

Integrating the Culture of Constitutionalism in the Education Sector: Analysis of Public Education Spending, Reforms and Income Inequality in Kenya

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Abstract

The main aim of this article was to find out if public expenditure policy on education in Kenya was pro-poor or not. Benefit Incidence Analysis (BIA) was conducted for the three levels of education, namely; primary, secondary and university. The share of learners from various quintiles of household income or wealth groups enrolled in public schools were estimated using secondary data from household surveys conducted in 2005, 2008, and 2014 in that order. The data on public spending by level of education was obtained from the Ministry of Education, Science and Technology. The results showed that the poor households immensely benefited from government basic education policies of free primary and free day secondary education. In Kenya, poor households had a large share of enrolment in primary, whereas the rich households had a higher enrolments in both secondary and university levels. Free day secondary education policy has not yielded expected outcomes although it is almost coming to neutral. This implies that distribution of public expenditure on education favor the poor at primary level and not at secondary and university levels. Therefore, the government should not only adopt a redistributive approach to public spending aimed at improving opportunities for all but it should also review basic education funding formulae. This is important so as to reflect the acute disadvantages facing the poor household income groups and marginalized regions.

Keywords: Culture of constitutionalism, benefit incidence analysis, public education spending, reforms, income inequality, Kenya.

I. Introduction

The Context of the Article

Kenya is one of the most unequal countries in the world characterized by high levels of poverty. Its colonial and post-colonial education policies did not give much regard to the poor until 2010, when addressing inequality became a constitutional requirement. The constitution also obligates the state to provide education since it is now a right. This makes public spending on education a strategic policy tool for alleviating poverty, reducing inequalities and advancing socio-economic opportunities for the masses who did not have access to development opportunities before. To appreciate the importance of public spending on education in the Kenyan context, one needs to consider the culture of exclusion that was entrenched in education policies during Kenya's colonial and post-colonial era. The first and dominant education for Africans since 1800s was provided by Christian missionaries who built schools, hospitals and churches in Kenya. German missionaries were the first to establish schools along the Kenyan Coast in 1840s. Access to education provided by Christian missionaries was limited to areas missionaries reached and the resources they had since missionary activities were not funded by governments. Each Christian Mission provided education independently of the other since they came from different Christian denominations for instance Catholic, Anglican, Methodist, Lutheran, Quaker and Presbyterian (Keshavjee, 2010).

The basis of inequality in education in Kenya is rooted in the fact that right from the start, the British state did not have a definitive education financing policy for all its 47 colonies around the world, Kenya included. This approach to education prevailed until 1960s. Thus, the education sector was guided by flexible general principles controlled by the Secretary of the State for the colonies.

In 1920, Kenya was declared a British colony which indigenous citizens opposed completely. At the time, a sizable number of British settlers had settled largely in Kenya highlands and in major towns where infrastructure was centralized. Education soon became a key instrument of colonization. Several measures formed early British education policies for instance: (1) The Kenyan society was categorized into three racial categories namely Africans, Asians (mainly Indians), and Europeans. (2) National values were organized along racial ideology which became the ruling ethic. (3) On this basis, resources allocated to the education sector were distributed. While all Kenyans were taxed, more revenue to the education sector was allocated to European followed by Asian (Indian) schools even though these were the minority. European schools used a different curriculum which was defined as superior to the one used in African schools (Mwiria, 1991).

In 1924, the Colonial government established the Dual Policy Act which legalized different development policies for different races in Kenya. Racial distinction became a key factor in resource allocation. This Act allowed the colonial government to: formulate and implement education policies over all schools be it public and private; allocate grants to missionary schools where most Africans studied; and separate schools per race; European, Indian and African. The dual policy established two systems of education namely: "Education for the masses" and "education for the leaders." The two systems of education had distinctive resource allocation, quality and curriculum (Keshavjee, 2010). Even though local communities had their own resources to build schools, the Colonial government refused to grant permit. In protest and civil disobedience, Local Native Councils began raising funds for the schools and opposing government authority in their areas. The resistance took 5 years until 1930 when the Colonial government accepted to grant permit having realized the growing agitation (Wamagatta, 2008).

Access to primary education was also restricted for Africans. Colonial policies limited the number of Primary schools for Africans based on cost control. On the contrary, European and Asian children were entitled to open access to seven years primary and four years of secondary education. In 1947 for example, European children received 60% of government funding compared to 0.4 % allocated to African children. To curb the inequality, missionary schools provided 41% funding to African children through missionary schools while African communities through Community self-help organizations provided 54% of funding for African children. However, inequalities prevailed. By 1950s, about a decade to Independence, 98% of Europeans were attending secondary school. In 1953, 90% of students enrolled in schools public and private combined were Africans. However, only 10.7% of total expenditure, recurrent and non-recurrent was allocated to education sector. Furthermore, only 49% of this was allocated to the education of Africans even though Africans constituted majority of the population in need (Somerset, 2011). Education policies did not change much even after independence. Changes in education policies relied heavily on recommendations of commission reports (Opondo, 2000). The Ominde Report was the first education policy document that provided recommendations on reforming the colonial education system. It was meant to provide a policy framework for restructuring the education system in Kenya, from a colonial oriented system to one that would foster national unity and development in the post-independence era. Because of the report, the government brought to end racial schools and education system. It also granted bursaries to African students to join former European and Asian schools (Soft Kenya, 2011). However, there were no major reforms to comprehensively address poverty and inequality.

Provision of subsidized education in Kenya has been a major political campaign tool for political parties to gain fame and be voted in. However, governments have systematically failed to put in place sustainable and comprehensive policies that address poverty and inequality. The introduction and implementation of Free Primary Education in 2003 for example, was superseded by political interests leading to inadequate preparation, consultation, planning, budgeting and a smooth implementation of the program (Sifuna, 2010). Therefore, poverty, exclusion and inequality have prevailed Kenya's colonial and post-colonial era. These issues were recognized by the 2010 constitutional reforms. Public spending on education for all has now become a constitutional imperative. This raises a scholarly interest in examining recent reforms with a view to determine whether they reflect the new culture of constitutionalism which is characterized by among other things, public spending that is pro-poor.

II. Statement of the Problem

The provision of education to every citizen in Kenya is vital for both economic and individual growth. The social welfare expenditure predominantly on education sector is regarded as one of the effective instruments used to decrease disparity in income distribution and reducing the poverty (Karim, 2015).

The main aim of government expenditure on education is not only to improve the well-being of the beneficiaries but also to improve their competence to earn income in the future (Manasan et al, 2008). The public education sector in Kenya has consistently received significant budget support throughout Kenya's history and training of many Kenyans has increased over the years as well. This has forced the government to introduce Free Primary Education (FPE) policy in 2003 and later subsidized day secondary school tuition also referred as Free Day Secondary Education (FDSE) policy in the year 2008. According to Ndonga (2017), in an effort to support national educational goals, international conventions on education and UNESCO instruments, Kenya has increased universal access to basic education by supporting free primary and free day secondary education. Despite the improvement and progress made in the education sector, the sector is facing challenges such as increasing enrolments, limited funding and inequality.

The government of Kenya through the Ministry of Education, Science and Technology has readjusted education and training to the Basic Education Act of 2013, Kenya's blue print of Vision 2030 through the Sessional paper No.14 of 2012, and to the Constitution of Kenya (2010). These crucial legal documents put much emphasis on linking education and the current labor market demands especially 2010 Constitution. Kenya's new constitution of 2010 provides for a new understanding and constitutional requirements that needs to be met. Unlike before: Article 53 (1b) provides for the right to basic and compulsory education for every child; Article 55 (a) provides for the state to use all measure including affirmative action in order to ensure that every young person has access to education; and Article 56 (b) provides for access to education for marginalized groups (Akech, 2010; Kenya Law, 2010). The burden is on the state to ensure that every Kenyan has access to education. It is also important to note that for this to be realized, a new way of allocating and spending resources in the education sector must be put into place in order to develop new trends in public spending which resonates with the new Kenya envisioned in the 2010 Constitution and vision 2030.

Besides the question of resource allocation and spending in the education sector; there are other contextual factors that might account for these changes or the status quo. These factors stimulate an interest in understanding whether the upward trends in education spending in Kenya resonate with the norms of the new constitution. The 2010 Constitution of Kenya and the Basic Education Act of 2013 are redistributive in nature. This means that its architecture is meant to ensure that adoption and implementation of policies serve to provide more access to resources for all including the poor and communities that were marginalized before. As a result, policies that do not entail redistribution in their content may not provide meaningful development for the poor household income groups or marginalized people.

Despite these achievements the government of Kenya has realized in education sector, there are a number of challenges still making it difficult to get the best outcome and quality education. The continuous enrolments each year in secondary education level have increased the demand for higher education. The fourth president of Kenya, His Excellence President Uhuru Kenyatta acknowledged that enrolments in higher education are growing faster and there is need to have a healthy balance between quality and quantity in education. The president was quoted saying, "Higher education is growing at an incredible pace. This is not only because of demand but because of the pace of development. We must make sure we maintain a healthy balance between quality and quantity." The president said this statement when he was addressing public universities chancellors in May, 2015 (ICEF Monitor, 2015).

The insufficient fund, inequitable financial resources and poor financial management are the main problems affecting education sector in Kenya (Imana, 2016). In Kenya, some regions have more and better schools than others, for example, marginalized regions in the country have been reported sometimes to have no or few basic facilities such as classrooms and better roads. The growing social demand for education due to inadequate infrastructure is putting the government of Kenya under pressure (Muricho and Chang'ach, 2013). Inequality can be seen in the entire education system whereby education access remains a big problem and the poor gain small while the rich gain more (Somerset, 2011). Education quality and effectiveness is in doubt by various stakeholders in education sector which is caused by inadequate budget allocation and other educational inputs (Maiyo et al, 2009). In Kenya there still exist various forms of inequalities which include regional, gender and marginalized groups (Johannes, 2010). The accessibility and unsustainable education funding policy is being put into question by all education stakeholders. This study through conducting benefit incidence analysis unveils effects of education redistributive policy in household groups and across regions especially. The article also discussed briefly on education reforms and their effects on education sector.

III. Objectives of the Study

The main objective of this study was to analyze how the constitution of Kenya supports education reforms and examine the incidence of public expenditure on education across various household income groups in Kenya so as to determine whether public expenditure policy on education sector as provided in the 2010 constitution and Education Act of 2013.

IV. Education System and Reforms in Kenya

The education system in Kenya has gone under various reforms and restructuring since independence in 1963. The government of Kenya initiated these reforms through various education commissions and political leverage. It first started with 7-4-2-3 system then to current 8-4-4 system, and soon to the newly proposed 2-6-6-3 system. It worth to note that changes in educational policy affects not only the learning process but it also affects the allocation of education budget. The current education system (8-4-4) was tailored to improve the problems related with academic education, for example, a scarcity of technical skills and manpower in several fields. The government of Kenya initially introduced vocational subjects in both primary and secondary education levels under “the umbrella” of 8-4-4-system syllabus (Mwiria, 2002). Generally, the 8-4-4-system consists of eight years in primary, four years in secondary, and four to six years in university education.

V. Education Financing and Administration

Education financing: the government of Kenya is the major financier of education sector and programs. The government is able to finance education programs through revenue collected, foreign grants, domestic and international borrowing. These sources of financial resources have enable the government to support free primary and secondary education programs. University educations receives government support inform of loans provided by Higher Education Loan Board (HELB) and bursaries. The three most of important legal educational documents defining education provision, funding and administration includes; Vision 2030, the 2010 Constitution and Education Act of 2013. The aim of basic education (FPE and FDSE) policies are aimed to enhance access, equity, quality and retention rate. The basic education policy caters for tuition and operational expenses that makes education affordable to most students from poor households.

The calculated capitation for free primary education is KES.1,020 while free day secondary education capitation has been between KES.10,265 which was increased to KES.12,870 in the year financial year 2014/2015. The share of education sector as percentage of the total government expenditure was 26.7 per cent while the budget allocation was 6.2 per cent of GDP in the financial year 2009/2010. According Ndonga (2017), free primary education program was allocated KES. 6.3 billion targeted to benefit 8, 879, 685 pupils in 21, 953 schools countrywide. In addition, secondary level that includes free day secondary program was allocated KES.16.1 billion which the government of Kenya expects to benefit more than 2,496,735 students in 8,361 public secondary schools. In spite of this progress and support, approximately 80 per cent of the education public recurrent expenditure goes to teachers’ salaries.

The primary recurrent expenditure in fiscal year 2005/06 was KES.7,148.58 million which increased to KES.14,319.70 million. This shows that primary recurrent expenditure has doubled over the period of 10 years especially with the introduction of free primary education policy. Total primary expenditure increased from KES.8,460.18 million on 2005/06 to KES.18,078.31 million in 2015/16. Secondary recurrent expenditure increased from KES.2,893.70 million in 2005/06 to KES.32,550.12 million which is a sharp increase and it is attributed to the introduction of free day secondary education 2008. On the other hand, university recurrent expenditure increased from KES.11,927.52 in 2005/06 to KES.45,168.30 million (see Table 1).

**Table 1: Primary, Secondary and University Expenditure Trend (2005/06 - 2015/16)
Amounts (KES. Million)**

Expenditure & Year	2005/06	2008/09	2011/12	2012/13	2013/14	2014/15⁺	2015/16*
Recurrent Expenditure							
Primary Education	7,148.58	7,298.79	9,705.76	9,393.13	10,533.76	13,408.00	14,319.70
Secondary Education	2,893.70	14,622.35	17,142.23	21,261.42	22,165.73	27,849.59	32,550.12
University Education	11,885.24	12,899.20	29,197.80	42,389.23	32,884.54	44,133.38	45,168.30
Sub-Totals (KES)	21,927.52	34,820.34	56,045.79	73,043.78	65,584.03	85,390.97	92,038.12
Development Expenditure							
Primary Education	1,311.60	7,284.67	1,122.57	329.96	6,061.89	334.13	3,758.61
Secondary Education	170.00	750.19	2,055.90	3,814.51	637.15	2,012.30	446.39
University Education	487.70	1,967.00	5,183.24	7,998.72	2,944.68	9,455.01	7,678.94
Sub-Totals (KES)	1,969.30	10,001.86	8,361.71	12,143.19	9,643.72	11,801.44	11,883.94
Grand-Total (KES)	23,896.82	44,822.20	64,407.50	85,186.97	75,227.75	97,192.41	103,922.06
Source: The National Treasury and Kenya Economic Surveys (Various)							
+ Revised Estimates							
* Printed Estimates							

Source: MOFNT and MOEST

Education administration: in Kenya, the Ministry of Education is responsible for the overall administration and sector coordination. The Ministry of Education has delegated some specific responsibilities to the 8 provinces, and 47 county governments' offices. These offices are responsible in managing and supervising educational services at lower levels.

VI. Research Methodology

Benefit Incidence Analysis

The study used Benefit Incidence Analysis (BIA) to determine whether public expenditure on education is pro-poor or not. Therefore, the research is basically quantitative in nature and is done on the basis of purely secondary data. Benefit incidence analysis (BIA) generally involves four main steps: (i) select individuals or households by expenditure and then group by quintiles; (ii) compute estimate of units subsidy of providing a particular type of government service as derived from official data on government spending; (iii) identify users of services provided by the government based on household service consumption; (iv) Impute unit subsidy to the respective household income group (Karim, 2015; Brasington, 2002; Demery, 2000).

Data collection

The study collected data mainly from Ministry of Education, Science and Technology, Ministry of Finance and National Treasury and from national surveys. The study used households' income group data from 2005/06 Kenya Integrated Household Budget Survey (KIHBS) and wealth group data for both 2008 and 2014 Kenya Demographic and Health Surveys (KDHS) in examining income and wealth distributive effects of government policy on education. Data from other sources such as World Bank, previous publications and reports were also used.

VII. Distribution of Income or Wealth on Education

This article used both income and wealth index to calculate income distribution. The data was obtained from integrated household budget survey of 2005 as well as demographic and health data for 2008 and 2014 surveys. The poor households generally do not benefit fully from government expenditure policy on education sector. In 2014 alone, the poorest household quintile received 6.3 per cent of the total education expenditure while the richest household quintile received 47.1 per cent of the entire education budget and the trend was not different in the previous years under study (Table 2).

Table 2: Distribution of Income or Wealth and Expenditure by household Class (KES. Million)

Income Class	Income per Month	Percent of Income	Primary	Secondary	University
Demographic and Health Survey (DHS) – 2014					
Poorest Quintile	5,394.03	6.3	17.5	9.2	1.1
Second Quintile	8,913.03	10.4	21.3	16.2	3.3
Middle Quintile	2,563.89	14.7	21.5	20.5	9.0
Fourth Quintile	8,360.90	21.5	20.6	24.0	20.2
Richest Quintile	0,248.22	47.1	19.1	30.1	66.4
Demographic and Health Survey (DHS) - 2008					
Poorest Quintile	2,623.86	7.5	17.0	8.4	1.2
Second Quintile	3,978.79	11.4	22.0	14.2	2.3
Middle Quintile	4,900.79	14.1	22.0	18.3	4.8
Fourth Quintile	7,788.11	22.4	20.2	27.3	18.0
Richest Quintile	15,528.79	44.6	18.8	31.8	73.7
Integrated Household Budget Survey (IHBS) - 2005					
Poorest Quintile	2,280.46	10.4	24.7	9.7	1.9
Second Quintile	2,543.59	11.6	25.3	17.1	2.0
Middle Quintile	3,004.07	13.7	21.7	22.2	6.9
Fourth Quintile	4,385.51	20.0	18.2	27.4	19.2
Richest Quintile	9,713.89	44.3	10.1	23.6	70.0

Note: The recurrent expenditure of 2005, 2008 and 2014 were used and represented in percentage

Source: Author's computation based on data from IHBS, DHS (various), MOEST and MOFNT.

The results generally show that in the three years (2005, 2008 and 2014), the public expenditure policy on education is not targeting well the poor households though in a specific education level for example primary school it was progressively targeted. Secondary education in general was slightly become to neutral meaning both the rich and the poor are benefiting almost equally. On other hand, university education in Kenya is pro-rich and therefore, the rich benefit more. The poorest quintile received only 1.1 per cent of university supports while the richest quintile 66.4 per cent way above fifty per cent. This implies that there is poor targeting. The poorest quintiles share of benefit is slightly declining over years instead of increasing in this education level. The poorest quintile income group decreased to KES.5,394.03 in 2014 from KES.2,280.46 in 2005 while the richest income group increased from KES.9,713.89 in 2005 to KES.40,248.22 in 2014.

VIII. Discussion and Analysis

The benefit incidence analysis (BIA) method enables one to assess education accessibility through evaluation of demographic and income distribution of household income groups before and after the government interventions. This paper therefore, analyzed each level of education to determine who benefit from government education policy and who does not. The information from this analysis is important to all education stakeholders especially the government through the Ministry of Education, Science and Technology. In order to achieve the desired results in analyzing income or wealth distribution, the following steps were followed according to BIA approach.

A. Beneficiaries of Education Policy

Education is divided into two main levels basic and tertiary levels. In Kenya, basic education includes primary and secondary levels while tertiary levels are comprised of university and vocational colleges. In this study, basic and university education were analyzed and major assumption made was that public expenditure policy on education supports beneficiaries directly and indirectly (Brasington, 2002). The students enrolled to various public schools, teachers and employees at the Ministry of Education, science and technology are the major beneficiaries of public expenditure policy on education. The students enrolled in primary, secondary and university levels of education in each household income group receive benefit of government education policy which is distributed to them proportionately.

The pupils from poor households attending primary benefited from free primary education (FPE) policy while those at secondary level benefited from free day secondary education program. At higher education, university students in Kenya benefited from public expenditure in form of loans and bursaries. Generally, urban households tend to benefit more from basic education compared to rural households even though basic education compulsory and now free for all. The scenario is seen from poor households which benefit as well from basic education while the rich benefit from both secondary and university education. Education has indirect benefits that affect the society by creating the spillover effect (Karim, 2015). The government and private organizations employ the fresh graduates from secondary and tertiary levels. In turn, these employees pay taxes to the government, support their families and themselves financially. This helps one to improve living standards and improve economy of the country in the long run.

B. Education Accessibility

The basic education accessibility in Kenya has improved a big deal due to the introduction of both free primary and free day secondary education in Kenya in 2003 and 2008 respectively (Ndonga, 2017; Bwonda, 2013). The trend of education sector enrolments in each level is affected by the behavior of both the household decision to enroll their children to schools and government expenditure policies on education. Primary and Secondary education enrollments have steadily increased upwards since introduction of Free Primary and Free Day Secondary Education in 2003 and 2008 respectively.

The basic education enrolments especially primary level has been increasing significantly in last two decades as indicated in various household surveys and Ministry of Education, Science and Technology (MOEST) enrolment trends on education. There has been a substantial growth in schools' enrolments in Kenya since her independence in 1963. Primary enrolments reached 7.6 million pupils in 2006 from 0.89 million in 1963 (Demery and Isis, 2009). The enrolment trends immediately changed when the policy of Free Primary Education (FPE) was implemented in 2003 whereby the households responded by taking more children to primary schools. Primary total enrolments increased from 8,253,800 thousand pupils in 2007 to 10,090,800 thousand pupils in 2015 while primary female enrolment increased from 4,031,000 thousand in 2007 to 4,962,900 thousand in 2015. The female enrolment in primary education is still low compared to primary male enrolment that was 4,222,800 in 2007 and 5,127,900 thousand pupils in the year 2015. Secondary total enrolments in 2015 reached 2,558,900 thousand students from 1,180,300 thousand in the year 2007.

Secondary enrolments are still low compared to the number of pupils completing primary education level. There gap between female and male enrolled in secondary school has been narrowing of recent, for example, in the year 2012 the female enrolled in secondary school was 895,800 thousand student compared to 1,019,000 thousand males enrolled in the same year. The increase of secondary enrolments can be credited to three main reasons; (i) introduction of FDSE by the government of Kenya in 2008; (ii) establishment of many secondary schools across the country through the help of programs such as Constituency Development Fund (CDF) which has assisted in expanding secondary education and; (iii) enforcement of re-entry policy to address low female enrolments caused by dropout cases of young girls who get pregnant while in school. Students joining universities are few compared to secondary schools. Students who performed well in secondary final examination and from rich household take the highest percentage in entire universities enrolments.

Table 3: School enrolment in level of education by sex, 2007-2015 ('000')

Education Level	2007	2008	2009	2010	2011	2012	2013	2014	2015
Primary (female)	4,031.0	4,201.3	4,322.0	4,629.3	6,673.7	4,784.9	4,837.9	4,898.5	4,962.9
Primary (male)	4,222.8	4,362.5	4,509.4	4,751.9	4,887.3	4,972.7	5,019.7	5,052.5	5,127.9
Secondary (female)	541.6	615.4	684.7	767.9	819.0	895.8	976.6	1,118.4	1,210.5
Secondary (male)	638.7	615.4	787.9	885.5	948.7	1,019.0	1,127.7	1,213.3	1,348.4
University (female)	36.6	37.9	52.9	53.8	63.6	86.0	115.7	146.2	169.7
University (male)	60.5	62.8	89.6	85.9	94.4	110.7	174	217.2	257.3

Source: Author's Computation based on MOEST, Kenya Education Network, and University of Nairobi

In overall, university enrolment increased from 97,100 to 427,000 thousand students in 2007 and 2015 respectively. Just like secondary level, female students enrolled at the university level is still low compared to male students. The students at public universities get financial help from the government bursaries and loans provided by Higher Education Loan Board (HELB) to the needy and deserving students.

C. Pupil Completion Rate (PCR) and Primary to Secondary Transition Rate (PSTR)

Pupil completion rate (PCR) increased from 81 per cent in 2007 to 82.7 per cent in 2015, while the primary to secondary transition rate (PSTR) raised from 59.9 per cent in 2011 to 82.3 per cent in 2015 (Table 4).

The transition rate of learners in primary level has been steady for 9 years. The increase in primary to secondary transition rate is an indication that more pupils from primary level are joining secondary education. This is attributed to free primary education policy which has not only increased enrolments but also increased rate of completion. Therefore, a huge progress has been in making sure that children remain in school and complete primary cycle of education.

Table 4: Pupil completion rate (PCR) and Primary to Secondary Transition Rate (PSTR)

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Pupil Completion Rate (PCR)	81.0	79.8	83.2	76.8	76.5	77.3	78.0	78.5	82.7
Primary to Secondary Transition Rate(PSTR)	59.9	64.1	66.9	72.5	69.4	68.4	76.8	80.4	82.3

Source: Ministry of Education, Science and Technology, Kenya.

D. The Distributional Effects of Public Education

The distribution of public expenditure on education varies in the three years under study. The poorest quintile received 24.7 per cent in 2005 while it received 17 and 17.5 per cent in 2008 and 2014 respectively at primary level. On other hand, the richest quintile received 19.1 per cent in 2014 while in 2005 and 2008 received 10.1 and 18.8 per cent respectively in the same education level. This means that the richest quintile benefited less from free primary education policy while the poorest quintile benefited more from the government policy and therefore the free primary education in Kenya is pro-poor. The secondary education has changed a little bit compared with primary level, the introduction of free day secondary education policy for example; the poorest quintile received 9.2 and 9.7 per cent in 2014 and 2005 respectively. The richest quintile on other hand received 30.1 and 23.6 per cent in 2014 and 2005 respectively. At the university level pattern was not different from that of secondary education. The richest quintile received 66.4 per cent in 2014 while in 2005 and 2008 it received 70 and 73.7 per cent respectively. In the same level, the poorest quintile received 1.1 per cent in 2014 while in 2005 and 2008 it received 1.9 and 1.2 per cent respectively (Table 5). In summary, the rich benefited from secondary and university levels in the three years under this study while poor household benefited less. This implies that secondary and university education is pro-rich and does not benefit the poor households' income group.

Table 5: The distributional effects of public spending, 2005, 2008 and 2014 (KES.Million)

School Level and Year of Survey	Total Amount (Years)	Poorest Quintile	Second Quintile	Middle Quintile	Fourth Quintile	Richest Quintile
Demographic and Health Survey (Year 2014)						
Primary	13,408.00	2,346.40	2,855.90	2,882.72	2,762.05	2,560.93
Percentage (%)	100	17.5	21.3	21.5	20.6	19.1
Secondary	27,849.59	2,562.16	4,511.63	5,709.17	6,683.90	8,382.73
Percentage (%)	100	9.2	16.2	20.5	24	30.1
University	44,133.38	485.47	1,456.40	3,972.00	8,914.95	29,304.56
Percentage (%)	100	1.1	3.3	9	20.2	66.4
Total Education	85,390.97	5,394.03	8,823.93	12,563.89	18,360.90	40,248.22
Total Percentage	100	6.3	10.4	14.7	21.5	47.1
Demographic and Health Survey (Year 2008)						
Primary Education	7,298.79	1,240.80	1,605.73	1,605.73	1,474.36	1,372.17
Percentage	100	17	22	22	20.2	18.8
Secondary Education	14,622.35	1,228.28	2,076.37	2,675.89	3,991.90	4,649.91
Percentage	100	8.4	14.2	18.3	27.3	31.8
University Education	12,899.20	154.79	296.68	619.16	2,321.86	9,506.71
Percentage	100	1.2	2.3	4.8	18	73.7
Total Education	34,820.34	2,623.86	3,978.79	4,900.79	7,788.11	15,528.79
Total Percentage	100	7.5	11.4	14.1	22.4	44.6

Integrated Household Budget Survey (Year 2005)						
Primary Education	7,148.58	1,765.70	1,808.59	1,551.24	1,301.04	722.01
Percentage	100	24.7	25.3	21.7	18.2	10.1
Secondary Education	2,893.70	280.69	494.82	642.4	792.88	682.91
Percentage	100	9.7	17.1	22.2	27.4	23.6
University Education	11,885.24	225.82	237.7	820.08	2,281.97	8,319.67
Percentage	100	1.9	2	6.9	19.2	70
Total Education	21,927.52	2,272.21	2,541.11	3,013.72	4,375.89	9,724.59
	100	10.4	11.6	13.7	20	44.3

Note: 1. Expenditure used is for 2005/06, 2008/09 and 2014/15 for 2005, 2008 & 2014 respectively

2. 2005^a and 2008^b – For ease of reference this represents fiscal year 2005/06 and 2008/09 respectively

Source: Author's Computation based on MOEST and various surveys (Economic Surveys, KDHS & KIHBS)

The result here clearly shows inequality in Kenya's education sector at the household income groups. The poor household income groups are unable to afford tertiary high tuition fee which includes university fee. School enrolments in basic education level tends to be high and increasing each year while gets less at the university level. The increase at the basic education level can be attributed to free primary and free day secondary education. This is the reason why the policymakers and implementers should work hand in hand to make sure everyone benefit equally from government support.

E. Calculation and Explanation of Benefit Incidence Analysis

In order to determine the benefits that each income group gets, it was necessary to calculate public expenditure incidence. Just as seen in Table 2, the benefit varies from one income class to another and from year one to another, for example, the poor are getting more in basic education which includes primary and secondary levels whereas the rich household income group benefited more at the university level (see Table 2). There exists two main ways of examining income distribution before and after public expenditure; first, the post income distribution can be arrived at by adding the absolute benefits to the corresponding incomes and re-computing the figures representing the new contribution and; second, calculating Gini coefficient. These two methods help to show whether inequality has increased or not.

F. Gini Coefficient Before and After Public Expenditure

This article was grounded to Gini coefficient which was not only used to measure inequality in Kenya but also used to measure income distribution trends. The Gini index for the three years before the government intervention under this study in Kenya were 0.3888, 0.4008 and 0.4104 calculated for 2014, 2008 and 2005 represented in that order (Table 6). This trend of Gini index, gives a clear picture to all education stakeholders and policymakers on what policies should be recommended for better service delivery in the education sector. Households' income groups showed wide-ranging contributions to the national income. The proportion of household income groups to the national income decreased due to the increase in the poorest population and over-dependence on inadequate government subsidy in basic education. The pre-expenditure in the poorest quintile was 7.50 per cent which decreased to 6.58 per cent in post-expenditure in the same quintile in 2014. The same trend was seen in 2008 in the poorest quintile whereby pre-expenditure was 6.30 per cent and post-expenditure went down to 6.03 per cent. This generally implies that the poorest household did not benefit from the government basic education financial policy in 2008 and 2014. In 2005, the trend of the poorest household was a little different from 2008 and 2014 since the poor benefit from the government policy. The pre-expenditure for the poorest quintiles was 5.40 per cent and post-expenditure was 5.67 per cent in the year 2005. This is an implication that the policy was pro-poor in general and household welfare improved as projected in the year 2005. This means that during the introduction of this free primary education program, households' welfare improved and therefore the policy at this very stage was progressive. It is worth mentioning that related patterns of the poorest household's income group were seen in the second and middle household income groups in the three years. In the fourth household income group things were different since in the three years under study, the share of contribution to the national income decreased in 2005 and 2014 an indication that inequality widened between the poor and the rich.

Table 6: Pre and Post-Expenditure Income Distribution and Gini – Coefficient

Types of Expenditure	Poorest Household	Second Household	Middle Household	Fourth Household	Richest Household	Gini Coefficient
Kenya Demographic and Health Survey – 2014						
Pre-Expenditure	7.50	9.80	11.70	20.00	51.00	0.3888
Post-Primary Expenditure	9.70	12.70	15.15	19.10	43.35	0.2948
Post-Secondary Expenditure	5.75	8.60	14.15	21.50	50.00	0.4056
Post-University Expenditure	4.30	6.55	10.35	20.10	58.70	0.4894
Post-Total Expenditure	6.58	9.28	13.22	20.24	50.68	0.3966
Kenya Demographic and Health Survey – 2008						
Pre-Expenditure	6.30	10.20	12.50	19.00	52.00	0.4008
Post-Primary Expenditure	7.35	12.20	15.40	23.15	41.90	0.3202
Post-Secondary Expenditure	7.00	8.65	10.10	21.00	53.25	0.4194
Post-University Expenditure	3.75	6.25	8.65	18.50	62.85	0.5218
Post-Total Expenditure	6.03	9.03	11.39	20.88	52.67	0.4205
Kenya Integrated Household Budget Survey - 2005						
Pre-Expenditure	5.40	9.70	13.80	19.10	52.00	0.4104
Post-Primary Expenditure	7.90	12.00	20.00	23.70	36.40	0.2748
Post-Secondary Expenditure	5.45	8.20	12.35	21.00	53.00	0.4316
Post-University Expenditure	3.65	5.85	10.50	19.55	60.45	0.5092
Post-Total Expenditure	5.67	8.68	14.28	21.42	49.95	0.3058

Source: Author's Computation

IX. Policy Recommendation

The income inequality has slightly decreased in Kenya as shown by Gini Coefficient and the government needs to promote equality for all especially people with disability and marginalized groups. The poor household comprising of the poorest and second quintiles benefited more from basic education meaning the government policy is progressive. The rich did not benefit much from primary education since most of the rich (fourth and richest quintile) households have taken their children to private and international schools. The enrolment rates are not stable across all education levels and therefore the government need to match schools enrolments with the ever increasing population. There is need to improve school basic infrastructure and employing more teaching staff as well. The government of Kenya should adopt a redistributive approach to public spending aimed at leveling opportunity for all. The government needs to review primary and secondary education funding formulae to reflect the acute disadvantages facing the poor at rural and urban slams.

X. Conclusion

This study sought to determine whether public expenditure on education is pro-poor or not. The rationale behind this question was that Kenya's colonial and post-colonial education policies were discriminatory in nature. They were intended to benefit a few elite at the expense of the masses. This contributed massively to entrenching poverty and inequalities in the society. Over the years, reforms have been conducted to reverse this trend. This means that education spending policies are critical to alleviating the root causes of poverty as well as reducing inequality. But we can only know whether this is true or not, when we analyze public expenditure on education using Benefit Incidence Analysis as conducted in this study.

While there are, several changes realized towards pro-poor public spending on education. The poor tend to benefit less when it comes to secondary and tertiary education. This remains a major disadvantage for the poor, because access to primary education alone does not give the poor a competitive advantage in an economy that is already marked by high levels of socio-economic inequality. There is more to be done to improve government public policy on education sector in Kenya. It seems that the government lacks sustainable funding mechanisms and proper policy implementation frameworks in order to provide not only quality education but also reduce inequality in the country. In overall, recurrent expenditure for all levels of education increased from KES.21,927.52 million in 2005 to KES.85,390.97 million in 2014. It seems that government of Kenya is far from reducing both illiteracy and poverty in poor household groups and regions. According to Wanja (2014), there exists uneven distribution of education opportunities between poor and non-poor regions both in urban and rural areas.

Therefore, the poor tend to have more limited access to educational opportunities especially in tertiary level. Therefore, it is the government responsibility to develop better and sustainable policies in order to improve the welfare of the poor households. The result of this study indicates that public expenditure policy was pro-poor at the primary and slightly at secondary education; generally this means the basic education policy is progressive while that of university education is purely pro-rich. This implies that basic education when funded fully will be purely pro-poor in nature and therefore, free primary and free day secondary education require sustainable and consistent funding. On other hand, university education in Kenya is pro-rich and this implies that the poor (poorest, second and middle quintiles) households benefited less from university education. Gini coefficient has improved over time although much needs to be done by the government especially much attention be given to the rural and poor households. Gini-coefficient for university level increased in the 3 years under study, for example, in 2005, university Gini coefficient increased to 0.5092 from 0.4104 while in 2008 Gini coefficient increased to 0.5218 from 0.4008. In overall, basic education programs (FPE and FDSE) in Kenya have contributed considerably in improving access, quality, equity and retention in both primary and secondary education levels. However, these programs still require additional funding in order to realize constitutional requirement of providing free and compulsory basic education.

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