

Case Study Report

Education



Overseas Development Institute

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Acknowledgements

This case study report 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 Aloys Blasie Ayako were local consul'tants, based in Kenya, with responsibilities for background research, engaging in interviews, and contributing and commenting on drafts. Jakob Engel of ODI provided early inputs for certain

The authors would like to acknowledge, with gratitude, the detailed comments on drafts from external peer reviewers: Nicholas Burnett (Results for Development Institute) and Pauline Rose (University of Cambridge). Extensive comments were also provided by ODI colleagues: Amanda Lenhardt and Katy Harris.

Aaron Griffiths provided editing support, with Chris Little handling layout and production. The authors would also like to thank the over 45 interviewees, 4 focus groups with teachers and students, and 12 workshop participants who gave their time and expertise to inform this study.

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. Its findings and conclusions are those of the authors and do not necessarily reflect the positions or policies of the Bill & Melinda Gates Foundation.

Abbreviations and acronyms

AfDB	African Development Bank	MoEST	Ministry of Education, Science and Technology
ASALs	Arid and semi-arid lands	MoHEST	Ministry of Higher Education, Science and
BMZ	Germany Federal Ministry for Economic		Technology
	Cooperation and Development	MP	Member of Parliament
CB0s	Community based organisations	NER	Net enrolment rate
CDF	Constituency Development Fund	NESSP	National Education Sector Support Programme
CIDA	Canadian International Development Agency	NGO	Non-governmental organisation
CS0	Civil society organisation	NORRAG	Network for International Policies and
DFID	Department for International Development		Cooperation in Education and Training
	(United Kingdom)	ODI	Overseas Development Institute
ECD	Early childhood development	OECD	Organisation for Economic Co-operation and
EFA	Education for All		Development
FDSE	Free day secondary education	PTR	Pupil-teacher ratio
FPE	Free primary education	SACMEQ	Southern and Eastern Africa Consortium for
GDP	Gross domestic product	CLE	Monitoring Educational Quality
GER	Gross enrolment ratio	SLE	School life expectancy
HDI	Human Development Index	SSA	Sub-Saharan Africa
HELB	Higher Education Loan Board	SWAp	Sector wide approach
ICT	Information and communications technology	TVET	Technical and vocational education and training
KESSP	Kenya Education Sector Support Programme	UIS	United Nations Educational, Scientific and Cultural Organization Institute for Statistics
KCPE	Kenya Certificate of Primary Education	UNDESA	United Nations Department of Economic and
KCSE	Kenya Certificate of Secondary Education	UNDESA	Social Affairs
KNBS	Kenya National Bureau of Statistics	UNDP	United Nations Development Programme
LATF	Local Authority Transfer Fund	UNESCO	United Nations Educational, Scientific and
LICs:	Low-income countries		Cultural Organization
MDG	Millennium Development Goals	UPE	Universal primary education
MoE	Ministry of Education	USAID	United States Agency for International Development

Abstract

This study describes the remarkable progress in education access at the post-primary level in Kenya in the last decade and the driving factors behind it. School life expectancy in Kenya increased by a third in the last decade, from 8.4 years in 2000 to 11 years in 2009 - outpacing most other African countries. This figure captures improvements in the transition rate from primary to secondary level, a jump in completion rates at secondary level and quadrupled enrolment to tertiary education (from a very low base). Gender equity is another area of long-term progress in post-primary education in Kenya.

Four key factors drove the expansion of both secondary and tertiary education in Kenya. Firstly, there was an increasing call for higher levels of education by communities, boosted by a growing demand by private employers for post-primary educational qualifications, Secondly, a strong political commitment to education emerged (including a commitment to education beyond basic levels), which involved several bold policy moves that were essentially game changers for the system. Thirdly, significant domestic and international resources were targeted at education, with largely domestic funds supporting post-primary levels. Fourthly, communities and the private sector have played a long-standing role in establishing provision of secondary education and more recently tertiary level education.

As primary school enrolment continues to grow worldwide, Kenya's story of expansion of secondary and tertiary education is at the forefront of a trajectory many other developing countries will be experiencing in coming years. While the Kenyan education system faces several fundamental challenges, including broad inequalities, poor quality, fragile school-to-work transitions and financial sustainability, its progress in post-primary education may offer lessons for other countries needing to improve secondary and tertiary opportunities.

1. Introduction



Enabling access to relevant and high-quality post-primary schooling and training is increasingly a national and international priority. While considerable progress toward Universal Primary Education (UPE) has been achieved, post-primary education¹ has been a comparatively neglected area in the Millennium Development Goals (MDGs) debate until quite recently. A number of proposals for post-2015 have suggested targets in this area, with the recent Global Education for All meeting and its Muscat Agreement, calling for 'knowledge and skills for decent work and life through technical and vocational, upper secondary and tertiary education and training, with particular attention to gender equality and the most marginalized' (UNESCO, 2014a).

In most countries, the World Bank 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' (2005: xviii). Post-primary levels of education are 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). Developing skills at post-primary level has an instrumental utility in a context characterised by increasing competitiveness and more complex job prospects. Skills development is central to enable young people to move out of poverty (AFDB et al., 2012).

Kenya represents an important example of progress in increasing access at these higher levels of education. It has experienced a significant rise in school life expectancy – from 8.4 years in 2000 to 11 years in 2009. Its primary school net enrolment rate has risen from 62% in 2002 to 95.7% in 2011. Moreover, secondary enrolment rates increased by 50% in 10 years. The secondary gross enrolment ratio (GER) grew from 40% in the early 2000s to 60% in 2009 whereas the sub-Saharan Africa and low-income country averages are both around 40%. This progress is built on a rapid expansion in the transition rate

1 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).

from primary to secondary level: from 46.4% in 2002 to 72% in 2009, with more recent estimates showing this proportion reached 74% in 2012 (MoE, 2012a).

Access to higher education has increased as well, with the number of students enrolling in public universities more than doubled increasing from 97,000 in 2007/08 to 201,000 in 2012/13. However, the higher education enrolment rate, starting from 2.75% in the early 2000s to 4% in 2010, is still well below the sub-Saharan average of 7%.

Finally, gender equality has been strong, with gender parity in enrolment rates achieved by the mid-1990s.

Kenya is not only a positive story of progress in the education sector but also an example of recovery from falling enrolment rates in the 1990s, following fiscal retrenchment and the introduction of cost-sharing policies between government and households for education financing.

Identifying factors that have contributed to these significant gains can help other countries understand the drivers of progress in expanding beyond basic education. Kenya also provides compelling material for discussing the implications of what government commitment and strong leadership can achieve in fostering this level of education – and where they sometimes fail.

This case study explores Kenya's improvements in postprimary education since 2000 and aims to address three broad sets of key issues:

- the nature of expanding access in post-primary education
- the factors driving these gains and remaining challenges
- potential lessons for other countries.

The study finds that the combination of four main factors came together to expand post-primary education opportunities in Kenya: a rising public demand for higher levels of education; political commitment to education and accompanying bold policy moves; key financing reforms, which helped to shift the burden from households to government at all levels; and the active role of communities and the private sector in expanding the supply of post-primary education services.

Despite the above gains, significant challenges remain. These include the need to address inequalities across regional and ethnic groups, particularly within the poorest parts of the country; to realise improvements in education quality at all levels; to strengthen school-to-work transitions; and to ensure financial sustainability.

1.1 Young, urbanising and diverse

The story of an expanding post-primary education sector is set in the context of a young, urbanising and diverse

Box 1: Varying attention on post-primary education

In the 1960s and 1970s, many developing countries focused strongly on secondary and tertiary education. Ensuring a pool of the well-educated elite was available for government and business was a priority - particularly for newly independent African and Asian countries. This focus later shifted as UPE was increasingly emphasised by the education MDGs.

There are several reasons post-primary education is again rising up the national and international agenda. Gains in achievement of the UPE and gender equity MDGs have led to pressure to expand education to higher levels. Low-income countries are seeing rapidly growing primary completion rates, and middle-income countries are increasingly focused on improving quality and relevance while ensuring retention. These gains, in fact, may be a positive function of progress in secondary education, by generating the incentive to complete primary education, by creating the required pool of teachers and by reducing gender discrimination (Lewin, 2011).

With a post-2015 framework potentially including targets on employment and livelihoods, there is an important role to play for post-primary education in contributing to these aims. In addition, as Internet access and broader globalisation introduce changes to societies around the world, incentives to access higher levels and new approaches to learning increase.

country – and one that has experienced significant political challenges and reforms over the years. Despite being one of the larger and more advanced economies in central and eastern Africa, Kenya remains a low-income country. Half of Kenyans live in absolute poverty, and the country's HDI rating is 145th out of 187 countries (UNDP, 2013a).

The country is in the middle of a demographic transition (World Bank, 2012), with the population growing at a slower pace than at the time of independence, mortality rates that are falling rapidly and declining birth rates.² With an estimated population growth of 1 million inhabitants per year (Fengler and Crespo Cuaresma, 2012), there will be burgeoning demand on education services. The population completing secondary education grew from 4 million in 2000 to 7 million in 2012, with indications that this figure is expected to triple by 2035 (Fengler and Crespo Cuaresma, 2012). Moreover, the share of the working age population (15-64 years) has expanded as a result of gradually falling fertility rates (from 5 births per woman in 2000 to 4.7 in 2011) and rising life expectancy at birth (from 52 years in 2000 to 57 in 2011). While the country's economic development can benefit from a

² Kenya's population stands at approximately 41 million (World Bank, WDI, 2012); its annual growth rate has been stable over the last 15 years (between 2.5% and 2.7%) and compares with average growth rates for LICs (2.1%) and for SSA countries (2.5%). UN forecasts a population of 66 million by 2030 and just under 100 million by 2050.

'demographic dividend' (Bloom et al., 2007) and declining dependency ratios, increased working age populations also means additional stress on the transition from school to work and on youth employment.

The population is also urbanising at a rapid rate (4.2% annually) - one quarter is currently living in urban areas, compared to 7% at the time of independence in 1963. The combined forces of population growth and urbanisation put additional demands on both the education system and on labour markets. Nairobi is the capital and largest city, with an official population of just over 3 million. Due to rapid urbanisation and population growth Nairobi is expected to reach over 5 million people by 2025.

Kenya is also a diverse country, with a multitude of ethnic groups present, the largest being the Kikuyu/Meru, followed by the Luhya, Kalenjin, Luo and Kamba.3 About 83% of Kenyans are Christian; with around half of those being Protestant, while 11.2% are Muslim and 1.7% hold indigenous beliefs. The country is divided into 47 counties⁴ with varied economic performance. Large areas have been suffering from ongoing food insecurity, with the arid and semi-arid lands (ASALs) in the north east particularly lagging behind in human development indicators compared • to the country average (Watkins and Alemayehu, 2012). The population in the north-east counties is mainly pastoral and nomadic with distinctive needs and challenges for education services (Birch et al., 2010). Ethnic tensions were at the heart of violence after the 2007 presidential election, won by the incumbent Mwai Kibaki, and the political settlement remains fragile. Moreover, Kenya is currently host to some of the largest refugee camps in the world, Dadaab and Kakuma, with a combined population of over 600,000 residents largely hailing from Somalia and South Sudan. However, the camps contain only one-third of the refugees in Kenya, with many others having settled in urban areas.

1.2 About this case study report

As part of ODI's *Development Progress* project, a number of case studies on education progress have been carried out. During a first phase, between 2009 and 2011, these studies were largely focused on increasing enrolment at primary level, and looked at the experience of Benin, Cambodia and Ethiopia. Now, in a second phase, we have turned to exploring issues many developing countries still struggle with, and which are at the forefront of likely post-2015 goals: quality and post-primary education. We've chosen to review progress in education quality in

Chile and Indonesia, and this case study on post-primary education in Kenya sits alongside a similar case study on Mongolia. The selected country case studies provide examples to better understand key factors that have led to improvements in the identified areas of education.

The case of Kenya was chosen after an analysis of education indicators, particularly those related to post-primary education, which considered a range of countries in terms of their absolute and relative progress, as well as deviation from fit. Consultation with a number of experts and a review of related literature also contributed to its selection. In addition to Kenya's relatively strong performance on secondary enrolment and school life expectancy – both of which are discussed in the next section – its selection was also motivated by an interest in exploring the role of some of the following aspects:

- school fee abolition and its impact across the education system
- substantial experimentation with private provision of secondary education
- a large rural/remote population including a large number of individuals living in pastoral communities
- the interaction between the post-primary education and training system and school-to-work transitions in an agrarian economy gradually undergoing structural changes.

While we review the evolution of the education system in Kenya from a historical perspective, our analysis of plausible drivers of education output concentrates on what happened in the last decade, which has seen the strongest growth in enrolment. Moreover, while we were keen to review progress across the full scope of post-primary education, our focus has centred on secondary education, as there has been more mixed progress in both the technical and vocational education and training (TVET) and higher education sectors.

The research team first conducted a desk 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). In February 2013, ODI researchers, working with local consultants, conducted a two-week country visit and interviewed selected key informants – both by reputational and snowball sampling. Semi-structured interviews were held with approximately 40 stakeholders including senior government officials, development partners, NGOs and CSOs, academia, education policy experts, head teachers/principals and students. At the end of

the ODI country visit, preliminary findings emerging from the desk-based review and interviews were discussed at a half-day workshop hosted in Nairobi.

Following this introduction, Section 2 of this report illustrates main changes in the education system over the last ten years, describes the extent to which post-primary education opportunities have expanded, and reviews the main elements of the economic and social context influencing both demand and supply of education services. Section 3 moves into the analysis of the four key factors

we identified as driving the expansion of opportunities at post-primary level: the rise in demand for education at post-primary level, political will and commitment, progress in financing, and the expansion of service provision by non-state actors. In Section 4 we discuss critical areas that have not seen much progress: inclusiveness, education quality, school-to-work transition and youth employment and financial sustainability. Section 5 concludes with policy lessons for other countries aiming to expand access to post-primary education in their long-term national strategy.

³ Kikuyu (22%) are the largest group, followed by the Luhya (14%), the Luo (13%), the Kalenjin (12%), and the Kamba (11%).

⁴ Before the current Constitution (2010), Kenya was divided into eight provinces: Nairobi, Central, Coast, Eastern, Nyanza, North Eastern, Rift Valley, and Western provinces. With the promulgation of the current constitution in 2010, the country now follows a devolved political system, with a national government and 47 County governments.

⁵ From the Ministry of Education, Ministry of Higher Education, Science and Technology, Ministry of Youth and Sport, Ministry of Labour, Ministry of Planning, National Development and Vision 2030, and Ministry of Finance.

2. What progress has been achieved?



This section looks at several interrelated aspects of Kenya's progress in improving post-primary education:

- the establishment and growth of the education system as a whole and at the various levels of post-primary education
- the evolution in access to post-primary education, showing gains in areas such as school life expectancy and enrolment ratios
- gains in equity in terms of income and gender, alongside broader entrenched regional inequalities
- key related aspects of the country's broader economic and social development context.

2.1 Foundations of the Kenyan education system

The Kenyan education system, like the country itself, has seen major evolution over the past decades. There were only 50 secondary schools when the country became independent in 1963. Before this, education was mostly provided by missionaries with the help of the colonial government. Sparse education for the indigenous population mostly consisted of local initiatives by communities in creating *Harambee* schools (a Kiswahili word which stands for 'pull it together') or by church groups and other NGOs. These groups were the main providers of primary and secondary education for the local population at the time of independence in 1963.

'There has been a deliberate focus on access, which is now compulsory in the constitution. Students in day primary and secondary schools hardly pay anything' - Head teacher

Kenya

Increase in school life expectancy

More years in school means more children in secondary education



AVERAGE YEARS SPENT IN SCHOOL						
	Primary education* Secon	dary education Tertiary education				
200 Kenya						
200	9 🛊 🛉 🛊 🛉 🛊 🕴					
Sub- Saharan 200						
Africa 200	9					

*UNESCO defines primary education as 6 years, while Kenya recognises 8 years **Sources:** UNESCO Institute for Statistics (UIS).

"Infogr8

Between independence and the 1990s, there was significant evolution across all levels of the education system.

The first Kenyan President, Jomo Kenyatta (1964-1978), introduced free primary education. The fees for the first four years of primary education were waived in 1974, with an additional three years becoming free later that decade, although these measures were retracted in the 1990s. Most secondary schools continued to be *Harambee* schools, which were built, funded, and run by local communities. The role of communities filled a gap that existed at secondary level as government funding concentrated on provision at primary level.

Education continued to expand in the 1980s, and Kenya was hailed as one of the best performers at the 1990 Jomtien Education For All conference. In the following decade, however, Kenya experienced falling enrolment rates at all levels, spurred on by cost-sharing policies which reintroduced fees put in place through World Bank conditions and the government's fiscal retrenchment (Cifuentes, 2012). The government was still responsible for teachers' professional development, salaries in public institutions, and administration, while non-state actors were largely in charge of infrastructure development (Ngware et al., 2007).

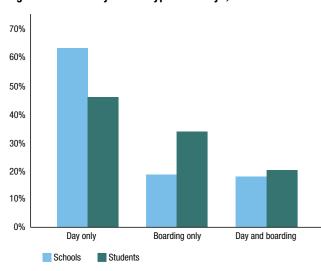
The cost-sharing policy was also extended to the higher education system – which in principle had been free of charge – with increased emphasis on student charges and budget rationalisation (Otieno, 2010).

In 1981, the Presidential Commission on the Establishment of a Second National University in Kenya (better known as the Mackay Report) recommended the education structure adopt an 8-4-4 system: eight years of primary education, four of secondary education, and four of university education (Government of Kenya, 1981). This advice was accepted by the Government in 1985 and this structure for a basic degree is still in place, with other structures for TVET and teacher education also broadly in place. Education at secondary level comprises four years (Forms 1-4) corresponding to upper-secondary in the International Standard Classification of Education.

Secondary schools are divided into day schools, boarding schools and schools that offer a mixture of both. Based on 2007 data (the latest available), nearly two thirds (63%) of secondary schools are day only, accounting for nearly half (46%) of students; 19% are boarding only, with 34% of students, and the rest are a mixture of both day and boarding (Figure 1 overleaf).

⁶ King and McGrath (2002: 89) claim that 'the 8-4-4 policy arose out of the concerns that a basic academic education might lack the necessary content to promote widespread sustainable (self) employment' (as cited in Makori (2005). There is an on-going debate on whether to change the 8-4-4 system of education. A Ministerial Task Force on the Realignment of Education to the Constitution of Kenya 2010 recommended that this system should be changed to two years pre-primary, six years primary, six years secondary, two years middle colleges, and three years minimum university education. Stakeholders are divided on this issue and the government has not yet made a decision.

Figure 1: Secondary school types in Kenya, 2007



Source: Kenya Open Data, 'Kenya secondary schools 2007'

At the tertiary level, the first university in Kenya – the University of Nairobi – was established in 1970; the second – Moi University – was created 14 years later to meet the demand for higher education with specialisation in technological and environmental fields. The 1980s mark the beginning of the expansion in Kenya's public university education (Oketch, 2004: 120) and in 1985, the Commission for Higher Education was established to oversee the expansion of university education and ensure its quality, sustainability, affordability and relevance (Colclough and Webb, 2010).

2.1.1 Exam system

Until 2012, Kenya's public secondary schools featured 18 prestigious *national schools*, originally created to prepare prospective senior civil servants, and which were better equipped than most both in terms of infrastructure (laboratories) and quality of teaching. Last year their number expanded to 78 - one for each county - as per the 2010 Constitution. According to Oketch and Somerset (2010), primary school leavers have one chance in a hundred to access this tier. Admission to national schools is not only regulated by results in the Kenyan Certificate of Primary Education (KCPE) but also respects regional representation in each institute as well as quotas for

primary school leavers from public institutions.⁷ The second tier consists of less than 1,000 *provincial/county* schools, while more than 7,000 *district schools* form the base of the pyramid. While most of the district schools are day schools, national and provincial/county schools are boarding schools.

While private primary schools are among the most prestigious at national level (and several of our interviewees argued this as a reaction to plummeting quality levels after the implementation of the Free Primary Education programme), the majority of private secondary schools are low-status, proprietor-owned institutions, generally located in areas where places in government secondary schools are in short supply (Oketch and Somerset, 2010: 16).8

Admission to both secondary and tertiary education is governed by the results of the national examination system, the KCPE and the Kenyan Certificate of Secondary Education (KCSE), for which exams take place at the end of Standard 8 (primary education) and Form IV (secondary education) respectively.

The KCPE system was introduced following the mid-1980s reform of the education system. Results in KCPE examination determine access to secondary education – a minimum score of 250 out of 500 is required, whereas the national average is around 240 (Watkins and Alemayehu, 2012). Selectivity by exam scores is seen as the key feature of a highly hierarchical and competitive system (UNESCO, 2010; Oketch and Somerset, 2010). Placement follows a sequence based on results: national schools first, then provincial/county schools, and finally district schools.

Admission to university and specific faculties is also administered on a highly competitive basis, on the results of the KCSE examination, which in turn are influenced by the type of secondary school attended. The minimum score required to access higher education is C+, with B+ being the minimum requirement to be admitted into regular programmes. However, fewer than one out of three candidates can qualify for university education: 28.36% of KCSE candidates scored above C+ in 2012 examination (see KNEC, 2013).

2.2 Gains in post-primary access

This section reviews some of the key indicators related to post-primary education, including school life expectancy

'The situation of girls in Kenya has improved a lot over the years. Free primary and free secondary was a big change. More girls are excelling, finding their way. Girls definitely have better access than before' - NGO representative

Table 1: Major events affecting Kenyan post-primary education

Year	Key event	Details	
1963	Independence and creation of Ministry of Education and <i>Harambee</i> movement	President Kenyatta calls for <i>Harambee</i> (Swahili for 'let's pull together') – locally built and funded schools, mostly secondary level – since government was focused on the primary sector. Compared to government schools, <i>Harambee</i> schools were generally expensive but low quality, with huge regional disparities due to decentralised nature of system (Buchmann, 1999).	
1964	Ominde Education Commission Report	Adopted recommendations were 7-4-2-3, curriculum changes to build national identity, and abolition of TVET from primary level (Makori, 2005).	
1970	First national university: University of Nairobi		
1974	School fees abolished for first four years of schooling (Colclough and Webb, 2010)		
1976	Gachathi Education Commission Report	Highlighted the increasing employment problem aggravated by enormous expansion of education system. TVET was then integrated into the system (Makori, 2005).	
1981	Mackay Education Commission Report	Recommended inclusion of TVET from primary level through to tertiary (Makori, 2005).	
1985	Introduction of American style 8-4-4 system, KCPE and KCSE Reintroduction of school fees as part of 'cost-sharing' measures	Introduced in response to unemployment issues, the 8-4-4 system focused heavily on attitudinal and skills preparation for work and especially self-employment. Greater emphasis was placed on numeracy and literacy.	
1988	Harambee schools taken over by state as provincial state schools (Colclough and Webb, 2010)		
1988	Kamunge Education Commission Report	Recommended reduction in examination subjects in 8-4-4: implemented in secondary schools but ignored in primary (Makori, 2005).	
2003	Free Primary Education (FPE)	Announced two days before start of school year, an extra 1.1 million students arrived at school (Cifuentes, 2012).	
2005	5 year SWAp: Kenya Education Sector Support Programme (KESSP)	Aimed to improve 'the structure of education system, by enhancing funding flows, and improving the effectiveness and financial transparency of implementation' (Colclough and Webb, 2010).	
2008	Launch of The Kenya Vision 2030 Introduction of Free Day Secondary Education (FDSE)	The national long-term development plan has led to 'serious consideration of changes to the 8-4-4 structure the introduction of technical and acader curriculum pathways, and the centrality of ICT to teaching and learning' (MoE, 2012d).	
2010	New Constitution	Right to free and compulsory eight years of education, with minorities, people with disabilities and other marginalised groups highlighted.	
2012	Education Act, 2012	Recommended change from 8-4-4 to 2-6-6-3 (or 14-3): 2 years pre-primary, 6 primary, 6 secondary, 2 (minimum) middle level colleges, and 3 (minimum) university education = 14 years of free and compulsory basic education followed by higher education (MoE, 2012c).	

⁷ Private primary schools are among top scorers in terms of KCPE results.

⁸ There are, however, a number of elite private secondary schools run mainly by religious denominations

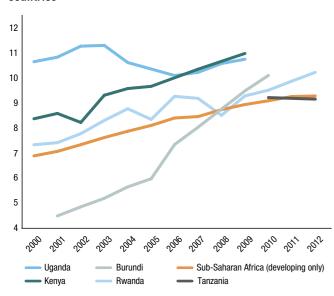
and enrolment. The analysis largely relies on UNESCO UIS data and compares the information with national sources - as became clear in the course of our research these are not always the same. Due to limited data availability, time horizon and country coverage, a number of the indicators looked at in this section will differ considerably across graphs and analyses.

2.2.1 School life expectancy

Over the last decade, Kenya has emerged as a leader in sub-Saharan Africa in terms of improvement in primary to secondary school life expectancy (SLE) from 2000 to 2010. SLE measures the absolute number of years, based on current trends, for which a new entrant in the school system is expected to attend. It is important to look at SLE alongside enrolment ratios, as improvements in SLE can happen even with very low enrolment.

The shift from an average of 8.4 years in 2000 (corresponding to completing basic education) to 11 years in 2009 (which includes three years of secondary education beyond primary level) implies that a larger number of students have transited from primary to secondary education. Kenyan performance has outpaced the average for sub-Saharan Africa (SSA) over the last decade⁹; the

Figure 2: School Life Expectancy (primary to tertiary) – 2000-2012, Kenya vs. SSA average and East African Community countries



Source: UNESCO Institute for Statistics (2014).

country has also closed the gap with Uganda, which abolished school fees in lower secondary schools in 2007 (UNESCO, 2013), and based on the latest data is a top performer within the East African Community (Figure 2).

2.2.2 Primary education

More years in school have been accompanied by the rapid expansion of primary education enrolment over the last decade. The net enrolment rate in 2002 was 62%, below the averages for low-income countries and SSA, which were 66% and 63% respectively. However, by 2009 the net enrolment rate (NER) had risen to 82% in Kenya, above the low-income country and SSA averages of 81% and 76%. 10

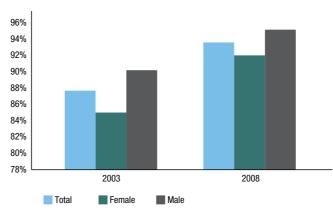
According to national statistics¹¹ in 2011, Kenya's net enrolment rate was 95.7% (KNBS, 2012). In absolute terms, the number of students in Standard 1 – the first year of primary/basic education – increased by 30.6% between 2003 and 2010, which formed part of the increase in total primary enrolments from 7.2 to 9.4 million (KNBS, 2011) resulting from the Free Primary Education (FPE) policy lowering financial barriers to access (see Section 3.3).¹²

Not only are more children enrolled in primary education, but they also stay in school longer than before and are more likely to complete the primary school cycle, lasting from year 1 to 8. The available data shows that the primary completion rate rose from 68.2% in 2003 to 81% in 2007 (MoE, 2008). Moreover, an increasing number of students are successfully moving from primary to secondary; the primary to secondary transition rate rose from 46.4% in 2002 to 72% in 2009 (MoE, 2012a), and to 74% in 2012 according to the MoE (2012b). Demographic and Health Surveys data suggests even higher figures, with an increase from 88% in 2003 to 93% in 2008 (see Figure 3 overleaf). These transition rates are based solely on the children in school, so in areas with relatively low enrolment, such as the ASALs, transition rates that appear high mask the fact that fewer students are in school to start with.

2.2.3 Secondary education

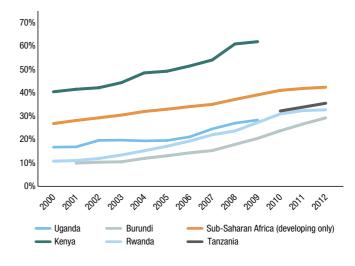
As a result of rising numbers of primary school leavers completing the first cycle, Kenya has seen a 50% increase in secondary enrolment in 10 years. The secondary GER grew from 40% in the early 2000s to 60% in 2009, well above the SSA average, which remains around 40%, and above all other countries in the East African Community. The steepest increase can be seen after 2008, coinciding with the introduction of the Free Day Secondary Education

Figure 3: Primary to secondary transition rates



Source: World Bank EdStats Query, Demographic and Health Surveys

Figure 4: Gross enrolment ratio, secondary education – 2000-09, Kenya vs. SSA average and East African Community countries



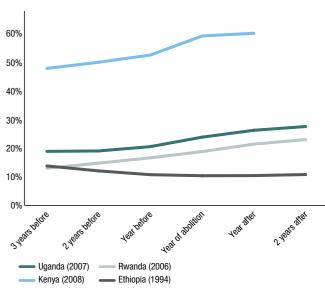
Source: UNESCO Institute for Statistics (2014)

(FDSE) programme (see Section 3.2). In absolute numbers, enrolment in secondary schools rose from 1.2 million in 2007 to 1.7 million in 2010 (KNBS, 2011) (Figure 4).

Despite starting from a higher rate, Kenya managed a more significant increase in GER compared with Ethiopia, Rwanda and Uganda – the other countries in the East African region that have abolished or subsidised secondary school fees either partially or totally (Figure 5). NER data for other countries in the East African Community is not widely available. These increases in enrolment compare favourably with other countries in East Africa which either abolished or partially abolished fees at the secondary level (Figure 5).

In the case of secondary education, data on survival rates (which are rather limited and only available up to 2007) show a mixed picture: the share of students completing

Figure 5: Changes in secondary GER – before and after secondary fee abolition



Source: UNESCO Institute for Statistics (2014)

Form 4 in 2005 (who enrolled in 2002) was 97.1%, which compares to a survival rate of 91.8% in 2007. The only source that specifically looks at drop-out rates (the inverse of survival rates) is MoE (2008), which presents only two data points for 1999 and 2003. This illustrates problems with the availability of education data in Kenya, which is particularly apparent at the secondary level.

2.2.4 Higher education

Access to university enrolment has also expanded over the past decades, although slowly. In 1970, fewer than 8,000 students were enrolled in university, which increased almost fourfold by 1989 to 31,000. In more recent years the number of students enrolling in higher education rose from 112,229 in 2006/07 to 180,978 in 2010/11, a more than 60% increase (KNBS, 2011). The GER at tertiary level quadrupled in a decade, reaching 4% in 2010 after starting from 1% in the early 1980s, and 2.75% by 2000. This, however, is not quite up to the regional SSA average of 7%. (Figure 6 overleaf). 20% of university students were enrolled in private institutions in 2010/11 (KNBS, 2011).

2.2.5 TVET

While enrolment at both secondary and higher education has significantly expanded in both absolute and relative terms, the TVET sector shows a less clear-cut picture. Increasing throughout the 1970s and 1980s, enrolment dropped off during the 1990s (Figure 7 overleaf). According to UNESCO Institute for Statistics 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: falling from

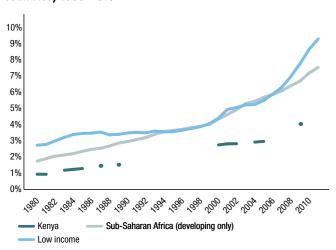
⁹ While Burundi has outpaced Kenya in terms of growth in SLE over this period, it has done with an incredibly low secondary net enrolment ratio, only reaching 18% in 2012 (UNESCO UIS, 2014). Its gains in SLE are thus likely to have largely benefited an elite, which illustrates why looking at SLE and enrolment in combination is necessary.

¹⁰ World Bank EdStats query: http://datatopics.worldbank.org/education.

¹¹ National data and UNESCO statistics may differ in terms of coverage (basic education in Kenya lasts eight years and encompasses both primary and lower secondary education). UNESCO statistics are also adjusted to allow for cross-country comparison.

¹² Even though Bold et al. (2011) have argued that the policy has been ineffective in expanding primary enrolment.

Figure 6: Tertiary GER (Kenya vs SSA and low-income countries) 1980-2010



Source: UNESCO Institute for Statistics (2014)

over 3% to less than 1%, compared to rates as high as 10-20% in some countries in Africa. According to the MDG Progress Report (GoK and UNDP, 2010) there were 70,516 students enrolled in TVET in 2007 – an increase of almost 20,000 in five years (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.

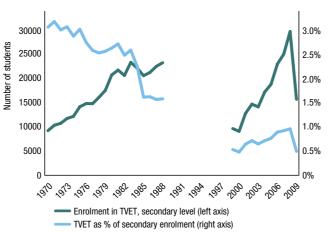
Based on the data above, the public TVET system has essentially disappeared over the last few decades. Whether TVET institutions are a means to gain a relevant education is an important question, and a fall in enrolment here could be a good thing if compensated by an increase in general secondary.

2.3 Progress on gender equity

One clear piece of good news over the longer term has come from the gender parity index for education. Starting from a low secondary education gender parity index of 0.45 in 1970 (i.e. for every 100 male students there were 45 female students), gender parity in enrolment rates was achieved (more or less close to one) by the mid-1990s (Figure 8). The latest figure (2009) shows a setback (0.9), but Kenya still outperforms the SSA average of 0.81 (Figure 9 overleaf). The relative poor performance in the 2000s reflects the widening inequalities throughout the system, discussed in Section 4. Although the gender parity index has fallen in the last decade this means that the growth of enrolment for boys has outstripped the growth of enrolment for girls, not that there are fewer girls in schools.

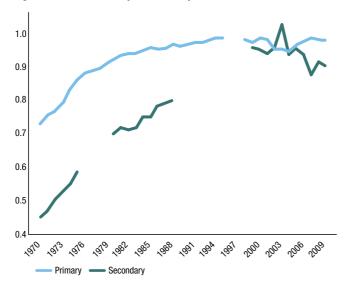
Another measure of gender equity is the numbers of students completing primary and secondary education. Latest results from the KCPE show that in 2010 354,000

Figure 7: TVET secondary enrolment and TVET enrolment as % of total secondary enrolment, 1970-2009



Source: UNESCO Institute for Statistics (2014)

Figure 8: Gender Parity Index Kenya 1970-2012

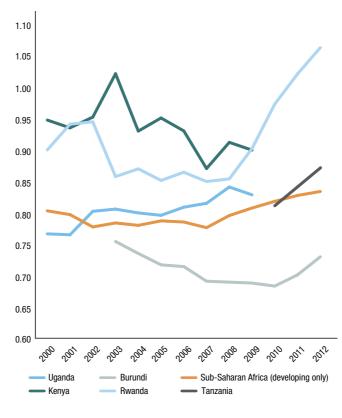


Source: UNESCO Institute for Statistics (2014)

girls took the end of primary exam compared to 385,000 boys. For the KCSE the numbers in 2010 were 158,000 girls compared to 196,000 boys. Slightly fewer girls take both levels of these exams, and they also perform slightly worse than boys. Results from the 2010 KCSE show that boys outperform girls. 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 (Figure 11 overleaf).

This evidence is confirmed by disparities in learning outcomes in the latest SACMEQ data, which is taken around the time of primary completion. While boys and girls performed equally in reading in 2007, as they did in 2000, boys outperformed girls in mathematics by 25 points

Figure 9: Gender Parity for Secondary GER

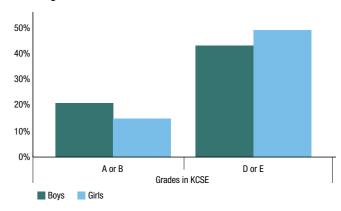


Source: UNESCO Institute for Statistics (2014)

on a scale of 500, again a similar outcome to 2000 (Ogle and Wambua 2011). Interviews confirm that the most marginalised are often girls in the ASALs in the northeastern region (UNICEF and UNESCO).

The improvements that have occurred in gender have been driven from both the bottom up and the top down. Pressure from women's rights groups helped move the gender equity agenda forward at the policy level, and this

Figure 11: Percentage of boys and girls receiving top and bottom grades in 2010 KCSE



Source: Kenya Open Data, 'Survey 2014 - KCSE Exam Results 2006 to 2010'

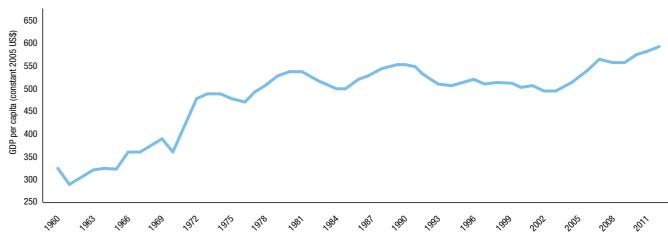
has worked in conjunction with efforts by government ministries and global institutions to achieve gender equity throughout schooling (Unterhalter, 2012).

2.4 The economy and education

Since independence, the Kenyan economy has experienced broad-based growth, although there have been some decades when this slowed (see Figure 10 on trends in per capita GDP figures). Vicissitudes of the Kenyan economy are, unsurprisingly, closely reflected in changes in the volumes and modalities of (public) education financing.

We can identify four different phases. The first phase was right after independence (1964-1973) when the Kenyan economy expanded rapidly at an annual average rate of 6% (Ndulu et al., 2008) and so per capita income expanded until the early 1980s (see Figure 10). Tuition fees were

Figure 10: Per capita GDP, 1960-2012



Source: World Bank World Development Indicators

removed for the four years of primary education in 1974 and in 1979 primary education was made entirely free.

The years of the second phase, the 1980s and the 1990s, were characterised by sluggish growth and two-digit inflation rates. These were the result of oil shocks, mismanagement of the coffee boom, a military coup attempt in 1982 and a severe drought in 1983-1984 (Ndulu et al., 2008). In response to macroeconomic challenges, Kenya requested adjustment assistance from the World Bank and underwent several structural adjustments programmes with varying degrees of success between 1980 and 1996 (World Bank, 2000). As a result, tuition fees in primary education were introduced in 1985 and university intake was restricted to 10,000 new students (see Otieno and Colclough, 2009 and Buchmann, 1999).

In the third phase, the early 2000s, macroeconomic performance improved and the resources allocated to the education sector increased. The government elected in 2002 revitalised the economy, including the education sector (World Bank 2004: 1). According to government figures (GoK, 2010: 6), the Kenyan economy was on a steady and broad-based growth path of about 6.1% between 2004 and 2007. Poverty rates fell from 57% in 2000 to 46% in 2006/07. Government revenues expanded, rising from 21% as a share of GDP in 2003

to a peak of 26.4% in 2009 (AfDB et al., 2012). Rising government revenues have been associated with a strong increase in government spending since 2003 (Watkins and Alemayehu, 2012). According to the GoK Public Expenditure Review 2010, public spending on education grew by 31% in real terms between 2003/04 and 2008/09 and most of the increase has been on the development budget (see also UNESCO, 2010).¹⁴

The fourth and final phase saw a transitory reversal of growth in 2008, when per capita incomes shrank by 1.1% as a consequence of the post-election violence combined with high energy and food prices (GoK, 2010). A strong fiscal position had given the government space to support a stimulus programme of infrastructure and social spending in 2009 and 2010 (World Bank, 2009), and Kenya was one of the few countries that grew faster in the aftermath of the financial crisis than it had before (World Bank, 2009).

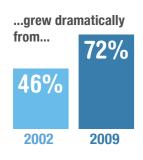
Since the late 1970s, Kenya has undergone a process of structural transformation. The economy shifted from one dominated by agriculture (more than 40% of GDP generated in late 1970s) to the service sector (57% of GDP in 2011) (World Bank, 2012) with tourism by far the largest contributor to the sector - although this is highly dependent on security and could change in the future.

KenyaRapid growth of secondary education



TRANSITION RATE (PRIMARY TO SECONDARY)





ENROLMENT RATE (SECONDARY GROSS ENROLMENT RATIO)



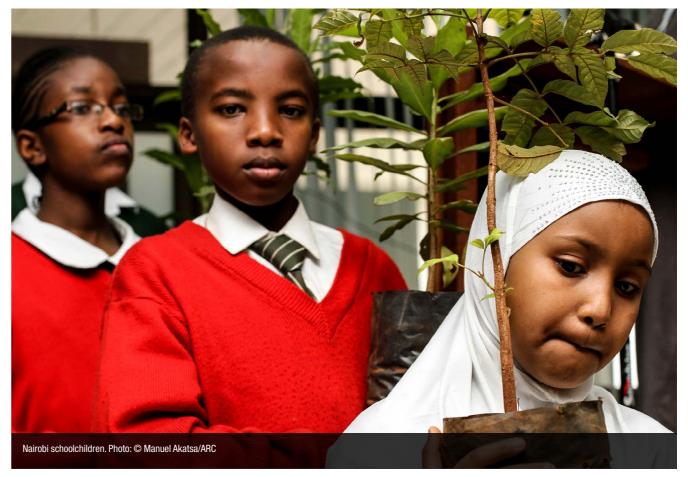
in the last decade

"Infoar8

Sources: Ministry of Education (2012) I UNESCO Institute for Statistics (UIS)

13 Despite being the largest and most advanced economy in central and east Africa, half of Kenyans live in absolute poverty with the country's Human Development Index standing at 0.519 (145th out of 187 countries).

3. What are the factors driving change?



This section unpacks the factors which have plausibly contributed and driven the expansion of post-primary education in Kenya - both at secondary and tertiary levels. More pupils pursuing their education into post-primary levels over the last decade were the result of a combination of factors that can be clustered around four interlinked drivers:

- mounting user demand for opportunities beyond basic education
- political prioritisation and fee abolition as a game-changer
- increased public funding to education in support of reforms
- growth in community, faith-based and private sector provision.

1 Calls for increasingly higher levels of education

It is clear that demand-side factors – such as demographic pressure, the value attributed to education for upward social mobility, and the importance of qualifications for jobs – have been key drivers behind the expansion of post-primary education in Kenya. In interviews conducted for this study, increased public demand was repeatedly highlighted as the main factor driving progress across the sector. Increased public demand can be seen as a key element behind each of the other three factors discussed below: government prioritisation, sustained public funding, and expanding non-state provision.

As mentioned above, Kenya's population has grown since independence, and while population growth started

'Strong political will and the determination of the Kenyan people have been key drivers of education progress' - Government official

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¹⁴ This is very much in line with the indications in the 2012 Public Finance Management Law where at least 30% of budget has to be allocated to development expenditure.

declining in the mid-1980s, more important is its changing composition. The share of population within the relevant cohort for post-primary education (15-24 years)¹⁵ has progressively expanded, which is known as an 'education dividend' (Fengler and Crespo Cuaresma, 2012). However, demographic pressure is but one part of the rise in demand for post-primary education. Beyond population growth, there has been a larger share of students attending secondary and tertiary education in the relevant age cohort, increases in the number of years they stay there, and knock-on effects from growing numbers of primary school leavers. Why is this?

Firstly, the decline in fertility rates and smaller household size mean that parents can in principle allocate more financial resources for human capital development for each child. In most of the interviews, the high value attributed to higher levels of education as a means for upward social mobility was cited as one of the driving factors behind expanding demand for skills and training at post-primary level. The evidence for this is largely anecdotal, but the demand for higher education seems to be driven by the importance of higher qualification levels in the job search (i.e. the signalling effect to potential employers in a competitive job market) rather than actual knowledge or skill acquisition. According to most interviewees the level of qualification required to enter professional jobs has risen. Positions requiring competencies at Bachelor degree level a few years ago now appear to be advertised either at Masters or Doctoral level, especially in the civil service. There is also a perception that the flexible nature of the job market, which requires people to change jobs more regularly, necessitates further education and training to advance careers (Gudo et al., 2011). Employers are increasingly looking for both cognitive skills, such as critical thinking, and non-cognitive skills, such as communication and adaptability, that require higher levels of education (Results for Development, 2012).

Secondly, high youth unemployment has created greater incentives to pursue further education as students are less likely to miss out on earnings by studying (the opportunity cost of higher education). At the same time, unemployment is seen as a temporary phenomenon by most interviewees, and this partially explains why demand for higher education is still growing despite the current lack of opportunities and the skills mismatch between the education system and demand from the labour market.

Thirdly, many education reforms over the last decade aimed to lower financial barriers and increase affordability across all levels of public education (see Section 3.2). For instance, in 2005 the MoEST released an assessment of burden sharing between government and household

Table 2: Burden sharing between government and household – % of total expenditure

Level	Public schools					
	Government	Household				
Early childhood	5	95				
Primary	80	20				
Secondary	40	60				
Technical industrial	25	75				

Source: Adapted from MoEST (2005a).

expenditure for each level of education, which found that household funding of secondary education was on average 60%. Only technical/industrial education and early childhood development (ECD) absorbed a greater household contribution (see MoEST, 2005a; Ngware et al., 2007). More importantly, tuition fees were found to be one of the main barriers to school enrolment at secondary level both in terms of limiting enrolment and causing students to drop out (Onsumo et al., 2006). Introducing subsidies for tuition fees for public schools at secondary level was meant to make secondary school attendance more affordable, therefore boosting demand and access.

The composition of secondary education has changed in recent years. While boarding schools are believed to provide better preparation for sitting the KCSE than district schools, some of our interviewees highlighted how this perception has more recently evolved. Some day schools have improved their relative performance and ranking in final KCSE examination, becoming not only a more affordable but also a more cost-effective option.

On average, household incomes have also expanded, potentially increasing households' ability to cover expenses not funded by the Free Secondary Day School capitation grant, such as boarding costs. Private final consumption expenditure grew by more than 7% in 2006 and 2007, recovering to these rates again in 2010. Most of our interviewees, however, did not point to a rise in household income as one of the factors behind greater demand for secondary education. Its direct contribution in Kenya to progress in post-primary education is quite challenging to assess as over 40% of the population still lives below the absolute poverty line, the country has experienced double-digit consumer price increases in most years since 2004, and we do not have sufficient information to gauge whether the growth performance has been pro-poor.

3.2 Government policy as a game-changer

One of the most striking drivers of education progress across the entirety of the Kenyan system has been the role of political decisions, particularly in the form of election promises and high-level policy pronouncements. While the move to FPE did not have a *direct* impact on post-primary education, it did have some major knock-on effects. In addition, it set a precedent and raised political expectations, which were taken up five years later through the implementation of the Free Secondary Day Education (FDSE) policy. At the tertiary level, the move to create a 'parallel track' (see below) opened access to higher education to significantly more people. This series of bold moves was underpinned by a steady process of policy analysis and advancing legal frameworks.

3.2.1 Free primary education

The introduction of FPE in 2003 sent shockwaves through the Kenyan education system. Having abolished FPE in 1988 in favour of cost-sharing supported by a wider structural adjustment programme (Somerset, 2009), the administration of President Daniel arap Moi announced in the run-up to the 2002 elections that it was looking into whether it could reinstate FPE if re-elected. Its conclusion that Kenya could not afford FPE was pounced upon on by presidential hopeful Mwai Kibaki. He made FPE his flagship promise at a time when the education system was seen as failing, with rising costs, deteriorating infrastructure, and rising drop-out rates. His campaign message that he wanted every child in school was a crucial factor in his election victory (Cifuentes, 2012).

On taking power, Kibaki immediately announced that FPE would go ahead – just two days before the start of the school year, resulting in an extra 1.1 million children arriving in schools (Cifuentes, 2012). The key points of FPE, as implemented in January 2003, included:

- The government would pay KES 1,020 per child to school for tuition fees.
- The government would subsidise low-cost boarding schools and support school feeding programmes in ASALs; parents would be responsible for examination fees for Standard 8, school uniforms, school meals, transport to and from schools, boarding facilities, health care.
- Schools needed to enrol all children of school-going age without discrimination.
- Classes needed to be set up for over-age students.
- Schools needed to have MoE approval to charge additional levies (Institute of Economic Affairs et al., 2011).

Older children or adults who had not previously attended primary education were also made eligible for

FPE, leading to a 17.4% increase in the education budget in May 2003, half of which was directly for FPE (MoEST, 2004a). However, primary education was still far from being free to access: parents remained responsible for examination fees at Standard 8 (KCPE examination), school uniforms, meals, transportation, boarding facilities and health care.

Decentralisation was also made a priority at this time, with the aim of improving efficiency in the education sector by decentralising school registration services, administration, finance, accounting services, and teacher management.

3.2.2 Free Day Secondary Education

The FPE programme has been successful in achieving its main objective of expanding primary level enrolment, which grew from 7.2 million in 2003 to 8.5 million in 2008 (KNBS, 2011: Table 3.6). As a result, additional pressure was put on entry to the secondary system (Wanja, 2014). According to interviewees, intense demand combined with the government's need to shift the focus of news away from post-election violence fast-tracked implementation of the next stage of fee abolition, Free Day Secondary Education (FDSE) in early 2008 (MoE, 2012c).

Like the FPE programme, government subsidies for secondary education appeared in an election manifesto (Ohba, 2009) and were implemented as soon as the coalition government took power. In early 2008, President Kibaki announced the introduction of a capitation grant of KES 10,265 per student (equivalent to \$115 dollars) to cover tuition fees and other expenses – such as those illustrated in Table 3 – disbursed in the form of a capitation grant to public secondary schools in three tranches (50% in December, 30% in April and 20% in August) (Mualuko and Lucy, 2013). Teachers' salaries in public institutions were already covered by public resources and they continued to be covered after 2008.

The introduction of the capitation grant was a response to the heavy burden of secondary education on households (see also Obha, 2009 and Jagero, 2011). The capitation grant, however, does not cover all the direct costs associated with school attendance. While several recurrent costs are included, the capitation grant excludes development expenditure (better known as capital expenditure). It covers the direct costs of attending day school, but does not cover add-on costs such as boarding fees. Therefore it is more appropriate to define the capitation grant as a form of public subsidy to secondary education rather than a school fee abolition programme.

The MoE has defined a series of guidelines indicating maximum fees to be charged to parents: the school can apply for an exception at the District Education Board subject

'A key driver of progress is political will. Free primary education was significant as it gave parents the idea that kids must be in school' - Government official

¹⁵ On the basis of UNDESA data this share increased from 16% of total population in 1960 to 22% in 2005.

¹⁶ The analysis does not reflect the effects of the Free Day Secondary Education and we are not aware of any study reassessing this estimate after the introduction of the subsidy for each study.

Table 3: Composition capitation grant and guidelines for capitation grant per school year

Item	Day school (KES)	Boarding schools (KES)		
	GoK subsidy	GoK subsidy	Parent fee	Total
Tuition o/w	3,600	3,600	0	3,600
Textbooks/instruction material	2195	-	-	-
Lab equipment	300	-	=	-
Exercise books	720	-	-	-
Chalk	72	-	-	-
Internal examinations	190	-	-	-
Boarding, equipment and stores	0	0	13,034	13,034
Repair, maintenance and improvement	400	400	400	800
Local travel and transport	400	400	500	900
Administration cost	500	500	350	850
Electricity, water and conservancy	500	500	1,500	2,000
Activity fees	600	600	0	600
Personal emoluments 3,965		3,965	2,743	6,708
Medical	300	300	100	400
Total school fees	10,265	10,265	18,635	28,892

Source: MoE (2008) Government Guidelines and MoE Free Day Secondary Education Programme. At the time of writing, 1 USD corresponds to approximately 90 KES.

to agreement from the Parent-Teacher Association. The capitation grant was calculated in 2008 and it has not been updated to reflect price increases since then; in the interviews it emerged that breaching the fee limits is not unusual.

In 2012, the MoE Task Force recommended raising the capitation grant to at least KES 19,238 for boys and KES 20,413 for girls (the full public unit cost of secondary education being more than KES 58,000), increasing provisions for each item described in Table 3 and extending the type of costs covered (notably assessment and examination costs). However, the proposal has not been taken up (MoE 2012c).

The capitation grant as a transfer mechanism aims to distribute resources in a fair and equitable way across schools and make more efficient use of resources. However, the grant formula does not include any specific correction to target vulnerable groups (e.g. special needs students, pastoralist areas) (MoE, 2012c). Several interviewees also expressed concern how expenditure from the capitation grant is accounted for at school level. In sum, however, the FDSE programme seems to have successfully increased transition rates from primary to secondary education.

3.2.3 Increased access to higher education

In higher education, support for expanding enrolment started in 1995, when a loan programme for university students was introduced to provide affordable loans, bursaries and scholarships to students (GoK, 1995), administered by the Higher Education Loan Board (HELB) (Ngolovoi, 2008). In 1998 a parallel track of private, non-subsidised education offered by universities, known as Module II, was introduced (Colclough and Webb, 2010). This self-sponsored system has been one of the biggest drivers of the expansion in higher education enrolment rates.

Module II allows private students to enrol in public universities and attend classes in the evenings or at weekends (Colclough and Webb, 2010). Pre-dating the implementation of FPE and FDSE, the scheme enabled public universities to expand enrolment while generating their own funds to supplement diminishing state support (Otieno, 2010). While the push for this policy from the universities perspective was partly financial, demand side factors and the currency of a university education in the job market also played a role.

All public universities now have a parallel track system in place. Students attend classes in the evening and over the weekend, so that classrooms are at full capacity (Ngolovoi,

2008). In 2004/05, the number of Module II students at the University of Nairobi was higher than the number of regular students (Otieno, 2010). Selection criteria are based on secondary schools results and are less strict than the standard curriculum: minimum entrance requirement for KSCE 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 their own funds to supplement diminishing state support (Otieno, 2010). For example, a Computer Science student would pay KES 120,000 per year if they were a regular student, but KES 240,000 in the dual track arrangement (Otieno, 2010).

The parallel system caters to a different target group of students. Students enrolled in the parallel systems are generally employed: many value the flexibility of attending classes in the evenings and over the weekend – making attendance compatible with a full-time job and dropping the opportunity cost of higher education – and complete the curriculum in a shorter time than regular students (Colclough and Webb, 2010; Ngolovoi, 2008).

In recent years, universities have proliferated, especially between 2012 and early 2013 when polytechnics and constituent colleges 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 2011.¹⁷ It also included 17 Chartered Private Universities (10 of them established after 2006) and 11 Universities with Letter of Interim Authority, with the latter not being authorised 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, see Figure 16, page 31).

3.2.4 Policy and legal frameworks

A number of official reports have examined the challenges for Kenya's education system over the years. The response to the reports' recommendations has been mixed, with some having a major influence on Kenya's education system, and others falling to the wayside.

One of the earliest significant reports was the Gachathi Education Commission Report (Gachathi, 1976), which emphasised national unity and socio-economic and cultural aspirations. It also raised the issue of unemployment in a warning that still holds true today: 'One of the largest problems confronting the country is that of unemployment. The problem is aggravated by the annual outputs of school leavers whose number continue to swell following the enormous expansion of the education.' This was followed by the Mackay Education Commission Report (GoK, 1981),

which influenced the restructuring of the education system from 7-4-2-3 to 8-4-4 and called for the establishment of Moi University and the Commission for Higher Education, both of which played a significant role in setting the tone and frameworks for university education in Kenya. The Kamunge Education Commission Report (GoK, 1988) focused on education financing, quality and relevance. It led to some of the main policies on cost-sharing. The report also recommended the reduction of examination subjects under 8-4-4, a reform that was implemented in secondary schools but ignored at the primary level.

Next, the Koech Education Commission Report (GoK, 1999) was mandated to recommend ways and means of enabling the education system to facilitate national unity, mutual social responsibility, accelerated industrial and technological development, life-long learning and adaptation in response to changing circumstances. The Commission adopted an approach facilitating the participation of as many Kenyans as possible in the inquiry. It proposed a new system of education called Totally Integrated Quality Education and Training, the expansion of compulsory education from 8 to 12 years, the expansion of opportunities at the post-secondary level, expanded alternative and continuing education, and the introduction of more manageable curriculum content. Furthermore, there was a suggestion of a comprehensive new legal framework to address previously omitted aspects of education such as Early Childhood Care, Development and Education, Special Education and technical education. According to interviewees for this study, despite strong analysis and relevant proposed reforms, these recommendations were mostly ignored.

In recent years policy attention has focused on the right to education, which was embedded in new legislation. A new constitution in 2010, Education Bill in 2012 and University Bill in 2012 all set the stage for progress on this front.

In 2010 Kenya replaced its 1969 constitution with a new version approved by 67% of Kenyans. The new constitution extended the right to eight years of free basic education to every child, highlighting entitlements for those with disabilities, minorities and other marginalised groups. It also called for youths to have access to relevant education and training. Furthermore, the constitution devolved powers from the national government to counties with the scope of enabling county governments to better provide services with greater involvement of local communities and individuals. A Teachers' Service Commission was established to be responsible for recruiting and assigning teachers, including reviewing the demand and supply of teachers as a whole.

The Education Bill of 2012 reinforced the right to free and compulsory basic education. It detailed the establishment and powers of a national education board

¹⁷ According to Oketch (2004) there was one private and one state university in 1970-75; eight private and five public universities in 1990-95; fifteen private and six public universities in 2000-08.

and county education boards, and provided further details on the responsibility of government and parents in the promotion of education and training. It detailed financing for education and training, and enabled the rehabilitation of certain schools and centres.

3.3 Financial resources accompanying political commitment

3.3.1 Public finance

The education sector has historically received the highest allocation of public spending (Ngware et al., 2007; GoK, 2010), generally above 20% of total budget, reflecting the priority accorded to it in national policies such as the Economic Recovery Stimulus and Vision 2030 (Colclough and Webb, 2010). Education's share of total expenditure was 27% and 26% in 2004/05 and 2005/06 (Ngware et al., 2007), much higher than the SSA average recorded in 2009 (18.3% see UNESCO, 2010).18 During the 1990s when cost-sharing and fiscal austerity were implemented in the context of the structural adjustment programmes (see KNBS, 1995) and economic downturn (World Bank, 2004: 49), the government did not scale down resources to education, at least in relative terms. Similarly, in the aftermath of the 2008-2009 global financial and economic crises, the primary and secondary education budgets have been ring-fenced, as was support to poor students at university level.

Public finance has supported progress in the education sector by removing demand-side barriers (see Section 3.2.1 on FPE and Section 3.2.2 on FDSE) and supply-side bottlenecks by expanding the total resources available to the education sector and by shifting the cost burden back toward the public sector. While a robust assessment of a direct causal link between public resources to the education sector and enrolment goes beyond the scope of this case study, we can surmise that the expansion in public finance to the education sector has been a necessary – though perhaps not sufficient – condition for expanding access to post-primary education.

Beyond these general trends, we can identify at least five main elements characterising education financing in Kenya over the last ten years.¹⁹

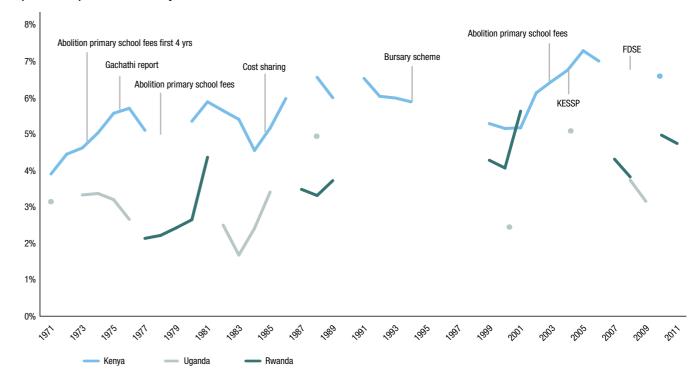
Firstly, the remarkable improvement in collection of fiscal revenues, from KES 372 billion (USD 4.2 billion) in 2006/07 to KES 651 billion (USD 7.4 billion) in 2010/11,

was associated with an expanding tax base, improved tax collection by the Kenyan Revenue Authority, and expanded fiscal space allowing a strong increase in government spending (Watkins and Alemayehu, 2012). According to the GoK Public Expenditure Review 2010, public spending on education had risen by 31% in real terms between 2003-04 and 2008-09. Figure 12 (overleaf) outlines the evolution of public spending on education in Kenya as a proportion of GDP since the implementation of the first wave of fee abolition in early 1970s. Bearing in mind data is rather patchy, Kenya has allocated a greater share of resources to the education sector than some of its neighbours (notably Rwanda and Uganda). Unsurprisingly, the share increased once the new programmes were implemented to shift the family cost burden towards public resources by eliminating (some) fees.

Secondly, most of our interviewees pointed out that resources channelled through Constituency Development Funds (CDFs), discussed in detail later on, played a pivotal role in education infrastructure development as well as supporting secondary-level bursaries.²⁰ CDFs were introduced in 2003 and allocated to each MP on the basis of a poverty index across the country. The share spent on education grew by 30% between 2003 and 2009/10. Based on data analysed by Watkins and Alemayehu (2012), nearly half of CDF resources over the period 2003-2009 were spent on the education sector (minimum of 30% and maximum of 65%). Resources channelled to local authorities will probably increase further in the coming years as a result of decentralisation. With the devolution process initiated with the 2010 constitution, 47 counties will receive 15% of total government resources following the principles of 'equitable development' and 'special provision for marginalised groups and areas'. Some basic services, including education, will not initially be devolved to countylevel governments (Watkins and Alemayehu 2012).

Thirdly, the surge in public spending at secondary level (where per capita expenditure doubled in five years) reflects the introduction of the capitation grants, with the largest increase coinciding with the first full school year (2009/10) after the introduction of the FSDE programme. The increase is almost entirely due to spending in secondary schools, as the Government at the same time introduced ways to tap private resources for universities, such as the Module II (parallel system). Hence university spending actually went down (see Table 4 overleaf).²¹

Figure 12: Evolution in public spending on education (share of GDP) – Kenya, Uganda and Rwanda – vis-à-vis main education policies implemented in Kenya



Source: World Bank EdStats Ouery 2012

Fourthly, to address infrastructure capacity constraints, a larger share of education sector public finance has been allocated to capital expenditure. In 2004-05, for example, most of the public education expenditure on secondary education was recurrent (93.5%) and the vast majority went on teachers' salaries²² (Ngware et al., 2007). Between 2003/04 and 2008/09, on the other hand, most of the 31% real terms increase in public education spending fell under the development budget (see also UNESCO, 2010). The 2012 Public Finance Management Law determined that at

least 30% of the education budget has to be allocated to development expenditure.

Fifthly, even though some challenges remain (see Section 4), public expenditure to the education sector became more efficient. A medium-term budget, strategic and planning process was introduced in 2000/01. A commitment to implementing national strategies and greater orientation to results emerged. National development plans are monitored against objectives on a quarterly basis; a performance-based and programme-based contracting system was

Table 4: Per capita public expenditure to education by level

Per capita expenditure 2003 Constant prices	2003/4	2004/5	2005/6	2006/7	2008/9	2009/10
Primary	4,945	5,425	5,563	5,665	5,858	5,405
Secondary	20,112	18,736	18,494	20,571	23,164	40,699
Technical	18,283	19,137	21,936	26,667	34,154	38,430
University	98,317	98,319	101,327	118,347	108,744	95,666

Source: KNBS (2011)

22 99% of recurrent expenditure on primary education was absorbed by teachers' salaries compared to 95% for secondary education (World Bank, 2004).

¹⁸ The SSA average is in turn larger than other developing regions, where the share of public finance allocated to education ranges from 11% to 28% of total budget (UNESCO, 2010).

¹⁹ The analysis was constrained by limited data availability over time of public finance data by education level and by recurrent and capital expenditure.

^{20 8.3%} of their spending on average is channelled to secondary school bursaries (CfBT, 2007). This spending is relatively minor compared to the overall education budget (2.73% in 2008/09) but it is ring-fenced.

²¹ In the Sessional paper No. 14, (MoE and MoHEST, 2012) the government proposes replacing the current funding structure for government-sponsored students in public universities which is uniform across courses with a Differentiated Unit Cost, adjusting it on the basis of resource requirements for each course.

Box 2: The Kenya Education Sector Support Programme (KESSP)

In 2005 a five-year Sector-Wide Approach (SWAp) programme, the Kenya Education Sector Support Programme (KESSP) was put in place following the introduction of FPE as a means for donors to coordinate and strengthen their support to the education sector. The programme aimed to improve 'the structure of education system, by enhancing funding flows, and improving the effectiveness and financial transparency of implementation' (Colclough and Webb, 2010)¹. In addition, its foreword stated that 'KESSP is based on the rationale of the overall policy goal of achieving Education For All (EFA) and the Government's commitment to the attainment of Millennium Development goals (MDG)[sic]' (MoEST, 2005b).

The KESSP was a largely government-driven programme establishing a strategy to guarantee the right to education and training no matter the student's socio-economic status. The KESSP mainly targeted primary education, even though the 70% target for the transition rate from primary to secondary school by 2008 was explicitly mentioned among its objective (MoEST, 2004b). The following targets pertained to post-primary education:

- increase primary to secondary transition rate form 47% to 70% by 2008 with special attention to girls education
- gender parity at primary and secondary by 2015
- develop a national training strategy for Technical, Industrial, Vocational and Entrepreneurship Training (TIVET) in 2005, with TIVET institutions properly funded and equipped by 2008
- achieve 50% improvement in adult literacy by 2010
- expand public universities' capacity to more than 5,000 students each by 2015 and increase proportion of students studying science-related subjects to 50% with more than a third being women, by 2010 (MoEST, 2005b).

The KESSP gained wide international support with donors contributing 6% of its budget - significant proportions of this from the Fast Track Initiative and DFID (37% and 23% respectively). There were, however, major concerns when an evaluation of KESSP implementation showed that KES 4.2 billion (USD 48 million) was lost to corruption (Transparency International, 2013). This stopped significant donor activity in the education sector in Kenya for several years, with a shift now to much of this being off budget.

i According to Cifuentes (2012), donors required the approval of a Secondary Education Strategy before they could disburse funds for the FDSE programme.

introduced in 2005. Furthermore, every public institution is monitored by a public procurement oversight body.

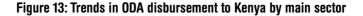
Finally, the education sector was one of the sectors targeted by the Public Expenditure Reform in 2002/03 introducing, among other measures, the use of a single account for schools and auditing of expenditure.

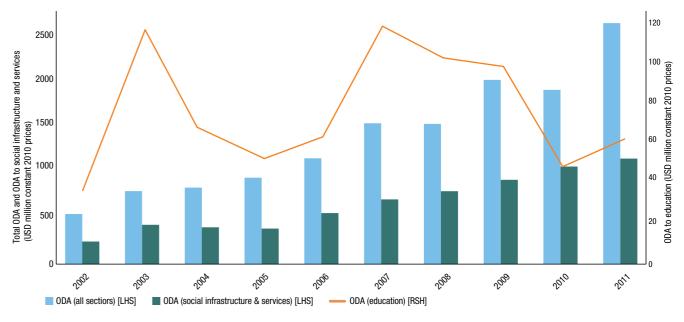
3.3.2 Donors to the education sector

Overall, aid to education in Kenya has remained modest compared to the government's education expenditure and small in comparison to other countries, but it has been influential at particular times (see Colclough and Webb, 2010: 12). The relationship between development partners and Kenya's education sector has fluctuated, mirroring dono relations with the ruling government (see also Colclough and Webb, 2010: 64). The two largest donors supporting secondary education are the African Development Bank²³ and Japan International Cooperation Agency.²⁴

In the case of higher education, several interviewees pointed out that expansion happened without strong donor financing support. The largest programme, which ended in 1994, was the University Investment Project, which imposed a maximum of 10,000 new students as one of the conditions of the World Bank Education Sector Adjustment Credit (Colclough and Webb, 2010).

External aid as a share of the Kenyan education budget was 0.02% in the mid-1990s (Otieno and Colclough, 2009), increasing to 6.2% in 2002/03 (Colclough and Webb, 2010: 65) as the result of the election of a new government which addressed some donors' concerns about corruption as well economic and development strategies which committed Kenya to international goals on education and to improving education planning (Colclough and Webb, 2010). Donors' contribution to the Kenya Education Sector Support Programme (KESSP) (see Box 2) has been relatively minor, at approximately 5% of its total





Source: OECD Stat (2012), Creditor Reporting System

resources. Despite the upsurge in development assistance associated with the implementation of the KESSP, the external contribution is lower than to other partner countries at the same income level. According to UNESCO (2012), in 2008 aid per capita to the education sector in Kenya was estimated at \$4, the lowest among low-income countries (LICs).

The fall in development assistance to the education sector in 2010 was the result of the phasing-out of the KESSP programme along with several donors deciding to withdraw (the World Bank, DFID, CIDA and UNICEF) or suspend (USAID) their assistance following a corruption scandal in 2009 with funds embezzled from the education budget.

At the time of writing, the relationships between development partners and the government have improved following the restitution of missing funds to donors. The government – in consultation with development partners – has been developing a new education strategy – the National Education Sector Support Programme (NESSP).

3.4 Growth in community and private sector providers

The role of non-state actors has also been significant in driving education opportunities in Kenya at the post-primary level. To a certain extent, this stems from a history of community involvement in development prior to Kenya's independence. During this time, partly due to British colonial policies, the self-help movement called *Harambee* and church groups together established and supported independent schools throughout the country (Onsomu, et al., 2006). This heritage of community

involvement in education has continued to evolve, with the private sector also increasingly playing an important role.

Table 5 overleaf 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. Community schools, in contrast, account for a very small share: 1% for secondary and 4.1% for those in training. 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, poor households have resorted to paying substantial fees to enrol children in unregulated private schools (Oketch et al., 2010).

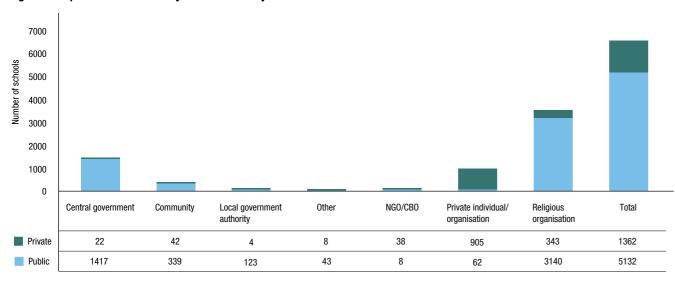
While non-state actors may have been the driving force behind a large number of secondary schools, they have often since been integrated into the government system. Community schools and even private secondary schools have been absorbed into the state system as district schools, with government salaried teachers and budgets. Figure 14 overleaf provides a closer look at the overall numbers of secondary schools and how these are broken down across providers. Note that despite being sponsored by either the community, a private actor or a religious organisation, many of these schools are considered 'public' and have been absorbed into the government sector.

What 'sponsorship' means exactly seems to vary across different schools. On our visit to Kenya, the head of a school sponsored by the Catholic Church highlighted that the church's involvement included involvement in the board overseeing the school, some supplementary funding, and until recently, appointment of the head of school from a religious order. Anecdotally it seems that other secondary

²³ Support to the enhancement of quality and relevance in higher education, science and technology project programme, mainly focusing on infrastructure development.

²⁴ Program on Improvement of the Quality of Primary and Secondary Education (Mathematics and Science Education) and in-service training.

Figure 14: Sponsors of secondary schools in Kenya in 2007



Source: Kenya Open Data, 'Kenya secondary schools 2007'

schools sponsored by either NGOs/CBOs or private actors have some variation in terms of this arrangement. The Ministry of Education, however, deploys the teachers, assigns students and has ultimate responsibility for infrastructure.

3.4.1 *Harambee* secondary schools

The number of *Harambee* secondary schools grew rapidly during the post-independence period after Jomo Kenyatta called the country to focus on self-help for development and build more schools to meet the growing demand for basic education. By 1974, *Harambee* schools accounted for approximately two-thirds of the total 1,000 secondary schools (before independence *Harambee* secondary schools accounted for 50 of a total of 151). As the government focused the majority of its resources on the primary sector, the *Harambee* movement drove much of the extension of secondary education across the country and into more rural areas (Mwiria, 1990). However these schools were generally recognised as being expensive and low quality

compared to government schools. There were also huge regional disparities due to the decentralised nature of their management, with the worst off areas often being in the ASALs and urban slums. The lack of regulation on *Harambee* schools meant that there were serious discrepancies between the labour market and the skills of school leavers.

This rapid growth in *Harambee* schools not only outstripped the growth in number of government schools in Kenya (Figure 15 overleaf) but also enabled the secondary sector to grow much faster than in the other two countries in the East African Community at the time: Tanzania and Uganda (Buchmann, 1999 and Mwiria, 1990).

3.4.2 Private secondary and tertiary education

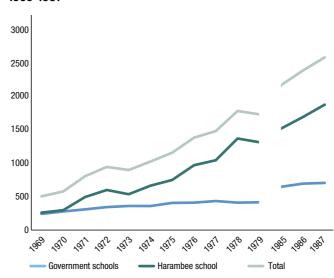
A number of private actors have established secondary schools, accounting for between 15% and 20% of the total number of schools (Ohba, 2009). While there is significant private sector provision at primary level, secondary education is predominantly provided by the state, with the private sector only accounting for 12% of students (2008)

Table 5: Percentage distribution of population (6+ years) by type of school and level attending

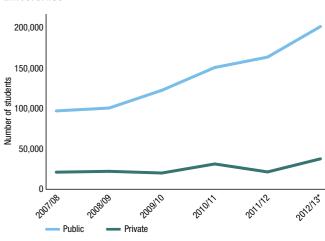
Schooling level	Government	Private	Community	Other	Not stated	Total count
Pre-school	67.2	26.1	6.3	-	0.4	816,049
Primary	90.3	9.3	0.2	0.0	0.1	8,829,291
Secondary	81.1	17.4	1.0	-	0.5	1,461,816
University	78.5	21.2	-	-	0.3	119,636
Training*	38.3	56.8	4.1	-	0.7	295,892
Not stated	72.9	22.0	-	-	5.1	129,819

Source: KNBS, 2013

Figure 15: Number of government and *Harambee* schools 1969-1987







Source: Mwiria, 1990. There were no data for years 1980-1984.

in general secondary programmes. The private sector does account for over 30% of secondary students in TVET programmes, but TVET at secondary level accounts for less than 1% of total students.

The private university system has played a role in expanding tertiary level provision. According to informants at the Ministry of Higher Education, Science and

Source: Kenya National Bureau of Statistics (2013).

Technology (MoHEST), the number of private universities more than doubled from 13 in 2003 to 29 in 2012. However, while total enrolment in public universities has more than doubled since 2007/08, enrolment for private universities has grown by only 44% over the same time period (Figure 16), meaning university education is increasingly dominated by state provision.

Table 6: Percentage of private enrolment, Kenya

	1999	2001	2003	2004	2005	2006	2007	2008	2009
Pre-primary	10.4	-	32.0	37.6	31.5	35.3	35.3	35.3	37.7
Primary	-	-	-	-	4.5	4.9	9.6	10.8	10.6
Lower secondary General	-	-	-	-	4.5	-	9.6	10.8	13.2
Secondary	-	-	-	-	-	-	11.3	11.7	12.7
Upper secondary General	-	-	-	-	8.8	12.3	13.0	12.4	12.1
Upper secondary Technical/ vocational	-	-	-	-	-	32.0	39.4	32.0	-
Tertiary	-	30.7	-	13.5	-	-	-	-	13.2

Source: UNESCO Institute for Statistics (2014)

^{*} Training includes professional and vocational training in colleges

Box 3: The use of bursaries in extending access

Despite the introduction of free secondary day school, education at this and higher levels is not entirely free. While the government capitation grants cover tuition fees and some of the add-on costs, financial barriers remain for many. In Kenya, the response has been extensive provision of bursaries by both the government and private sectors.

Information to gauge the relative importance of bursaries and scholarships in financing and supporting secondary education is rather patchy. In the main study available, which took place before the implementation of FDSE, roughly 40% of secondary schools surveyed had at least 20 students receiving bursaries, with a further 15% of the schools having more than 50 students on a bursary (CfBT, 2007). This same study found through interviews with school principals that 83.8% of the bursaries covered school fees while 18.6% covered boarding fees. Other areas covered were uniforms (8.2%), textbooks (9.4%), food (7.8%) and sports equipment (3.4%).

Some of these bursaries are provided by government, disbursed through the Ministry of Education to schools. Another category of bursary is provided by Parliament through the CDF. Bursaries are limited to 8.6% of total CDF funding (GoK, 2010) and 0.9% of total resources for Local Authority Transfer Funds (LATFs). Disbursement of these funds to each constituency is based on total student enrolment compared to national enrolment and the constituency poverty index vis-à-vis the national poverty index; the amount per student and the allocation criteria vary across constituencies.

Support from the private sector in the form of scholarships – based both on a needs-assessment and merit – has also expanded in recent years. A notable example is the programme Wings to Fly, managed by the Equity Group Foundation, which is aiming to reach 10,000 scholarships at secondary level targeting 'high achieving students from needy families' (Equity Group Foundation, 2014) with the support of MasterCard Foundation, BMZ, DFID and USAID. This type of support has become more visible through the establishment of a Scholarship Forum to coordinate efforts and share experiences across six different actors – the Jomo Kenyatta Foundation, the Equity Group Foundation, Kenya Commercial Bank, Cooperative Bank, Heidleberg and Palmhouse. In addition, the selection process for private scholarships is seen to be more transparent than with public sector bursaries, while their support is more comprehensive (also covering indirect costs beyond boarding such as transportation and personal expenses).

The increased availability of bursaries has helped to ease the financial burden of secondary schools (see Glennerster et al., 2011), but there have been recent recommendations that these should be better targeted towards poor and vulnerable students (MoE and MoHEST, 2012).

Kenya

The main factors driving education progress



USER DEMAND FOR HIGHER LEVELS OF EDUCATION

- More children completing primary school and transitioning to secondary.
- Decreasing fertility rate means increased household financial resources per child.
- Employers requiring higher qualifications and skills.



FINANCIAL RESOURCES AND POLITICAL COMMITMENT

- Decentralised funding has been pivotal for infrastructure development and bursaries.
- The education sector has been receiving the highest allocation of public finance:





GOVERNMENT PRIORITISATION AND REFORMS

 Election promises become policy.



GROWTH IN COMMUNITY, FAITH-BASED AND PRIVATE SECTOR PROVIDERS

- History of Harambee community schools.
- Growth of private universities.



Sources: Fengler (2012) | Ngware et al., (2007) | World Bank (2010) | Ministry of Education | Colclough and Webb (2010: 65)

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4. What are the challenges?



While access to post-primary education has improved remarkably in Kenya over the last decade, the rise in attendance rates has highlighted some challenges that could prevent further gains or threaten the sustainability of achievements so far.

This section outlines some of the main challenges in improving post-primary education in Kenya:

- 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 with regard to teachers and infrastructure.

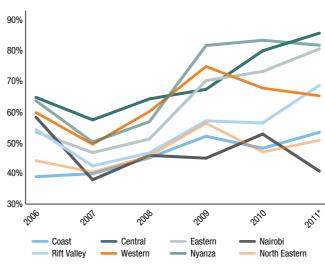
4.1 Entrenched inequality across the system

Equitable access remains a key challenge for the education system. Although progress has been made in increasing access for all groups, inequalities still exist and appear in fact to have been increasing in recent years. For instance, while Nairobi has one of the worst transition rates, it leads the country in secondary test scores – those that get into secondary do well, but the gate for entrance is very tight. In contrast, the ASALS in the north-east consistently lag far behind the other provinces in both transition rates and learning outcomes (Watkins and 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

'Yes, there is access to post-primary, but access to what? The quality of some secondary schools was better 20 years ago' - Kenyan academic

Figure 17: Percentage of students transitioning to secondary education by region

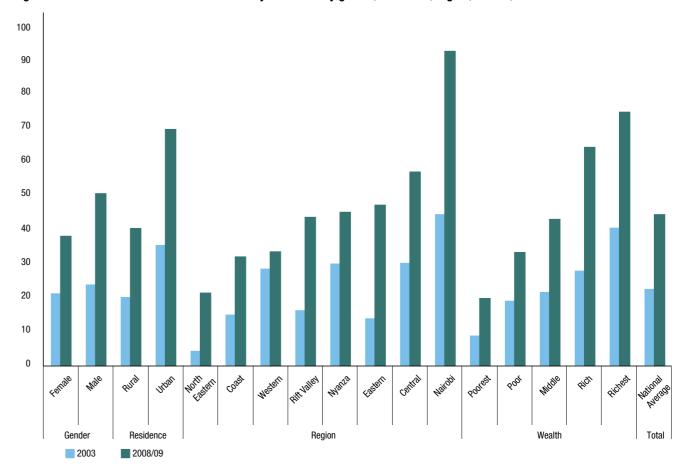


Source: Kenya Bureau of Statistics, accessed 13th Feb 2014
* Provisional

from 75% to 19% for the richest and poorest quintiles respectively (Figure 18). The most disadvantaged are those that fall within more than one marginalised group, for example girls in rural areas. These intersecting inequalities mean that only 13% of girls in the poorest quintile were attending secondary school in 2008/09 compared to 87% of boys in the richest quintile (KNBS and ICF Macro, 2010). 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. Figure 17 shows that when disaggregated regionally, transition rates from primary to secondary education have become more unequal, with the gap between the top and bottom performers increasing from 26 percentage points in 2006 to 45 percentage points in 2011.

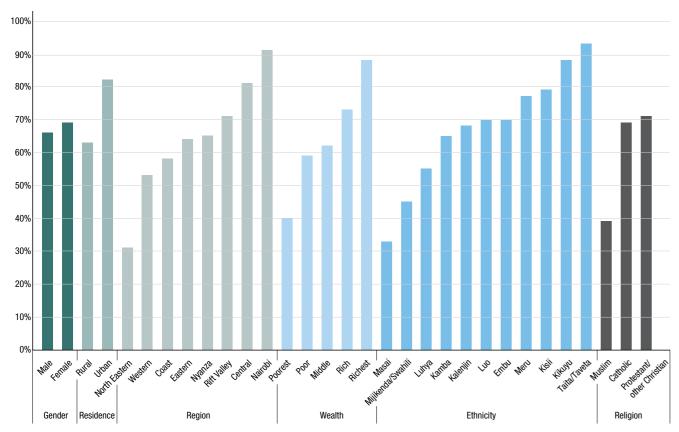
Moreover, net attendance ratios highlight that a large proportion of students accessing secondary education are over age. In 2008/09 the national average for age-appropriate attendance was 18% (net attendance ratio) compared to 45% (gross attendance ration) including over age students. The gross attendance ration better highlights the inequalities in the full student population accessing secondary education.

Figure 18: Gross attendance ratios for secondary education by gender, residence, region, wealth, 2003 and 2008/09



Source: Kenya Demographic and Health Surveys 2003 & 2008/09

Figure 19: Lower secondary completion rate, 2008



Source: UNESCO (2014), World Inequality Database on Education

These disparities are also reflected in learning outcomes. In the 2010 KCSE, in certain ASALS only 2.6% of boys and 1.1% of girls attained the grade necessary (B+ or above) to secure funding for higher education. This compares to national averages of 7.1% and 4.4% respectively (Watkins and Alemayehu, 2012).

Lower secondary completion rates show that although the gender disparity was low, with more girls (69%) completing compared to boys (66%), inequalities remain significant in other areas: urban/rural, region, wealth, ethnicity and religion (Figure 19).

At the tertiary level, the gender parity index for gross enrolment was 0.7 in 2009 (UNESCO Institute for Statistics, 2014). This is an improvement from 0.54 in 2000 but is still a long way from parity. Data on other inequalities (wealth, ethnicity, and region) do not exist for the tertiary level, but the situation probably reflects a continuation of the inequalities that develop through primary and secondary education. Addressing inequalities throughout the education system remains one of the key challenges for the country.

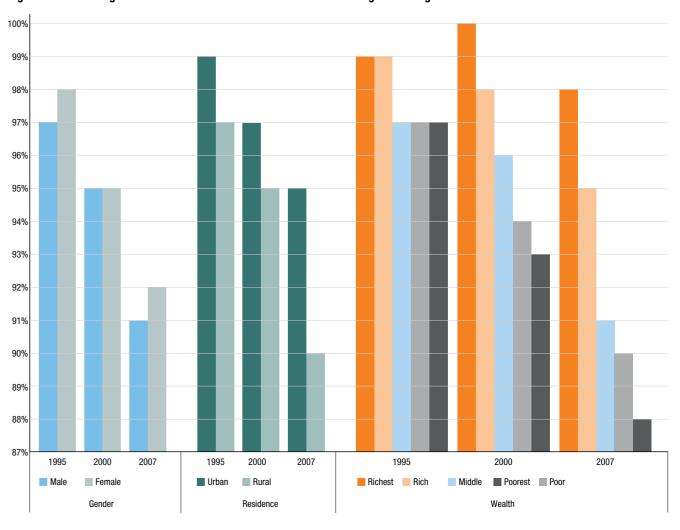
4.2 Concerns over education quality

Quality is a major challenge at all levels of Kenya's education system, and it is intricately linked to both equity and labour market issues. The majority of data available on this issue is at the level of primary education, which we cover here, given that this sets the foundation for quality at higher levels of education. Information on education quality for secondary and tertiary is much more limited.

There are significant learning shortfalls in primary education which affect students' starting points in secondary education. As shown in Figure 20 overleaf, the percentage of students achieving the basics of learning to read in primary school has been falling and inequalities widening. This fall may be because a greater number of children who are less prepared for school are enrolled, which points to the need for stronger early childhood education.

However Kenya is still a relatively high performer when compared with other countries that participate in SACMEQ. In 2007, the most recent data, Kenya was the second highest performer in maths and the fifth highest performer in reading out of fifteen countries (Figure 21 overleaf). Although this performance is high relative to other SSA countries, it represents low learning outcomes overall and masks considerable inequalities (Spaull, 2012). Uwezo, which has been measuring learning outcomes at

Figure 20: Percentage of students who achieve basic levels of learning in reading

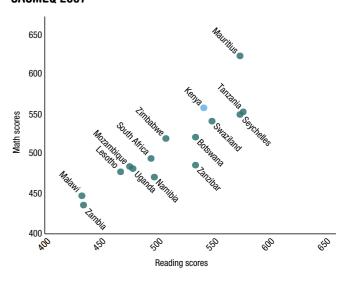


Source: World Inequality Database on Education: www.education-inequalities.org

the primary level since 2009, has found that less than half of students in grade 4 are able to pass both English and numeracy tests at the standard 2 level (Uwezo, 2012).

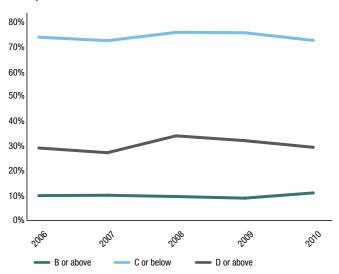
Education quality was one of the areas of concern raised in many of the interviews for this study. At the secondary level very little data are available on learning outcomes. The only available data are the results of the KCSE between 2006 and 2010. While these exams are not the strongest measure of learning outcomes, as they also involve thresholds to restrict access to higher levels, they are some of the only measures available. According to these, around three-quarters of students do not achieve the minimum grade for entry into university (C+), meaning only a quarter of those completing secondary education can consider continuing into higher education. The proportion of students achieving top grades (B or above) increased only marginally from 10% in 2006 to 11% 2010. It should be noted that these grade boundaries could be artificial in that public examinations are often

Figure 21: National performance on reading and maths, SACMEO 2007



Source: Education Policy Data Center (2012)

Figure 22: Percentage of students achieving various grades in KCSE, 2006-2010



Source: Kenya Open Data, 'Survey 2014 - KCSE Exam Results 2006 to 2010'

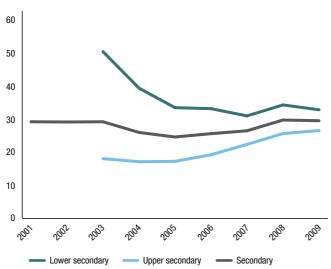
used to restrict access to higher levels of education due to inadequate supply.

Proxies of quality include the pupil-teacher ratio and the percentage of teachers who are trained. At secondary level the pupil-teacher ratio is about 30, but there are variations at lower and upper secondary level. At lower secondary level the ratio has decreased rapidly from over 50 in 2003 to 33 in 2009, while the upper secondary ratio has increased from 18 to 27 over the same period. However, the percentage of trained teachers has fallen for both lower and upper secondary levels from highs of 99% and 97% in 2006 to 97% and 89% in 2009 respectively (Figure 23 and Figure 24).

At both primary (Martin and Pimhidzai, 2013) and secondary levels (Lucas et al., 2012) teacher absenteeism is a concern. According to World Bank data over 42% of teachers are absent from the classroom, figures which are worse for public schools (47%) and schools in rural areas (47%) compared to private schools (31%) and schools in urban areas (34%) (Martin and Pimhidzai, 2013).

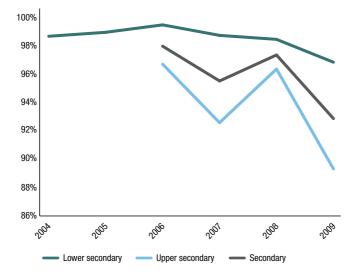
With demand on the rise, the quality of higher education is also increasingly a concern. Gudo et al. (2011) highlight the need for increased investment in infrastructure, teaching and research resources, better use of information and communication technology, and increased collaboration between public 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 and UNDP Kenya, 2010).

Figure 23: Pupil-teacher ratio



Source: UNESCO Institute for Statistics (2014)

Figure 24: Percentage of trained teachers



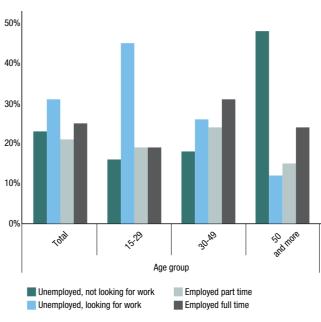
Source: UNESCO Institute for Statistics (2014)

4.3 Extensive youth unemployment

Unemployment hits youth hard and puts Kenya at risk of squandering its demographic dividend in the coming decades. Despite this clearly being an issue, there is a stark lack of data on unemployment rates in Kenya, especially for the youth.

According to the UNDP (2013b), youth unemployment is highest for those who are 20 years old (35%). In 2005-2006, 80% of Kenya's 2.3 million unemployed were between the ages of 15 and 30 (KNBS, 2013). 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 who are often unwilling to work in informal sectors or devote their time to home-making (UNDP,

Figure 25: Employment status by age, 2011



Source: Afrobarometer (2011 data based on a sample size of 2,399)

2013b). Over 90% of unemployed youths have no vocational or professional skills training. A more recent source is Afrobarometer, whose 2011 survey found that 45% of people between the ages of 15 and 29 are not in work and looking for it, compared to 26% for those aged 30 to 49. Only 19% of 15-29 year-olds are employed full time (see Figure 25).

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). 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 (2010), 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.

According to most accounts, the quality of TVET is weak, with various authors pointing to 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 KESSP: '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, 2005a: 231). (Also see Figure 7, page 18, which suggests TVET enrolments have only grown modestly since 1970 and have in fact fallen significantly as a proportion of secondary enrolment.) Problems with the TVET sector include 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).

4.4 Financial constraints and sustainability

While strong progress has been made in expanding access to post-primary education, there are some challenges ahead if the government is aiming – as stated in Sessional Paper No. 14 (MoE and MoHEST, 2012) – to achieve a 100% transition rate from primary to secondary education in the near future²⁵ and to guarantee provision of full and free basic education (which includes secondary day education in Kenya) in line with the 2010 Constitution.

Despite the rise of school infrastructure spending fuelled by the CDFs, the expansion in demand for secondary education has not yet been matched with increased service provision. One of the flagship projects of the Vision 2030 strategy includes the construction and equipping of 560 secondary schools as well as expanding and rehabilitating facilities together with the transformation of 355 centres of excellence. At the same time, to accommodate the growing demand for secondary education by increasing efficiency in service delivery, the government is currently reviewing policies on secondary school size.²⁶

Addressing the shortage of teachers requires a combination of expanding supply and introducing efficiency measures. A shortage of personnel exists at various levels. In the medium-term plan (2008-12) the government envisages employing 28,000 additional teachers. In 2008 contract-teachers were hired to cover the rapid rise in demand, and temporary staff were later absorbed amid the 2012-2013 teacher strikes. Set against this, pupil-teacher ratios in Kenya at secondary level are among the lowest in SSA and there are plans to revise teaching workloads and make more efficient use of teachers across schools for each subject.

Managing teachers' performance is key as their salaries are estimated at approximately 59% of total education

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²⁵ In 2013, for instance, more than 100,000 primary school leavers who scored more than 250 in the 2013 KCPE exam session could not be accommodated in secondary school.

²⁶ One policy paper proposes introducing a minimum 150 pupil-size for each school with at least 25 pupils per class or 150 pupils per school within the first year of establishment; at least three streams, class size of 45 students and pupil-teacher ratio of at least 35 students per teacher at secondary level with all school principals required to sign performance contracts (MoE and MoHEST, 2012).

spending in 2008/09 (GoK, 2010: 59).²⁷ Teachers' absenteeism and lack of motivation are major issues for the improvement of learning outcomes. Teachers' salaries lack an incentive structure, such as performance-related pay. Teacher shortages in ASALs are aggravated by the lack of financial and professional incentives to take posts in these areas.

In managing resource mobilisation for infrastructure development and teacher hiring, the large role played by local government funds (CDFs and LATFs notably) add another layer of complexity, in particular when it comes to coordination of resources in the sector. According to MoE (2012d), funds 'are not clearly linked to central government spending and recurrent sector spending', resulting 'in the emergence of small and unviable schools in some localities, many without qualified teachers or with limited numbers of teachers'.

Demographic pressure from new cohorts together with the policy targets of universal provision of basic education and a 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 the utilisation of teachers, Kenya's tax ratio (tax revenue as a share of GDP) is close to 20% and it is already twice as much as the low-income and lower-middle income average; there may be limited scope to improve tax collection further. Even without considering any revisions in the capitation grant to secondary education, excluding further infrastructure development

and teacher hiring, and assuming a constant unit cost of KES 40,699 (2009/10 figures) and an average 100,000 new intake each year, additional financial requirements of approximately KES 4 billion would be needed, or 3% of the total education budget each year.

Finally, the introduction of a privately-financed parallel system within public universities (Module II) was meant to address financial sustainability in higher education. While HELB loans have been extended to students enrolled in private institutions, their financial viability strongly hinges upon loan repayment rates. Given its nature of a revolving fund, continuing availability of HELB loans will be conditioned upon borrowers being employed after graduation, otherwise default rates will quickly become intolerable.

While the implementation of the FDSE programme has reduced financial barriers for students attending day schools, we have stressed that attending secondary school is far from free. In Section 3.2 we noted that government guidelines for boarding costs and other fees not included in the capitation grant cannot exceed roughly KES 29,000 a year. These costs make attending boarding schools unaffordable for students from the poorest backgrounds. They also 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 GDP per capita in 2012 (\$117) and that the total costs for boarding schools is 38% (\$330).

Box 4: Challenges in data collection and monitoring

While the analysis of enrolment data confirms the positive trajectory of progress in access to post-primary education, a series of challenges have emerged in basic data collection, consolidating information over time, and in unpacking aggregate numbers regarding both the education system as well as the transition from school to job market.

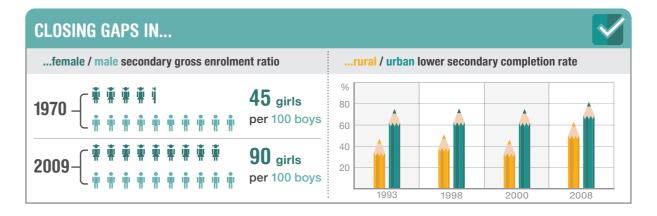
The Education Management and Information System aims to collect, compile and communicate information on the education system, reconciling information across the different ministries involved (MoE, MoHEST and Ministry of Youth and Sports). While data has been disseminated for up until 2007, the system is now under revision with support from some development partners. Government officials reported that it is 'difficult to monitor activities in the education sector as [multiple] ministries are involved', and 'it is not easy to get the necessary information of who is where'. There were several requests for the creation of an integrated information system within those ministries involved in the education sector to avoid discrepancies on figures across the government. Our analysis on the effects of the capitation grant on secondary school enrolment has been constrained by the lack of information on efficiency measures, such as completion rates and drop-out rates at secondary level.

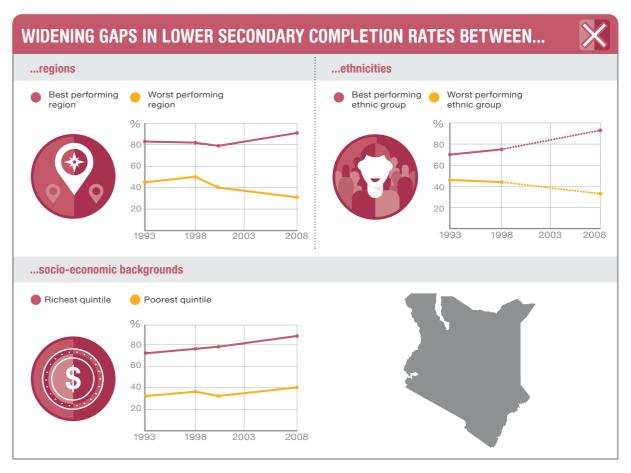
The need to improve data collection is not limited to the education sector. Education policy and curriculum development requires a good understanding of the evolution and conditions of labour markets. While there are potentially several sources of information, they are seriously underfunded or still under development. For instance, there is no national employment management information system. In the interviews with government officials we learnt that the National Employment Bureau is trying to set one up, but its implementation is very much dependent on funding. The Labour Force Surveys – probably the best source for employment data – are based on census data and thus only collected once every ten years (the last one took place in 2009). A National Manpower Survey looking into skills gaps and skill match is being completed. Finally, a Labour Market Survey looking at labour markets and the current status and determinants of unemployment has not been conducted for some time due to lack of funds.

KenyaIs inequality in education

being addressed?







Sources: UNESCO Institute for Statistics (UIS) | World Inequality Database on Education (WIDE)

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²⁷ Average spending across SSA countries on teacher salaries is more than half of the education budget with data showing that the proportion of teacher salaries on the total budget decreases with the education level (UNESCO Institute for Statistics 2011): 69% in primary, 55% in secondary, 38% in TVET and 26% in higher education.

5. What lessons can we learn?



More and more Kenyans have been able to go to school beyond primary levels since the 2000s, and especially into secondary education. Improvement has been strong: in 2000 a pupil was typically expected to complete primary education; by 2009 they would typically have been able to complete lower secondary education (i.e. the full 4+4 year basic education requirement, with most pupils also moving towards completing upper secondary and an increasing number beyond). In this indicator, known as

school life expectancy,²⁸ Kenya has continued to be above the SSA average and has also closed the gap with Uganda, one of the top performers in SSA and a regional neighbour that implemented school fee abolition in lower secondary school a year earlier than Kenya. More years behind school desks and a smaller share of pupils out of school reflected a series of underlying trends:

'Capitation grants are not enough, funding needs to be differentiated and universities need to think outside the box for funding' - Government official

28 The number of years a pupil is expected, at their first year, to stay in school.

'Our students are ambitious, they dream of having a university degree' - School principal

- More pupils enrolled in primary school over the last decade. Gross enrolment ratios at primary level recovered from a low in 1999 of 90.4% to reach 104% in 2009 (above the SSA average 99%).²⁹
- More pupils completed primary school. Available data show that the completion rate rose from 68.2% in 2003 to 81% in 2007 (MoE, 2008).
- More pupils continued into secondary education. The primary to secondary transition rate rose from 46.4% in 2002 to 72% in 2009 (MoE, 2012a), and up to 74% in 2012 according to the MoE (2012b). Ultimately, a larger share of students was enrolled in secondary education programmes: the secondary gross enrolment ratio grew by 50% in less than 10 years from 40% in the early 2000s to 60% in 2009.
- More students attended university. The number of students enrolling in higher education rose from 112,229 in 2006/07 to 180,978 in 2010/11, a more than 60% increase. Gross enrolment rates for higher education also quadrupled in 10 years reaching 4% in 2010 from 2.75% in the early 2000s but it is still below the SSA average of 7%.
- These outcomes were achieved with gender balance, at least according to the gender parity index. Starting from a low gender parity index (0.450) in 1970 for secondary education, gender parity in enrolment rates was virtually achieved by the mid-1990s. Notwithstanding a setback in the 2000s (0.9 in 2010), Kenya still outperforms the SSA average (0.81 in 2009).

We identified four closely interconnected factors propelling this expansion in enrolment rates in both secondary and higher education: (1) increasing political calls for higher levels of education combined with the growing relevance of qualifications for entering and progressing in the job market; (2) strong political commitment to education, which involved several bold policy moves; (3) significant domestic and international budgets targeted at education, with elements of these supporting post-primary levels; and (4) the expansion of provision of education services at the secondary and more recently tertiary level by the communities, faith-based organisations and the private sector.

More students going to school and staying longer has put existing education systems under pressure. On top of this, there are demographic pressures: the population having completed secondary education has grown from 4 million in 2000 to 7 million in 2012, with indications that this figure is expected to triple by 2035 (Fengler and Crespo Cuaresma, 2012). A series of challenges in the

education sector have to be addressed to avoid creating further bottlenecks and hampering the sustainability of the achievements so far. These include: entrenched inequality across the system as well as across ethnicities, regions and income levels; significant learning shortfalls at primary level affecting students' transition to post-primary, with issues of quality continuing into secondary and tertiary education; a mismatch between the skills and competencies developed in the education system and those needed in the labour market, exacerbating youth unemployment; and the need for greater investment and recurrent expenditure, particularly with regard to teachers and infrastructure, which will put public finances and the sustainability of the financing model under strain.

As primary school enrolment continues to grow worldwide, Kenya's story of expansion of secondary and tertiary education reflects a trajectory many other developing countries will be experiencing in the coming years. While the Kenyan education system faces challenges, some of the steps it has taken in the growth of post-primary education may serve as illustration for other countries needing to expand and improve secondary and tertiary opportunities. A number of lessons can be drawn.

- When political commitments lead to dramatic reforms such as fee abolition, this can send shockwaves through an education system that continue to be felt years later. The implementation of FPE and then FDSE were to a large extent unplanned reforms based on election pledges. While the desired effects of increasing enrolment and reducing the household burdens of education were achieved, the sudden increase in numbers led to an overburdened system at least initially and may have diverted attention away from issues of quality and equity. By and large the consensus from interviewees seemed to be that fee abolition was a net positive outcome for the education system as a whole, but that it could have benefited from more comprehensive planning.
- As with primary education, lowering the household financial burden is a key aspect of increasing access at secondary level. Secondary and tertiary education are far more expensive than primary education (lower pupil-to-teacher rations, higher teachers' salaries, transport and/or boarding costs and higher capital costs and equipment). Greater unit costs put pressure on government budgets to finance post-primary education (World Bank, 2008). We have seen that the Kenyan government scaled up education spending by 31% in real terms between 2003/04 and 2008/09, including

29 World Bank EdStats Query.

- provision for FPE and FDSE programmes, with rising per capita spending for primary and secondary school pupils. In the case of higher education, the average public cost per student slightly declined over the last decade, and we see that financial cost to households has not been a strict barrier to access, partially reflecting the fact that Module II students in public universities contribute significantly to tuition fees. Moreover, starting from a low base, higher education scholarships (from private institutions especially) are increasingly targeting talented and needy students.
- Community-based action in education both increasing demand and supporting provision - has been an essential part of Kenya's gains in post-primary education. Our interviewees repeatedly highlighted the role that parents' and students' demand for education have had across the board. Historically, a large number of secondary schools were established as Harambee schools at the behest of community and church leaders. The government later incorporated these into the public system and took on responsibility for teachers, curriculum and regulation while often leaving communities to support infrastructure, attendance and other areas. Interviewees told us this model is still being followed, with new Harambee schools continuing to be established at secondary level. The downside to this model is that where communities aren't making strong demands for secondary education, such as in the ASAL regions, it is more difficult for the state to fully take on provision successfully.
- If there is hope of strengthening school-to-work transitions, greater attentions to high quality and relevant education is needed, along with active links to the labour market. While completing secondary or tertiary education increasingly seems to be a necessity in Kenya's job market, increased access at post-primary

- levels does not necessarily lead to better employment outcomes. In Kenya, many employers are saying that there are not enough qualified and skilled entrants into the job market an issue more of quality than access, requiring curricula and teaching methods to be revised to address the skills mismatch. World Bank research suggests that foreign direct investment, in particular, is affected by higher test scores especially on maths and science at the end of the first cycle of secondary (Hanushek and Woessmann, 2007). Moreover, Kenya's mixed picture for TVET could potentially be transformed with greater links to labour and industry leadership, a focus on changing perceptions of youth polytechnics, and subsidising students.
- While average gains in post-primary access can be good, masked inequalities can still be entrenched as in the Kenyan system - which calls for more fundamental attention to system reform. The challenge ahead in Kenya is to achieve greater access to post-primary education across all income groups and regions. We have seen that gender equity is strong, with 69% of girls completing secondary schools compared to 66% of boys. However, inequalities remain significant in other dimensions: urban/rural, regions, income and ethnicity. Scaling-up access to post-primary opportunities and potentially achieving universal secondary education requires these inequalities to be addressed. This means making changes to the stratified secondary education system, including exams, making education even more affordable to households, subsiding costs and providing bursaries for more vulnerable groups (especially in boarding schools for pupils from rural areas), better balancing allocations across district, provincial and national schools, and strengthening school infrastructure in rural areas.

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This publication is based on research funded by the Bill & Melinda Gates Foundation. The findings and conclusions contained within are those of the authors and do not necessarily reflect positions or policies of the Bill & Melinda Gates Foundation.

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