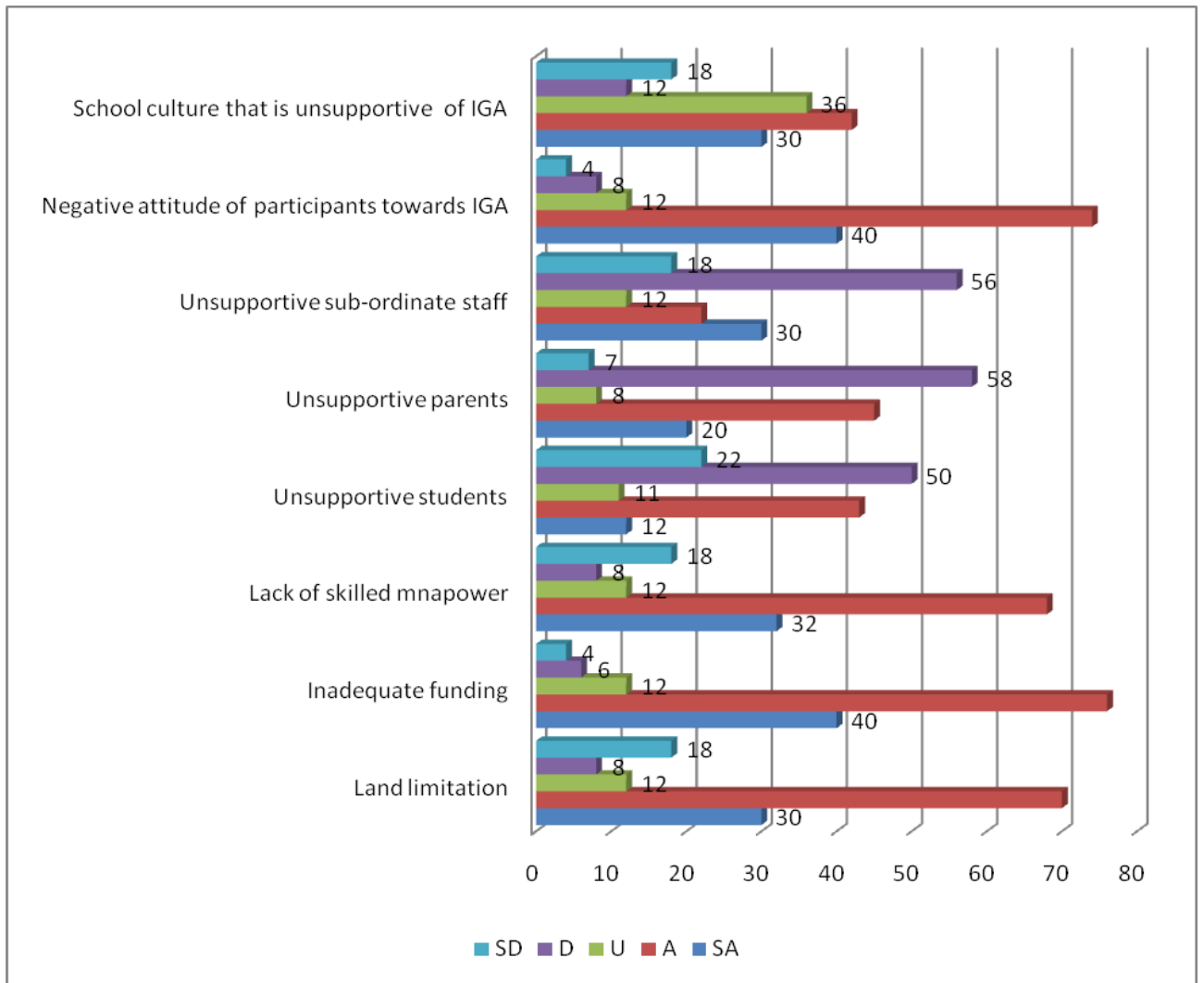


#### **4.6.8 Principals' negative attitude**

From table 4.4, 4(36.4%) agreed that the negative attitude of principals towards some income generating activities was a major challenge. When probed further, a number of them admitted that they disliked farming activities even though their schools were practicing them .This proves why the income generating activities were not generating much profits. Bench marking in schools that have vibrant and successful income generating activities could help to bolster positive attitude.

The bar graphs shown below show a summary of the challenges faced by principals as reported by teachers in their questionnaires:

**Figure 4.2 Challenges faced by principals as reported by teacher respondents**



From figure 4.2, the teachers' responses illustrate the perceived challenges that principals face while managing income generating activities. These results are in agreement with the findings from the principals responses since the major challenges mentioned include among others land limitation, inadequate funds and lack of skilled manpower.

#### 4.7: Contribution of Income Generating Activities to the financing of secondary education

Table 4.5 shows the average annual income from income generating activities as per the responses by the principals.

**Table 4.5: Average Annual Income from Income Generating Activities for the period 2010 to 2012**

		Frequency	Percent	Valid Percent	Cumulative Percentage
Valid	50,000-100,00	1	9.1	9.1	9.1
	200,000-500,000	6	54.5	54.5	63.6
	500,000-1000000	3	27.3	27.3	90.9
	Above 1000000	1	9.1	9.1	100.0
	<b>Total</b>	<b>11</b>	<b>100.0</b>	<b>100.0</b>	

From the findings, majority of the schools 6(54.5%) obtained an average annual income of between Ksh200000 and Ksh 500000 from the income generating activities. It was also revealed from the study that the revenue obtained from these income generating activities was utilized mainly for feeding of students and teachers, buying furniture and for paying workers salary. In the interview with the District Education Officer, it was established that income generating activities serve as support for funds received such as Constituency Development Fund and Free Secondary Education Funds. For example it is stipulated that Constituency Development Funds should be utilized on purchasing component materials of the project only. This definitely calls for additional funds to allow recipient institution meet emerging needs of this nature. The research results imply

that since income generating activities play a pivotal role in the financing of secondary education, ways of enhancing these activities should be sought for. These study findings concur with the findings of Getange (2005) who established that income generating activities contributed significantly in financing secondary schools in Kisii Central District. Consequently, these study findings are also in agreement with the findings of Nafukho (1999) who established that additional funds at any level in academic institutions ensures completion of unfinished projects and facilitate the institutions' improvement as well as enhance learning material infrastructure and maintenance of high academic standards.

#### **4.8: Solutions to the challenges faced by principals in managing income generating activities**

Table 4.6 shows the solutions to the challenges faced by principals in managing income generating activities as per the responses of the principal and teacher respondents.

**Table 4.6: solutions to the challenges faced by principals in managing income generating activities as indicated by principals (n=11) and teachers (n=143)**

Solution	P	T
	F %	F %
In service courses	7 (63.6)	81 (56.6)
Better crop and animal breeds	6 (54.5)	76 (53.1)
Joining co-operative societies to assist in marketing	4 (36.4)	63 (44.1)
Teachers and students involvement to reduce labour costs	6 (54.5)	88 (61.5)
Business strategic plans	5 (45.5)	66 (46.2)
Others	8 (72.7)	53 (37.1)

KEY: P-Principals, T-Teachers, F-Frequency

#### **4.8.1: In service courses**

From table 4.6, 7(63.6%) of principals and 81(56.6%) of teachers suggested that in service courses especially in business management skills can help to solve some of the challenges encountered by principals while managing income generating activities. This implies that most principals lack pre-requisite entrepreneurial skills and thus they should enroll for short courses especially during the school holidays. In addition, the training that prospective teachers undergo in teacher training institutions is mainly geared towards preparing them for classroom teaching. Cunningham and Cordeiro (2006) in

reference to Hoy and Miskel (2005) states that useful methods to improve school leadership include selecting and educating leaders assuming leadership positions and engineering the situation.

#### **4.8.2 Better crop and animal breeds**

From the findings, 6(54.5%) of principals and 76(53.1%) of teachers suggested that better crop and animal breeds could lead to higher earnings. The research established that most schools had not embraced modern farming technologies. For example, indigenous cows which have low milk production are still the predominant breeds in the district. This finding calls for secondary school principals to be dynamic enough and always consult the relevant professionals so that they can acquire the best crop and animal breeds that will give them higher profits.

#### **4.8.3: Co-operative societies**

From the findings, 4(36.4%) of principals and 63(44.1%) of teachers mention that schools could either join or form co-operative societies so as to solve the marketing problem. From the interview with the District Education Officer, it was established that some schools in the district encountered challenges in the marketing of agricultural produce like maize, milk and beans. This was because they faced stiff competition from established businesses. This finding may call for schools to find ways of either forming or joining existing co-operatives to assist in the marketing of produce. These research findings concur with the findings of Ojwang et al (2011) whose studies revealed that marketing of agricultural produce for schools in Eldoret Municipality was a big challenge.

#### **4.8.4: Teacher and student involvement in the income generating activities**

From table 4.6, 6(54.5%) of principals and 88(61.5%) of teachers suggested that involving teachers and students in running the income generating activities could help in reducing the maintenance costs. For example, students could assist in weeding of crops like maize. This implies that principals should consider innovative methods of reducing maintenance costs. Ndolo (2011) in the study of IGAs in Homa Bay district suggests that parents and even students could provide labour in school farms and thus raise school fees under a program known as “work study”.

#### **4.8.5: Business strategic plans**

From table 4.6, 5(45.5%) of principals and 66(46.2%) of teachers suggested that schools should formulate business strategic plans to guide their business operations. The study further revealed that no school had made such a plan. This calls for principals to embrace modern business and accounting techniques so that they can improve the management of the income generating activities.

#### **4.8.6: Auditing of records**

In the interview with the District Education Officer, he stated that since poor record keeping was a major challenge facing income generating activities in many schools, auditing of school records of accounts by the relevant government department should be enhanced. Since income generating activities are school initiatives, in most cases their records are never audited. This can create a loophole for malpractices. However, principals should just consider it necessary to have proper records as a sound business practice so that they can know whether they are operating at a profit or at a loss. On the



other hand, this finding calls on the education ministry to intensify its function of auditing school records so as to instill financial discipline in these institutions. Ojwang (2011) recommended that proper auditing of income generating activities should be done to ensure accountability.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.0 Introduction

This chapter presents summary, conclusions and recommendations of the study. These decisions were informed by the purpose of the study and the research results. The findings presented in chapter four were further discussed and summarized for conclusions and recommendations to be made. The findings were presented, interpreted and conclusions drawn based on the findings in order to answer the research objectives. Then recommendations were made on what needs to be done on the management of income generating activities in order to improve their performance.

#### 5.1 Summary

The results show that majority of teachers (56%) were female while the majority of the principals (81.8%) in the study district were male. The District Education Officer was male. .Consequently, most teachers (52%) were in the 31-40 age category while most principals were in the 41-50 age category. In addition, most teachers (64.5%), had a work experience of between 5-9 years while majority of the principals had a work experience of 10 years and above.

From the results most schools are involved in crop faming with respondents supporting the income generating activity totaling to 8(80%). Dairy farming was also an income generating activity that was practiced in 7(63.6%) of the sample population. Hosting seminars and conferences had the minimum support .This implied that majority of schools in Mumias district are day schools since only 3(27.3%) of schools reported that they engaged in it.

The study established that most teachers 80(58%) were actually involved in the decision making process involving income generating activities. In general, the study results revealed that 66(44.8%) of teachers participated in the running of the income generating activities. The study also revealed that most teachers who taught technical subjects like agriculture and business studies were directly involved in the income generating activities. Teacher welfare associations in most schools were operating school canteens.

On the challenges faced by principals in the management of the income generating activities most of them agreed that the following were the major challenges: land limitation 6(54.5%), inadequate funds 5(45.5%) and lack of skilled manpower 6(54.5%). However 4(36.4%) disagreed with the statement that unsupportive staff was a challenge. Income generating activities like any other business were bound to encounter challenges but most principals were upbeat that they would surmount them with time.

Most schools obtained an average income of between Ksh 200000 and Ksh 500000 from the income generating activities annually for the period 2010 to 2012. However, the study established that many schools were eager to increase their revenue base. This they intended to do by either improving on the existing income generating activities or by diversification.

The suggested solutions to the challenges facing principals in managing income generating activities included among others the acquisition of better plant and animal breeds, in servicing of principals on entrepreneurship, use of innovative ways of reducing labour costs and also frequent auditing of school records. In general, the study established

that the income generating activities in public secondary schools of Mumias district had the potential to perform even better.

## **5.2 Conclusion**

Based on the finding of the study which examined the challenges faced by principals in the management of income generating activities in Mumias district, the following conclusions were made: The main income generating activities carried out in the district include service crop farming, dairy farming, poultry keeping, bus hire, hosting of conferences and seminars, canteens and hiring chairs.

The main contributions made by teachers towards the income generating activities include contributing to decision making involving income generating activities, organizing students to take part in the income generating activities and also training students and support staff on suitable income generating activities ideas.

It was revealed that the main challenges facing secondary school principals in the management of the income generating activities are land limitation, inadequate funding, lack of skilled manpower, unsupportive parents, unsupportive Boards of Governors, negative attitude of principals, unsupportive staff, high maintenance costs and record keeping or management.

In addition secondary schools obtained a considerable amount of income from the income generating activities that contributed to the schools' financing.

### 5.3 Recommendations

Based on the finding of the study, the following are recommendations for the purposes of practice and policy implementation regarding the management of income generating activities as a source of additional funding for Public Secondary Schools. Based on the first objective which was to find out the types of income generating activities being implemented in Mumias district, the following recommendations can be made:

- 1) The schools should purchase higher crop and animal breeds to improve production.
- 2) Schools should venture into more lucrative and enterprising ventures which serve the needs of the urban population namely: parking yards, hostels, constructions of building for office space and residential flats.

The following recommendations can be made with regard to the second objective which was to determine the contribution of teachers in the management of income generating activities in public secondary schools:

- 1) Schools should make adequate use of available expertise in the form of teachers who teach technical subjects, for example agriculture and business studies.
- 2) Teachers who assist in the income generating activities should be motivated through for example, financial incentives.

On the challenges faced by principals in the management of income generating activities, the following recommendations can be made.

- 1) With regard to lack of requisite skills needed to undertake these income generating activities aggressively and manage them professionally, the Ministry of Education should mount training programmes in entrepreneurial skills for

school managers in order to empower them to run these income generating activities.

- 2) Principals should also take the initiative and enroll for short term courses especially during the holidays
- 3) Promotion of principals should also be pegged on their financial management ability as in this case; the income generating activities.
- 4) Schools should liaise with relevant government departments, for example agricultural field officers to get expert support.
- 5) Schools without land title deeds should strive to obtain them so that they can use them as collateral to obtain loans from financial institutions.
- 6) Schools should include targets for their income generating activities in their strategic plans and work towards achieving them.
- 7) Schools should liaise with relevant government departments, for example agricultural field officers to get expert support.
- 8) Entrepreneurship should be included in the Teaching Curriculum of Universities and Colleges. This will help to bring to the attention of future school administrators of the need for starting up, enhancing of Income Generating Activities as a supplementary fund to effectively execute school budget.
- 9) Schools should look for innovative ways of reducing running or maintenance costs, for example by involving students in crop farming.
- 10) Proper auditing of Income Generating Activities should be done to ensure accountability and proper record keeping.

11) Students and staff who assist in the income generating activities should be motivated by, for example being offered better meals or by the award of gifts and presents so as to increase their output.

12) Principals should keep the parents and members of the Boards of Governors informed about all stages of implementation of the income generating activities so as to win their trust and confidence. These projects should not be mired in secrecy.

The following recommendations can be made pertaining to the objective of establishing the contribution of income generating activities to the financing of secondary education:

- 1) Schools should formulate separate strategic plans if possible for the income generating activities and work towards attaining them.
- 2) Secondary schools should borrow a leaf from the universities that run Income Generating Activities as separate entities, for example University of Nairobi Enterprise Services

#### **5.4 Suggestions for further research**

The following are suggested topics for further research:

- i. To find out secondary school principals' perception towards income generating activities.
- ii. To find out the relationship between principals' management styles and the performance of the income generating activities.
- iii. To find out how status of school influences the types of income generating activities that are practiced.

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**APPENDIX I: INFORMED CONSENT LETTER**

Department of Educational Management and Policy Studies

School of Education

Moi University

P. O. Box 3900

**ELDORET, KENYA**

Dear Participant,

**RE: INFORMED CONSENT LETTER**

I am a Post graduate student in the department of Education Management and Policy Studies of Moi University. I am pursuing a Master of Philosophy Degree Program. I hereby request you to participate in the study. The purpose of the study is to provide information on the selected factors influencing principals' management of Income Generating Activities in Public secondary schools of Mumias District.

You are requested to provide sincere and accurate responses to all items in the questionnaire that you will be given. The information that you give will be kept confidential and will not be used for any purpose which is not related to the objectives of this study. Please do not write your name on any of the papers provided. You may contact the researcher for more information about the study or you may request the researcher to communicate the findings of the study.

Thank you very much for volunteering to participate.

Yours Sincerely,

Andrew Mbasu Lunani

**APPENDIX 2: TIME SCHEDULE**

<b>MONTH</b>	<b>ACTIVITY</b>
May – August 2012	Drafting of research proposal
September 2012	Presentation of research proposal in the department of Education Management and Policy studies
October – December 2012	Making correction to the proposal
January 2013	Seeking permission from the Ministry of Higher Education
February 2013	Administration of questionnaires and conducting interviews
March 2013	Data analysis and report writing
April 2013	Library research
May 2013	Submission of thesis to the department of Education Management and Policy studies
May 2013	Making the final correction to the thesis
June 2013	Final submission
October 2014	Defending of the final Thesis

**APPENDIX 3: BUDGET**

	<b>ACTIVITY</b>	<b>COST IN KSHS</b>
1.	Photocopying and typesetting	70,000
2.	Data collection	30,000
3.	Internet services	25,000
4.	Transport	20,000
5.	Writing materials	10,000
6.	Flash discs and CDs	5,000
7.	Research Assistant fee	30,000
8.	Miscellaneous	20,000
	<b>TOTAL</b>	<b>210,000</b>

## APPENDIX 4: PRINCIPALS' QUESTIONNAIRE

The purpose of this questionnaire is to collect information on the selected factors influencing principals' management of income generating activities in public secondary schools of Mumias district .The information you will give will be used for this study and shall be absolutely confidential. You are therefore not required to write your name on this questionnaire.

### Part A: Demographic information

Provide appropriate responses to the following. Please put a tick in the appropriate box and give a comment where required.

1. What is your gender?

Male  Female

2. What is your age bracket?

20-30 years  31-40 years  41-50 years  above 50 years

3. What is the type of your school?

Girls boarding school  Mixed boarding  Mixed day  Mixed day and boarding

4. What is the category of your school?

District  Provincial

5. What is your highest level of education?

a) Certificate  b) Diploma  c) Bachelor's degree  d) Masters degree

7. What is your work experience?

a) 0-4 years  b) 5-9 years  c) 10 years and above

### Section B:

10. Please tick appropriately to indicate the kind of income generating activities (IGA) carried out in your school.

<b>Income Generating Activity</b>	<b>Available (operational)</b>	<b>Not available</b>	<b>Average annual income for the period 2010 to 2012</b>
Crop farming			
Poultry keeping			
Dairy farming			
Hosting conferences and seminars			
School canteen			
Bus hire			
Others			

11. What is the contribution of school members in supporting the income generating activities? Please tick appropriately.

Key: Strongly Agree (S.A), Agree (A), Undecided (U), Disagree (D), Strongly Disagree (S.D).

<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>DA</b>	<b>SD</b>
<b>Head teacher</b>					
Coordinating the running of income generating activities					
Seeking support from well wishers					
Overseeing transactions involving the IGA					
Project assessment of viable IGA					
Monitoring of IGA					
Evaluation of IGA					
Ensuring accountability from all participants in IGA					
<b>Teachers</b>					
Contributing to decision making involving IGA					
Organizing students to participate in IGA					
Actively participating in IGA					
Training students and staff on suitable IGA					
Coming up with new IGA ideas					
<b>Students</b>					
Participating actively in IGA					
Supportively contributing ideas in areas of specialization					
Sensitizing each other on importance of IGA					



<b>Parents</b>					
Giving financial support to IGA					
Giving advisory in their respective areas of specialization					
Giving material support to IGA					
Giving moral support to participants in IGA					

12. How has earnings from income generating activities been used in your school? Please tick appropriately.

Key: Strongly Agree (S.A), Agree (A), Undecided (U), Disagree (D), Strongly Disagree (S.D).

<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>DA</b>	<b>SD</b>
Improving infrastructure					
Shared among teachers					
Paying school fees for less fortunate students					
Buying teaching and learning materials					
Rewarding of performing teachers and students					
Buying of laboratory equipments					
Holding students and teachers parties					

13. What in your own words do you think are the effects of earnings from income generating activities being used in you school on the following aspects;

Student's academic performance

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.....  
.....  
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Co-curriculum activities

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Student health

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Teachers welfare

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School budgeting

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 .....  
 14) Please tick appropriately to indicate your opinion on the following challenges facing income generating activities (IGA).

Key: Strongly Agree (S.A), Agree (A), Undecided (U), Disagree (D), Strongly Disagree (S.D).

Statement	SA	A	U	DA	SD
Land limitation					
Inadequate funding					
Lack of skilled manpower					
Unsupportive teachers					
Unsupportive parents					
Unsupportive Boards of Governors					
Unsupportive sub-ordinate staff					
Negative attitude towards income generating activities					
School culture that is unsupportive of (IGA)					

15) In your opinion, what are some of the solutions to the challenges that principals face while implementing income generating activities?(please give brief responses)

.....  
 .....  
 .....  
 .....  
 .....

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## APPENDIX 5: QUESTIONNAIRE FOR TEACHERS

The purpose of this questionnaire is to collect information on the selected factors influencing principals' management of income generating activities in public secondary schools of Mumias district .The information you will give will be used for this study and shall be absolutely confidential. You are therefore not required to write your name on this questionnaire.

### Part A: Demographic information

Provide appropriate responses to the following please put a tick in the appropriate box and give a comment where required.

1. What is your gender?

Male  Female

2. What is your age bracket?

20-30 years  31-40 years  41-50 years  above 50 years

3. What is the type of your school?

Girls boarding school  Mixed boarding  Mixed day  Mixed day and boarding

4. What is the category of your school?

District  Provincial

5. What is your highest level of education?

a) Certificate  b) Diploma  c) Bachelor's degree

7. What is your work experience?

a) 0-4 years  b) 5-9 years  c) 10 years and above

8. Who is your employer?

a) TSC  b) S.M.C

9. Position in school

Assistant teacher [ ] H.O.D [ ]

**Section B:**

10. Please tick appropriately to indicate the kind of income generating activities (IGA) carried out in your school.

<b>Income Generating Activity</b>	<b>Available (operational)</b>	<b>Not available</b>
Crop farming		
Poultry keeping		
Dairy farming		
Hiring facilities (bus, chairs, conference halls)		
School canteen		
Bus hire		
Others		

11. What is the contribution of teachers in supporting the income generating activities?

Please tick appropriately.

**Key: Strongly Agree (S.A), Agree (A), Undecided (U), Disagree (D), Strongly Disagree (S.D).**

<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>DA</b>	<b>SD</b>
Contributing to decision making involving IGA					
Organizing students to participate in IGA					
Actively participating in IGA					
Training students and staff on suitable IGA					
Coming up with new IGA ideas					

12. How has earnings from income generating activities been used in your school? Please tick appropriately.

**Key: Strongly Agree (S.A), Agree (A), Undecided (U), Disagree (D), Strongly Disagree (S.D).**

<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>DA</b>	<b>SD</b>
Improving infrastructure					
Shared among teachers					
Paying school fees for less fortunate students					
Buying teaching and learning materials					
Rewarding of performing teachers and students					
Buying of laboratory equipments					

Holding students and teachers parties					
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13 Please tick appropriately to indicate your opinion on the following challenges facing income generating activities (IGA).

Key: Strongly Agree (S.A), Agree (A), Undecided (U), Disagree (D), Strongly Disagree (S.D).

Statement	SA	A	U	DA	SD
Land limitation					
Inadequate funding					
Lack of skilled manpower					
Unsupportive students					
Unsupportive parents					
Unsupportive Boards of Governors					
Unsupportive sub-ordinate staff					
Negative attitude towards income generating activities					
School culture that is unsupportive of (IGA)					

14) In your opinion, what are some of the solutions to the challenges that principals face while implementing income generating activities?(please give brief responses)

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**APPENDIX 6: EDUCATION OFFICER’S INTERVIEW SCHEDULE**

1. For how long have you been a District Education Officer?

\_\_\_\_\_

2. What are some of the major Income Generating Activities that are practiced in the District?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. What is the official government policy on the Income Generating Activities?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. What role does the government play in the Income Generating Activities?

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5. Does the government offer any entrepreneurship training courses for the principals?

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6. Are the Income Generating Activities officially audited by the Ministry of Education?

**MINISTRY OF EDUCATION**

Telegram  
Telephone  
*When replying please quote.*



DISTRICT EDUCATION OFFICE  
MUMIAS DISTRICT  
P. O. BOX 352  
MUMIAS.

REF: MMS/EDU/7/31/64

22<sup>nd</sup> February, 2013

**All Principals  
Secondary Schools  
Mumias District.**

**RE: RESEARCH AUTHORIZATION - ANDREW MBASU LUNANI**

The above named is a 2<sup>nd</sup> year master of philosophy (M. Phil) student at Moi University. He has been authorized by the **National Council for Science and Technology** to undertake his research in our schools.

This is therefore to kindly request you to accord him the necessary cooperation in the course of his research to enable him come out successfully.

**MUKABI THOMAS  
DISTRICT EDUCATION OFFICER  
MUMIAS.**

CC:

The National Council for Science and Technology  
P. O. Box 30623 - 00100  
Nairobi.

REPUBLIC OF KENYA



## NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349, 254-020-2673550  
 Mobile: 0713 788 787 , 0735 404 245  
 Fax: 254-020-2213215  
 When replying please quote  
 secretary@ncst.go.ke

P.O. Box 30623-00100  
 NAIROBI-KENYA  
 Website: www.ncst.go.ke

Our Ref: **NCST/RCD/14/013/338**

Date: **4<sup>th</sup> April 2013**

Andrew Mbasu Lunani  
 Moi University  
 P.O.Box 3900-30100  
 Eldoret.

### RE: RESEARCH AUTHORIZATION

Following your application dated **25<sup>th</sup> March, 2013** for authority to carry out research on "*Challenges faced by Principals in managing income generating activities in public Secondary schools of Mumias District, Kenya*" I am pleased to inform you that you have been authorized to undertake research in **Mumias District** for a period ending **15<sup>th</sup> August 2013**.

You are advised to report to **the District Commissioner and District Education Officer, Mumias District** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

  
**DR. M. K. RUGUTT, PhD, HSC.**  
**DEPUTY COUNCIL SECRETARY**

Copy to:

The District Commissioner,  
 The District Education Officer,  
 Mumias District.



Research Permit No. NCST/RCD/14/013/338

Date of issue 4<sup>th</sup> April, 2013

Fee received KSH. 1,000

THIS IS TO CERTIFY THAT:

Prof./Dr./Mr./Mrs./Miss/Institution

Andrew Mbasu Lunani

of (Address) Moi University

P.O.Box 3900-30100, Eldoret

has been permitted to conduct research in

Location

Mumias

District

Western

Province



on the topic: Challenges faced by Principals in managing income generating activities in public Secondary schools of Mumias District, Kenya

for a period ending: 15<sup>th</sup> August 2013

Applicant's Signature

Secretary National Council for Science & Technology

CONDITIONS

1. You must report to the District Commissioner and the District Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.
2. Government Officers will not be interviewed without prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2)/ four(4) bound copies of your final report for Kenyans and non-Kenyans respectively.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.



REPUBLIC OF KENYA

RESEARCH CLEARANCE PERMIT