

Full Length Research Paper

The impact of cost sharing on internal efficiency of public secondary schools in Ndivisi division, Bungoma district Kenya

Noah Murumba Kiveu* and Julius Mayio

Masinde Muliro University of Science and Technology P.O Box 190-50100 Kakamega, Kenya.

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Adoption of cost sharing policy in education has witnessed the return to communities and parents a substantial proportion of financial responsibility for schooling. With increased poverty levels, many parents and communities have not been able to meet the cost requirements under cost sharing policy. Thus their investment in education and support to their children's education have dwindled, this study therefore intended to evaluate the impact of cost sharing on internal efficiency of public secondary schools in Ndivisi division of Bungoma district. In particular the study sought to find out the direct costs of secondary school education, the proportion of dropout, absenteeism and repetition attributed to costs of secondary education, the extent to which parents and communities contribute to physical facilities and equipment in schools. It is hoped that this study has contributed useful information applicable to the effective implementation of cost sharing policies in education in Kenya. It has encouraged further interest and inquiry into the application of cost-sharing policies in education. This is also a significant contribution to the development of an appropriate policy for financing education in Kenya, the scope of the study was all public secondary schools in Ndivisi division of Bungoma district. Seven secondary schools in the division were purposively sampled. The study was carried out using descriptive survey study design. The researcher used questionnaires, observation and interview schedules as research tools. Analysis of documented data was also done to gather relevant information. Both qualitative and quantitative data were collected and analyzed. Qualitative data were analyzed in narration form while quantitative data were analyzed by use of %, means and frequencies. Tables were used to present data for easy interpretation. The study found out that school fees, uniform, transport and stationary were among the direct costs incurred by parents. On average, the transition rate was 0.30, dropout rate was 0.095 and repetition rate was 0.03, parent's contribution to physical facilities and equipment was minimal. Parents and teachers view cost sharing as a burden and it has both negative and positive impact. Negative in the sense that it has increased dropout, repetition and absenteeism and it has led to inadequate facilities and equipment in schools, positively, it has led to democratization in the management of schools. The study recommended that the government should establish the unit cost of secondary education and provide fee guidelines that are acceptable by all and additional costs in the middle of the term or year should be avoided. School administrators should encourage and use locally available teaching-learning materials, start income generating activities and sensitize parents on their role in the provision of physical facilities and equipment in schools.

Key words: Cost sharing, internal efficiency

INTRODUCTION

This paper discusses how cost sharing policy in education has contributed to dropouts, repetition and inequity in access to secondary schools in Kenya. In Kenya, cost

sharing has mainly affected the poor because they cannot afford the cost of secondary education which is beyond the reach of not only the poor but also the middle income families (Martim, 2008). Apparently, dropouts and repetition as a phenomenon in Kenyan secondary schools as a whole has significantly contributed not only

*Corresponding author. E-mail: noshly78@yahoo.com

to unequal access to education, decreased quality of education (Pontefract and Hardman, 2005), but also manifested an alarming aspect of wastage within the education system (Republic of Kenya (RoK) 1998; RoK 1999).

This study was therefore aimed at understanding how cost sharing policy has impacted on internal efficiency of public secondary schools in Ndivisi division of Bungoma district, Kenya

In this paper, internal efficiency is used to refer to flow of students from the point of entry to the secondary school to the point of graduation. The indicators of internal efficiency are dropout rates, repetition rates and graduation rates. Cost sharing policy is a situation where the government on one hand and the households and communities on the other share the responsibilities of financing education.

Kenya ranks 152nd (out of 177) on the Human development index, with more than half of its population living below the poverty line. That is, living on less than one US dollar a day and unable to meet their basic requirements (HDR, 2006). It is one of the countries that manifest a lot of inequalities with around 20% of its population controlling almost 80% of its wealth. According to 2007 estimates; life expectancy rate is 55.24 and 55.37 for males and females respectively (WFC, 2007). Kenya has a large percentage of children of primary and secondary going age, the same source indicates that 58% of its population is under the age of 18; making it imperative for more investment in primary and secondary education.

Background to the study

The World Bank (1988) urged African countries to consider the idea of cost sharing instead of fully relying on public expenditure in financing education. It further observed that in many African countries most of the money allocated to education is spent on teachers' salaries with little regard to equipment, maintenance of physical facilities and development. One of the most important recommendations by the world Bank is that if African countries (South of the Sahara) were to reduce their unit costs in education at all levels they had to introduce cost sharing in which the student and the parent pay directly for such items as books and school running expenses.

In Kenya, cost sharing is not a recent concept. Since independence Kenya has become well known for the scale of community involvement in education particularly in the secondary sector (Bray, 1992). A key phenomenon since independence in 1963 has been the development and growth of "Harambee" (pulling together), indicating that cost sharing has been working in Kenya as exemplified through Harambee movement. However, it was officially introduced in 1988 on the basis of economically genuine reasons (Republic of Kenya, 1986). These are:

i) The diminishing resources at the disposal of the go-

vernment of Kenya

ii.) Education has private rates of return. At secondary level, private rate of return exceeds social rate of return. Therefore, beneficiaries of this education ought to pay part of the costs of education.

Psacharopoulos and Woodhall (1985) noted that there has been a massive increase in spending in education all over the world due to rising costs of education because of inflation, the need for more sophisticated equipment such as computers, laboratory equipment, home science materials and projectors and the ever-growing demand for education because of the recognition that education is a central element in social and economic development which has resulted in expansion of educational system.

However, the poor economic performance of the 1970's and 1980's which saw the decline in Gross Domestic Product (GDP) from 6.6 to 5.2% and then to 4.1% in 1979 coupled with increasing demand from direct productive sectors like agriculture made the Kenyan government resources increasingly strained and forced it to cut back the share of the national budget that was being taken up by education (Olembo and Harrold, 1992). In an effort to reverse the worsening economic growth rate, the government together with her development partners- International monetary fund (IMF) and World Bank adopted structural adjustment programmes (SAPs) through sessional paper No. 1 of 1986 on economic management for renewed growth (ministry of education science and technology, 2001). The adoption of SAPs led to cost sharing policy in education. The adoption of cost-sharing policy in education has witnessed the return to communities and parents a substantial proportion of the financial responsibilities for schooling. As a result of this policy paper, parents were required to shoulder the development expenditure. They were responsible for erecting and maintaining physical infrastructure like classrooms, libraries and workshops. Similarly, through the report of the presidential working party on manpower training for the next decade and beyond (1988) the government put more weight on parents by adding textbooks and supplementary readers, stationary, consumable materials, boarding and feeding costs. They were also to provide for tuition fee, activity fee and examination fee.

Statement of the problem

The escalation of school fees at secondary level has been the immediate consequence of cost sharing policy in Kenya. The fees and other school related direct costs have become too high for parents to afford given their low average incomes. Therefore some may not afford to keep their children in school especially at secondary level (Muya, Daily Nation Feb. 26, 1994). According to Miruka, Akinyi and Mangoa (2009) 5 students who were admitted to national school from Nyanza province could not report

because of lack of school fees. Access to public secondary schools and universities by the poor has remained elusive despite government efforts to ensure equity in provision of education (Martim, 2008). He argues that despite tuition fee waiver in secondary schools, children from poor backgrounds have continued to be marginalized as some national schools charges are in excess of Kshs. 60,000 annually. Many children from poor families perform well in KCPE and are admitted to national schools but are locked out due to their inability to pay the high fees. Although cost sharing policy was introduced on the basis of economically genuine reasons, high poverty levels in the households are very pervasive. Therefore, financing education through cost sharing policy could be one of the major problems facing secondary education in Kenya. This situation might be the root cause of increased dropout, absenteeism and repetition in secondary schools in Ndivisi division of Bungoma district. Hence the researcher sought to establish the impact of cost sharing strategy of financing secondary education had on the internal efficiency of public secondary schools in Ndivisi division of Bungoma district, Kenya.

The objectives of the study

The objectives of the study were

- i.) To determine the direct costs that parents incur as part of the cost sharing policy in financing secondary school education.
- ii.) To determine the proportion of wastages attributable to cost sharing in public secondary schools in Ndivisi division, Bungoma district, Kenya.
- iii.) To determine parental contribution to PTA projects in public secondary schools.
- iv.) To assess the views of teachers on the impact of cost sharing on internal efficiency of their institutions and the views of parents on cost sharing policy.

Significance of the study

This study has

- i.) Contributed information applicable to effective implementation of cost sharing policy in financing education in Kenya.
- ii.) Encouraged further interest and inquiry into the application of cost sharing policies in education.
- iii.) Contributed to the development of an appropriate policy for funding education in Kenya.
- iv.) Contributed to the existing literature on cost sharing.

Theoretical framework

The study was based on the classical liberal theory. The Classical liberal theory states that social mobility will be promoted by equal opportunity of education. The roots of

this theory can be traced back to Rousseau, (1712 - 1778) who claim that in the 'natural' state men were born equal and personal qualities should not jeopardize social equality so long as society rewards people according to their merits. Thus the writers of the American declaration of independence claimed that all men are created equal in the sense that they are born with the same moral and political rights. It follows from this belief that social institutions such as education should in some sense attempt to treat people equally. American educator Horace Mann (1796 - 1890) termed education the great equalizer. Evidence in favour of this belief is mainly in the form of case studies. There are innumerable examples of people from poor families who have taken advantage of education opportunities and proceeded to obtain better jobs and higher incomes than they would otherwise have done. If the state did not provide education without charge, these individuals would have been denied the opportunity for advancement. There is a widespread belief that by removing economic barriers and making more places available in upper secondary and higher education and by increasing the length of attendance in the common school, ideal situation could be created to implement the vision of equal opportunity, where every body has access to the kind and amount of education that suited his inherited capacity. In the past, a great deal weight has been attached to education as a vehicle of equalization and it has generally been assumed that increased spending in education will contribute to this end and reduce dropouts, repetition and absenteeism of the poor (OECD 1975) .

In developing countries where inequalities of education provision are severe, it may be desirable on equity and efficiency grounds, to pursue the goal of equal distribution of educational opportunities. Inequality of participation means that the benefits of education are disproportionately enjoyed by the upper income families whose children are far more likely to complete secondary schooling or enroll in higher education (Psacharopoulos and Woodhall, 1985) while poor families may not afford to sustain their children in schools hence increased dropouts, absenteeism and repetition. These affect the internal efficiency of public secondary schools.

In Kenya, the government has been subsidizing education to enable more people participate in education. However, with the introduction of cost-sharing policy in the context of poverty levels in the country, many parents may not be able to enroll and sustain their children in secondary schools given the rising costs. Therefore for equity consideration, it practically becomes impossible to ignore the fact that unequal participation in education will in the long run worsen the status of the poor or the vulnerable groups (Ambajo, 1997).

The theory was found relevant because cost sharing policy is discriminating poor families who cannot afford to keep their children in school hence withdrawing them prematurely thus impacting on internal efficiency of learning institutions.

METHODOLOGY

Study design

Descriptive survey design was adopted in conducting this study. Descriptive survey design is appropriate because it involves collecting data in order to test hypothesis or questions concerning the current status of subjects of the study. It is used to test attitudes and opinions about events, individuals or procedure (Gay, 1993). Kothari (1995) notes that descriptive survey design is concerned with describing, recording, analyzing and reporting conditions that exist or existed. Engelhart (1972) argues that descriptive methods are widely used to obtain data useful in evaluating present practices and in providing the basis for decision- making.

Study area

The study was carried out in Ndivisi division, which is one of the ten divisions of Bungoma district. The district has an altitude of 1200 – 2000 m above sea level. The district experiences two rain seasons, short and long rains. The mean annual rain in the district varies from 1250 - 1850 mm. The mean annual temperature vary from 21 - 25 centigrade. Hence the district is majorly agricultural (Bungoma district development plan, 1997 - 2001).

The district has a population of 809,293 people, 64% of whom are youth below 20 years. Secondary age group (14 - 17 years) population is 81,484 (Bungoma district development plan, 1997 - 2001). Ndivisi division has 4 locations, agriculture is the mainstay of the division's economy accounting for 75% of employment. Majority of parcels (plots) are smallholdings under two hectares each. Subsistence farming is dominant. Cash crops grown are sugarcane, maize and coffee (Bungoma district development plan, 1997 - 2001).

The rationale for choosing Ndivisi division was that, the poverty levels are very high, (Bungoma district development plan, 1997 - 2001), there are incidences of dropout and the researcher's own interest and knowledge of the area. According to Singleton (1993), the ideal setting for the study is one that is directly related to the researcher's interest. He further points out that the setting be easily accessible to the researcher and that it should allow immediate rapport with the participants.

Study population

The study population was all public secondary schools all head teachers, teachers PTA representative and parents of dropouts in Ndivisi division of Bungoma district. The division had 9 public secondary schools during the time of research. Total number of teachers in the division was 145 and there were 3,339 parents of dropouts.

Sample and sampling procedure

7 public schools were purposively sampled. Purposive sampling was used because the study targeted data of a span of 10 years. 2 schools were only 2 years old and therefore did not have all the data that was significant enough to add value to the study. 4 teachers from each school which represent 20% of the population were purposively sampled. Class teachers were targeted because they keep class attendance register and therefore they have information regarding repetition, dropout and absenteeism. These were specifically class teachers who had information on wastage rates. 20% of PTA representative were sampled and 10% of the parents of dropouts were conveniently sampled. Kothari (2003) a sample of between 10 and 30% is appropriate for descriptive studies. There-

fore, 7 head teachers, 28 PTA representatives and 106 parents of dropouts formed the sample.

The researcher used questionnaires, interview schedules, observation schedules and document analysis to collect both quantitative and qualitative data. Quantitative data were analyzed by use of frequencies and % while qualitative data were analyzed in narration form according to the objectives. The analysis of collected data generated the following results.

FINDINGS AND DISCUSSION

The direct costs incurred by parents in education at secondary school level

Data were gathered concerning the total direct costs incurred by parents in public secondary schools in Ndivisi division of Bungoma district. These data were required in order to establish the total private direct costs that parents are supposed to pay as their share of cost sharing policy. Table 1 shows the direct cost incurred by parents in secondary school education in Ndivisi division per year. Other requirements met by parents,

i.) Personal books e.g. dictionaries, bible, atlas and hymn book.

li.) Personal basics e.g. soap, pens, exercise books, uniforms and shoes.

From the Table 1, it is clear that parents meet various costs of secondary education. For example uniform fees, boarding fees, PTA, medical and caution. In total, the Table 1 reveals that for boarding schools, parents pay between kshs. 31,100 kshs. 47,000 while in day schools parents directly pay between 14,100 and 21,400 kshs per annum.

Under cost sharing policy, parents are supposed to shoulder 60% of the total expenditure of secondary school education while the government shoulder's 40% (MOEST, 2001). Perhaps the amount reflected in the Table 1 represent 60% of the total cost of secondary education that is shouldered by parents. The amount reflected in the Table 1 was higher than what is recommended by the ministry of education. The recommended annual fee guidelines for public secondary schools were only lunch money for day schools and kshs. 18,250 for the boarding schools in district and provincial category.

This study was carried out in provincial and district boarding schools. With reduced government spending to schools as part of cost sharing strategy in education, the current government policy on how schools should raise funds gives a lot of leeway to secondary school head teachers to decide on the type of educational levies to impose on parents.

One major source of revenue is school fees, which is supposed to be controlled by the MOEST guidelines. From the findings of the study it is clear that schools charge more than what the ministry has recommended. The major reason attributed to this scenario is that the basis upon which the costs are derived at is not known

Table 1. Fees charged in boarding and day schools in Ndivisi division.

Expense Item	Boarding		Day	
	Lowest Kshs	Highest Kshs	Lowest Kshs	Highest Kshs
Boarding fee	13400	17000	-	-
Registration		800		500
Caution	1000	2000	500	1000
Uniform	1500	3000	1000	2000
P.T.A	4000	6000	2000	4000
Medical	800	1200	300	600
L.T.T	800	1000	-	500
Personal Emol.	2000	3000	2000	2000
Elect. & Water	800	1000	-	500
D.E.I	200	200	200	200
Examination	3600	4600	3600	3600
Special Sub		800	-	-
Remedial	3000	6000	1500	3000
Lunch			3000	3500
Total	31,100	47,000	14,100	21,400

Table 2. Reasons for delayed payments.

Reason	N = 7	%
Poverty	7	100
Many dependants	5	71
Poor market	4	57
HIV/AIDS	4	57
Unemployment	3	43

hence the guidelines are regarded as not being realistic since they do not reflect real unit cost of secondary education at specific schools. Thus, these guidelines are largely ignored by large number of headteachers, boards of governors and parents teachers associations who go ahead and charge what they feel is realistic. Be-side the vote heads recommended by the MOEST, schools have introduced other items such as remedial teaching fees, motivation fees, welfare fees that have contributed to increased costs of education. These find-ings conform to those of Orodho (2002) and UNICEF (1999) that found out that the schools charge more than what the ministry of education has recommended. Similarly, Martim (2008) found out that most schools especially national schools charge over Kshs. 60,000 per year. This high cost is prohibitive to not only the poor but also middle class families. Akinyi et al. (2009) state that 5 students who are admitted to national schools from Nyanza province could not report because of lack of school fees. This is a clear indication that despite tuition fees waiver many parents are still unable to educate their children in secondary schools

Methods of payment: An inquiry on how direct costs

are paid to schools re-vealed that payments are made in installments and not all parents complete paying fees by the end of the year. However, it was reported that some do not pay promptly. In some schools, it was revealed that very few parents pay promptly.

The researcher sought to find out the reasons for delayed payment of fees. Table 2 shows the reasons given by head teachers for delayed payments.

From the Table 2 presented, it is clear that poverty plays the biggest role on delayed payment. 100 of the head teachers felt that poverty was the main cause of delayed payments. Many parents are poor and therefore cannot pay promptly. Another factor that affects prompt payment is the situation where parents have many dependants to cater for, this constituted 71%. Many dependants, coupled with poverty have made it difficult for the parents to pay promptly. 57% of head teachers stated that some parents who were farmers do not have ready market for thier produce thus they could not pay promptly. Some teachers (57%) identified HIV/AIDS and orphanage as a factor affecting payment of fees. They indicated that AIDS has made some parents unable to pay for their children because they spend a lot of money on medication. This condition had also left some children orphans without somebody to pay for their fees. At the same time 43% of the head teachers reported that some parents are unemployed and therefore they do not have regular income and so cannot pay promptly.

Impact of delayed payment

It was revealed that the greatest impact of unprompt payment of school fees is absenteeism. Students are regu-

Table 3. Views of parents on school fees charged.

Rate	N	%
High	25	89
Average	3	11
Low	0	0
Total	28	100

Table 4. Trends of School Fees Charged.

Trend	N	%
Constant	8	29
Fluctuate	20	71
Total	28	100

regularly sent home for fees. This impact on the internal operations of the school institutions in the following ways,

- i.) There was delayed coverage of the syllabus because students were not attending classes regularly. This made teachers to repeat what they had already taught when those students who had been sent home for fees resumed.
- ii.) Projects in schools were delayed and payments of non-teaching staff were delayed leading to lack of motivation hence poor performance. Physical development in school slowed down and it was revealed that some projects, which were supposed to have been completed some years back, were still under construction.
- iii.) Acquisition of necessary teaching learning materials and equipment had become difficult. This demotivated teachers and students leading to poor performance.
- iv.) When students were sent away from classrooms to collect fees, there were underutilization of available resources such as classes, books, libraries and laboratories and when all were present these resources were shared among many students. This is not cost effective. If resources are over utilised at times and overutilised at other times, the operation of the schools are not cost effective hence resulting into inefficiency.

It was also reported by teachers that absenteeism leads to poor performance, which in turn leads to repetition that overburden parents who were made to incur extra costs. This also leads to inefficiency in the sense that the students take more than the required minimum number of years to graduate. Other students could have used these resources. If this trend persists, it was established that the student finally drops out of school.

Views of parents on school fees charged

The researcher gathered views of parents on school fees

charged. These data were necessary to establish whether the school fees charged in their socio-economic context was high, average or low. The Table 3 below presents the views of parents on school fees charged.

From Table 3 above, a majority of parents (89%) said that fees charged are high. They lamented that the fees was very high and therefore needs to be reduced. Most of them admitted that they could not afford it. The head teachers interviewed agreed that the fees charged was very high for the parents to afford but insisted that it is inadequate to meet all school costs. Perhaps this is why they do not follow the fee guidelines given by the ministry of education.

The researcher gathered information on the trends of school fees charged and the Table 4 shows how parents view the trend.

From Table 4, it is clear that most parents (71%) lamented that despite the fact that school administrators did not use the government fee guidelines, they do not stick to the fee structure that they provide at the beginning of the year. They introduce some levies in the middle of the year that frustrate the already overburdened parents. One parent stated, ".....the school fees is too high for me to afford and they keep on increasing the fees even in the middle of the year. The government should assist us by ensuring that head teachers do not increase school fees the way they want". This made some parents to withdraw their children from education institutions because most of these parents are farmers and therefore earn only once a year. They budget at the beginning of the year. Therefore other costs introduced in the middle of the year are unbearable.

On average parents are spending a large proportion of their meager income in paying for secondary education. Parents have to meet secondary education expenses that are much higher than their income. More revealing was the fact that because wealth in this division is not equitably distributed, majority of households have incomes that are below the expenses of educating one secondary education student. Given that 56% of the Kenyan population is living below the poverty line, the great majority of household income per year is kshs. 8,508 (Bungoma district development plan 1997 - 2001). Given that schools in this division charge between kshs. 17,850 and 32,900 per year per student in boarding schools, the inescapable conclusion would seem to be that children from poor households are kept away from secondary education because their parents cannot afford the attendance expenses.

A lot of research on causes of dropouts, repetition and absenteeism suggest that it is associated with the distribution of wealth. 2 studies in Kenya associate it with low incomes of the affected sections of the society. Families with low income are unable to provide education to their children. UNICEF (1994) states that these costs are prohibitive not only to the poor but also to medium income ones. Martim (2008) states that most schools

Table 5. Enrolments, transition, dropout, repetition and graduates (1992 - 2001)

Year	Std 8 graduates	Form 1	% Transition	Form 2	Form 3	Form 4	Total; enrolment	Form 4 graduates	Drop out
1998	2775								
1999	2792	866	31	820	763	624	3073	621	157
		23		14	17	27	85		
2000	2806	898	32	860	841	819	3418	775	151
		26		24	29	38	117		
2001	2830	876	31	869	853	831	3229	820	162
		32		32	37	21	122		
2002	2897	902	32	879	860	848	3449	820	180
		31		21	32	37	121		
2003	3011	1003	35	978	957	940	3878	895	201
		43		32	42	36	123		
2004	3123	1214	40	1120	1097	998	4429	859	194
		43		37	26	15	121		
2005	3302	1256	40	1224	1201	1182	4863	1067	232
		64		54	40	30	118		
2006	3345	1340	43	1318	1290	1232	5180	1186	286
		73		37	25	37	172		
2007	3507	1387	41	1354	1345	1309	5395	1204	303
		82		18	21	42	163		
2008	3611	2134	61	2023	1976	1906	8039	1791	181
		75		31	37	43	186		

KEY	
886	Upper Number = Total Enrolment
23	Lower Number = Total Repeaters

especially national schools charge at least 60,000 Kenyan shillings per child per year. These costs are far beyond the reach of the poor and medium income families. Therefore children from these families are priced out of these schools. This situation increases inefficiency and inequity in the provision of education.

The rates of transition, dropout and repetition attributed to education costs

Data were gathered concerning the total enrolment in public secondary school over 10 years from 1998 - 2008. These data were required in order to establish the number of dropout, repetition and graduation throughout the period 1998 - 2008. The Table 5 shows the total number of school age going population, enrolment, dropout and graduation between 1998 and 2008

From the Table 5 presented, it is clear that on average only 38% of the total graduates of standard eight enrolled in secondary schools in the division. 62% did not enroll perhaps because their parents could not afford secondary school costs. At national level, only 46% of the standard 8 graduates enrolled in secondary schools in the

year 2000 (EFA, 2001). The transition rate in this division is lower (32%) compared to that of national (46%). In 2008, 61% enrolled while 39% did not. This increase in enrolment could be attributed to the tuition free secondary education that was introduced in the country in 2008. However this transition rate is lower the average national transition rate which is 70%. The 39% that did not enrol may be attributed to the fact that majority of parents in this division are poor and therefore cannot afford secondary education costs. This study assumed that the number of students who enrolled in this division from other divisions cancelled out the number of students who enrolled in other divisions apart from Ndivisi division.

According to (EFA, 2001) secondary education is part of basic education in Kenya. Failure to provide basic education seriously compromises a country's effort to reduce poverty. This also implies that the millennium development goal of providing basic education to all by the year 2015 will not be realized. Basic education of acceptable quality is crucial in equipping disadvantaged individuals with the means to contribute to and benefit from economic growth. Education is one of the most powerful instruments societies have for reducing deprivation and vulne-

Table 6. Repetition rates.

Year	Form 1	2	3	4
1993	0.02	0.05	0.06	0.04
1994	0.02	0.06	0.07	0.04
1995	0.01	0.01	0.03	0.06
1996	0.03	0.05	0.06	0.05
1997	0.03	0.03	0.04	0.03
1998	0.03	0.03	0.03	0.04
1999	0.03	0.03	0.04	0.04
2000	0.03	0.01	0.07	0.06
2001	0.02	0.02	0.04	0.05
2002	0.04	0.02	0.03	0.04
2003	0.05	0.04	0.05	0.04
2004	0.04	0.04	0.03	0.02
2005	0.05	0.05	0.04	0.03
2006	0.06	0.03	0.02	0.03
2007	0.06	0.01	0.02	0.03
2008	0.06	0.02	0.03	0.03

Table 7. Graduation rates

Year	Rate	%
1993	0.97	97
1994	0.97	97
1995	0.96	96
1996	0.94	94
1997	0.99	99
1998	0.99	99
1999	0.99	99
2000	0.99	99
2001	0.99	99
2002	0.97	97
2003	0.95	95
2004	0.86	86
2005	0.90	90
2006	0.96	96
2007	0.91	91
2008	0.94	94

rability. It helps lift health of parents and children, reduce fertility and child mortality and affords the disadvantaged a voice in society and the political system (Psacharopoulos and Woodhall, 1985).

Education investments are crucial for sustained economic growth, which low - income countries are seeking to stimulate and without which long - term poverty reduction is impossible. Education directly contributes to worker productivity and can promote better natural resources management and more rapid technological adaptation and innovation. It is fundamental to the creation of a competitive knowledge-based economy, not only for the direct production of the critical mass of scientists and skilled workers that every country requires but broad based education is associated with faster diffusion of information within the economy, which is crucial for enabling workers and citizens in both traditional and modern sectors to increase productivity (Psacharopoulos and Woodhall, 1985).

Research has shown that nations with most of the population literate and in which all children complete at least a basic education have higher quality institutions, stronger democratic process and as consequence, more equitable development policies. To achieve these in Kenya, the government should come up with financing policies that will enable a good % of Kenyans to complete at least the basic level of education.

Repetition rates

Repetition rate is an indicator of internal inefficiency. Data were gathered on the number of repetition and repetition rates were established. Table 6 shows the rates of repetition between 1993 and 2008.

From Table 6 presented, the rates of repetition are very low. This was because most parents could not allow their

children to repeat in the same grade because they could not afford to incur costs in the same grade twice. In fact the majority of those who repeated came from well off families that could afford the costs. This scenario of promoting weak students to the next grade impacts on internal efficiency of secondary schools in that the performance in most of the schools visited is poor. On average these schools had a mean grade of D+.

The researcher gathered information on the number of graduates and calculated the graduation rates. Table 7 shows the graduation rates.

Graduation rates are high as most students who enter form four persist on in schools until they finish. However those who are sent for school fees before they register, they opt out of school or repeat. For those who register, even if they are sent out of class, they finally came back to do examinations. This affected their performance because they were not in classes most of the time. The mean score in the division was D+. It was also established that those students who had fees problems kept on transferring from one school to another. Once fee in one school had accumulated and the parent was unable to pay, he/she transferred the child to another school. It was also revealed that students, especially with fee problems opted to register for examinations in a different school and therefore paid the examinations fees only. Another factor that resulted to higher graduation rates is that head teachers allowed those students who had fee balances to do examination hoping that they could pay later, unfortunately only a few paid and some did not pay especially when they realized that they had failed the examination. Drop out is an indicator of internal efficiency in the sense that, high drop out rates indicate inefficiency and low dropout rates indicates efficiency. Therefore data were collected on dropout to determine the rates of dropout. Table 8 shows the dropout rates.

Table 8. Dropout rates.

Year	Forms		
	1-2	2-3	3-4
1993	0.17	0.09	0.02
1994	0.03	0.04	0.18
1995	0.09	0.20	0.15
1996	0.06	0.04	0.12
1997	0.11	0.11	0.10
1998	0.08	0.06	0.02
1999	0.20	0.01	0.14
2000	0.01	0.01	0.14
2001	0.02	0.05	0.08
2002	0.04	0.04	0.07
2003	0.10	0.08	0.12
2004	0.09	0.15	0.14
2005	0.07	0.12	0.09
2006	0.07	0.08	0.11
2007	0.11	0.06	0.13
2008	0.08	0.10	0.06

Table 9. Head teachers' views on causes of dropout

Factor	N = 7	%
Lack of school fees	7	100
Pregnancies	6	86
Indiscipline	4	57
Transfer	2	29
Family decisions	2	29

From the Table 8 presented, it is revealed that a total of 1060 students dropped out of school while 670 students repeated in the period 1992 - 2001. The enrolment in all forms had been increasing every year. This could be attributed to the increased population. High dropout and repetition occurs between form 3 and 4 where the average dropout was 0.11 compared to 0.08 and 0.06 between forms one to form two to form three respectively. It is also revealed that in a span of 10 years from 1998 to 2008, a total of 2279 students dropped out of school. This high number of dropout could be attributed to poverty among other factors.

Parents whose children were in form one and two made efforts to pay and they talked to the head teachers on how to pay the fee, but it was reported by head teachers that some parents did not honour their pledges and so the head teachers were forced to send the students out of class especially when the balances accumulated.

When this happened and the parent was not in position to raise money he/she gave up on educating the child.

This resulted in dropout. Similarly when a student was frequently sent home due to school fees, his/her performance was affected and when advised to repeat he/she

Table 10. Teachers' views on Causes of Dropout

Factor	N = 28	%
School fees	24	68
Pregnancy	13	46
Indiscipline	6	21
Orphanage	5	19
Ignorance	3	11
Attitude	3	11
Peer pressure	2	7

simply dropped out of school because the parents could not afford the fee.

An enquiry on the causes of drop out and repetition was carried out and the Table 9 summarizes the reasons for dropout and repetition.

From Table 9, it can be concluded that school fees contributed a high number of dropouts. In fact 100% of the head teachers stated that it is a cause. Other causes cited are pregnancies (86%), indiscipline (57%), transfer and family decisions (29%)

The researcher sought to find out the view a of teachers on the causes dropouts and the responses are shown in Table 10

It is clear from the Table 10 presented that school fees played greater role in dropout rates. 68% Of teachers felt that it contributed to dropout. Other factors were: pregnancy (46%), Indiscipline (21%), Orphanage (19%), ignorance (11%), attitude (11%) and peer pressure (7%).

It is clear from the the Tables 10 presented, that the costs of education contributed the largest % of school dropouts. From the extensive research on wastage and repetition that was carried out by UNESCO (1997) it is evident that the problem of dropout and repetition is serious in most developing countries. The major cause of this scenario is the unbearable costs that are charged in education institutions. Dropout and repetition appear to be most common among students from a low socio-economic background as revealed from literature reviewed and among females than among males. Causes include poverty that give rise to illness, malnutrition and absenteeism. Dropout and repetition have been identified as the major cause of internal inefficiency (Psacha-ropoulos and Woodhaall, 1985). Such high rate of wastage means that the average number of years required to complete secondary education is more that 4. Since every repeater displaces a potential new student. This leads to inefficiency.

The researcher gathered information on the views of head teachers and teachers on causes of repetition. Table 11 is presents in views of teachers.

From Table 11 presented, it was revealed that 46% of teachers viewed poor performance as a factor that contributed to repetition. Other factors were absenteeism (36%), pregnancy (29%), illness (14%) and inadequate facilities (14%)

Table 11. Head teachers' views on causes of repetition.

Factor	N = 7	%
Poor performance	6	86
School fees	5	75
Irregular attendance	3	43
Improve performance	3	43
Inadquate facilities	2	29
Illness	2	29

Table 12. Head Teachers' Responses on Percentage of Wastage Attributed to Cost Sharing.

Degree	N	%	Cumulative frequency
Very high	4	57	57
High	2	34	91
Average	1	9	100
Low	0	0	100

Table 13. Parents' reasons for dropout.

Factor	N	%
School fees	221	66
Pregnancy	34	10
Transfer	42	13
Marriage	20	6
Indiscipline	26	8
Death	11	3

Cost sharing and wastage

The researcher sought to establish the contribution of cost sharing on wastage and the head teachers responses are shown in the Table 12 presented. From the responses given in the Table 12, it is clear that the cost sharing policy in education has contributed a lot to wastage in secondary schools. 91% of head teachers felt that cost sharing contributed to the high % of wastage.

As it has been mentioned earlier 1060 dropped out of school for the period 1992 - 2001 and a total of 2279 did drop out between 1998 and 2008. The researcher interviewed 334 parents of dropouts to ascertain the reasons for dropout. Table 13 shows the responses of the parents.

From the Table 13 the costs of education contributed a large share of dropout. It was revealed that 66% of the respondents stated that school fees led to dropout. Other factors are pregnancy (10%), transfer (13%), marriage (6%), indiscipline (8%) and death (3%).

It is clear from Table 13 that cost of education is the key reason for dropout from school. The education for all global monitoring report (2009) shows that 36 million

children of primary school age are out school and that 1.5 million are in Kenya, an indication that Kenya may not achieve the objective of achieving universal basic education by the year 2015. The report further states that by 2015, 900,000 children will be out of school by 2015 due to poverty unless effective financing strategies are put in place.

UNESCO (2009) notes that in Kenya children from poor households are less than half as likely to proceed to form one as those from the richest 20%. The report further states that in Nairobi, slum residents have a 20% attendance points lower than other city children. Martim (2008) notes that secondary education in Kenya is beyond the reach of the poor as most schools especially provincial and national schools charge over 60,000 per year. In a country where more than a half of the population is living below the poverty line, the inescapable conclusion will be most people will afford to educate their children in secondary schools.

In a country striving to achieve national cohesion, the alleviation of hardship to the poor members of the society and the provision of equal access opportunities for advancement must receive serious consideration in financing policies. Rather than accept overrepresentation in post primary of some sections of the population and institutionalize it by offering opportunity to the few who could afford the costs, it seems that a better policy would be to find ways in which a combination of public and private resources are deployed to increase the representation of the poor. This policy of cost sharing in education would be a failure if it would not take into consideration the overall government policy of promoting the development of the whole community. This is also against the classical liberal theory that advocates for equal access to education. Social institutions such as education should attempt to treat people equally. Costs should not create inequalities.

The extent to which parents and communities contributed to physical facilities and equipment in secondary schools

The researcher inquired whether the schools had enough teaching and learning facilities. The responses are as shown in the Table 14

From Table 14, it is clear that 86% of teachers who responded to the questionnaire reported that their schools did not have enough teaching and learning materials. An inquiry into who was supposed to meet these costs revealed that parents were supposed to do it. But they did it to a small extent. The reason given for failure of parent to buy these materials was that most of them were poor and also lacked information on what they were supposed to contribute.

The researcher went further to find out the impact that teaching-learning materials had on school operations. Table 15 shows the impact of lack of teaching-learning

Table 14. Facilities in the Sam-pled Schools.

Facilities	N	%
Enough facilities	4	14
Not enough	24	86
Total	28	100

Table 15. Impact of lack of teaching- learning materials.

Impact	N	%
Poor performance	27	96
Syllabus not covered	21	75
Inefficiency	21	75
Teaching is difficult	15	54

Table 16. Facilities and Equipments Available in Secondary Schools

School	Facility	Condition
1	Library	Well equipped
	Labolatory	Well equipped
	Classes	Enough
	Sport ground	Enough
2	Library	Not there
	Laboratory	Not there
	Classes	Over crowdeded
	Sport ground	Available
3	Library	Few books
	Labolatory	One, not very spacious and well equipped
	Classes	Enough
	Sport ground	Available
4	Library	Few books on the shelves
	Labolatory	Few apparatus
	Classes	Few, overcrowded
	Sport ground	Use primary section
5	Library	Fairly equipped
	Labolatory	Not well equipped
	Classes	Sufficient
	Sport ground	Available
6	Library	Few books
	Labolatory	Not well equipped
	Classes	Sifficinet
	Sport ground	Sufficient
7		Few bookswer available
	library	in a drawer
	Laboratories	Not there
	Classes	Not sufficient
	Sport ground	Use primary section

materials on the day -to -day school operations.

From Table 15, it is clear that lack of facilieties and teaching-learning materials has regressive impact on internal operations of the school as it leads to poor performance and inefficny while teaching was made difficult and the syllabus is not covered. This scenario did not only frustrate students but also teachers. This led to increased dropout and repetition, which are indicators of internal inefficiency. The researcher observed the facilities and equipment in the schools and Table 16 shows the facilities and equipment.

Table 16, it is clear that most schools do not have enough facilities and equipment. In the whole division there is only one school that has welol equipped library and labolrotry. This is a provincial school, 3 schools had the laboratories and libraries, but they were not well equipped. Finally 3 schools did not have labolarories, libraries and classes were overcrowded. These were district schools. Form this it could be concluded thatn district schools did not have enough facilities and equipment. Contrary to the researcher's expectations, those schools that lacked these facilities and equipment had a large number of students.

An enquiry into this scenario revealed that the costs in these schools were relatively cheaper and therefore most parents who were unable to pay high school fees in those schools that were well equipped transferred their children to those poorly equipped schools where the cost were low. However it was revealed that most parents were still unable to pay the required fees. Therefore poor families were forced to provide to their children a type of education, while its cost was relatively low, did not adequately prepare them for advancement up the education ladder. With the much higher expenses in the secondary school, it is reasonable to conclude that greater many families had been priced out of education at secondary school level.

The government under cost sharing policy was to provide teachers, additional textbooks and equipment. The cost sharing policy required that parents and communities provide learning and teaching resources, physical facilities and other amenities that were necessary for running schools effectively (Ministry of education and human resource development, 1999).

However, this study revealed that the government did not provide enough teachers in these schools. The schools were compelled to employ teachers and the cost of paying these teachers were transferred to the parents who were already overburdened. The government did not provide the additional textbooks and equipment. These costs were too passed to the parents. Most parents were poor and therefore would not meet these costs. Therefore schools were not in a position to purchase necessary teaching and learning materials, construct physical facilities and also equip them. Lack of textbooks, enough teachers and teaching-learning materials led to dropout and repetition which are indicators of internal inefficiency (Psacharopoulos and Woodhall, 1985).

Instructional materials are key ingredients in learning.

They provide information, organize the presentation of information, offer student's opportunities to use what they had learned, and are known to enhance student achievement (World Bank, 1990). In the eighties researchers found that the availability of textbooks and other learning materials had a consistently positive effect on student's achievement (World Bank, 1990). However in schools the researcher visited, students either lacked books altogether or were required to share books and other facilities with other students.

Views of parents and teachers on cost sharing policy

Parents and teachers viewed cost sharing both negatively and positively. Positive in the sense that it had made parents to actively participate in the running and management of schools. They participated in the guiding and counseling of the students so that those students avoided indiscipline behaviours so as to complete school without being expelled from school. The parents were also more interested in ensuring that their financial contributions are put into best use for the education of their children. A more astonishing revelation was that cost sharing had reduced repetition in the sense that parents were not willing to allow their children to repeat the same grade, as they could not incur costs twice in the same grade. However it increased internal inefficiency, as a student who was automatically promoted finally failed examinations.

On the negative side, it was reported that cost sharing has discriminated the poor who could not afford the costs of education. Thus most children from poor families were forced to drop out of school. Similarly parents did not pay the school fees required to enable schools operate efficiently. As a result, many schools did not have basic facilities and equipment and this compromised the quality of education. At the same time, it was revealed that the government did not provide the whole of its share. That is, did not provide enough teachers and additional texts and materials that it was supposed to provide. This negatively affected the internal operations of the schools.

Conclusion

From the findings of this study, the following conclusions were made, enrolment had been increasing every year due to increase in school going age population in the division. Despite the increase in population only 32% of the total school going age students enrol in secondary schools.

Head teachers, teachers, parents revealed that drop-outs affected the poor in most cases. High rates of absenteeism were associated with school fees as students were regularly sent home for school fees.

School administrators did not follow the fees guidelines provided by the ministry of education and they regarded them as unrealistic hence charged what they felt was

realistic.

Both partners of cost sharing did not contribute the full share of what they are supposed to contribute.

Most of the schools visited did not have enough teaching – learning materials, physical facilities and other necessary amenities to facilitate efficient internal operations of the school.

Parents viewed cost sharing as a burden. The costs of education were too high especially for the poor parents and they called for reduction of education costs. Some parents were not aware of their role as far as cost sharing is concerned.

Policy recommendations

Based on the findings of this study, the researcher made the following recommendations

- i.) The government should establish the unit cost of secondary education and come up with fee guidelines that are acceptable to all and put in place policies to ensure that school administrators adhere to these fee guidelines. Additional costs in the middle of the term or year should be discouraged.
- ii.) This study established that schools did not have enough teaching and learning materials. Therefore, there is a need for school administrators to encourage and use locally available resources and improvise those materials that they cannot afford to purchase.
- iii.) The government should introduce effective policies in the administration of the bursary fund to mainly target the poor.
- iv.) There is a need for the introduction of a better method of financing education that would reduce dropout rates. Such methods could include provision of selective education vouchers that would mainly target the poor and the marginalized.
- v.) School administrators should be encouraged to start income generating activities and encourage both parents and students to fully participate to subsidize the costs of schooling.
- vi.) Head teachers should encourage parents to be paying in kind. For instance, parents should be encouraged to supply building materials, foodstuffs and labor.
- vi.) School administrators and parents should come up with the best formulae of paying school fees. Allow parents with low-income to be paying as little as kshs. 200 per week. This will enable many parents to pay so that students are not regularly sent home to collect school fees because this has led to inefficiency in schools.
- vii.) There is a need for the introduction of work based programmes in secondary schools to enable the economically disadvantaged students to raise their school fees.

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