

Effects of Alternative Sources of Financing Education on Provision of Teaching and Learning Resources in Public Secondary Schools: A Case Study of Trans-Nzoia East Sub-County, Trans-Nzoia County, Kenya

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Abstract: This paper sought to examine the effects of alternative sources of financing education provision of teaching and learning resources in public secondary schools, guided by four objectives. To find out the contributions of alternative sources of income in financing education on provision of teaching and learning resources in public secondary schools in Trans-Nzoia East Sub County, to assess the extent to which the various alternative income sources of financing education are reliable and adequate to purchase quality teaching and learning resources in public secondary school, to find out to what extent alternative sources of financing education are utilized to acquire quality teaching and learning resource in public secondary schools, to find out which strategies can be devised to improve alternative income sources of funding to enhance the financing of public secondary schools. Purposive sampling was used to select a target population of 62 respondents. Questionnaires were used as the main data collection instruments. Descriptive and inferential statistics were used in data analysis aided by SPSS software. The major finding was that the alternative sources of financing education in public secondary schools are grossly inadequate and irregular and fraught with myriad of challenges.

Keywords: Secondary education, financing education, access, quality, Trans-Nzoia East Sub-county.

1. INTRODUCTION

Provision of quality basic education has been a priority of the Kenya government since independence, as stipulated in relevant policy documents, including Kenya vision 2030 and the basic education act 2013, the Kenya constitution 2010. The educational needs for secondary schools have increased due to the introduction of free primary education in 2003 as a result enrolments in public primary schools rose from 5.6 million in January 2003 to 9.4 million in 2010, an increase of 59.32% in GER (republic of Kenya /UNESCO 2012).

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 2015). According to the free secondary education policy the government was expected to meet the tuition fees of ksh 10,265 per student, while the parents were required to meet other requirements like land transport and boarding fees for those in boarding schools, besides development of approved school projects. This was in line with the government commitment to ensure that regional special needs and gender disparities were addressed (Ohba 2009). The issue of

financing education has become a very challenging issue today through the cost of education is borne both by the public and private sectors, the proportion of public expenditure on education is becoming a great national matter of concern correctly it is bordering the national treasury.

The education sectors public spending was allocated colossal funding which increased from ksh. 92.2 billion in 2005/2006 to Kshs. 169 billion in 2009/2010(Orodho,2014). On average, the education sector accounted for 28 percent of the aggregate public expenditure in 2006 and dropped marginally to 26 percent in 2009/ 2010 fiscal years (Republic of Kenya, 2013).

These efforts to devote meaningful funding to education is justified against backdrop that available evidence from literature review suggests a positive and significant correlation between indicators of quality and financial allocation (Oketch and Ngware,2012). The World Bank (1990) emphasized sourcing of additional; sources of financial support or reducing the unit cost through greater efficiency as the solution on public finance at a time when government funds are stagnant or even declining in many developing countries. Principals of public secondary schools are thus tasked with responsibility to initiating appropriate institutional strategies such as income generating activities, aimed at enhancing resource mobilization in order to run their schools effectively and efficiently.

Trans Nzoia East sub County has experienced rapid increase in enrolment since introduction of free primary education which has led to increased secondary schools enrolment (DEO Trans-Nzoia East Sub County, 2014). This high enrolment has put a lot of pressure on the limited and already overstretched school facilities and resources for provision of quality education. To cope with this increased enrolment, secondary school management has to explore alternative sources of enhancing financing of the government and parents efforts. In pursuit of increased returns from secondary schools, the ministry should put in place mechanisms to ensure that each school is given a condition of raising a minimum threshold of income for financing secondary education before it qualifies for the free secondary funding by the governments (Education and practice vol.4, 2013). The success of an educational system depends on manpower, money and material available to it. Bell and Rhodes (1996) Noted that school facilities include administrative offices, staffrooms, laboratories, workshops, equipment , stores, libraries, staff house, offices and school grounds.

Thus it is necessary to conduct a study of assessment of alternative source of financing public secondary school education in Trans Nzoia East Sub County to determine their contribution, reliability and viability in raising the much needed supplementary funds to finance school programs and acquisition of adequate and quality teaching and learning resources.

1.1. Statement of the Problem:

Recent studies on financing education in Kenya indicate that there are serious finance related constraints affecting effective implementation of free secondary education in Kenya (Orodho ,2014, Republic of Kenya UNESCO 2012). Despite the fact that the government has introduced free primary education and subsidized secondary education to help many children access basic education, access remain unsatisfactory due to inadequate infrastructure and inability of most Kenyans to afford the fess charges , inadequate teaching and non-teaching staff as a result of which Board of management and parents pay for employment of more staff (MOEST, 2014). It is against this background that this study sought examine the alternative sources of finding public secondary schools in Trans-Nzoia East County.

1.2 General objective:

To examine the effects of alternative sources of financing education on provision of teaching and learning resources in public secondary schools in Trans-Nzoia East Sub County.

1.3 Specific objectives of the study:

- i. To find out the contributions of alternative sources of income in financing education on provision of teaching and learning resources in public secondary schools.
- ii. To assess the extent to which the various alternative income sources of financing education are reliable and adequate to purchase quality teaching and learning resources in public secondary school.
- iii. To find out to what extent alternatives sources of financing education are utilized to acquire quality teaching and learning resource in public secondary schools.

- iv. To find out which strategies can be devised to improve alternative income sources of funding to enhance the financing of public secondary schools.

2. LITERATURE REVIEW

The study was guided by the Human capital theory and the Resource Dependency Theory (RDT).

2.1. Human capital theory:

Human capital theory stresses the significance of education and training as the key to participation in the new global economy the desire to create a better world found its expression in the formation of the United Nations and its expression in the formation of the United Nations and its charter, the declaration of human rights that followed in 1948 included rights to each individual to education. There was unprecedented and enrolments demand for education which has not yet been satisfied. This expression has meant that education has become a major industry in all countries which require resources to access the services of education (Ayot and Briggs 1992) .The main influence on a country's volume of production is normally the quantity of its factors of production that is the inputs of its factors of goods and services, hinges on land, labour and capital Todaro (1994) argued that the concept of capital cannot be restricted to physical capital but human capital hence human capital theory. Therefore, investment in education by both the society and individuals is widely accepted as vital for economic growth (Ayot and Briggs, 1992).

2.2 Resource Dependency Theory (RDT):

The study was also framed within postulates of the Resource Dependency Theory (RDT) to explain the management of public secondary schools to initiate business enterprises for supplementary incomes. The theory which was founded on the principles of open systems theory postulates that even though all organizations have internal resources, most of them are not self-sufficient and therefore must depend on external resources to support their operations and aspirations (Gulati and Sytch, 2007)

On this basis, deficiency in resources is perceived as the key force driving organizations to initiate business ventures to reduce uncertainty and risks of bankruptcy. The theory further postulates that organizations have varying degrees of dependency on resources from external environment consequently inadequate control of the external environment may interfere with the achievement of organizational goals and ultimately threaten the very existence of such organizations (Heeley, King &Covin 2006).In this context, this paper perceives the Resource Dependency Theory (RDT) as being appropriate in examining the funding related challenges facing effective financing of secondary education in public secondary school in Kenya.

2.3. Conceptual framework:

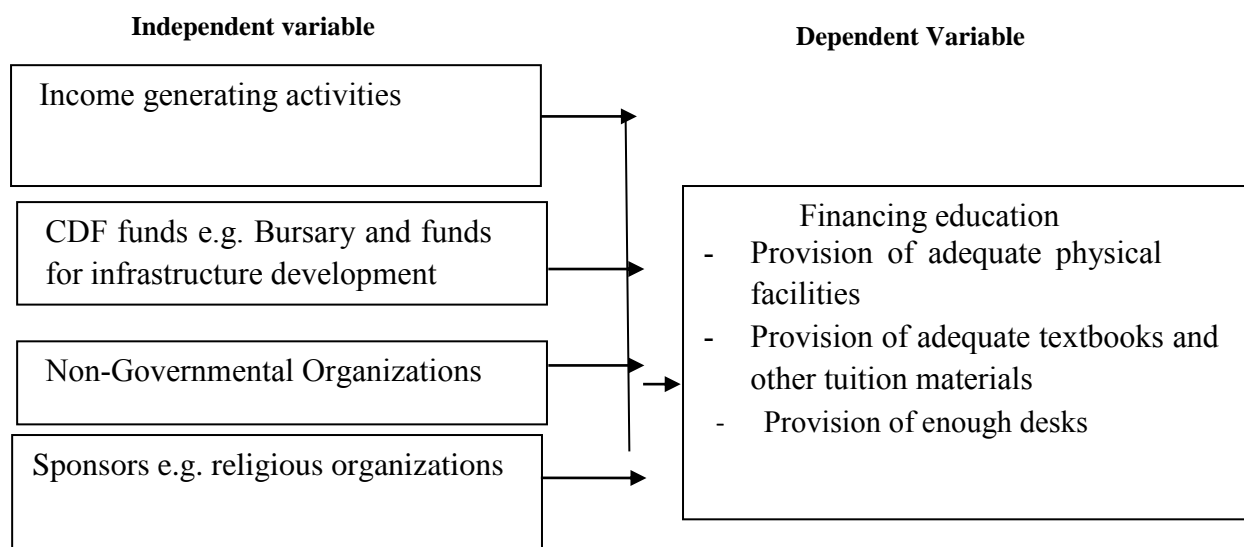


Fig. 2.1 Conceptual framework

2.3.1 Income generating activities (IGAS):

IGAS as a source of income was also found to be inadequate. Their finding agreed with the finding of Hming Ng' (2000) who in his study pointed out that the ability of schools to create income positively correlates to school status. High status schools normally make profits because they are supported by Alumni, influential parents and large enterprises.

According to the Little and Mittles (1928) projects are building block of an investment plan which can reasonably be of an investment plan which can reasonably be analyzed and evaluated as independent units. Project can be broken down into parts for separate considerations. Each of those parts would then be small or big project the project can be simple or complex. Schaffer and Beatrice (2001) assert that small firm might have more problems than large firms. These problems are related to economies of scale and entry costs and political influence. Economies of scale and entry costs business obstacles may be particularly severe for small firms because they represent fixed costs that a large firm can absorb more easily. There are huge entry costs for small entrepreneurs who lack access to higher level of administration. Small and medium scale business done include, cattle keeping poultry, cereals, farming among others (Musimba et al 2000).

2.3.2. Constituency development funds (CDF):

Infrastructure development funds and bursaries for needy students are provided by CDF in Kenya, the CDF act allows the use of CDF funds to improve schools infrastructure, specifically, 3% of the government's revenue is earmarked for CDF and the act allows up to 5% of these funds to be spent for education (government of Kenya, 2001) however, availability of these funds is largely influenced by political considerations.

Getange K.N (2013) CDF as sources of income are not reliable methods as they are given for special projects identified by CDF Committee, hence they are not continuous and constant sources to Public Secondary Schools. Bennie & Newstead (1998) as a result, when CDF is used to buy textbooks, schools are able to use the finances to meet the other school needs. According to a study conducted by Dorcas .W.W (June 2013). CDF has also addressed infrastructure development in the secondary schools in Nyahururu District through Construction of Laboratories, classrooms, dormitories offices, Libraries and Furniture.

2.3.3. Non-Governmental organizations (NGO's) Funds:

External support for investment in Secondary education has been small, the share of AID targeted on Secondary education by bilateral donors remained tiny both globally and in Sub-Saharan Africa over the period of 1993 (Bennel and Furlong 1997), World Bank lending to secondary education declined from 50% in 1970's to 10% between 1980 – 1996 (World bank 1995)

Mutua, (1975) observed that public financing of education in Kenya started in 1909, when financial grants were made to Mission Schools conducting industrial training. Riechi (2003), carried a study of revenue diversification in Kenya Public Universities, he established that non- governmental services contributed between 19% and 40% of the recurrent expenditure budget

2.3.4. Sponsors:

In Kenya the Christian Missionaries played a dominant role in determining the type of education for Africans. They built schools including preschools, managed and supervised them, determined the curriculum and influenced the direction of education Policy Ministry of Education (1989) In Indonesia Schools with religious bias are run and financed by Islamic communities and by Mid 1980's, they formed 21% of the lower and upper Secondary Levels (World bank 1989)

The Loreto Sisters had a European School opened in 1921 in Nairobi, a Goan School at the current Catholic Parochial School in the City Centre 1924 and later an African Girls School in 1936 in Limuru (Baur, 1990)

3. RESEARCH METHODOLOGY

The study employed a descriptive survey. The descriptive methodology of research design helps researchers plan and carry out descriptive studies. The descriptive method often involves extensive observation and note taking as well as in depth narrative.

A descriptive survey is a design used to collect data from members of a population with respect to one or more variables (Mugenda & Mugenda 2003). By using descriptive survey design in which the researcher collects information

from a smaller group of the population in a way that the knowledge gained is representative of the total population (Marion & Cohort 2003). This was also appropriate for this kind of study as it provided the researcher with an opportunity to go to the field to collect data for analysis.

4. RESEARCH FINDINGS AND DISCUSSIONS

The first objective was focused on the various Income sources in Public Secondary School .As much as schools are nonprofit making organization; funds are paramount in day today activities. The challenge is that as much as the government subsidizes funding in school and the parents pay the fees, the fund raised is not enough to support adequate supply of teaching and learning resources. This provoked a survey to establish the necessity of alternative sources of income. On sources of income the study looked at: income sources in public secondary schools, the amount collected from the various income sources in PSS between 2010-2014.

The first research question focused on the various source of income which PSS relied on. The researcher was also able to establish the adequacy and reliability and trend of income amounts from 2010 to 2014. This enabled the researcher to determine the income amount, reliability, adequacy and trend of revenue and expenditure between 2010-2014. The reliability and adequacy of the income sources indicated need for alternative.

Table 1: Frequency of response on Sources of income to schools

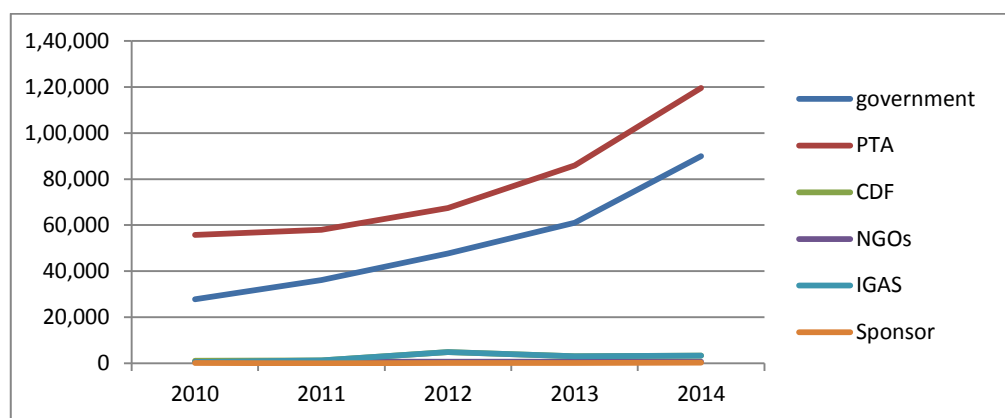
Sources of funds	Frequency	Percentage
Government	15	30
PTA/parent	15	30
Donors	2	4
IGAS	4	8
Sponsor	1	2
CDF	13	26
Total	50	100.0

From the study finding it was revealed that a majority of the respondents 30 % of funding came from the government, 30% from PTA/Parents, 4% from donors, 8% from school income generating activities, 26% from CDF and sponsor gave 2%. Table 2 shows the amount collected from the various income sources in PSS between 2010-2014

Table 2: Amount per income source in PSS (2010-2014) in Ksh '000

Income source	2010		2011		2012		2013		2014	
	Amount	%	Amount.	%	Amount	%	Amount.	%	Amount	%
Government	27,838	32.4	36,204	37..5	47,619	38.4	61,000	39.6	90,000	41.3
P.T.A	55,744	64.8	58,022	59.5	67,425	54.8	85,884	55.8	119,508	54.8
IGAS	585	0.7	1,200	1.2	4,900	3.1	3,100	2.0	3,300	1.5
Sponsor	100	0.1	1.50	0.2	160	0.1	140	0.1	260	0.1
CDF	1,150	1.4	1,200	1.2	4,900	3.1	3,100	2.0	3,300	2.0
NGOs	600	0.7	680	0.7	737	0.6	706	0.5	720	0.3
Total	86,017	100	97,456	100	123,741	100	153,930	100	218,088	100

The findings indicates that in the year 2010, the major sources of income in the PSS were parents constituting of 64.8% of the total followed by government constituting of 32.4% and Income generating activities constituting of 0.7%. Sponsors 0.1% and donors 0.7% and CDF 1.4%. The trend was nearly the same in the subsequent years where the income from parents was 59.5% and 54.8%, 55.8% in the year 2011, 2012, 2013 and 2014 respectively.

The trend of income sources from 2010- 2014 in public secondary school

Source: Based on field data

The finding that the funding was a gradual increase in government contributions to PSS. The rise was occasioned by the introduction of FSE in 2008. The CDF fund contributions have been varying between Ksh 1,150,000 in the year 2010 and Ksh 4,300,000 in 2014. The contribution of the sponsors to school financing is normal with occasional contribution of Ksh 100,000 to Ksh 2,600,000 during the period under study. Schools have also been receiving donations from donors ranging between Ksh 600,000 to Ksh 720,000 in 2010 and 2014 respectively. Income from IGAS has been varying between Ksh 585,000 to Ksh 3,300,000 during the period under study. All these indicated that the major sources of income to PSS are the government and the parents. There is need to source more funds from the other income sources. Graphically the trend is shown in Figure 4.4. Generally figure 4.4 indicates that there was an increasing trend in annual income from the government and an increasing trend on the other income sources to PSS between 2010-2014 due to increase student enrolment due to government subsidy through FSE.

Table 3: School income expenditure in PSS in Kshs '000' – 2010- 2014

Year	Projected	Actual	Deficit
2010	101684	95235	6449
2011	123,450	113,300	10159
2012	141,746	129,621	12125
2013	162,817	147,587	15230
2014	198,189	179,017	19,172

From table 3, it is evident that all PSS had a deficit in their expenditure in 2010 the projected expenditure was ksh. 101684 the actual was ksh 95235 with a deficit of ksh 10150 in 2012 the projected expenditure was ksh 141,746 actual ksh 129,621 with deficit 12125. In 2013, the projected expenditure was ksh 162,817 and actual ksh 147,587 and deficit ksh 15230. In 2014 the projected expenditure was ksh 198,189, actual ksh 179,017 and a deficit of ksh 19172.

All these indicated that there is a rising trend in projected and actual expenditure in PSS. It also shows that there is an increasing trend in deficit in all schools and consequently the quality and adequacy of teaching and learning resources are affected. The relationship between income and expenditure was tested using the following hypothesis.

Ho₂. There is no statistical relationship between income and expenditure in PSS.

Table 4. Regression analysis of income and expenditure in PSS

	Correlations	income	expenditure
Income	Pearson correlation	1	.993
	Sig (2 tailed)		.000
	N	5	5
Expenditure	Pearson correlation	.993	1
	Sig (2- tailed)	.000	
	N	5	5

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

This hypothesis was tested by using the regression analysis and it was shown that income and expenditure are highly correlated ($r = 0.993$).

The hypothesis that there is no statistically significant difference between income and expenditure was tested using the ANOVA which revealed that the relationship is significant ($P < 0.05$).

From interview schedule principals indicated that most schools had debts hence financial deficit. The findings concur with KIPPRA (2006) that the costs of provision and expansion of quality secondary education have been escalating while resources for secondary education have been dwindling. The report projected the enrollment in secondary education to rise from 0.92 million in 2004 to 2 million and 2.7 million students by 2010 and 2015 respectively. The report further concurs with the present study that the main sources of secondary school funding are households and the government while the other sources of funds include private sector, religious organizations, NGOs and development partners. Public sources mainly fund teachers' personal emoluments and bursary to students, while household meetcost for provision of suppliers and equipment, operations, maintenance, repair and physical infrastructure. Whereas earlier studies indicate projections of enrolment and costs the present study is a representative accurate sample of educators (principals) reporting on their individual schools. All the principals reported that the income sources were inadequate and unreliable. Resources for schools can be raised in a variety of ways but the major sources of funding should be based on sources that generate stable and growing revenue to schools. Sources that generate small and highly fluctuating revenues are not desirable for supporting the major operational expenses of schools. With the increasing demand for secondary school as a result of FPE program, it is becoming increasingly important to improve programs of income sources that reduce the financial barriers to secondary schooling.

In this study, the contribution of parents towards meeting the costs of public secondary schools were fairly adequate shown by 33.3% and not adequate by 66.67% hence cannot be sufficient to run the costs of having at this level. The finding agreed with that of Ogeta (2004) who found out that in South Nyanza, Kenya parents contributions towards meeting the costs of upper primary education were below what each of them expected to pay, the study attributed this to low average annual income per parent from their occupations. Similarly, in this study poor home background has contributed as a cause of parents' inability to pay for learning. It was also found in this study that NGOs as a source of funding PSS was 86.67% inadequate. Most schools did not seek NGOs support due to level of information by principals on NGOs which can support the education program. In this study, "Harambee" as a source of funding was found to be inadequate. This concurred with a study findings of Ogachi (2002) on community financing of primary schooling in Kenya and its implications on quality in Trans-Nzoia East Sub County. The study established that community financing led to deterioration in quality of both physical facilities and learning. This was attributed to poor social economic background. The harambee though is being initiated by the schools, not one school has used it to raise money for education.

The current government policy of providing funds to schools has discouraged this model of financing education. In this study, the IGAS as a source of income was also found to be inadequate. This finding agrees with the findings of Hming Ng' (2000) who in his study pointed out that: the ability of schools to create income positively correlates to the schools status. It was established that high status schools engaged in agricultural based IGAS. The study further pointed out that high status schools normally make profits because they are supported by alumni, influential parents and large enterprises. In this study it was established that most PSS in Trans-Nzoia sub county have a the land size of between 3.5 acres which is not enough to engage in large scale agricultural production. The social economic status of the parents and community is low hence the contribution to schools income is low. The study established that schools initiative supplement finances of secondary education. This findings also concurred with that of Getange (2005) who found out that in Kisii Central District secondary schools cultivated beans, coffee, Napier grass besides dairy farming and poultry keeping. It is evident from this study that none of the schools have modern facilities like swimming pools, halls and school buses for hire; hence the income from IGAS is insufficient and fluctuating. The study also found PTA as a source of income to be inadequate. This was attributed to poverty of the households. The overall adequacy and reliability of the income sources was found from this study to be inadequate. In this study, the trend of income-sources over the years shows a gradual increase of the Government contribution and decrease of the parents' contributions. The introduction of FSE in 2008 saw withdrawal of parents' support with the excuse that education is free.

However, this is not the reality on financial demands. The income from other sources is Minimal and shows a fluctuating trend. The income and expenditure trends show a deficit over the years. However, there is significant difference between

income and expenditure. KIPPRA (2003) coheres with the study that the patterns and trends of education financing in Kenya is based on partnership between the state, household and communities. The FDSE is a new dimension on the depth and volume of government, community and household expenditure on education services.

Financing of education underlies the themes of the current education policy of quality access and efficiency. However, the spending on education is notably low at 16% (233.1 billions) of spending in years 2012-2013. The ambitious plan of free primary education (FPE) increased the number of the pupils completing primary education and failure to expand secondary education will compromise quality and consequently jeopardize economic recovery and development. In the present study, the government and parents are the main source of revenue to public secondary schools, while donors. IGAS, sponsors, CDF insignificant and highly fluctuating revenue. Data from the present study gave an accurate contribution of each source of revenue. In the present study, the revenue from the income sources is inadequate and unreliable to meet the corresponding financial. Needs at secondary school level. The income trend indicated quantitative increase of the government revenue from 2010 and declining trend by parents.

4.1 The utilization of existing income sources in financing the teaching and learning Resource:

The survey also established how the income were utilized in providing teaching and learning resources in PSS in Trans-Nzoia East Sub County .

4.1.1 Utilization of PTA finances in the provision of school facilities:

The study also sought information on utilization of PTA funds in provision of school facilities. The findings from the study were presented on table5 below:

Table 5.Utilization of PTA finances in the provision of school facilities

Projects	Frequency n= 15	%
Classroom construction	13	22.7
Library	1	1.8
Dining Hall	10	18.2
Electricity installation	08	14.5
Salaries	15	27.3
Office	8	14.5
Total	55	100.00

Data from Table 5 indicates that classroom construction and salaries consume most of the PTA finances. The study further established from BOM interview schedule that schools had ongoing projects of various types. It was evident from the interview report and observation 9(60%) of the schools had classroom projects, 4(26.7%) had computer laboratory and science laboratory projects, 1(6.7%) had library project, 3(20%) had dining hall and 3(20%) had no ongoing projects and 4(26.67%) had a Kitchen project.

The study findings on how PTA projects influence teaching and learning process that most schools through PTA had initiated projects, few had been completed and some had stalled. These are meant to provide conducive teaching and learning environment but they have stalled due to lack of funds to complete them. The projects included classrooms, library, kitchen, water and offices.

4.1.2 Utilization of CDF funds in provision of teaching and learning resources:

Table: 6 Utilization of CDF funds in provision of teaching and learning resources

Resources	frequency	%
Classroom	15	35.7
School land purchase	2	4.8
Laboratory	12	28.6
Administration block	3	7.1
School buses	4	9.5
Dinning hall	6	14.2
	42	100.00

Data from table 6 indicates that classroom construction consumed (35.7%) and laboratory construction (28.6%) consumed most of CDF funds. The school bus purchase project consumed (9.5%), dining hall administration block and school land purchase, consumed 7.1% and 4.8% respectively.

4.1.3. Utilization of IGAS funds in the provision of teaching and learning resources:

The study sought information on utilization of I.G.A.S funds in provision of teaching and learning resources. The findings from the study, Indicate that IGAS are mainly used to construct classrooms.

4.1.4 Utilization of NGOs funds on provision of teaching and learning resources:

The study sought information on utilization of NGOs funds in the provision of teaching and learning resources. The findings from the study, indicate that classrooms construction consumed 40%, laboratory 30%, and administration block 20% while textbooks consumed 10%.

4.1.5 Utilization of sponsors funds on provision of teaching and learning resources:

The study sought information on utilization of sponsors' funds in provision of teaching and learning resources. The findings from the study indicate that textbooks purchase utilized 50% of sponsor's funds and classroom construction consumed 33.3% while teaching staff. Consumed 16.7% Of the sponsors' funds.

4.2: The reliability and adequacy of the income sources in public secondary school:

The researcher under the third objective sought to ascertain whether the various income Sources were reliable and adequate to sustain the provision of resources in PSS. To determine the reliability and adequacy of income sources, Table 4.19 presents information on the reliability of Income sources.

Table 7: Reliability of income sources to PSS in Percentage

Source of income	Extremely reliable		Very reliable		Reliable		Unreliable	
	Freq	%	freq	%	freq	%	Freq	%
PTA/Parent	0	0.0	0	0.0	18	53.3	7	46.7
NGOs	0	0.0	0	8.0	2	13.3	13	86.7
IGAS	0	0.0	0	0.0	4	26.7	11	73.3
Sponsors	0	0.0	0	0.0	3	20	12	80
CDF	0	0.0	2	13.3	5	33.3	8	53.3

From the study finding most of the respondents 53.3% indicated that income from parents was unreliable while 46.7% of the respondent indicated that income from parents was reliable. The finding indicated that parents were to pay levies like lunch, development fee and even Extra fees for remedial. The findings from the interview schedule on principal established that parents were to pay in extra cash for non-mainstream activities in public secondary schools. The finding also established that a majority of the respondents 86.7% indicated that funds from donors were very unreliable, 13.3% said that they were reliable, 26.7% of the respondents reported that funds from school income generating activities sources were reliable, while 73.3% said that they were unreliable. 20.0% of the respondents reported that school funds from sponsor were reliable while 80% reported that they were unreliable. 13.3% of respondents reported that funds from CDF were very reliable, 33.3% said that they were reliable while 53.3% responded that they were unreliable

Table 8: Adequacy of income sources

Source of income	Very adequate		Adequate		Fairly adequate		Not adequate	
	Freq	%	Freq	%	Freq	%	Freq	%
Government	0	0.0	3	20	6	40	6	40
Parents (PTA)	0	0.0	2	13.3	3	20	10	66.7
NGOs	0	0.0	0	0.0	2	13.3	13	86.7
Sponsors	0	0.0	0	0.0	2	20	12	80
I.G.A.S.	0	0.0	2	13.3	2	13.3	11	73.3
C.D.F.	0	0.0	1	6.7	3	13.3	12	80
Total	0	0.0	8		20		64	

Study finding indicated that 0.0 % of respondents reported that government sources of income to schools were very adequate, 20% said the source was adequate, 40% reported that the source was fairly adequate while 40% of respondents said that the government source was not adequate. 13.3% of respondents reported that parents sources (PTA) of income were adequate, 20% said that the source was fairly adequate and 66.7% of respondents said that parents source of income was not adequate. 20% of respondents reported that fund raising as a source of income to schools is fairly adequate while 86.7% of them said that the source is not adequate. 13.3% of the respondents said that IGAS source for income was adequate, 13.3 % said IGAS sources were fairly adequate while 73.3 % said IGAS sources were not adequate. 13.3% of respondents reported that CDF source of income was adequate, 13.3% said CDF source of income was fairly adequate while 80% of respondents said CDF source of income was not adequate. 0.0% of respondents agreed that school income sources were very adequate, 13.3% said that the sources were adequate, 20% said that the sources were fairly adequate while 66.7 % reported that the sources of income were not adequate.

4.3. Constraints facing the income sources and strategies on improving in financing Public secondary school:

The fourth research question sought information from principals, PTA and BOM Chairpersons on the constraints facing the income Sources in financing public secondary education.

From the study findings, it was evident that the government financial support is inadequate by 100%, and all the principals head teachers reported delayance in the disbursement of the funds which affected learning in the schools. the parents contributions had constraints as shown by all responses that parents owe schools arrears and all the principals felt that their contribution is inadequate 13(86.%] of the respondents poverty of parents to meet their financial obligations, 12[80%] reported that parents delayed in their fee payment and 10[66.7] indicated that parents were reluctant to pay. CDF as income sources 13[86.7%] showed that the payment is delayed, 12[80%] responses showed that the fund was unreliable, 13[86.7%] felt that the fund was inadequate and 15[100%] felt that the fund was irregularly disbursed. Sponsors and donors as income sources, 15% of the responded indicated lack of sponsor support and 15[100%] of the respondents felt that they had the Responsibility to seek for funds. Institutional income generated activities (IGAS) as a source of income had the following constraints all responded that there are no funds set aside for IGAS, 12[80%] showed no land for expansion all felt that they lacked entrepreneurial Skills to carry out the IGAS in the schools. Community as a method of financing education all respondents felt that poverty was a cause affecting this method and all of the respondents felt that community Lacked awareness on the need to supplement school income. .

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. Summary:

The study was in argument that alternative sources of financing influence teaching and learning process in public secondary schools. The study collected data on some key attributes of sources of income in PSS which points out information on alternative income generating activities, contribution of CDF, Extent of the contribution of NGOs funds and contribution of the sponsors in the acquisition of teaching and learning resources in public secondary schools:

5.1.1 Alternative income generating activities on provision of teaching and learning resources in public secondary school:

The study evaluated; Year of establishment of Schools, School Enrollment, income sources and utility in public secondary schools and the level of staffing basing on different sources of income. On the issues of school establishment the study indicated that Between 1961 and 1970, 1(6.67%) of the current schools were established, 2(13.3%) were started in 1971-1980, 3(20.00%) were started in 1981-1990, 4(26.67%) of the schools were started in 1991-2000 while 5(33.33%) of the schools were Started in the year 2001-2010. There were more enrollments in most school with up to 60% of schools with class enrolment of over 40 students while 25% of the schools had an enrolment of 30-40 students, 10.8% had an Enrolment of between 20-30 students and 4.17% had an enrolment of below 20 students.

5.1.2 The income source and expenditure in public secondary schools:

The major source of income to PSS is the government and parents, funds from PTA vote heads accrued from fee payment represented by 28%. Government contribution represented 30% of total sources of income. Donors' contribution represented 4%, income generating activities 8%, the sponsors 2% and Community Development Funds contributed up to

28%. During the five year period (2010-2014), there was an increasing trend in the amount of money received from the government. The increase was from Ksh 27,838,000 in 2010 ksh 90,000,000 in 2014

Influence of CDF as an alternative income sources on the acquisition of teaching and learning resources in public secondary schools

From the study finding most of the respondent 86.6% acknowledged that CDF source of income is utilized in construction of laboratories, 80% of the respondent indicated that schools buses are bought by CDF, 66.7% for classroom construction, 53.3% of the respondent agreed that administration .Block and school land are acquired by CDF. Only 40% of the respondent acknowledged that dining halls are constructed by CDF.

The extent NGOs and sponsors funds as alternative sources of income contribute to the purchase of teaching and learning resources in public secondary schools.

The researcher found out that it is necessary to investigate the influence of sponsor and donors as an alternative source of income because it was important to find out the various ways in which financing can be improved to enhance provision of adequate teaching and learning resource. It was established that 15(100%) of the respondent indicated that the sponsors as stakeholders in education need to source for more funds from donors since some of the sponsors have attachment to foreign donors. 15 (100%) of the respondents also indicated that sponsors besides being involved in management of school should support the school financially .This agrees with the resource dependency theory.

The utilization of income sources in providing the teaching and learning resources from the study, it indicates that CDF funds are utilized for classroom construction (35.7%) and laboratory construction 28.6%, the school bus purchase project consumed 9.5%, dining hall utilized 14.2%, administration block 7.1% and school land purchase consumed 4.8% of CDF funds. From the study, it revealed that sponsors funds were utilized by classroom construction consuming 33.3%, textbook purchase 50% and teaching staff utilized 16.7% of sponsor's funds. From the study, it indicates that NGOs funds were utilized for classroom construction consumed 40%, laboratory construction 30, Administration block consumed 20% while textbooks consumed 10% of NGOs funds. From the study, it revealed that I.G.A.S funds are mainly used for classrooms construction at 100%.

5.1.3. The reliability and adequacy of the income sources:

From the study finding most of the respondents 53.3% indicated that income from parents were unreliable while 46.7% of the respondent indicated that income from parents was reliable. The finding also established that a majority of the respondents 86.7% indicated that funds from donors were very unreliable, 13.3% said that they were reliable, 26.7% of the respondents reported that funds from school income generating activities sources were reliable, while 73.3% said that they were unreliable. 20.0% of the respondents reported that school funds from sponsor were reliable while 80% reported that they were unreliable. 13.3% of respondents reported that funds from CDF were very reliable, 33.3% said that they were reliable while 53.3% responded that they were unreliable. On average all the funds remitted to school are unreliable and that's why it is very important for the institutions should have alternative sources of funding their teaching and learning processes.

5.1.4. Constraints affecting provision of teaching and learning resource:

The researcher found out the question on adequacy of CDF was necessary for investigation because it was important to find out how CDF financing enhance provision of adequate teaching and learning resource. From findings were respondent 13 (86.7%) of the respondent indicated that CDF was in adequate and always delay. 15(100%) of the respondents established that CDF were irregularly disbursed and 80% of the respondent acknowledged that the funds were unreliable.

5.2 Conclusions:

In the present study, the government and parents are the main sources of revenues to public secondary schools, while NGOs, IGAS, sponsors, CDF, indicate insignificant and highly fluctuating revenue. Data from the present study gave an accurate contribution of each source of revenue. In the present study, the revenue from the income sources is inadequate and unreliable to meet the corresponding financial needs at secondary school level. The income trend indicated qualitative increase of the government revenue from 2010 and declining trend by parents.

There is a strong relationship between projected and actual expenditure in PSS. The trend of income source shows a gradual increase of the government contributions and dwindling of the parents contributions. This is due to relation of the parents due to the erroneous notion that the government is supposed to meet all the education costs. This has greatly contributed to colossal budget deficit in most public secondary schools in the sub –county. The schools have not also devised more sustainable modes of generating funds from income generating projects to relieve parents from the financial burden and also complement the funds from the government kitty.

5.3 Recommendations:

Since the financial sources in public secondary schools are unable to meet the required facilities for enhancing provision of quality teaching and learning resources. The government needs to increase the amount disbursed to schools due to inflation and the high cost of living. The government contribution should be disbursed in time preferably before the start of the term to avoid delayance which led to financial strains which hinder provision of adequate teaching and learning resource.

It was evident from the study that one income source cannot meet costs of secondary school education. Education financing will need to be supported through multi- income sources. The parents should be encouraged to continue to support education and be sensitized on the need to provide the supplementary resources required in education.

From the study, that the funds provided to schools do not provide enough money to purchase the necessary teaching and learning resources. This was due to the unreliable and inadequacy of the income sources. The community involvement needs to be harnessed more to provide such support like land, contributions in kind for construction and through mobilizing of fundraising contributions.

It was evident that schools have IGAS, however, their contributions are minimal and schools should be encouraged to venture into lucrative and enterprising ventures which can generate enough supplementary income namely; housing units within the school, hire land for crop and animal production, intensive gardening and keeping poultry. Schools can create production units with unit managers who can run the IGAS .Entrepreneurial education should be inculcated into the teaching profession.

It is evident from the study that the government is unable to meet the financial requirement of secondary education. The study recommends that cost sharing as a method of financing education should be strengthened so as to enhance the provision of quality teaching and learning resources. This can be done by involving the communities, holding fundraisings. Schools need to design proposals for securing donor support and the sponsors of the schools need to contribute money to the schools they manage and sponsor.

5.3.1. Suggestions for further research:

Further research can be carried out to determine the strategies of boosting the income sources to meet the Costs of secondary education.

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