Effectiveness of Decentralized Education Bursary Fund in Enhancing Equity in Access and Participation in Public Secondary Schools, in Kajiado County, Kenya

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Abstract:
The secondary schools bursary fund was introduced in 1993/1994 financial year to enhance access, ensure retention and reduce the disparities and inequalities in provision of secondary education in Kenya. Decentralization witnessed communal involvement in decision making and it was anticipated that there will be fairness and efficiency in the whole process. Nevertheless, cases of complaints by various stakeholders still abound. Renewed interest led to the introduction of secondary school subsidy by the government in 2008, which is more favorable to day schools, however, boarding school students have to pay extra charges for boarding facilities. This, together with opportunity cost for both day and boarding schools students justify the continuation of secondary school bursary fund. This paper study specifically looked at the trend in allocation of decentralized bursary fund in the years 2008-2011, the relationship between socio economic status and bursary demand and supply, the challenges and the policy reforms in tackling the bottlenecks. The study employed a descriptive survey and phenomenological design and was conducted in 14 public secondary schools. A sample of 345 students, 14 head teachers, 12 Kajiado constituency bursary committee members and 2 area education officers was surveyed. Data was collected using pre tested Questionnaires for head teachers, bursary recipients and non recipients that yielded a correlation co-efficiency of 0.923. Interview guide for the Kajiado Constituency Bursary Committee and area education officers was used and finally document analysis. The collected data was analyzed using descriptive, Lorenz curve, Gini co efficiency and inferential statistics. The Findings of the study observed that: (a) the number of bursary applicants has continued to increase but there is reduction in amount being allocated to each constituency; (b) the bursary award has no relationship with the beneficiary's socio-economic and the average amount of money distributed depends more on the location than ones socio economic status; (c) More boys than girls get Bursary fund allocation; (d) that there is no statistically significant difference in allocations between students in provincial and district schools; (e) the students from private and day schools have been included to benefit leading to awards spread thinly to many students. Among other challenges include: the whole process was marred by political influence. Students were exaggerating fees with little verification from schools as constituency bursary committee lacked the funds to make follow up with lack of proper recording system. From the findings, the reforms needed include: (a) a policy on inclusion of day and private schools students as beneficiaries of bursary, needs to be clear and documented; (b) the use of locations to consider those with high population and it be based on poverty index of each location and number of needy students;(c) there is need for an independent structured management team to be instituted whose work is monitoring and to evaluate the work of CBC and the DEB body at county level; (d) Need to set up a data bank calling for increase administrative funding for CBC and need for capacity building for CBC members; (e) There is need for policies on proper definition of orphans; and (f) the CBC should access lists by other bursary providers to avoid double duplications in disbursement.

1. Introduction

1.1 Background of the Problem

Education reforms that are aimed at increasing access to education and participation at any level carry significant financial demands. In 2003, Kenya introduced the Free Primary Education (FPE) policy with a view to meeting the goal of Universal Primary Education (UPE). Having successfully initiated the implementation of this policy, the country is now gearing towards widening access to, and improving the quality of secondary and tertiary education. However, the country faces constraints in mobilizing additional public and private resources to meet the high cost of expanding access to quality secondary education (Tharman, 2004).

In developed countries, education beyond the compulsory level is financed in part and sometimes wholly by the government. In Japan, the governments' fiscal policies provide for free education up to secondary level and learners of school going age have no option other than attend school to acquire education that is fully funded by the government (Moon and Mayes, 1994). In the United States of America (USA), the federal government supports public education (Roe, Edgar, and Morphet, 1969).

Many governments, particularly in Sub Saharan Africa (SSA) consider abolishing school fees for secondary education although most of them in the region are under severe budgetary constraints (Ohba, 2009). Given the massive increase in enrolments after the introduction of Free Primary Education (FPE), governments in SSA are concerned that if secondary schools continue to charge levies, majority of those who completed FPE will be unable to continue secondary education (Ibid).

Many countries of the world have committed themselves to the Millennium Development Goal of Education for All of achieving universal primary education enrolment by 2015. In an attempt to meet this international commitment and improve the quality of public education services and the equity with which public funds are disbursed, some governments are experimenting with other ways of channeling public funds. One such mechanism is demand-side financing, whereby public funds are channeled directly to individuals or to institutions based on some expression of demand by users (Patrinos and Ariasingam, 1997). Demand-side financing mechanisms can be used to help poor families invest in schooling by compensating fee charges or helping families to recover some of the opportunity costs. Targeted bursaries are examples of demand-side financing mechanisms whereby cash payments may go directly to schools, municipalities, or provinces and are earmarked for specific purposes, such as improving the curriculum or increasing school access for minority, indigenous, or poor children (Lewin and Caillods, 2001).

There has been a clear trend towards decentralization of the education service with inclusion of finance, to give greater involvement of people in the Management of educational funds. This has been the trend to move away from centralization, a situation where affairs of the people are managed from one central point (Bloom, 1991; Mukabi, 2008). In Kenya, various policy documents express the desire to decentralize a number of educational functions but most of them fall short on specifying the details (ROK, 2005).

With increase in enrolment rate being more than population growth of 2.9% 1989-1999 in the country (ROK, 2001), the ASAL regions are the worst affected. The major issues affecting education in ASALs include: inadequate access to schools, low enrolment levels, low retention and completion of learners once enrolled. Kajiado County as one of the ASAL areas has not only experiencing low female participation but also the provision of education opportunities in general are low (Fedha, 2008). The national secondary school level gross enrollment rate (GER) is below 50 percent, implying that the number attending secondary school is far much less than the size of the eligible age population.

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Boys	27.2	29.7	31.7	31.3	34.6	40.4	46.3	49	50.9
Girls	24. 2	27.4	27.3	29.1	29.3	33.3	38.8	-	46.3
Total	25.6	28.8	29.8	30.2	32.2	36.8	42.5	-	47.8

Table 1: Gross Enrolment Rates at Secondary Schools by Sex 2002 – 2008

According to Table 1, the Gross Enrolment Rate recorded at 2008 was 42.5 percent. The implication of this is that for every 100 secondary school age children, about 57 percent are not enrolled in any secondary school. This notwithstanding the transition rate from primary to secondary has improved from 47 percent in 2002 to 70 percent in 2008 (ROK, 2008). This implies that 30 percent of pupils in the 2008 cohort, who completed primary education, were not able to access secondary education. Though there has been notable increase in GER to 47.8% by 2010, the transition rates still remains a problem. Given the high poverty rate in Kenya that is estimated at 46 percent, the financing of secondary education possess affordability problems. When these figures are looked at regionally, serious regional and gender disparities emerge as seen in Table 2.

Year	Kajiado		Laikipia		Narok		Nakuru	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
2003	20.8	19.9	31.8	30.4	14.6	10.5	40.0	35.1
2004	24.1	19.1	34.6	30.2	18.3	19.8	33.8	24.5
2005	24.9	17.0	36.3	32.7	19.4	17.8	36.8	28.2
2006	28.5	19.8	41.6	37.7	23.6	20.6	43.7	31.2
2007	19.5	11.2	63.7	60.6	27.1	21.0	21.9	17.9

Table 2: Secondary Schools GER by Sex in Some Counties in Rift Valley, 2002-2007
Source: Republic of Kenya Educational Statistical 2003-2007

From Table 2, it is evident that Kajiado County has low participation rates at the secondary level in comparison with other counties in the province. When this is compared with national Gross Enrolment Ratio (GER), the latter increased from 28.8% in 2003 to 36.8% in 2007, against Kajiado districts 20.4% in 2003 to 15.4% in 2007.The implication of these being that over 80 percent of secondary students here were not able to enroll. This already shows a downward trend in participation. The National Net Enrolment Ratio (NER) was 18.9% in 2003 and increased to 24.2% in 2007 against Kajiado district 12.7% in 2003 which dropped to NER of 9.1% in 2007. This is a worrying trend given that the bursary scheme has been in effect during this period hence the need to carry out this study to find out reasons for low enrolment affecting both boys and girls.

In an effort to enhance transition from the primary to secondary schools, the Government of Kenya introduced the bursary scheme for secondary schools during 1993/1994 financial year (Njeru and Orodho, 2003). The purpose was to cushion households from rising impacts of poverty, unstable economy and devastating effects of HIV/AIDS pandemic (Njeru and Orodho, 2003; Ndura, 2004; Watchiye, 2007). Initially, bursaries were administered from ministry of education head quarters where money would be sent to various districts headquarters for disbursement. This method was faulted for being inefficient and ineffective in terms of it perpetrating unfairness (Odebero, 2002; Njeru and Orodho, 2003; Obare, 2004).

In recognition of these flaws, at the beginning of financial year 2003/2004, the ministry of Education decentralized the allocation of bursaries to constituency level and bursary management committees were formed to manage the funds. This was an effort to adopt participatory stakeholders' approach that involves community and household representation in management of bursaries (ROK, 2005). The governments' new guidelines that led to decentralization included changes in bursary allocation and disbursement criteria. Disbursement was based on constituencies' student enrollment and district Poverty index (Mwaura, 2005). The Constituency Bursary Fund (CBF) strategy according to Watchiye, (2007) was in line with government policy on devolution, decentralization of power and empowerment of local communities. The rationale of this method was to give bursaries to those deserving financial support. However, Sessional Paper No.1 of 2005 on Policy framework for Educational Training and Research (ROK, 2005a) notes that, the educational legal framework in the country is wanting as the various laws governing education are not harmonized and are no longer responsive to the current emerging needs and trends in education and training, an area requiring research to find if this has been put in place and how it is impacting on the effectiveness of the bursary scheme.

Studies by Mwaura (2005), Mwangi (2006), Watchiye (2007), Ngware (2008), were carried out to find out whether the new methods have impacted on amount of bursaries for poor and disadvantaged increasing to cater secondary access and retention, but little had been done on issues of policy, practice. How such policy affects access for the non recipients and more so orphans and partial orphans who are denied chance due to other opportunity costs in day schools. This study therefore sought to examine criteria, practice and implication of financing secondary education in Kenya through targeting student's bursary to vulnerable in society in relation to access, participation and equity in education.

This study was carried out at a time when there was renewed interest in secondary education in the country especially due to pressure occasioned by free primary education. In particular, the Sessional Paper No.1 of 2005 that underscored the costs of education as being the cause of low transition to secondary education. In response the government of Kenya developed the Kenya Education Sector Support Programme 2005-2010, that states its intention to integrate secondary education as part of basic education (ROK, 2005). In 2008, the government introduced secondary school subsidy favoring the day secondary education, however, boarding school students have to pay extra charges for boarding facilities of up to Ksh. 19,000. Some of the existing studies, Ohba (2009) and Asayo (2009), reveal that free education policy only reduced substantial amount of payable school fees but never abolished it. This gave room for school heads to levy fees in order to meet school expenses.

Majority of Kenyans may not afford to meet payments due to high poverty levels more so, the orphans in both public day and boarding schools whose numbers are on the increase. In 2003 the percentage orphans alone was 13.1 percent of total secondary school enrolment (ROK, 2010). This together with opportunity cost for day school students justify the continuation of secondary school bursary scheme. Thus an improvement of secondary bursary scheme would complement the governments' effort to enhance access and participation to secondary education. Documented evidence suggests more funds are channeled to ASAL regions yet there was little that had been done to document the impact of such extra funding, hence the need for this study.

1.2. Statement of the Problem

In order to address the emerging challenges, over the years, the Ministry of Education has made efforts to reform the management and implementation process by revising management guidelines through a number of circulars, but has this led to the effectiveness of the decentralized bursary fund?

Past endeavors by the government to increase participation has involved changing the bursary disbursement guidelines from the school boards and principals to disbursing funds through decentralized constituency bursary committees (Sessional paper no.1, 2005). This renewed hopes, that it would cushion the poor and vulnerable against high costs of secondary education, however, contrary to this expectations there have been concerns on how students from poor families are not able to access secondary education despite availability of these funds (Njeru and Orodho, 2003; Watchiye, 2007; Ngware, 2008).

Renewed interest has seen the government introduce secondary school subsidy in 2008 except for boarding expenses, day secondary schools have been excluded from bursaries as beneficiaries, and there has been reduction of government spending from eight to five million (Oyugi, 2009; ROK, 2010) but due to the high cost of secondary education, the extra charges for boarding schools and opportunity costs for day schools justify the continuation of the bursary fund.

Despite the availability of decentralized bursaries, access and participation still remains low with national Gross Enrolment Ratio (GER) at about 45.3 percent in 2008 (ROK, 2010). It is evident that Kajiado County continues to record low participation rates at the secondary level in comparison with other counties in the province with a GER of 15.4% in the same year. When analyzed against all the years there is evidence of a downward trend in participation despite bursary funds being available an area requiring this study. Studies have shown that when increases in public spending fail to generate improvements, it is possible that either there is ineffective transfer of funds or that there is deficiency in the capacity of those charged with the task, an area this study sought to find out (Oyugi, 2009)

Studies by Watchiye (2007), Ngware (2008), Oyugi 2009, have evaluated student's bursary scheme in general and found that it is still ineffective but little has been documented on how this is impacting on the non recipients, whether numbers of applicants had reduced given that more day school students are now catered for by the tuition fee waiver introduced in 2008, therefore there was need to examine and document criteria being used under the government subsidy, and how it was impacting on participation by the poor and vulnerable in Kajiado County regardless of the type of schools accessed by secondary school students.

1.3. Purpose of the Study

The purpose of this study was to assess the effectiveness of decentralized education bursary fund in enhancing equity in access and participation in public secondary schools, in Kajiado county, Kenya.

1.4. Research Questions

This study was guided by the following research questions:

- How is the gender trend in demand and allocation of decentralized bursary fund in the years 2008-2011 to recipients?
- What is the relationship between socio economic background and bursary fund supply and demand?
- What are challenges faced in disbursement and appropriate recommendation in strengthening effectiveness in the bursary system

1.5. Hypotheses

The research questions were further investigated using the following research Hypotheses at 95% confidence level.
Ho1: There is no statistically significant difference between bursary demand and supply, and selected students' background.

CHAPTER TWO

2. Research Methodology

A combination of descriptive survey and naturalistic design were used to establish the effectiveness of decentralized bursary fund. According to Kerlinger (1973), a descriptive study is not restricted to fact finding; but may often result in the formulation of important principles of knowledge and solutions to significant problems. It is appropriate because it aims at gathering facts, knowledge, opinions and attitudes about people; events or procedures (Gay, 1992). A descriptive survey design was appropriate for this study, which aimed at investigating decentralization of bursary as a management strategy and assessing its effectiveness in Kajiado County. The design enabled description of the current situation on the ground, which is held by stakeholders and to determine the next step about the policy on bursary disbursement.

The phenomenological design provided in-depth information about individuals, groups and institutions as they naturally occur. This design was regarded as responsive because it takes into account the value position of multiple audiences. According to Sogunro (2001), a researcher should be capable of using both methods. He argues that the usage of numbers and description that anchor on both qualitative and quantitative strengthens each other and produce a research synergy in which collective benefits are greater than what is obtained from an individual paradigm. Therefore in keeping with the above argument, both qualitative and quantitative data were collected.

2.1. Target Population

The study targeted all the public schools in Kajiado County. It also targeted all the secondary head teachers as they were used to verify bursary applicants in the schools and to assess the effectiveness of criteria used, constituency bursary committee members were included as they are the ones charged with responsibility of disbursing funds at the divisional levels. The Area Education Officers, who are secretaries to the constituency bursary committees in the counties, were included.

Two groups of students were included in the study, the first group comprised of students who had applied and received bursary and the second group were those students who had applied and failed to receive bursary. Further, more priority was given to 2008 cohort. This cohort was chosen because they are in their final year of study and they are likely to have received more bursary than any other cohort. This was to make the study more informative on trend of demand and supply of bursary. Moreover information received from them was more reliable because such information could be cross-validated through in depth interviews.

2.2. Sample and Sampling Techniques

Table 3 shows the number of anticipated and actual participants that were sampled for the study

Category	Total population	planned sample	Actual Sample size	%	Sampling technique used
Public schools	28	14	14	50%	Stratified and random sampling
Head teachers	28	14	14	50%	Purposive sampling
CBF. Committee	34	12	12	35%	Simple random sampling
Students	742	280	177	24%	Simple and stratified sampling
AEOs	2	2	2	100%	purposive sampling
Non bursary recipients	662	280	168	24%	snowball sampling and purposive
Total	1496	602	388	64%	

Table 3: Accessible population and corresponding sample size
Source: The information on the population was obtained from the DEO Office Ngong and Kajiado (2011)

According to Gay (1992), a researcher selects a sample due to limitations that may not allow researching the whole population. Mugenda and Mugenda (1999), notes that, resources and time tend to be major constraints in deciding on the sample size to use. As a result of heterogeneous nature of population, the study employed, simple random sampling, stratified sampling, snowball and purposive techniques to draw samples. According to Kothari (2001), if a population from which a sample is drawn does not constitute a homogenous group, stratified sampling techniques are applied. Sampling for the different categories of respondents was drawn as follows:

2.2.1. Constituency Bursary Committee Members (CBC members)

The sample of CBC members emanates from Mulusa (1990) who suggests that one third of the target population is representative to make estimates of the characteristics being investigated. Out of 17 CBC members, one third will give a total of 5.1 members which was rounded up to six. The researcher then used simple random sampling using lottery technique.

2.2.2. Schools and Head teachers

For head teachers, the schools formed the basis used in including them in the sample size. A sample of 14 schools was drawn from 28 schools in two constituencies (ROK, 2005); Kajiado North constituency was used and the basis of choosing it is that it has the highest number of schools in the county, and most of which are in urban areas. Kajiado Central was identified as having the lowest enrolment levels in the District. As a result of schools diversity, stratification was used along the following lines: Provincial and District schools, boys secondary, girl's secondary and mixed schools and the sampling fraction that was used is: 1/3 of the total, therefore the sample size of schools per each stratum. Using purposive stratified method all the 5 provincial 2 girls' schools' and 3 boys schools in this two constituencies were purposively selected and each represented rural and urban schools respectively. Among the district boys' schools there was one in each constituency each representing rural urban divide. Stratified sampling was used to select a sample from the remaining 14 secondary schools leading to 8 rural and 6 urban schools respectively.

2.2.3. Bursary Recipients

Stratified random sampling was used to select a sample from the 28 public schools : Borg and Gall, (1996) suggests that for a survey study, a minimum of one hundred subjects in each sub group and twenty to fifty subjects in each minor sub group are adequate size to make generalization about the group. Based on this, using simple random sampling, the researcher sampled a total of 20 students from each of the district mixed boarding schools, girls boarding, boys boarding of which 12 were form fours, 4 form three students and 4 from form two and one. The rationale for choosing more students from the form four classes was their having received more funding given its higher class. All the provincial schools were purposively included in the study because they are only 5 in the two

constituencies and also it was because they draw students both locally and from other districts in Rift Valley Province. This gave a total of 280 students from a population of 742.

2.2.4. Questionnaire for Non Bursary Recipients
The questionnaire for non recipients sought to elicit responses regarding information on socio economic status and bursary demand, reasons for missing loans and how they were copying. It aimed at comparing the socio economic status of non recipients and recipients of bursary funds. It helped to verify information regarding validity of criteria used to identify bursary recipients. In order to include non bursary recipients in the study; they were first identified through snowball sampling method at the schools. This involved the use of snowball sampling to identify two non recipients who merited bursary award but were not awarded. The two were then used to identify others who applied but did not get bursary in the same cohort. A total of 20 students from each school were sampled giving a total of 280 students that were included in the study..

2.2.5. Area Education Officers
The sample of MOE staff emanates from Mulusa (1990) who posits that one third of the target population is representative to make estimates of the characteristics being investigated. Out of ten AEOs, one third gave a total of 3 members. The three were purposively selected as the bursary was mainly distributed from three constituencies with only one AEO in charge.

2.3. Description of Research Instruments
The research was carried out using three questionnaires, two in depth interview guide, and one document analysis guide as the instruments for data collection. The instruments were developed in reference to financing of secondary education through the bursary scheme. The instruments were tested and reviewed appropriately before using them to collect information in the various schools and other respondents.

2.4. Data Analysis Procedures
The study applied both quantitative and qualitative approaches to process, analysis and interpretation of data. Quantitative data was tabulated and analyzed using simple frequencies, percentages, means and standard deviation. In particular, to establish extent of equity in loan disbursements, Lorenz curve and Gini Coefficients were adopted (Psachoropoulous and Woodhall, 1985). Test statistics that were computed to establish degree of relationship or association between the variables was the Chi-square test. Analysis of Qualitative data was an ongoing process; data was analyzed thematically as much as possible to capture the voices of the respondents. This was to determine the usefulness of the information in answering the research questions.

3. Findings

3.1. The trend in enrolment, demand and allocation of decentralized bursary fund in the years 2008-2011 to recipients
The first research question sought to determine the gender trend in enrolment and award of bursary 2008-2002011. The data addressing the first research question is as follows: A total of 14 schools were included in the study. An attempt was made to establish enrolment growth in sampled schools in Kajiado North and central for the last four years, a period when bursary was then disbursed through the constituency bursary committee. Kajiado North was purposively selected due to its high number of schools in the constituency and represents 62% of entire population followed by Kajiado Central with 21% hence representative of the county that has a total of 34 schools. Gender disparity persists at the secondary levels as evidenced in the two constituencies shown in Figure 1.
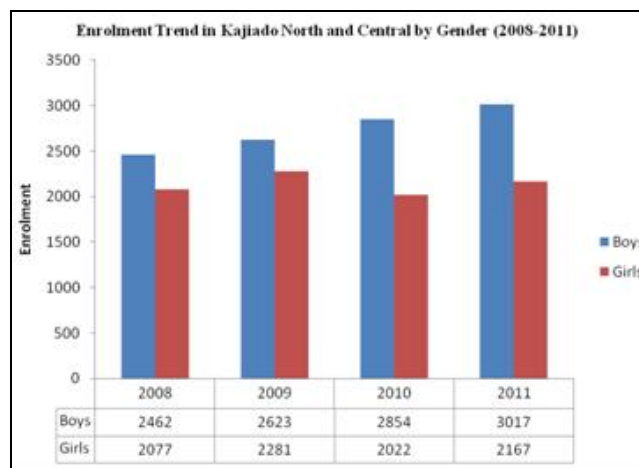

Figure 1: Trend in Enrolment by Gender in Kajiado North and Central (2008-2011)

The study found that the average enrolment for girls and boys in secondary schools in Kajiado District had increased marginally since the introduction of constituency based bursary fund. In 2008, there were only 2462 boys and 2077 girls, by 2009 there were 2623 boys and 2281 girls and by 2011 the numbers had increased to 3017 for boys and 2167 for girls. By 2011 the total population enrolled for boys was 6444 against the girls 4894 in the whole county. Analysis of gender shows continued persistent trend of having fewer girls enrolled in the constituencies. This is in agreement with the finding in literature review that gender disparity still persists despite increase in bursary and 5% affirmative action for girl child (Mwaura, 2005, MOEST 2005). The respondents were asked to explain the trend. The students (45%) felt cultural factors and parents level of education determined whom they sent to schools. (100%) of AEOs were in agreement with these factors and so were (87%) of the head teachers with poverty also coming out as a factor affecting enrolment.

The study sought to know the information on bursary demand and allocations for the four - year period from 2008 to 2011, this is because the level of bursary demand and supply can determine to a large extent the level of bursary effectiveness. Information from document analysis used in disbursement from both Kajiado North and Central received from the two secretaries to the CBC who are the area education officers are presented in Table 4.

Year	2008 Central	Kajiado North	2009 Central	Kajiado North	2010 Central	Kajiado North	2011 Central	Kajiado North
Number of students who applied for bursary	437	1660	490	1072	576	1975	630	874
Number of students who received bursary	194(45%)	1036(62%)	152(31%)	654(61%)	166(30%)	783(40%)	227(37%)	515(59%)
Number of students who did not receive the bursary but had applied	243(55%)	624(38%)	228(69%)	416(39%)	410(70%)	1192(60%)	403(63%)	259(41%)
Total Bursary allocated to each constituency	1.1M	2.05M	1.2M	3.5M	1.31M	2.1M	1.35M	1.9M

Table 4: Information on bursary demand and allocations for the Four - year period in Kajiado North and Central

Table 4 reveals a notable increase in the number of applicants over the four year period from year 2008 to 2011 especially in Kajiado central that is from 437 students in 2008 to 490 in 2009, 576 in 2010 which increased to 630 in 2011 respectively. The contrast was noted in Kajiado North with a decrease in 2009 from 1660 students to 1072, then up again to 1975 students in 2010 and down to 874 in 2011. From the findings in Kajiado Central, out of the 437 applicants, 44.7% received the bursary while 55.3% failed to receive the bursary in the year 2008. The study also found that 69 % of the applicants in 2009 failed to receive, 70 % in 2010, ands 63% in 2011. This implies that 64% of applicants were unable to get funding in Kajiado Central. In Kajiado North, in 2008, the number of recipients were 63% with 37% missing bursary after applying, in 2009, 61 % received and 39 % were not able to receive, the bursary recipients were 40% in 2010 down from 60% showing the level of inconsistency in bursary supply and in 2011, the number again went up to 59% for recipients. An analysis was done for the two constituencies and findings show that in total, an average number 46% of the bursary applicants were able to receive bursary from the two constituencies while 56% of the students were not able to receive any bursary, implication being that a large number of students were not able to receive bursary. The study also revealed that there was an increase in bursary allocations in the two constituencies from 3.15 million in 2007/2008, to 3.7 million in 2008/2009, and this reduced to 3.42 million in 2009/2010 and further to 2.44 million in fiscal year 2010/2011, this shows that bursary allocations from the ministry have not been consistent.

From the findings, the supply of bursary in Kajiado central was found to be low compared to supply of bursary allocations in Kajiado North in terms of number of students who received the bursary funds, although the trends in both constituency had declined from 2009 and again went up from 2010. These fluctuations imply that the bursary fund is not reliable as expected to enhance secondary school participation in Kajiado County. These fluctuations could be as a result of lack of consistency of funds received from ministry as earlier noted in Table 3. These bursary trends are further illustrated in the Figure 2.
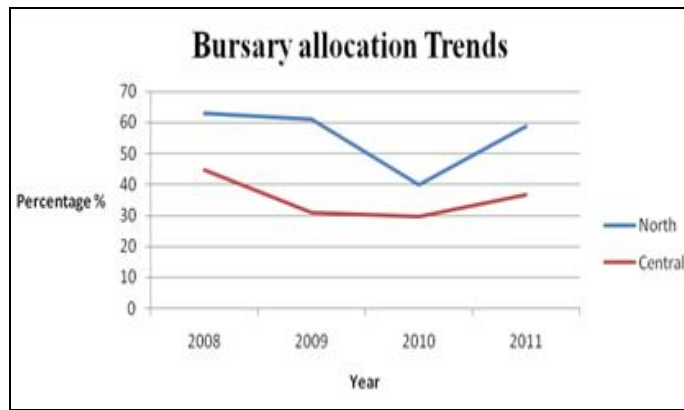
Figure 2: Bursary allocation trends in Kajiado North and Central in % for period 2009-2011

The bursary allocation was averagely below 40% for Kajiado Central while bursary allocation for Kajiado North had been above 60% but sharply decline to 40% and rose to 59% in the year.

The two AEOs, who are secretaries were therefore in agreement over amount from the ministry being inconsistent and therefore justifying why students could not also be assured of the same amount given each year. This information is in agreement with findings in Table 4.3 where the number of applicants was high in Kajiado North compared to Kajiado Central and the amount given from ministry was also higher for Kajiado north based on the number of applicants showing that allocations from ministry is given based on number of applicants in a given constituency.

The study further sought the trend in bursary demand and allocations based on gender for the four - year period, 2008-2011 and the findings are given in Figure 3.

Figure 3: Information on bursary award trend in Kajiado by gender in percentages for the four - year period 2008- 2011

From the findings, the trend shows that boys were getting more allocations compared with the girls in the two constituencies. This is a reflection of trend in enrolment where more boys are enrolled than girls in Kajiado County as seen in Figure 4.1. By 2011, the population of boys was 6444 against the girls. In 2008, 55% of the boys were able to receive bursary against a total of 46% for girls. In 2009, 59% of the bursary recipients were boys and 41% were girls. In 2010 the number of recipients dropped from 60% to 56% for boys while percentage for girls moved to 45% and finally in 2011 there was an increase in the percent of boys receiving bursary to 66% against the girls 35%. Notable also in Kajiado is the inconsistency of the numbers receiving bursary for both boys and girls showing that the bursary is not very reliable as illustrated in Figure 3 where for instance the bars shows lack of constant increase for both boys and girls with.

Years	Level of Bursary Allocation to beneficiaries					
	15,000	**10,000**	**6000-9000**	**5000**	**4000**	**<3000**
2008	.17	. 85	3. 23	20.74	59.5	15.47
2009	. 09	. 074	5.02	14.5	41. 2	38.13
2010	0	0	0	.73	8.92	93
2011	0	0	. 95	13. 5	16. 74	68. 78
Average	0. 26	.92	9. 2	49.5	91.9	182

Table 5: Level of bursary allocations to beneficiaries

Here, the researcher was interested in finding out the amount allocated to the bursary recipients and the data reveals that in 2008, 75% percent of the beneficiaries received less than Ksh 4,000 and 21% received 5000 whereas a paltry 1.2% percent of the beneficiaries received the maximum allocation of Ksh 15,000 and 10,000. But on further scrutiny the student who received 15,000 was from a district boarding school and did not belong to the national school The Ministry of Education has provided further guidelines as to the minimum amounts to be awarded to applicants from the various categories of secondary schools. These amounts are meant to be sufficient to meet the fee shortfalls of the needy students and therefore improve access. The recommended amounts are: Day Secondary Schools Kshs 5,000; Boarding Secondary Schools Kshs 10,000; National Schools Kshs 15,000 (MOEST 2005). This finding reveals that the criterion was not being followed as those receiving higher allocations in Kajiado County are not from the provincial schools. Majority whether from provincial or not were receiving equal awards that does not impact well especially in provincial categories.

Therefore the allocations depend more on the location the students come from implying that those locations with few applicants have an advantage over those with many applicants as evident from Appendix seven in document analyzed on students fee balance, location and amount given. This therefore shows that a student's amount awarded is affected by a number of factors, the location, and influence from local politician, amount allocated from ministry and lastly the categories identified by each constituency.

Information gathered through the beneficiaries and the information provided by the school principals revealed that some of those that are unable to clear their fee balance in time waste a lot of time away from school. This contributes to their poor performance in schools. In some cases, students from poor families were said to have opted to transfer to 'cheap' schools or discontinued their schooling altogether.

The bursary fund allocation levels to beneficiaries is therefore too low as can be noted from a cross-section of allocations against fee balances in Appendix seven to cover the entire fees for those assessed as poor and needy, especially in boarding schools now that the government is in the fourth year of implementing a tuition fee waiver for all students in all public schools. What is also astounding from Appendix seven is that beneficiaries from provincial schools (well performers) got relatively low allocations that are not in line with the maximum approved bursary allocations as compared to those beneficiaries from district. The researcher sought clarifications on why the students from day and private schools were also getting bursary and the two AEOs said though the MOEST has mentioned the same, the guidelines still in use have never been amended to remove that clause and hence all are given.

The study further sought to find out the trend in the award of bursary to all categories, that is, total orphans, partial orphans and poor needy students. The study looked at the proportion of student's fee balances against the bursary allocations to assess the trends in allocation to orphans, partial orphans and poor needy case and the findings are presented in the following section.

3.2. Comparison of proportion of fees for total orphans, partial and poor needy students met by bursary in 2009-2011
A combination was made of the proportion of fees for total orphans, partial and poor needy students met by bursary in 2009 to 2011 and the results are presented in Figure 4. In all categories, the bursary awards were very little compared to fee balances, none was able to receive the allocations as stipulated in the ministry guidelines; the recommended amounts are: Boarding Secondary Schools Kshs 10,000; National Schools Kshs 15, 000, (MOEST 2005). Day schools had been allocated Ksh.5000 but this was waived in 2008 after introduction of government tuition fee waiver. The study further found out that despite ministry guidelines all students whether in public, boarding, public day and private schools were receiving equal shares as evident in Appendix 8, showing that the received funds are not adequate as they are spread to all students in the county.
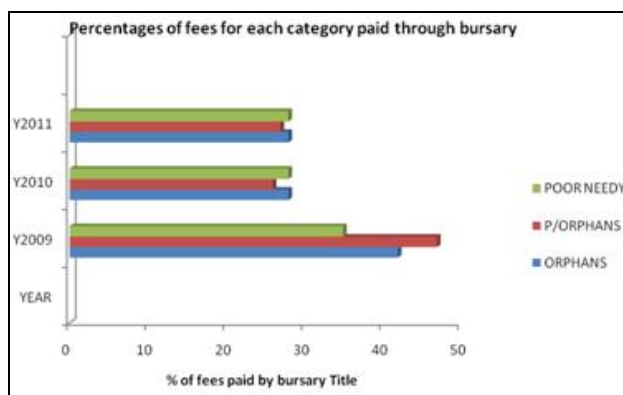
Figure 4: Comparison of proportion of fees for total orphans, partial and poor needy students met by bursary in 2009-2011

From the percentages the category of total orphans was not given full award as stipulated in ministry guidelines and therefore student's retention remains an issue despite the scheme. Though it came out that the CBC gave considerations in award of bursaries to orphans, it was still not adequate. The proportion of bursary to year 2009 school fees balance was 41% for orphans, 35 % for needy poor and 47% for partial orphans and children from single parents. The high allocations in 2009 could be attributed to bursary applicants who were few compared to the subsequent years. In 2010, proportion was 27% for total orphans, 26% partial orphans and 28% for needy poor. The same trend was notable in 2011 with orphans receiving 28%, poor needy 28% and partial orphans receiving 27%. In comparison to their fee balances all students in all categories are receiving insufficient funds leading to them being sent home for fees as averred by 83.3% of the head teachers, regardless of whether one is an orphan or not.

From bursary trend in award of bursary to orphans the following was noted: That being an orphan does not guarantee one the awards as stipulated in ministry of education guidelines. The amount of fees owed by the student is also not looked at as a priority, rather it is the location that the student comes from which was the most determinant of award given and this is why there was notable discrepancies with some orphans with huge fee balances receiving less than those with less. In some of the locations, a flat rate was used in awarding bursaries to orphans regardless of fees balances. The type of school, such as, provincial, district girls, day or private categories did not matter here at all and a student in form four in normal circumstances would require more priority which again is not given priority as summarized in appendix 8. Thus orphans in this county need to be awarded as per the ministry guidelines and hence avoid the risk of dropping out of schools.

These findings correspond with responses from head teacher's questionnaire on whether orphans get total bursary allocation. The study found that all head teachers (100%) and CBC members indicated that orphans did not get total bursary allocation. The study further sought to know what happened to the orphans if they did not get the total bursary allocations to cater for their total fees and what could be done to solve the problem. From the findings, all the head teachers (100%) indicated that most of the orphans have huge fees balances. This make them struggle to survive in the school resulting to drop out and therefore well wishers, other parents, teachers and students may opt to pay for their fees. The CBC needs to put them on permanent bursary and be fully catered for by the bursaries.

4. Discussion

The level of bursary demand and supply determines to a large extent the level of bursary effectiveness. The study sought to know the information on bursary demand and allocations for the four - year period from 2008 to 2011. The study found that the number of applicants was high compared to the number of students receiving bursary a factor attributed to inconsistency in allocation of bursary funds to the two constituencies from the ministry of education .These implies that the bursary fund is not reliable as expected to enhance secondary school participation in Kajiado County.

Based on the findings, percentages in both constituencies show continuous biasness in the award of bursary based on gender in the two constituencies. There is the trend of more boys being enrolled than girls in all constituencies and this is reflected in bursary allocations where boys are getting more allocations compared to girls, this results seems to agree with sentiments by two female head teachers who felt that there is a tendency that boys received a higher percentage than girls in all the four years of study thus awards are skewed towards the boy child here. These findings agreed with the sentiments of other 48% of head teachers who disagreed that bursary fund was gender sensitive. The findings are also in agreement with Fields (1980) who noted that there is evidence that some groups in developing countries have better access to education than others but the factors determining access vary among countries.

Fields study found considerable differences in education participation of individuals classified by sex, socio-economic background, urban areas and rural areas and also race and Religion. He found that in Malaysia, disparities exist not only between males and females as seen in Kajiado, and between geographical regions but also between those of Malaysia and Chinese origin while in Sri-lanka, ethnic and religious differences play a role in education attainment. Notable also in Kajiado is the inconsistency in the numbers receiving bursary for both boys and girls showing that the bursary is not very reliable. From the findings, despite the students having been evaluated and found poor and needy in one year was not a guarantee that they will receive funding in subsequent years.

Further, the level of funding relative to fees requirements is also very low, leaving the students with huge fee balances to clear. This contributes to their poor performance in schools. In some cases, students from poor families were said to have opted to transfer to 'cheap' schools or discontinued their schooling altogether.

The analysis of the bursary allocation levels presented revealed that allocations to recipients depends more on the location the students comes from implying that those locations with few applicants have an advantage over those with many applicants. Then there was the issue of influence from the area member of parliament where awards have to be given to as many students as possible disregarding the most needy, no wonder one of the head teachers made a remark that as long as the area member of parliament still holds influence in this disbursements, the most needy cases still remain a problem to deal with. This therefore shows that a student's amount awarded is affected by a number of factors, the location, influence from local politician and the amount allocated from ministry. These figures are similar to the finding of the survey conducted in Nairobi province in 2008 which indicated that majority of the students, estimated at 21 percent received the minimum allocation of Ksh. 5,000, 75% received less than 4000 and a paltry 0.4 percent received the maximum bursary allocation of Ksh. 15,000, though in case of Nairobi this were genuine beneficiaries from the national school (Oyugi, 2008).

The Ministry of Education has provided guidelines as to the minimum amounts to be awarded to applicants from the various categories of secondary schools. The recommended amounts are: Day Secondary Schools Kshs 5,000; Boarding Secondary Schools Kshs 10,000; national Schools Kshs 15,000 (MoE Circular, 2005). But the findings reveal that, regulation of fee notwithstanding, schools are known not to adhere to this limit and majority of them, especially the provincial schools charge more fees in Kajiado County. The guidelines from ministry has no provision for private schools but the study found out that there was no discrimination in allocation of bursaries to all schools including private and day schools. This could be the reasons why most students were getting inadequate amounts.

The study further sought to find out the trend in award of bursary to all categories, that is, total orphans, partial orphans and poor needy students. A combination was made of the proportion of fees for total orphans, partial and poor needy students met by bursary in 2009 to 2011. In all categories, the bursary awards are very little compared to fee balances, none was able to receive the allocations as stipulated in the ministry guidelines; The study further found out that despite ministry guidelines all students whether in public, boarding, public day, provincial and private schools were receiving equal shares, it is no wonder that the received funds are not adequate as they are spread to all students in the county.

Though it came out that the CBC gave considerations in award of bursaries to orphans, it was still not adequate. From bursary trend in award of bursary the following was noted: That being an orphan does not guarantee one the awards as stipulated in ministry of education guidelines. The amount of fees owed by the student is also not looked at as a priority, rather it is the location that the student comes from which was the chief determinant of award given and this is why there was notable discrepancies with some orphans with huge fee balances receiving less than those with less. In some of the locations a flat rate was used in awarding bursaries' to orphans regardless of fees balances, and the type of school, such as, provincial, district girls, day or private categories did not matter here at all and a student in form four in normal circumstances would require more priority which again is not given priority

These findings concur with responses from all the head teachers, that is, on whether orphans get total bursary allocation. The study found that all respondents indicated that orphans did not get total bursary allocation. The study further sought to know what happens to the orphans if they don't get the total bursary allocations to cater for their total fees and what can be done to solve the problem. From the findings, the head teachers and CBC members indicated that most of the orphans have huge fees balances which make the struggle to survive in school resulting to drop out therefore well wishers, other parents, teachers and students may opt to pay for their fees, CBC need to put them on permanent bursary and be fully catered for by the bursaries.

Related to sustenance was the level of academic excellence of bursary beneficiaries and the study found that funds awarded are too little to retain majority of students in schools and this impacts on their performance as well. The study further sought to find out the trend in allocation of bursary allocations by various bodies in Kajiado County and specifically from schools in the study and the findings reveal there are many bodies in the county sponsoring students and many students were receiving bursaries especially from CDF and County council than from government bursary which came third compared to the rest. It is no wonder that some of the head teachers (33.3%) gave examples of students getting double allocations from these bodies as in most cases they are only left to verify information needed. If the lists of such beneficiaries are then not accessed by CBC members, duplication becomes a norm. There is need for close involvement of all these members on one body if bursary has to have any major impact on needy students with closer involvement of head teachers of the schools on such a committee.

4.1. The relationship between socio economic background and bursary fund demand and supply

The study sought to find out if there was any relationship between socio economic background (SES) and bursary fund supply and demand. Before coding and entering the students SES variable in the computer programme for statistical analysis, the 2008 cohort was selected to be used. In 2011 there were 111 form four students who received bursaries from the two constituencies out of which 105 returned the questionnaires. In total 105 forms, four students representing 95% of the bursary recipients in the 2008-2011 cohorts were used. This was then subjected to basic statistical procedures in order to determine the different categories of socio-economic status. The use of several indicators in this study was preferred in order to capture various characteristics common in Kajiado families whose contribution to parental SES could not be ignored (Ngware, 2000). This deviates from the traditional sole measures for SES such as parental level of education or parental occupation (Odebero, 2008).

Information from the student's questionnaire was used and scored. The students' SES scoring criteria included if student had both parents or was orphaned. This was scored 3 for parents, 2 for single parent and 1 for orphans. Main source of family income was scored, 4 for father's employment, 3 for mother, 2 for small family business and 1 for small scale farming. On who pays the applicant's fees, this was scored 4 for father, 3 for mother, 2 for guardian and one for bursary. The next item was the work of the person who pays the applicant's fees. Here, professionals like lawyers, medical doctors, and large-scale business entrepreneurs among others were scored between 3; while small business entrepreneurs scored 2. The next item was the type of house lived in at home.

This was scored 3, 2, 1 and 0 for permanent with electricity, semi-permanent with electricity, permanent without electricity, and grass thatched in that order. Then was land acreage owned by the applicant's family, which attracted 1 for below 5 acres, 2 for 6-8 and 3 for 9-10, 11 and above 11 scored 4. Item 6 evaluated the type of property owned by the applicant's family. High cost properties like a car were awarded 3 while simple ones like a radio or bicycle scored 1. The next item was the level of education of the parents or guardian. The scoring criteria ranged from 4 for postgraduate to zero for none, while income level ranged from 6 for above Ksh 30,000 and one for below Ksh 2000.

In analyzing the students SES, a continuum was generated based on the total score. The score was 33 for highest and the lowest was 11. In order to categorize applicants into different socio-economic classes, the total score of 33 was divided by three to get 11 for the low socio economic status (LSEs), 22 for the medium socio-economic status (MSEs) and 33 for the high socio economic status. Consequently, those who scored 1-11 belonged to Low (LSES), while those who scored between 12-22 and 23-33 belonged to medium SES (MSES) and high socio economic status (HSEs) respectively as shown in the continuum. The bursary allocation for the four years; namely; 2008, 2009, 2010 and 2011 were recorded as shown in Table 6.

			Recipient of the Bursary	Non Recipient of the bursary	Total
CONTINUUM		Count	1	2	3
		% within CONTINUU	54.1%	42.9%	100.0%
	High socio economic	Count	12	11	23
		% within CONTINUU	52.2%	47.8%	100.0%
		% of Total	6.2%	5.7%	11.9%
	Low Socioeconomic status	Count	18	9	27
		% within CONTINUU	66.7%	33.3%	100.0%
		% of Total	9.3%	4.6%	13.9%
	Medium socio economic	Count	75	69	144
		% within CONTINUU	52.1%	47.9%	100.0%
		% of Total	38.7%	35.6%	74.3%
Total		Count	105	89	194
		% within CONTINUU	54.1%	45.9%	100.0%
		% of Total	54.1%	45.9%	100.0%

Table 6: Recipient and non recipients of the bursary: Cross tabulation

From the findings, majority of bursary recipients came from MSEs (38.7%), followed by LSEs (9.3%) at a percentage (6.2%) of those in the HSEs accessed bursary funds. There was though, no significant difference as in both cases, non recipients also came from medium and high SES. Equally notable was the fact that there was (4.6%) of non recipients in the low social economic status not awarded any bursaries yet (6.2%) of their counter parts in the higher social economic status were able to receive bursaries. This pointed to the fact that one's socio economic background is not a recipe for award of bursaries especially when we have non recipients in low socio economic status missing out on bursaries, calling for measures to make sure all students from low socio economic background need not be locked out.

In determining the ability of student, the CBC needs to consider students from socio-economic backgrounds, than their counterparts in higher socio-economic backgrounds. The bursary allocations to the recipients by quintiles for the years 2008-2011 are presented in Table 7.

Quintile	2008	2009	2010	2011	Perfect equality % allocation
I	14.35	30.42	16.76	20.70	20.0
II	20.63	23.33	20.03	28.20	20.0
III	27.80	27.58	29.84	32.24	20.0
IV	15.45	11.09	16.96	7.38	20.0
V	21.77	7.58	16.41	11.49	20.0
Total	100.0	100.0	100.0	100.0	100.0

Table 7: Income share table for annual bursary allocations by quintiles for the years 2008-2011

According to Table 7, the second and third quintiles received more allocations than they deserved for all the four years. On the other hand, the 1st, 3rd and 4th quintiles received less than what they deserved for all the years except 2009 when the 1st got higher than their share of 30.4%. The foregoing figures reveal that there were inequalities in the bursary allocations to the recipients. In the year 2008, all quintiles apart from the 1st and 4th quintile received more allocations than what they ideally deserved. However, the deviations from the perfect equality allocation were very small apart from the 3rd quintile. These percentages of bursary allocations reveal inequalities in bursary allocations especially from the 2nd and 3rd quintiles in all the four years.
Table 8 shows the combined percentages of bursary allocations to the recipients for the years 2008, 2009, 2010 and 2011 combined.

Quintile	Actual Allocation	Cumulative%	Perfect equality % allocation
I	21.0	21	20.0
II	23.1	44	20.0
III	29.6	73	20.0
IV	12.9	86	20.0
V	14.3	100	20.0
Total	100.0	100	100.0

Table 8: Income share table for the overall bursary allocation by quintiles for the four years

According to this table, the first quintile received slightly higher (21%) than the normal perfect allocations of 20%, both the second (23.1%) and third quintiles (29.6%) received allocations bigger than what they rightly deserved. The fourth (12.9%) and fifth quintiles (14.3%) received less than what they deserved, an indication that the CBC was to an extent following set guidelines to reach the more needy though this does not agree with the results of hypothesis one that concluded that the award of the bursary has no great connections with the applicants socio-economic status.
In the second and third quintiles the deviations are not small showing that there are instances of inequality in distribution and these findings are in agreement with a study carried out by Odebero (2002) on bursary allocation in Busia district that revealed that the bursary allocation in Busia district was not equitable. As one CBC official asserted:
We strictly adhere to the set guidelines and award according to MOE guidelines, but we cannot rule out that some undeserving students get bursary, though if this happens then it is done at preliminary stage by the district board that vets application forms before submitting list to CBC for awards. Also, we have a lot of influence not necessarily from local politician but other forces especially those people in high positions will always give their lists, but at committee level we are very strict.
This could partly explain why we had 6.2% of the students from high socio economic status receiving bursary while a 4.6% percentage in the low socio economic status group missed out. According to this study, recipients from medium socio-economic backgrounds received more bursary support than their counterparts from the humble backgrounds. This anomaly was attributed to the flawed criteria of selecting the bursary recipients. The figures in Table 4.13 were ultimately used to draw a Lorenz curve for the two constituencies. In this study, the Lorenz curve was drawn to specifically help answer the research question about determining the level of inequality among the bursary recipients based on their socio economic status in the 2008 form four cohort in Kajiado North and Central constituencies. In this case, the combined bursary allocations for the years 2008, 2009, 2010 and 2011 were used, giving rise to Figure 5.
In this particular study, the curve was designed so as to diagrammatically show the relationship between the bursary recipient groups and their respective percentage share of bursary allocations. On the horizontal axis, the numbers of bursary recipients were plotted, not in absolute terms, but in cumulative percentages, while the vertical axis showed the share of bursaries associated or received by each percentage of recipients. Percentages on both the axis were cumulative up to 100%. A diagonal line was drawn from the lower left hand corner (origin) of the square, to the upper right hand corner. At every point on the diagonal, the percentage of bursary received, was exactly equal to the percentage of bursary recipients. Any sagging of the Lorenz curve, away from the diagonal, represented inequality

In considering the distributions within the region whether it was uneven and whether there were any variations based on socio economic status, the study found that the Lorenz curve deviates from the diagonal and the extent of this deviation is seen by the region between the straight line and the curve. The region between the curve and straight line is a measure of the degree of inequality in distribution especially in the third quintile that had the high allocations at 29.6 percent. This shows that there was no equity as the first, second and third quintiles received more than their share of 21 and 23.9 percent instead of 20 percent each in the allocation of government bursary allocation at secondary school level in all cohorts.
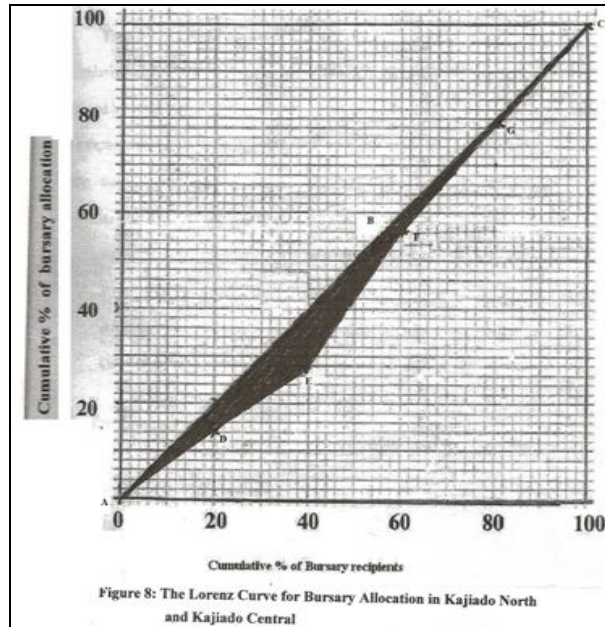

Figure 8: The Lorenz Curve for Bursary Allocation in Kajiado North and Kajiado Central

Figure 5

The level of inequality depends on the extent of sagging. In order to quantify the levels of inequalities in bursary allocation, the Gini-coefficient was determined. This was a summary measure of the relative degree of inequality in the bursary allocations to the recipients. The Gini-coefficient was determined by calculating the ratio of the area between the diagonal and the Lorenz curve hereinafter known as A as compared to the total area of the half square in which the curve lies, hereinafter known as BCD. The area of the triangle BCD was determined by formula ½ bh. In order to find the area of A, it was necessary to determine the area below the Lorenz curve which was calculated by the use of the trapezoidal rule of approximation of integrals, (Dane, 1990, as cited in Odebero, 2008) as indicated below;

- **A=   (½ h1 (y0+y1) + (½ h2 (y1+y2) + (½ h1 (y0+y1) +(½ h3 (y2+y3) + (½ h4 (y3+y4)+ (½ h5(y4+y5)**

The area of **A** was obtained after subtracting the area below the Lorenz curve from the area of the triangle **BCD**. The area of trapezium was subtracted from the area of half square which is 5000 to get area shaded. The un shaded area was then divided by 5000 to get Gini coefficient. In this particular study, the Gini coefficient was found to be 0.192, an indication that the bursary allocation to the recipients was not equitable.

5. Discussion

The study sought to find out if there was any relationship between socio economic background (SES) and bursary fund supply and demand. 59% of bursary recipients in the 2008-2011 cohorts were used in this analysis. Findings on the relationship between socio economic background and bursary fund demand and supply reveal the socio economic status of students ranged from 11 points to 33 points. Majority of the students had 22 points therefore were in the medium socio group. Those with 11 points were in the low socio economic status group, 11-22 in medium and 22-33 in high socio economic brackets. The highest amount of bursary given to recipient was Kshs15,000 with a high allocation of a total of Kshs. 45,725 over the four years and he had 18 points therefore was in MSE bracket followed by 36,000 in the same MSES and the two students were from district boarding schools not a provincial school. This had its implication, as one expects such higher amount to go a student in the low social economic bracket and especially in a provincial school where fees is high and also in line with the criteria by MOEST.

From findings 87.3% of the non-recipients came from the MES and 71% of the same groups were recipients. 4.6% of non-recipients came from low socio economic status with 18% being recipients. This raised the question on the rationale used in awarding bursaries and denying students who were equally needy. For instance, the 4.6 % non recipients are more needy yet 6.2 % of recipients came from higher socio economic bracket, allocations that could have catered for 4.6 % of the non-recipients who deserved to be awarded. This led to conclusion that to some extent, one's socio economic background is not a recipe for a student's award of bursary in this county. In determining ability of student the KCBC needs to consider needs of students from socio-economic backgrounds. This are the issues brought about due to lack of proper vetting of applicants and this findings agree with Baines (2005), and Psacharopoulos &

Woodhall, (1985) that when full proof mechanisms for vetting eligibility are lacking, there is danger of funds going to undeserving students, for example in Indonesia, lack of precise targeting of scholarships under scholarship and grants programmes led to about 18% of scholarships going to the relatively wealthy students thus on the issues of efficacy there is need to seriously consider amount allocated to individual applicant for it to effectively impact on access and retention.

Majority of the respondents came from medium socio economic status with 39% for recipients and 36% for non recipients. This could be an indicative trend at secondary education attainment where most of the students are overrepresented in the two categories. Studies have shown that over 49% of the general populace lives in absolute poverty (ROK, 2005) those in the medium and high categories constitute a smaller proportion yet they are over represented as one climbs the education ladder. Other reports such as the millennium development goals progress report (Republic of Kenya, 2004) indicate that over 56 % live below poverty line and the number is expected to increase to 65.9% by 2015. However, the report has different measures of poverty levels between those living in rural and urban areas at US$ 17 and US$ 16 per Month in urban and rural areas respectively.

This translates into Kshs 1,225 for rural areas and Kshs 2,592 urban areas according to current exchange rates (23rd Oct 2010). Such revelations imply a big number of Kenyan families need financial assistance from government and their donors to equitably access secondary education through bursary and other scholarships. Applied in the context of bursary funds disbursement in education, equity refers to the application of the principles of justice in determining the distribution of these funds among students of varied backgrounds.

The findings from income share table for annual bursary allocations by quintiles also point to levels of inconsistencies in award of bursaries based on once socio economic status. The most allocations in this county is given to the medium social economic status group that has most applications than in the low socio economic status a case that needs to be reversed, as it goes to prove allegations made early by AEOs that the criteria used of allocating based on locations before use of status, is about the numbers not really reaching out to the real needy. If it was about needy cases then the 4.6% non recipients should not have missed out on allocations.

On the other hand it is notable that there were low allocations noted for students from HSE status across the four years which is encouraging showing that, the CBC was able to check on those not really needy cases and award the same to others. The same was notable for Lorenz Curve that showed sagging in the middle showing inequalities were noted with more awards being given to those averagely able by a Gini coefficient of 0.192. It can be concluded that bursary allocation in Kajiado was not equitably distributed among the recipients since Gini coefficients revealed concentration ratios for all the years studied. This finding is reinforced by the Lorenz curve which indicated that recipients in the first, second and third quintiles received more than their share of 21 and 23.1 and 29.6% instead of 20 percent each in the allocation of government bursary allocation at secondary school level in all cohorts. These implies that those in high brackets received less which is encouraging but more of these should have been given to the 4.6% of the students in low social economic status among the non recipients who missed out. It therefore calls for CBC to revisit their identification criteria so that those needy are not left out as this is likely to perpetuate inequalities in income distribution since education is itself a determinant of lifetime earnings according to Psacharopoulos and Woodhall (1985).

5.1. Appropriate recommendation can be made in strengthening effectiveness in the bursary system
The study sought the appropriate solutions to problems identified. The CBC members, head teachers and students suggested the following as some of the possible solutions to the identified problems. There is need for the right identification of the really needy cases as not all students applying were needy. There is also need for secretaries through data personnel to have lists of beneficiaries from other providers to avoid duplicate of awards to same students by different providers. A policy on sharing of such lists needs to be put in place as some providers were not willing to remit the lists. A data bank that captures students information as they join the new schools is the best starting point in identification of the real needy cases which can be constantly updated on in cases such as new orphans arising as years progresses due to unavoidable circumstances. Such a data is not easily manipulated. This can be used in verification of students by the CBC. The list of needy students should be also availed from the schools.

There is a need for sub committees in schools to deal with such issues on bursary and be the ones to forward this lists. In some schools this has already been put in place with one teacher fully in charge. The schools to directly deal with the needy cases so as to establish the level of need and forward them to the CBC and there should be enhancement of the communication to avoid duplication errors especially from the bodies funding students that are more than ten. Further, because a school committee will be independent of the locality, the evaluation will be more objective.

Another suggestion was for more skilled personnel to deal with recording and keeping record for easy retrieval of information for allocation of funds purposes, the AEOs and head teachers were in agreement that allocating of funds according to locations and not the number of applicants in each location is denying the committee to award needy students like orphans more bursary due to numbers as in some locations the numbers were higher hence allocations had no impact on recipients. They suggested need for increased allocation based on well researched needs assessment instead of allocation based on locations.

According to 83.3% of head teachers and 100% AEOs, synchronization will only be possible if there is closer collaboration from all bursary providers. It therefore calls for one main body to oversee bursary provision in Kajiado, use information from all this providers and notify all other bursary providers through issuing of recipients, admission numbers, year and class to avoid duplications.

There is need to for more head teachers to be brought on board if the funds cannot be reverted to schools as agreed by 83.3% of the head teachers, 100% of AEOs, 33.3% of the CBC member and 90.1% of students. This will help in head teachers owning the process and will therefore help in curbing the cheating cases as school principals over time know their students better and therefore are better

placed to conduct objective evaluation of the potential beneficiaries. There is need to limit the number of political places in CBC membership and increase school participation and other education stakeholders.

From the findings respondents indicated that politician should be kept out as averred by 100% of head teachers, the two AEOs and 66.7% of the CBC members. All the AEOs (100%) were of the opinion that bursary forms be send to schools and instead of chiefs signing last it should be signed last by the school heads but again it calls for more head teachers on the bursary committee than the counselors' who are more inclined to bring on board the politicians opinions.

According to all the stakeholders there is need to increase the funds allocated by ministry of education, the funds should be given based on the school calendar year therefore per term would be the most appropriate way to go, there is need to increase this funding especially for orphans who require full allocation and from, the findings in kajiado, the overall percentage of total orphans does not exceed 20% of total applicants hence the more reasons why they should receive funding to retain them in school.

The CBCs members were in agreement on various suggestions as noted. Among some of their other recommendations for bursary to be effective was CBC members need to be facilitated in their travel and sitting allowances and also motivation allowances for them as this will increase the numbers present during the awarding process, as it was found wanting with only half in attendance at times. There is need for capacity building after one is appointed to the committee as majority had not had any induction upon appointment.

Among other recommendation by all the CBC (100%), included the need for the ministry to put in place policy guiding them on inclusion of day and private schools in the criterion being used, at the same time need for policy distinguishing between orphans from commercial based institutions and those taken care of by relatives, based on challengers they are facing with orphans from orphanage homes without back up background information. This calls for need for amendments of guidelines that should be documented to guide the CBC well.

On what could be done to improve a public awareness as regards bursary, the study found out that the school management and CBC needs to work together to avoid the confusion where students fill wrong forms as a result of many bursary providers. The students need to be clear of the types of bursary providers and any other relevant information to be able to make informed decisions. It was clear that there was confusion among the students on which bursary this researcher wanted information on as they are too many in the county calling for enhancement of the communication to avoid duplication error. This can only be done when the head teachers are more involved and students faking of fees will be something of the past.

A data bank would be needed for follow up of students benefitting, visitations to villages and schools where students live, therefore calling for more administrative funds to support this as agreed by 83.3% of the members. They were though in agreement with head teachers on use of institutional data for verifications where home visits could not work requiring more time and allowances. They were also in agreement with head teachers on the need to get lists from other bursary providers to avoid duplications of awards to same students.

The CBC however did not agree on removal of locations as the main criteria for bursary allocations noting that it uplifted mainly students in the remote parts of the county, though they were in agreement the heads be the last to sign bursary forms before submissions for disbursement.

The students gave several recommendations to challenges as follows. Among the main recommendations given by both recipients of bursary and non-recipients included: 56% bursary recipients were of the opinion that bursary needs to be disbursed by CBC while 45% felt that bursary needs to revert to the schools. This was agreed upon by 67% of bursary recipients who felt bursary should revert back to schools as 25% wanted it to be in hands of CBC. The main reason given by the students was that the school heads and teachers could verify information and teachers could verify information and sieve out those giving wrong information.

The two groups were also in agreement that there should be recording of bursary recipients from the first year students are given bursary in form one or any other first time, to reduce movements by same students for information that could have been kept in data bank. The other recommendation was reduction in time taken from time forms are given to bursary disbursement. They felt this was largely contributing to their staying away after being sent home due to fee balances. The same number wanted the procedures to be reduced especially movements to their homes for chiefs and pastors to sign. This is why most requested for databank that is efficiently kept after the first time a student is identified as needy.

The two groups were in agreement on need to increase amount which would see the allocations to individual's students increasing and even those missing out getting allocations. They wanted CBC to make visits to schools and homes to collaborate information given by students as they felt most needy students were not getting bursary. The students requested for bursary forms issued to be enough for all students. They felt that communication of information needs to be done on time and forms be availed through schools for all to get on time.

What also came out from the two groups is the need to use understandable language on the forms. Students felt most of the information required their parents. This therefore calls for piloting to find out level of understanding of bursary information by all filling before it is officially used on application. The need for monitoring and evaluation team on the on transparency of CBC came out strongly. The non- recipients requested for feedback for them to understand reasons for missing out as agreed by 34% and the need for more school heads and teachers to be involved in disbursement process as they know their students better.

6. Conclusion

Based on the findings of this study, the following conclusions were drawn by the researcher: The allocations to applicants is not consistent and therefore having an allocation in Form One does not guarantee students subsequent funding therefore impacting on sustenance and retention of students. In relation to proportion of each category of student's fees met by bursary all students receive

insufficient funds regardless of whether one is an orphan or not. Though the socio economic status of students is used by CBC to some extent, the criteria of disbursing funds equally to all locations first before socio economic criteria is used has led to many students receiving less funds that cannot sustain them in schools leading to ineffectiveness of bursary in enhancing participation.

Lack of proper guidelines from the Ministry on inclusion of day and private schools has seen many students from these categories apply and receive bursaries further increasing number of recipients implying that funds are spread to many students and therefore not enough. Such categories like the type of school a student comes from is not really factored in and therefore whether from Provincial, District Boarding or Day schools the amount given is the same compromising on guidelines from the ministry. The criterion used by CBC was wanting as most students were allocated same amounts despite being in provincial schools or orphans. Lack of an effective monitoring system to check the effectiveness of the scheme has led to some of the more needy cases being locked out.

7. Recommendations
- Policy on day and private schools as beneficiaries of bursary needs to be clear and documented.
- There is need for policies on proper definition of orphans; this will help in curbing cases of scrupulous business people with schools for orphans who cannot be verified by the CBC due to lack of documents.
- Need for a policy on proper criteria to be followed in identification and award of bursary to students. Let the allocations be based on poverty index of each location and number of needy students from it, not generalization to all locations.
- There is need for an independent structured management team to be instituted at the county whose work is measured based on assisting the needy at grassroots level. This team should be used in monitoring the work of CBC and the DEB body that selects the list given to CBC. The team should track and report key performance indicators in relation to supporting the needy.
- To avoid duplication of the same number of students receiving funds from other bodies, away of accessing the lists of their beneficiaries be used.

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