Situation of Post-Primary Education in Kenya: A Review of Structure, Performance, Drivers and Challenges

By

Aloys B. Ayako
The Catholic University of Eastern Africa (CUEA)
Nairobi, Kenya

---

1 This paper is derived from a case-study report that was authored by Susan Nicolai and Annalisa Prizzon of the Overseas Development Institute (ODI), with substantial research support provided by Sébastien Hine, Okwach Abagi and the author. The case-study report was funded by the Bill & Melinda Gates Foundation as part of ‘Development Progress’, a four-year research project that aims to better understand, measure and communicate what has worked in development and why.
Table of Contents

Abstract........................................................................................................................................... 425

1 Introduction..................................................................................................................................... 425

2. Methodology ................................................................................................................................. 426

3 Situation Analysis of Post-primary Education.................................................................................. 426

3.1 Structure of Provision .................................................................................................................. 426

3.2 Performance................................................................................................................................. 427

3.3 Drivers of Performance ............................................................................................................... 429

4. Challenges..................................................................................................................................... 429

5. Conclusions .................................................................................................................................... 431

References.......................................................................................................................................... 433
Abstract
The paper attempted a comprehensive review of the situation post-secondary education in Kenya. The review included such parameters as the structure, performance, drivers and challenges of the education sub-sector. The paper was based on the mix of desk research and interviews with select key informants. Among the key findings of the paper include: i) mixed provision for post-secondary education involving, public private, and community sources; ii) Unlike many low-income countries, Kenya has achieved significant progress in its post-primary education in the last decade and half as is reflected in significant gains in almost all key indicators of education performance including gross enrolment ratio (GER), school life expectancy, and gender equity (measured both in term gender parity index and the numbers of boys and girls completing post-primary education); iii) The country’s post-primary development progress (as reflected in the expansion of education opportunities) has been attributed to a combination of four main factors: a rising demand for higher levels of education boosted by growing relevance of qualifications to enter and progress in the job market; a political commitment to education beyond only the basic levels and accompanying bold policy moves; key financing reforms which helped to shift the burden from households to government; and the active role of communities and the private sector in expanding supply of education services and iv) Although access to post-primary education has improved remarkably in Kenya over the last decade, the rise in attendance rates has emphasised some existing challenges for post-primary education, some of them creating some bottlenecks for further scale up and the sustainability of achievements made so far.

Keywords: Post-primary education, Structure, Gross Enrolment ratio, Gender Parity, Universal Primary Education, Free Day Secondary Education, Higher Education, Module II, Non-state-actors, TVET

I Introduction

Enabling access to relevant and high-quality post-primary schooling and training is increasingly a national and international priority. While some progress toward Universal Primary Education (UPE) has been achieved, in comparison, post-primary education has been a neglected area in the Millennium Development Goals (MDG) debate. A number of proposals for post-2015 are including a proposed goal or target on this. For instance, the Commonwealth Ministers of Education highlighted post-primary as one of three main priorities in their proposed goals, calling for, “Post-basic education [to be] expanded strategically to meet needs for knowledge and skills related to employment and livelihoods”.

In most countries, the World Bank (2005, pg. xviii) argues, inadequate secondary education “is a major barrier to human development, economic growth, and poverty reduction. ... [and] a bottleneck for the expansion of educational attainment.” This level of education is aimed at equipping young people with “advanced knowledge, skills and competencies enabling them to succeed in the world of work, provide security to their families, participate effectively in social and economic development, live a healthy life and become critical and proactive citizens” (NORRAG, 2008).

---

2 By post-primary education we are referring to the range of levels of education encompassing lower and upper secondary education, Technical and Vocational Education (TVE), and higher university education and skills training (Munavu et al. 2008).
Furthermore, developing skills at post-primary level has an instrumental utility in a context characterized by increasing international competitiveness, rapid changing skills demands and more complex job prospects. Skills development is central to enable youths to move out of poverty (AFDB et al. 2012).

Unlike many low-income countries, Kenya has achieved significant progress in its post-primary education in the last decade and half. The progress in the level of the country’s education system is reflected in significant gains in almost all key indicators of education performance including gross enrolment ratio (GER), school life expectancy, and gender equity (measured both in term gender parity index and the numbers of boys and girls completing post-primary education). However, the key drivers of this progress have not been systematically analysed and documented. There is also a need to systematically analyze and document key challenges to extending and sustaining the progress hitherto attained in the country’s post-primary education. Hence, this paper seeks to provide an extensive review of the progress of the country’s post-primary education focusing on its structure, trends, key drivers and challenges.

The remainder of this paper is divided into five sections. The methodology for the paper is presented in section two. In section three, we provide a situation analysis of the post-primary education sector, specifically highlighting its current structure and progress. In section four, we highlight the key challenges of sustained funding to the sector. In section five we highlight key challenges of extending and sustaining progress.

2. Methodology

The desk research entailed review of relevant policy documents, grey literature and peer-reviewed articles. Data on education outputs and financing was analysed from cross-country comparable sources (UNESCO Institute for Statistics and World Bank World Development Indicators). The field research, on the other hand, entailed a two-week interviews with selected key informants – both by reputational and snowball sampling – in the education sector and education financing. Semi-structured interviews were held with approximately 40 stakeholders including senior government officials (MoE, MoHEST, Ministry of Youth and Sport, Ministry of Labour, Ministry of Planning, National Development and Vision 2030, Ministry of Finance), development partners, NGOs and CSOs, academia, education policy experts, head teachers/principals and students. At the end of the interviews, preliminary findings emerging from the desk-based review and interviews were discussed at a half-day workshop to solicit further primary data.

3  Situation Analysis of Post-primary Education

3.1 Structure of Provision

Table 1 indicates that in 2005/06, private schools accounted for a significant portion of student attendance: 17.4% at secondary, 21.2% at university, and more than half of those in training. On the
other hand, community schools account for a very small amount, 1% for secondary and 4.1% for those in training.  

Table 1: Percentage distribution of Population (6+ years) by type of school and level attending

<table>
<thead>
<tr>
<th>Schooling Level</th>
<th>Government</th>
<th>Private</th>
<th>Community</th>
<th>Other</th>
<th>Not Stated</th>
<th>Total Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre School</td>
<td>67.2</td>
<td>26.1</td>
<td>6.3</td>
<td>0.4</td>
<td>816,049</td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>90.3</td>
<td>9.3</td>
<td>0.2</td>
<td>0.1</td>
<td>8,829,291</td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>81.1</td>
<td>17.4</td>
<td>1.0</td>
<td>0.5</td>
<td>1,461,816</td>
<td></td>
</tr>
<tr>
<td>University</td>
<td>78.5</td>
<td>21.2</td>
<td></td>
<td>0.3</td>
<td>119,636</td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>38.3</td>
<td>56.8</td>
<td>4.1</td>
<td>0.7</td>
<td>295,892</td>
<td></td>
</tr>
<tr>
<td>Not Stated</td>
<td>72.9</td>
<td>22.0</td>
<td></td>
<td>5.1</td>
<td>129,819</td>
<td></td>
</tr>
</tbody>
</table>


While non-state actors may have been the driving force behind establishing a large number of secondary schools, they have often since been integrated into the government system. Community schools and at times even private secondary schools have been absorbed into the state system as district schools, with government salaried teachers and budgets.

3.2 Performance

Though Kenya has achieved comparatively higher progress in its post-primary education in the last decade and half than many low-income countries, the progress achieved however varies across the secondary, TVET and higher education levels.

The secondary enrolment rates increased by 50% in 10 years – the secondary gross enrolment ratio (GER) grew from 40% in early 2000s up to 60% in 2009: the sub-Saharan Africa and low-income countries average are around 40%. Access to higher education has increased as well, quadrupling in 10 years from 1% in the early 2000s to 4% in 2010, though still well below the sub-Saharan average at 7%. It has experienced a significant rise in school life expectancy – from 8.4 years in 2000 to 11 years in 2009. Moreover, Kenya scored in the top 15 of performers globally on this indicator, and a leader in its region. The progress in school life expectancy is built off of a rapid expansion in the transition rate from primary to secondary level: from 46.4% in 2002 to 72.0% in 2009, and more recent estimates show this figure to be up to ¾ of primary school leavers in 2012 (MoE, 2012a).

Improvement in gender equality is particularly visible since the early 1970s: starting from a low gender parity index (0.450) in 1970 for secondary education, gender parity in enrolment rates had already been achieved (more or less close to one) by the mid-1990s. In 2010 158,000 girls compared to 196,000 boys completed the Certificate of Secondary Education (KCSE). Furthermore, the results from the 2010 KCSE show that boys outperform girls as well. The percentage of boys achieving top grades (A or B) is 21% compared to 15% for girls. For the lowest grades (D or E) the rates are 43% for boys and 49% for girls.

3 It is unclear to what extent the table includes the more recent growth in low-fee private schooling, typically at primary level. Because of a lack of supply and perceived poor quality in the public system, the poor have resorted to paying not insubstantial fees to enrol children in unregulated private schools (Oketch et al. 2010).

4 On the basis of World Bank (2012) data.
While enrolment at both secondary and higher education has significantly expanded over time – both in absolute and relative terms - the TVET sector shows a less clear-cut picture. Increasing throughout the 1970s and 1980s, enrolment dropped off in the sector during the 1990s. According to UIS data, the number of students increased rapidly during the past decade, exceeding the numbers achieved during the 1980s. However, the percentage of TVET enrolment as a share of total enrolment has declined consistently (from over 3% to less than 1%, this share is as high as 10-20% in some countries in Africa). According to the MDG Progress Report (GoK & UNDP, 2010) there were 70,516 students enrolled in TVET in 2007 – an almost 20,000 increase to five years earlier (and also significantly more than is suggested by UIS). According to 2008 UIS data, approximately 32% of students in upper secondary TVET are in private institutions.

Access to the higher education has increased as well, albeit not quite to the regional SSA average of 7%. The GER at tertiary level quadrupled in 10 years: it was 4% in 2010 starting from 1% in early 2000s. The number of students enrolling in higher education rose from 112,229 in 2006/07 up to 180,978 in 2010/11 (KNBS, 2011); 20% of university students were enrolled in private institutions in 2010/11 (KNBS, 2011). In recent years, the number of universities proliferated, especially between 2012 and early 2013 when polytechnics were converted into universities. In 2014, the public higher education system in Kenya counted 22 public universities (15 of them established between 2012 and 2013) and 9 Public University Constituent Colleges in 2011. It also included 17 Chartered Private Universities (10 out of 17 established after 2006) and 11 Universities with Letter of Interim Authority (LIA), with the latter not being authorized to grant their own diploma/degrees (Commission for University Education, 2013). Despite the growth in the number of private institutions at higher education level, private institutions enrolled only a fraction of total students (16% in 2012/13).

All public universities now have a parallel track system in place. Students attend classes in the evening and over the week-end with structures being at full capacity (Ngolovoi, 2008). For instance, in 2004/05, the number of Module II students at the University of Nairobi was higher than the number of regular students (Otieno, 2011). Selection criteria are on the basis of secondary schools results and they are less strict than the standard curriculum: minimum entrance requirement for KCSE examination is a C+ grade (regular students are generally admitted if they score at least B+). The introduction of private entry schemes has allowed public universities to expand enrolment while generating own funds to supplement diminishing state support (Otieno, 2011). For example, a Computer Science student would pay 120 000 KES per year if he/she were a regular student; twice as much for dual track student/year (KES 240 000) (Otieno, 2011).

The parallel system caters for a different target than regular students. Students enrolled in the parallel systems are generally employed, with a large share valuing the flexibility not only of attending classes in the evenings and over the week-end – making attendance compatible with a full-time job dropping opportunity costs of higher education – but also to complete the curriculum in a shorter time than regular students (Colclough & Webb, 2010; Ngolovoi, 2008).

---

5 Access to university enrolment has also expanded over the past decades. In 1970, fewer than 8,000 students were enrolled in university. This increased almost four-fold by 1989 (to 31,000).

6 According to Oketch (2004) there were 1 private and 1 state universities in 1970/75; 8 private and 5 public universities in 1990/95; 15 private and 6 public universities in 2000/08.
3.3 Drivers of Performance

The country’s post-primary development progress (as reflected in the expansion of education opportunities) has been attributed to a combination of four main factors: a rising demand for higher levels of education boosted by growing relevance of qualifications to enter and progress in the job market; a political commitment to education beyond only the basic levels and accompanying bold policy moves; key financing reforms which helped to shift the burden from households to government; and the active role of communities and the private sector in expanding supply of education services. The improvements that have occurred in gender equity have been driven through both ‘bottom-up’ and ‘top-down’ pressures. ‘Bottom-up’ pressures through women’s rights groups who mobilized on a wide range of topics helped move forward the gender equity agenda at the policy level. This has been in conjunction with efforts through government ministries and global institutions to achieve gender equity throughout schooling (Unterhalter, 2012).

4. Challenges

Although access to post-primary education has improved remarkably in Kenya over the last decade, the rise in attendance rates has emphasised some existing challenges for post-primary education, some of them creating some bottlenecks for further scale up and the sustainability of achievements made so far. Some of the main challenges in improving post-primary education in Kenya include:

- Dealing with entrenched inequality across the system, particularly within the secondary level;
- Significant concerns regarding the quality of education;
- Extensive youth unemployment, reinforced through a disconnect between the education system and labour market;
- Financial constraints and sustainability issues, particularly in regards to teachers and infrastructure.

Equitable access remains a key challenge for the education system. Although progress has been made in raising access for all groups, inequalities still exist between groups and appear in fact to have been increasing in recent years. Regionally Nairobi leads in education performance and the arid and semi-arid lands (ASALS) consistently achieve far behind the other provinces (Watkins & Alemayehu, 2012). Inequalities have meant than gains made through FPE and FDSE have been most beneficial to already advantaged groups, such as boys, the wealthy, and those in urban areas, while disadvantaged groups have made smaller gains. At the secondary level the most recent gross attendance ratios (2008/09) range from as high as 93% in Nairobi to only 21% in the North Eastern province, and from 75% to 19% for the richest and poorest quintiles respectively. The most disadvantaged are those that fall within more than marginalised group, for example girls in rural areas and poorer families. Although FDSE has contributed to greater numbers of students accessing secondary education across the board it is has done little to reverse trends in already entrenched inequalities.

Financing of education, in general, and post-primary education, in particular, faces myriad challenges including inadequacy and sustainability of funding for the sub-sector at both public and private/community levels. Consequently, the government may not achieve a 100% transition rate from primary to secondary education in the near future and to guarantee provision for all of full and free basic education (which includes secondary education in Kenya) in line with becoming a right
under the 2010 Constitution as stated in Sessional Paper No.14 (MoE and MoHEST, 2012). The funding to the sub-sector during 2010/2011 and 2011/2012 was not matched to the expansion in demand for secondary education. Specifically, the funding was inadequate to achieve one of the flagship projects of the Vision 2030 strategy including the construction and equipping of 560 secondary schools as well as expanding and rehabilitating facilities together with the transformation of 355 centres of excellence. The funding also seems inadequate to address the existing personnel shortages at various levels of the sub-sector. In the Medium-term plan (2008-12) the government envisaged to employ 28,000 additional teachers but this was not realized due to shortages of funds. Instead, in 2008, the government hired contract-teachers to partially cover the shortfall.

Demographic pressure from new cohorts together with the policy target of universal provision of basic education (which includes secondary education) and 10% gross enrolment ratio in tertiary education will put the national budget under stress. While there is some margin to improve efficiency both in terms of infrastructure and teachers’ utilisation, Kenya’s tax ratio (tax revenue as a share of GDP) is close to 20% and it is already as twice as much the low-income and lower-middle income average: there may be limited scope to further improve tax collection. Without considering any revisions in the capitation grant to secondary education and excluding further infrastructure development and teachers’ hiring, a constant unit cost at secondary level of 40,699 Kshs (2009/10 figures), assuming 100,000 new intake on average in the next years, this conservative scenario would still imply additional financial requirements of approximately 4 billion Kshs, 3% of total education budget each year.

Quality at all levels of Kenya’s education system is a major challenge, and is intricately linked to both equity and labour market issues. Although information on education quality for secondary and tertiary is much more limited, the founding quality at the primary level is reflective of the challenge at higher levels of education. In primary education, there are already significant learning shortfalls which affect students’ starting points in secondary education. The percentage of students achieving the basics of learning to read in primary school has been falling with widening inequalities, implying that a greater number of children who are less prepared for school are enrolled. This is further reflected by the KCSE results showing that about three quarters of the students do not achieve the minimum grade for entry into university, C+.

With demand on the rise, the quality of higher education is also increasingly a concern. Gudo, Olel and Oanda (2011) highlight the need for increased investment in infrastructure, teaching and research resources, better use of ICT and increased collaboration between public and private universities. The quality of TVET is also identified as a problem with issues including inadequate relevance, a weak curriculum and a lack of meaningful work experience and supervision for students a mismatch between learned and demanded skills, inadequate quality assurance mechanisms and inadequate facilities and equipment (Nyere, 2009 & UNDP Kenya, 2010).

According to most accounts, the quality of education in TVET is weak, with various authors pointing to its inadequate relevance, a weak curriculum and a lack of meaningful work experience and supervision for students (Nyere, 2009). This is also recognised by the MoEST in the design of the Kenya Education Sector Support Programme: “In spite of the enormous gains made in the
development of TVET over the last 40 years, the growth of this sub-sector has been rather haphazard and uncoordinated due to lack of a unified policy and legal provisions” (MOEST 2005, pg. 231). This includes problems due to an inflexible curriculum, a mismatch between learned and demanded skills, inadequate quality assurance mechanisms and inadequate facilities and equipment. The tertiary education system also suffers from quality constraints, particularly due to the “inadequate capacity to cater for the growing demand for university places” (UNDP, 2010).

Unemployment is a problem which hits youth hardest and places Kenya at risk of squandering its demographic dividend in the form of a particularly large working-age population over the coming decades. Despite this clearly being an issue, there is a stark lack of data on unemployment rates in Kenya, especially for youth. According to the UNDP (2013) youth unemployment is highest for those who are 20 years old at 35%, and 80% of Kenya’s 2.3 million unemployed are between the ages of 15 and 30, as based on the Kenya Integrated Household Budget Survey of 2005/06. For 15 to 25 year olds the unemployment rate is 10 percentage points higher for women than for men, and the bulk of those unemployed are those with primary and secondary education in part due to unwillingness to work in informal sectors or devote their time to home-making (UNDP, 2013). They also find that 92% of the unemployed youth have no vocational or professional skills training.

A second, more recent source is the Afrobarometer whose 2011 survey, based on a sample of 2,399 people, finds that 45% of people between the ages of 15 and 29 are not in work and looking for it, the corresponding figure for those aged 30 to 49 is 26%. Only 19% of 15-29 year olds are employed full time.

The AfDB et al. (2012) argue that in the short to medium term Kenya will continue to experience “rampant youth unemployment” (AfDB et al, 2012). This unemployment is not spread evenly among youth. Minimal involvement of young people in gainful employment and economic participation as well as their exclusion from decision-making poses a threat to the stability of the country. According to UNDP (2009), causes of youth unemployment include slow or declining growth of the economy, rapid population growth, poor dissemination of labour market information, skills mismatch, structural reforms, and high costs of labour. This is driving both rural-to-urban migration and among better educated youths, emigration abroad.

5. Conclusions

In Kenya, more and more pupils and students have been able to go to school beyond basic levels since the 2000s, particularly into secondary education. Improvement has been strong: in 2000 a pupil was – on average – expected to complete primary education; by 2009 he/she would have able to attain the full cycle of lower secondary education. Against this indicator, known as school life expectancy, i.e. the number of years a pupil is expected, on average, to stay in school at his/her first year, Kenya has outpaced the rest of Sub-Saharan Africa and the country has also closed the gap with Uganda, one of the top performers in SSA and a regional neighbour which implemented school fee abolition in lower secondary school in 2007 (UNESCO, 2013), a year earlier than Kenya. Kenya also scored in the top 15 of performers globally in terms of improvements in primary to secondary life expectancy. More years behind the school desks and a smaller share of pupils out of school reflected a series of underlying trends including: more pupils enrolled in primary school over the last decade; more pupils completed primary school. More pupils continued into secondary
education; and more students attended university. It is noteworthy that these outcomes were achieved while keeping a gender balance, at least as evidenced through the gender parity index.

Four factors, some of them closely interconnected, have been identified as key drivers/propeller the expansion in enrolment rates in both secondary and higher education in Kenya: increasing call for higher levels of education boosted by growing relevance of qualifications to enter and progress in the job market; strong political commitment to education, including beyond only the basic levels, which involved several bold policy moves; significant domestic and international budgets targeted at education, with elements of these supporting post-primary levels; and finally, the expansion of provision of education services at the secondary and more recently tertiary level by communities, faith-based organisations and the private sector have played a long-standing role in provision of education.

Although access to post-primary education has improved remarkably in Kenya over the last decade, the rise in attendance rates has emphasised some existing challenges for post-primary education, some of them creating some bottlenecks for further scale up and the sustainability of achievements made so far. Some of the main challenges in improving post-primary education in Kenya include:

- Dealing with entrenched inequality across the system, particularly within the secondary level;
- Significant concerns regarding the quality of education;
- Extensive youth unemployment, reinforced through a disconnect between the education system and labour market;
- Financial constraints and sustainability issues, particularly in regards to teachers and infrastructure

Financing of education, in general, and post-primary education, in particular, faces myriad challenges including inadequacy and sustainability of funding for the sub-sector at both public and private/community levels. Consequently, the government may not achieve a 100% transition rate from primary to secondary education in the near future and to guarantee provision for all of full and free basic education (which includes secondary education in Kenya) in line with becoming a right under the 2010 Constitution as stated in Sessional Paper No.14 (MoE and MoHEST, 2012). The funding to the sub-sector during 2010/2011 and 2011/2012 was not matched to the expansion in demand for secondary education. Specifically, the funding was inadequate to achieve one of the flagship projects of the Vision 2030 strategy including the construction and equipping of 560 secondary schools as well as expanding and rehabilitating facilities together with the transformation of 355 centres of excellence. The funding also seems inadequate to address the existing personnel shortages at various levels of the sub-sector. In the Medium-term plan (2008-12) the government envisaged to employ 28,000 additional teachers but this was not realized due to shortages of funds. Instead, in 2008, the government hired contract-teachers to partially cover the shortfall.

Demographic pressure from new cohorts together with the policy target of universal provision of basic education (which includes secondary education) and 10% gross enrolment ratio in tertiary education will put the national budget under stress. While there is some margin to improve efficiency both in terms of infrastructure and teachers’ utilisation, Kenya’s tax ratio (tax revenue as a share of GDP) is close to 20% and it is already as twice as much the low-income and lower-middle income average: there may be limited scope to further improve tax collection. Without considering any revisions in the capitation grant to secondary education and excluding further
infrastructure development and teachers’ hiring, a constant unit cost at secondary level of 40,699 Kshs (2009/10 figures), assuming 100,000 new intake on average in the next years, this conservative scenario would still imply additional financial requirements of approximately 4 billion Kshs, 3% of total education budget each year.

Finally, public universities have already suffered from re-prioritization of public finance towards basic education. The introduction of a privately-financed parallel system within public universities (Module II) was one of the answers to address financial sustainability in higher education. While HELB loans have been extended also to students enrolled in private institutions, their financial viability strongly hinges upon loan repayment rates, given its nature of a revolving fund, repayment of HELB loans conditioned upon lender being employed.

While the implementation of the FDSE programme has reduced financial barriers for households of those students attending day schools, we have stressed that attending secondary school is far from being free. We have outlined in Section 3.2 that government guidelines for boarding costs and other fees not included in the capitation grant cannot exceed roughly annual 29,000 Kshs, which is nearly three times the current capitation grant. These costs make attendance of boarding schools unaffordable for those students coming from the poorest and most vulnerable background. And these costs do not reflect the rise in inflation which hit food prices in particular. It is worth noting that the full annual costs of secondary education correspond to 14% of the GDP per capita ($117 total costs see section 3.2 divided by $862 per capita income as measured in 2012) and that the total costs for boarding schools within the guidelines is 38% of GDP per capita ($330 total fees / $862).

References
Presented to the University Leaders Forum on Developing and Retaining the Next Generation Academics,


Education Policy and Data Center (2012) Kenya SACMEQ Profile, Washington D.C.


