

Full Length Research Paper

Equity in the distribution of bursary to secondary school students in Busia district, Kenya

Stephen O. Odebero¹, Anthony K. Sang¹, Joseph N. Bosire¹ and Lucas A. Othun²

¹Department of Curriculum, Instruction and Education Management, Egerton University, P. O. Box 536, Egerton, Kenya.

²Department of Psychology, Maseno University, P.O. Private Bag, Maseno, Kenya.

Accepted 12 November, 2007

This study sought to find out the opinion of the head teachers on equity of the established criteria in bursary support for the needy. It was done in the District's 27 secondary schools with the total student enrolment of 5780. All the 190 students (3.3% of the total enrolment) who had received bursaries from 1999 - 2002 in the district were included in the study. Another saturated sample of 27 head teachers was included in the study. Data was collected using questionnaires, in-depth interview schedules and document analysis. The study used Lorenz curves and Gini coefficients to measure equity in bursary distribution. Findings show that bursary allocations in the district were inequitably distributed for all the years studied. It further reveals that the bursary award criteria were largely not effective in identifying and benefiting the most needy students. It recommended that there is need to review the criteria for the selection of the students with financial need. The study further recommends mounting of workshops and seminars for stakeholders to educate those in charge of disbursements on key items within the disbursement process so as to eliminate ambiguities in the criteria.

Key words: Access to secondary school education, equity, bursary, Lorenz curve, Gini coefficient.

INTRODUCTION

Kenya is in the category of countries, which have chosen a capitalist path to development, but at the same time, subscribing in its policy statements commitments to socialist principals. The Sessional Paper No. 10 of 1965 (Republic of Kenya, 1965), which provides guidelines about the aims of Kenyan society, point out the most systematic policy statements on Kenyan egalitarian principles to be pursued within the framework of African Socialism. In the Development Plan of 1979 - 1983, the government stated that during this period the educational opportunities would have to be substantially improved to reach target groups such as the pastoralists, small scale farmers, landless rural workers and urban poor (Republic of Kenya, 1979).

According to Gravenir (1991), the amount of money allocated for recurrent expenditure in education in 1987/1988 was 55 times what it was in 1963/1964, and that for development expenditure in education during the

same year it was 72 times. According to the government's estimates of 1987/1988 financial year, education took over 40% of the total government expenditure (Republic of Kenya, 1989). Such scenario is of concern as stated in the National Development Plan of 1989-1993 where it was posited that if this claim of the educational sector on national resources was allowed to continue along the same trend, it would seriously reduce the resources available to meet the growth targets set out in the plan (Republic of Kenya, 1989).

However, as the budgetary allocation to the Ministry of Education, Science and Technology continued to increase, there was a general observation that access and participation levels in secondary schools by the needy had not kept pace (Kinyanjui, 1991). Claims have been advanced that although government expenditures on education are high; it rarely benefits the most needy and that most students with exemplary performance in Kenya Certificate of Primary Education Examination are unable to proceed to secondary schools because their poor parents can hardly afford the required fees (Odaló, 2000) required fees (Odaló, 2000). Government of Ken-

*Corresponding author E-mail: sodebero@yahoo.co.uk.

ya Report (Republic of Kenya, 1999), reveal that the high cost of learning and teaching facilities have proved unaffordable for students from poor families thus leading to low participation rates and high dropout rates for the poor. This contrasts with the government policy to direct bursary allocation to the poor but academically talented students commensurate with their academic achievements in order to enhance their access and participation rates in secondary school education (Republic of Kenya, 1997). Although this was an indication that the government might not be achieving parity in secondary school participation, empirical studies have not been documented on the actual status of bursary distribution to recipients. Given the foregoing policy statements in regard to equalizing educational opportunities through bursary subsidies among children from poor households, there was need for an analysis of the concrete reality in which provision of bursaries was being carried out and then contrasted with the policy pronouncements.

Statement of the problem

The government has stated in its policy documents (Republic of Kenya, 1992, 1994, 1997) that it introduced the bursary scheme to create equal opportunities in access to secondary school education among the poor. However, there has been concern that bursary is not equitably distributed to the recipients. Concerns have been raised on how students from poor families are still unable to access secondary school education despite the availability of government bursary scheme. Although this implied that the government secondary school bursary scheme was likely to be inequitably allocated, empirical studies had not been documented on the actual status of bursary distribution to the recipients in Busia district Kenya. This study sought to establish the extent to which bursary was equitably distributed to secondary school students in Busia District of Kenya.

Purpose and objectives of the study

The purpose of this study was to determine the extent to which the government bursary was equitably distributed among secondary school students in Busia District of Kenya. The specific objectives of this study were to: i) Determine the opinion of the head teachers on equity of the established criteria in bursary support for the needy. ii) Determine the extent of equity in bursary distribution to the recipients in Busia District of Kenya.

Significance of the study

This study attempted to determine the extent to which bursary allocations addressed inequity among varied social classes in access to secondary school education in Busia District, Kenya. This is an area that had not been adequately addressed by past evaluative research on

financing of secondary school education. Consequently, it was hoped that the findings of this study might contribute to the understanding of the contribution of bursary schemes in addressing the issue of equity and access to secondary school education in Busia District. This would be significant to the recipients who hitherto were unable to access and participate in secondary school education because of unfair bursary allocation criteria. It was also hoped that the study findings would provide relevant information for policy discussions on the issue of bursary schemes in financing of education in the country. It was further hoped that the study would create new knowledge on financing of secondary school education. The study would also lead to review of the criteria for bursary allocation in the country so as to enhance equitable allocation and access to secondary school education.

Study methodology

According to Busia District Development Plan (Republic of Kenya, 1989) the District had 27 secondary schools in 5 administrative divisions. The total student enrolment was 5780. The population consisted of all the 5780 students, and all 27 school heads. The study used a saturated sample of all the 27 secondary schools in the District. All the 190 bursary recipients (3.3% of the total enrolment) who had received bursaries between 1999 - 2002 in the district were included in the study. All the 27 headteachers also formed the sample. Research instruments included questionnaires, in-depth interview schedules and document analysis schedules.

The study adopted descriptive statistics, which were used to analyse primary data in order to determine headteachers' opinions on the established criteria and its effectiveness in aiding bursary support for the needy students. Descriptive statistics were further used to determine common considerations in the selection of needy students. To determine the extent of equity in the disbursement of bursary awards to the needy, Lorenz curves were drawn for each year from 1999 to 2002. With significant distribution difference, the curves sagged downwards from the line of perfect equality to reflect inequity in bursary distribution. In order to reflect the precise measure of the differences, Gini coefficients were calculated. This involved calculating the ratio of the area between the diagonal and the Lorenz curve divided by the total area of the half square in which the curve lies. A Gini coefficient above 0.3 indicates inequity in disbursement of bursary. The higher the value, the greater the inequity.

RESULTS

Criteria for selection of needy students

One objective of this study was to find out the headteachers' opinion on the established criteria in selecting the needy students for more effective bursary support to the needy secondary school students. Head teachers in Busia District used almost the same criteria in the selection of bursary recipients. The criteria were set by the Ministry of Education, Science and Technology and circularized to all the secondary schools through the District Education Office. The criteria included good academic performance, good discipline and poor family background and Orphanhood. These were distributed to the

Table 1. Head teachers, Opinion on Effectiveness of Criteria for Identification of Needy Students for Bursary Allocation (N = 27)

Opinion on Criteria	Frequency	Percentage
Adequately targets Support to Needy Students	12	44.4
Does not adequately target Support to Needy Students	15	55.6
TOTAL	27	100.0

Table 2. The Most Problematic Criterion as Perceived by Head teachers

Criterion	Frequency	Percentage
Poor Performance	6	40.0
Indiscipline	4	26.7
Orphaned	3	20.0
Needy	2	13.3
Any other criteria	0	0.0
TOTAL	15	100.0

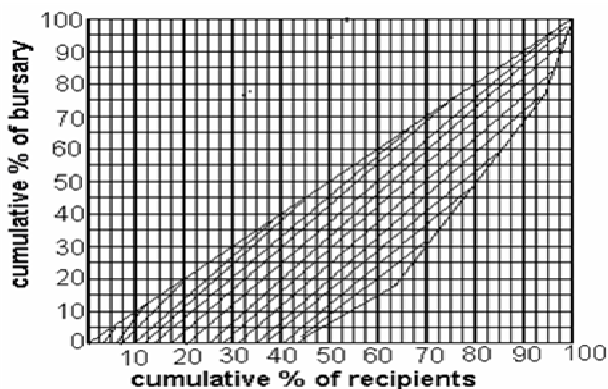


Figure 1. Lorenz curve for bursary distribution in Busia District in 1999. Note: Gini Coefficient = 0.550. Area approximated by using Trapezoidal Rule

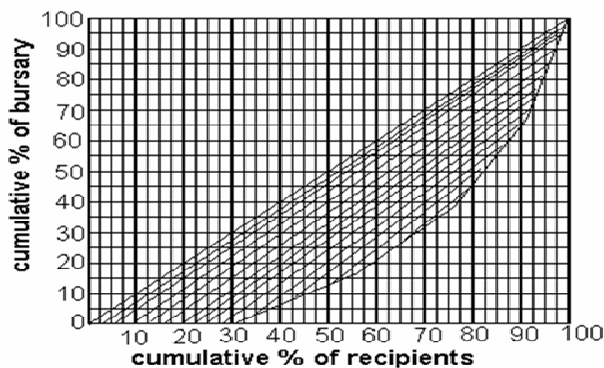


Figure 2. Lorenz curve for bursary distribution in Busia district in 2001. Note: Gini Coefficient = 0.542. Area approximated by using Trapezoidal Rule.

school heads through the District Education Officers. The assumption was that orphaned children were needy especially in the wake of the HIV/AIDS scourge, which had left many students in need. When asked to give their opinion on the set criteria, the results were as shown in Table 1.

Table 1 shows that majority (56.6%) of head teachers in Busia District secondary schools were not generally of the opinion that support to needy secondary school students has been enhanced through the bursary scheme. Whereas a total of 12 head teachers (44.4%) felt that the criteria being used were fair and just in targeting the bursaries to the poor, 15 head teachers (55.6%) felt that the criteria were wanting and could hinder the identification of the needy. This implies that the secondary school bursary scheme may not be accurate in targeting support to the really needy students due to its flawed criteria.

Head teachers were consequently asked to give their views on the most problematic of the established criteria in targeting support to needy students. Table 2 relays the results.

Table 2 reveals that majority of the head teachers (40.0%) were in agreement that poor performance was the biggest problem with the established criteria. The head teachers felt that some of the needy students ended up missing bursary support unfairly through this criterion. The next was indiscipline where 26.7% of the head teachers felt that it was the main problem that was used to deny needy students access to bursary. In the same vein, 20.0% of the head teachers were of the view that the biggest problem was orphanhood as a criterion, while 13.3% of the head teachers thought that the term needy as used by the ministry was the biggest problem affecting the disbursement of bursaries in their institutions. This was because in the executive interview, the head teachers conceded that the term needy was ambiguous, as it did not set standards of who constitutes a needy case. This implies that nearly all the criteria were cumbersome and were not effectively used by the head teachers to identify the needy students.

Extent of equity in bursary distribution to the recipients

The study also sought to determine the extent of inequalities in bursary distribution to the recipients in the District. The results show that there were inequalities in the allocation of bursary in the District for all the years studied. The Lorenz curves (Figures 1, 2, 3 and 4) shows that the curves sagged downwards from the line of perfect equality to reflect inequity in bursary distribution.

The figures indicate that recipients in the first and second quartiles got less bursary allocation than what was deserved to them. For example, in 1999, 45% of the recipients in the first quartile got no bursary, while 63%

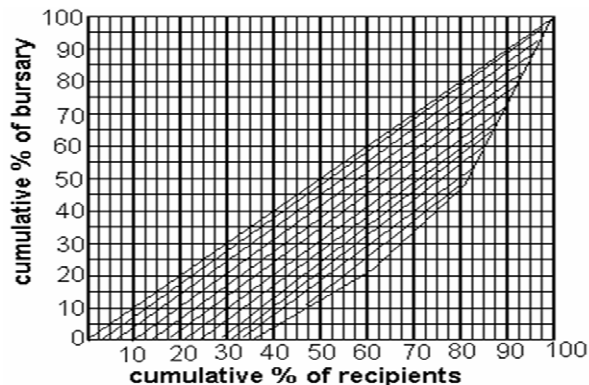


Figure 3. Lorenz Curve for bursary distribution in Busia district in 2002. Note: Gini coefficient = 0.527. Area approximated by using Trapezoidal Rule

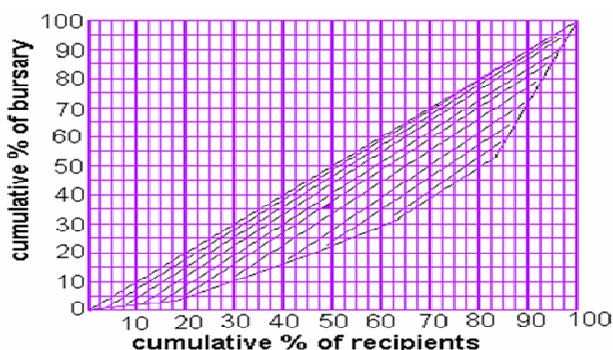


Figure 4. Lorenz Curve for the distribution of total bursary in Busia district from 1999 to 2002. Note: Gini Coefficient = 0.413. Area approximated by using Trapezoidal Rule

of the recipients in the second quartile got only 17 percent of the bursary. Conversely, 95% of the recipients in the third quartile got over 75% of the bursary allocation. The situation is the same for the subsequent years where recipients in first and the second quartiles received less than a half of their deserved bursary while recipients in the third and fourth quartiles got more than their due share of the bursary allocation. This indicated high inequalities in bursary allocation to recipients within the quartile measures. According to Todaro, (1980) and Psacharopoulos and Woodhall, 1985, recipients in lower quartiles such as the first and second should normally receive higher allocations for the disbursement to be fair. This is because, the Lorenz curve model is based on the assumptions that the lower the quartile the lower the income class.

Based on the foregoing inequalities as reflected in the Lorenz curves, more precise measures were computed using the Gini Coefficients. As the results in Figure 1 show, there were inequalities in the distribution of bursary during the year 1999 with a Gini coefficient of 0.550. The value of the coefficient is 0.5 which according to Todaro (1980) suggests high inequalities in the alloca-

tion. The findings in Figure 2 show that bursary allocation was still unequal in the year 2001 with a coefficient of 0.542. This coefficient also falls above 0.5 thus indicating high inequalities in the allocation.

In the year 2002, the Gini coefficient still revealed high inequalities in bursary distribution (Figure 3) with a coefficient of 0.527. This is also above the 0.5 mark. Figure 4 is the Lorenz curve for the distribution of total bursary in the district from 1999-2002. In comparison to the preceding curves presented, the distribution of total bursary was relatively lower with a coefficient of 0.413. This coefficient lies below 0.5, indicating that the total bursary over the four-year period was relatively fair compared to single years when the cumulative allocations are considered. However, the lower coefficient for the cumulative coefficient may be due to the model used (Odebero, 2007) which tend to reflect lower coefficients for bigger figures. These results therefore suggest that bursary allocations in the district are inequitably distributed to recipients. The results further suggest that the means testing tool developed from the criteria is not effective in helping the head teachers discriminate bursary allocations according to the level of need.

DISCUSSIONS

The study found that 55.6% of the respondents felt that the criteria developed for the selection of the students with financial need, was wanting in so far as aiding the administrators in targeting bursary support to the needy. These could include lateness, absenteeism, unfinished assignments, lack of proper school uniform and untidiness caused by a deprived background. However, some 44.4% of the respondents felt that the criteria were fair and assisted them in targeting bursary support to the most needy students. This means that though majority of head teachers did not agree on the criteria contained in the tool, a reasonable proportion were contended with it. The study supports majority of the head teachers because, recipients in the lower quartiles tended to received lower bursary allocations while those in the third and fourth quartiles got higher allocations. Impliedly, the criteria put in place by the Ministry of Education cannot aid head-teachers in effectively developing a proper means testing tool for differentiated loan allocation according to students' level of need. Similar findings were observed by Odebero et al. (2007) whose study established that means testing tools used to allocate funds to students still constitute a problem in determining their level of need.

About 27% of the respondents who criticised the bursary award criteria felt that some needy students from low socio-economic backgrounds could not meet the level of discipline and performance required. Using discipline as a criterion was likely to disadvantage students from poor families. There is overwhelming evidence indicating that children from poor households are likely to have more school discipline related problems than those from wealthy families. These could include lateness,

absenteeism, unfinished assignments, lack of proper and untidiness caused by a deprived background, school uniform, Regarding performance, 33.3% of the respondents felt that it is performance as a criterion that militates against applicants from low socio-economic backgrounds, thus hindering them from getting bursary support as they may not be high achievers in academic work. It is not by chance therefore that this study confirms that bursary award is inequitably distributed in the district. This means that if attention was paid to performance as a criterion it could curtail the government's effort to equalise access to education through the provision of bursary subsidies. However, giving bursary support to low achievers may turn out to be a waste of tax payers' resources especially if the recipient doesn't pass summative examinations. While it is true that performance is influenced by social economic status, the importance of this criterion lies in its ability to first benefit vulnerable students who perform (score) well in school. All the 27 head teachers who responded to the item on criteria for identification of the needy also regarded financial need as one of the criteria. The study shows that some recipients were needier than others were and thus required more bursary support. However, it was evident that ambiguities in the established criteria as admitted by the school heads hindered them from determining varying amounts to be awarded to different applicants based on their level of need. This resulted in more needy applicants being awarded less bursary support as revealed by the Lorenz Curves (Figures 1 - 4) than required thus eroding the confidence of the public in the awarding criteria. This essentially means that the awarding process was inequitable and needs to be reviewed.

The findings of this study are strikingly similar to what is expressed by Psacharopoulos and Woodhall (1985) when they suggested that the present patterns of subsidy for education might not be achieving either equity or efficiency and need to be re-appraised. The existence of lack of proper criteria in the identification of the needy for the purpose of bursary awards revealed in this study should be a matter of concern to the government and educational stakeholders. Although one may argue that bursary should be awarded to students who can pass examinations, a firm foundation of efficiency and equity of bursary performance in the district is dependent upon responsible decision making regarding the manner in which bursary is awarded.

The study also sought to determine if bursary allocation to the recipients was equitably distributed.

From the results presented in the Lorenz curves (Figures 1, 2 and 3) it was found that bursary subsidy was not equitably distributed among the needy. This observation was supported by the finding that the District recorded a Gini coefficient of more than 0.5 for all the years studied from 1999 - 2002 as follows; 1999 = 0.550, 2001 = 0.542 and 2002 = 0.527. This is a reflection of high inequalities in the distribution of bursary. Even in total bursary distribution (Figure 4) where the coefficient

was comparatively lower, it still stood at 0.413, which can not be adjudged to be equitable having surpassed the 0.3 mark regarded as equitable (Todaro, 1980). It is worth noticing that there was no bursary disbursement during the year 2000 because the government did not release funds to the Ministry of Education, Science and Technology during the year. It was further observed from the study findings that in many instances, the first, second and third quintiles of the recipients received less than a half of the total bursary they were supposed to receive (Figures 1, 2, 3 and 4). The findings of this research thus concur with what was expressed by Theuri (1998) and Odalo (1999). It also concurs with the findings of some of the recent commissions on Education (Republic of Kenya, 1997 and 1999) which highlighted on the inequalities prevalent in the education system characterized by gender, geographical region and socio-economic status and consequently urged the government to emphasize the need for equitable distribution of resources to ensure that the disadvantaged communities and social classes are not disadvantaged against the provision of education.

Conclusions and Recommendations

The study on whether bursary as a method of financing secondary school education was equitably disbursed was prompted by the fact that education can be used to redistribute income among different social groups. This therefore means that ensuring equal distribution of bursary among different groups is vital to the efficiency and equity of bursary performance. Therefore the measures taken by the government through the Ministry of Education, Science and Technology to develop valid criteria for the selection of the bursary recipients can go a long way in helping the school administrators to identify the most needy students to benefit from government bursary subsidies in order to improve their participation rates as envisaged in the government's policy pronouncements (Republic of Kenya, 1997). Nevertheless this is only likely if the criteria are effective and reliable.

It can be concluded that bursary allocation in Busia District was not equitably distributed among the recipients since Gini coefficients revealed concentration ratios of over 0.500 for all the years studied. This finding is reinforced by the Lorenz curves which indicated that recipients in the first and the second quartiles received less bursary support than what was deserved, while those in the third and fourth quartiles got more bursary support than what was deserved to them. It is apparent that if the current inequalities in the award of bursary in the district continue, they will seriously inhibit the participation rates of the needy. This is likely to perpetuate inequalities in income distribution since education is itself a determinant of lifetime earnings (Psacharopoulos and Woodhall 1985).

The study also concludes that the criteria set by the

Ministry of Education Science and Technology to be used by the school administrators to allocate bursary in the district bore some encumbrances that made it difficult for bursary to accurately target support to the really needy student. The criteria, according to the school heads left room for a lot of discretion which could be subjective. Poor performance was the biggest problem with the established criteria. The head teachers felt that some of the needy students ended up missing bursary support unfairly through this criterion. The next was indiscipline, orphanhood and level of need where a reasonable proportion of the head teachers felt that they were used to deny needy students access to bursary. It is therefore concluded that most of the criteria were cumbersome and could not be effectively used by the head teachers to identify the levels of need for differentiated bursary allocations in light of the findings and conclusions of this study, the following recommendations are made for the improvement of bursary scheme in Busia District.

1. It is recommended that the school administrators in Busia District should strive to allocate bursaries more equitably among the recipients. Apart from showing the score and significance attached to each criterion, the MOEST could also state specific amount of money to be allocated to students who fall in each category of the means tested score. This would reduce the amount of discretion currently enjoyed by the bursary administrators in determining the amount to be awarded. This could eventually improve the participation rates of the students from poor households and in the long run lead to income distribution in the district.

2. The Ministry of Education Science and Technology should review the current criteria for bursary allocation in Busia district and set criteria that are free of ambiguities and encumbrances. These will aid the school administrators in equitable allocation of bursary. Items in the laid down criteria should be clear and should not discriminate against students from any income class because of the background

3. The Ministry of Education science and Technology should mount workshops and seminars involving key stakeholders like the headteachers in order to educate them on the key criteria. Such a workshop would be significant in brainstorming on the main items in the criteria and would aid in removing encumbrances in the interpretations.

REFERENCES

- Gravenir FQ(1991). An Assessment of Trends in Public Financing in Kenya. *Kenya J. Educ.* 5(1): 1-7.
- Kinyanjui K(1991). Education and Inequality in Kenya: Some Research Experience and Issue. Working paper No.373. Institute for Development Studies, University of Nairobi.
- Odalo B (2000). HELB: Undeserving Students Get Loan, in *Daily Nation*, Nairobi: March 5th 2000.

- Odebero OS (2007). 'Equity in Access to University Education in Kenya through HELB Loans in Relation to Demand, Supply and Effectiveness in Loan Recovery, Unpublished PhD Thesis, submitted to Egerton University, Kenya
- Odebero OS, Bosire NJ, Sang AK, Ngala BJ. & Ngware MW(2007). Equity in Loan Disbursements in Kenya in Relation to Demand and Supply of HELB loans: An Empirical Analysis, *J. Educ. Res. Review* Vol. 2 (8), pp. 209-219, August 2007 Available at <http://www.academicjournals.org/ERR>
- Psacharopoulos G, Woodhall M (1985). *Education for Development: An Analysis for Investment Choices*, 2nd edition, Washington D.C: Oxford).
- Republic of Kenya (1962). *The Higher Education Loans Fund Act*. Nairobi: Government Printer.
- Republic of Kenya (1989). *Busia District Development Plan 1989–1993* Nairobi, Government Printer.
- Republic of Kenya (1997). *Development Plan 1997-2001* (Nairobi, Government Printer.
- Republic of Kenya(1999). *Report on Totally Integrated Quality Education and Training* (Nairobi, Government Printer).
- Theuri M(1998). How Lack of Planning has Flawed Education, in *The People* April 17-23, 1998.
- Todaro MP(1980). *Economics for a Developing World*, London: Longman group.