

Financing education in Kenya: expenditures, outcomes and the role of international aid

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RESEARCH CONSORTIUM
ON EDUCATION OUTCOMES
AND POVERTY (RECOUP)

KENYATTA UNIVERSITY
DEPARTMENT OF
EDUCATIONAL FOUNDATIONS

Financing Education in Kenya: Expenditures, Outcomes and the Role of International Aid

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Abstract

This paper analyses educational expenditures in Kenya over the past two decades, comparing these with changes in enrolments and outputs from the education system. While there is a direct relationship between public financing policy and participation in education, the positive outcomes in the sector cannot be directly attributed to external aid. Though aid has played its part, the major stimulus to sector improvement has been internal. But the Kenyan experience shows that aid has had an impact on national policy and, at times, Kenya has seemed to change its policy objectives in order to access aid. Though a strong economy by African standards, Kenya's continued reliance on external support is inevitable if its ambitious objectives in the education sector are to be upheld.

Keywords: international aid, financing education, education outcomes, access, equity, quality, education policy. JELCN: I21

Contents

ABSTRACT	2
APPENDICES	5
ACRONYMS	8
CHAPTER ONE: EDUCATIONAL PARTICIPATION IN KENYA	9
1.1. Introduction	9
1.2 Brief Methodological Note	10
1.3 Trends in Educational Participation	10
CHAPTER TWO: THE DYNAMICS OF QUALITY	27
2.1 Introduction	27
2.2 School Textbooks	27
2.3 Performance in National Examinations	29
2.4 Teachers in Primary and Secondary Schools	32
CHAPTER THREE: THE FINANCING REALM	37
3.1 The Macro Economic Picture	37
3.2 Education Sector Expenditures	38
3.3 Education versus Social Sector and Other Related Expenditures	41
3.4 MoE and Overall Government Development Funding	42
3.5 Sub-Sectoral Spending Patterns	42
3.6 Recurrent Expenditure	44
3.7 Patterns of Per Student Educational Expenditure	45
3.8 Parental/Household Spending on Education	49
3.9 Who Benefits from Educational Spending in Kenya?	51
3.10 Teacher Salaries	56
3.11 Financing University Education	56
3.12 Sector Financing Gaps	58

CHAPTER FOUR: INTERNATIONAL AID TO KENYAN EDUCATION	60
4.1 Introduction	60
4.2 The Volume and Nature of Aid	62
4.3 The Volume and Nature of Aid to Education	64
4.4 The Education SWAp (KESSP) and Current External Sector Support	67
CHAPTER FIVE: CONCLUSIONS	70
5.1 Introduction	70
5.2 The Relative Impact of Aid on Policy Formulation in Kenya	70
5.3 The Future of External Aid to Education in Kenya	72
REFERENCES	91

Appendices

Appendix 1:	Enrolment in Primary Schools by Gender and level 1996-2006 ('000s)	74
Appendix 2:	Primary GER and NER by Gender (percent) 1990-2006	75
Appendix 3a:	Enrolment in Secondary Schools by Gender and Level 1996-2006 ('000s)	75
Appendix 3b:	GER and NER in Secondary schools in Kenya, 1990-2006	76
Appendix 4:	Student Enrolment by Gender in Technical Institutions, 1999-2005	76
Appendix 5a:	Primary School Teachers by Sex, Qualification and percent Female 1991-1997	77
Appendix 5b:	Primary School Teachers by Sex, Qualification and percent Female 1998-2004	78
Appendix 6:	Secondary School Teachers by Sex, Rural/Urban percent Distribution, and percent Female	79
Appendix 7a:	Proposed Distribution of Expected Donor Funding of KES 5,911,900,000 among SWAp Eligible Categories, March 2007	80
Appendix 7b:	Functional Analysis of Public Expenditure (percent of GDP), 1992/93 – 2005/06 Excluding Expenditures by Local Authorities	81
Appendix 7c:	Functional Analysis of Public Expenditure (percent of Total Expenditure), 1992/93 – 2005/06 Excluding Expenditures by Local Authorities	81
Appendix 8:	Total Primary and Secondary Education Recurrent and Development Expenditure (percent)	82
Appendix 9a:	Intra-Sectoral Analysis of Education Development Expenditure as Percent of Total Education Development Expenditure, 1990/91-2005/06	83
Appendix 10:	Teachers' Average Salary per Grade in Constant 1998 KES and US\$	84
Appendix 11:	Aid Receipts (Disbursements) for Education by Major Agencies for Selected Years* (Constant 1991/1992 KES Million)	85
Appendix 12:	Sources of Funds for University Education (KES Million)	87
Appendix 13:	Student Enrolment by Gender Full time and Part time Programmes	89

Tables

Table 1:	Total Pre-Primary School Enrolment by Region, 1999-2006	11
Table 2:	Public Pre-Primary Schools Enrolment, 1999-2006	12
Table 3:	Private Pre-Primary Schools Enrolment by Province, 1999-2006	13
Table 4:	Primary GPI by Province, 2000-2005	16
Table 5:	Primary School Grade Repetition Rate (percent)	17
Table 6:	Primary School Grade Repetition Rates (percent) by Poverty Bands	17
Table 7:	Primary School Grade Dropout Rate (percent)	18
Table 8:	Transition Rate from Primary to Secondary School by Gender, 1991-2004	19
Table 9:	Transition Rate by Province (percent), 2002-2005	19
Table 10:	Distribution of School-going age Population by Reason for Currently not in school	21
Table 11:	Adult Literacy Enrolment by Gender 1990-2003	23
Table 12:	Textbook Pupil Ration by Subject and Standard, 2005	29
Table 13:	Mean Scores on KCSE exams, 1989-95	30
Table 14:	National Mean Scores by Subject in KCPE, 1990-95 and 2002-05	31
Table 15:	KCPE Raw Mean Score by Gender and Subject, 2002-05	32
Table 16:	Distribution of Teachers: August 2006	33
Table 17:	Number of Educational Institutions, 2002-06	34
Table 18:	Trends in Teacher Replacement, 2002-06	35
Table 19:	Kenya – Macro Economic Indicators	37
Table 20:	Education Expenditure as percent of Government Total and GDP	39
Table 21:	Educational Expenditure by Economic Classification, recent years	39
Table 22:	Public Spending on Education, Selected Countries	40
Table 23:	Education expenditure as percent of total government funds, 1993-2004	40
Table 24:	Actual Expenditure 2002/03 – 2005/06 (percent)	43
Table 25:	Recurrent Expenditure by Economic Classification, 2002/03 – 2006/07	44
Table 26:	Public Expenditure Patterns by Level, 2002-2005	46
Table 27:	Sub-sector Financing Trends (percent)	47
Table 28:	Recurrent Expenditure per Student, 1990/91 – 2005/06	48
Table 29:	Education Expenditure by Economic Classification, 2002/03 – 2005/06	49
Table 30:	Average Distribution of Expenditures on Education by Income Levels	50
Table 31:	Mean Annual Expenditures on Education by Poverty Levels, 1996-2004	50
Table 32:	Distributions of University Students by estimated Family Income Level	51
Table 33:	Actual and Projected Gender Parity Index (GPI)	53
Table 34:	Public teacher salary expenditures by district wealth quintiles	53
Table 35:	Gross and Net Rates of Enrolment for Various Groups, Kenya, 1994	54
Table 36:	Net Average Enrolment Rates by Region and Income Levels, 1993-2002	55
Table 37:	Project Financing Gap in Constant 2007 KES and US\$ (Millions)	58
Table 38:	Education Sector Resource Requirement, Constant 2007-08 KES, US\$	59
Table 39:	Loan and Grant Components of total Kenya's ODA, 1989-2006	63
Table 40:	External Aid to Education Sector: Multilateral and Bilateral	65
Table 41:	FPE Funds Disbursements to Schools, 2002/03 and 2003/04 (KES)	67
Table 42:	Donor Commitments to Education Sector, 2007/09	69

Figures

Figure 1:	ECD Gross Enrolments by Gender, 2000-2005 (percent)	14
Figure 2:	Sector Development expenditure as Percent of Total	42
Figure 3:	Sector Recurrent Expenditure and as percent of Government Recurrent	45
Figure 4:	Characteristics of EU ODA in Kenya – Main EU ODA Sectors	62
Figure 5:	Total and EU ODA Trends in Kenya	63
Figure 6:	EU ODA Per Capita and Poverty Trends in Kenya	64

Acronyms

AICAD	African Institute for Capacity Development
AIDS	Acquired Immune-Deficiency Syndrome
ASE	Affordable Secondary Education
AVU	African Virtual University
AY	Academic Year
CHE	Commission for Higher Education
CIDA	Canadian International Development Agency
DFID	Department for International Development
ECD	Early Childhood Development
EU	European Union
FPE	Free Primary Education
FTI	Fast Track Initiative
FY	Financial/Fiscal Year
GAP	General Administration and Planning
GDP	Gross Domestic Product
GOK	Government of Kenya
GPI	Gender Parity Index
HIV	Human Immune-Deficiency Virus
IDA	International Development Assistance
IMF	International Monetary Fund
JICA	Japan International Cooperation Agency
JKUAT	Jomo Kenyatta University of Agriculture & Technology
KCPE	Kenya Certificate of Primary Education
KCSE	Kenya Certificate of Secondary Education
KES	Kenya Shillings
KIE	Kenya Institute of Education
MDGs	Millennium Development Goals
MoE	Ministry of Education
MoEST	Ministry of Education, Science & Technology
NGO	Non-Governmental Organization
ODA	Official Development Assistance
SAPs	Structural Adjustment Programs
SbTD	School-based Teacher Development
SPRED	Strengthening Primary Education Phase Three
SWAp	Sector Wide Approach
TIVET	Technical, Industrial and Vocational Education and Training
TPR	Textbook Pupil Ratio
UIP	Universities' Investment Project
UNESCO	United Nations' Educational, Scientific and Cultural Organization
UNICEF	United Nations' Children's Fund
UoN	University of Nairobi
UPE	Universal Primary Education
USAID	United States Agency for International Development

Chapter One: Educational Participation in Kenya

1.1 Introduction

The provision of widely spread education and training opportunities has been a long-standing objective of the Government of Kenya (GoK). Since Independence, the Government has sought to address the challenges facing the education sector through a range of policy initiatives, often with mixed results. Nevertheless, a major focus has been the attainment of Universal Primary Education (UPE) and the key concerns of achieving greater access, participation, equity, quality and relevance. However, at the outset of the 21st century, the country is faced with new challenges for educational policy, which marry both the right to universal access to education, and the need to enhance rapidly the development of skilled human resources (Kenya, 2005). Over the last 30 years, the education sector has undergone major transformations with more than ten reviews by special commissions and working parties established by the Government¹. The increased public demand for education and training has stretched the Government budget, and in response partnerships have been intensified with parents and communities, individual investors, civil society and donors.

Disentangling the separate influence of government and donors in the Kenyan education sector is not easy. For example, recent increases in primary school enrolments are mainly a direct result of the government's free primary education program. Nevertheless, donor funding has made a direct contribution to improving teaching and learning materials, increasing reading proficiency and therefore the quality of education. In the light of the volume of pupils, the quality of education would otherwise have suffered and in recent years the important role of donor funds in supporting state funding and safeguarding basic learning has been clear.

These issues constitute an important subject for interrogation in this paper. It is the outcome of a study commissioned by the University of Cambridge in collaboration with Kenyatta University on the role and importance of aid to education, under the auspices of the RECOUP project. The overall objective of the paper is to identify and analyse educational expenditures over the past two decades, and to compare these with changes in enrolments and outputs from the education system over the same period. A particular interest is to identify the role of donor spending in the sector, and to document the main changes in the volumes and emphases of such expenditures. The paper is structured as follows. This

¹ These include, the 1964 Ominde Commission, the 1979 Gachathi Report, the 1981 Presidential Working Party on the Establishment of the Second Public University, and the 1988 Presidential Working Party on Education and Manpower Training for the Next Decade.

introductory chapter presents an analysis on the trends in participation in education in Kenya, covering early childhood development (ECD), primary, secondary, technical and vocational schooling and university education. A discussion of quality issues is presented in chapter two. An analysis of the financing trends and patterns of international aid flows in Kenya is presented in chapters three and four. Some concluding observations on the impact of international aid are offered in chapter five.

1.2 Brief Methodological Note

The focus for this study is the period from 1990 to the present, although there are many data gaps which prevent consistent coverage of the whole period. In particular, data on technical, industrial and vocational education and training (TIVET) are only available for five years. Adequate information is constrained by, *inter alia*, the location of some components of education and training (like TIVET) in a ministry other than education. Second, there is a problem of multiplicity of data sources that are not always consistent with each other. Statistical Abstracts, Economic Surveys, the Teachers' Service Commission (TSC), the Kenya National Bureau of Statistics (KNBS), the Ministry of Education Planning Unit, Ministry of Science and Technology, the Joint Admissions Board (JAB), the Commission for Higher Education (CHE), Kenya National Examination Council (KNEC), etc, all provided data for this study. In some cases, an aggregation is made of the multiple data sources. Where disagreements are considered grave, the relevant data are omitted

1.3 Trends in Educational Participation

1.3.1 Early Childhood Development

Total pre-school enrolment for the period 1999 – 2006 and enrolment in public and private ECD institutions in the country are presented in Tables 1, 2 and 3.

Overall enrolment for the seven year period rose by 27.1 percent. Differences exist, especially at the regional level. Enrolment remains very low in North Eastern compared to other regions. There are no significant gender differences in enrolment at the national level. Girls constituted 48.6 percent of enrolments in 1999, dropping marginally in 2006 to 48.2 percent, but with notable regional differences. In North Eastern Province, girls comprise only 38.3 percent of enrolments.

The bulk of ECD enrolments are in public institutions, comprising about 64.7 percent (Tables 2 and 3). What this means is that the private ECD sub-sector has played a significant role in enhancing access to pre-school education. Comparatively, the private sub-sector in primary and secondary education is relatively small, comprising on average about 2 percent of all educational institutions and less than 10 percent of enrolment. Enrolments in the public ECD sub-sector expanded by 39.3 percent during the seven years under consideration.

Table 1: Total Pre-Primary School Enrolment by Region, 1999 – 2006

Province	1999			2000			2001			2002		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Coast	54,784	48,359	103,143	50,354	46,676	97,030	54,270	50,891	105,161	57,859	53,745	111,604
Central	73,665	71,341	145,006	71,233	69,348	140,581	74,467	71,579	146,046	70,450	67,637	138,087
Eastern	97,064	91,831	188,895	95,292	92,624	187,916	98,665	95,086	193,751	113,819	111,368	225,187
Nairobi	109,465	103,364	212,829	110,906	104,759	215,665	111,822	105,660	217,482	111,887	105,758	217,645
Rift Valley	139,189	129,269	268,458	162,383	150,197	312,580	173,743	164,628	338,371	190,889	181,240	372,129
Western	66,630	66,801	133,431	62,422	64,892	127,314	69,312	69,735	139,047	90,368	86,356	176,724
Nyanza	78,689	77,461	156,150	81,465	81,072	162,537	85,751	86,325	172,076	100,618	101,662	202,280
North Eastern	6,573	4,177	10,750	6,981	4,590	11,571	6,548	4,972	11,520	6,873	5,097	11,970
Total	626,059	592,603	1,218,662	641,036	614,158	1,255,194	674,578	648,876	1,323,454	742,763	712,863	1,455,626
	2003			2004			2005			2006*		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Coast	59,076	49,867	108,943	74,294	71,024	145,317	75,949	76,707	152,656	77,218	77,873	155,090
Central	69,765	69,090	138,854	71,653	70,618	142,271	72,325	69,232	141,558	73,667	70,357	144,024
Eastern	115,371	115,275	230,646	117,893	112,732	230,625	119,774	108,587	228,360	121,752	110,223	231,975
Nairobi	134,282	127,339	261,621	136,495	139,599	276,094	143,347	139,613	282,959	146,580	142,306	288,886
Rift Valley	211,031	199,369	410,400	214,031	205,522	419,553	228,445	214,623	443,068	232,576	218,090	450,667
Western	91,256	90,061	181,317	85,471	81,733	167,204	86,263	62,101	148,364	87,809	63,095	150,904
Nyanza	94,597	100,476	195,073	111,774	114,585	226,359	112,662	114,548	227,209	114,642	116,356	230,998
North Eastern	6,640	4,574	11,214	11,806	7,491	19,297	11,994	7,476	19,470	12,200	7,592	19,792
Total	782,018	756,051	1,538,069	823,417	803,304	1,626,720	850,759	792,887	1,643,646	866,445	805,892	1,672,336

Source: EMIS, School Data Returns, MoE

* Provisional

Table 2: Public Pre Primary Schools Enrolment, 1999 – 2006

Province	1999			2000			2001			2002		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Coast	42,756	37,668	80,424	39,199	36,305	75,504	42,221	39,596	81,817	45,022	41,829	86,851
Central	42,694	41,046	83,741	41,356	39,935	81,291	42,534	40,732	83,266	40,851	39,047	79,899
Eastern	80,226	75,771	155,997	77,900	75,910	153,810	81,307	78,459	159,767	93,646	91,770	185,416
Nairobi	27,637	26,097	53,734	27,973	26,449	54,422	28,176	26,676	54,852	28,164	26,701	54,865
Rift Valley	100,941	93,444	194,384	112,904	103,880	216,784	120,664	114,457	235,120	132,792	125,737	258,529
Western	50,354	50,499	100,853	47,285	48,889	96,174	52,441	52,779	105,220	68,167	65,371	133,538
Nyanza	51,114	50,291	101,405	61,907	61,470	123,377	65,610	66,012	131,622	78,154	78,925	157,079
N. Eastern	3,743	2,542	6,285	4,113	2,943	7,056	3,749	3,261	7,010	3,664	3,128	6,792
Total	399,465	377,358	776,823	412,637	395,781	808,418	436,703	421,971	858,674	490,460	472,508	962,968
	2003			2004			2005			2006*		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Coast	46,109	37,725	83,835	58,616	56,611	115,227	63,016	63,601	126,617	63,962	64,491	128,453
Central	39,916	40,123	80,040	39,524	38,518	78,042	41,852	39,700	81,552	42,432	40,204	82,636
Eastern	93,688	94,414	188,102	99,339	95,282	194,621	101,588	92,011	193,599	103,112	93,299	196,411
Nairobi	34,113	32,754	66,867	23,392	23,924	47,316	35,007	34,095	69,102	35,532	34,572	70,104
Rift Valley	147,892	137,160	285,052	149,478	138,475	287,953	157,979	148,575	306,554	160,349	150,655	311,004
Western	72,981	69,011	141,992	62,334	61,652	123,986	61,094	44,228	105,323	62,011	44,847	106,858
Nyanza	74,580	79,899	154,479	84,517	86,931	171,447	83,642	85,304	168,946	84,896	86,498	171,394
N. Eastern	3,465	2,682	6,147	9,201	5,834	15,035	9,386	5,862	15,249	9,527	5,945	15,472
Total	512,744	493,768	1,006,512	526,400	507,227	1,033,627	553,565	513,376	1,066,941	561,821	520,511	1,082,332

Source: EMIS, School Data Returns, MoE

* Provisional

Table 3: Private Pre Primary Schools Enrolment by Province, 1999-2006

Province	1999			2000			2001			2002		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Coast	12,028	10,691	22,719	11,155	10,371	21,526	12,049	11,295	23,344	12,837	11,916	24,753
Central	30,971	30,295	61,265	29,877	29,413	59,290	31,933	30,847	62,780	29,599	28,590	58,188
Eastern	16,838	16,060	32,898	17,392	16,714	34,106	17,358	16,627	33,984	20,173	19,598	39,771
Nairobi	81,828	77,267	159,095	82,933	78,310	161,243	83,646	78,984	162,630	83,723	79,057	162,780
Rift Valley	38,248	35,825	74,074	49,479	46,317	95,796	53,079	50,171	103,251	58,097	55,503	113,600
Western	16,276	16,302	32,578	15,137	16,003	31,140	16,871	16,956	33,827	22,201	20,985	43,186
Nyanza	27,575	27,170	54,745	19,558	19,602	39,160	20,141	20,313	40,454	22,464	22,737	45,201
N. Eastern	2,830	1,635	4,465	2,868	1,647	4,515	2,799	1,711	4,510	3,209	1,969	5,178
Total	226,594	215,245	441,839	228,399	218,377	446,776	237,876	226,905	464,780	252,303	240,355	492,658
	2003			2004			2005			2006*		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Coast	12,967	12,142	25,109	15,678	14,413	30,091	12,933	13,106	26,039	13,256	13,382	26,637
Central	29,848	28,966	58,815	32,129	32,100	64,229	30,473	29,533	60,006	31,235	30,153	61,388
Eastern	21,683	20,861	42,544	18,554	17,450	36,004	18,186	16,576	34,761	18,640	16,924	35,564
Nairobi	100,169	94,585	194,754	113,103	115,675	228,778	108,340	105,518	213,858	111,048	107,734	218,782
Rift Valley	63,139	62,209	125,348	64,553	67,047	131,600	70,466	66,048	136,514	72,227	67,435	139,663
Western	18,275	21,050	39,325	23,137	20,081	43,218	25,169	17,873	43,041	25,798	18,248	44,046
Nyanza	20,017	20,578	40,595	27,257	27,654	54,912	29,020	29,244	58,264	29,745	29,858	59,603
N. Eastern	3,175	1,892	5,067	2,605	1,657	4,262	2,608	1,613	4,221	2,673	1,647	4,321
Total	269,273	262,283	531,556	297,017	296,077	593,094	297,194	279,510	576,705	304,624	285,380	590,004

Source: EMIS, School Data Returns, MoE

* Provisional

N/B: Data in Pre-Primary Schools for 1990-1998 is unavailable at Government Offices. The Kenya National Bureau of Statistics Library from where most data is stored confirmed non-record keeping for the same.

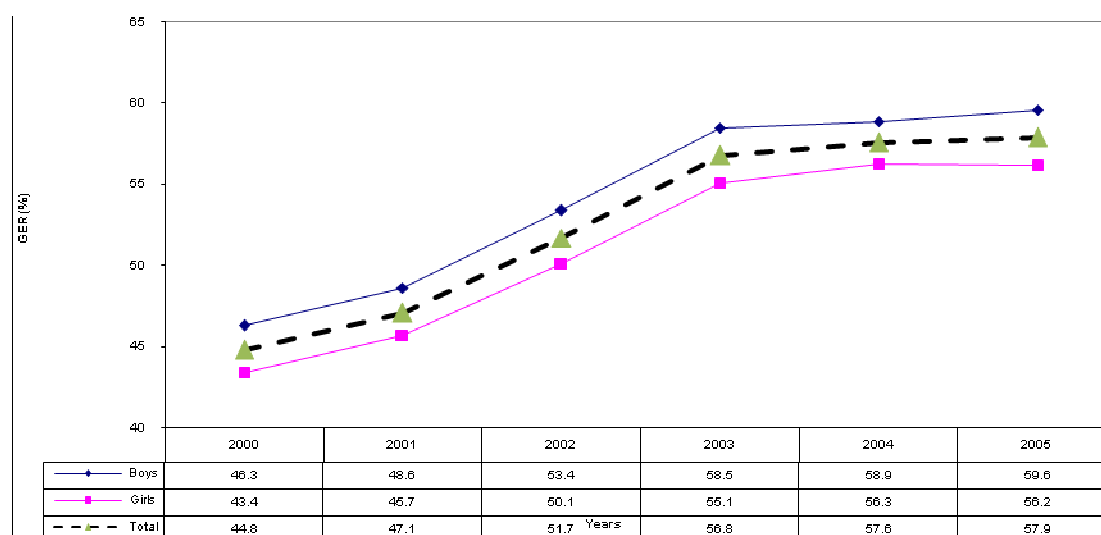
In contrast, the private ECD sub-sector has expanded by 33.5 percent over the same period. It is surprising to find that the public sector could expand faster than the private, given the low level of public funding for ECD. Most of the ECD institutions in the country are community owned, especially in the rural areas. Thus, it is likely that the community owned institutions have been classified as public, when, in reality, they are private, at least to the extent that they are not state funded (Oxfam, 2003).

Figure 1 presents trends in GER and NER for the sub-sector. The five-year period witnessed an average growth in the proportion of pre-school children enrolled from 44.8 percent of the population group in 2000 to 57.9 percent in 2005. This represents an annual increase of 2.6 percentage points. One of the main constraints facing ECD has been the low proportion of qualified teachers. Unless this is addressed, enrolment in this level will remain low. The

MoE seems to have recognised this problem and is putting in place measures for the training of ECD teachers. According to MoE sources, the total number of ECDE teachers increased from 63,650 in 2003 to 72,182 in 2005 out of which 70.6 percent are trained².

The growth in ECD enrolments was steady between 2000 and 2003, with a levelling off in subsequent years. This is in contrast to the primary level where growth has been very consistent, witnessing an increase of over two million children in less than five years. In fact, the levelling off started with the implementation of the Free Primary Education (FPE) programme: whereas all primary schools benefited from direct government funding, ECD did not. This means that the children in ECD continue paying fees, which is a major deterrent to enrolment, compared to their primary counterparts.

Figure 1: ECD Gross Enrolments by Gender, 2000-2005 (Percent)



Source: Ministry of Education

1.2.2 Primary Education

Appendix 1 indicates a substantial absolute increase in primary school enrolments over the last 17 years: the number of learners increased by 2.4 million or 43 percent. The relative increase was greater for boys (45.6%) than for girls (40.3%). However, because of the

² Though these are trained, all would be graduates of private colleges offering different kinds of certification, but mostly the Montessori category. Currently, there are no public schools for training ECD teachers. Universities started offering undergraduate programmes in early childhood development, but they only enrol serving teachers who want to upgrade their skills and professional qualifications.

important policy shift in 2003 that saw the implementation of FPE and the subsequent establishment of an education SWAp, it is instructive to compare the two distinct periods of pre- and post-2002. In that regard, the increase in absolute terms between 1996 and 2002 was 532, 400 pupils, or an average growth of 1.5% per year. Between 2002 and 2005, by contrast, the growth in enrolments was very large: an additional 1.5million children were enrolled in primary education over that three year period, representing a growth of some 7.4% per year. Thus, it seems clear that the policy intervention of the FPE program provided an unprecedented stimulus to increased primary enrolments. I

Trends in Primary GER and NER

Appendix 2 shows that both the primary GER and the NER increased by 29 percentage points over the period to 107 and 81 respectively, with little difference amongst girls and boys. However, a comparison of the GER and NER figures shows that there are more overage boys than girls in school. More older girls drop out of the school system owing to a variety of circumstances, including early pregnancy or marriage. The age data suggest that they usually do not subsequently re-enrol, despite the formal existence of a re-admission policy in the Kenyan education system. This appears less successful than in some other African countries such as Malawi, where active re-admissions policies in both primary and secondary education have been implemented for some time (UNICEF, 2007).

Primary Gender Parity Index (GPI) by Province³

The actual difference in the enrolment patterns of girls and boys is better presented by the Gender Parity Index (GPI). For the country as a whole, the GPI (Table 4) reveals near gender parity. There is little difference between the male and female NERs. However, there exist regional gender disparities across the provinces. As indicated in Table 4, North-Eastern Province recorded the greatest inequalities, with the GPI ranging from 0.60 in 2001 to 0.71 in 2005. Female enrolments, on the other hand, are stronger in Nairobi Province with GPIs of 1.17 in 2001 and 1.04 in 2005. The high GPI for Nairobi indicates that there are more girls in schools in the region compared to the rest of the country. But that does not mean that all school-age girls are actually enrolled. Sixty percent of the Nairobi population lives in informal settlements characterized by high incidence of poverty, high population and poor access to social services, including education (Kenya 2005). In these settlements, FPE gains

³ The Gender Parity Index (GPI) is the ratio of female to male values of a given indicator, in this case, enrolment. A GPI of 1 indicates parity between the sexes; a GPI between 0 and 1 means a disparity in favour of boys/men/male while a GPI greater than 1 indicates a disparity in favour of girls/women/females

are increasingly being reversed, and the programme is being criticised for falling short of expectations.

Table 4: Primary GPI* by Province, 2000- 2005

Province	2000	2001	2002	2003	2004	2005
Coast	0.88	0.87	0.91	0.90	0.93	0.98
Central	1.03	1.03	1.05	1.01	1.00	0.99
Eastern	1.04	1.03	1.04	1.00	1.00	0.99
Nairobi	1.16	1.17	1.16	1.14	1.14	1.04
Rift Valley	0.98	0.99	1.00	0.98	0.97	0.97
Western	0.96	0.95	0.96	0.96	0.98	0.95
Nyanza	1.00	0.98	1.01	0.99	0.99	0.99
North Eastern	0.57	0.60	0.72	0.62	0.63	0.71
TOTAL	1.00	1.00	1.02	0.99	1.00	0.99

Source: Statistics Section, MoE, 2008

* Note: The primary GPI is the ratio of female NER to the male NER at primary level. A GPI of 1 indicates parity between sexes; a GPI that of less than 1 implies that a greater proportion of boys than girls are enrolled, whereas a GPI greater than 1 indicates that enrolments favour girls.

Repetition and Drop out

Repetition figures by grade for 2004 – 2006 are presented in Table 5. The average repetition rate of 6.1 percent is high by any standard, as it means that these are children on whom the state and the parents are spending double the resources in the same grade for more than one schooling year. Two distinct features of the table stand out. First is that overall, the mean for boys is higher than that of girls, implying that they repeat more. This might be the result of higher private investment value being attached to boys' education and consequent pressure to succeed in school, while, on the other hand, girls not only have a 'lesser' investment value (and therefore less pressure on them to repeat), but also mature faster than boys, and are therefore more likely to be allowed to proceed to the next grade than boys.

Table 5: Primary School Grade Repetition Rate (percent)

Year		G1	G2	G3	G4	G5	G6	G7	G8	Mean
2004	Girls	7.2	6.3	5.4	5.5	6.6	5.4	7.6	4.7	6.1
	Boys	5.9	7.1	7.0	5.0	5.8	5.6	6.8	6.1	8.2
	Total	6.6	6.7	6.2	5.3	6.2	5.5	7.2	5.5	6.1
2005	Girls	6.3	5.1	6.2	5.3	7.2	6.0	7.3	3.5	5.9
	Boys	7.0	6.0	7.4	5.1	6.0	5.5	7.7	5.3	8.3
	Total	6.6	5.6	6.8	5.2	6.6	5.7	7.5	4.4	6.0
2006	Girls	7.3	6.0	6.1	5.9	6.1	7.2	8.2	3.3	6.3
	Boys	7.4	6.2	5.6	6.1	5.4	6.1	7.9	3.4	8.0
	Total	7.4	6.1	5.8	6.0	5.8	6.6	8.0	3.3	6.1

Source: MoE, 2006

Secondly the total repetition in Grade 7 is higher than in any other grade, reflecting parental and school pressure to pass examinations. Students are normally under pressure to repeat the pre-examination grade to ensure that they perform better in the Kenya Certificate of Primary Examinations (KCPE) and proceed to the best secondary schools in the country.

Table 6: Primary School Grade Repetition Rates (percent) by Poverty Bands*

Year	Poverty Bands	G1	G2	G3	G4	G5	G6	G7	G8	Mean
2003	Low	7.5	4.6	4.5	4.2	4.5	3.9	4.7	3.0	4.6
	Medium	9.3	7.3	6.9	6.9	9.4	7.1	9.0	6.6	7.8
	High	13.6	14.4	14.5	11.5	13.5	12.5	14.4	9.8	13.0
2004	Low	3.3	4.5	2.7	3.4	3.7	2.9	3.5	3.2	3.4
	Medium	7.2	6.2	6.8	5.9	6.7	6.7	7.8	6.3	6.7
	High	9.3	10.6	10.6	7.1	9.2	8.1	12.5	8.9	9.5
2005	Low	3.4	2.9	3.3	2.8	3.8	3.3	3.9	3.0	3.3
	Medium	5.8	5.0	7.6	5.7	7.6	6.2	8.3	4.9	6.4
	High	11.2	10.0	11.2	8.2	9.5	9.1	12.1	9.3	10.1
2006	Low	3.8	3.2	2.7	3.5	3.2	3.8	4.6	2.3	3.4
	Medium	6.4	5.7	6.5	6.1	6.5	7.6	8.7	3.8	6.4
	High	12.1	10.2	9.1	9.6	8.8	9.7	12.6	5.0	9.6

Source: MoE (2006)

* The source document does not define the poverty bands in greater detail

Information in Table 6 suggests that the poor are most affected by repetition, as the repetition levels for all years and grades are highest for those in the high-poverty band. Notably, however, repetition among all groups was highest in 2003. Subsequent to this year, the government began enforcing a policy of automatic promotion to the next grade. Though not fully successful, it has stemmed the high repetition rates as school authorities are wary of disciplinary action that might be taken against them if they breach of this directive. But the practice of repetition

thrives within the private school sector where the over-stretched government inspection and supervisory services have not been as effective.

Drop-out

A summary of drop-out rates in primary education for the period 2003–06 is presented in Table 7. Overall, there seems to be a gradual reduction in drop-out rate over the four-year period. According to the MoE, the drop-out rate (not captured in Table 7) declined further in 2007 to 2.0 percent (MoE, 2007). The drop-out rate seems to be high between G7 and G8, and more girls drop out of school than boys, with a one percentage point difference. The negative rates in Table 18 reflect the net flow of pupils into the receiving grades, i.e., they are experiencing more new entrants from outside the system. There may have been actual drop-out even in the years showing negative values, but the net effect may have been cancelled by the high number of new entrants. The implementation of FPE programme in 2003 associated with the reduction in the direct costs of schooling is responsible for this trend. These ‘drop-ins’ may be out-of-school children attracted into the system with the elimination of financial and other barriers.

Table 7: Primary School Grade Drop-out Rate (percent)

Year	Gender	G1 & 2	G2 & 3	G3 & 4	G4 & 5	G5 & 6	G6 & 7	G7 & 8	Mean
2003	Girls	-11.3	-16.5	-11.4	-3.0	-8.3	-6.2	11.4	-6.5
	Boys	-10.0	-11.9	-12.6	-6.1	-4.6	-8.3	2.2	-7.3
	Total	-10.7	-14.1	-12.0	-4.6	-6.4	-7.2	6.8	-6.9
2004	Girls	5.2	1.9	0.6	3.3	-0.7	-9.4	-17.9	-2.4
	Boys	7.4	-1.6	-5.8	2.3	-1.1	-8.8	7.1	-0.1
	Total	6.4	0.1	-2.7	2.8	-0.9	-9.1	-5.2	-1.2
2005	Girls	11.5	7.7	-2.4	6.3	-0.8	-1.8	14.9	5.1
	Boys	6.3	5.2	-2.3	7.1	2.6	-5.6	15.7	4.1
	Total	8.8	6.4	-2.3	6.7	1.0	-3.8	15.3	4.6
2006	Girls	3.7	2.8	0.0	5.0	2.7	-4.7	19.4	4.1
	Boys	5.8	6.2	4.1	4.4	3.4	-6.0	18.8	5.2
	Total	4.8	4.6	2.2	4.7	3.1	-5.4	19.1	4.7

Source: MoE (2006)

Transition

Progression of learners from one level to another is a measure of a system’s internal efficiency as well as its physical capacity. Transition rates are normally affected by pass rates, availability of places in the next cycle of education as well as affordability. In Kenya, the problem of low transition rates (Table 8) has been occasioned more by the system’s low

absorptive capacity than by poor pass marks in either primary or secondary leaving examinations.

The transition rate has averaged about 45.3 percent for the period under consideration. The lowest rate was recorded in 1993 (38.4 percent). Notably, the transition rate for girls has been lower than boys for the 15 years under consideration by a consistent average of 3 percentage points. The biggest jump in transition rate was recorded in 2005 over the 2004 figure by a significant 11.2 percent. The transition rates, like other participation indices, disguise serious regional disparities (Table 9).

Table 8: Transition Rate from Primary to Secondary School by Gender, 1991-2004

Year in:		Std 8 Enrolment ('000)			Form 1 Enrolment ('000)			percent Transiting to Form 1		
Std 8	Form 1	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1990	1991	210.4	174.1	384.5	95.5	76.1	171.6	45.4	43.7	44.6
1991	1992	207.3	173.7	381.0	97.3	78.1	175.4	46.9	45.0	46.0
1992	1993	195.0	198.8	393.8	81.5	69.6	151.1	41.8	35.0	38.4
1993	1994	210.4	185.3	395.7	90.8	78.1	168.9	43.2	42.1	42.7
1994	1995	212.5	190.3	402.8	96.4	83.6	180.0	45.4	43.9	44.7
1995	1996	211.6	194.0	405.6	97.4	85.9	183.3	46.0	44.3	45.2
1996	1997	217.3	199.0	416.3	98.5	88.6	187.1	45.3	44.5	44.9
1997	1998	224.6	209.3	433.9	102.4	92.8	195.3	45.6	44.3	45.0
1998	1999	221.0	215.3	436.3	105.2	95.8	201.0	47.6	44.5	46.1
1999	2000	246.6	228.0	474.6	108.1	97.2	205.3	43.8	42.6	43.3
2000	2001	235.6	227.8	463.4	112.2	103.4	215.6	47.6	45.4	46.5
2001	2002	261.7	246.6	508.3	116.2	105.2	221.5	44.4	42.7	43.6
2002	2003	296.9	244.5	541.3	129.4	121.7	251.1	43.6	49.8	46.4
2003	2004	280.8	267.5	548.3	132.6	118.6	251.2	47.2	44.3	45.8
2004	2005*	343.0	314.8	657.7	198.0	170.6	368.3	57.7	54.2	56.0

* Provisional

Source: EMIS, MoE

Table 9: Transition Rate by Province (percent), 2002-2005

Province	2002	2003	2004	2005*
Nairobi	32.5	33.5	34.5	50.9
Coast	30.4	31.0	32.1	34.0
North Eastern	42.9	43.8	44.9	45.1
Eastern	47.5	48.9	51.2	49.4
Central	57.3	58.5	59.6	63.7
Rift Valley	21.1	21.6	41.7	48.5
Nyanza	35.4	36.1	47.3	57.1
Western	52.6	53.7	55.8	52.0
Total	41.7	42.6	45.8	52.1

Source: Statistical Abstract, 2006

* Provisional

Though the national transition rate is 52 percent, the Central province rate is higher by almost 12 percentage points, while Coast province registers a rate that is 18 percentage points lower than the national average. Thus the proportion of students in Central province proceeding to secondary education is almost twice that of students from the Coast. By consequence, some regions receive a disproportionate share of publicly subsidized secondary (and higher) education. Matters are made worse by the fact that Central is economically better endowed than most of the rest of the country. Thus, not only do more students proceed to secondary schooling, but they get to the best schools because they are able to afford them. These differential opportunities lead to a skewed pattern of education and skill development amongst the different regions.

1.2.3 Secondary Education

In contrast to primary education, no major policy intervention has so drastically changed enrolments in secondary education. Tuition fees were waived in 2008 but the effects of this will take some time to be seen. Nevertheless, there has been a significant absolute increase in the number of secondary school students in recent years. Enrolment increased by 245,500 or 40.2 percent between 1996 and 2006 (Appendix 3a). As in primary education, gender differences are evident. Girls' enrolment increased by 162, 800 or 53.3 percent, compared to 204,400 or 58.8 percent for boys over the same period.

The disadvantaged position of girls, with enrolment growth trailing that of boys by about 5.5%, seems to be more or less similar in primary and secondary education. A comparative picture of gross and net enrolment rates is presented in Appendix 3b.

Primary and Secondary Education Enrolment by Poverty Groups

An analysis of the factors influencing participation in primary and secondary education reveals that generally, the poor face more barriers to access in sending their children to school compared with the non-poor (Table 10).

Table 10: Percentage Distribution of School-age Population by Reason for not Currently in School

Reason	Primary							Secondary						
	Kenya	Poverty status		Male		Female		Kenya	Poverty status		Male		Female	
		Poor	Non Poor	Poor	Non Poor	Poor	Non Poor		Poor	Non Poor	Poor	Non Poor	Poor	Non Poor
No money	61.0	60.8	61.2	63.4	64.0	58.3	58.7	33.7	44.2	30.1	44.2	44.2	30.7	29.4
Poor schools	1.3	1.1	1.6	1.3	1.5	0.9	1.6	0.8	0.6	0.8	0.7	0.4	0.9	0.8
Own illness/disability	3.0	3.3	2.8	3.0	2.5	3.7	3.0	1.0	0.9	1.0	1.0	0.9	0.9	1.1
Family illness/Disability	1.8	1.6	2.0	1.5	1.7	1.8	2.2	0.7	0.8	0.7	0.8	0.9	0.7	0.7
Not interested	15.9	17.1	14.8	18.3	16.3	15.9	13.4	3.3	3.4	3.2	2.7	4.4	2.8	3.6
Parents refused	6.8	7.1	6.5	5.8	4.6	8.5	8.3	0.9	1.0	0.8	1.1	0.9	0.7	1.0
Work/help at home	5.3	5.9	4.8	6.3	5.5	5.5	4.2	3.4	2.9	3.6	3.3	2.2	3.9	3.2
School too far	0.8	1.0	0.6	1.3	0.9	0.7	0.4	0.1	1.2	0.1	0.4	0.0	0.1	0.1
School conflict with beliefs	1.2	1.5	0.9	0.9	0.5	2.0	1.3	0.4	0.7	0.3	0.8	0.6	0.3	0.4
Completed	5.2	4.6	5.8	5.5	6.5	3.6	5.1	54.6	44.8	58.0	47.0	41.4	59.7	56.0
Other	8.0	7.5	8.4	4.1	5.0	10.7	11.4	7.6	7.2	7.7	5.1	10.3	5.9	9.8
Not stated	0.4	0.3	0.5	0.3	0.5	0.3	0.4	0.4	0.4	0.4	0.3	0.6	0.4	0.3
# of children	14,340	7,047	7,293	3,481	3,456	3,566	3,837	7,906	2,015	5,891	1,200	815	3,127	2,764

Source: Kenya (2008)

Despite the introduction of FPE, the major constraint to enrolment in primary education remains financial barriers. Interestingly these are reported to affect the poor and non-poor, male and female alike. The intensity of financial barriers was more pronounced at the primary than the secondary level where fees still existed at the time of the survey (2005/2006 - ie before the implementation of the affordable secondary education (ASE) programme the key feature of which is the waiver of tuition fees which had stood at KES 10, 265 per year). Because of the magnitude of the fees then in place at the secondary level, financial barriers affected the poor significantly more than the non-poor.

A higher proportion of the non-poor than of the poor were not attending school because they had completed primary and/or secondary schooling. It is also clear from the table that the poor are affected by distance between home and school more than the non-poor, and that conflict between beliefs held by the poor in relation to schooling affect their participation more than the non-poor. Parental attitudes to schooling, acquired illness/disability and lack of interest in school also inhibit the participation of the poor more than the non-poor.

1.2.4 Technical and Vocational Education

Technical and vocational education in Kenya is currently under the Ministry of Science and Technology. Like ECD, this has received far less government funding than other levels. As a result, most institutions have out-of-date equipment, a fact that has played a great role in the varying enrolment pattern evident in Appendix 4⁴. While there was an increase in enrolment between 2002/03 and 2003/04, there was a sharp contraction between 2004 and 2005 and, whilst picking up in 2006, still remaining below the 2003 enrolments. This sharp drop may be attributable to the expensive nature of TIVET especially in the national polytechnics, or to the abolishing of production courses in these institutions.

However, the inclusion of this sector as one of the investment programmes in the SWAp (Kenya Education Sector Support Project (KESSP), and therefore being in principle eligible for donor funding) may have played a role in rekindling interest - as did the diversification of courses offered in the institutions and the improved relevance of the same to the labour market, made possible by the reform program in 2003. The expansion of technical education in 2005/6 came with its inclusion in the SWAp, with donors becoming willing to fund TIVET. In this regard, the Italian government aided the expansion and upgrading of two of the national polytechnics - Mombasa and Kenya polytechnics - to offer degree programs as campuses of existing national universities. This initiative raised the profile of these institutions and enhanced their ability to attract students. The Italian government funding provided an example of the positive impact of donor funding on access expansion. Lack of enough qualified teachers/instructors, however, remains an impediment to expansion.

Female student enrolment in TIVET comprises 41.1 percent of total student enrolment. This is much higher than in public universities, where women constitute just about one-third of total enrolments. However, underlying this ostensibly better enrolment for women is their concentration in courses like secretarial studies, home economics, textile design and related subjects, where gender-stereotyping has strong influence.

⁴In Table 21, enrolment for KTTC is not given for the four years preceding 2003. Prior to this date, KTTC enrolments were subsumed in figures for technical training institutes. A decision was made to change in 2003 because KTTC is the only specialized technical teacher training institution in the country. Nevertheless, intake is low, less than four hundred every year. Total enrolment in all TTIs is on average less than enrolment in two public universities. In fact, the enrolment is almost equal to the total number of regular and parallel track students at the University of Nairobi.

1.2.5 Adult Education

An emphasis on lifelong learning gives opportunities to those who have missed out on mainstream education. Like TIVET this is based within a ministry other than education - adult and continuing education being taken care of by the Ministry of Culture, Youth and Sports (MoCYS). Generally, enrolment of adult learners in the country is low (Table 11 shows the national data). This is mostly due to the low status of adult education, lack of teachers, poor provision of requisite services, lack of own facilities and resources, etc. Cumulatively, these have led to little enthusiasm among learners in enrolling for adult education classes. Adult education teachers are also poorly remunerated; they lack essential teaching skills and are mostly volunteers. In a majority of cases, they are retired teachers or Ordinary Level/Form Four school leavers without any form of teacher training. Another reason for the low levels of adult education development is the lack of a direct vote within the MoE. Not being a mainstream activity of the MoE results in a natural disadvantage. It benefits neither from MoE's professional support services nor from its leadership, that has played a crucial role in improving formal primary and secondary education.

UNICEF is one agency that has actively supported adult education in the country. In 2007, jointly with DFID and other donors, it funded an extensive study of adult education in Kenya that entailed a compilation of competency levels among adult learners of varying ages and grades.

Table 11: Adult Literacy Enrolment by Gender 1990 - 2003

Year	Male	Female	Total	percent Men	percent Women
1990	37,093	110,487	147,940	25.0	75.0
1991	30,123	97,984	129,107	25.3	74.7
1992	25,425	84,049	109,474	23.2	76.8
1993	26,027	81,271	107,298	24.3	75.7
1994	26,554	87,648	114,278	23.3	76.7
1995	27,572	88,479	116,051	23.8	76.2
1996	26,612	89,029	115,641	23.0	77.0
1997	28,139	73,215	101,354	27.8	72.2
1998	26,180	74,081	100,261	26.1	73.9
1999	30,200	71,061	101,261	29.8	70.2
2000	25,802	68,101	93,903	27.5	72.5
2001	26,479	66,573	93,052	28.0	72.0
2002	41,341	73,524	114,865	34.0	64.0
2003	31,305	77,126	108,431	28.9	71.1
2004	32,408	76,245	108,653	29.8	70.2
2005*	29,205	78,457	107,662	26.1	72.9

* Provisional

Source: Economic Surveys, Central Bureau of Statistics

1.2.6 University Education

Two important developments in university education have had tremendous impact on its expansion. First, the establishment of the Commission for Higher Education (CHE) in 1985 and the consequent enactment of Universities (Establishment of Universities, Standardization, Accreditation and Supervision) Rules, in 1989 provided the framework for the regulation of university education. The ensuing establishment of private universities has been rapid, with the number growing from just three in that year to 21 by 2008. A second development was the initiation of parallel track (of private, non-subsidized) admissions to public universities. Beginning in 1998, courtesy of the pioneering work of Makerere University in Uganda followed closely by the University of Nairobi (UoN), a number of public universities started 'Module II', 'Parallel' or 'Self Sponsored' programmes. All public universities now have these programs in place. These initiatives have greatly expanded university education opportunities, leading to a significant increase in university enrolments over the last decade (Appendix 13).

The majority of university students in Kenya are in the public universities, despite there being more private than public universities. By 2004/2005, the six public universities had 91,541, while all the private universities had 10,050 students, meaning that for every one student private universities enrol, public universities would enrol nine. The important role that the private entry schemes have played in the overall expansion of university education is seen in the high proportion of students in these programs. It is clear from Appendix 13 that the total number of Module II students at UoN in 2004/2005 was greater than the regular full-time students and also higher than enrolments in all private universities. On the other hand, the paradox of a higher number of institutions with fewer students is seen in the overall tiny size of the private university sub-sector. The private share of total enrolments in 2007/08 Academic Year is only 9.2 percent, from a high of 20 percent before the onset of privatization. The public sub-sector has also had a much more rapid expansion than the private. Enrolments in public institutions in 2004/2005 reflect a growth of 80.5 percent (or 16.1 percent annual) over 2000/2001. In contrast, private university growth is 18.4 percent (3.7 percent annual) over the same period. The overall proportion of female students remains low, at 36.6 percent of total enrolment in 2005/6. In public universities, the proportion of students who are female is 31.4percent, whilst the private universities have done better, having 54.3 percent of their students being female.

It is worth noting that this expansion in university education has happened without donor support. The largest programme for university education in Kenya was the Universities Investment Project (UIP), ending in 1993-94. Yet at that time, enrolments actually stagnated, mainly because universities were restricted to enrolling a maximum of 10,000 new students per year. This condition was part of the education sector adjustment credit (EdSAC) conditionalities attached by the World Bank to the UIP grant. Universities compensated for the lack of donor support by pursuing private income-generating programs that have proved useful in stabilizing the financial health of the institutions, facilitating completion of stalled projects, clearing pending bills and generally allowing investment in infrastructure and other projects that enhance the quality of teaching and learning. But little has yet been done to enhance the capacity of the system. As a result, the public universities have had limited capacity to meet the burgeoning demand for university education. Every year, the numbers of qualified applicants has outstripped the available university places, with the result being that not more than one third of those qualified have typically manage to obtain admittance (Kenya National Bureau of Statistics, 2006). The proportion of form-four graduates who gain admittance to university education has consistently been below seven percent, and has actually been declining.

Conclusion

The next two chapters deal with the financing of education and with international donor support to the sector. Whilst there is a direct relationship between public financing policy and participation in education, international donor support cannot easily be linked to educational participation issues like access and equity, as earlier mentioned. We shall see that aid has played its part, but the major stimulus to increased enrolment in Kenya has been internal. Changes in government policy have had a direct impact on enrolment, historically. With the initial experimentation of free education in arid and semi-arid lands (ASAL) areas in 1971, extension of free education to ASAL areas in 1974, the introduction of free school milk in 1979, and most recently, the FPE programme in 2003, enrolment in primary education increased beyond the usual increments occasioned by natural factors such as the growth in the school-age population. The only external intervention that has had a clear and consistent impact on participation is the WFP's school-feeding programme in ASAL and in other areas with substantial pockets of poverty. Nevertheless, the long term impact of the feeding programme is debatable, not least because of its potential unsustainability (Ngome, 2002).

There has been considerable value added by international support in the areas of the quality of education - through provision of instructional materials, increasing teacher competencies,

management capacities of school and education administrators, and overall policy formulation. This latter has become clearly evident with the adoption of the SWAp framework in the sector (see below). Prior to the SWAp, policy formulation had more or less been a government undertaking through commissions of inquiries, obviously with great political influence. Nowhere was this influence more noticeable than the Mackay Commission whose recommendations had a deep impact on the structure of education and its curriculum. The donor-funded programmes which had most positive impact on quality have been the primary schools management project (PRISM) and the school-based teacher development (SbTD) programmes. Within the SWAp, donor influence brought positive changes via their financing of specific projects. Of note here are the FTI-funded instructional materials programme and the UNICEF supported girls' scholarship programme in Northern Kenya.

In conclusion, we can say that the impact of donor agencies on enrolment in Kenya was indirect, but significant. The report of the Presidential Working Party on Education for the Next Decade and Beyond (Kenya, 1988) had the effect of reducing enrolment at all levels of education by consequence of its recommendations on cost sharing in the sector. Thus, the earlier gains which the country had made in basic education were reduced: its primary GER of 95 percent, steadily declined to 76 percent by 1995. Whilst there were other factors explaining the decline in educational access, some studies indicate that education costs were the greatest impediment (Olembo and Waudu, 1999; National Council of NGOs, 1997; Khasiani, 1997; Mitha, et. al., 1995; Karani, et. al., 1995; Akwanalo, et. al., 1998; among others). International support has mostly influenced process variables once students are enrolled. Exceptions are where specific programmes have been designed with the explicit objective of attracting children to school, such as the WFP's school feeding programme and, to some extent, UNICEF's programmes on sanitation and girls' scholarships.

Chapter Two: The Dynamics of Quality

2.1 Introduction

The question of the quality of education and its main determinants remains controversial amongst scholars, policy makers and practitioners. Traditionally, teaching and learning inputs and examination scores have been used as proxies for quality. However, we should remember that to the extent that factors shaping educational experience are school-based, while others relate to the child's family, community, social and cultural aspects of the child's environment, educational quality needs to be examined in relation to the social, political, cultural and economic contexts in which it takes place (UNESCO 2004). This report confines its discussion to three important input and outcome indicators, viz; school textbooks, teacher numbers and qualifications and student performance in national examinations.

2.2 School Textbooks

Among the most important instructional materials that have been shown to have a significant influence in the teaching-learning process are textbooks and other reading materials. Studies have pointed to evidence, particularly in developing countries, that the availability of such materials has a positive effect on school effectiveness (Farrell and Heyneman, 1989; Lockheed and Vespoor, 1991; Psacharopoulos and Woodhall, 1985). Availability of textbooks has been shown to have a direct and positive correlation with pupil achievement in developing countries.

The Kenyan government began providing textbooks in schools immediately after independence as one of the measures to support children from poor families. Under the Kenya School Equipment Scheme (KSES), 20 K shillings per child were provided at the primary school level for the provision of learning materials. Increased enrolment in subsequent years, however, constrained the government's ability to fully meet the needs of schools and pupils. Subsequently, the cost-sharing programme shifted the entire burden of book provision to the parents, and KSES was abolished in 1989. However, the procurement and supply of textbooks to poor schools under an adjustment credit was re-introduced in the 1990/91 financial year. The importance of textbooks in the FPE programme is underscored by the fact that out of the FPE funds of KES 1,020 per pupil, about two thirds (KES 650 or 64 percent) is earmarked for the purchase of textbooks, supplementary readers and reference materials, among other items. But some background information is necessary to facilitate an understanding of the current policy context.

In 1997/98, MoE developed and launched the National Policy on Textbooks Publications, Procurement and Supply for Primary Schools with the aim of reducing costs to parents and ensuring equal distribution of textbooks in poor areas. The policy guidelines marked a major departure from the previous arrangement where textbooks publication, procurement and supply were centrally controlled by the ministry. The move was in response to an outcry by publishers regarding the monopoly enjoyed by the Kenya Institute of Education (KIE) in a liberalized regime. Even donors had expressed concern and were sending covert signals that they could assist only on condition that the textbook market was liberalized. In the meantime, there had also been serious concerns by teachers that the books produced by KIE in particular were substandard. Consequently, in a major reform, schools were allowed to select books from a list approved by the ministry (the 'Orange Book'). Each school was expected to form a School Textbook Selection Committee (STSC) to oversee the selection and procurement process⁵. In order to limit the cost of purchasing and also reduce the burden on learners, schools were expected to buy only one textbook as a course book in each subject per class, unlike the previous situation where a course could have as many as four or five titles per class. This policy removed the monopoly that state firms like KIE, Kenya Literature Bureau (KLB) and Jomo Kenyatta Foundation (JKF) had enjoyed on the printing and distribution of school texts.

Following the policy realignment, in 1998, the government, with support from the Netherlands embassy, initiated the Direct Budget Support for Textbook Project (short-lived though it turned out to be). In the meantime, the government, with the support of DFID, initiated a programme under SPRED III project that had a textbook component. Under this project, some 1.6 million pupils in 5,387 schools spread over 28 districts and municipalities benefited at a cost of approximately KES 1.2 billion. The Kenya government spent a similar amount in a matched funding arrangement. During the financial year 2000/1, MoE released KES 260 million to schools to buy books.

2.2.1 Current Textbook-Pupil Ratio (TPR)

According to a survey of the textbook situation in Kenya in 1999, there were wide variations between districts in access to textbooks. On average, TPR for lower primary ranged from 1:5 to 1:10 while in upper primary the ratio varied from 1:5 to 1:2 (Abagi and Olweya, 1999). This background preceded the launch of the instructional materials program as part of the implementation of the FPE programme. The program was supported by, among others, the World Bank through its Free Primary Education Support Program (FPESP), DFID under

⁵With the introduction of FPE, the STSC changed to School Instructional Materials Committee (SIMC). The SIMC is charged with the procurement of materials from Account I.

SPRED III and the FTI. An evaluation of the project indicated significant improvements in TPR. As evident in Table 12 below, TPR of 1:2, 1:2, 1:2, 1:3 and 1:3 have been recorded in Mathematics, English, Kiswahili, Science and Social Studies respectively as compared to 1:5 for Religious Education. The government's objective of achieving TPRs of 1:3 TPR in lower primary and upper primary in English, and 1:4 (lower) and 1:3 (upper) in Mathematics have largely been met, although there remain significant variations between schools.

The evaluation also reported high levels of satisfaction among all stakeholders and the strengthening of the capacity of the local community in the procurement and monitoring of textbooks. Books are procured with the participation of the school instructional materials committee (SIMC) which is a sub-committee of the school management committee (SMC). The report also indicated that performance in the primary leaving examinations, the Kenya Certificate of Primary Education (KCPE), had gradually improved with the provision of better instructional materials and in-service teacher education program. However, findings of the evaluation report indicate notable discrepancies between the official stock records and actual textbooks available in the classrooms.

Table 12: Textbook Pupil Ratio by Subject and Standard, 2005

Standard	English	Mathematics	Science	Kiswahili	Social	RE	Average
1	1:2	1:3	1:3	1:3	1:3	1:6	1:3
2	1:2	1:2	1:3	1:3	1:3	1:6	1:3
3	1:2	1:3	1:3	1:3	1:3	1:5	1:3
4	1:2	1:2	1:3	1:3	1:3	1:4	1:3
5	1:2	1:2	1:2	1:2	1:2	1:4	1:2
6	1:2	1:2	1:2	1:2	1:2	1:4	1:2
7	1:2	1:2	1:2	1:2	1:2	1:5	1:3
8	1:2	1:2	1:2	1:2	1:3	1:4	1:3
Total	1:2	1:2	1:3	1:2	1:3	1:5	1:3
Lower Primary	1:2	1:3	1:3	1:2	1:3	1:5	1:3
Upper Primary	1:2	1:2	1:2	1:2	1:2	1:6	1:3

Source: MoE (2006)

2.3 Performance in National Examinations

It is generally agreed that the most important manifestations of schooling quality (however defined) are literacy, greater cognitive abilities and better student performance in examinations (UNESCO 2004; Deolalikar, 1999). Internationally, pupil scores have been accepted and used as a proxy of achievement. Traditionally, the Kenyan education system has performed better than that of its neighbours as measured by the relevance and the quality of test items and overall outcomes. As early as 1982, a comparison of the educational

development in Kenya and Tanzania (Knight and Sabot, 1990) noted the higher educational attainment of Kenyans compared to Tanzania. They attributed the difference partly to the more relaxed attitudes taken by the Kenya toward the growth of private schools contrary to the situation in Tanzania. Deolalikar (1999) further noted that whereas many questions in the Kenyan examination system (KCPE and KCSE) are knowledge- based, there is still a strong emphasis on problem solving and application of knowledge and that as a result, these examinations may be valid measures of students' cognitive achievements.

2.3.1 Performance in KCSE and KCPE

In an analysis of KCSE performance over a seven year period (Table 13) Deolalikar concludes that secondary school students absorb less than a third of the material taught. Information in Table 13 also points to the consistent gender disparity in examinations, with boys performing better than girls overall and especially in subjects like Mathematics (Boys 15.3 percent, girls 10.3 percent) and the natural sciences. A worrying trend is that gender disparity has not narrowed overtime. Another concern is the better performance of private schools over public schools. Whereas urban public schools perform better than their rural counterparts, private schools in both rural and urban areas perform equally well. In the 2000 KCPE results, pupils from private schools accounted for most of the top 100 positions in all the provinces. One of the private schools (Makini) had 22 pupils out of the top 100 pupils in Nairobi while in Mombasa two private schools produced more than 50 per cent of the top candidates in the district (*East African Standard*, 30th Dec. 2000, p 4). The trend is no better in the primary segment, although unlike the position at secondary level, the KCPE results are normalised, which makes it difficult to identify performance trends (Table 14).

Table 13: Mean Scores on KCSE exams (per cent of maximum possible scores), 1989-95

Subject	Sex	1989	1990	1991	1992	1993	1994	1995
English	Male	28.5	24.2	25.4	32.4	32.8	28.0	27.8
	Female	28.4	24.0	24.9	32.5	32.8	28.3	27.8
Mathematics	Male	13.6	15.5	19.3	24.4	17	12.9	15.3
	Female	9.0	10.3	13.2	9.3	11.3	9.0	10.3
Physics	Male	34.6	25.3	19.9	26.1	30.9	29.1	35.7
	Female	29.4	21.1	15.7	20	24.9	25.4	31.1
Chemistry	Male	32.4	28.5	28.6	33.6	32.4	33.5	32.1
	Female	30.0	25.9	25.9	30.5	28.9	29.9	28.3

Source: Deolalikar (1999) Table 11

Table 14: National Mean Scores by Subject in KCPE, 1990-1995 and 2002 – 2005

Subject	1990	1991	1992	1993	1994	1995	2003	2004	2005
English	49.93	50.26	49.96	49.16	48.25	48.03	49.50	49.54	49.48
Kiswahili	49.76	50.13	49.11	48.56	47.66	48.05	49.50	49.50	49.50
Mathematics	48.45	48.12	48.38	47.50	47.41	47.56	49.49	49.60	49.50
Science/ Agriculture	48.41	48.79	48.21	47.65	46.72	46.75	49.47	49.48	49.48
GHC/CRE	48.81	50.54	50.09	49.09	47.17	48.00	49.50	49.49	49.49
Arts & Craft	48.92	48.95	48.50	47.52	46.59	47.03	-	-	-
H/Sc./ B.Education	49.54	48.48	48.90	48.05	46.42	47.24	-	-	-

Source: Kimuyu, Wagacha and Abagi (1998), Otieno (2007)

There have been cases of cheating in examinations at both primary and secondary levels leading to the failure of the Kenya National Examinations Council (KNEC) to rank some schools while others have had their results withheld altogether. This threatens the credibility of both the examining body and the examination itself. While these have been few, there is still need to seal the loopholes that have resulted in the isolated cases of cheating. In 2008, for example, the KNEC was accused of complicity and unprofessionalism following the release of the 2007 KCSE results. By consequence, the initial list of school results was withdrawn and replaced by a second one several weeks later.

Gender Dimensions of Performance

The previous chapter discussed gender dimensions of educational participation. The biases evident in access and internal efficiency are also conspicuous in achievement indicators. The disparity in performance between girls and boys extends from primary to secondary education, with significant implications for participation and achievement at the university level. Girls register relatively better performance in languages whilst boys outperform girls in mathematics and science (Table 15), although the male math/science advantage is substantially greater than that of girls in languages.

Table 15: KCPE Raw Mean Score by Gender and Subject, 2002 – 2005

Subject	Category	2003		2004		2005	
		Male	Female	Male	Female	Male	Female
English	Gender	49.27	49.74	49.17	49.93	49.06	49.96
	Total	49.50		49.54		49.48	
Kiswahili	Gender	48.91	50.14	49.16	49.86	48.89	50.17
	Total	49.50		49.50		49.50	
Math	Gender	51.61	47.22	51.54	47.47	51.49	47.30
	Total	49.49		49.60		49.50	
Science/ Agriculture	Gender	52.83	45.86	52.23	46.48	52.63	45.99
	Total	49.47		49.48		49.48	
Geography, History & Civics (GHC)	Gender	52.37	46.43	51.89	46.86	51.97	46.74
	Total	49.50		49.49		49.49	

Source: KNEC, 2005

2.4 Teachers in Primary and Secondary Schools

Teacher data are presented in Appendices 5a, 5b and 6. The proportion of female teachers at primary level increased from 38.85 percent in 1991 to 44.36 in 2004, reflecting a net gain of nearly six percentage points. A notable feature of the Kenyan teaching profile is the elimination of untrained teachers in primary schools by 1994. This was achieved through intensive in-service teacher training programs. There have been some successful donor-funded initiatives targeting teacher training and management. These include PRISM, SPRED and SbTD, each funded by DFID (and its predecessor, the Overseas Development Administration (ODA)), the British Council and the centre for British Teachers (CfBT). These programs increased teacher competencies, their classroom management and resulted in notable quality improvement.

Recruitment and replacement of teachers by the Teachers' Service Commission (TSC) resulted in an improvement of pupil-teacher ratios, although the impact of the FPE program continued to exert pressure on the teaching force. The improved PTR, however, added to the burden of teacher costs, evident in the high proportion of the salary component in the education budget.

Continuous capacity development for teachers has also been mounted by the Kenya Education Staff Institute (KESI) focusing on school management. The targets have been school principals, head teachers and their deputies and members of boards of governors (BoGs) and parents and teachers associations (PTAs). Currently, KESI is the lead agency managing the capacity development investment program of KESSP with the support of a number of donors such as the Belgium government as well as UNESCO.

At the secondary level, the proportion of female teachers is much lower than at primary, and has remained almost constant. In 1991, female teachers constituted 33.7 percent of the secondary teaching force. More than a decade later in 2004, female teachers increased by only one percentage point to stand at 34.7 percent. Low proportions of female secondary school teachers reflect a fundamental weakness in the education system: lower progression of girls through the school system compared to boys. Unlike primary teachers who need Form 4 education to proceed to diploma colleges, secondary teachers are trained at the university level, and must therefore successfully pass KCSE to qualify for university education and to train as teachers.

Compared with their primary counterparts, there are more secondary teachers in the urban as opposed to rural areas (21 percent against 13 percent at primary level). This follows from the concentration of secondary schools being higher in urban areas compared to rural areas, in contrast to primary schools where they are more evenly spread. Secondary education remains expensive, despite the implementation of affordable secondary education (ASE)⁶, and parental expenditure at this level is likely to remain higher than all other levels.

Secondly, unlike primary education, where the government has eliminated untrained teachers, 13.4 percent of secondary teachers remained untrained in the mid-2000s, even though they were mostly university graduates. The difficulty in eliminating untrained teachers is due to the highly specialized nature of the curriculum. It is often difficult to get trained teachers in some of the specialized or technical subjects, which forces the government to hire those with degrees even when they have no training in pedagogy.

Table 16: Distribution of Teachers: August 2006

Category	Number
Teachers on duty (primary)	174, 576
Teachers on duty (secondary)	48,425
Teachers on duty (TIVET)	3313
Teachers on duty (special institutions)	4475
Teachers under discipline	1419
Teachers on study leave	2533
Reported death cases	259
Total	235,000

Source: TSC

⁶ In 2008, the Government started the affordable secondary education (ASE) programme through which it subsidizes tuition fees by KES 3,600 per student per year. The figure is based on its own fees guidelines that it issues to schools on a yearly basis, but which is rarely enforced.

As regards the distribution of teachers, 74.3 per cent are at primary level (Table 16). Over the first half of the present decade the number of educational institutions at all levels increased very substantially, led particularly by the growth of private institutions: private primary and secondary schools increased by 58 percent and 29 percent respectively, and the number of private universities increased from 13 to 21 (61.5 percent) over the years 2002-6 (Table 17) – a reflection of the constraints facing the public sector and of the excess demand for university places.

Table 17: Number of Educational Institutions, 2002 – 2006

Category	Institution Type	2002	2003	2004	2005	2006*
Schools:	Pre-Primary	28,279	29,455	31,879	32,043	33,121
	Primary Public	17,683	17,697	17,804	17,807	17,946
	Primary Private	1,441	1,857	1,839	1,946	2,283
	Primary Total	19,124	19,554	19,643	19,753	20,229
	Secondary Public	3,247	3,583	3,552	3,621	3,646
	Secondary Private	440	490	490	573	569
	Secondary Total	3,687	3,999	4,073	4,197	4,215
Training Colleges:	Pre primary					
	Primary	29	29	30	30	30
	Secondary+	3	3	3	3	3
	Total	32	32	33	33	33
Universities	Public	6	6	7	7	7
	Private	13	17	17	17	21
	Total	19	23	24	24	28
Total all educational institutions		51,141	53,063	55,652	56,050	57,626

Source: Ministry of Education

+ Includes Kenya Technical Training College

* Provisional

2.4.1 Teacher Attrition and the HIV and AIDS Pandemic

The Kenyan education system suffers from high teacher attrition, which has increased substantially as a result of the HIV/AIDS pandemic. In 2006, it was estimated that the number of HIV positive teachers stood at 1,781, just short of one percent of the entire teaching force. Given the current curriculum-based establishment for teacher deployment at the primary level, this figure is equivalent to the full teaching establishment for 223 primary schools. The trend in teacher replacement is presented in Table 18. Over the five year period shown, the government hired an average of just over 6,500 teachers per year - slightly fewer than the

numbers leaving, which are estimated at about 7,000 per annum. The net impact of the current replacement policy therefore leaves the number of teachers more or less constant.

Table 18: Trends in Teacher Replacement, 2002-2006

Year	Number of Teachers		Total replacement
	Primary	Post Primary	
2002	2,870	2,083	4,953
2003	4,000	2,454	6,454
2004	5,000	1,200	6,200
2005	6,200	1,700	7,900
2006	5,641	1,691	7,332
Sub-total	23,711	9,127	32,838

Source: TSC Records, 2008

An important donor intervention has been the sponsorship of a national association of teachers living with HIV and AIDS. The Kenya Network of Positive Teachers (KENEPOT) provides an important channel for dissemination of information on the impact of HIV and AIDS on the education sector, sensitization of stakeholders on the plight of infected teachers, acceptance by and support from the community and access to life-prolonging drugs, among others. An intended long-run outcome of these activities is some reduction in the disruption to learning which the pandemic continues to cause.

2.5 Conclusion

Kenya has made much progress in addressing quality issues in education on several fronts. The government has eliminated the incidence of untrained teachers at primary level, while the proportion at secondary level remains small, and mostly confined to the technical subjects. There has been significant progress also on the supply of teaching and learning materials. Thirdly, the management capacity of head-teachers has been strengthened over the years, thanks to projects like PRISM. At the same time, successful interventions in this area through school-based teacher development (SbDT) has enhanced the professional competencies of the already trained teachers and imparted important skills on mentoring for the non trained teachers, as well as innovations in the production of teaching and learning materials.

International donors have been instrumental in funding these important initiatives. Each of the projects cited above were donor-funded, and have had a useful role in improving the process of educational provision. The SWAp (see below) has been an effective mechanism for harmonising donor support to these projects. Challenges remain, especially at the secondary-school level which, as will be evident from the ensuing chapters, remains one of

the most expensive levels of schooling in Kenya. The implementation of the affordable secondary education programme provides another challenge, particularly in the likely event of a major increase in secondary enrolments following on from the shift to FPE in 2003.

Whilst examination performance provides a measure of educational quality, there has been little donor support to strengthening the capacity of the KNEC and in ensuring integrity of examinations in the face of increased criticism of the council. It is not possible to address educational quality without establishing concrete measures to address learning outcomes, a process that begins with curriculum formulation, implementation and evaluation. This is one area which would provide a productive opportunity for the use of donor funds, subject to government's priorities. As will become evident from the next two chapters, the government's capacity is already stretched, and it may find it appropriate to seek external support in strengthening KNEC.

Chapter Three: The Financing Realm

3.1 The Macro Economic Picture

Before looking at the specific aspects of educational spending in Kenya, it is useful to map the broader macroeconomic context that influences the direction of sectoral development. A six-year summary of trends is presented in Table 19. The GDP over the period grew by about six percent while per capita GDP, owing to population growth, realised a consistent decline over the same period.

Table 19: Kenya – Macro Economic Indicators

Indicator	2002	2003	2004	2005	2006	2007					
Population in Millions	31.5	32.2	32.8	33.4	36.1 [^]	37.2 [^]					
GDP in constant 2002 US \$ m	17,460	-*	15,087	15,344	14,212	14,913					
GDP in constant 2002 KES m	1,345,685	1,125,476	1,166,889	1,110,434	986,261	934,683					
Total Domestic Debt Constant 2002 US\$ m)	5,861	5,765	5,895	5,740	6,293	5,898					
Total Domestic Debt Constant 2002 KES m)	451,680	438,939	455,979	415,397	436,742	369,654					
	1997/ 98	1998/ 99	1999/ 00	2000/ 01	2001/ 02	2002/ 03	2003/ 04	2004/ 05	2005/ 06	2006/ 07	2007/ 08
Per capita GDP in constant 97/98 US\$ m	3,556	3,335	2,957	2,934	-	2,718	2,487	2,261	2,222	2,094	1,971
Per capita GDP in constant 97/98 KES m	222,883	206,465	215,644	228,986	-	209,516	189,377	174,904	160,810	145,333	123,562

Source: Economic Survey, 2006; Statistical Abstract, 2006, 2007 and 2008; GOK, Analytical Report on Population Projections (2002)

Notes:

[^] Projections

* Figures in these cells were omitted due to inconsistency. While the source indicates a GDP growth of 3 per cent, the actual figure of 16,232.7m (14781.86m in 2002 constant terms) reflects a contraction rather than (real) growth.

While some growth in GDP has been evident, there has also been a sharp rise in the total domestic debt. Total debt is sourced from both internal and external sources. While the latter comprises borrowing from bilateral and multilateral lenders, domestic borrowing has been

dominated heavily by the Treasury bills and bonds floated by the Central Bank of Kenya. Traditionally, internal debt has been substantially higher than external debt, accounting for an average of up to 85 percent of total public debt (Kenya, 2007c). There are indications that the total debt is set to rise substantially. In 2009, the government floated an infrastructure bond that enabled it to raise an unprecedented KES 18 billion (US\$ 230 million at current exchange rates). There are proposals for similar bonds to finance the country's long-term development strategy (Vision 2030). It should be noted however that external debt repayments are such that the country recently has been spending almost as much as it receives in aid payments in servicing these current debts. This denies sectors the needed resources to meet specific sectoral goals.

As indicated, GDP per capita in constant terms has fallen over the period of consideration. A population that grows poorer can ill afford an education system that has high user fees. In that context, the government's decision to adopt the school fees abolition initiative (SFAI) evident in the implementation of the FPE in 2003 and free secondary tuition (FST) in 2008 is a welcome measure in improving access to basic education for the poorer parts of the population. However, irrespective of the position concerning average incomes, in a country characterized by inequality, as in Kenya, there is a skewed appropriation of the benefits of production. Furthermore, not all sections of Kenyan society equally benefit from state spending on education. The inequality puts pressure on the state to implement social safety nets, which in turn require more resources. Because it is not able to raise all the resources needed, the government turns to donors especially for capital development.

3.2 Education Sector Expenditures

Over time, financing of education has been a partnership between the government, parents, communities and the international community. The government has always been responsible for financing teacher salaries and offering limited development finance for specific projects in public schools. However, at university level government has continued to fund both the recurrent and development budgets of the public universities. Donors have been instrumental in funding capital projects. An analysis of government funding reveals that the education sector has over the years taken the largest proportion of the government budget (which has often led to calls for its reduction (Table 20).

Table 20: Education Expenditure as percent of Government Total and GDP, 1980/81-2001/02

Year	percent of Total	percent of GDP	Year	percent of Total	percent of GDP
1980/81	18.1	5.3	1998/99	19.7	6.8
1990/91	16.8	6.6	1999/00	20.6	6.6
1991/92	16.2	-	2000/01	18.4	6.3
1992/93	15.5	-	2001/02	18.1	5.4
1993/94	11.9	-	2002/03	29.6	6.2
1994/95	15.4	-	2003/04	27.4	6.4
1995/96	17.3	6.9	2004/05	26.8	6.2
1996/97	18.2	-	2005/06	25.8	6.6
1997/98	14.7	7.2	2006/07	23.7	6.4

Source: Economic Surveys, various years

The share of total government expenditure taken up by education for the years since 1990 has averaged 17.0 percent (Table 20), although with considerable growth to more than one quarter during the present decade. Moreover, since the turn of the century, recurrent expenditure on education has accounted for about 35 percent of the overall annual government recurrent budget (Table 21). This partly reflects the fact that Kenya's spending on education, both as a proportion of GDP and of total public spending, is well above both the global average and those of her immediate neighbours (Table 22 and Table 23).

Table 21: Educational Expenditure by Economic Classification, recent years

Classification	2002/03	2003/04	2004/05	2005/06
Total Expenditure as percent of GDP	6.2%	6.4%	6.2%	6.6%
Total Expenditure as percent of Public total expenditure	29.6%	27.4%	26.8%	25.8%
Recurrent Expenditure as percent of total public recurrent expenditure	34.8%	35.5%	35.3%	34.6%
Capital expenditure as percent of total public capital expenditure	8.0%	27.4%	4.0%	7.0%
Recurrent as percent of Total Education Expenditure	96.0%	94.4%	96.4%	93.0%
Capital Expenditure as percent of Total Education Expenditure	4.0%	5.6%	3.6%	7.0%

Source: Economic Surveys, various years

Table 22: Public Spending on Education, Selected Countries

	Public spending as percent of GDP
Botswana	8.6
Ghana	4.1
Kenya	6.1
Malaysia	6.2
South Africa	5.7
South Korea	3.8
Tanzania	2.2
Uganda	2.5

Kenya (2004)

Table 23: Education expenditure as percent of total government funds, 1993 -2004**

Country	Education percent of total public expenditure	Country	Education percent of total public expenditure
Angola	15*	Mozambique	10*
Botswana	26	Namibia	22
Burundi	15	Seychelles	10
Ethiopia	16	Swaziland	20
Kenya	26	Uganda	15*
Lesotho	27	Tanzania	8*
Madagascar	21	Zambia	14
Malawi	12	Zimbabwe	24
Mauritius	16		

Source: UNICEF (2006)

** Most recent year available within the period of consideration

* – Data refer to years or periods other those specified in the heading, different from standard definition, or refer to only part of a country.

Focusing on the post 2003-period reveals the changing pattern of government expenditure on education associated with the recent changes in policy in the sector. Over these years, the SWAp was established, the FPE policy was adopted in 2003, basic education was redefined as the first 12 years of schooling and tuition fee-waivers were introduced at secondary level. Higher education expanded significantly, and a dual track system of admission to public universities was adopted.

The impacts of some of these policy shifts are evident. Table 21 and Figure 2 show that capital expenditure on education rose sharply as a proportion of total public capital expenditure in FY 2003/04 - mainly owing to the grants extended to primary schools for system expansion – and that capital expenditure as a proportion of total education expenditure almost doubled in 2005/06 compared with the previous FY.

3.3 Education versus Social Sector and Other Related Expenditures

Education expenditures, in the context of broader social sector spending, and primary and secondary recurrent and development expenditure patterns are detailed in Appendices 8, 9a and 9b. Education has historically taken the largest share since 1990, averaging about 73 percent of all government spending on social services. Total education expenditure as percent of GDP has averaged 6.3 percent, compared to expenditure on defence at an average of 1.5 percent, other social services at 2.0 percent, economic services at 4.2 percent and other services including debt repayment at 5.1 percent. Total expenditure on education as a proportion of all public expenditure averaged 25.6 percent. Kenya has clearly prioritized social sector spending, and education in particular. Only in 2000/01 did the vote for general administration and planning appropriate a larger budget than education, occasioned by payments for staff retrenchment that had been continuing since the mid-1990s.

There has been a consistent increase in the education budget over the years. It increased by over KES 80 billion in the 16 years under consideration, from KES 12.7 billion to KES 92.3 billion. Although not included in the table, the education budget for FY 2007/08 increased to KES 119.5 billion – almost a ten-fold increase over the period. This arose partly from the transition from a regime of cost-sharing to heavy government subsidization of primary education. Also, a salary increase for teachers of up to 150 percent, effected in 1997, had sharp expenditure consequences. The natural growth in the student population together with the drive to achieve the MDGs brought demands for heavy investment in the education sector.

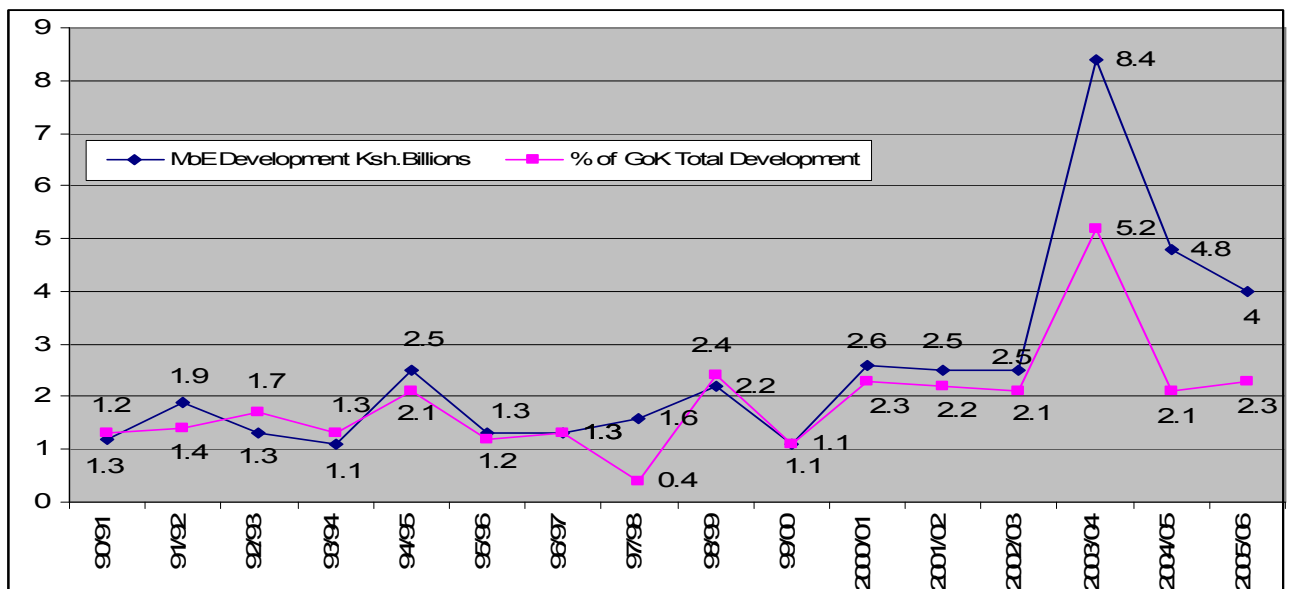
An important feature of these spending patterns, however, is the low expenditure on teaching and learning materials, which has averaged less than five percent of recurrent spending. Nevertheless, between 2001/2 and 2005/6 expenditures on these items more than doubled, mainly by consequence of two donor-funded programs implemented immediately before and during the FPE period. Salaries, however, still dominate the education budget, and Kenyan teachers remain better paid than most teachers in the region.

In the past, there were no government contributions for construction or for purchase of learning materials at secondary level, but this is changing with the implementation of ‘affordable secondary schooling’ from 2008. Under this programme, government will transfer monies directly to schools to finance these expenditures.

3.4 MoE and Overall Government Development Funding

The share of education development funds in the total government development budget has varied, though not significantly. A notable aspect is the high proportion of the MoE development vote in the years 2000/01 to 2005/06 (Figure 2) This followed from the introduction of FPE and spending to meet the MDGs by increasing system capacity. The FPE programme resulted in the highest development spending on education over the 16-year period, through the introduction of school improvement grants (SIGs). These entailed direct transfers to schools of a sum of KES 200,000 for improving school buildings, furniture, water and sanitation services.

Figure 2: Education Sector Development Expenditure as Percent of Total Government Development Expenditure, 1990/91-2005/06



Source: Appropriation Accounts and MPER various issues

3.5 Sub-Sectoral Spending Patterns

Analysis of how the education budget is distributed reveals that primary education has typically taken more than half of the total education budget (three of the four years starting in 2002/3). In 2005/06 for example, primary, secondary and tertiary education accounted for 89 percent of public spending on education, distributed in the ratio 6:2:1 (Table 24). The ratio has improved slightly in favour of primary, from the pre-2003 scenario when it stood at 5:2:1 (Kenya Civil Society Working Group on Education, 2003).

Table 24: Actual Expenditure (Recurrent and Development) 2002/03-2005/06 (percent)

Sub-vote (Total)	2002/3	2003/4	2004/5	2005/6**
General Administration and Planning*	15.6	6.2	6.5	9.0
Primary Education	46.2	57.4	56.1	53.6
Teacher Education	0.2	0.5	0.4	0.6
Special Education	0.2	0.2	0.3	0.2
Early Childhood Education	0.3	0.2	0.0	0.0
Secondary Education	24.4	22.5	22.4	21.8
Technical Education	1.4	1.6	2.1	2.0
University Education	11.3	11.0	11.8	12.8
Miscellaneous Services	0.4	0.3	0.4	0.0
Total Expenditure	100.0	100.0	100.0	100.0
Total Development Expenditure	4.0	5.6	3.6	7.0
Total Recurrent Expenditure	96.0	94.4	96.4	93.0

* Includes Policy and Planning and Quality Assurance expenditures; **Provisional
Source: Appropriation Accounts and MPER various issues

The bulk of funds at all levels go to teachers' salaries, with primary teachers' salaries taking more than half of the total salary vote for the ministry (Table 25 and Appendices 8, 9a and 9b). However, the university teachers' salary component of the budget has risen by 4.3 percentage points over the 2002/3 - 2006/7 period. The high expenditure on formal primary, secondary and university education leaves the other sub-sectors such as non formal education, TIVET, special education and ECD with just about 10 percent or less of the total MoE budget.

Table 25: Recurrent Expenditure by Economic Classification, 2002/03–2006/07 (KES Millions)

Economic Classification	2002/03	2003/04	2004/05	2005/06	2006/07
Primary teachers salary	28,159.30	33,617.10	36,564.80	39,906.84	42,159.73
Secondary teachers salary	15,324.30	15,280.50	16,667.60	18,364.95	22,676.16
Special institutions salary	1,430.40	2,037.40	2,191.60	1,664.53	2,055.83
Capitation Grants to universities	4,744.60	5,113.40	6,903.00	10,300.70	10,551.30
Salary for TSC secretariat	719.90	777.60	1,107.30	1202.50	1,335.00
TIVET salaries**	770.40	875.50	1,211.10	1,583.00	-
Other salaries and wages**	1,328.60	1,379.50	2,409.20	1,368.50	1,506.90
Total salaries	52,477.50	59,081.00	66,985.40	74,089.52	80,284.92
Operations and maintenance	8,374.40	9,067.70	10,083.60	11,798.30	13,384.00
Appropriation in Aid	39.80	66.70	80.80	86.70	81.60
Total MOE recurrent	60,891.70	68,215.40	77,219.00	86,350.82	94,563.12
Primary teachers salaries as percent of salaries	53.7	56.9	54.6	53.9	52.5
Primary teachers salaries as percent of total MOE recurrent	46.2	49.3	47.4	46.2	44.6
Secondary teachers salaries as percent of salaries	29.2	25.9	24.9	24.8	28.2
Secondary teachers salaries as percent of total MOE recurrent	25.2	22.4	21.6	21.3	24.0
Universities salaries as percent of salaries	9.0	8.7	10.3	13.9	13.3
Universities salaries as percent of total MOE recurrent	7.8	7.5	8.9	11.9	11.3
Total salaries as percent of total MOE recurrent	86.2	86.6	86.7	85.8	84.8

Source: Appropriation Accounts 2002/03 to 2005/06; Printed Estimates 2006/07

*TIVET salaries for 2006/07 moved to Ministry of Science and Technology

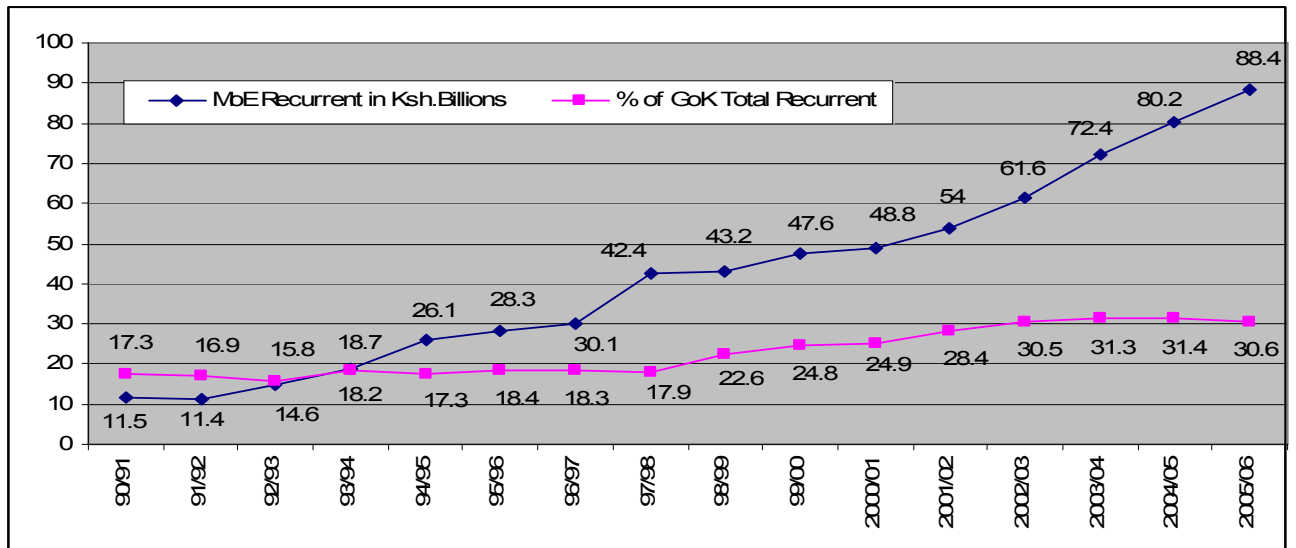
** Includes Ministry headquarters salaries.

Of course, in per capita terms, the balance of expenditures is different, with far greater expenditure per student for university education than at secondary and primary levels. The difference lies in the number of institutions and learners. While there are only seven public universities in 2008 with 112,000 students, there are more than 19,000 primary schools with 7.8 million pupils.

3.6 Recurrent Expenditure

Education spending has increased strongly over the past two decades and it has more than doubled as a proportion of total government recurrent spending since the early 1990s (Figure 3). The biggest increase in the education share of the budget in any two financial years of 4.7 percentage points was registered between 1997/98 and 1998/99 - the year when teachers were awarded a 150 percent pay rise

Figure 3: Education Sector Recurrent Expenditure and as percent of Total Government Recurrent, 1990-91-2005/06



Source: Calculated from Economic Surveys, Various Years.

The distribution of development expenditure among the different components of education has varied over the years. On average, university education has taken the largest share, but since the overall development vote has been low, this has not implied high allocations in absolute terms. The impact of FPE on the realignment of development funding is visible from the higher proportions of development spending allocated to primary education from 2003. As with recurrent funding, ECD, special education and technical education have received the least attention. The small share of special education arises from the fewer number of institutions, but that for ECD implies low priority, given that the number of ECD institutions in the country is larger than the number of primary schools (Table 17).

3.7 Patterns of Per Student Educational Expenditure

An analysis of funding levels per student shows that university per-student costs have been about 24 times that of recurrent public spending per primary-school pupil. The ratio, according to MoE (2007) for primary, secondary and university education was 1:3.3:23.5. Details of unit public spending by level of education for four years are presented in Table 26.

Table 26: Public Expenditure Patterns by Level, 2002-2005*

Primary	2002	2003	2004	2005
Primary Total Recurrent Expenditures	404,619,178	444,257,550	486,937,005	485,450,368
Primary Teachers' Salaries	392,687,857	401,821,245	412,799,254	414,589,643
Primary Cost of Other Inputs (e.g. FPE)	11,931,321	42,436,306	74,137,751	70,860,725
Primary Teachers	172,424	160,790	145,659	134,488
Primary Public Enrolment	5,874,776	6,289,082	5,865,008	5,487,624
Primary Pupil Teacher Ratio	34	36	33	31
Average Compensation of teachers	2,277	2,276	2,334	2,340
Average cost per student on other inputs	2	6	11	10
Primary Unit Cost (UC)	69	65	68	67
Secondary				
Secondary Total Recurrent Expenditures	228,148,571	209,565,438	198,995,263	200,174,951
Secondary Teachers' Salaries	218,605,714	199,067,262	187,913,861	189,928,350
Secondary Cost of Other Inputs (e.g. bursaries)	9,542,857	10,498,175	11,081,401	10,246,602
Secondary Teachers	41,145	43,013	39,126	36,063
Secondary Public Enrolment	691,371	733,152	693,029	700,564
Secondary Pupil Teacher Ratio	17	15	15	14
Average Compensation of teachers	5,313	4,214	3,955	3,998
Average cost per student on other inputs	14	13	13	11
Secondary Unit Cost (UC)	330	260	236	217
Technical Education Unit Cost	292	238	251	276
University Education Unit Cost	1,309	1,279	1,242	1,571

* Financial figures in constant 2002 US\$

Source: MoE (2007)

It can be seen that, on average, by 2002, recurrent spending on primary education was almost twice that at the secondary level, and the differential increased further by 2005. Nevertheless, the unit cost of secondary education has been about four times that of primary – a product of higher teacher salaries and an average pupil-teacher ratio which has been half that at primary (17:1, compared with 34:1). This spending pattern is further entrenched by private outlays, which take the form mostly of household expenditure on fees, transport and boarding costs. Public unit expenditures fell in real terms during the early part of the decade, with the

exception of those at university level, which had increased by 20 per cent by 2005. Despite the high unit costs of technical education compared to primary and even secondary education, enrolments are low (as shown in Appendix 4) and spending at this level, as shown in Table 27, remains modest.

Table 27: Sub-sector Financing Trends (percent)

Sub-vote (Total)	2002/3	2003/4	2004/5	2005/6
Gen. Admin. and Planning	15.6	6.2	6.5	9.0
Primary Education	46.2	57.4	56.1	53.6
Teacher Education	0.2	0.5	0.4	0.6
Special Education	0.2	0.2	0.3	0.2
Early Childhood Education	0.3	0.2	0.0	0.0
Secondary Education	24.4	22.5	22.4	21.8
Technical Education	1.4	1.6	2.1	2.0
University Education	11.3	11.0	11.8	12.8
Miscellaneous Services	0.4	0.3	0.4	0.0
Total Expenditure	100.0	100.0	100.0	100.0
Total Development Expenditure	4.0	5.6	3.6	7.0
Total Recurrent Expenditure	96.0	94.4	96.4	93.0

Source: MoE (2007)

Recurrent expenditure per student by level of education shows wide variations. The expenditure ratios between primary, secondary and university education implied by Table 28 for 1990/1 are 1:3:25. These remained broadly unchanged in 2005/06. (Figures in Table 28 may appear inconsistent because, in 1994/95, the salaries of teachers in primary and secondary schools were moved to the general administration and planning sub-vote of MoE expenditure.)

Table 28: Recurrent Expenditure per Student, 1990/91-2005/06 (Constant 1990/91 US\$)

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98
Primary	47.86	23.40	14.76	25.99	0.08 ⁺	0.65 ⁺	0.70 ⁺	0.37 ⁺
Secondary	125.05	59.72	39.01	40.33	5.25 ⁺	5.00 ⁺	6.67 ⁺	3.61 ⁺
Technical*	-	-	-	-	-	-	-	-
Teacher Training**	-	-	-	-	-	-	-	-
University Education	3,097.30	1,464.01		950.71	735.45	702.82	551.44	524.17
	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06
Primary	1.05	0.99	0.87	1.17	4.30	7.72	6.55	7.00
Secondary	8.21	9.87	5.55	7.90	5.93	5.60	7.16	20.14
Technical*	-	385.88	232.08	313.21	215.59	196.14	255.95	237.86
Teacher Training**	378.17	247.07	92.52	162.35	119.98	141.41	145.27	113.00
University Education	1,210.82	920.19	495.66	723.78	556.69	573.28	517.81	517.24

Source: Calculated from Economic Surveys, Various Years

* Excludes Youth Polytechnics

** Includes KTTC

⁺ The low figures from 1994/95 is due to the reclassification of primary and secondary teachers' salaries to the General Administration and Planning vote.

Education expenditure in real terms more than tripled over the 16-year period from KES 16,276.48 million in 1990/91 to KES 45,274.68 in 2005/06, albeit with considerable year on year fluctuations. (Appendix Table 8). These increases were strongly influenced by changes in the earnings and employment of teachers, particularly at primary level (Table 29), where there are 230,000 primary teachers in Kenya, compared to fewer than 7,000 lecturers in the eight public universities.

Table 29: Education Expenditure by Economic Classification (percent), 2002/3-2005/6

Economic classification	2002/3	2003/4	2004/5	2005/6
Primary teachers salaries as percent of primary expenditures	96.18	81.02	81.36	80.26
Secondary teachers salaries as percent of Secondary education expenditures	99.01	93.92	93.01	90.99
Universities salaries as percent of university expenditures	88.86	85.57	72.98	86.91
Total salaries as percent of education recurrent expenditure	86.18	86.61	86.75	85.79
Total salaries as percent of total education expenditure	82.72	81.73	83.65	79.82
Total Non salaries as percent of total education expenditure	17.28	18.27	16.35	20.18
Primary teachers salaries as percent of GDP	2.75	2.96	2.85	2.82
Secondary teachers salaries as percent of GDP	1.50	1.34	1.30	1.30
Total Teachers' salaries as percent of GDP	4.25	4.30	4.15	4.12
Universities salaries as percent of GDP	0.62	0.60	0.54	0.73
Total salaries as percent of GDP	5.13	5.20	5.22	5.23

* Provisional

** Includes wages for all administrative staff at all levels

Source: Appropriation Accounts, and MPER various issues

3.8 Parental/Household Spending on Education

The previous sections noted that educational financing has been a partnership between the government, parents, community, private sector and international donors. Household spending patterns could not be uniform, given the existence of strong socio-economic differences in society (Table 30), and educational expenditure differences between the poor and non-poor are stark. The high expenditure by the non-poor does not mean that they face a greater burden in accessing education - rather, it testifies to the eventual human capital benefits that the rich derive from higher educational spending, for which they are able to pay. That the non-poor pay 11 percentage points more for secondary school fees attests to their attendance at the more expensive schools that produce the best students, who then dominate university education which is highly subsidized. Expenditures by the poor are proportionately greater on harambee schools than is the case for the non-poor.

Table 30: Average Distribution of Expenditures on Education (percent) by Income Levels, Analysis from 1992-2004

	Poor Rural	Poor Urban	Poor Total	Non-poor Rural	Non-poor Urban	Non-poor Total
Primary fees	12.0	26.1	16.1	11.2	17.9	14.2
Secondary fees	38.7	34.2	37.4	49.0	47.6	48.4
Boarding	5.5	4.9	5.3	7.5	5.7	6.7
Uniform	15.7	12.8	14.7	9.7	6.7	8.4
Primary books	11.2	7.9	10.2	7.2	4.8	6.1
Secondary books	3.4	1.8	2.9	3.5	2.2	2.9
Transport	1.1	4.9	2.2	2.7	2.1	2.5
Harambee	10.8	6.4	9.5	6.9	7.2	7.0
Insurance	1.7	1.0	1.5	2.2	5.7	3.8
Total	100	100	100	100	100	100

Source: Poverty in Kenya (1999); MoF and Planning (2005)

The poor, in Table 30, are defined as those people estimated to earn KES 1,239 in rural areas and KES 2,648 in urban areas by 1997 and KES 2,458 in rural areas and 5,045 in urban areas as at 2004. This definition changed in the subsequent analyses which are now based on computed overall poverty lines in monthly adult equivalent terms of KES 1,562 and KES 2,913 for rural and urban areas, respectively (Kenya National Bureau of Statistics, 2007a).

The poor spend a bigger proportion of their income on uniforms compared to the non-poor. However, as shown in Table 31, the absolute expenditures of the non-poor on uniforms are greater than those of the poor. This indicates that the cost-distribution of the kinds of school attended by both groups differs strongly. Indeed, the distribution of entire cost streams among the two groups is totally different, with implications for the quality of schooling for both groups.

Table 31: Mean Annual Expenditures on Education (KES) by Poverty Levels, Analysis from 1996-2004

	Poor Rural	Poor Urban	Poor Total	Non-poor Rural	Non-poor Urban	Non-poor Total
Primary fees	229	885	355	578	2,792	1,048
Secondary fees	741	1,161	822	2,537	7,428	3,573
Boarding	105	166	117	389	8,967	496
Uniform	301	436	327	504	1,040	617
Primary books	214	268	224	374	749	454
Secondary books	65	62	64	181	343	216
Transport	21	166	49	142	329	181
Harambee	207	217	208	358	1,126	521
Insurance	32	36	33	115	894	280
Total	1,914	3,395	2,198	5,178	15,5597	7,386

Source: Poverty in Kenya, MoF and Planning

The definitions of the poor are the same as between Tables 30 and 31. In absolute terms, the non poor on average spend five times the amount spent by the rural poor on education. But even among the poor, there are stark differences. The urban poor spend on average three times more than the rural poor. Among the former group, however, there is evidence that the high cost of spending on education by the urban poor arises from the lack of access to publicly-provided education. Typically, the urban poor attend non public primary and secondary schools, even though they do not offer a good quality education, and they have charges that are above the average cost of publicly provided education (Kimkam Development Consultants, 2000; Oxfam, 2003).

3.9 Who Benefits from Educational Spending in Kenya?

A benefit incidence analysis of educational spending in Kenyan primary and secondary education by Deolalikar (1999) noted that though access to primary education is equitable, inequity increases from the secondary school level such that by the time students reach university, the poorest quintile constitutes only 7.54 percent of higher education attendants. The second, third, fourth and richest quintiles account for 4.46 percent, 20.96 percent, 22.25 percent and 44.78 per cent respectively. A recent study on the dual track admission system in Kenya (Otieno, 2007) reported that when university students were classified by estimated family income levels, cumulatively, 78.3 percent reported being from high income/high middle income and middle income families, while only 21.7 percent reported being from low-income families (Table 32).

Table 32: Distributions of University Students by estimated Family income Level

	Frequency	Percent	Valid percent	Cumulative percent
High income/ High middle income	27	5.4	5.7	5.7
Middle income	344	68.9	72.6	78.3
Low income	103	20.6	21.7	100.0
Total	474	95.0	100.0	
Other Unspecified	25	5.0		
Total	499	100.0		

Source: Otieno (2007)

Data in Table 32 are broadly consistent with Deolalikar (1999). The high and middle income groups have the economic means to take children to better quality secondary schools from which they can obtain university entry marks. The low proportion of students from high-

income groups does not imply low presence of students from this economic group in universities as a whole but rather, results from two factors. First, the high income group as a proportion of the total population is low (Kenya, 2007). Second, the majority of high income families send their children to universities outside Kenya. Indeed, there are some K12 schools that specialise in preparing students for university education in Britain, the United States, Australia, Canada, New Zealand and South Africa⁷.

Notwithstanding the dominance of the rich in higher education, it continues to attract greater public subsidies than other levels of education. This means that there is a maldistribution of subsidies as they benefit those who need them least. It has been demonstrated (Republic of Kenya, 1996; Deolalikar 1999) further that while government expenditures on, and subsidies to lower levels of education are distribution-neutral, subsidies to secondary and tertiary education benefit disproportionately the more affluent groups. To this extent, the mode of financing education in Kenya is retrogressive and exacerbates inequality. Cumulatively, therefore, the richest 40 percent accounts for up to three quarters of all university students in the country, despite the poor being the majority in the population⁸.

A second parameter of interest in educational benefit incidence analysis is gender. In that regard, a comparison of GPI across levels of education over a period of time should give a clear picture on the differences between girls and boys. Table 33 summarises actual and projected GPI for selected years. It can be seen that Kenya has attained near gender parity in basic (ECD and primary) education, while progress is being registered in secondary education. The figures in Table 33 confirm the previous findings by Deolalikar on the neutrality of primary and secondary expenditure, while at the same time reinforcing the inequity in university education. At the university level, the improved participation of women is brought about by the expansion of private universities, with the net effect that the actual

⁷ There are more than a dozen such specialised schools in the country, majority of which are located in Nairobi and its environs. Some of the schools include Brookside, St. Mary's, Peponi, Braeburn, Breaeside, Brookhouse, Hill Crest, St. Andrews Turi, etc. These are high end schools whose fees are beyond the reach of the average Kenyan. At St. Andrews Turi for instance, the fee per term is much higher than the total fees in a four year undergraduate course.

⁸ According to the latest statistics from the Kenya National Bureau of Statistics, the proportion of the population living below the poverty line (defined as less than one dollar a day) is 56percent. There are however regional disparities, with some districts such as Suba having close to two thirds (63percent) of its population living below the poverty line. It is not surprising therefore that these districts and regions do not take students to the lucrative programs in the universities. For the last ten years, there is no student from the district who had directly enrolled in the subsidized public university schools of medicine. For an overview of these district and regional disparities, see Wesonga, Ngome, Ouma and Wawire (2007).

private costs to women increase, whilst more men continue to enrol in publicly subsidized, labour-market rewarding university education.

Table 33: Actual and Projected Gender Parity Index (GPI)*

Education Level	Data	Statistics				Actual		Projection	
		2005		2006		2005	2006	2007	2008
		Male	Female	Male	Female	Male	Female	Male	Female
ECD	NER	32.9	25.6	33.6	33.6	0.78	1.00	1.00	1.00
Primary	NER	83.8	82.6	86.5	86.5	0.99	1.00	1.00	1.00
Secondary	GER	31.3	27.2	34.6	29.9	0.87	0.86	0.91	0.91
University	Enrolment	58,805	33,511	68,345	43,884	0.57	0.64	0.60	0.67
Other Tertiary Institutions	Enrolment	46,159	44,555	49,851	48,715	0.97	0.98	0.97	0.98

Source: Kenya (2007)

* For a definition of GPI see Table 4.

A third relevant parameter is regional differences, firstly in terms of general access to educational opportunities, and secondly in terms of the proportions of public finances appropriated by regions for different components of educational spending. Analysis along these lines is revealing. While the primary GER for the country as a whole is estimated to be 107 percent, the Garissa, Wajir, Mandera, Marsabit and Samburu districts have GERs of less than 50 per cent, with Garissa having a gross primary enrolment ratio of only 26 per cent.

Further differences are discernible in the proportion of resources going to the poor districts. Teachers' salaries are one such example. According to the MoE (2007), the wealthiest districts in the country consume more of the teacher salary expenditures (Table 34). Public teacher expenditures per pupil are higher in wealthier districts than in poorer district, an indication of higher TPRs in wealthier districts. The question that arises is whether the quality of education provision in wealthier districts is higher than that of poorer districts. If TPRs and performance in national examinations is anything to go by, then the answer is in the affirmative.

Table 34: Public teacher salary expenditures by district wealth quintiles

Quintiles	2005		2006	
	Per cent		Per cent	
Poorest 20percent	18.66		19.4	
2 nd 20percent	16.59		16.9	
3 rd 20percent	20.68		20.5	
4 th 20percent	20.69		20.4	
Wealthiest 20percent	23.38		22.7	

Source: Kenya (2007)

Further differences occur at the sub-sectoral levels. In secondary education for instance, regions and socio-economic/income groups record differential rates in both GER and NERs (Table 35). The poorest per capita expenditure group accounts for less than nine percent of secondary students, whereas the richest quintile is over-represented by 10 percentage points at about 30 percent. As with primary education, there are serious disparities among districts in access to education. Whereas national secondary GER is 26 per cent, there are five districts with GERs of less than 5 per cent, with the former South Nyanza having a GER of only 1.2 per cent (Deolalikar 1999). These regions also have some of the highest incidences of poverty, highest infant mortality rate, highest HIV and AIDS infection rate, lowest per capita consumption of essential RDA, lowest teledensity, and widest gender disparities.

Table 35: Gross and Net Rates of Enrolment for Various Groups, Kenya, 1994

Group	Gross Rates		Net Rates	
	Primary	Secondary	Primary	Secondary
National	93.88	26.01	68.91	11.58
Rural/urban residence				
Rural	94.43	22.05	68.13	8.32
Urban	89.70	51.77	74.89	32.82
Rural per capita expenditure quintiles				
Bottom	86.78	9.55	61.07	3.57
Second	94.02	17.07	68.14	5.45
Third	97.79	23.08	70.45	8.60
Fourth	98.81	28.98	71.58	11.43
Top	96.03	33.92	70.73	13.56
Urban per capita expenditure quintiles				
Bottom	79.38	35.10	67.88	21.32
Second	96.35	36.75	72.80	23.68
Third	91.27	49.60	74.76	31.07
Fourth	95.25	61.23	84.65	34.26
Top	87.64	76.50	78.32	53.07

Source: WMS II, 1994 as derived from Deolalikar 1999

In Kenya, therefore, schooling is less affordable by the poor than by the non-poor. Lack of affordability leads to reduced demand for schooling among the poor. This explains why there is greater disparity across economic groups in secondary than in primary enrolment ratios in Kenya. The private cost of secondary schooling is significantly greater than that of primary schooling (Deolalikar 1999). For the poor, basic survival necessitates that they spend most of their income on food, making education a secondary consideration. Data show that the poor spend a much higher proportion of their incomes on food than on education (NGO Council, 1997). The exclusion of the poor especially from secondary education means that they do not

eventually get access to higher education, and thus have little chance of the social and economic mobility such access would bring.

The exclusion of the poor from secondary and higher education is not only a poverty issue but also a geographical one, because the poor tend to come from the ASAL areas, informal settlements (slums in urban centres) and generally from regions where cultural inhibitions particularly against the education of girls still prevail. It is therefore not surprising that in public university education, the proportion of girls/women is only 29 per cent (Republic of Kenya 1998b).

Table 36: Average Net Enrolment Rates by Level of Education, Region and Income Levels, 2002 (percent)

Region	Primary		Secondary		Tertiary	
	Non-Poor	Poor	Non-Poor	Poor	Non-Poor	Poor
Nairobi	83.6	69.2	40.6	32.5	9.3	3.9
Central	78.1	74.0	21.4	6.6	0.7	2.6
Coast	58.7	49.7	17.5	2.9	2.5	3.7
Eastern	77.1	69.2	14.0	5.4	4.1	4.3
N. Eastern	29.0	15.5	12.6	0.4	5.3	3.8
Nyanza	71.2	73.8	14.4	7.5	3.1	1.5
R.Valley	71.0	61.5	11.7	5.5	5.6	4.2
Western	80.2	69.0	15.1	5.5	4.9	4.6
Rural	71.6	64.7	12.3	4.9	3.6	3.7
Urban	78.6	68.2	38.3	20.7	6.9	3.3
Total	72.7	65.0	17.0	6.2	4.5	3.6

Source: Poverty in Kenya, Social Indicators, MoF

Regions that have enrolments lower than the national average are North Eastern, Coast, Rift Valley and Nyanza. Data in table 36 show that in all regions, the non-poor, both rural and urban, dominate secondary schools. For some regions such as Coast, the difference is as high as 15 percentage points in favour of the non-poor. On the other hand, the representation of the urban population in secondary education is as high as 17 percentage points. There is uneven access to all levels of education in Kenya, first by region and second, by income groups. External support to education should therefore be targeted to redressing these imbalances in the appropriation of the benefits of educational access.

Another type of exclusion arises from the failure to fully integrate women in positions of decision making, including membership of SMCs, BOGs of both secondary school and other educational institutions like institutes of technology, polytechnics, etc. These boards and

committees are typically headed by men, even in girls-only schools. The trend does not end there and indeed appears to be more pronounced in higher education.

3.10 Teacher Salaries

Previous analyses have shown that teacher salaries constitute the bulk of state expenditure on education. This section attempts to show the actual salaries per grade or scale for the different cadres of the teaching force. The current salary scales are presented in Appendix 10. On average, teachers in all categories have seen a 46.8 percent erosion in their salaries in the last two decades. Only primary school teachers in Grades P2 and P3 have had an increase in real salaries of 11 percent and 2 percent respectively. The salary award of 150 percent in 1997 has therefore been largely eroded by inflationary pressures. However, it should be noted that the increases shown in Appendix 10 do not include the last phase of the award that was effected in 2007 (mainly because the data were not available). Untrained graduate teachers and Graduate/Approved Teacher 3 Scale experienced erosion in salaries of up to 32.4 percent. The rest that had erosion in real salaries are as follows: P1 and trained technical teachers (27percent), S1 teachers (24.3 percent), Graduate/Approved Teacher 2 Scale/Assistant Lecturer (11.7percent) and Head Teacher Grade/Secondary School Principal/Principal Graduate Approved/Approved Teacher 2 Scale and Principal Grade (7.1percent and 6.4percent) respectively. The differential erosion in salaries for most grades and the increase for some grades is part of a rationalisation process that the Teachers' Service Commission embarked upon with the increases in 1997. In other words, the TSC took the opportunity afforded by the salaries review to reduce the disparities in the salaries of different categories of teachers. That partly explains why the single biggest increase affected secondary level teachers (Untrained Graduate Teachers and Graduate/Approved Teacher 3 Scale) to bring them into harmony with the rest. The policy at the TSC has been to give special incentives to teachers in subject areas that had serious shortages especially in the technical subjects. As a result of the incentives, some of the teachers earned more than their trained counterparts, a result which proved controversial for obvious reasons.

3.11 Financing University Education

Details of funding university education by government, households and donors for selected years are presented in Appendix Table 12. Government funding for higher education has been fairly consistent over the period, at least up to 1997/98. The next two FYs saw a significant reduction in the level of funding, before picking up in 2000/2001 with a

consistent increase subsequently. Despite an increase in the absolute level of government funding, it has declined as a proportion of total university expenditures. This decline has been consistent from 1998 and is mainly due to the launch of dual track admission system in the public universities, whereby there is a highly restricted, “merit-based” entry to very low cost higher education, with other applicants not so admitted being permitted entry on a fee-paying basis. By consequence the proportion of university costs met by private households has risen from less than 10 per cent in the 1990s, to more than fifty percent by the mid-2000s. The programmes have increased the financial health of public universities tremendously. For instance in 1998/99AY and part of 1999 alone, the UoN made KES 464 million (US \$ 5,948,718) while Moi University earned in excess of KES 100 million (US \$ 1,282,051.3) in a year (Mwiria and Ng’ethe, 2002), primarily as a result of student fees. The new policy has facilitated a rapid expansion of enrolments. For example, in the 1998/99 academic year (AY), the University of Nairobi had 756 students but by 2000/01 the number had increased five-fold to around 4,000. Equally, at Moi University, the enrolment increased from 227 to 1,686 between 1999 and 2001, representing a seven-fold increase (ibid). From the position of cash-strapped public universities, having been accustomed to state control with limited funding, these figures suggest that, for them, privatisation pays. Universities have used the proceeds from these programs to settle outstanding debts and complete stalled projects. For example, before the program was started, UoN had an electricity and water bill of KES 130 million (US \$ 1.7 million) which its increased income allowed it to clear.

Appendix 12 shows that the highest level of government funding was in 1997/1998. On the other hand, the highest level of external support for university education was in 1991/1992, since when it declined. The diminished external support for higher education in the period after 2003 was associated with two principal factors. First, the increased revenues from Module II programmes, discussed above, meant that even with constant funding from the state and donors, their share would reduce. Second, the country adopted a sector wide approach (SWAp) approach, which initially excluded university education as a sub-sector for external support. The SWAp - Kenya Education Sector Support Programme (KESSP) – was established in 2005 following a major education conference in 2003 and the publication of a new sector policy paper (Sessional Paper No. 1 of 2005). The KESSP consists of 23 thematic areas in education, termed investment programs (IPs), which have to meet specific requirements before being eligible for donor funding from the pooled account. University education has remained one of the ineligible expenditure items for pooled funds (along with seven others) owing to there being no strategy for university development. A strategy has

since been developed and it is expected that, following ratification by stakeholders, university education will be included in the eligible expenditure list from FY 2008/09.

3.12 Sector Financing Gaps

According to the Budget Outlook Paper (2007) and KESSP, despite the enhanced budgetary allocations to education from both government and donors, the education sector faced huge funding shortfalls, even before the decision to implement affordable secondary education programme was taken (Table 37). The sharp increase in the financing gap (from KES 3.1 billion to KES 65.5 billion) between 2005/06 and 2006/7 is notable. Its increase may be attributable to the expansion programme in secondary education, and to the inclusion of the secondary sub-sector in the list of items eligible for funding from the SWAp's joint-financing kitty. The decline in the following year was mainly due to the fact that some of the items in secondary education financing (such as grants for expansion of secondary education places) are 'once-off' expenditures.

Table 37: Projected Financing Gap in Constant 2007 KES and US\$ (Millions)

Source of financing	KES/ US\$	2005/06	2006/07	2007/08	2008/09	2009/10
Net Government funding (recurrent)	KES	113,843.20	952,361.70	97,280.00	78,480.15	66,771.87
	US\$	1,640.46	15,195.24	1,544.13	1,207.39	1,094.62
Net Government funding (development)	KES	1,049.02	10,112.70	1,063.00	817.69	685.81
	US\$	15.12	161.35	16.87	12.58	11.24
Total net Government funding	KES	114,892.30	962,474.40	98,343.00	79,297.85	67,457.68
	US\$	1,655.58	15,356.59	1,561.00	1,219.97	1,105.86
Total donor funding	KES	9,328.76	51,290.98	2,092.00	-	-
	US\$	134.43	818.36	33.21	-	-
Total donor plus net Government	KES	124,221.00	1,013,765.00	100,435.00	79,297.85	67,457.68
	US\$	1,790.01	16,174.96	1,594.21	1,219.97	1,105.86
Total education requirement	KES	127,393.20	1,079,283.00	129,550.00	87,186.92	74,553.03
	US\$	1,835.72	17,220.31	2,056.35	1,341.34	1,222.18
Financing gap	KES	-3,172.13	-65,517.40	-29,115.00	-7,889.08	-7,095.35
	US\$	-45.71	-1,045.35	-462.14	-121.37	-116.32

Source: Budget Outlook Paper (2007) and KESSP (2005)

More recent calculations suggest a continued funding gap through 2010 (see Table 38 below). With a reduced capacity to increase the education budget further, and known donor commitments to the sector, options for the government are either to scale down some of the development projects to meet the essential recurrent expenditures, or to source funding from the non-traditional donors such as the Arab and Asian countries. Partly reflecting such opportunities, following the change of government in 2003, the country has increasingly been looking to the East for opportunities to enhance both trade and aid flows.

Table 38: Education Sector Resource Requirement, Constant 2007/08 KES, US\$

		2006/07	2007/08	2008/09	2009/10
Ministry of Education*	KES		118,621,805,284	93,230,309,225	82,261,227,257
	US\$		1,882,885,798	1,434,312,450	1,348,544,709
Ministry of Science and Technology	KES		9,979,000,000	9,281,153,846	9,029,333,333
	US\$		158,396,825	142,786,982	148,021,858
Total Resource Requirement	KES		134,375,805,284	104,843,386,148	93,645,893,923
	US\$		2,132,949,290	1,612,975,172	1,535,178,589
Total available resources	KES	119,491,356,383	119,259,000,000	99,479,230,769	95,749,333,333
	US\$	1,906,979,834	1,893,000,000	1,530,449,704	1,569,661,202
Resource Gap	KES		9,341,805,284	3,032,232,302	(2,103,439,410)
	US\$		148,282,624	46,649,728	-34,482,613

Source: MoE/MPER (2007)

Note: * In 2008 The Ministry was split, with the higher education section being merged with Science and Technology to form the new Ministry of Higher Education, Science and Technology (MoHST)

Chapter Four: International Aid to Kenyan Education

4.1 Introduction

Kenya has had a long history of receiving international assistance for its education sector. At independence, the World Bank loaned the country a sum of Kenya Pounds (K£) 2.5 million (US\$ 649,350) in order to implement one of the recommendations of the first Kenya Education Commission for the expansion of secondary schools over the 1965-76 period (Abagi, 1999). This was the genesis of donor assistance to Kenyan education which has continued to date. Aid receipts by major sources for selected years are presented in Appendix 11. They include:

The Early Childhood Development Project (ECDP) (US \$ 35 million);
Strengthening Primary and Secondary Education (STEPS) Project (US \$200 million - USAID);
Strengthening Primary Education (SPRED II and III) (GBP 13.36 million - UK);
Primary Schools Management (PRISM) (GBP 4.8 million - UK);
Strengthening Practical Subjects in Primary Education (PraSUPE) (US \$ 2.5 million – GTZ);
Strengthening Mathematics and Science in Secondary Education (SMASSE) (US \$ 2.5 million – JICA);
Direct Budget Support for Textbook Project (US \$ 2.5 million – Netherlands);
Basic Education, Child Protection and Development Programme (US \$6 million – UNICEF with GoK);
International Programme for Elimination of Child Labour (IPEC) (US \$43,000 – International Labour Organization); and,
School Feeding Programme (US \$ 18 million – WFP).

These projects illustrate the importance of donor assistance to the Kenyan education sector. Donor programs have traditionally funded either special programs (such as those listed above) or capital projects. The impact of donor funding can therefore be judged from the perspective of the specific changes resulting from their implementation. As an example, the PRISM project funded by DFID has been lauded by some observers for the successful institution of school development planning in Kenyan primary schools. By the mid-2000s, all schools in the country developed these plans, which form the basis of funding from communities and, where applicable, from government sources, such as FPE funds. A second program that is believed to have resulted in significant change is the School-based Teacher Development (SbTD) programme, which was again funded by the British Government through DFID. This

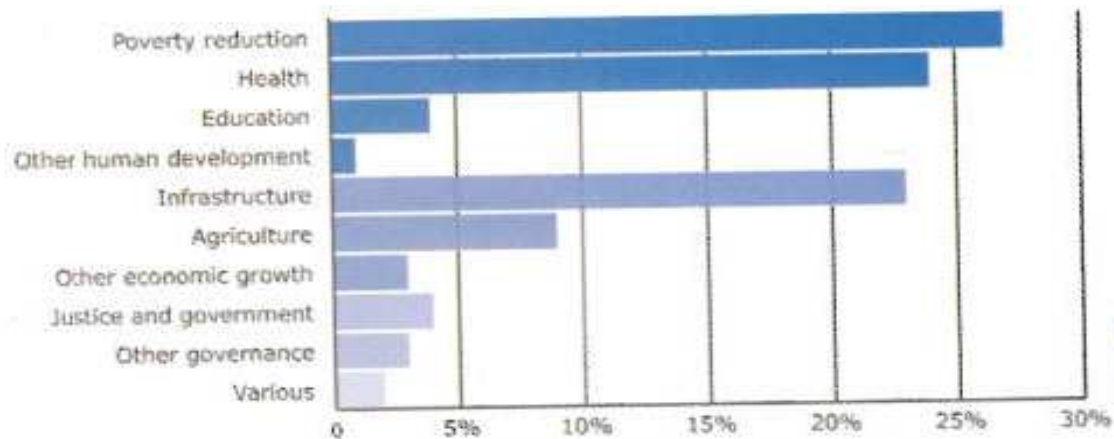
programme instituted school mentorship through the training of key resource teachers (KRTs) who in turn have provided continuous support to other teachers at the school level (OWN and Associates, 2002).

Whilst many donor-funded projects in the county have had notable impact, these two programmes are amongst the most recent, having had a direct impact on school administration and on teaching and learning processes. On the other hand, there have also been cases where funds for special programmes have been misused and the programmes have been suspended or scaled down. One notable such project is the Direct Budget Support for Textbook Project funded by the Dutch government. Aid was suspended by the donor agency because of glaring malpractices in its implementation. Substantial amounts of funding were thus held back, reducing the overall inflow of international assistance. The experience pointed to the dangers of depending on donor aid for specific projects, even though in this case, the concern was well-founded. Not only can aid be withdrawn at will, but it is also unpredictable as the recipient countries do not have total control on its disbursement. The universities investment project (UIP) was also attended by controversy, when it was discovered that the suppliers delivered reconditioned Tata buses from India, after colluding with some government officials, instead of the Isuzu brand that was specified in the tender. The situation was rectified when one senior university officer advised the other universities not to accept the buses. It can be simplistic therefore, to blame donor agencies for systemic ills when their best efforts in assisting countries are frustrated by graft.

The suspension of aid arising from such concerns was not confined to the education sector. In the transport sector, the Kenya Urban Transport Infrastructure Project (KUTIP), heavily funded by the World Bank, was also terminated at about the same time due to similar, if not more grave, concerns.

Despite this chequered historical relationship, the agencies have continued to support the education sector (Table 39), even though education is often not a priority area for donor support. For example Figure 4 shows that the European Union (EU), which has provided roughly half of all aid to the education sector in Kenya, has had more substantial programmes in other sectors.

Figure 4: Characteristics of EU ODA in Kenya – Main EU ODA Sectors



Source: http://europa.eu/index_en.htm, retrieved March 20th 2008

4.2 The Volume and Nature of Aid

Table 39 indicates that there has been a remarkable shift in Kenya's external receipts over the past two decades. In constant price terms, annual aid receipts roughly tripled during the 1970s, and then remained roughly constant through the 1980s. At the end of that decade there was a further sharp increase, with aid almost doubling again over the three years 1987-1990. The latter year marked the peak, when Kenya was strongly occupied with the implementation of its structural adjustment programs. As indicated elsewhere in this paper, this year also marked one of the largest single items of external support to the higher education sub-sector - the universities improvement project (UIP). However, aid inflows declined significantly after 1990, halving by 1993, and falling to below 15 per cent of 1991/2 levels by the end of the decade. This period witnessed the height of political repression, and growing demands for multi-party democracy. Relations between the government and the donors deteriorated badly during the late 1990s, and were compounded by major concerns about corruption. Although there was renewed interest in supporting Kenya following the election of a new government in 2003, even by 2006, total external support had recovered only to the equivalent of about 40 percent of its 1990 level.

Data in Table 39 indicate that Kenya has received more grants than loans. Over the entire period (1970- 2006), grants cumulatively accounted for 55% of external support. The data suggest a good balance between loan and grant components of Kenya's ODA. It is worth noting the decision of the Paris club to ignore Kenya's plea for debt forgiveness: it is not classified as a highly indebted poor country (HIPC), thereby making it ineligible for the reprieve granted other countries.

Table 39: Loan and Grant Components of total ODA to Kenya Current and Constant Prices, (US\$ millions)

Year	Loans	Grants	Total	Total in constant 1970 prices	% grants	Year	Loans	Grants	Total	Total in constant 1970 prices	% grants
1970	35.5	30.6	66.1	66.1	46.3	1989	538.3	553.6	1091.9	341.8	50.7
1971	42.2	37.8	80.0	76.7	47.3	1990	429.7	1185.3	1615.0	479.7	73.4
1972	55.7	85.8	141.5	131.4	60.1	1991	461.2	640.9	1102.1	313.9	58.2
1973	87.1	54.1	141.2	123.5	38.3	1992	327.5	659.6	987.1	272.9	66.8
1974	77.8	72.9	150.7	118.8	48.4	1993	317.6	552.1	869.7	233.5	63.5
1975	98.2	89.4	187.6	135.4	47.7	1994	227.5	503.8	731.3	191.4	68.9
1976	148.8	109.9	258.7	176.5	42.4	1995	557.5	463.4	1020.9	259.8	45.4
1977	139.9	113.7	253.6	162.5	44.8	1996	342.8	400.5	743.3	183.8	53.9
1978	168.8	174.6	343.4	204.4	50.8	1997	-	-	-	-	-
1979	213.1	218.9	432.0	231.1	50.7	1998	266.9	79.5	346.4	82.5	23.0
1980	232.1	248.8	480.9	226.5	51.7	1999	121.5	58.2	179.7	41.9	32.4
1981	237.1	298.7	535.8	228.8	55.7	2000	201.6	118.3	319.9	72.1	37.0
1982	317.8	260.2	578.0	232.4	45.0	2001	187.2	146.8	334.0	73.2	44.0
1983	242.6	277.0	519.6	202.4	53.3	2002	212.7	205.9	418.6	90.3	49.2
1984	373.5	282.1	655.6	244.8	43.0	2003	193.8	277.2	471.0	99.3	58.9
1985	215.0	311.5	526.5	189.9	59.2	2004	174.0	165.1	339.1	69.6	48.7
1986	287.9	349.2	637.1	225.5	54.8	2005	160.4	248.3	408.7	81.2	60.7
1987	352.5	400.1	752.6	256.9	53.2	2006	496.1	455.5	951.6	183.1	47.9
1988	387.3	567.1	954.4	313.1	59.4						

Source: Ryan and O'Brien (1999); Statistical Abstract, 2004, 2007; Economic Surveys, various years

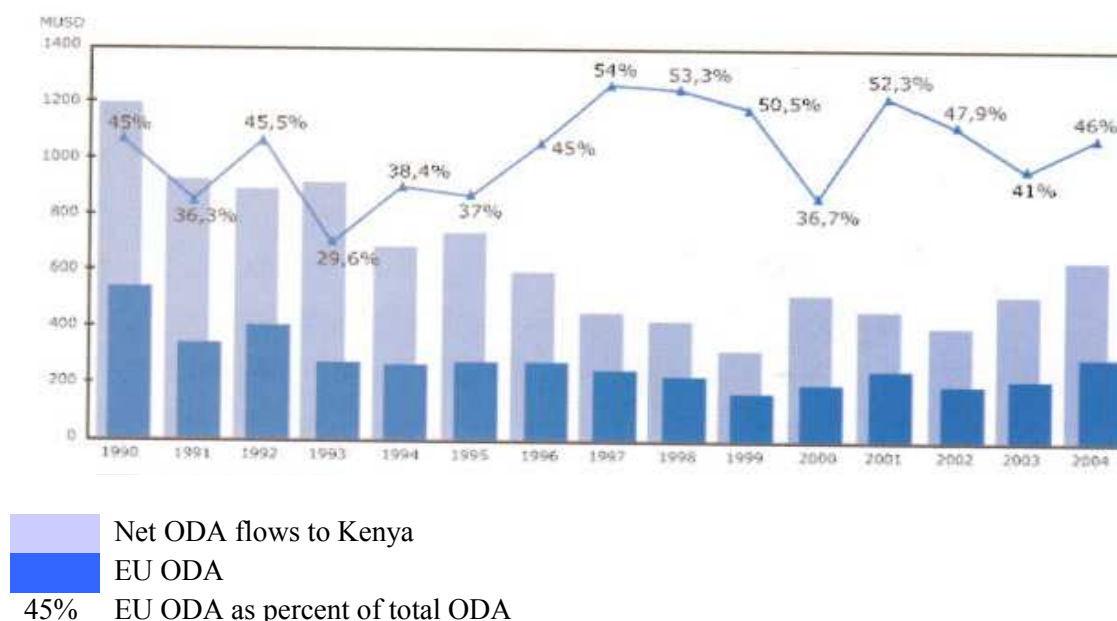
Notes:

* Constant price series in 1970 prices was derived by applying an international inflation index from 1970 onwards to the nominal price series shown in Column 4.

Source: Inflationdata.com.

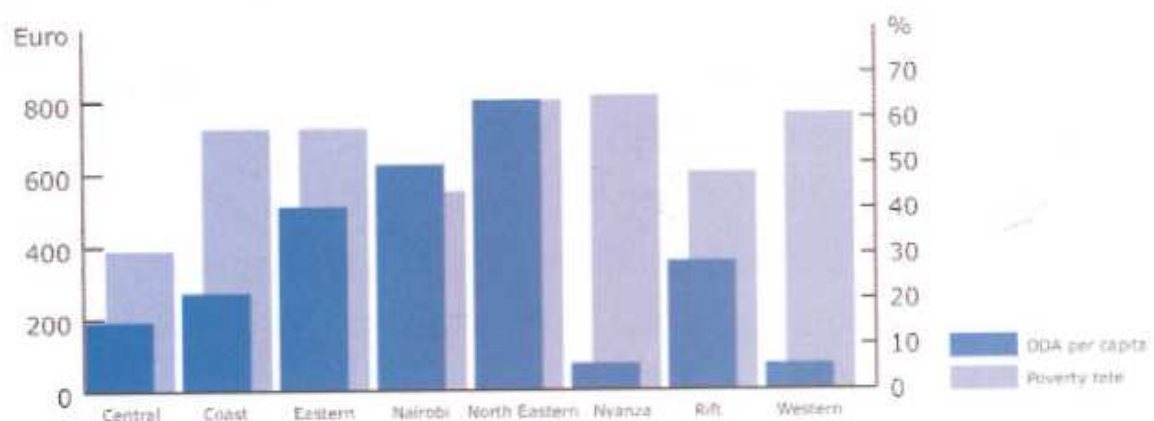
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Figure 5: Total and EU ODA Trends in Kenya



The EU has been the largest single source of ODA for Kenya for the past one and half decades, contributing about 50 percent of all ODA inflows to Kenya. Though the volume of EU aid is significant, targeting has been poor, and most of the aid does not reach the poorest regions of Kenya (Figure 6). Particularly in Central, Coast, Rift and Nyanza provinces, EU aid per capita is far less than in the other, better off provinces. This mismatch reflects deeper development asymmetries which have been a key feature of Kenya's development policy since independence. It could be argued therefore that the targeting of EU's aid has not been pegged to poverty levels. The support has also been influenced by political factors which typically see more support going to regions which support the government of the day.

Figure 6: EU ODA Per Capita and Poverty Trends in Kenya



Source: http://europa.eu/index_en.htm, retrieved March 20th 2008

A notable feature of external support to Kenya is that the bulk of the donor contribution has been consistently from multilateral sources. Over the period under consideration, the bilateral portion of assistance to Kenya has averaged 21.4 percent. The only years in which bilateral aid constituted more than one third of external assistance were 2000/01 and 2005/06. This was mainly due to increased commitments from DFID and CIDA, even though multilateral aid was still significant.

4.3 The Volume and Nature of Aid to Education

The flow of external aid to education in Kenya has been characterized by inconsistency and fluctuation. In particular, the mid 1990s were a difficult time for Kenya in accessing donor funds, with receipts being at their lowest for a 16 year period (Table 40). The proportion of

aid received averaged two percent of the education budget. The highest amount received by the country was in 1992/93 fiscal year. But the years between 1994 and 2001 included years with the lowest level ever of aid inflows. Over that period aid to education was running at only about five percent of its pre-1994 levels, and its volume was tiny. Receipts averaged a mere 0.11 percent of education budget. Generally, the 1990s were marked by poor relations between Kenya and the international community arising from its bad records on democracy and human rights.

Table 40: External Aid to the Education Sector (grants and development Assistance): Multilateral and Bilateral (figures are in Kenya shillings) ⁺

Fiscal Year	Multilateral		Bilateral		Total Amount	Education Budget	
	Amount	Per cent	Amount	Per cent		Total	Aid as per cent of
1990/1991	19,981,000	83.71	39,442,400	16.49	239,243,400	12,756.4	1.87
1991/1992	139,800,000	74.04	49,000,000	25.97	188,800,000	13,624.4	1.38
1992/1993	895,890,220	84.28	167,150,000	15.73	1,063,040,220	15,945.4	6.67
1993/1994	229,612,600	97.70	5,389,400	3.49	233,562,000	19,800.4	1.18
1994/1995	5,679,900	85.30	980,000	14.71	6,659,900	28,603.4	0.02
1995/1996	6,219,900	84.42	1,149,800	15.60	7,369,760	31,399.4	0.02
1996/1997	5,679,900	75.84	1,809,800	24.16	7,489,700	31,382.4	0.02
1997/1998	5,679,900	75.84	1,809,800	24.16	7,489,700	44,045.4	0.02
1998/1999	18,208,000	88.73	2,313,000	11.27	20,521,000	46,500.8	0.04
1999/2000	15,208,000	74.11	5,313,000	25.89	20,521,000	48,259.8	0.04
2000/2001	110,450,000	64.65	60,398,129	35.35	170,848,129	49,371.9	0.35
2001/2002	178,450,670	79.58	45,786,900	20.42	224,237,570	51,001.5	0.44
2002/2003	2,450,670,000	68.56	1,123,657,000	31.44	3,574,327,000	57,927.0	6.20
2003/2004	3,235,670,120	80.38	789,897,450	19.62	4,025,567,570	80,377.26	5.00
2004/2005	2,578,670,000	79.16	678,967,000	20.84	3,257,637,000	83,478.52	3.90
2005/2006*	1,340,780,560	63.24	780,763,200	36.80	2,121,543,760	96,747.54	2.20
2006/2007	-	-	-	-	5,006,000,000*	98,987	5.06
2007/2008	-	-	-	-	2,092,000,000*	115,794.41	1.81
2008/2009	-	-	-	-	1,216,000,000*	N/A	N/A

Source: Central Bureau of Statistics; Ministry of Education, Statistics Department and Ministry of Finance, Estimates and Appropriations in the Public Sector

⁺ Excludes direct external funding for projects/programs in the universities

* Provisional Figures

Fortunes changed for the better from 2003 onwards and the average receipts increased to an average of 4.0 per cent of the budget for the period 2003 to 2007. Two factors explain the increase in the flow of aid. The first was the election of a new government in 2003, which promised a new approach to development, a strong fight against corruption, and an economic strategy of which the donors approved. This saw the initiation of the free primary education program, design of a sector wide approach that has been lauded as being effective in coordinating sector work, and the relative absence of corruption-related issues in the sector, compared with earlier years. The World Bank provided a grant of US\$ 50 million towards the new program. Other agencies that contributed notably were UNICEF and DFID, which allocated about £55 million over five years for the programme. Second, at the macro level, the new government initiated new policy programmes the flagship of which was the Economic Recovery Strategy (ERS), ending in 2007, which built strongly on Kenya's PRSP and which had been agreed with the donors.

The Free Primary Education (FPE) Programme and Resumption of Aid, 2003

The launching of the free primary education (FPE) programme, in January 2003 was a landmark policy decision by the new government. Seen by donors as a key step towards school fee abolition, it opened the door to new levels of donor support, and it has subsequently taken the bulk of government and donor development funding for education. The World Bank gave a grant of Ksh 3.7 billion in June 2003 while the British government through DFID had earlier given a grant of Ksh 1.6 billion to boost the programme (Aduda, 2003). Other donors include the Organisation of Oil Petroleum Exporting Countries (OPEC) (KES 1.2 billion), the government of Sweden (KES 430 million) and UNICEF (KES 250 million) (Daily Nation July 10 2003, p.5). Over time, the number of projects increased from nine in 2003/04 to 15 in 2006/07. External support to education in 2006/07 alone was equivalent to more than one third (35.3percent) of total external support to education for the entire period under review, totalling KES 5,053.05. The adoption of the SWAp in 2005 resulted in setting clearer priorities and the design of a framework for joint financing, including annual sector reviews and budget workshops, which set the stage for this huge increase in external support.

An important change in the way funding was allocated was made under FPE, whereby the government decided to transfer funds to schools directly (Table 41). This included donor funds for such programmes as the Instructional Materials (IM) and school-building grants. The process appears to have worked well: an audit of funds-utilization under the free primary

education program (MoE, 2005) concluded that overall, the resources earmarked for this purpose - both from government and donors - do reach the schools.

Table 41: FPE Funds Disbursements to Schools, 2002/03 and 2003/04⁹ (KES)

Sources of Funds – Exchequers	2002/2003	2003/2004
GOK	2,916,000,000	6,105,752,760
DFID	1,606,000,000	-
IDA	-	2,174,300,000
SIDA	-	503,138,213
CIDA	-	431,250,000
Total receipts	4,522,000,000	9,214,440,973
Disbursements to schools		
GOK	2,392,223,850	5,027,403,204
DFID	1,431,478,771	0
IDA	-	2,141,105,839
SIDA/CIDA	-	-
Subtotal – transfers to schools	3,572,584,610	7,168,509,043
Balance of funds at year end	698,297,379	2,045,931,930
Represented by:-		
GOK	523,776,152	1,078,349,556
DFID	174,521,229	-
IDA	-	33,194,161
SIDA/CIDA	-	934,388,213
Total	698,297,379	2,045,931,930

Source: PETS, 2005

4.4 The Education SWAp (KESSP) and Current External Sector Support

An in-depth analysis of sector support by specific budgetary items is beyond the scope of this paper. This section briefly analyses donor support to the sector in 2006/7, the most recent year for which data are available (Table 42). It is evident that the bulk of donor funding (3.7 billion or 62.7 percent) was earmarked for spending on the provision of basic infrastructure (35.1 percent of total) and instructional materials (28.8 percent of total). These expenditure items are vital in improving access, retention and quality of education. The preceding sections showed that the pupil textbook ratio has improved dramatically following the launch

⁹Since the launch of FPE in 2003 and the decision to transfer funds directly to schools, all schools opened two accounts for the purpose of receiving FPE funds. Account I is the School Instructional Materials Bank Account (SIMBA) and the second account is the General Purposes Account (GPA). As the name suggests, Account I is basically for instructional materials, while other general expenditures like postal charges, payments to subordinate staff, utilities, etc, are charged to Account II. Data in this table only captures contribution of pooling partners, since the launch of the SWAp in 2003 (though, practically, the effective date of the SWAp was 2005 with the publication of the Kenya Education Sector Support Project (KESSP)).

of the FPE and the subsequent donor response in providing teaching and learning materials and resources.

Historically, NFE has been one of the most neglected components of schooling. It is instructive that donors have earmarked significant funding for providing teaching and learning materials in the sub-sector. The bulk of funding for NFE comes from IDA and FTI. The UNICEF contribution is least in this regard, even though it is one of the most active agencies in advocating alternative and complementary approaches to basic education. Another area that has received little government funding is early childhood development. Table 42 indicates that it has recently accounted for less than one percent of the total public budget for education. Donor support to the extent of KES 300 million (Appendix 7) is much higher than total public budgetary provision to ECCE over the last two decades.

External support to education has therefore played a very significant role in meeting the expenditure needs especially of the neglected sectors and sub-sectors. It may not account for a high proportion of the overall sector budget, but aid has often provided the only significant source of funding for specialized programs, such as NFE and ECCD, that receive little government attention.

Although there are more than 20 agencies involved in supporting the sector, only DFID, World Bank, UNICEF and CIDA, amongst those shown in Table 42 have signed up to the JFA and, consequently, contribute to the pooled resources. Some of the non-pooling partners, including the United States Agency for International Development (USAID), are constrained by accountability requirements of their home governments which prevent them joining the JFA.

The bulk of aid funds are committed to the basic education sector, with only three projects targeting higher education consistently over the three years. The project with the heaviest funding in 2006/7 was SPRED at KES 1,885 million. Instructional materials programmes building heavily on SPRED received generous funding, accounting for 51 percent of the entire grants to the sector in 2006/07 and more than one third (37.3percent) of the total external support in the same year. Most of the other projects targeted infrastructure (with the exception of WFP projects, which focus on school health), thereby providing a good mix of external support to major items which underpin learning.

Table 42: Donor Commitments to Education Sector, 2007/09 (Constant 2007 KES/US\$ mn.)

Project	Donor	Grant/ Loan	Printed estimates 2006/07	Commitments		Printed estimates 2006/07	Commitments	
				2007/ 08	2008/ 09		2007/ 08	2008/ 09
			Constant 2007 KES			Constant 2007 US\$		
FPE support	IDA	Grant	100.00	120.26	0.00	1.60	1.91	0.00
Education III	ADB/ADF	Grant	486.00	0.00	0.00	7.75	0.00	0.00
Technical assistance & supply of equipment	BELGIUM	Grant	43.9.8	0.00	0.00	0.70	0.00	0.00
SMASSE	JAPAN	Grant	200.00	182.22	0.00	3.20	2.89	0.00
AICAD JKUAT	JAPAN	Grant	113.00	91.11	71.55	1.80	1.45	1.10
Support to Education II	CIDA	Grant	480.00	437.32	343.45	7.66	6.94	5.28
Tegemeo Institute (Egerton University)	USAID	Grant	66.00	60.13	47.22	1.05	0.95	0.73
Crop Management Research (Egerton Univ.)	USAID	Grant	20.00	18.22	14.31	0.32	0.29	0.22
Infrastructure support for NEP primary schools	USAID	Grant	130.00	0.00	0.00	2.07	0.00	0.00
HIV/AIDS education and life skills	UNICEF	Grant	30.00	0.00	0.00	0.48	0.00	0.00
ECDE	UNICEF	Grant	22.10	0.00	0.00	0.35	0.00	0.00
Primary and complementary education	UNICEF	Grant	85.20	0.00	0.00	1.36	0.00	0.00
Children Participation	UNICEF	Grant	23.00	0.00	0.00	0.37	0.00	0.00
SPRED	UK	Grant	1885.00	0.00	0.00	30.08	0.00	0.00
School Feeding	UK	Grant	25.50	0.00	0.00	0.41	0.00	0.00
Access to basic education	WFP	Grant	2.20	0.00	0.00	0.04	0.00	0.00
Education III	ADB/ADF	Loan	788.00	677.84	0.00	12.57	10.76	0.00
Basic education	OPEC	Loan	550.00	318.88	393.53	8.78	5.06	6.05
Total grants			3,668.00	909.26	476.53	58.52	14.43	7.33
Total loans			1,338.00	996.72	393.53	21.35	15.82	6.05
Grand total			5006.00	1905.98	870.06	79.87	30.25	13.39

Source: Budget Outlook Paper and KESSP

Chapter Five: Conclusions

5.1 Introduction

The focus of this paper has been on the financing of the education sector in Kenya, its outcomes, and the role of international aid in that process. It has been shown that, after a difficult relationship with the aid community for more than a decade, a clear pattern of increased external support for Kenya emerged. For the education sector, two developments explain the increase in external support in the last five years. Firstly, the declaration of free primary education called for infusion of substantial resources at the primary level. This provided a signal to aid agencies that Kenya intended to prioritise primary education in ways consistent with the objectives of the MDGs¹⁰. Secondly the new political dispensation brought about by the election of the national rainbow coalition (NARC) government in 2003 facilitated a normalization of relations between donors and government. Later, the dispute and civil unrest arising from the flawed presidential elections of 2008 again brought threats from some donors to stop aid to Kenya. A number of them temporarily suspended their lending, at a time when the country had rolled out a program for the provision of affordable secondary education (ASE). Even the World Bank, having previously earmarked a sum of US\$ 20 million to support secondary education bursaries, scaled down this support substantially. Others, however, adopted a cautious approach pending the resolution of the political stalemate.

This concluding section makes observations on the relative impact of aid in the policy making process and on its likely future importance for the Kenyan education sector.

5.2 The Relative Impact of Aid on Policy Formulation in Kenya

One early criticism of the influence of international aid on policy formulation, was that its intentions were “to help harmonize comprador interests with foreign capital” (Leys 1975:251). In other words, donor countries used international assistance to advance their own interests, and one of the ways of doing that was to influence policy. In the days before ‘policy dialogue’ became commonplace, this was judged to be achieved mainly by seconding technical experts to help with policy formulation and design of programmes. Two decades

¹⁰ In that context, the Kenya MDGs report noted that the volume of ODA to the country has actually declined overtime (Kenya/UNDP, 2005).

later, Odhiambo-Mbai (1996) argued that the role of aid personnel remained the same, even if their numbers had declined.

The use of aid as a means of promoting particular policies in low-income countries became increasingly visible during the 1980s, when the economies of many – particularly those in Africa - declined, making them more susceptible to manipulation by the donor countries. This was achieved by increasing the ‘conditionality’ of aid – ‘the requirement that certain actions be taken by the receivers of aid as condition for its provision’ (Windham 1995:435).

As regards the education sector, 1988 was a turning point for Africa generally, and for Kenya in particular. In that year the World Bank released one of its most influential documents on African education, “*Education in Sub-Saharan Africa: Policies for Adjustment, Revitalisation and Expansion*” (World Bank, 1988). This publication was explicit in its endorsement of ‘user fees’ as a means of recovering education costs. It was in part meant to prevail upon African governments to move toward initiating greater liberalisation of education and the adoption of Structural Adjustment Programs (SAPs) as a means of tackling growing budgetary imbalances. The implications of this new approach had been set out in an earlier Bank document, “*Sub-Saharan Africa: From Crisis to Sustainable Development*” (World Bank, 1986). The latter was a precursor to the education paper, and, in many ways, changes were meant to proceed in the same order: macroeconomic adjustment first, followed by sectoral reforms later.

Following the publication of the Bank’s education paper, the Kenya government established a ‘Presidential Working Party on Education and Training for the Next Decade and Beyond’, which released its report the same year. Known as the Kamunge Report (Republic of Kenya, 1988a), it institutionalized cost-sharing in education, partly to help reduce the proportion of government funds spent upon education¹¹, in ways which had been encouraged by the Bank¹. These and other changes led to the Bank-financed Education Sector Adjustment Credit (EdSAC) in the mid-1990s. Of additional note here is the Universities’ Investment Project

¹¹The GoK quickly accepted the recommendations of the Working Party in its *Sessional Paper No. 6 on Education and Training for the Next Decade and Beyond* (Republic of Kenya, 1988b). Under the new framework, the government was to meet salaries of teachers and education administration as well as fund some limited school facilities while parents were to provide for tuition, textbooks, activity and examinations fees. The communities on the other hand were to be responsible for putting up physical structures and ensuring their maintenance. It certainly could not have been a coincidence that two years earlier, the government had released its *Sessional Paper No. 1 of 1986 on “Economic Management for Renewed Growth”* (Republic of Kenya, 1986) in which it spelt out changes in macroeconomic management including the implementation of adjustment policies. It is in the same year that the World Bank released its report on “*Sub-Saharan Africa: From Crisis to Sustainable Development*” (World Bank, 1986).

(UIP) which included a condition binding the government to admitting not more than 10,000 new students per year, even though the numbers qualifying for university admission remained much higher. The proportion of qualifying students admitted for public university education remained less than one third until 2008 when the universities for the first time admitted 17,000 students. Thus, the government sacrificed its stated policy of widening access to higher education in order to access foreign capital. Some commentators believe this to have had a deleterious impact not only on social development, but on nurturing indigenous, home-designed policies. Odhiambo-Mbai asserts that “when the Kenya government accepts financial assistance with conditionalities attached to it, it rules out any indigenous public policy discussions on the issues covered by aid. And the Kenya government, which has increasingly become aid dependent over the years, rarely turns down foreign financial assistance on matters of policy” (1996: 49).

There are, of course, differences in the policy terms attached to the acceptance of aid from different sources. Whilst the above example of the World Bank may be suggestive of the impact of external influence in domestic policy formation, concrete evidence that other multilateral donors, such as the EU and most of the bilateral donors, have used their aid to impose particular policy reforms in the education sector is not easy to find. But the absence of patent examples does not mean that there have been no attempts to do so.

5.3 The Future of External Aid to Education in Kenya

Kenya is not unusual amongst African countries in facing major financial challenges to achieving the MDG and EFA goals, and the impact of past development support programmes in education has been substantial – particularly over the past decade. The improvement of teacher competencies, reduction in class sizes, improvement of classroom conditions, more favourable PTRs, increased achievement levels, and overall indications of an improvement in the quality of education, have all been, in part, products of this external support. Without these programmes, the system would not have expanded adequately, bringing lower access, and slower progress in improving teacher competencies. While the analysis in this paper has dwelt mainly upon the impact of aid on basic education, higher education has also benefited from external support, evident not least in the positive impact of UIP in improving the infrastructure of most public universities in the country.

A strategic input of this kind will continue to be needed, even though improved utilization of donor funds will also be required. Concerns have been expressed on targeting, with some areas that are deserving of support receiving much less than those which are not. Two

examples in Kenya suffice. One is the EU's analysis of its own ODA per capita and poverty trends in Kenya which showed that most of its aid goes to areas that are actually not poor. Second is the Arid Lands Resource Management Programme (ALRMP) in which some of the districts which are not arid at all and which have some of the best development indices (such as Nyeri) received grants for school improvement and text book support, whereas other more marginal districts were excluded. Political influence in determining where aid is used remains significant. If aid is to be used for its intended purposes, such practices will have to stop.

Donor funding will also have to be more closely harmonized with the developmental and financial calendar of recipient countries. The delayed release of donor funds – caused either by failure of the government to meet agreed conditions or by differences in donor/recipient financial calendars - has sometimes resulted in postponement of planned activities. These are issues that will have to be addressed if the efficiency of external support is to be improved.

As regards absorptive capacity, Kenya has usually done well in spending donor funds in education. For example, it absorbed the US \$ 24.4 million FTI grant during its first year of support, and easily qualified for second and third FTI tranches as a result. Nevertheless, this has not always been so in other sectors, particularly in the provision of infrastructure where construction delays have led to frequent under-spending.

In recent years, policies of aid selectivity have meant that 'sound' macroeconomic and development strategies, clearly spelt out in policy blueprints, often aided by, or made in consultation with, international development agencies, have become an important prerequisite for the receipt of aid support. In this context, Kenya has put in place the Vision 2030 - an ambitious programme that aims to transform Kenya into a middle income country. Implementing this plan will need external support, and it has received the endorsement of major donors. Though a strong economy by other African standards, Kenya's continued reliance on external support is inevitable over the medium term. In 2008, the volume of external aid as a proportion of the total government budget surpassed the 7 percent mark, and in education, it probably exceeded 5 percent of total education spending. Provided that both the macro strategy and the type of sectoral programming represented by KESSP remain in place, increased flows of external aid to Kenya are likely to be seen by the donor community to be worthwhile.

Appendix 1: Enrolment in Primary Schools by Gender and Level 1996 – 2006 ('000s)

Class	1996			1997			1998			1999			2000			2001		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
	1	494.2	463.9	958.1	498.2	468.2	966.4	503.1	473.0	976.1	484.4	452.9	937.3	505.4	487.2	992.6	494.5	466.6
2	437.4	414.9	852.3	442.9	421.1	864.0	460.4	431.1	891.5	468.9	412.2	881.1	487.4	451.4	938.8	459.2	435.4	894.6
3	397.0	374.7	771.7	402.1	370.4	772.5	428.2	405.8	833.0	416.1	393.1	809.2	432.0	414.9	846.9	434.5	413.5	849.0
4	372.9	364.2	737.1	379.5	372.4	751.9	397.1	390.3	787.4	396.0	382.0	778.0	410.2	414.9	825.1	402.7	399.0	801.7
5	330.9	330.8	661.7	331.7	334.6	666.3	351.3	352.3	703.6	340.3	344.2	684.5	352.5	363.9	716.4	375.9	372.3	748.2
6	297.5	307.0	604.5	304.1	312.4	616.5	316.2	326.0	642.2	310.3	324.8	635.1	325.3	332.9	658.2	335.9	340.7	676.6
7	296.2	299.8	596.0	301.2	310.9	612.1	317.2	331.2	648.4	307.1	318.3	625.4	316.1	320.4	636.5	315.2	328.0	643.2
8	217.3	199.0	416.3	220.5	207.1	427.6	221.0	215.3	436.3	226.5	214.5	441.0	235.6	227.8	463.4	261.7	248.6	510.3
Total	2843.4	2754.3	5597.7	2880.2	2797.1	5677.3	2994.5	2925	5928.5	2949.6	2842	5827.6	3064.5	3013.4	6104.9	3079.6	3004.1	6084.7
2002																		
	2002			2003			2004			2005			2006*					
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			
1	499.8	469.2	969.0	679.0	632.7	1311.7	646.2	606.2	1252.4	620.4	585.8	1206.2	631.8	592.6	1224.4			
2	443.3	416.0	859.3	526.4	492.0	1018.4	588.3	551.3	1139.6	575.8	551.8	1127.6	589.6	572.7	1162.3			
3	424.4	397.3	821.7	490.8	454.4	945.2	493.9	459.8	953.7	549.2	517.5	1066.7	578.6	549.8	1128.4			
4	418.1	400.0	818.1	475.7	446.9	922.6	477.7	445.7	923.4	493.7	469.9	963.6	527.5	502.5	1030.0			
5	377.6	371.7	749.3	436.0	418.8	854.8	444.0	402.5	846.5	449.1	410.8	859.9	502.5	489.8	992.3			
6	346.4	353.2	699.6	400.9	392.3	793.2	418.8	399.9	818.7	429.3	413.6	842.9	469.4	432.8	902.2			
7	335.6	336.1	671.7	383.2	379.9	763.1	412.6	404.9	817.5	443.0	430.0	873.0	441.6	406.3	847.9			
8	296.9	244.5	541.4	282.4	269.1	551.5	334.0	309.1	643.1	342.1	309.6	651.7	398.5	316.7	715.2			
Total	3142.1	2988	6130.1	3674.4	3486.1	7160.5	3815.5	3579.4	7394.9	3902.6	3689	7591.6	4139.5	3863.2	8002.7			

Source: EMIS, Ministry of Education; Statistical Abstracts, various years; Annual Education Sector Reports

* Provisional

Appendix 2: Primary GER and NER by Gender (Percent) 1990 - 2006

Gender	1990		1991		1992		1993		1994		1995		1996		1997		1998	
	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER
Boys	79.3	56.0	80.1	57.2	80.9	58.0	80.0	60.0	82.5	82.5	84.5	63.1	85.0	64.0	86.6	64.9	88.8	66.0
Girls	77.0	49.0	77.3	50.5	78.0	52.0	76.0	52.0	76.5	77.2	54.0	79.0	56.0	80.0	58.0	80.0	88.0	63.0
Total	78.2	52.5	78.7	53.9	79.5	55.0	78.0	55.5	79.5	57.25	80.8	58.6	82.0	60.0	83.3	61.5	88.4	64.5

Continuation of NER&GER at Primary Schools

	1999		2000		2001		2002		2003		2004		2005		2006*	
	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER
Boys	88.0	66.8	89.0	67.7	88.0	75.0	88.9	76.5	105.0	80.8	108.0	82.2	109.9	83.8	108.9	82.0
Girls	84.3	66.1	88.4	67.8	87.3	75.0	87.5	78.0	100.5	80.0	101.6	104.4	104.4	82.6	105.8	81.0
Total	86.1	66.5	88.7	67.8	87.6	75.0	88.2	77.3	102.8	80.4	104.8	107.2	107.2	83.2	107.4	81.5

* Provisional

Source: EMIS, Ministry of Education

Appendix 3a: Enrolment in Secondary Schools by Gender and Level 1996 - 2006 ('000s)

Form	1996		1997		1998		1999		2000		2001							
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls						
Form 1	97.4	85.9	183.3	98.5	88.6	187.1	102.4	92.8	92.8	86.3	80.4	166.7	108.1	97.2	205.3	122	113.8	235.8
Form 2	93.5	81.4	174.9	95.5	86.9	182.4	98.1	86.9	185	92.1	83.4	175.5	104.1	93.6	197.7	106.7	95.6	202.3
Form 3	83.9	71.9	155.8	89.4	79.5	168.9	90.3	77.9	168.2	83.0	72.8	155.8	98.6	87.3	185.9	103.3	90.4	193.7
Form 4	78.1	66.0	144.1	80.5	68.7	149.2	82.6	69.5	152.1	76.0	64.5	140.5	91.7	78.4	170.1	99.4	87	186.4
Total	352.9	305.2	658.1	363.9	323.7	687.6	373.4	327.1	700.5	337.4	301.1	638.5	402.5	356.5	759	431.4	386.8	818.2

Form	2002		2003		2004		2005		2006*				
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls			
Form 1	136.0	120.7	256.7	129.4	121.7	251.1	145.1	125.5	111.4	235.9	157.4	123.9	281.3
Form 2	108.6	97.5	206.1	121.8	116.3	238.1	124.6	114.1	119.5	252.4	146.7	125.9	272.6
Form 3	99.2	89.4	188.6	106.7	97.2	203.9	118.0	105.1	107.8	230.7	134.7	113.6	553.9
Form 4	99.3	85.9	185.2	111.6	86.1	197.7	101.3	89.4	98.4	209.3	121.5	104.7	226.2
Total	443.1	393.5	836.6	469.5	421.3	890.8	489.0	434.1	437.1	928.3	560.3	468.1	1028.4

*Provisional

Source: Economic Surveys and EMIS, MoE.

Appendix 3b: GER and NER in Secondary schools in Kenya, 1990-2006

Gender	1990		1991		1992		1993		1994		1995		1996		1997		1998	
	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER
Boys	19.3	9.0	19.6	9.4	20.0	10.0	20.2	10.2	21.0	11.0	21.4	11.8	22.0	12.0	21.8	12.2	22.6	11.6
Girls	16.0	6.0	16.0	7.0	16.2	7.5	16.8	8.0	17.0	8.6	17.2	9.0	18.0	9.0	18.2	9.4	20.0	11.0
Total	17.2	8.5	17.3	8.2	18.1	8.3	18.5	9.1	19.0	9.3	19.3	10.4	20.0	10.5	20.0	10.3	21.3	11.3
Continuation of NER&GER at Secondary Schools																		
	1999		2000		2001		2002		2003		2004		2005		2006*			
	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER	GER	NER		
Boys	24.0	12.2	26.8	13.9	27.1	15.7	27.2	18.5	29.7	19.7	31.7	19.7	31.3	20.1	32.0	21.2		
Girls	21.0	12.6	23.6	14.0	24.2	15.2	24.2	17.1	27.4	19.1	27.3	19.1	29.1	19.4	30.0	20.0		
Total	22.5	12.4	25.2	14	25.6	15.5	25.7	17.8	28.6	19.4	29.8	19.4	30.2	19.8	31.0	20.6		

Source: Economic Surveys and EMIS, MoE.

* Provisional

Appendix 4: Student Enrolment by Gender in Technical Institutions, 1999 - 2005

Institution	1999		2000		2001		2002		2003		2004		2005		2006	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Kenya Polytechnic	2,720	1,739	2,979	1,228	4,523	1,385	4,586	1,984	4,488	2,016	5,619	3,222	2,771	1,323	2,962	1,429
Mombasa Polytechnic	1,784	1,141	1,943	801	3,567	1,092	3,149	1,401	2,647	1,390	2,778	2,436	1,423	444	1,630	570
Kisumu Polytechnic	689	441	646	266	785	240	947	410	937	421	937	433	1,452	516	1,602	728
Eldoret Polytechnic	664	425	833	343	647	515	1,527	660	1,523	684	1,610	707	1,804	1,526	2,160	1,927
Total	5,858	3,745	6,400	2,639	9,522	3,232	10,209	4,455	9,595	4,511	10,944	6,798	7,450	3,809	8,354	4,656
Technical Training Institutes	5,942	3,799	4,960	3,280	5,295	4,160	5,547	4,539	7,436	5,648	9,653	8,350	5,436	4,448	6,662	5,232
Institutes of Technology	4,875	2,040	4,380	2,895	4,674	3,672	4,898	4,007	4,799	3,927	4,715	3,755	4,800	3,927	5,250	4,125
Total	10,817	5,839	9,340	6,175	9,969	7,832	10,445	8,546	12,235	9,575	14,368	12,105	10,236	8,375	11,867	9,357
KTTC	-	-	-	-	-	-	-	-	337	332	347	360	325	336	332	327
Total	33,349	19,169	31,481	17,627	38,982	22,128	41,308	26,002	29,001	27,341	33,916	32,821	17,686	12,184	20,553	14,350
GRAND TOTAL	26,259	24,554	30,555	33,655	56,342	66,737	29,870	34,903								

Source: Ministry of Science and Technology, 2007

Appendix 5a: Primary School Teachers by Sex, Qualification and percent Female 1991 - 1997

Qualification	1991		1992		1993		1994		1995		1996		1997	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Graduate	11	14	30	62	-	-	4	4	9	10	21	37	17	14
Approved	434	224	254	755	769	336	590	258	866	448	994	610	1,364	795
SI/Diploma	3897	1598	4,398	1,806	5,099	2,132	5,410	2,510	6,287	3,351	7,873	4,939	9,993	5,392
P1	51,600	30,424	54,641	33,514	57,279	35,787	63,447	41,822	66,728	44,396	69,042	48,112	70,017	50,221
P2	18,278	11,301	18,073	11,640	17,889	11,701	18,969	12,484	19,158	13,015	18,128	13,132	17,809	13,108
P3	5,856	5,537	5,291	5,217	5,163	5,129	4,966	5,098	4,714	4,797	4,050	4,071	3,474	3,796
P4	25	30	4	5	49	43	12	17	69	67	21	25	11	23
Others	-	-	-	-	346	325	-	-	-	-	-	-	-	-
Sub-Total 1	80,101	49,128	82,940	52,466	85,825	55,453	93,398	62,193	97,831	66,084	100,129	70,926	102,685	73,349
Untrained														
Graduate	-	-	-	-	28	17	-	-	-	-	-	-	-	-
Diploma	-	-	-	-	16	21	-	-	-	-	-	-	-	-
KACE (A Level)	2,690	2,506	2,899	1,639	2,358	1,209	1,276	722	1,612	942	1,027	556	622	387
KCE/KCE	20,501	13,018	18,520	12,126	13,719	8,610	10,605	6,467	7,786	4,675	6,006	3,734	4,940	2,935
KJSE	3,720	1,304	3,332	1,382	3,021	974	2,020	733	1,523	515	954	375	873	350
CPE	590	515	514	437	458	513	347	213	216	197	185	156	151	129
Other	6	11	50	55	111	75	90	33	335	259	197	145	74	95
Sub-Total 2	24,548	17,354	25,315	15,639	19,711	11,419	14,338	8,168	11,472	6,528	8,369	4,966	6,660	3,896
Total	104,649	66,482	108,255	68,105	105,536	66,872	107,736	70,361	109,303	72,612	108,499	75,892	109,345	73,736
Grand Total	171,131		176,360		172,408		178,097		181,915		184,391		183,081	
percent Female	38.85		38.62		37.92		39.51		39.92		41.16		39.99	
percent In Rural	88.6		87.5		88.2		86.9		87.2		88.0		86.9	
percent In Urban	11.4		12.5		11.9		13.2		12.7		12.1		13.2	

Source: Economic Surveys; EMIS, MoE.

Appendix 5b: Primary School Teachers by Sex, Qualification and percent Female 1998 - 2004

Qualification	1998		1999		2000		2001		2002		2003		2004	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Graduate	-	-	97	67	130	63	122	54	168	74	147	107	5330	395
Approved	924	727	1,624	920	1,733	902	12,625	6,598	12,549	6,559	11,007	5,723	26,791	22,309
SI/Diploma	12,363	7,381	11,550	7,392	11,335	6,635	316	375	288	341	546	649	4,512	4,655
P1	73,311	54,299	71,147	54,343	69,338	51,662	74,288	53,250	74,076	53,098	75,597	54,188	56,156	43,393
P2	16,544	12,541	15,502	12,171	14,683	11,579	14,721	10,975	14,081	10,498	13,920	10,378	9,037	6,738
P3	3,158	3,374	2,513	2,788	2,261	2,685	2,401	2,027	1,859	2,201	1,818	2,154	854	1,011
P4	708	406	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Total 1	107,008	78,728	102,433	77,681	99,480	73,526	104,099	73,653	103,020	72,772	103,036	73,228	97,880	78,501
Untrained														
Graduate	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diploma	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KACE (A Level)	246	71	-	-	-	-	-	-	-	-	24	28	-	-
KCE/KCE	3,501	1,848	3,511	1,785	3,350	1,719	1,313	492	911	342	958	359	672	217
KJSE	490	156	614	239	609	216	826	265	611	196	113	36	84	40
CPE	120	82	-	-	-	-	131	81	114	41	519	321	506	284
Other	42	14	184	115	-	-	-	-	-	-	-	-	-	-
Sub-Total 2	4,399	2,171	4,309	2,139	3,959	1,935	2,270	838	1,636	579	1,614	744	1,262	541
Total	111,407	80,899	106,742	79,820	103,439	75,461	106,369	74,491	104,656	73,351	104,650	73,972	99,142	79,042
Grand Total	192,306		186,562		178,900		180,860		178,007		178,622		178,184	
percent Female	42.07		42.78		42.18		41.19		41.21		41.41		44.36	
percent In Rural	89.1		85.7		86.7		88.0		83.8		84.6		87.1	
percent In Urban	10.8		14.4		13.2		12.0		16.3		15.5		13.0	

Source: Economic Surveys; EMIS, MoE.

Appendix 6: Secondary School Teachers by Sex, Rural/Urban percent Distribution, and percent Female

	1991		1992		1993		1994		1995		1996		1997	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Trained	15,156	8,515	16,993	10,226	14,459	9,057	20,221	11,372	21,821	11,592	22,335	12,484	24,900	13,527
Untrained	7,382	2,943	4,130	2,559	6,523	2,241	5,238	1,821	7,027	1,990	4,895	1,462	4,601	1,350
Total	22,538	11,458	21,123	12,785	20,982	11,298	25,459	13,193	28,848	13,582	27,230	13,946	29,501	14,877
Grand Total	33,996	33,908	32,280	42,430	38,652	32.0	34.1	32.0	33.9	33.5	33.5	33.5	33.5	33.5
percent Female	33.7	37.7	35.0	34.1	34.1	32.0	34.1	32.0	33.9	33.5	33.5	33.5	33.5	33.5
percent In Rural	79.4	81.5	82.7	79.9	79.9	83.6	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4
percent In Urban	20.7	19.6	17.4	10.2	10.2	16.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7

	1998		1999		2000		2001		2002		2003		2004	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Trained	25,652	14,785	25,356	14,067	25,173	13,824	27,640	15,362	28,739	15,720	28,738	16,018	30,285	16,194
Untrained	2,579	678	1,131	335	900	193	1,504	349	1,540	257	899	1,343	909	196
Total	28,231	15,463	26,487	14,402	26,073	14,017	29,144	15,711	30,279	15,977	29,637	17,361	31,194	16,390
Grand Total	43,694	40,889	40,090	46,256	44,855	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
percent Female	35.4	35.2	34.3	34.5	34.3	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
percent In Rural	77.7	79.1	78.5	81.9	81.9	83.5	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0
percent In Urban	22.4	20.8	21.5	18.2	18.2	16.4	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2

Source: Economic Surveys; EMIS, MoE.

N/B: The data available do not give the gender distribution of teachers in urban/rural areas. For the purpose of this study; Nairobi, Kisumu, Nakuru, Eldoret, Mombasa and Nyeri were classified as urban areas.

Appendix 7a: Proposed Distribution of Expected Donor Funding of KES 5,911,900,000 among SWAp Eligible Categories, March 2007

Expenditure Item	Total funding	Gap	Breakdown of Donor Funding by Source						Total Funding
			CIDA	IDA	DFID	FTI	UNICEF		
Basic Infrastructure	100%			38.24%	14.54%	46.27%	0.96%	100%	
	2,000,000,000			764,735,978	290,815,090	925,330,533	19,118,399	2,000,000,000	
Instructional Materials:									
Non Formal Education	204,000,000			78,003,070	29,663,139	94,383,714	1,950,077	204,000,000	
Account I	103,441,550			39,552,737	5,041,182	47,858,812	988,818	103,441,550	
Account I	1,718,200,000					1,718,200,000		1,718,200,000	
Account I	480,000,000		480,000,000					480,000,000	
	2,505,641,550								
	756,258,450			289,169,023	109,965,685	349,894,517	7,229,226	756,258,450	
	153,741,550	153,741,550	-	-	-	-	-		
Water and sanitation in Primary Schools @ KESs. 50,000 per School	910,000,000			289,169,023	109,965,685	349,894,517	7,229,226		
				57,355,198	21,811,132	69,399,790	1,433,880	150,000,000	
				114,710,397	43,622,264	138,799,580	2,867,760	300,000,000	
Special needs @ KES 2,000 for an enrollment of 75,000 pupils	150,000,000			57,355,198	21,811,132	69,399,790	1,433,880	150,000,000	
Early Childhood Community Grants	300,000,000			114,710,397	43,622,264	138,799,580	2,867,760	300,000,000	
				7,647,360	2,908,151	9,253,305	191,184	20,000,000	
				7,647,360	2,908,151	9,253,305	191,184	20,000,000	
Infrastructure in Special Schools	200,000,000			1,178,878	23,265,207	74,026,443	1,529,472	160,000,000	
				76,473,598	29,081,509	92,533,053	1,911,840	200,000,000	
TOTAL	6,065,641,550		480,000,000	1,420,000,000	540,000,000	3,436,400,000	35,500,000	5,911,900,000	

Source: MoE, 2007.

Appendix 7b: Functional Analysis of Public Expenditure (percent of GDP), 1992/93-2005/06 Excluding Expenditures by Local Authorities

	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06
General Public Expenditure	5.9	6.0	6.3	5.8	5.3	6.1	5.6	5.7	7.4	3.4	8.0	7.9	7.3	6.9
Defence	1.7	1.6	1.5	1.4	1.6	1.6	1.4	1.3	1.7	1.8	1.8	1.7	1.6	1.5
Education	5.4	6.3	6.2	5.1	5.2	7.4	6.5	6.1	5.9	5.9	6.9	7.1	6.8	7.2
Other Social Services	2.3	1.9	2.1	2.2	1.8	2.7	1.8	1.5	2.1	1.9	2.5	1.9	1.4	2.1
Economic Services	3.8	4.1	4.2	4.1	3.9	4.1	3.7	3.6	4.7	4.1	4.6	4.6	4.7	3.9
Others Services including debt repayment	5.2	6.1	5.9	4.7	4.8	7.0	5.5	4.3	3.6	4.2	4.9	4.4	5.4	4.8
Total Expenditure	24.3	26.0	26.2	23.3	22.8	29.0	24.5	22.7	25.4	24.2	28.8	27.6	27.2	26.4

Source: Public Expenditure Review, Various Years

Appendix 7c: Functional Analysis of Public Expenditure (percent of Total Expenditure), 1992/93-2005/06 Excluding Expenditures by Local Authorities

	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06
General Public Expenditure	20.9	21.2	21.4	21.8	21.6	21.2	22.8	25.0	29.3	25.9	27.8	27.4	28.1	25.5
Defence	5.8	5.7	6.1	5.6	6.3	5.6	5.9	5.9	6.6	7.3	6.2	6.3	6.4	6.6
Education	26.2	24.9	25.3	26.8	24.1	25.5	26.5	27.1	23.1	24.6	24.1	27.2	28.8	30.1
Other Social Services	10.1	9.3	8.9	9.3	8.7	9.2	7.2	6.7	8.4	7.7	8.6	8.9	7.9	7.9
Economic Services	13.9	14.8	15.1	16.3	15.7	14.2	15.2	16.0	18.3	17.1	16.1	17.1	16.9	17.2
Others Services including debt repayment	23.1	24.1	23.2	20.2	23.6	24.3	22.3	19.2	17.3	17.3	17.1	13.1	11.9	12.7
Total Expenditure	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: Public Expenditure Review, Various Years

Appendix 8: Total Primary and Secondary Education Recurrent and Development Expenditure (percent)

Expenditure	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
Primary Education Recurrent								
Salaries	96.8	96.48	97.01	94.60	94.80	97.30	96.60	93.60
Teaching Materials	3.12	2.02	1.62	2.73	2.69	1.48	1.64	2.42
Maintenance	0.50	0.30	0.40	1.72	1.84	1.03	1.18	3.14
General Administration and Planning	0.18	1.20	0.97	0.95	0.67	0.19	0.58	0.84
Total	100	100	100	100	100	100	100	100
Secondary Education Recurrent								
Salaries	97.2	97.5	97.1	97.6	98.4	98.7	98.3	98.5
General Administration and Planning	2.9	2.4	2.3	1.6	1.2	1.8	1.6	1.3
Total	100	100	100	100	100	100	100	100
Primary Education Development								
Construction	-	0.8	-	6.9	-	3.9	10.7	10.2
Purchase of Furniture	-	-	-	-	-	-	-	-
Purchase of Textbooks	8.8	9.1	4.7	0.5	8.0	1.6	3.4	1.5
Purchase of Writing Materials and Books	5.2	6.8	7.1	1.2	-	-	-	-
General Administration and Planning	86.0	84.1	88.2	90.4	92.0	94.4	86.0	88.2
Total	100	100	100	100	100	100	100	100
Recurrent Expenditure (Constant 1990 KES/US\$ Millions)	14,271.94	14,130.53	10,012.05	10,690.29	14,834.32	15,294.16	15,264.06	20,801.37
Development Expenditure (Constant 1990 KES/US\$ Millions)	508.37	390.17	146.88	238.41	265.19	277.97	243.53	336.02
Total MoE (Constant 1990/91 KES/US\$ Millions)	1,496.17	2,368.11	909.45	624.23	1,417.61	717.84	666.09	789.51
Total MoE (Constant 1990/91 KES/US\$ Millions)	53.29	65.39	13.34	13.92	25.34	13.05	10.63	12.75
Total MoE (Constant 1990/91 KES/US\$ Millions)	16,276.48	16,888.81	11,068.38	11,552.93	16,517.12	16,289.97	16,173.68	21,926.90
Total MoE (Constant 1990/91 KES/US\$ Millions)	561.66	455.56	160.22	252.33	290.53	291.02	254.16	348.77
Continuation								
1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/2006	
Primary Education Recurrent								
Salaries	91.70	94.50	92.66	91.70	86.42	84.14	83.60	81.60
Teaching Materials	1.24	2.71	5.63	7.21	10.60	11.72	12.24	13.2
Maintenance	6.20	1.32	1.24	0.48	2.12	3.71	3.62	3.60
General Administration and Planning	0.86	1.47	0.47	0.61	0.86	0.43	0.54	0.6
Total	100	100	100	100	100	100	100	100
Secondary Education Recurrent								
Salaries	98.6	97.5	98.3	97.7	98.1	97.7	98.1	97.1
General Administration and Planning	2.4	1.7	2.4	1.7	2.4	2.2	2.0	1.6
Total	100	100	100	100	100	100	100	100
Primary Education Development								
Construction	6.3	7.3	4.0	2.0	3.4	2.6	2.1	2.0
Purchase of Furniture	-	-	-	-	1.8	2.4	3.0	4.7
Purchase of Textbooks	2.4	6.7	12.0	5.1	6.2	16.7	21.1	20.6
Purchase of Writing Materials and Books	-	-	-	-	4.6	7.3	4.8	6.7
General Administration and Planning	91.0	86	84	93.0	84.0	71.0	69.0	66.0
Total	100	100	100	100	100	100	100	100
Recurrent Expenditure (Constant 1991/92 KES/US\$ Millions)	53,450.68	58,837.58	36,997.72	35,175.93	34,976.06	39,140.83	40,730.92	43,312.50
Dev. Expenditure (Constant 1991/92 KES/US\$ Millions)	1,903.92	1,624.63	542.78	784.49	625.25	711.38	649.84	699.65
Total MoE (Constant 1990/91 KES/US\$ Millions)	2,677.38	1,351.50	1,744.92	1,455.77	1,447.49	4,229.30	2,422.07	1,962.18
Total MoE (Constant 1990/91 KES/US\$ Millions)	95.37	37.32	25.60	32.47	25.88	76.87	38.64	31.70
Total MoE (Constant 1990/91 KES/US\$ Millions)	56,129.05	61,633.86	43,907.82	36,631.66	36,423.53	43,370.13	43,152.98	45,274.68
Total MoE (Constant 1990/91 KES/US\$ Millions)	1,999.29	1,661.95	568.38	816.96	651.13	788.25	688.48	731.35

Source: Economic Surveys, CBS; Budget and Supplementary Appropriations, Ministry of Finance.

N/B: All development expenditure allocation to Secondary education went to General Administration and Planning

Appendix 9a: Intra-Sectoral Analysis of Recurrent Education Expenditure as percent of Total Education Expenditure, 1990/91-2005/06

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06
Primary	50.7	49.9	53.9	58.9	0.17	1.3	1.6	0.6	0.8	1.0	1.7	1.4	5.4	9.0	8.2	8.1
Secondary	15.2	14.8	16.7	16.9	1.2	1.1	1.8	0.8	0.7	1.3	1.4	1.2	1.1	0.9	1.2	3.3
Technical Education	1.3	1.6	1.3	1.2	1.2	1.4	1.5	1.5	1.9	1.9	2.3	2.2	2.0	1.1	3.8	2.1
Teacher Training	2.6	1.9	2.2	1.8	0.6	0.7	0.6	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.3	0.2
University Education	21.5	21.6	17.1	15.2	15.6	16.6	14.9	12.1	10.0	11.4	12.0	11.8	11.0	8.5	12.1	13.5
Pre-Primary	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Special Education	0.7	0.7	0.9	0.7	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
Miscellaneous	0.4	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.4	0.6	0.5	0.5	0.4	-	0.4	-
General Admin.& Planning	7.6	9.2	7.5	4.8	80.7	78.2	79.0	84.0	85.5	83.2	81.5	82.4	79.7	58.3	73.7	72.6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
MoE Recurrent Exp (KES Billions)	11.5	11.4	14.6	18.7	26.1	28.3	30.1	42.4	43.2	47.6	48.7	53.9	62.6	72.1	80.2	88.4

Source: Calculated from Economic Surveys, Various Years

Appendix 9b: Intra Sectoral Analysis of Education Development Expenditure as percent of Total Education Development Expenditure, 1990/91-2005/06

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06
Primary	1.1	3.8	2.0	1.3	2.7	2.74	21.6	19.3	7.4	26.0	9.1	0.1	1.0	68.9	67.0	32.8
Secondary	8.7	2.5	4.4	5.7	2.4	2.8	1.7	0.7	0.6	0.2	0.4	-	2.1	1.8	4.3	4.2
Technical Education	0.4	5.9	0.6	0.2	6.1	0.3	0.3	0.2	0.0	-	0.5	-	-	0.1	1.5	4.6
Teacher Training	15.8	21.4	22.1	29.1	30.2	9.4	25.9	19.9	9.6	0.3	0.5	1.3	1.1	0.2	1.7	3.6
University Education	65.8	58.5	51.3	34.4	31.9	72.1	37.3	52.1	69.7	6.8	2.6	4.6	14.6	7.5	11.7	12.2
Pre-Primary	-	-	-	-	0.7	-	0.9	2.8	4.8	24.5	10.5	8.0	7.8	6.7	0.1	-
Special Education	1.1	1.1	0.6	0.5	2.6	3.0	9.7	3.6	-	-	-	-	-	-	0.0	-
Miscellaneous	0.1	0.2	-	-	-	-	-	-	-	-	-	-	0.0	-	0.0	-
General Admin. & Planning	6.9	6.7	19.1	28.6	23.4	11.0	2.7	1.4	7.8	2.5	17.8	18.5	74.3	13.9	13.6	42.6
Total	100	100	100	100	100	100	100	100	100	60.3	41.4	32.5	100	100	100	100
Development Exp for MoE (KES Bn)	1.2	1.9	1.3	1.1	2.5	1.3	1.3	1.6	2.1	1.1	3.4	1.0	3.8	8.4	4.8	4.0

Source: Calculated from Economic Surveys, Various Years

Appendix 10: Teachers' Average Salary per Grade in Constant 1998 KES and US\$

Teacher Grade	KES/ US\$	1990/ 1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	Salary per year		Difference 06 - 90/97	
												2006	1990-97	KES	percent
Untrained without/ with KCPE/CPE	KES	3,888	-	4,603	4,421	-	-	-	-	-	-	-	-	46,662	-
	US\$	83	-	63	57	-	-	-	-	-	-	-	-	995	-
	KES	4,312	-	4,943	5,086	-	-	-	-	-	-	-	-	51,747	-
	US\$	92	-	68	65	-	-	-	-	-	-	-	-	1,104	-
Untrained KCEDiv.1-3/ KCSE 'C' & Above	KES	4,684	-	5,841	5,864	-	-	-	-	-	-	-	-	56,208	-
	US\$	100	-	80	75	-	-	-	-	-	-	-	-	1,199	-
	KES	4,796	-	6,734	6,546	-	-	-	-	-	-	-	-	57,546	-
	US\$	102	-	92	84	-	-	-	-	-	-	-	-	1,228	-
P3 Teacher	KES	5,202	9,940	7,146	-	6,949	7,193	6,664	6,372	6,182	5,854	70,247	62,424	7,824	11
	US\$	111	161	98	-	88	93	88	82	85	84	1,012	1,332	(319)	(32)
P2 Teacher	KES	5,945	10,340	7,448	6,953	7,385	7,474	6,925	6,674	6,304	6,090	73,074	71,569	1,505	2
	US\$	127	167	102	89	94	97	91	86	87	88	1,053	1,527	(474)	(45)
P1 Teacher	KES	8,793	10,898	7,652	7,297	7,411	7,650	7,088	6,981	6,733	6,418	77,018	105,517	(28,499)	(37)
	US\$	188	176	105	94	94	99	93	90	93	92	1,110	2,251	(1,141)	(103)
S1 Teacher	KES	8,917	11,468	8,692	8,092	8,416	8,559	7,930	7,510	7,234	6,754	81,046	107,004	(25,958)	(32)
	US\$	190	185	119	104	107	111	104	97	100	97	1,168	2,283	(1,115)	(95)
Untrained Technical Teacher	KES	8,917	13,125	9,679	9,136	9,123	9,264	8,583	8,130	7,859	7,730	92,756	107,004	(14,248)	(15)
	US\$	190	212	133	117	116	120	113	105	109	111	1,337	2,283	(946)	(71)
Trained Technical Teacher	KES	10,892	13,479	10,198	9,711	9,852	9,713	8,999	8,600	8,235	7,938	95,258	130,706	(35,448)	(37)
	US\$	232	218	140	124	125	126	118	111	114	114	1,373	2,788	(1,416)	(103)
Untrained Graduate Teacher	KES	12,007	13,790	10,529	10,095	10,064	10,032	9,295	8,890	8,590	8,121	97,456	144,089	(46,633)	(48)
	US\$	256	223	144	129	128	130	122	115	119	117	1,404	3,074	(1,669)	(119)
Graduate/Approved Teacher 3 Scale	KES	14,610	16,780	11,144	10,660	11,160	11,149	10,330	9,741	10,161	9,882	118,587	175,316	(56,729)	(48)
	US\$	312	271	153	137	142	145	136	126	140	142	1,709	3,740	(2,031)	(119)
Graduate/Approved 2 Scale/Assistant Lecturer	KES	16,332	24,500	18,129	17,180	16,578	17,532	16,244	15,159	14,248	14,429	173,145	195,985	(22,840)	(13)
	US\$	348	396	249	220	211	227	213	196	197	208	2,495	4,181	(1,686)	(68)
Snr. Lect./HM Grade 2 Scale, Sec. & Technical Schs/Approved Teacher	KES	19,579	37,570	24,386	22,510	23,396	24,595	22,789	22,552	22,317	22,126	265,512	234,944	30,568	12
	US\$	418	607	334	288	298	319	299	292	308	319	3,826	5,012	(1,186)	(31)
H/M Grade 1, Sec. Sch. Principal/Principal Grad. Approved / Approved Teacher 2	KES	26,890	42,400	26,181	24,365	24,770	25,556	23,678	23,007	25,557	24,971	299,647	322,677	(23,030)	(8)
	US\$	574	685	359	312	315	332	311	297	353	360	4,318	6,883	(2,565)	(59)
Principal Grade	KES	32,800	52,140	31,635	30,017	30,531	32,460	30,075	32,262	31,912	30,707	368,481	393,606	(25,125)	(7)
	US\$	700	842	434	385	388	421	395	417	441	442	5,310	8,396	(3,087)	(58)

N/B: These Figures exclude commuter and house allowances

Source: Recurrent Expenditure Estimates, Ministry of Finance / Institute of Policy Analysis and Research (IPAR) Policy Papers.

Appendix 11: Aid Receipts (Disbursements) for Education by Major Agencies for Selected Years* (Constant 1991/1992 KES Million)

Source	Type	Description	1991/92	1992/93	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2006/07
CIDA	Grant	Budget Support	10.00	8.91	-	-	-	-	-	-	-
DANIDA	Grant	KISE	1.62	2.47	-	-	-	-	-	-	-
ITALY	Grant	Moi University	18.00	5.48	-	-	-	-	-	-	-
JAPAN	Grant	JKUAT	224.90	17.06	-	-	-	-	-	-	-
Netherlands	Grant	University of Nairobi	12.00	4.18	-	-	-	-	-	-	-
Netherlands	Grant	ASAL	2.50	1.92	-	-	-	-	-	-	-
Netherlands	Grant	Moi university	12.00	7.26	-	-	-	-	-	-	-
Switzerland	Grant	UoN	3.20	2.19	-	-	-	-	-	-	-
UK	Grant	Moi University	107.3	21.78	-	-	-	-	-	-	-
UK	Grant	Kenyatta University	15.4	10.55	-	-	-	-	-	-	-
USAID	Grant	Egerton University	20	12.33	-	-	-	-	-	-	-
EDF/EEC	Grant	Strathmore College	20	6.85	-	-	-	-	-	-	-
EDF/EEC	Grant	Secondary Education	3.5	0.00	-	-	-	-	-	-	-
BELGIUM	Grant	Technical Education	2	0.55	-	-	-	-	-	-	-
UNDP	Grant	Moi university	0.6	-	-	-	-	-	-	-	-
UNDP	Grant	Egerton university	2.9	1.99	-	-	-	-	-	-	-
UNESCO	Grant	Kenyatta university	32.9	0.00	-	-	-	-	-	-	-
UNICEF	Grant	ECC/Primary Support	2.44	1.67	-	-	-	-	-	-	-
UNFPA	Grant	Family life education	0.9	-	-	-	-	-	-	-	-
WFP	Grant	Food assistance	60.9	-	-	-	-	-	-	-	-
IDA	Loan	Education project	108	-	-	-	-	-	-	-	-
IDA	Loan	ECC/ECD	-	-	-	125.02	71.01	162.45	-	-	-
IDA	Grant	CHE	-	-	-	9.11	-	-	-	-	-
IDA	Loan	Budget support	-	-	-	1.82	-	267.74	-	86.08	-
IDA	Loan	STEPS	-	-	-	-	-	182	-	-	-
IDA	Grant	ECD	-	-	31.9	-	-	-	-	-	-
World Bank	Grant	Budget support	-	-	-	-	-	-	-	-	-
ADF	Loan	Sec. teachers project	20	-	-	-	-	-	-	-	-
EEC/EDF	Grant	Strathmore College	-	-	20.99	-	-	-	-	-	-
EEC/EDF	Grant	Rural Schools Electrification	-	-	66.79	-	-	-	-	-	-
EDF/EEC	Grant	Budget Support	-	-	-	-	-	-	-	-	-
EEC/EDF	Grant	Technical Education	-	-	-	-	-	-	-	-	-
UNICEF	Grant	BOG Schools	-	-	-	18.22	17.75	-	-	-	-
UNICEF	Grant	Budget Support/Primary	-	-	-	-	-	-	-	-	-
UNICEF	Grant	Non-formal education	-	-	-	-	-	-	-	-	-
UNICEF	Grant	HIV-AIDS prevention	-	-	0.67	-	-	-	-	-	-
UNICEF	Grant	ECC/ECD	-	-	0.72	1.18	1.29	0.62	0.89	-	-
UNICEF	Grant	Primary non-formal	-	-	-	1.09	3.46	-	1.10	0.88	-
UNICEF	Grant	Girls education	-	-	-	10.93	12.92	-	0.00	6.01	-

* All price units are 1991/92 constants unless otherwise specified

Japan	Grant	Budget support	0	0	0	0.00	1.11	0.00	1.05	0	0	0
Japan	Grant	Non-formal education	0	0	0	1.14	0.00	0.00	0	0	0	0
Japan	Grant	SMASSE	0	0	0	5.42	0.00	0.00	0	0	0	0
Japan	Grant	BOS schools	0	0	0	1.64	1.55	0.00	0	0	0	0
Japan	Grant	AICAD-JKUAT	0	0	0	0.00	0.00	132.00	0	0	0	0
WFP	Grant	Food assistance-ASAL	0	0	0.00	65.18	96.93	118.09	84.36	0.00	0	0
WFP	Grant	Urban feeding	0	0	0.00	70.87	55.79	0.00	0.00	0.00	0	0
WFP	Grant	School feeding	0	0	0.00	19.58	19.08	18.92	18.14	17.29	0	0
WFP	Grant	Disadvantaged urban poor	0	0	0.00	70.92	55.79	0.00	0.00	0.00	0	0
WFP	Grant	School feeding	0	0	0.00	0.00	19.08	10.12	10.08	10.01	0	0
FRG	Grant	TIVET	0	0	0.00	6.88	5.28	0.00	0.00	0.00	0	0
FRG	Grant	KIE	0	0	0.00	10.93	12.92	0.00	0.00	0.00	0	0
FRG	Grant	Primary education	0	0	0.00	0.00	12.92	8.40	5.61	7.24	0	0
USAID	Grant	Budget support	0	0	0.00	0.00	1.46	0.00	0.00	0.00	0	0
UK	Grant	PRISM	0	0	0.00	0.00	8.43	7.57	0.00	0.00	0	0
UK	Grant	SPRED	0	0	0.00	0.00	91.38	10.12	7.30	11.70	0	0
GEFT	Grant	LVEMP- Maseno Univ.	0	0	0.86	0.00	0.00	0.00	0.00	0.00	0	0
ADB/ADF	Loan	Education project	0	0	102.43	0.00	0.00	0.00	0.00	0.00	0	0
ADB/ADF	Loan	Rural Schis Electrification	0	0	0.95	0.00	0.00	0.00	0.00	0.00	0	0
SPAIN	Grant	Rural Schools Electrification	0	0	101.14	0.00	0.00	0.00	0.00	0.00	0	0
IDA	Grant	FPE support	0	0	0	0	0	0	0	0	35.31	0
ADB/ADF	Grant	Education project	0	0	0	0	0	0	0	0	0	171.58
ADB/ADF	Loan	Education project	0	0	0	0	0	0	0	0	0	278.21
BELGIUM	Grant	Budget support	0	0	0	0	0	0	0	0	0	15.53
JAPAN	Grant	SMASSE	0	0	0	0	0	0	0	0	0	70.61
JAPAN	Grant	JKUAT	0	0	0	0	0	0	0	0	0	39.90
CIDA	Grant	Education project	0	0	0	0	0	0	0	0	0	169.47
USAID	Grant	Tegemeo Institute-Egerton	0	0	0	0	0	0	0	0	0	30.36
USAID	Grant	NEP Schools	0	0	0	0	0	0	0	0	0	45.90
UNICEF	Grant	Life Skills education	0	0	0	0	0	0	0	0	0	18.39
UNICEF	Grant	Children participation	0	0	0	0	0	0	0	0	0	38.20
UK	Grant	SPRED	0	0	0	0	0	0	0	0	0	665.51
UK	Grant	School feeding program	0	0	0	0	0	0	0	0	0	9.00
WFP	Grant	Basic education support	0	0	0	0	0	0	0	0	0	0.78
OPEC	Loan	Basic education support	0	0	0	0	0	0	0	0	0	194.18
Total Grant			553.06	105.19	192.94	335.17	533.78	329.60	187.58	87.30	1,310.54	
Total Loans			128	0	103.38	126.84	71.01	430.19	0	86.08	472.39	
Total External Support			681.06	105.19	296.32	462.01	604.79	759.79	187.58	173.38	1,782.93	

* All price units are 1991/92 constants unless otherwise specified

Appendix 12: Sources of Funds for University Education (KES Million)

Year	Source	Amount	percent of funds	Total
1990/1991	Government	2,960.0	59.12	3,315.5
	Households	811.7	24.48	
	External Aid	543.7	16.40	
1991/1992	Government	3,678.4	78.65	3,703.0
	Households	768.8	20.75	
	External Aid	24.6	0.6	
1992/1993	Government	3,709.8	82.98	4,638.6
	Households	860.8	18.56	
	External Aid	67.8	1.46	
1993/1994	Government	4,405.0	90.38	4,873.5
	Households	456.8	9.37	
	External Aid	11.6	0.24	
1994/1995.	Government	4,172.6	79.59	5,242.8
	Households	946.7	18.06	
	External Aid	123.4	2.35	
1995/1996	Government	8,195.9	91.41	8,966.5
	Households	769.6	8.59	
	External Aid	0.98	0.012	
1996/1997	Government	9,219.4	92.99	9,914.6
	Households	689.4	6.95	
	External Aid	5,679.9	0.06	
1997/1998	Government	9,678.1	86.89	11,138.4
	Households	1,450.8	13.09	
	External Aid	2,456.7	0.02	
1998/1999	Government	5,456.7	74.23	7,351.0
	Households	1,890.6	25.72	
	External Aid	3,458.0	0.05	
1999/2000	Government	3,265.8	60.62	5,387.6
	Households	2,115.8	39.27	
	External Aid	5,991.2	0.11	
2000/2001	Government	6,369.0	61.98	10,511.4
	Household	4,129.0	37.78	
	External Aid	13.2	0.24	
2001/2002	Government	6,278.0	52.56	

	Households		5,162.4	43.88	11,516.5
	External Aid		76.0	3.56	
2002/2003	Government		6,410.0	44.78	
	Households		7,129.4	52.67	13,583.6
	External Aid		46.0	2.55	
2003/2004	Government		6,851.2	41.01	
	Households		8,345.4	54.76	15,259.6
	External Aid		63.0	4.32	
2004/2005	Government		7,125.4	43.80	
	Households		9,130.0	55.31	16,269.8
	External Aid		14,420.7	0.89	
2005/2006	Government		6,952.4	40.33	
	Households		10,240.1	59.47	17,227.2
	External Aid		34.6	0.20	

Sources: Economic Surveys; Kenya National Bureau of Statistics, IPAR, Commission for Higher Education (2008).

N/B: Monies raised from households in terms of registration from 1990/1991- 1997/1998 are regarded as government contribution. It is only after 1998/1999 that collections from households are not proportioned as direct government contribution to university education. These are amounts only for public universities. The amounts include direct external funding for university programs.

Appendix 13: Student Enrolment by Gender Full time and Part time Programmes

Institution	2000/01		2001/02		2002/03		2003/04		2004/05		2005/06		2006/07		2007/08*	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Nairobi	10,532	4,301	15,426	9,270	16,200	9,489	16,992	9,720	21,268	11,706	21,940	11,765	22,513	12,426	23,513	12,826
Full time	8,383	3,341	8,724	4,450	9,163	4,428	9,603	4,406	9,987	5,250	10,800	5,425	10,858	5,536	11,340	5,714
Part time	2,149	960	6,702	4,820	7,037	5,061	7,389	5,314	11,281	6,456	11,140	6,340	11,655	6,890	12,173	7,112
Kenyatta	5,943	4,010	6,831	4,984	10,737	4,998	10,753	5,023	11,252	4,803	10,896	4,787	8,845	7,891	10,172	8,426
Full time	4,510	3,019	5,384	3,983	4,972	3,329	5,221	3,495	4,313	2,887	4,356	2,947	5,066	3,285	5,826	3,507
Part time	1,433	991	1,447	1,001	5,765	1,669	5,532	1,528	6,939	1,916	6,540	1,840	3,779	4,606	4,346	4,918
Moi	4,753	3,766	5,469	3,869	6,274	4,549	5,804	4,643	6,796	5,214	6,831	5,314	8,604	6,059	8,674	6,158
Full time	4,046	3,163	4,066	3,179	4,086	3,195	4,107	3,211	4,304	3,195	4,311	3,200	5,654	3,554	5,700	3,612
Part time	707	603	1,403	690	2,188	1,354	1,697	1,432	2,492	2,019	2,520	2,114	2,950	2,505	2,974	2,546
Egerton	6,629	2,356	6,816	2,285	6,975	2,387	6,908	2,444	6,350	2,247	6,262	2,236	8,163	4,006	8,262	4,205
Full time	5,981	2,127	6,161	2,053	6,307	2,151	6,207	2,196	5,540	1,960	5,322	1,890	7,319	3,383	7,408	3,551
Part time	648	229	655	232	668	236	701	248	810	287	940	346	844	623	854	654
JKUAT	2,992	1,288	2,565	1,115	3,184	1,404	3,202	1,455	4,315	1,959	4,207	1,673	4,460	1,845	5,450	2,512
Full time	1,301	520	857	339	1,442	613	1,373	624	2,201	999	2,240	1,016	2,176	524	2,659	713
Part time	1,691	768	1,708	776	1,742	791	1,829	831	2,114	960	1,967	657	2,284	1,321	2,791	1,799
Maseno	2,596	1,538	2,530	1,518	3,505	2,130	3,428	2,179	3,413	2,168	2,826	1,878	2,778	1,937	3,487	2,199
Full time	1,994	1,155	1,922	1,132	2,885	1,736	2,777	1,765	2,660	1,690	2,106	1,420	1,888	1,277	2,370	1,450
Part time	602	383	608	386	620	394	651	414	753	478	720	458	890	660	1,117	749
MMUST**	-	-	-	-	-	-	-	-	-	-	775	287	1,154	656	946	278
Part time	-	-	-	-	-	-	-	-	-	-	420	182	620	422	508	179
Full time	-	-	-	-	-	-	-	-	-	-	355	105	534	234	438	99
Sub-total	33,445	17,259	39,637	23,041	46,875	24,957	47,087	25,464	53,394	28,097	53,737	27,940	56,517	34,820	60,504	36,603
Private Universities																
Accredited	3,093	4,050	3,122	4,089	3,476	4,163	3,650	4,371	3,796	4,546	4,215	4,624	8,975	6,973	9,688	10,469
Unaccredited	876	472	949	511	748	742	763	757	801	907	853	947	2,853	2,091	583	392
Sub-Total	3,969	4,522	4,071	4,600	4,224	4,905	4,413	5,128	4,597	5,453	5,068	5,571	11,828	9,064	10,271	10,861
Total	37,414	21,781	43,708	27,641	51,099	29,862	51,500	30,592	57,991	33,550	58,805	33,511	68,345	43,884	70,775	47,464
Grand Total	59,195	71,349	80,961	82,092	91,541	92,316	112,229									

Source: Ministry of Education, Economic Surveys, 2001 - 2008

* Provisional

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