## THE INFLUENCE OF EDUCATION COSTS ON STUDENTS' ACADEMIC PERFORMANCE IN KENYA: AN EMPIRICAL STUDY OF BUNGOMA COUNTY SECONDARY SCHOOLS

Samwel Wamalwa Munda & Stephen Odebero

Masinde Muliro University of Science and Technology, Kakamega County, Kenya Correspondent Author: <u>sodebero@yahoo.co.uk</u>

# ABSTRACT

Attainment of education related millennium development goals in Kenya is largely hinged on availability and appropriate use of financial resources to acquire supportive inputs to the education process. Two years away from the deadline, the promise of Education for All (EFA) is still a challenge that stands out among the disadvantaged poor populations who cannot finance their own education. Even when they start school, they have to drop out due to push out factors related to costs of schooling. Often, this is before acquiring the basic skills required to make a useful contribution to national development. This study sought to investigate the relationship between unit cost and students' academic performance in secondary schools in Bungoma County. Descriptive survey research design was used. Proportionate random sampling was used to select eighty class teachers in twenty schools who served as respondents, and gave feedback through structured questionnaires. Pearson's correlation was used to measure the degree of relationship. Statistical tests were done at  $\alpha$ =0.05. It was found that a significant positive relationship existed between unit cost and academic performance, and government efforts to provide financial subsidy to education were still not adequate to cover vulnerable groups. Therefore innovative funding approaches involving a wide range of stakeholders need to be devised to help shore up government efforts and mitigate the deprivation that vulnerable groups endure.

Keywords: Education costs, academic performance, subsidy, vulnerable groups.

# **BACKGROUND TO THE STUDY**

Global development and welfare indices (World Bank, 2010) show that illiteracy and poverty coincide, with nations facing challenges of extreme poverty also faring poorly in terms of knowledge economy indices and availability and absorption of new technologies. After the Jomtien conference on Education for All (EFA), it was understood that it was by making basic education free that it would include poor children and therefore become universal. Millennium Development Goals (MDGs) promised EFA by 2015. Two years from the deadline, the world's most disadvantaged children have not yet benefited from this promise due to their state of deprivation. Karemesi (2010) observed that costs such as examination fees, salary top ups, textbooks, teaching materials, school uniforms, feeding, transportation and sports are major constraints to achieving universal basic education especially for the poor. School levies are the biggest hindrance to students' regular school attendance. In much of Sub-Saharan Africa, having been deprived of their right to free state education, some of the world's poorest people have to pay for the privilege of sending their children to schools that lack qualified teachers, books and the basic infrastructure that can support learning. Such children endure shockingly poor quality education.

Studies show that there is a 'storm' blowing over entire education systems in the world today. Over the past few years (Tobyehatch, 2013) education costs have been rising at a rate that out paces consumer price indices. In the USA for instance, education endowments and state appropriations have been declining while school expenses and enrolments increase. Consequently there is growing relevance of management accounting in the administration of schools and the recognition of the need for an effective cost assessment system. Calls have been made for schools to be supported develop and implement of financial models that may be useful in attracting and retaining more students in schools (Lima, 2011). This can be achieved through government and other non-state actors deliberately impressing upon schools to look at the affordability value of each charge levied on students and use it as a basis for determining those that warrant grants and other financial support.

It is from the foregoing, perhaps, that diverse modalities for financing education in developing countries has taken different forms such that one does not only concern himself with monetary inputs. According to Bray (1996) communities and governments contribute materials, labour, expertise and land to support education. Since these inputs would have to be purchased if they were not provided, they are considered substitutes for cash. However, this is not applied across the board. Approaches to financing depend on how schools are operated and the purpose of the financial aid. For instance, parents through Parents and Teachers' Associations have been responsible for raising funds and providing facilities in Cameroon; "launching ceremonies" to raise funds to support school programmes are done with sanctions to ensure compulsory attendance in sections of Nigeria; households and individuals are levied towards school development at rates determined by local school community elders in Botswana, while co-operative unions in parts of Tanzania generate funds for approved schools by levying each kilogram of coffee sold through the cooperatives. Bray (1996) argued that the scale of community financing was often viewed as an indicator of effective demand for education in the specific locations where these models were applicable.

Cumming et. al. (1995) reported World Bank Studies which showed China, El Salvador, Malaysia and Indonesia as having communities that engaged in school financing as a result of demand for alternative forms of education that related to cultural and religious needs of the groups. Similar systems existed in parts of Asia: in Laos People's Republic for instance, chairmen of village community associations usually oversaw construction of rural schools where levies were imposed with allowances for substitution with labour; recurrent needs of community schools in Singapore were raised through central provident deductions for racial based associations, while levies on purchases made at village shops are used to raise funds for local schools in parts of India. Other mechanisms for raising money for capital works include festivals, cultural and harvest shows and sponsored walks. In countries such as Chad, Nepal, Mali and Myanmar, government resources were found inadequate even for providing teachers to schools, and communities had to employ their own (Bray, 1996)

Questions have been raised with regard to financial management of schools in developing countries (Lockheed & Verspoor, 1991), with reports indicating that education systems in many developing countries are unable to meet their objectives due to problems associated with costs. Since the early years of their independence, challenges facing education systems in developing countries included high levels of expenditure already reached (Hallack, 1972) and the constant rise in unit cost. A comparative examination of education expenditure in countries of the world is worth considering. For instance, the UNDP for 2012 indicated that public spending on education was 5.3% of GDP in the UK, and 3.6% of GDP in East Asia (UNDP, 2013). Kenya spent over 6.57% of GDP on education over the financial year period 2011/12. However the UK and Kenya had 108% and 24% of the relevant age groups respectively, participating in secondary school education. Fuller (1990) reported the case of

Malawi where the budgetary resources necessary for erecting more classrooms, train more teachers and procure more textbooks were acutely inadequate. The devastating effect of this inadequacy is that resources were stretched over a rapidly rising number of students, resulting in decline in quality. One may infer that countries that spent more on education like Kenya could improve academic performance by focussing on the most cost effective inputs.

Kenya has been trying to achieve the goal of universal education since independence in 1963, with mixed successes. Various approaches which were seen as likely to augment resources and define strategies for education financing more closely adapted to social and economic realities have been suggested and attempted. The most notable (Elimu Yetu Coalition, 2003) was the cost sharing framework, by which the government was to meet salaries of teachers and education administration costs while parents provided tuition fees and textbooks; communities on the other hand were to be responsible for putting up physical facilities and ensuring their maintenance. However, given the differential economic endowment of regions and even social groups, disparities in access to education emerged. The disparities were cost related since not all groups could marshal resources on equal footing. Munya (1995) reported that under the cost sharing arrangement, parents felt exploited by school committees which were considered unsympathetic to parents due of the burdens they imposed on them. Abagi & Olweya (1999) seemed to lend credence to this view when he observed that school fees typically contributed 91% to 100% of all financial resources that were available in schools; government subsidies on the other hand hardly ever exceeded 8% of the schools' total budget.

The introduction of free tuition in secondary schools was aimed at providing the economically disadvantaged with an opportunity to benefit from government sponsored education provision. However, there are indications that providing this education is now beyond the scope of Kenya's ordinary education budget, owing to the rapid population growth rate spews out an ever increasing number of students keen to join the education system at all levels (Karemesi, 2010). Challenges arising from the pressure placed upon available finances have been steadily growing. Given the new measures that government is undertaking to address issues of access and quality of education in recent years, it is worth examining the influence of costs on students' performance as a way of seeking solutions to the long standing challenge of education quality in Kenyan schools.

## **Purpose of the Study**

The purpose of the study was to determine the influence of education costs on students' academic performance in Bungoma District secondary schools.

### **Objectives of the Study**

This study specifically set out to:

- i) Establish differences in costs of education between District and County schools
- ii) Determine how costs relate to the academic performance of district and county schools.

### Significance of the Study

Costs of educational inputs are a critical factor in an institution's ability to adequately meet material and non material educational needs. Findings of this study are expected to contribute

to a greater understanding of costs that go into education and the measures that can be taken to lower these cost in secondary schools in Kenya. It is the only way that can ensure the poor and other vulnerable groups benefit from government supported education services. Such understanding is useful to planners and policy makers in their quest to improve access to secondary education. It is expected that findings too, will serve as a useful reference for researchers keen on studying dynamics of secondary school financing in Kenya. Lastly, parents and students as central stakeholders will find this study useful in raising their capacity to make informed suggestions regarding measures to reduce costs of education.

## Limitations of the Study

The study suffered the challenge of proper record keeping in some schools. Information given based on poorly kept records may not reflect the true state of affairs in schools. Besides, the study was set to examine the influence of costs on performance; but it was not possible to isolate expenditure that exclusively went to cater for students' academic needs. Instead, average costs for the whole school population were used.

## **RESEARCH METHODOLOGY**

Descriptive survey design was used. This was design appropriate (Mugenda & Mugenda, 1999; Ogula, 1998; Guy, 1976) it is capable of facilitating collection of data that describes specific characteristics of phenomena in order to determining the status of a population with respect to one or more variables. After a descriptive research had identified important variables in the study, data was analysed using correlations in order to determine the degree and direction of relationships among the variables. This design was deemed appropriate for the study because of its ability to establish facts which result in formulation of important principles of knowledge about populations that are too large to be observed directly (Mugenda & Mugenda, 1999; Kathuri & Pals, 1993; Lomax & Li, undated).

Bungoma County was chosen because school attendance and performance in national examinations had not met expectations of education stakeholders in the County (Republic of Kenya, 2006; Karemesi, 2010). This has seen them voice concern at many forums that are organised to deliberate education matters. Besides, the county has pockets of the very poor within their urban and rural settlements respectively (Republic of Kenya, 2002). Schools were categorised into County schools (usually boarding) and District schools respectively. According to Kathuri & Pals (1993), the minimum sample for survey research is 20 to 50 cases. Proportionate random sampling was use to select thirteen District schools, and seven County schools for use in the study. Both open and closed ended questionnaires were used to collect data from class teachers. The validity and reliability of instruments was established through careful selection of items to be responded to, piloting and expert review of the instruments. A computed Cronbach's Coefficient of reliability, alpha of 0.83 was obtained: an indicator that the instruments were of high reliability (Fraenkel & Wallen, 1990).

# **RESEARCH FINDINGS Differences in costs of education between District and County schools**

Findings established that there were disparities in costs of education both within and between the two categories of County and District schools. The average per student direct unit cost for county schools was Kshs. 43,706, nearly double the average of Kshs. 24,975 for District schools. However, additional levies increased fees in schools beyond what was stipulated in

the fees structure even after ministry officials had been petitioned to review charges to accommodate extra cost items. The corresponding unit cost standard deviations were Ksh. 9635 and Kshs. 6,980 respectively. These disparities in costs could be an indicator of underfunding of some schools on critical education inputs (Shikanda, et al (2013), while others are adequately funded. But it also implies that charges are levied in an arbitrary manner without strict standard criteria. Since better funding directly impacts quality of inputs procured to support educational provision, this could explain the better students' performance in county schools.

Schools strive to invest in areas and activities that can help them attract the best students, attract donations and ultimately boost their ranking in performance league tables, hence drawing in yet more talent students and money. To pay for these investments, schools have been enrolling more students and rising up their fees. According to (Munda 2008; Shikanda *et al*, 2013) a comparative analysis school charges had established that the average per student cost in Kenya had risen by more than twice the rate of inflation between 2003 and 2007. Fees charged have gone up from an average of Ksh. 21,310 and Ksh. 12,350 to 43,706 and 24,975 in County and District schools respectively between the year 2007 and 2012, a rise of more than 105%. Further, the indirect cost of tuition alone had soared from 13% of the median annual earnings to 32% in 2010; these increases are not sustainable. Indeed reports indicate that students are accumulating huge debts at a time when government funding is at historically highest levels.

Government guidelines seemed to favour county schools by allowing them to levy higher charges than District schools. It was observed that county schools had many vote heads which did not exist in approved government fee guidelines, but against which students were levied or the votes were levied beyond the approved ceilings. The vote heads included uniform, BOG teachers' salaries, students' identification cards, school magazines, teachers' welfare, worker' gratuity, school endowment, bus insurance and maintenance, computer maintenance, special tuition and co-curricular charges. Boarding Equipment and Stores (BES) was the most expensive item, averaging Ksh. 17,045 or 166% of the entire government subsidy; day schools charged an average of Kshs. 5600 or 154.5% of the total government subsidy. However there were huge disparities, with a calculated standard deviation of more Ksh. 4102 or 40% of the total government subsidy within this levy. Clearly, food and accommodation are the largest determinants of school attendance since they constitute the bulk of unit cost that accrues against students. There was no government subsidy on this vote across the schools.

The next most expensive item borne by students was personnel emoluments. Government subsidy on this vote was Kshs. 3965. However, the average extra charge towards this vote in county schools was Kshs. 3159 or 79.7 % of government subsidy on the vote. It was however noted that other levies that go towards staff emoluments had been introduced under diverse names such as BOG salaries, remedial fees, education support programmes, academic welfare and teacher motivation. These levies once approved by Ministry of Education officials escalated the cumulative charge on services to students which were already covered under this vote. It was estimated that some county schools could be levying as high as Kshs. 10,000 under these disguised charges. Sampled district schools however stuck with the approved government levies. If there is a rational basis to justify these levies in county schools, then it means that more and better quality student support services were offered in county schools a competitive edge over district schools in terms of academic performance.

A schools infrastructural development is critical in creating conducive environment for both teachers and learners to engage in their respective activities. However, no government subsidy was provided to support capital development in schools. Instead, schools sought approval from parents through their representatives (Parents/Teachers Association Committees) before approaching County Education Officers to ratify charging education levy. County schools charged the highest average levy of Ksh. 2,914 or 28.4% of total government subsidy, while District schools averaged Ksh.1768 or 17.2% of total government subsidy. Disparities within the two categories of schools were also noted, with some County schools charging as high as Ksh. 77.9% of the total government subsidy per student. It is worth noting that District schools are usually inspected before being elevated to County schools, often after attaining a certain minimum approved infrastructural threshold. County schools are therefore endowed with better class rooms, libraries, teachers' offices, dormitories and toilet facilities. Yet they charged more PTA levy. District schools, on the other hand are usually at their initial stages of development, often with few students whose ability to pay development levies is greatly impaired. This could explain the low charges levied. It therefore translates to students and teachers in District schools working under extremely difficult conditions, a possible reason for their poor performance relative to county schools.

Electricity and Water are important utilities which guarantee the well being of the entire school community. Government subsidy on this vote was Ksh. 700 or 6.8% of the total subsidy. This appeared to fall below the requisite school needs across the board. On average, County schools levied Ksh. 1500 (or more than double the government subsidy). District schools however avoided further levies on students against this vote. This could be justified on the basis that students in District schools, who are day scholars may not consume as much service in this regard as in County schools where students are fully resident during an academic term. Day students who don't have these utilities at home as often happens in rural areas often have challenges in handling their homework in the evenings. Thus District schools are disadvantaged in this regard because their students usually day scholars.

Provision of free tuition in secondary schools was one of the major education policy reform upon which the government sought to attract the poor and vulnerable groups into the secondary school system. However it was noted that tuition charges had been introduced in most county schools; charges varied by school, but were generally on the upward spiral. Some schools disguised these levies under different names, such as remedial levy, education support programme, and academic welfare. Official approval for such levies would seem to go against government policy. According to the government's 2013/2014 - 2015/2016Medium Term Expenditure Framework (Republic of Kenya, 2012), the strategy to increase access to secondary education will entail providing free tuition by sending grants to schools to facilitate procurement of teaching and learning materials in schools across the country. This will further be reinforced by bursaries that target vulnerable groups. Within this group are orphans, girls and children from poor families in slums, pockets of poverty in high potential areas and arid and semi-arid regions. The fact that most District schools did not levy extraneous tuition levies could explain their poorer academic performance relative to County schools.

Kenya's long term development strategy (Vision 2013), set out to establish a computer supply programme to equip students with modern ICT skills. Indeed the MoE through the Multi-Media Project (Republic of Kenya 2012) has already set up a plan to equip selected schools with ICT integrated content delivery systems. In an effort to be at par with these

developments in education, school management through their parents' committee have encouraged parents to support provision of computers in schools. However, computer levy especially in County schools was noted to be charge that threatens to escalate unit cost of secondary education. The fees ranged from Ksh. 500 to Ksh. 4,500, indicating a possible arbitrary manner in which the levy is determined and charged. It is worth noting that more established schools boasting high enrolments and better facilities charged the highest fees. One would expect such institutions to enjoy economies of scale: the advantage firms get as a result of growth in size of their operations. On average computer charges under extraneous levies were equivalent to 13.9% of the total government subsidy to schools. This noble initiative could serve the unintended purpose of dampening demand for secondary education especially among the poor and vulnerable groups in society. Besides, if it triggers irregular school attendance due inability to make timely payments, it could undermine students' performance.

Another notable direct charge on students was the bus maintenance and insurance levy. It is a charge that was levied students whose schools had acquired buses often with the sole financial support of parents. County schools were the dominant owners of buses. The levy did not exist in any form in schools which did not have buses, as they solely relied on the Local Travel and Transport vote provided for under government subsidy across the schools. Charges ranged from Ksh. 300 to Ksh. 2000. On average, bus maintenance levy was Ksh. 1021 or 9.9% of the total per capita government subsidy to secondary education. Though buses facilitated easy movement of students on trips to participate in academic and co-curricular activities, disparities in levies point at a non regulated levying scheme that could hurt overall students' academic interest in the schools. One may ask: why parents' investment in acquiring a bus results in levies that escalate the cost of education? In some schools, the cumulative bus maintenance and insurance charge over a period of five years would be worth a new bus – a really expensive undertaking that parents have to endure.

Other numerous levies existed in schools, most of which were approved by MoE officials. These included local joint examinations fees, special subject fees, uniform fees, university application fees, activity fees, registration and documentation fees. School identification and visitors card levies, school magazines, academic awards levies were also charged. Though it was not possible to establish the veracity of these levies, it is incumbent upon the government to always provide direction on optimal charges in order to avoid vesting in individual school management too much discretion in setting levies.

## How Costs Relate to Academic Performance of District and County Schools

The second objective set out to determine how education costs relate to the academic performance of district and county schools. To obtain a numeric measure of the relationship between costs and academic performance, Pearson's correlation between the two variables was run for the eighty schools sampled for this study. Results are shown in Table 1.

	<u> </u>	School Average Unit Cost School Mean Score		
		School Average Unit Cost		
School Average Unit Cost	Pearson Correlation	1.000	$.462^{*}$	
	Sig. (2-tailed)	•	.000	
	Ν	80	79	
School Mean Score	Pearson Correlation	.462*	1.000	

### Table1: Relationship Between School Average Unit Cost and Performance

Sig. (2-tailed)	.000	
Ν	79	80

\*. Correlation is significant at the 0.05 level (2-tailed).

Results as presented in Table 1 indicate that unit cost was significantly related to performance at  $\alpha = 0.05$ . The correlation coefficient was found to be positive: therefore increasing unit cost was likely to have a positive impact on performance. This is contrary to findings by Psacharopaulos & Woodhall (1985) who found that schools with the highest costs in Malaysia did not achieve above average results; schools with high achievement scores on the other hand did not spent more than average. As observed by headteachers, findings from this study point to the need for school to raise their income. Gogo (2011) observed that parents were the main source of revenue in secondary schools, contributing 97.02% in 2005, 92.1% in 2007 and 50.6% of the total income in 2008. They may be required to pay more in terms of school levies to stabilise schools' financial positions.

But the option of raising fees can only be explored as an option of last resort. The national fee guideline and the introduction of government grants to cover tuition in secondary schools was aimed at reducing costs to parents, which hamper poor students' enrolment at the secondary education cycle. These policy guidelines are implemented in line with the broader long term government development strategy (Vision 2030) which aims to expand access and improve retention of students who transit from primary to secondary schools. Beside, measures to set ceilings on fees chargeable are justified on the basis of Millennium Development Goals status report for Kenya (Republic of Kenya, 2005) which indicated that the poverty index was 56% and the proportion of people living below the poverty line was projected to rise to 65.9% in the year 2015 if the prevailing conditions remained unchanged. It will therefore require policy makers and school managers to be innovative in identifying and implementing alternative financing mechanisms to sustain school operations.

Other sources of school finance which were already accepted as making a significant contribution to school revenue included Bursaries from government and non government agencies (NGOs), Constituency Development Fund (CDF) grants, local authority grants, Harambee, aid arising from established collaborations between local schools and foreign institutions, and internal Income Generating Activities (IGAs). The most common income generating activities in schools included farming (keeping dairy cattle, cultivating maize and sugar cane), renting school halls, and offering catering services for short time seminars or workshops that take place in some schools.

But the major challenge associated with these alternative sources of funding was their unreliability. For instance, though it was appreciated that bursaries had increased the volume of revenue flowing into schools, their untimely disbursement was not able to boost school attendance and hence performance in national examinations. This finding is in tandem with a government report (Republic of Kenya, 2006) which indicated that irregular disbursement of funds meant to assist needy students and poor administrative skills that resulted in wastage of school resources were a threat to education development in Bungoma District.

# **DISCUSSION OF FINDINGS**

Headteachers viewed a school's stable financial base as a catalyst for activities that enhance improved academic performance in schools. Though ability to pay fees was not a criterion for

students' admission into all schools, school levies played an important role in sustaining school activities. Fees charged were decided by school Boards of Governors (BOG) in consultation with the Parents and Teachers Associations (PTA) and with approval from the District Education Board (DEB). This was the standard Ministry of Education requirement. Apart from the government subsidy which came in guaranteed tranches, most schools collected less than 70% of their other budgeted revenue which almost entirely came from fees. An examination of revenue trends indicated general rise in levies to match the escalating cost of living. Similar findings were reported in different surveys of tuition charges in Kenyan Secondary schools (Ngare, 2007; Aduta, 2007). It was established in this study that fees largely contributed to students' irregular attendance and eventual dropout from school; this undermined their academic performance. However, there was a feeling among headteachers that school programmes cannot be sustained without adequate revenue collections.

A study of rural public secondary schools in Nyando District, Gogo (2011) reported that though it would be ideal to reduce fees in schools in view of the poor response in payments, headteachers felt that this was not feasible, and that fees should be raised instead. They argued that prevailing budgets in public schools were the lowest in the face of consistent increase in prices of goods and services which in effect strained school budgets. Despite the Government introducing grants to the tune of 10,265 per student per year in 2008, complaints from headteachers and parents about the unbearably high costs arising from increased prises of school uniforms, stationery and food have persisted (Muindi, 2009). And the grants whose disbursement is erratic seem not to be adequate to sustain the targeted vote heads such as tuition fees, exercise books, laboratory equipment and teaching aids, internal examinations, electricity, water, conservancies and students' activities (Shikanda *et al*, 2013).

Schools that had sources of income other than direct levies on students were able to generate more revenue and hence expended more on procurement of various goods and services. Dominant alternative sources of revenue identified included proceeds from schools farms, "harambee", and donations from well wishers and charities. A few schools that had entered collaborations with foreign institutions also received support in kind in selected areas of academic interest like books and equipment; since these materials would have had to be bought if they were not provided, they are taken as substitutes for cash.

Some schools, in an effort to address their financial problems were cutting costs of what were perceived as non core activities so as to concentrate at excelling in a limited number of important activities rather than trying to do everything. This was evident in the area of sports and academics where schools scaled down on subjects and sports whose combinations were unsustainable in view of the teacher establishments in departments. This would reduce the pressure on the number of teachers required to be hired by the schools to help shore up areas of extreme deficit. These measures tended to strip administrative costs and overheads, but limited student choices and their future career aspirations.

## CONCLUSION

Education cost is a critical factor in any schools' operations. Schools with a large revenue base performed better than those whose income was low. However, when high fees are levied on students to generate such revenue, their participation is undermined. Thus, stakeholders, namely parents, government, and donors interested in improving education standards should put in place mechanisms that will ensure adequate and timely provision of financial resources

to run school operations. But such mechanisms should be sensitive to the unique needs of vulnerable children who are often the silent victims of huge levies in schools. Government decision to offer free tuition in secondary schools was a step in the right direction. But other stakeholders in education should continue to be complacent government efforts to roll out quality education programmes. The existence of bursaries to support bright but needy students has been criticised for failing to accurately target needy students. Efforts need to be made to improve mechanisms of targeting needy students. Besides, other viable cost effective instructional techniques should be explored with a view to reducing average school costs as is the practice with virtual learning in Australia. More private players should be encouraged to participate in the delivery of education in order to pull the economically able members of society out of public schools to reduce crowding.

### RECOMMENDATIONS

- Huge disparities were noted in levies charged by schools within the same category, even when they drew students in the same catchment area. Government must therefore review school needs on a regular basis to avoid arbitrary setting of levies in public schools. Giving school managers too much discretion in this regard has the potential to hurt academic interests of students from vulnerable backgrounds. Institutionalising mechanisms to regularly monitor financial operations in schools is the only way that unscrupulous managers can be brought to account for violating stipulated government policies.
- It is clear from the fore going that government is stretched to the limits in its efforts to deliver education. Therefore more private investors should be encouraged through structured incentive systems to participate in provision of education services to lessen pressure on government in providing this important service. One way of raising demand for private education would be for government to give vouchers to students in private schools and require that such schools lower fees by a similar margin to attract more students. This may save the cost of putting up facilities to ease to congestion that is a defining feature of public schools. Such private providers are likely to free up space in public schools, lower student-teacher ratio and mitigate the inadequacy of other teaching and learning materials, as those who can afford quality private education relocate to private schools.
- All public schools should embrace Activity Based Management principles, by which they will be required to tie all expenditure to targeted activity outcomes within their expendable income. Activity Based Management ascribes the amount of resources consumed by activities to the quantities produced or performed. Since output targets are cascaded to specific individuals under this modality it will be possible address the twin challenge of misappropriation of public finances, and failure to deliver on set objectives.

### REFERENCES

- Abagi & Olweya (1999). Achieving Universal Primary Education in Kenya Where Reality Lies: Challenges and Future Strategies. Nairobi: Institute of Policy Analysis and Research.
- Bray, M. (1996). *Decentralisation of Education: Community Financing*. Washington, DC: The World Bank.
- Cumming, C. E.; Brock. A.; Kasiyo, P. K.; & Opio-Owulu, C. (1995). *Secondary Education Costs and Finance Study*. Cambridge : Cambridge Educational Consultants.

- Elimu Yetu Coalition (2003). Reform Agenda for Education Sector in Kenya: Setting Beacons for Policy and Legislative Framework. Nairobi: Elimu Yetu Coalition.
- Fuller, B. (1990). "What Investments Raise Achievement in the Third World?" in Chapman W. D. & Carrier, C. A. (eds) Improving Education: A Global Perspective. Connecticut: Greenwood Press.
- Guy, L. R. (1976). *Education Research. Competencies for Analysis and Application.* Columbus, Ohio: Charles E. Merrill Publishing Company.
- Hallack, J. (1972). Financing Education Policy in Sri Lanka. Paris: UNESCO.
- Karemesi, J. (2010) Universalising Primary Education in Kenya, Is it Sustainable? Surfing the Web: <u>http://usbec.wordpress.com</u> Retrieved 14/11/2012.
- Kathuri, J. N. & Pals, D. A. (1983). *Introduction to Educational Research*. Egerton University: Educational Media Center.
- Lima C. M. F (2011). The Applicability of the Principles of Activity Based Costing System in Higher Education. In Economics and Management Research Projects: An International Journal Vol. No. 57-63. Available 1. 1 pp. at http://webapps.fep.up.pt/oaij/index.php.EMR\_1J/article/12/32. Accessed on 8/7/2013.
- Lockheed, E. M. & Verspoor, M. A. (1991). *Improving Primary Education in Developing Countries*. Washington, DC: The World Bank.
- Mugenda, O. M. & Mugenda, G. A (1999). *Research Methods: Qualitative and Quantitative Aproaches*. Nairobi: African Center for Technology Studies.
- Ogula, P. A. (1998). A Handbook on Educational Research. Nairobi: New Kemit Publishers.
- Republic of Kenya (2000). *Education Statistical Booklet*. Nairobi: Ministry of Education Science and Technology.
- Republic of Kenya (2002). Bungoma District Development Plan 2002 2008. Nairobi: Government Printers.
- Republic of Kenya (2006). *District Annual Monitoring and Evaluation Report for Bungoma District*: Unpublished District Development Committee Report.
- Republic of Kenya (2012). Education Sector Report 2013/14 2015/16: Medium Term Expenditure Framework. Available at <u>www.reasury.go.ke</u>. Retrieved 1/11/2013.
- Shikanda, FC, Odebero, OS & Byaruhanga, J. (2013): Role of ministry of education fees guidelines in management of annual school budgets in public secondary schools in Kenya. Kenya Journal of Education Planning, Economics and management, Vol. 5, January, 2013.
- UNDP (2012). Education Spending by Country. Available at <u>http://www.nationmaster.com/graph/edu\_edu\_spe-education-spending-of-gdp</u>. Retrieved on 1/11/2013.
- World Bank (2012). World Development Indicators. Available at <u>www.worldbank.org/en/country/keya</u> Retrieved 10/11/2013.
- Tobyehatch, H. (2013). Mastery of the Cost of Education With Hyperion Profitability and Cost Management. Available at <u>http://blogs.oracle.com/epm Retrieved 10/9/2013</u>
- Mailu, G. M. (2013). Kenya's MDGs Status Report to Date: A Presentation to the Post 2015 MGDs Forum. Available at <u>www.planning.go.ke</u>.