

**IMPACT OF INCOME GENERATING ACTIVITIES ON STUDENTS'
RETENTION RATES IN PUBLIC SECONDARY SCHOOLS IN
VIHIGA DISTRICT, KENYA**

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DECLARATION

This research project is my original work and has not been presented for any award in any other university

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DEDICATION

This project is dedicated to my beloved parents; Mrs Albina Cheroigin and the late Mr. Richard Cheroigin.

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ABBREVIATIONS AND ACRONYMS

DEO	–	District Education Officer
EFA	-	Education for All
IGAs	–	Income Generating Activities
GDP	–	Gross Domestic Product
GER	–	Gross Enrollment Rate
IMF	–	International Monetary Fund
KIPPRA	–	Kenya Institute of Public Policy Research and Analysis
MOE	–	Ministry of Education
ROK	–	Republic of Kenya
SAPs	–	Structural Adjustment Programmes
SMASSE	–	Strengthening the Teaching of Mathematics and Science

ABSTRACT

Education is crucial for social economic development of any nation. The importance of education in nation development is best captured by Todaro (1989) who asserts that “a country which is unable to develop the skills and knowledge of her people and utilize them effectively in national economy, will be unable to develop anything else”. The importance of secondary education in stimulation of social economic development of any nation have been documented in several studies and a number of government policy documents (Psacharopolous, 1985; Ayot and Briggs, 1992). The purpose of this study was to establish the impact of income generating activities on students retention rate in public secondary schools in Vihiga district. Four objectives guided the study; establishment of type of income generating activities, the amount earned from various income generating activities, how funds earned from income generating activities were being used to mitigate students’ retention, how income generating activities were being managed and the challenges schools were experiencing in exploiting income generating activities as alternative source of education financing. The literature review exploited empirical findings on income generating activities in schools and what different authors have written on the same. The study employed descriptive survey research design. A population of 22 Principals, 22 bursars, 22 class teachers and 220 form four students were used in the study. Due to the small number of schools as target population, saturated sampling was used. Questionnaires, interview schedule and observation checklist were used as research instruments. Quantitative data was analyzed using descriptive statements while qualitative data was incooperated in interpretation of research findings based on field experience. The findings of the study indicate that income generating activities which could have eased the burden of educational financing was not fully exploited. It concluded that most principals lacked entrepreneurial and business skills to exploit income generating activities as an alternative source of education financing to promote students retention. The study recommends that since there is high potential for income generating activities to contribute towards school budget, they should be enhanced to mitigate retention in public schools in Vihiga district. The school principals should be equipped with entrepreneurial and business skills to make them effective in exploiting income generating activities and make significant contribution cost of education and promotion of students retention. The study further recommends that similar study should be carried out in other regions to find out if the findings can be generalized.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Education is crucial for social economic development of any nation. The importance of education in nation development is best captured by Todaro (1989) who asserts that “a country which is unable to develop the skills and knowledge of her people and utilize them effectively in national economy, will be unable to develop anything else”. The importance of secondary education in stimulation of social economic development of any nation have been documented in several studies and a number of government policy documents (Psacharopolous, 1985; Ayot and Briggs, 1992).

In Kenya, the demographic trend of secondary school age population and improvement of primary school internal efficiency have led to high demand for secondary education (ROK, 2005). It is projected that enrollment in Kenya’s secondary school is to grow by 115% from 0.9 million students in 2004 to 2.7 million by 2015 (KIPPRA, 2006). However, the increasing demand comes at a time of rising diminishing resources due to poor economic growth and rising poverty levels among the household.

In bid to address the problem of education financing which heavily weighs on the exchequer, the International Monetary Fund (IMF) advocated for structural Adjustment programmes (SAPs) in early 1990s which saw introduction of cost

sharing in the provision of education in developing countries. The donors, local communities, households, government and other beneficiaries of education were to share responsibility of meeting the costs of education (RoK, 1988). Introduction of cost sharing had devastating consequences on access, retention and quality of education with the worst hit being students from poor social economic backgrounds. Poverty levels among households have made it difficult to meet their obligations towards cost of education. (Njeru and Orodho, 2003; Anderson, 1988)

Despite the rising cost of secondary education, the importance of secondary education in stimulation of social economic development of any country dictates that all possible alternatives have to be exploited to ensure that adequate resources are raised to ensure provision of not just secondary education, but education that is relevant to the needs of the country. According to World Bank (2005) provision of good quality secondary education stimulates opportunities and benefits of social economic development by providing a link between basic education and the world of work, on one hand and further training on the other.

Education financing by the donors, households and governments have remained the only traditional sources of. Mukira (2005) argues that income from fees charged to students is unreliable due to low income and high poverty levels among the households. Similarly, income from donors is unreliable as it comes with strings attached. The only source could be the government but its constrained by budgetary allocations and competition from other sectors of the economy. Therefore, there is

need to explore other viable sources of education financing in order to supplement tradition sources to promote enrolment, retention and quality of education. But what other financing options are available? Simatwa, and O. Ojwang (2011) identifies Income Generating Activities (IGAs) within schools as one of the viable sources that school management can tap to narrow budgetary fiscal deficit brought about by inability of partners of education to meet adequately their obligation towards education financing. They advocate for mobilization of school resources such as use of land, physical facilities and equipment to generate supplementary income so as to provide necessary learning resources to run schools effectively.

Indeed, IGAs as a financing option is viable. For instance when structural adjustment programmes (SAPs) were introduced in Nigeria, public universities developed adaptive mechanisms such as; curtailment of laboratory and practical classes, limitation of field trips, freezing of new appointments among other measures. Income generating activities such as research work, issue of bonds by Nigerian universities and introduction of module 2 studies in Kenyan public universities are living example of how universities have come up with innovative programmes to generate funds internally to cushion budgetary deficit brought about by under funding (Kimuyi and Igwe; 1998; Lumuli, 2009). Public universities in Kenya have used funds raised through income generating activities to expand education opportunities.

Brodersohn (1978) citing evidences from Caribbean countries at that time concluded that 25-50% of operating and maintenance costs could be financed through goods produced in schools. This shows that schools have potential to initiate income generating activities to supplement their budgets. Mukira (2005) and Kiveu and Mayo (2009) in their agreement with this assertion identifies such activities as dairy farming, horticulture, housing estates, school canteens among others as some of the activities that schools could engage in to get additional sources of income. These activities could go a long way in assisting in the provision of teaching and learning resources which could go along way in creation of conducive environment for learning, promoting access, retention, completion and quality of education.

A report on poverty in Kenya (RoK 2005) showed that 66% of the population in Vihiga lived in absolute poverty. The causes of poverty are identified as; lack of capital to invest, high population density, uneconomical land units, high dependency syndrome, HIV and AIDs, high cost of education and poor infrastructure. In Vihiga district poor families find it difficult to pay school fees that even free education imposes a substantial burden through earnings foregone and other expenses for uniform, travel, books, lunch and extra tuition. This study therefore, endeavors to establish the extent to which income-generating activities in public schools have been tapped to generate funds to supplement school budget in provision of teaching and learning resources, awarding bursaries to needy students, motivating staff and providing basic needs to students with the aim of increasing retention rate.

1.2 Statement of the Problem

Documented literature and various government policy documents have shown how education is important in the stimulation of social-economic development of a nation. Kenya's visionary plan of being industrialized by the year 2030 demands that a majority of the youth should be able to access secondary education as a component of basic education. However, despite the importance of education in the process of economic development, the high costs of its provision and expansion of quality education have been escalating as a result of high demand brought about by demographic trend of secondary school age population and improvement of primary school internal efficiency (ROK, 2005).

The increased demand comes at a time of dwindling resources as the government faces poor economic growth and increasing demand from other sectors of the economy. The household is faced with increasing poverty levels and donor funding which is unreliable as they keep shifting conditions. This has made reliance on traditional sources inadequate to support access, retention and completion rates. At the same time, support to quality education has worst hit children from poor social economic background. Several alternatives in supporting education budget outside conventional sources have been advanced with income generating activities in schools being one of the alternatives (ROK, 2009).

Vihiga District has over 60% of her population living below poverty line (ROK, 2008). According to the development plan, most parents experience problem of meeting their obligation towards cost of education due to uneconomic land sizes and high HIV and AIDS prevalence rates with more than 50% of bed occupancy in hospitals in the region are taken over by HIV and AIDs victims (RoK, 2008). Various workshops have been mounted for principals of secondary schools in Vihiga district by the ministry of education with an aim of enlightening them on the importance of supplementing school budgets internally through initiation of income generating activities. The major question is: To what extent have public schools in Vihiga District embraced IGAs as alternative mode of financing education to ease the burden of education financing to support retention in schools? Due to high levels of poverty, income generating activities in schools could have gone a long way in supplementing school budget while easing the burden of education financing. This study sought to establish the impact of IGAs on students' retention in public secondary schools in Vihiga District and whether public schools were exploiting IGAS as an alternative form of education financing to promote students' retention.

1.3 Purpose of the Study

The purpose of the study was to establish the impact of income generating activities on students' retention rate in public secondary schools of Vihiga district.

1.4 Objectives of the Study

The study was guided by the following objectives;-

- i) To determine the type of income generating activities in public secondary schools in Vihiga district.
- ii) To establish the extent to which income realized from various income generating activities in public secondary schools in Vihiga district are used to mitigate students' retention.
- iii) To examine how various in-come generating activities in public secondary schools in Vihiga District are managed.
- iv) To establish challenges faced by public secondary schools in initiating and sustaining income generating activities as a measure of enhancing students' retention.

1.5 Research Questions

The study was guided by the following research questions

- i) What are income generating activities in public secondary schools in Vihiga district?
- ii) How are funds from various income generating activities in public secondary schools in Vihiga district used to mitigate students retention?
- iii) How are various income generating activities in existence in public schools managed?

- iv) What challenges do public secondary schools in Vihiga district encounter in initiating and sustaining income generating activities as a measure of enhancing student retention?

1.6 Significance of the Study

The findings may contribute to empirical backing on the contribution of IGAS towards support of education budget in schools. The findings may provide a reference point to education stakeholders such as policy makers and administrators who may use them in their effort to planning and making intervention efforts to supplement traditional sources of education financing to make it affordable hence promoting retention. Finally, the finding of this study may provide a data bank for other researchers who may be interested in similar studies in future.

1.7 Limitations of the Study

At the initial stages the respondents were reluctant to give information since the study touched on sensitive matters of school finances. However the researcher, explained the importance of the study, the need for truthfulness on the side of the respondents, the assurance that their identity was not to be divulged and that the study was mainly for academic purpose. This made the respondents to cooperate. The researcher also used triangulation, a method of obtaining data by using several instruments to obtain the same information from independent sources by asking on the same thing.

1.8 Delimitation of the Study

The study was carried out in public secondary schools in Vihiga district. This has made generalization of findings to other districts difficult since exploitation of income generating activities and how such funds are utilized may vary from region to region as the challenges and opportunities faced may not be uniform.

1.9 Basic Assumptions

The study was guided by the following assumptions;

- i) Incomes from income generating activities in schools are ploughed back in schools to promote education to increase access, retention and improve quality of education.
- ii) Public schools are run by principals who are academically and professionally qualified.
- iii) Each school has a potential to generate some income that could go a long way in supplementing the cost of education in the schools.

1.10 Definition of Significant Terms

Access – refers to availability of opportunities at Secondary School level for those who are eligible and meet the desired criteria

Cost of education – refers to the price paid in providing or acquiring education.

Drop out – refers to withdraw from a school at any level or grade before completing the required course.

Income generating activities – refers to any commercial undertaking aimed at earning income for an institution.

Initial registration – refers to students who were enrolled in form one of the cohort

Public Secondary school - refers to those schools that are registered as such and are supplied with teachers and occasional grants by the government.

Quality of education - refers to caliber of graduates of education system as evidenced through skills attained undertaking aimed at earning income for the institution

Repetition – refers to a year spent by a student doing the same work at the same grade as his or her previous year in school.

Retention – refers to ability to remain and participate in school activities once requested up to the end of the cycle without dropping out.

1.11 Organizational of the Study

The study is organized into five chapters. Chapter one covers the introduction to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitations of the study, delimitations of the study, basic assumptions and organization of the study. Chapter two presents literature review under introduction, economic justification of investment in secondary education, access and retention in secondary schools, and issues of retention in secondary schools, summary of literature review and conceptual framework. Chapter three consists of research methodology which

covers introduction, research design, target population, sampling technique and sample size, research instruments, validity of research instruments, reliability of research instruments, data collection procedure, data analysis technique. Chapter four presents data captured from the field. It shows data analysis which is organized into themes based on research questions. Chapter five gives the summary, conclusion, recommendations of the study and recommendations for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section covers literature related to the study under; justification of investment in education, access and retention in secondary schools, issues of retention in secondary school.

2.2 Justification of Investment in Education

World Bank (2005) states that provision of good quality secondary school education is a critical tool for generating opportunities for social economic development. It is estimated that average earnings increase by 11% for each addition year of schooling while additional year of maternal education reduces child mortality by 8% (ibid). KIPPRA (2006) identifies secondary education as a vital link between basic education, world of work and further training. This sector is critical in preparation of human capital and provision of life opportunities through promotion of macroeconomic performance in form of higher levels of growth rates associated with high levels of productivity and per capita income at country level (UNESCO, 2005; Lewin and Celled, 2001)

Wei Tsang and Chen (1999) identify secondary education to provision of higher returns in promotion of economic development compared to primary education. They state that vicious cycle of greater investment in education leads to greater economic growth as it happened in East Asia. Mandan, Mau and Simonyi (2002)

observed that private returns to education in Kenya increases with level of education. They further noted that human capital externalities for male and female has positive impact on earnings of all workers. Secondary education plays a critical role in poverty reduction through allocation of life chances in most developing countries (Lewin 2006). Access to and successful completion of secondary education tap pool of talents, promote equality of educational opportunities, improving social mobility out of poverty.

Therefore, the importance of secondary education in promotion of social economic development demands that all necessary resources have to be mobilized to promote access retention and quality of education. Income generating activities in schools have been identified to have the capacity of filling this gap through provision of supplementary funds to reduce cost of education on the household, provision of bursaries to needy students, provision of teaching and learning resources and motivation of teachers creating conducive environment.(Kiveu and Mayo, 2009; Lumuli, 2009). The extent to which IGAs have been used to promote the above Vihiga District has not been documented. This study proposed to fill this gap.

2.3 Factors Influencing Access and Retention in Secondary Schools

Lewin (2006) made the following observation on secondary schooling in Sub Saharan Africa (SSA). First participation and schooling is generally low as three quarters of school age population experience little or no secondary school;

participation rates are not systematically related to enrolment rates at primary nor are lower and upper secondary rates related; more boys than girls attend secondary school in SSA; participation is strongly skewed in favour of the rich households and urban population; public expenditure on secondary education is less than that allocated to higher education in some countries and lastly poverty reduction will stall unless both growth and distribution of secondary education are considered.

In the 16th Conference of Ministers of Education (2006) whose theme was ; Financing Secondary Education in Commonwealth Countries: New Challenges for Policy Practice, it was observed that; the number of primary school pupils completing education is set to double in the next 10 years as universal education and completion is approach. Secondly, HIV and AIDS have decimated the active labor force and undermined prospects for economic growth in some countries and pose a threat to many. Thirdly, increased secondary participation within the current cost structures in SSA is severely constrained and substantial increase in secondary school access will be difficult to finance and sustain without reforms. The following table shows the numbers of children out of school in the low income countries.

Table 1.1 Children out of School in the Low Income Common Wealth

Countries in Secondary schools

COUNTRY LOCATION	NUMBER ENROLLED	NUMBER OUT OF SCHOOL
Sub-Saharan Africa	17,385,000	31,758,000
South Asia	95,068,000	107,138,000
South East Asia	2,505,000	985,000
Caribbean central	529,000	97,000
America		
Pacific	303,000	601,000
Overall	131,097,000	140,577,000

SOURCE: 16th Conference of Education Ministers (UNESCO 2005)

From the above table, over 140 million children are out of secondary school with over 31 million coming from SSA. However, majority of children who are out of school is not due to lack of interest in education but inability to meet cost requirement towards education financing. According to Lewin (2006), if lower secondary education enrollment is to achieve 100% enrolment of those of the official entry age four times, as many places are needed which will rise to 5.6 times as many by 2015. Similarly for 100% upper secondary participation 10.9 times of places are needed which should be raised to 15.5 times by 2015. Based on the above scenario, IGAs should be undertaken seriously as part of school reforms in sustaining school budget to promote access to secondary education. But to what extent was this option being exploited in public secondary schools in

Vihiga district? This is an issue that called for investigation; hence the purpose of this study.

2.4 Issues of Retention in Schools

2.4.1 Cost of Education

Retention in school is influenced by costs of education. The costs of education are direct cost as cost of fees, while indirect costs involve opportunity cost foregone. The cost of education will determine affordability. Schultz (1963) argues that whatever the benefit of education cost really matter. Njeru and Orodho (2003) identify high cost of education in terms of fees and other related charges as the most critical factor hindering student enrolment and participation in schools. Indeed Mayo; Achoka; Ndiku; Amuga and Wasike (2008) state that students from poor families are worst hit by high cost of education. They state that students from poor families lack parental stimulation while those from rich families do not only have economic superiority over them but they also have motivating environments back home. They are therefore cushioned in all ways and this enhances their competition of schooling as the poor succumb to wastage (ibid). Unequal consumption of education is caused by income inequalities leading to stratification of a society into 'haves' and 'have nots'.

Despite the critical role that secondary education plays in development; Wachiye (2010); states that access to particularly secondary education remains strongly associated with household wealth. The chances of the poorest being enrolled

relative to the richest have not improved substantially despite the commitment to pro-poor policies by the government; such as introduction of bursary fund. According to Kiveu and Mayo (2009) adoption of cost sharing policy in education has witnessed the return to communities and parents a substantial proportion of financial responsibility for schooling. This situation is compounded with increased poverty levels making many parents and communities not to be able to meet the cost of education under cost sharing policy (ibid). This position concurs with Njeru and Orodho (2003) who states that;

The cost sharing strategy has had a negative impact on the poor and the vulnerable households. The latter do not only fail to enrol their children in secondary schools but they also fail to sustain continuous participation of those enrolled due to inability to meet the cost of requirements.

Similarly session paper on education (2004) states that introduction of cost sharing led to reduction in Gross Enrollment Rate (GER) from 29.4% in 1990 to 22.2% in 2000 due to high cost of education and poverty among the households. Alternatively, the World Bank report of 1995 states that between 1991 and 1994, Gross Domestic Product per capita (GDP) in Kenya declined at 35% yet the cost of education borne as a percentage of Gross National Product per capita continued to rise over the same period. It further states that students with fee difficulties increased from 34% of school enrolment to 38%, a situation that contributed to drop out rates in schools.

As Kenya moves towards achieving universal primary schooling, demand of education is shifting to secondary education. Onsomu (2009) notes that raising adequate revenue to run secondary education sector is a big challenge to the government. Therefore despite the importance of secondary education in development, the cost of provision and expansion of quality secondary education have been escalating while resources are dwindling. This scenario is likely to remain the same if not worse unless intervention is put in place (ibid). A number of observations have been made showing a bleak future of secondary education sector unless urgent measures are put in place to address the problem of secondary education financing. First with introduction of free primary education (FPE), the number of pupils completing primary education is bound to increase in the near future. Second, to do nothing on transition rate into access to secondary education may have adverse consequences for primary completion rates as pupils lose hope of joining secondary schools. Third, failure to expand secondary education will compromise human capital accumulation and therefore jeopardize economic recovery and development. Fourth, Kenya economic recovery and growth will prove elusive with small proportion of labour force completing secondary education, undermining the financial sustaining for education for all (EFA) as envisaged in national development goals.

Though children from poor families might benefit from Free Primary Education (FPE), the high secondary school fees demanded for education provision become a hindrance to their further advancement. Bursaries and Constituency

Development Fund (CDF) which should enable them access secondary education are disbursed late and some of the poor families may have no idea on how to get financial assistance (Mayio et al, 2008). The few who perform well at Primary School loose opportunity to join good Secondary School. Though investment in education by the poor could help reduce income inequality, the poor cannot invest what they do not have. It is against this background that Kenya Draft Secondary Education Strategy Paper (2005) called for containing the unit cost of education through innovations not only to meet the supply side of “accessibility” expansion needs for addition teachers and classrooms, but also address the demand side of “affordability” pressure that are preventing lower scoail groups from accessing secondary education. However, the effort to make education affordable should not compromise the quality of education offered. Somerset (2011) observed that the initiative to achieve universal primary education is unlikely to succeed unless tension between access and cost and its implication on quality is recognized and taken into account. If the program does not inco-oporate viable plans to meet additional costs and prevent quality being compromised, its prospects will be in jeopardy from the onset (ibid). The same is applicable in secondary schools. Income generating opportunities in Schools could help greatly by contributing towards the raising of the cost of education, reducing the burden borne by the parents hence increasing demand for education. This study aimed at establishing the extent to which public schools in Vihiga District had embraced this option.

2.4.2 Poverty Level

Mayio et al(2008) states that many low income countries take bold steps to broaden access to schooling through abolishing tuition fees in primary schools. However, the poor quality education is emerging as foremost obstacle to progress as high levels of access do not translate into high quality of education. In many developing countries, less than 75% of pupils reach grade 5 reflecting issues of household poverty and poor quality education. Pupils from low income families are the hardest hit by poor quality education as they are subjected to overcrowding in classrooms, poorly trained teachers, lack of learning materials and sanitation facilities (ibid). Similarly they contend that income inequality is significantly and negatively related to education dispersion and the average education attainment in the population. Inequality depresses economic growth and affects universal uniform investment in education by countries as well as individuals. Without economic growth then, there is no creation of employment opportunities that can raise the income of the poor and alleviate poverty. Lack of investment in education also means lack of increase in stock of human capital within the middle and low income groups. Such an unequal distribution of education opportunities disadvantages low income groups.

Generally, when education levels are low, a characteristic of less developed countries, there is a low degree of education dispersion as very few people acquire education. They conclude that the resultant effect is there are few education differences between generations and within each generation; as all individuals

tend to have the same education levels. Unesco (1998) contends that income inequality leads to gender inequality in the acquisition of education. It was noted that when poor families can only afford to educate some of their children, they tend to favour sons over daughters. This is because of the belief that it is important to equip the boys for the job market. This makes girls to comprise a large proportion of out of school population and face special difficulties in gaining access to education. According to UNICEF(1999) girls represent 2 of every 3 children in the developing world who do not receive primary education.

Psacharapoulos and Woodhall (1985), identifies family income as the most powerful determinant for primary and higher education. In all countries children from poor social economic background are less apt to enroll and more apt to dropout than children from better off families (Anderson, 1988; Machyo; 1995). A study done in Malaysia (Meerman, 1979) concluded that effective demand at each level of education is a positive function of income. Oduk (2007), states that students from low income countries face perennial problem of school fees which affect their retention and completion rates. They are consistently sent home due unpaid fees and may be a way from school for several weeks with some dropping out altogether. Opportunity cost for poor families is high since expected returns for poor families from schooling is low, affecting their retention and completion rates (ibid).

According to Mbai (2004), when faced with dire economic consequences, the poor tend to give priority to essential needs such as food, shelter and clothing; where education is placed at a distant in their hierarchy. Poverty levels at households makes the poor families to assess opportunity cost associated with schooling. Since the poor cannot hire labour, students from poor families are used as labour for odd jobs as housemaids among other duties to help the family earn a living. Republic of Kenya (1999) acknowledges that child labour is rampant in denying children a chance from participating in education or reducing effective participation, causing absenteeism and eventual drop out.

Onyango (2000) states that the higher the poverty level, the higher the drop out rate for the poor have to make considerable financial sacrifice to send other children to school. Indeed world bank 1995 indicated that due to high poverty levels that Kenya was experiencing as a result of low economic growth, many children no longer had access to education because they were unable to meet the cost of education. Briggs (1972) agrees that economic factors are the main cause of premature withdrawal of students from schools. Mbai (2004) attributes 98% of drop out cases to inability to meet the cost of education. According to Vihiga District Development Plant (ROK 2008), the district has over 60% of population living below poverty line; therefore most parents experience a problem meeting their obligation towards cost of education.

Achoka (2007) states that critical concern of perennial retention, drop out and completion rates at secondary school level marks the country's loss of potential manpower for industrialization. This also affects country's target of EFA by the year 2015 which is the year for realization of Millenium Development Goals.

It is against this background that it is necessary to supplement financing education from other sources in order to cushion students from poor social economic background against adverse effect of high cost of education. Income generating activities are some of the potential sources for schools to supplement their income. But what is the extent of implementation of IGAs in public secondary school in Vihiga District? Since there was limited literature to enable the answering of this question, the study endeavored to fill the gap.

2.5 Summary of Literature Review

Literature review reveals the importance of secondary education in promotion of social economic development. It shows however that for effective social economic development, education has to be accessed by a majority of the members of that particular society. At the same time meeting educational requirements in terms of resources comes at a cost. This cost greatly disadvantages students from poor social economic background whose ability to meet the same is limited. The governments' efforts to assist poor students are also hampered by budgetary constraints and corruption. Donor funding has been an alternative of education financing is unreliable. Empirical literature indicate that in order to promote access and retention of students in schools, various

alternatives of education financing have to be fully exploited with income generating activities being among them. The review indicates that income generating activities in public universities in Kenya has helped greatly in bridging budgetary deficit in these institutions. Therefore, there is high potential for schools to make significant contribution in bridging budgetary deficit gaps created by supplementing with income from other sources among them income from income generating activities in schools. It is against this background that this study sought to find out how IGAs were contributing to reduction in cost of education to promote student retention in public secondary schools of Vihiga district.

2.6 Theoretical Framework

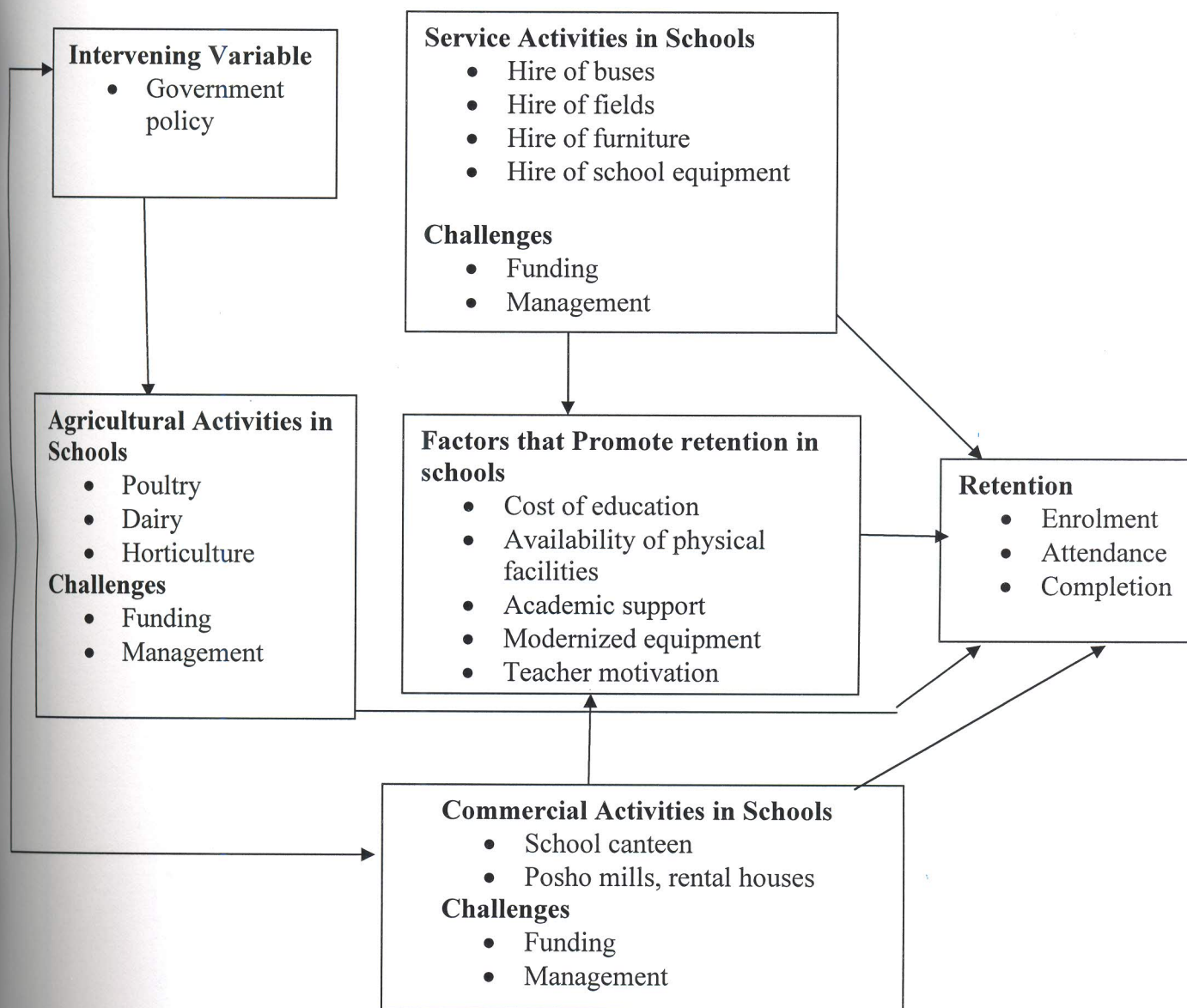
This study was guided by the human capital theory developed by Schultz in 1960. Schultz in 1960 after extensive study of economic growth in the USA argued that the growth in output could only be adequately explained by the investment in human capital that had taken place inform of formal education, on job training, improved health, adult education and the mobility and migration of workers so that they are able to respond to changing job opportunities (Schultz, 1971). According to this theory, people should invest in education for future gain. Investment in education can be done by an individual or by the society/government or both for future expected benefits.

Development of human knowledge through education is a process of investment which involves incurring both private and social costs. The theory emphasizes on present investment in education in order to enjoy future benefits such as employment opportunities, higher earnings, improved standards of living and higher economic production. This theory formed an important theoretical base of this study which intended to find out the impact of income generating projects on retention rate in Public Secondary Schools in Vihiga District.

2.7 Conceptual Framework

The conceptual framework shows the inter-relationship between the dependent variables and the independent variables influencing retention rates

Figure 1: Income Generating Activities that Contribute towards Students Retention in Schools



The conceptual framework shows income generating activities that a school can engage in to mobilize supplementary funds to provide necessary learning resources and contain the cost of education borne by parents to promote students retention in schools. The activities are broadly classified into agricultural activities, service activities and commercial activities. Schools can engage in agricultural activities such as poultry farming, maize farming and horticulture as a way of raising supplementary funds. Similarly, schools can engage in service activities such as hire of school facilities and buses among others. Commercial activities can be putting up rental houses, running of school canteens and posho mills. All these activities will generate additional funds whose benefit should be passed to students in terms of reduced fees, bursary schemes and improvement of educational infrastructure with an aim of promoting students' retention in school.

However, the success of such ventures is determined by managerial abilities of administrators. Similarly, they may be affected by government policy in place. This study was interested in establishing how; service, commercial and agricultural activities as possible income generating activities were being exploited by schools to generate supplementary funds to promote retention.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the methodology used in the study. the chapter is covered under; research design, target population, sampling techniques and sample size, research instruments, validity of research instruments, reliability of the instruments, data collection procedures and data analysis techniques.

3.2 Research Design

The study used descriptive research design. This design enabled the researcher to have in depth information on income generating activities in public secondary schools in Vihiga District, income earned from these activities and how these activities were being managed. According to Frankle and Wallen (1993) descriptive studies are concerned with what people think and what they do. Since this study was concerned with finding out the type of income generating activities and how funds generated were used to enhance retention, this design was found to be relevant.

3.3 Target Population

Target population includes all the members of real or hypothetical set of people events or objects to which the researcher wishes to generalize results of their research (Borg and Gall 1996). In this research, the target population consisted of all 22 public secondary schools in Vihiga district represented by the principals,

class teachers, bursars and students. Since there were only 22 public secondary schools in Vihiga district, the study targeted 22 principals, 80 form four class teachers, 22 bursars and 2,200 form four students (Statistical returns April 2012 District Education Office, Vihiga district).

3.4 Sampling Technique and Sample Size

Sampling is the process of selecting part of the population for study with intent that the findings from the sample accurately represent population characteristics (Borg and Gall, 1996).

The researcher used both saturated and purposive sampling. Principals, class teachers, Bursars and form four students were purposively selected to participate in the study. Purposive sampling allows the researcher to use cases that have required information to answer the research questions (Mugenda and Mugenda; 2003). In this case, the principals and bursars are people who deal with financial matters in schools and were therefore found to be resourceful. Class teachers of form IV were used since they had necessary information concerning students' social economic background, drop outs and transfer as they interacted with their students on daily basis when they marked the class registers. They were therefore able to give clear students' pattern of school attendance before eventual dropout. Ten students were selected using simple random sampling per school since they are supposed to be the beneficiaries of the income generating activities.

Therefore, the study used 22 principals, 22 bursars, 22 class teachers and 220 students from the Public Secondary Schools in Vihiga District.

3.5 Research Instruments

Data was collected using questionnaires, interview schedules, and observation checklists. Questionnaire was preferred due to its ability to ensure confidentiality of responses from respondents (Saunders, 2003). Four sets of questionnaires were prepared consisting of both open ended and closed ended questions; one for principals, another one for Bursars, form four class teachers and form four students. The questionnaires sought information on IGAs, and utilization of the proceeds in motivation of teaching and non teaching staff, acquisition of teaching and learning resources and offering of bursaries and scholarship to the economically disadvantaged students all being activities aimed at increasing retention rates. Interviews were administered to 5 randomly selected principals with the aim of getting more information on exploitation of IGAs as alternative source of financing secondary school education. Response from interviews was recorded under sub headings targeting the objectives of the studies. The researcher also use observation checklists in five randomly selected schools during the same period of the interviews in order to verify some responses captured through questionnaires and interviews.

3.5.1 Validity of Research Instruments

Validity refers to the quality of data gathering instruments or procedures that enable the instrument to measure what it is supposed to measure (Best and Kahn, 1963). It is the extent to which the instrument covers the objectives of the study.

To enhance validity, the research instruments were presented to research experts who are the project supervisors from the Department of Educational Administration and Planning in the University of Nairobi. They assessed whether the instrument captured the content of the research question as well as ascertaining whether the set items accurately represented the concepts under study. The questionnaires were piloted in two schools. This is enabled identification of omissions or commissions ascertain the face and content validity, typographical errors, spelling mistakes, ambiguous instructions, length of administration and level of language for the respondent. The instruments were also modeled along instruments used in previous similar studies. This reliability technique is an acceptable method in survey research that is qualitative in nature since it lends credibility to the findings on several accounts and sources (Kothari, 2004; Mugenda and Mugenda; 2003).

3.5.2 Reliability of Research Instruments

Kerlinger (2003) defines reliability of research instrument as the relative absence of error in an instrument or the accuracy or precision of the instrument. It is the

ability of the instrument to give consistent results after a number of repeated trials.

To determine reliability of the instrument, the researcher carried out piloting in two schools where questionnaire were administered. The same questionnaires were re-administered after two weeks. The data obtained through piloting formed two sets of data which were correlated and the correlation co-efficient obtained adjusted using the Spearman-Brown Prophecy formula given by

$$R_{xx1} = \frac{2 \text{ roe}}{1 + \text{ roe}}$$

Where R_{xx1} = reliability of the original test

roe = the reliability co-efficient obtained by correlating the scores of first test and scores of second test.

r was obtained using the following formula

$$r = \frac{N \sum xy - \sum x \sum y}{\sqrt{N[\sum x^2 - (\sum x)^2] (N \sum y^2 - (\sum y)^2)}}$$

To obtain the score of x and y, half split technique was used. Even scores were marked x and odd marked y. Any co-efficient (r) that is 0.7 and above is accepted as reliable Kothari (2004). The value obtained in this study was 0.75 hence the instrument was found to be reliable since it was above the recommended value of 0.7.

3.6 Data Collection Procedure

The researcher sought a permit from National council for Science and Technology that enabled the carrying out of the research. Similarly the researcher sought clearance from Vihiga District Education Officer before proceeding to visit study schools. The questionnaires were administered and collected on the same day except for those principals who needed more time because of their busy schedule. Further arrangement was made for the collection of the same at the time that was convenient to them. Interview was conducted on the same day the questionnaires were administered, for those principals who had been ear marked for interview.

3.7 Data Analyses Techniques

The researcher went through the instruments and ensured that they were complete and accurate. The study yielded a variety of data containing both qualitative and quantitative. The data was then categorized into information that targeted the objectives of the study. In case of open ended questions in the questionnaire were the respondents were free to give their own responses, the researcher categorized responses according a given number of times a response is given. The data was then analyzed using quantitative and qualitative analysis technique. Quantitative data was analyzed through the descriptive statements and presented in tables from which conclusion were made depending on relative responses. Qualitative techniques were used to analyze data which was collected through study based on expressed words were classified into categories that targeted the objectives of the

study. Since collected results were none standardized its analyses was done through the use of conceptualization. This involved incorporating the findings in the researchers' interpretation on the basis of reviewed literature and field experiences. These are shown up in comments and recommendations on the subject of study. This is acceptable as noted in previous similar studies (Mugenda and Mugenda, 2003)

CHAPTER FOUR

DATA PRESENTATION, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter presents findings captured from the field. They are presented under; introduction, background information, income generating activities in public secondary schools in vihiga district, utilization of income from income generating activities and challenges of managing income generating activities.

4.2 Background Information

The study was carried out in 22 schools, where 22 principals, 22 bursars and 220 students were used as respondents. Since the number of the respondents involved were few, and the researcher personally administered the instruments 100 percent response was achieved the findings of the study are given below.

First the researcher sought to find out when the public secondary schools in Vihiga district were established. The information is given in table 4.1

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Table 4.1 The Year the Schools in Vihiga were established

Period	Frequency	Percentage
1960'S	5	25
1970'S	2	10
1980'S	3	15
1990'S	2	10
2000'S	8	40
Totals	20	100

From Table 4.1 most of the schools, 8(40%) were established in 2000's.

Also the researcher sought to establish the nature of secondary schools in existence in public secondary schools. The findings are presented in Table 4.2;

Table 4.2 Type of Public Secondary Schools in Vihiga District

Nature of public schools	Frequency	Percentage
Boarding	2	10
Day	15	75
Boarding and day	3	15
Total	20	100

From Table 4.2, the majority of the schools 15(75%) were day schools. The principals were asked to give reasons as why day schools were most popular in the region. All principals (100%) said that though students in boarding schools had conducive environment to carry out studies, economic background of majority of the parents in the region could not afford the high cost of secondary education. Indeed one principal remarked;

If students miss a single meal in school, they could even end up burning the school yet they could not burn their homes even if they went without meals the whole day.

Since it is more economical to run schools with large enrollments due to economies of scale such as bulky purchases, the researcher sought to find out students enrollment in various public secondary schools in vihiga district. The findings are given in Table 4.3;

Table 4.3 Enrolment in Various Public Secondary Schools in Vihiga District

Number of students	frequency	Percentage
100-200	8	40
200-300	3	15
300-400	2	10
400-500	2	10
500-600	5	25
Total	20	100

From Table 4.3 most of the schools 8(40%) in Vihiga district have their enrolment falling between 100-200 students. The majority of schools had enrolment of less than 300 students per school.

Social economic background of a student determine the ability of the parent to meet the cost of education hence access and retention in schools. The study therefore sought to find out students background. First the researcher sought to find out whether the parents were alive. From students response it was established that 5 % of the students were total orphans, 11% had one parent alive and 84% had all parents alive. The study further sought to establish employment status of the parents. From students response it was established that only 30% of the students had either a single parent or both parents in formal employment while 70% of the students had parents whose earnings were irregular hence unreliable to finance their education.

The ability to meet the cost of education for a family is further determined by the size of the family. Therefore researcher sought to find out the number of siblings is student's families. From students response, it was established that majority of families (70%) had more than 5 children while 30% had 5 children or less.

Similarly the amount of fees charged has an effect on student's retention rate in school. The researcher was therefore interested in finding the amount of fees charged by various public secondary schools in Vihiga district. The findings are shown in Table 4.4;

Table 4.4 Amount of Fees Charged by Various Public Secondary Schools

Range	Frequency	Percentage
5,000-10,000	2	10
10,000-15,000	12	60
15,001-20,000	1	5
Above 25,000	5	25
Total	20	100

From the Table 4.4, majority of schools (60%) charge fees ranging from sh.10, 000- sh.15, 000. Schools that charged fees above sh.25, 000 were actually boarding schools with some charging fees up to sh.45, 000.

The cost of education is further increased by other charges beside the school fees charged by schools. The researcher sought to find out whether there were other charges apart from school fees. It was established that all schools (100%) had other charges apart from school fees. The charges were for school uniform, medical fees, holiday tuition, SMASSE, Teachers' welfare among others. The amount charged for each activity varied from schools to school. Some schools charged holiday tuition of up to sh.8000 per year.

The researcher sought to find out if there were cases of drop out experienced by schools. According to students and class teachers' response, all schools (100%) experienced dropout of students. The level of dropout is given in table 4.5;

Table 4.5 Form Four Class Teacher's Response on Cohort Dropout Cases in Schools

School	Enrolment in Form 1	Enrolment in Form 4	No of dropout	Percentage
1	30	22	8	26.7
2	25	19	6	24
3	60	48	12	20
4	50	41	9	18
5	15	10	5	33.3
6	45	36	9	20
7	55	43	12	21.2
8	38	28	10	26.3
9	40	33	7	17.5
10	19	13	6	31.6
11	48	36	12	25.0
12	27	15	12	44.4
13	30	24	6	20
14	48	38	10	20.8
15	50	42	8	16
16	15	10	5	33.3
17	50	40	10	20
18	45	35	10	22.2
19	30	23	7	23.3
20	48	38	10	20.8
Total	768	594	174	22.7

From Table 4.5, all schools experienced dropout cases in four years ranging from 16% to 44.4%. On overall the average dropout rate with schools stood at 22.7% for the four year period.

The researcher sought to establish causes of drop out experienced in schools. Class teachers' response on causes of drop out is given in table 4.6 below.

Table 4.6 Class Teachers Response on Causes of Drop out in Order of Ranking

Response	Percentage
Lack of school fees	50
Transfer to other schools	30
Poor performance	15
Discipline	5

From Table 4.6, drop out in schools was majorly caused by lack of school fees (50%). One class teacher stated; "there were some students who were hopping from one school to another on accumulation of huge fee arrears".

Students were asked by the researcher on whether schools had any programme to support economically disadvantaged students to complete their studies, all students (100%) stated that there was no such programme in their schools. Also the researcher sought students' opinion on how schools could make cost of education affordable and assist needy student to contain drop outs in schools.

According to the students' response, 70% stated that schools could lower school fees charged and avoid unnecessary extra charges such as SMASSE and 20 % of students stated that schools should have a programme of paying school fees for needy students, while 10% stated that all secondary schools should be day. One student remarked;

“We do not know where maize that is harvested and money earned from sell of milk goes in this school. Such money may be ending up in the pockets of school heads and teachers whom we see eating meat daily”

Efficient management of education resources can cut down on the cost of education. Efficiency in management is tied to qualification of the principals and the years of experience in management. The researcher sought to find out principals academic qualification and administrative experience. The findings are given in table 4.7 and 4.8;

Table 4.7 Head Teacher's Academic Qualification

Qualification	Frequency	Percentage
Diploma	2	10
Bachelor's degree	14	70
Masters degree	4	20
Total	20	100

From Table 4.7, majority of schools (70%) are run by principals who are bachelor's degree holders. This brings in the question of management practices, since advancement in education not only makes principals better managers but also makes them receptive to the new potential opportunities that could be

exploited bringing them in line with current thinking in line with education with regard to efficient management. The researcher further sought to establish principals professional experience.

Table 4.8 Principals Response of Professional Experience

Experience	Frequency	Percentage
<1year	2	10
1-3 years	4	20
4-7 years	8	40
8-12 years	2	10
Over 12 years	4	20
Total	20	100

As shown in Table 4.8 most of the principals 8 (40%) had been in management for a period ranging from 4-7 years.

4.3 Kinds of Income Generating Activities in Public Secondary Schools in Vihiga district.

Income generating activities supplement school budget. The researcher first wanted to establish the rate of fees payment. The results are shown in table 4.9.

Table 4.9 Principal's Response on Fees Payments

Response	Frequency	Percentage
Good	1	5
Poor	12	60
Very poor	7	35
Total	20	100

From Table 4.9 majority of the schools 12(60%) experienced poor fees collection while 7(35%) recorded very poor fees payment. With poor fees collection the researcher was interested in establishing the state teaching and learning resources in public schools. All principals (100%) reported lack of adequate resources to support effective teaching and learning.

The researcher wanted to find out how the state of teaching and learning resources affected performance of their schools. The researcher therefore sought views on how principals rated performance of their schools. Principals' response is given in table 4.10;

Table 4.10: Principals' Rating of School Performance against Teaching and Learning Resources

Effect	Frequency	Percentage
Good	3	15
Poor	12	60
Very poor	5	25
Total	20	100

From Table 4.10, majority of the principals of the schools (85%) rated performance ranking from poor to very poor. Therefore teaching and learning environment is far from being conducive to promote effective teaching and learning. All class teachers (100%) conquered that education resources were inadequate to promote effective teaching and learning. Principals were asked to identify income generating activities in their schools (if any). Their response is given in Table 4.11.

Table 4.11 Principals Response on kinds of Income Generating Activities in their Schools

Income generating activity	Frequency	Percentage
Horticulture	4	20
Dairy farming	2	10
Maize	8	40
Hire of buses	1	5
Housing	1	5

From table 4.11 the kinds of income generating activities in schools were maize farming, horticulture, dairy farming and hire of buses. Maize farming was practiced by most of the schools (40%). However income generating activities were only in 10 schools. Some schools had a number of IGAs such as maize farming and rental houses. This meant that most schools have not fully exploited income generating as a source of funding.

Due to failure by most schools to embrace income generating activities the researcher was interested in finding out why despite the importance of income generating activities most schools were yet to embrace this option. The findings are given in table 4.10 below

Table 4.12 Principals Response on Challenges Faced by Schools when Implementing Income Generating Activities

Challenge	Frequency	Percentage
Lack of land	8	40
Lack of capital	15	75
Managerial problem	2	10
Risk associated to projects	16	80

From table 4.12 majority of the principals (80%) ranked risk associated with income generating as a major problem. Indeed one principal remarked “*why should I risk the little money raised through struggle to invest in a project whose returns I may not be sure of at the expense of academic programmes*”. In any case unlike other vote heads that are clearly specified on fees structures, there was no vote head on fees structure meant for investment in income generating activities. No wonder 75% of the schools cited lack of capital as a major problem hindering exploitation of income generating activities as an alternative form of education financing. In fact one principal when asked why he had not invested in income generating activities in his school retorted: “from which vote head”. For schools that had some income generating activities, the researcher sought to find out how much money was realized from various income generating activities in place. The findings are given in table 4.13.

Table 4.13 Bursars Response on Various Income Generating Activities in Public Secondary in Vihiga District

Activity	Amount	Frequency
Horticulture	<10,000	2
	10,001-20,000	2
Maize farming	<10,000	3
	10,001-20,000	4
	20,001-30,000	1
Dairy	<10,000	2
Hire of buses	100,000	1
Staff houses	80,000	1

From Table 4.13 above income generating activities in schools do not earn much money. The highest earner is higher of bus which was only on one school(sh 100,000). It was noted that most schools do not seriously undertake income generating activities as a venture that can supplement school budget despite existence of such potential.

4.4 Utilization of Income from Income Generating Activities

The income generated in schools is meant to be utilized in promotion of school activities. The researcher sought to establish how income realized from various

income generating activities was being utilized to enhance activities that promote students retention. The results are shown in table 4.14

Table 4.14 Bursars Response on Utilization of Income from Income Generating Activities

Activity	Frequency	Percentage
Teacher motivation	10	100
Others	4	40

From table 4.14 all ten schools(100%) that had engaged in some income generating activities had their earnings going towards teachers motivation , (40%) towards other activities. It was established that motivation of teachers included provision of tea, lunch programmes and motivational trips after release of Kenya certificate of secondary education results. Some schools used funds on motivational trips citing strict audit procedure tied on vote heads indicated on fees structure. Other uses involved use of income from income generating activities to pay wages and other minor expenditures in schools. The researcher was interested in finding out the basis of allocation for funds from income generating activities. It was established that all schools that had income generating activities had income shared among vote heads based on the guidance of Board of Governors (BoG).

4.5 Management of Income Generating Activities in Public Secondary Schools

Success of any enterprise depends on good management .The researcher was interested in finding out how income generating activities were being managed. It was established that all income generating activities in schools 100% were managed by mainstream school administration.

The researcher sought opinion of the principals on how they rated the level of management of income generating activities in their schools. The results are shown in table 4.15

Table 4.15 Principals Response on Rating Management of Income Generating Activities in Schools

Response	Frequency	Percentage
Satisfactory	1	10
Unsatisfactory	9	90

From the table 4.15 majority of principals 90% rated management of income generating activities in their schools unsatisfactory with only 10% rating management as satisfactory. Majority of those who rated management not satisfactory cited lack of clear boundary between expenses going towards the school and income generating activities, particularly payment of workers which made it difficult to clearly see profitability of income generating activities. One

principal asked; “How do you allocate the portion of salary that goes to school workers who was working partly on the farm and partly on other areas of the school?”

4.6 Challenges of Managing Income Generating Activities.

Managers of any enterprise do encounter challenges in the course of their operations. Table 4.16 presents the challenges encountered by public secondary schools in exploiting income generating activities as alternative source of funding to promote students retention .The results are shown in table 4.16

Table 4.16 Principals Response on Challenges Encountered

Challenge	Frequency	Percentage
Limited Land	12	60
Lack of Capital	5	25
Management	1	5
Government policy	2	10

From table 4.16 majority 12(60%) of the principals cited lack of land as the main problem facing schools. Indeed one principal remarked, “What do you expect one to do with the four acres of land the school may be having?”

CHAPTER FIVE
CONCLUSION, RECOMMENDATIONS AND SUGGESTIONS FOR
FURTHER RESEARCH

5.1 Introduction

This chapter covers; introduction, study findings, conclusions, recommendations of the study and suggestions for further research.

5.2 Summary of the Findings

5.2.1 Type of Income Generating Activities Public Secondary Schools in Vihiga District

It was revealed from the findings of this study that a number of public secondary schools in Vihiga district embraced IGAs as recommended by several scholars (Kiveu and Mayo, 2009:Lumuli 2009). The activities in place included; maize farming, dairy farming and horticulture as well as housing .It was noted that some of the schools had more than one income generating activities. It also established that earnings from IGAs ranged from sh.10, 000 to 100,000 for highest earners per annum.

5.2.2 Utilization of Income from Income Generating Activities

The study established that most of the income earned from income generating activities in schools went towards teacher's motivation. This mainly included

provision of meals for teachers and academic trips. Part of the funds were utilized for payment of wages and other minor expenditures in schools.

5.2.3 Management of Income Generating Activities

The study revealed that management of income generating activities was done by school administration; there was no autonomy in running of income generating activities. Funding and money realized from IGAs was not kept in independent accounts in most schools. There were also no clear records relating to IGAs.

5.2.4 Challenges faced in Exploitation of Income Generating Activities

It was established that most schools lacked capital to invest in IGAs with some principals fearing investing for fear of losing original investment. This was worsened by poor fees payment by parents. The study also found that though most schools had limited land to have meaningful income generating activities particularly farming; other alternative income generating activities that did not require huge land had not been exploited. Management was also identified to be a major problem hindering the running of IGAs making it difficult to clearly ascertain their profitability.

5.3 Conclusion

5.3.1 Type of Income Generating Activities Public Secondary Schools in Vihiga District

It is established that public secondary schools had not fully exploited various income generating activities as alternative form of supplementing school income. Most schools engaged in agricultural activities such as maize and horticulture farming. Even where there were some IGAs in place, the amount generated was so little to make significant contribution towards school budgets hence making negligible contribution towards activities that mitigate students' retention.

5.3.2 Utilization of Income from Income Generating Activities

Though teachers' motivation is necessary in enhancing their performance, it could have been necessary for schools to give preference to needy students to enhance their retention by setting aside part of income from IGAs to offer bursaries and scholarship for such disadvantaged students to contain dropout in schools.

5.3.3 Management of Income Generating Activities

Income generating activities in public schools are poorly managed. There was no clear boundary between school activities and income generating activities making it difficult for one to clearly determine their profitability and hence their contribution towards supplementing schools budget. Records of IGAs were poorly kept and funds from IGAs were generally mixed with other monies school

management was also reluctant to seriously engage in the running of income generating activities.

5.3.4 Challenges faced in Exploitation of Income Generating Activities

Though most schools had a problem of limited land there was high potential for schools to embrace IGAs since not all activities required huge size of land. Poor payment of fees experienced by most schools also made it difficult for schools to have surplus funds for investment. This was worsened considering that there was no special votehead specifically meant for investment.

5.4 Recommendations of the Study

- There is need for schools to take income generating activities seriously in order to generate additional funds to supplement their budgets as the study revealed that this activity was not fully exploited.
- Earnings from income generating activities should be channeled towards improvement of school environment that promote learning and retention.
- Though principals are professionally trained and qualified, their training should also put great emphasis on equipping them with business and entrepreneur skills to enable them have necessary skills for investment.
- In order to have capital to finance IGAs in schools, special fund should be set up for investment in order to eliminate the fear that the principals have of interfering with set up vote heads.

5.5 Recommendations for Further Research

- i) Similar study to be carried out in other regions in order to establish if the findings can be generalized
- ii) A study should be carried out to establish the adequacy of teacher training curriculum in preparing headteachers as financial managers of schools.

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APPENDICES

APPENDIX A

LETTER OF INTRODUCTION

University of Nairobi

Department of Educational Administration and Planning

P.O Box 92

Kikuyu

Dear Sir/Madam

**RE: IMPACT OF INCOME GENERATING ACTIVITIES ON STUDENTS'
RETENTION RATE**

I am a Master's student at the University of Nairobi carrying out research on the impact of Income Generating Activities on students' retention rate in public schools in Vihiga district.

Your school has been selected to participate in the study. Kindly assist me in filling the questionnaire as accurately as possible. Your responses will be used for the purpose of this study and confidentiality is guaranteed.

I take this opportunity to thank you in advance for your cooperation.

Yours faithfully,

Chepkoech Selina (Sr)

APPENDIX B

PRINCIPALS QUESTIONNAIRE

I am a postgraduate student from the University of Nairobi. You are kindly requested to provide the necessary information to enable me write the project report. Confidentiality is guaranteed.

Part A

1. a) How long have you been a principal?

Below one year () between 1-3 years () between 3-5 () above 5years ()

b) What is your academic qualification?

Diploma () Degree () Masters () PhD ()

c) Before your appointment as the head teacher, did you serve as the deputy headteacher? [Yes] [No]

d) For how long have you been a principal?

2 a) When was this school started?

b) What is the type of the school?

(i) Boarding () Day () Boarding/ day ()

(ii) Why was this type preferred?

3 a) What is the current school enrollment?

b) How many streams does the school have?

One Two Three Four More than four

4 a) What is the amount of fees charged by the school? _____

b) Is the fees charged adequate? Yes No

Give reasons for your answer _____

c) Apart from fees, Do you have other charges? If yes list them

(i)

(ii)

(iii)

d) How do you rate fees payment in your school

(i) Very Good

(ii) Good

(iii) Poor

(iv) Very Poor

5(a) What is the amount of fees charged by the school

(b) Is the fee charged adequate? Yes NO

Give reasons for your answer

6a) Does this school experience cases of dropout of students?

Yes No

b) What is the state of teaching and learning resources in the school?

(i) Very Good

(ii) Good

(iii) Poor

(iv) Very Poor

c) How do you rate school performance given the existing state of teaching and learning resources?

(i) Very Good

(ii) Good

(iii) Poor

(iv) Very Poor

d) How does school performance affect students' retention?

7 a) The government encourages schools to initiate income generating activities to supplement school budget. What income generating activities does the school have?

- i) ----- iv) -----
 ii) ----- v) -----
 iii) -----

b) What is the estimated value per year for every income generating activity?

Activity	Estimated value
i)	
ii)	
iii)	
iv)	

8) What proportion of income went to the following activities?

	Activity	2008	2009	2010	2011
i)	Teachers Motivation				
ii)	Improving school infrastructure				
iii)	Bursaries and Scholarships for students				
iv)	Provision of Teaching and learning Resources				
v)	Others(specify)				

9) What guides the allocation in Number 8 above?

10) How are income generating activities (if any) managed?

- a) Independently
- b) School administration
- c) Contract

11) What can you say about management of income generating activities?

- (i) Very satisfactory
- (ii) Satisfactory
- (iii) Unsatisfactory

12) What challenges do public schools in Vihiga district generally face in initiating and sustaining income generating activities in schools?

APPENDIX C

CLASS TEACHERS' QUESTIONNAIRE

I am a postgraduate student from the University of Nairobi. You are kindly requested to provide the necessary information to enable me write the project report. Confidentiality is guaranteed.

1. How long have you been a teacher?

2. What was the number of students enrolled in one for this particular class?

3. a) Do you have cases of students who have repeated at any level for this class?

Yes

No

b) Give reasons for your answer above

4. How is the general response of fee payment by students?

Good

Fair

Poor

5. a) Do you have any programme in School that support the students who have fee problems?

Yes

No

b) How many students from your class have benefited from school's bursaries and scholarships since form one in 2009?

6 a) Income generating activities normally supplement school budget. Does the school have any income generating activities?

Yes

No

b) If yes list them

i) -----

ii) -----

iii) -----

iv) -----

7 a) Are you aware of any activity (ies) in the school supported by the proceeds from income generating activities

Yes

No

b) If yes list them in order of preference

i) -----

ii) -----

iii) -----

iv) -----

8 a) Dropout in schools majorly affect students from poor social economic background due to inability to meet education cost requirements. Do you have cases of students who have dropped out of the school since 2009?

Yes

No

b) If yes, what are the causes of drop out in order of importance

i)

ii)

iii)

iv)

9) What would you say about the state of education resources in supporting effective teaching and learning in the school?

Resource	Land	Buildings	Fields	Text books	libraries	Laboratories
Adequate						
inadequate						

10) Motivation of teachers, students and workers has great impact on student attainment in examination.

a) Does the school have any motivation programme in place?

Yes

No

b) If yes what are the modes of motivation?

11) In your own opinion what can the schools do to ensure that students are retained in school until completion?

- | | |
|------|-----|
| i) | iv) |
| ii) | v) |
| iii) | vi) |

APPENDIX D

BURSAR'S QUESTIONNAIRE

I am a postgraduate student from the University of Nairobi. You are kindly requested to provide the necessary information to enable me write the project report. Confidentiality is guaranteed.

1. What is your professional qualification?

2. For how many years have you served in your present station as a bursar?

3. Apart from fees charged by the school that's tuition boarding and PTA charges does the school have other charges?

Yes

No

If yes identify the activity and estimated amount charged

	Activity	Amount
i)		
ii)		
iii)		
iv)		

4. Income generating activities can go along way in supplementing school budget. List income generating activities (if any) and the estimated amount realized for the year 2010 and 2011.

	Income Generating Activity	Estimated amount	Estimated amount
		2010	2011
i)			
ii)			
iii)			
iv)			

- 5) How are income generating activities funded?

- 6) What proportion of income generated went to the following activities between 2008 and 2011

	Activity	2008	2009	2010	2011
i)	Teachers Motivation				
ii)	Improving school infrastructure				
iii)	Bursaries and Scholarships for students				
iv)	Provision of Teaching and learning Resources				
v)	Others(specify)				

7) What challenges does the school face (if any) to initiate and sustain income generating activities?

APPENDIX E

STUDENTS' QUESTIONNAIRES

1. Are your parents alive

Mother Yes No

Father Yes No

2. Who pays your school fees?

Mother

Father

Mother and Father

Other (specify) _____

3. How many siblings do you have?

4. Are the following in formal employment?

Mother Yes No

Father Yes No

5 How much money do you pay as school fees per year

6 a) A part from school fees, do you pay other monies i

Yes No

b) If yes, list activities and the amount charged per item

Item (What is the money for)	Amount
i)	i)
ii)	ii)
iii)	iii)

5.7 Are you aware of any income generating activity in the school

Yes No

If yes list them

i) iii)
ii) iv)

6. a) Do you know any student in this class that has since dropped out of school?

Yes No

b) What do you think were the reasons for dropping out of school

7) a) Does this school have any programme where needy students are given bursaries or other financial assistance to enable them pursue education

Yes No

c) If yes specify the program

8) a) Have you ever benefited from school's bursaries or scholarships?

Yes No

b) If yes, how much were you awarded?

9) In your opinion, how can the school assist needy students to pursue their education?

APPENDIX F

INTERVIEW SCHEDULE FOR PRINCIPALS

1. What is the general of fee payment in the school?
2. Due to inadequacy of funding from traditional sources, various alternatives in schools have been recommended with IGAs being one of the measures schools can take to supplement their budget. To what extent has your school embraced this option?
3. Which activities in the school have been funded from the proceeds of the income generating activities in an attempt to improve retention?
4. What can you say about the level of success your school has attained through embracing IGAs as alternative way of education financing?
5. What are challenges encountered by your school in your endeavor to embrace IGAs and how can they be overcome?

APPENDIX G

OBSERVATION CHECKLIST

The researcher will observe the state of school resources to assess their adequacy and utilization.

Facility	Availability	Adequacy	Utilization
Land			
Class room			
Laboratories			
Text Books			
Fields			
Toilets			
Stationery			

APPENDIX H

BUDGET FOR STUDY

	Category	Amount
1	Proposal writing Traveling to and from Nairobi	15,000
2	Secretarial services <ul style="list-style-type: none"> • Typing proposal • Expected correction • Typing of final proposal • photocopying 	1,500 2,000 3,000 2,000
3	Stationery <ul style="list-style-type: none"> • Duplicating • Pens, pencils, erasers • Writing material 	1,000 300 1,000
4	Traveling expenses <ul style="list-style-type: none"> • Pre-testing questionnaire • Administering questionnaires • Consultation of supervisor and accommodation 	7,000 10,000 20,000
5	Research clearance	2,000
6	Binding: Proposals Final copies	1,500 4,000
7	Computer expense Data analyses (pre-test and final)	10,000
8	miscellaneous	15,000
	Total	83,000

REPUBLIC OF KENYA



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Our Ref: **NCST/RCD/14/012/568**

Selina Chepkoech
University of Nairobi
P.O BOX 40197-00100
NAIROBI

Date: **25th May, 2012**

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Impact of income generating activities on students retention rates in public secondary schools in Vihiga District, Kenya*" I am pleased to inform you that you have been authorized to undertake research in **Western Province** for a period ending **30th May, 2013**.

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

On completion of the research, you are expected to submit **two hard copies and one soft copy** 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,
Vihiga District

Research Permit No. NCST/RCD/14/012/568

Date of issue 25th May 2012

Fee received KSH. 1,000

THIS IS TO CERTIFY THAT
Prof./Dr./Mr./Mrs./Miss/Institution

Selina Chepkoech
of (Address) University of Nairobi

P.O.Box 30197-00100, Nairobi.

has been permitted to conduct research in

Location
Vihiga District
Western Province

on the topic: Impact of income generating
activities on students' retention rates in public
secondary schools in Vihiga District, Kenya

for a period ending: 30th May, 2013



Applicant's
Signature

Secretary
National Council for
Science & Technology

UNIVERSITY OF NAIROBI
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P. O. Box 30197
NAIROBI

- 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 with-out 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.**



RESEARCH CLEARANCE PERMIT

GPK6055t3mt10/2011

(CONDITIONS—see back page)