

Cost Reduction Strategies for Access and Retention Boost in Secondary Education in Mathira West Sub-County, Nyeri County, Kenya

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Abstract

Secondary School Education has become unaffordable for many households in Kenya. This study sought to determine the strategies of reducing the cost of secondary school education in order to boost access and retention in Mathira West Sub-county in Kenya. The study used descriptive survey design. The principals of all 16 public secondary schools in Mathira West Sub-county filled up questionnaires and the researcher carried out an interview with 16 Parents Teachers Association members, one from each school. Observation and document analysis were also used. Descriptive statistics were used to analyze quantitative data. All respondents agreed that secondary schools are financed through cost sharing between government and parents. 62.5% and 68.75% of principals and PTA members respectively agreed that hire of school hall as the main revenue generating venture in their schools. 68.75% and 62.5% of PTA members and principals respectively indicated that revenue from income generating projects was not adequate. The study concluded that the schools have adopted income generating projects to subsidise secondary school education. The study recommended that the secondary schools need to diversify their income generating projects and the public private partnerships should be increased to include other forms to include services such as education management and provision of support services.

Key words: Cost Reduction, Access, Retention, Mathira West Sub-county.

1.0 Introduction

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 experienced an upsurge in the demand for quality secondary and tertiary education (Gogo, 2012). However, the country faces constraints in mobilizing additional public and private resources to meet the high cost of expanding access to quality secondary education (Ngware, et al 2006).

In a bid to find lasting solution to funding problems, the government of Kenya introduced cost sharing strategy between the government and parents through Sessional Paper No. 1 of 1986 on Economic Management for Renewed Growth that set procedures for reducing government expenditure to 30% of the total recurrent expenditure. This led to introduction of cost sharing principle in the financing of education and training, and called for the use of more cost effective measures in the utilization of educational facilities, equipment, materials and personnel (Republic of Kenya, 1988). The government recommended Ksh. 26,900, Ksh. 22,500 and Ksh. 10,500 for national, county and district (day) secondary schools respectively as fees guidelines to be paid by parents (Gikandi & Mureu, 2006). However, it has not been possible to maintain the fees at these levels because parents are made to pay extra charges for development projects and other supplementary services (Gogo, 2012).

1.1 Problem Statement

There is hardly any sector of the economy in the society which can achieve its expected level of development without secondary education. However, despite the great importance of quality secondary education, the high private cost of secondary education appears to be the key to understanding the low secondary access and retention rates. Therefore, there is need to find strategies of reducing financial costs (World Bank, 1995).

1.2 Purpose of the Study

This study sought to identify strategies of reducing the cost of secondary school education in order to boost access and retention in Mathira West Sub-county.

1.3 Research Objectives

This study had the following objectives;

- (i) To identify cost reduction measures used to boost access and retention in secondary schools in Mathira West District.

- (ii) To explore various income generating activities as cost reduction measures to boost access and retention in secondary education in Mathira West District.
- (iii) To determine the involvement of private sector in the financing of secondary school education in Mathira West District.

1.4 Conceptual Framework

Figure 1 shows the relationship between the dependent and independent variables of the study. Access and retention in secondary education which are the dependent variables are related to the strategies of reducing costs which includes income generating activities and private sector involvement. The effects of these variables on access and retention in secondary education could also be influenced by government policies, socio-cultural, economic, political and technological factors which are the intervening variables of the study.

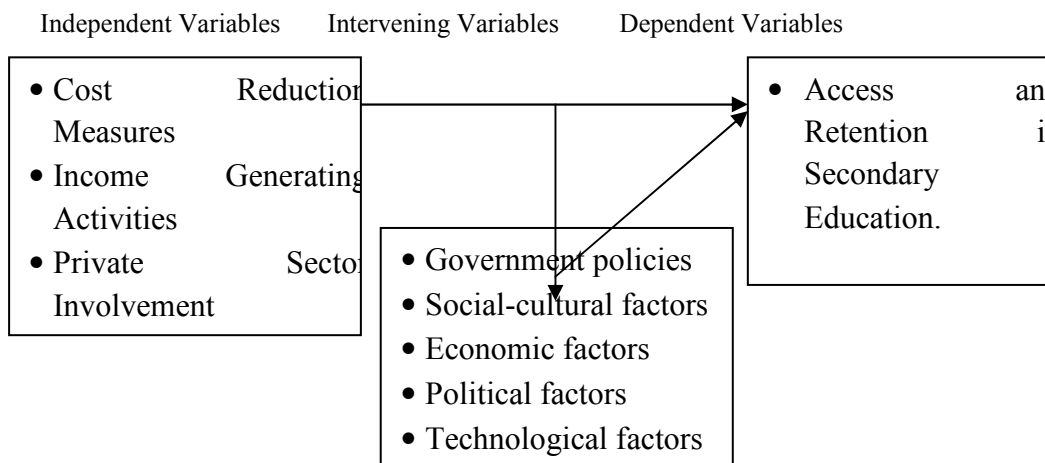


Figure 1: Conceptual framework

2.0 Research Design

The study used descriptive survey. According to Kothari (2006) survey is concerned with describing, recording, analyzing and reporting conditions that exist or have existed. The study target population was three girls' boarding schools, two girls' day and boarding secondary schools, one boys' boarding secondary school, one boys' day and boarding secondary school and nine mixed day schools which were all the 16 public secondary schools in Mathira West Sub-county. Of those 16 public secondary schools, 13 were categorized as district schools, two county schools and one national school.

2.1 Research Methodology

The study employed a questionnaire, an interview schedule, observation and document analysis for data collection. Lecturers from Karatina University, Mount Kenya University and Kirinyaga University College assisted in developing and ensuring the validity of detailed research instruments. According to Borg & Gall (1989) validity of instruments is improved through expert judgement. The instruments were piloted in 5 schools in the neighbouring Mathira East Sub County. According to Kathuri and Pals (1993) items with validity and reliability coefficients of at least 0.70 are accepted as valid and reliable in research. The researcher derived a Pearson correlation coefficient of 0.821. After the issuance of research permit appointments were made with the principals of all 16 schools and with a PTA member from each school. The principals filled up a questionnaire, interviews with the PTA members were conducted and observations made. Document analysis was used to collect data in the number type and impact of income generating activities or private investment involvement going on in each school.

2.2 Data Analysis

Data analysis was done using the Statistical Package for Social Sciences (SPSS) version 19. The data collected required both qualitative and quantitative analysis. Descriptive statistics was used to analyze the quantitative data. The statistics included frequency counts, and percentages. The qualitative data obtained in this study was analyzed by organizing it into similar themes and tallying the number of similar responses. The results of data analysis were presented in frequency tables, bar graphs and a pie chart.

3.0 Results and Discussion

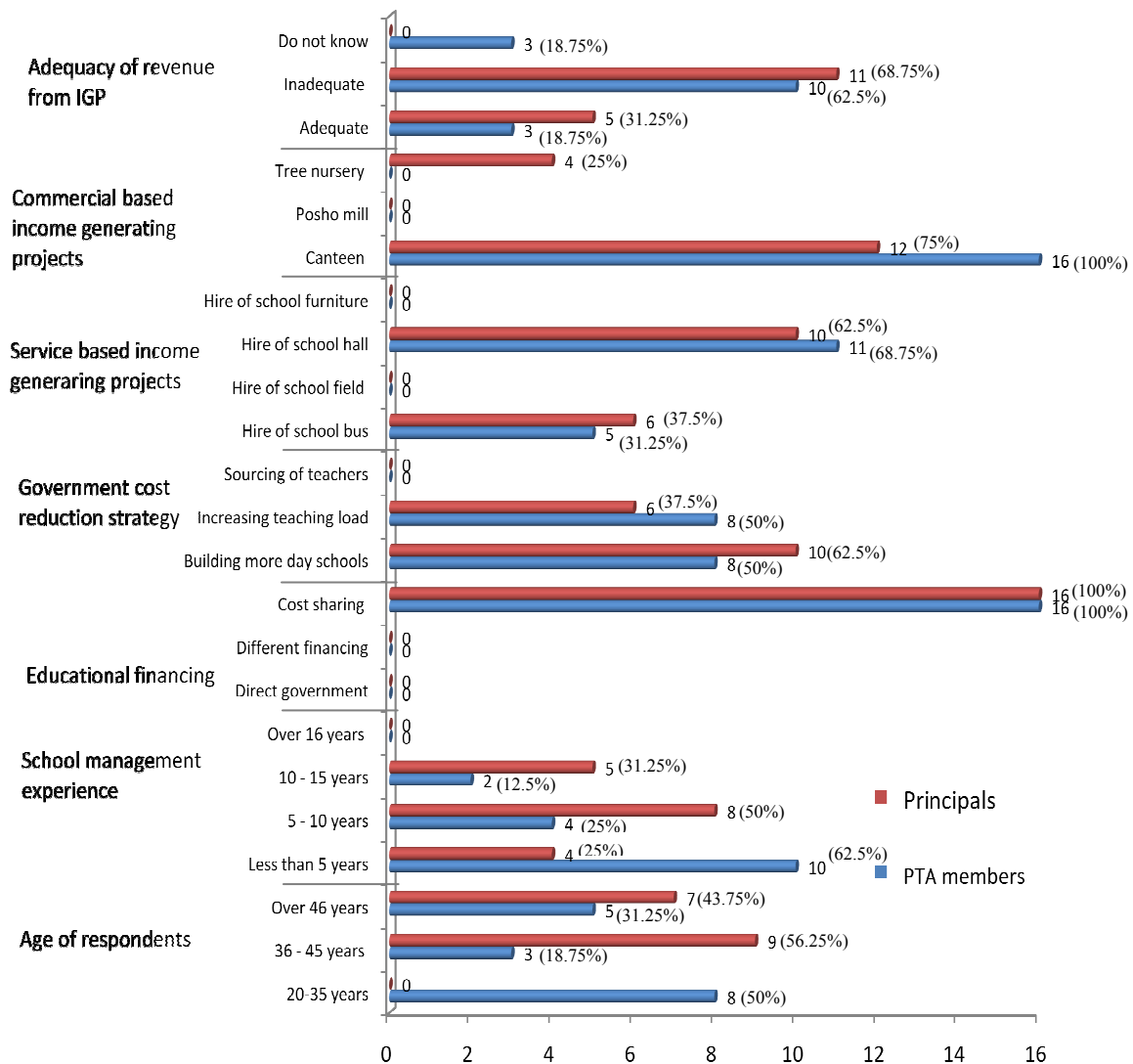


Figure 2: respondents responses

3.1 Age of Respondent

From Figure 2, no school principal was aged below 35 years but 8 PTA members were aged between 20-35 years old, 9 principals and 3 PTA members were aged between 36-45 years, whereas 7 principals and 5 PTA members were aged over 46 years. This analysis indicated that majority of the principals in secondary schools were in their late thirties and above.

3.2 Years in School Management

The respondents were asked to indicate their experience in school management, as it was likely to affect the data.

From Figure 2, 25% and 62.5% of principals and PTA members had less than 5 years' experience in school management. 50% and 25% of the principals and PTA members had between 5 – 10 years whereas those with over 10 years were 31.25% and 12.5% respectively.

3.3 Ratio of Government to Parental Financing

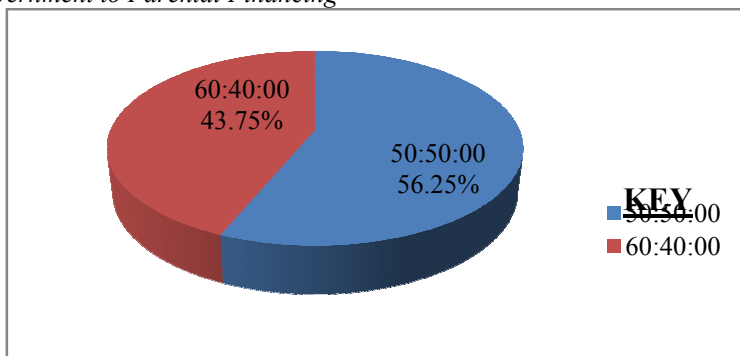


Figure 3 Ratio of government to parental financing.

From Figure 3, 56.25% of the principals agreed that the ratio of government to parents was 50:50 whereas another 43.75% agreed that the ratio is 60:40 for government to parents' contributions. This could be explained by the fact that the government has offered a free day secondary school programme but the parents still have to pay for incidental costs of schooling such as cost of uniforms, payment of maintenance and other incidental costs. The PTA members were asked to name the main sources of school funds in their schools. They unanimously indicated that schools charged fees to meet the costs of education since the government funds never reach the schools in time and the resources allocated are not enough. The PTA member' indicated that in day schools the fees charged are in the range of Ksh. 3,000 and 5,000. The findings described above concurs with Gropello (2006) that cost sharing of education is the new strategy adopted by governments to reduce their cost burden.

3.4 Secondary School Resource Utilisation Strategies

The respondents were asked to indicate between vote head adherence, strict supervision, and application of other public finance procedures as the strategies implemented by secondary schools to ensure that there is maximum resource utilization. However the respondents were asked to be specific on the strategies they apply individually in their schools and all the principals indicated that secondary schools apply a combination of all above strategies. The principals were requested to indicate the government strategies aimed at ensuring maximum resource utilisation. The respondents were to indicate between building of more day schools, increase in the teaching load and centralized sourcing of teaching resources.

From Figure 2, 62.5% and 50% of the principals and PTA members indicated that the government is constructing more day schools as a strategy for increasing access and retention in Mathira West Sub-county. 37.5% and 50% of the principals and PTA members indicated that the government is increasing the teaching load. An observation noted by the researcher was that teachers currently have an average of 6 lessons daily which makes over 20 hours of class time per teacher. The findings stipulated above concur with MOE (2007) that among the strategies option to reduce the secondary education cost burden on government is to gradually increase the average teaching load from 18 hours per week to 20 hours, 23 hours, and 25 hours. The finding also agrees with UNESCO (2006), that a larger proportion of enrolments could be encouraged by increasing the number of day students.

Table 1: School resource utilisation strategies.

Strategy	Principals	PTA Members
Private sector involvement	12 (75%)	10 (62.5%)
Cost cutting expenditure	2 (12.5%)	5 (31.25%)
Self-sustaining projects	2 (12.5%)	1 (6.25%)
	16	16

From Table 1, 75% of the principals and 62.5% of the PTA members indicated that private sector involvement was a strategy used by schools as an effective resource utilization strategy. 12.5% of the principals and 31.25% of the PTA members indicated that cost cutting in the school was another strategy adopted to increase efficiency in resource utilization as well as 12.5% of the principals and 6.25% of the PTA members indicating self-sustaining projects were a strategy for effective resource application.

3.5 Income Generating Activities in Secondary Schools

Table 2: Presence of Income Generating Projects in Schools

Response	Yes	No
Principals	12 (75%)	4 (25%)
PTA Member	11 (68.75%)	5 (31.25%)

From Table 2, 75% of the principals and 68.8% of the PTA members indicated that their schools had ongoing income generating projects. This finding confirms the findings by Orodho & Njeru (2003) that schools had devised income generating projects as a way of raising revenue and moving away from the traditional methods of raising revenue through increases in school fees. Kigen (2003) indicated that there were two types of income generating projects (IGP) that schools can be involved in and classified them into service based and commercial based.

Table 3: Type of Income Generating Project in Schools

	Principals	PTA Members
Service Based IGP	68.75%	75.00%
Commercial Based IGP	25.00%	12.50%
All the above	6.25%	12.50%
Totals	100%	100%

From Table 3, 68.75% of the principals and 75.00% PTA members respectively agreed that their schools were involved in service based income generating projects. 25% and 12.5% of the principals and PTA members respectively indicated presence of commercially based income generating projects 6.25% and 12.5% of the principals and PTA members respectively indicated a combination of service based and commercial enterprises. From figure 2 out of the principals and PTA members who indicated presence of service based income generating projects in their schools, 37.5% and 31.25% respectively indicated that hire of the school bus was the main service based IGP whereas 62.4% and 68.75% or principals and PTA members respectively agreed that hire of school halls as the main revenue generating venture in their schools.

Out of the principals who indicated their schools have commercially based IGP, 75% indicated that their schools are involved in running a canteen. From the PTA members who indicated their schools have commercially based IGP, all of them (100%) indicated the school runs a canteen. An observation made by the researcher is that the school operates a canteen located in the school selling bread and other consumer goods to the students and school community. The PTA members indicated that schools were also involved in coffee and tea farming as well as dairy farming depending on the region that the school was established.

31.25% and 18.75% of principals and PTA members respectively indicated that revenue from income generating projects was adequate and 68.75% and 62.5% indicated that the revenue generated was not adequate. However 18.75% of the PTA members did not know if the revenue was adequate or not.

The findings agreed with Omukoba (2011) that schools have diversified their operations to include income generating projects as a way of meeting the rising cost of education and also easing some burden on the parents.

3.6 Private Sector Involvement in Secondary Schools

Table 4 summarizes the respondents responses on how the private sector gets involved in education and their efforts in increasing access and retention in education.

Table 4: Private Sector Involvement in Secondary Education

	Strongly Agree	Agree	Do Not Know	Disagree	Strongly Disagree
The private sector has built private secondary schools in Mathira	18.75%	1.25%	12.5%	18.75%	18.75%
There is regulatory framework for the private schools	37.5%	62.5%	0%	0%	0%
The private sector is involved in community schools	50%	8.75%	12.5%	12.5%	6.25%
The private sector has provided scholarships	31.25%	3.75%	0%	18.75%	6.25%
The private sector is involved in supply of education materials	25%	75%	0%	0%	0%
The private sector is involved in Provision of Education Management Services	6.25%	6.25%	37.5%	43.75%	6.25%
The private sector is involved in Provision of Support services	6.25%	12.5%	0%	18.75%	62.5%
The private sector is involved in Building of Additional Facilities in Public Schools	62.5%	12.5%	18.75%	6.25%	0%

From Table 4, 18.75% and 31.25% of the principals strongly agreed and agreed that private sector has built

private secondary schools in the sub-county. From the analysis of the number of private secondary schools in the sub-county, the PTA members gave the number as two. The findings agree with Ladd (2002) that private stakeholders offer an alternative to public education system by building their schools and letting the parents make informed choices on where to enrol their children. Ladd (2002) noted by private sector operating their schools, well up parents enrol their children to these facilities and thus create room in the public schools for poorer children to access education.

All the respondents agreed that there existed a regulatory framework by the Ministry of Education.

The respondents were also asked if the private sector is involved in community schools. 50% and 18.75% of the principals strongly agreed and agreed respectively with the statement. 12.5% of the principals were undecided and an equivalent number disagreed that private sector has been involved in community schools. When the PTA members and principals were asked how private sector involvement comes in, the results are summarised in Table 5.

Table 5: Approaches in Private Sector Involvement in Education

	Principals	PTA Members
Direct Contact	31.25%	18.75%
Proposals	62.5%	81.25%
Other Avenues	6.25%	0%

From Table 5, 62.5% and 81.25 of the principals and PTA members agreed that proposals are drafted and sent to the private sector inviting them to partner with the school. 31.25% and 18.75% of the principals and PTA members indicated that private sector organisations come in directly and request that they contribute to the school. However they indicated that this was rare and there must have been a person who vouches for the school within the company either a board member or parents or former students.

From Table 4, 31.25% and 43.25% of the principals strongly agreed and agreed that the private sector has provided educational scholarships to students in the schools. This finding agrees with Bravo et al (2011) that private sector organisations provide scholarships to learners in schools. The educational scholarships according to Bravo (2011) are full or partial scholarships where all the educational needs of the student are met or where the organisation pays part of the tuition fees and parents or guardians have to pay the balance.

6.25% of the respondents agreed that private sector provided education management services with an equivalent percentage strongly agreeing to the statement. 37.5% of the respondents were undecided in private sector offers education management services and 43.75% and 6.25% disagreeing and strongly disagreeing respectively with the statement. The finding disagrees with Lewis (2011) the private sector initiatives offer educational management services such as financial management, staff management, long-term planning and leadership.

62.5% of the respondents disagreed with the statement that private sector initiatives are involved in provision of support services in secondary schools. The finding is divergent from the findings of Barrera-Osorio (2007) that private sector has been involved in provision of support services in secondary schools.

Conclusions

The study makes the following conclusions:

Secondary school education is financed through cost sharing between the government and the parents. The government is increasing the number of day secondary schools in the district to increase access to secondary education. The schools have adopted income generating projects to subsidise secondary school education. Most secondary school operates service based income generating projects.

The ministry of education has a laid down regulatory framework for controlling private organisation involvement in secondary education. Most public-private partnerships involve issuance of education scholarships in secondary education.

Recommendations

In view of the study conclusions, the following recommendations have been arrived at. The secondary schools need to diversity their income generating projects in order to fully reap the benefits of large scale enterprises.

The public private partnerships should be increased to include other forms to complement the current educational scholarships to include services such as education management and provision of support services.

The government should increase the education funding to include incidental costs of education such as payment of casual and non-teaching staff in secondary schools.

Suggestions for Further Study

During the course of the study, the researcher came across the following issues that need further research;

- (i) The impact of private sector involvement on academic performance of learners.
- (ii) The impact of private sector involvement on management of secondary schools in Kenya.

Reference

- Barrera-Osorio, F. (2007) 'The impact of private provision of public education: empirical evidence from Bagota's concession school.' World Bank Policy Research Working Paper No. 4121, Washington DC.
- Bravo, David, Sankar Mukhopadhyay, and Petra E Todd, "Effects of school reform on education and labour market performance: Evidence from Chile's universal voucher system," *Quantitative economics*, 2011, 1 (1) 47-95.
- Borg, R. W. & Gall, M. D. (1989). Educational Research: an introduction. New York: Longman Inc.
- Gikandi, B. & Mureu, L. (2006). Why principals Have Little Time for Fees Guidelines. The Standard. School and Career Magazine. The Standard, 16th February, 2006 Pg. 5
- Gogo, J. G. O (2012). *Cost Effective Measures to Reduce Operational Costs of Secondary Education: A Case Study of Nyando District in Kenya*. Nairobi, Daystar University Press.
- Government of Kenya (1988). Report of the presidential working party on education and manpower training for the next decade and beyond. Nairobi: Government Printer.
- Gropello, E. (Ed). (2006). Meeting the challenges of secondary education in Latin America and East Asia: Improving efficiency and resource mobilization. Washington, DC: The World Bank.
- Kathuri, J. N., & Pals, D. A. (1993). Introduction to Educational Research. Njoro: Egerton University Press.
- Kigen W. K. (2003). Factors affecting the viability of secondary schools income generating projects in Koibatek District. Egerton University. Kenya.
- Kothari, C. R. (2006). Research Methodology: Methods and Techniques. New Delhi: New Age International (P) Limited Publishers.
- Ladd, H. F. (2002) 'School Vouchers: A Critical View', *Journal of Economic Perspectives* 16(4): 3-24.
- Lewis, L. A. and Patrinos, H. A. (2011) Framework for Engaging the Private Sector in Education. Washington, DC: World Bank.
- Ngware, N. W., Onsomu, E. N., Muthaka, D. I., & Manda, D. K. (2006). Improving access to secondary education in Kenya: What can be done? *Equal Opportunities International*, 25 (7), 523-543.
- Omukoba, H., Simatwa, E. Ayodo, T. (2011). Contribution of IGAs to financing secondary education in Kenya: A case of Eldolet Municipality.
- Orodho J., & Njeru, E. (2003a). *Education financing in Kenya: Secondary school bursary scheme implementation and challenges. IPAR discussion paper No. 035/2003*. Nairobi. Institute of Policy Analysis and Research (IPAR).
- UNESCO (2006). Global education digest: Comparing education statistics across the world. Montreal: UNESCO Institute for Statistics.
- World Bank. (1995). Report No. 13132-KE: Kenya Poverty Assessment March 15th 1995. Population and Human Resource Division Eastern Africa Department; Africa Region. World Bank.

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