

An inequality perspective of education structure and performance in Kenya

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Abstract

Education is an important determinant of individuals' income, health as well as the capacity to interact and communicate with others. In spite of this view, there is considerable evidence of inequalities of opportunity in education in most developing countries. Differences abound with respect to sex of the head of the household, rural and urban areas heads, across population groups defined by parental education, region of residence and wealth. The probability that the household head is uneducated is higher than average when she is a woman and in general, household heads are more likely to have no education when they are in rural areas than in urban areas. Achievements by children in school vary considerably depending on the wealth of their household, their place of residence, the education of their mother and that of their father.

From the foregoing, the overall policy goal for the Kenyan Government is therefore to provide every Kenyan the right to education and training no matter his/her socio-economic status through the provision of all-inclusive quality education that is accessible and relevant. This vision is guided by the understanding that quality education and training contributes significantly to economic growth and the expansion of employment opportunities. The vision is in tandem with the Government's plan as articulated in the Economic Recovery Strategy Paper which provides the rationale for major reforms in the current education system in order to enable all Kenyans to have access to quality lifelong education and training.

For the above reasons, the Kenyan Government has, over the years, demonstrated its commitment to the development of education and training through sustained allocation of resources to the sector. However, despite the substantial allocation of resources and notable achievements attained, the sector still faces major challenges related to access, equity, quality, relevance, efficiency in the management of educational resources, cost and financing of education, gender and regional disparities, and teacher quality and teacher utilization.

Therefore, the purpose of this paper is to discuss some of inequalities that still exist within the Kenyan education system despite the Government's efforts and at the same time suggest some policy issues and strategies thereof. The paper looks at the background to inequalities in education, education with respect to employment and national development, impact of free primary education, inequalities in education, an analysis of education expenditure and ends with a discussion on several strategies that must be implemented in order to reverse the current inequalities in education in Kenya.

BIO DATA

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ABBREVIATIONS

ASALs	Arid and Semi Arid Lands
DEBs	District Education Boards
ECDE	Early Childhood Development and Education
EFA	Education For All
ERS	Economic Recovery Strategy
FTI	Fast Tract Initiative
FPE	Free Primary Education
FPESP	Free Primary Education Support Project
GER	Gross Enrolment Rate
GHCR	Geography, History, Civics and Religion
GPA	General Purpose Account
GPI	Gender Parity Index
IPERS	Investment Programme for Economic Recovery Strategy
KCPE	Kenya Certificate of Primary Education
KCSE	Kenya Certificate of Secondary Education
KESSP	Kenya Education Sector Support Programme
KShs	Kenya Shillings
MDGs	Millennium Development Goals
MOES&T	Ministry of Education Science and Technology
MTEF	Medium Term Expenditure Frame Work
NER	Net Enrollment Rate
NFE	Non-Formal Education
NFECs	Non-Formal Education Centres
NFS	Non-Formal Schools
NGO	Non-Governmental Organizations
PCR	Primary Completion Rate
PTR	Pupil Teacher Ratio
SIMBA	School Instructional Management Book Account
SEMIC	School Instructional Material Committee
SWAP	Sector Wide Approach
TPR	Textbook Pupil Ratio
TIVET	Technical, Industrial Vocational and Entrepreneurship Training

1 INTRODUCTION

1.1 Background

Inequalities in opportunity have a direct bearing on what people can be and what they can do with their human capabilities. Children facing a higher risk of death because they are born into a low-income or rural household or because they are female have less opportunity to realize their potential. Inequality goes against the basic principle of social justice as disparities based on wealth, region, gender and ethnicity can retard growth, democracy and social cohesion. Where extreme inequalities based on wealth, gender or region exists, a high percentage of the society suffers from the resulting inefficiency. Denial of educational opportunities is not just a violation of human right; it is also bad for growth. For example, the gender-based education inequalities in Pakistan have held back the economic development Any citation for this finding?. Disparities in education reduce the scope of disadvantaged groups to take advantage of opportunities for improving their welfare.

Wealth creation comes about through individuals, families and communities taking advantage of the opportunities available to them by working, investing and innovating ways to improve their lives. But inequalities in opportunity, both within and across countries exist. Even the basic opportunity for life itself is unequally distributed; whereas the infant mortality rate is 2% for children of educated mothers, it is 10% for those whose mothers have no schooling in El Salvador; in the Laos People's Democratic Republic. For example, although the overall percentage of household heads with no education is about 20%, the rate is closer to 70% for female household heads. In Kenya, homes headed by people with secondary school education or above suffer less poverty than those headed by people who reached only primary level, and they in turn suffer less than those headed by people with no formal education. In addition, illiteracy is more widespread in rural areas than in urban areas where the rural households headed by a head with no education, poverty incidence vary from a low of 27% to 89%. Among urban households, poverty incidence for households headed by people with no education varies from 10% to almost 100% of the urban residents. Education, or lack of it, impacts on both rural and urban families and the more educated the head of households, the better the overall living conditions for the family.

1.2 Objectives of this Paper

The general purpose of this paper is look into inequalities of education structure and performance in Kenya. Specifically, the first objective of this paper is to discuss some of the inequalities that still exist within the Kenyan education system. The second objective of this paper is to suggest and provide some policies and strategies that need to be put in place and at the same time be implemented in order to address several inequalities that still exist within the Kenyan education sector. The paper looks at the background to inequalities in education, overview of education in Kenya, education with respect to employment and national development, impact of free primary education, inequalities in education, an analysis of education expenditure and ends with a discussion on several strategies that must be implemented in order to reverse the current inequalities in education in Kenya.

2 AN OVERVIEW OF EDUCATION IN KENYA

Before independence in 1963, most schools were under the colonial Government and missionaries. Emphasis was on provision of technical skills to indigenous Kenyans. However, after independence, the Government focused on the development of skills by indigenous Kenyans to replace the expatriates and also more enrolment for Kenyan children. This was due to the realization that provision of education and training to all Kenyans was fundamental to overall development because education and training is the key to wealth creation and self-esteem; it is through education that we learn to value ourselves and then enhance the ability to preserve and utilize the environment for productive gain and sustainable livelihoods. Having promised to eliminate poverty, disease and ignorance at independence in 1963 and subsequently through the *Sessional Paper No 10 of 1965 on African Socialism and its Application to Planning in Kenya*, the Government invested and continues to invest heavily in education and training through various initiatives.

Provision of education and training to all Kenyans is, therefore, fundamental to the success of the Government's overall development strategy. First, the long-term objective of the Government is to provide every Kenyan with basic quality education and training. Second, develop quality human resource that is central to the attainment of national goals for industrial development. Third, the realization of universal access to basic education and training ensures equitable access to education and training for all children, including disadvantaged and vulnerable groups. Fourth, education is necessary for the development and protection of democratic institutions and human rights.

Since 1963, education and training in Kenya has expanded considerably. However, the determination to provide education and training to all Kenyans has over the years experienced some challenges. These challenges have been addressed through establishment of Commissions, Committees and Task Forces, such as, The Ominde Report, 1964 (through the recommendations, the Government produced the *Sessional Paper No 10 of 1965*, The Gachathi Report, 1976, The Mackay Report, 1981, The Kamunge Report, 1988 (through the recommendations, the Government produced the *Sessional Paper No. 6 of 1988*), The Koech Report, 2000 and *Sessional Paper No 1 of 2005 on a Policy Framework for Education, Training and Research*.

The recent policy initiatives have focused on the attainment of Education for All (EFA) and, in particular, Free Primary Education (FPE) in 2003. Before the introduction of FPE and during the implementation of FPE, the key concerns are access, equity, retention, quality and relevance with attention on internal and external efficiency within the education and training system. The effectiveness of the structure has also come under increased scrutiny as in the last decade there has been a decline in enrolments, particularly at the primary and secondary school levels. However, the Government is committed to EFA objective and strategies have been developed through the *Sessional Paper No 1 of 2005 on a Policy Framework for Education, Training and Research*.

In order to operationalize the *Sessional Paper No. 1 of 2005* and through the Sector Wide Approach (SWAP) process, the Ministry of Education with development partners and other stakeholders in education have developed Kenya Education Sector Support Programme (KESSP)

which was launched in July 2005. The KESSP fits within the broader framework of national policy framework as set out in *Economic Recovery Strategy for Wealth and Employment Creation* (ERS) and the Sessional Paper No. 1 of 2005. Moreover, the implementation of KESSP is designed to be in line with the Medium Term Expenditure Framework (MTEF) and annual budget cycle. It will therefore operationalize the budget for prioritized programmes, which when accomplished will ensure that the goals and objectives as spelt out in the policy documents are attained in the next five years.

Focusing on one “road map” for the development of the education sector will significantly reduce duplication and inefficient use of resources which often occurs when many projects and programmes are implemented without a clear long-term sector wide development strategy. It will also ensure that resources are invested in programmes, which will have the greatest impact on improving access, equity, retention, quality and relevance of education for all Kenyans. The implementation of FPE is critical to the achievement of EFA, which is a key objective under the Millennium Development Goals (MDGs).

The Government must therefore continue to invest heavily and sustain FPE in order to provide an all inclusive education and training to all Kenyans irrespective of region of origin, income status, gender, religion and any other disparities. It must invest in people by expanding access to schooling, targeting the most needy and providing safety nets for the working poor, those unable to work and special vulnerable and marginalized groups.

3 EDUCATION, EMPLOYMENT AND NATIONAL DEVELOPMENT

The Government has recognized the strategic importance of improving the overall education level of Kenyans within the context of poverty reduction and economic growth. In this regard, education is not only a welfare indicator but it is also a key determinant of earnings and, therefore, an important exit route from poverty. As a result, increased investment in education is one of the pillars of the Government’s overall economic recovery strategy.

Education is an investment in human capital and empirical evidence, based on endogenous growth models, shows that human capital is a key determinant of economic growth. Indeed, sustainable development is only possible if there is a critical mass of skilled people. Studies on poverty in Kenya show that education is an important factor in poverty levels and outcomes in various parts of the country (CBS, 2005). In addition, there is a strong positive relationship between human capital and earnings as well as the overall productivity that is well captured by measures of human capital returns. Recent studies of human capital returns in Kenya show that capital returns increase as the level of education goes higher, as Table 1 below illustrates. The data reveal that investment in education has high private rates of return particularly higher education and training. There are also studies showing that individuals benefit a great deal from the education of others. These findings highlight the importance of an educated population.

Education can reduce social and economic inequality. Today, Kenya is characterized by large inequalities with respect to income distribution and this has constrained economic growth. As such, investment in education is an important strategy to address such inequalities, and thus facilitate faster economic growth. Government involvement in education and training is

therefore justified on the basis that human capital development has large social returns, and because the market can fail to provide socially optimal returns.

Table 1 Private Rates of Return to Education in Kenya (Percent)

Category	Primary	Secondary	University
National	7.9	17.2	32.5
Urban	4.4	21.3	48.5
Rural	8.3	16.3	23.0
All males	11.0	17.8	35.2
Urban males	7.4	21.8	43.7
Rural males	11.1	16.7	29.7
All females	5.7	15.8	32.2
Urban females	2.1	21.1	70.2
Rural females	6.9	15.1	15.9

Source: Manda, Mwabu and Kimenyi, Kenya Institute of Public Policy and Research Analysis, 2002.

For the country to achieve the desired economic growth targets and social development, a high priority needs to be placed on the development of human capital through education and training by promoting technical and vocational training, as well as the teaching of sciences and information technology. Not only will the growth of the education and training sector contribute to economic growth and social returns, it will also increase demand for more equitable education attainment, which is an important human welfare indicator by itself.

Notwithstanding the challenges the sector is facing, the Ministry of Education Science and Technology (MOES&T) is determined to improve access, equity, quality and relevance of education through better management of service delivery to all learners. Achievements in this sector will, therefore, enhance economic growth, create more employment, guarantee sustainable development and hence ensure poverty reduction for the Kenyan people now and in the future.

4 FREE PRIMARY EDUCATION

4.1 Introduction

In the Investment Programme for Economic Recovery Strategy (IP-ERS), the Government has elaborated a three-pillar strategy to meet its strategic objectives over the medium-term. The second pillar puts emphasis on enhancing equity and reducing poverty among the Kenya people. In order to address the issues of equity and poverty reduction, the Government will continue to focus on providing an increasing share of its resources to education and health sectors. In the education sector, the Government will continue to fund Free Primary Education Support Project (FPESP) while at the same time rehabilitate secondary school classrooms and laboratories and provide bursaries to poor bright students. The FPESP addresses poor resource management in primary schools, in-adequate in-servicing of teachers, poor learning environment due to overcrowding, inadequate facilities, poor health and sanitation, gender insensitive environments, barriers for those with special needs including the girls and inadequacies in quality assurance. Due to these factors, many children could not attend school. This commitment by the

Government will therefore ensure the achievement of EFA by 2015. The associated indicators are: primary school Net Enrolment Rate (NER) will increase to 100 percent by 2015, and completion rate of 100 percent by 2010 and achieve gender parity at primary, secondary and university levels by 2015.

In order to achieve the above targets, there should be increased enrolment in urban slums, Arid and Semi Arid Lands (ASALs) and areas that have above than average poverty levels. Some of the indicators have been partially achieved after the FPE initiative in 2003. However, in order to enhance access and equity and at the same time improve quality and relevance, MOES&T, must undertake following programmes to guarantee the achievement of the outputs:

- Address primary school infrastructure with the aim of having all children access to school within walking distance and achieve maximum class size of 50 in all school;
- Expand school health, nutrition and feeding to cover more children;
- Improve provision of school instructional material to attain textbook ratio of 1:1;
- Increase grants to Non-Formal Schools (NFS);
- Enhance the provision of bursaries to students from poor households;
- Improve quality and internal efficiency through teacher training and redeployment;
- Rationalize the curriculum to focus on core skills; and
- Build capacity for primary schools management and accounting systems among others.

4.2 Impact of Free Primary Education

The introduction of FPE in January 2003, following the passing of the Children Act in 2001, has led to significant educational achievements. Through the FPE initiative, there has been an upsurge in enrolment at primary school level, which is already putting pressure on textbooks, other instructional materials as well as the infrastructure. Enrolment at both public and private primary schools increased by 23%, from 6.2 million in 2002, before FPE, to 7.6 million in 2005 (public 7.3 million and private 0.3 million) with 350,000 in NFS. The success of FPE in increasing enrolment has raised the Gross Enrollment Rate (GER) to 104.8 percent (girls 101.6 percent; boys 108.0 percent) compared to 93% in 2002. The NER stood at 82.5 percent in 2004 (girls 82.0 percent; boys 82.2 percent). However, about 1.5 million children of school age are not in the formal school system. An estimated one million of these children live in ASALs and urban slums. Many of these children may opt not to enroll in formal primary schools for various reasons, therefore, it is imperative to provide more alternative learning opportunities for the out of school children as well as creating a strong linkage with the formal education system. In this regard, the Ministry of Education has extended FPE grants to NFS.

The provision of FPE grants has also enabled schools to procure learning and teaching materials. Over 9 million textbooks were purchased for the five major subjects in primary schools in 2003. Most of these textbooks were purchased after the schools received FPE grants. An analysis of the subjects in Table 2 below indicate that Mathematics, English, Science had attained a Textbook Pupil Ratio (TPR) of 1:2, 1:3 and 1:3 as compared to 1:4 and 1:7 for Kiswahili and Geography, History, Civics and Religion (GHCRE). These results indicate that on average, most of the schools had attained a 1:3 TPR in lower primary and 1:2 in upper primary in Mathematics, English, and Science subjects. However, the schools have not given GHCR subjects as a priority.

Table 2 Book Pupil Ratio by Subject and Standard: 2003

Standard	English	Mathematics	Science	Kiswahili	GHCRE
1	1:2	1:3	1:3	1:4	1:164
2	1:4	1:5	1:4	1:8	1:234
3	1:3	1:4	1:4	1:6	1:273
4	1:3	1:3	1:3	1:5	1:95
5	1:2	1:2	1:2	1:2	1:51
6	1:3	1:4	1:4	1:5	1:53
7	1:3	1:3	1:3	1:4	1:41
8	1:2	1:2	1:2	1:3	1:29
Total	1:2	1:3	1:3	1:4	1:71
Lower Primary	1:3	1:4	1:3	1:5	1:207
Upper Primary	1:3	1:3	1:3	1:3	1:49

Source: Education Statistics Section, MOES&T

Therefore, the national TPRs now range from 1:2 to 1:6 (the target of 1:3) in lower primary schools and 1:2 to 1:4 (the target of 1:2) in upper primary schools. However, the ratios vary between districts and schools. In some schools the targets have already been achieved, while in others they have been exceeded as per the Joint Review Mission Report of November 2005. Based on the national rapid monitoring draft report carried out in February/March 2005, the national TPRs in a few selected areas seems to have worsened compared with last year due to wear and tear of books, poor storage and theft. As a result of improved TPRs, evidence from early studies show that student retention and attendance have improved. Students like new learning material and their performance has improved as teachers find it easier to teach, convey skills and knowledge more quickly and can give homework assignments. The performance indicators relating to examination results in the core subjects have also improved.

Funds have reached schools and have been used to procure textbooks and instructional material. Through both the School Instructional Management Book Account (SIMBA) and the General Purpose Account (GPA) have been very successful and has enabled head teachers, School Management Committees (SMCs) and School Instructional Materials Committees (SIMCs) to identify and procure needs-based material and improve on some infrastructure, thereby raising the quality of education. The management of these two accounts has also stimulated local decision-making and capacity building.

The implementation of FPE has posed as a major challenge to the financing of education in Kenya. However, the Government and the development partners have sustained the programme through FPESP in the disbursement of the FPE grants to schools twice a year since the year 2003. Each pupil enrolled in public primary schools receives a unit cost of KShs 1,020 annually through the SIMBA and GPA accounts. As at the beginning of 2004 KShs 17.37 billion had been disbursed to all public primary schools as shown in Table 3 below.

Table 3 Free Primary Education Expenditure (Billion KShs): February 2004

Province	SIMBA	GPA	Total
Central	1.25	0.83	2.08
Coast	0.70	0.48	1.18
Eastern	1.90	1.40	3.30
Nairobi	0.29	0.17	0.46
North Eastern	0.09	0.08	0.17
Nyanza	1.84	1.35	3.19
Rift Valley	2.52	1.94	4.46
Western	1.54	0.99	2.53
Total	10.13	7.24	17.37

Source: FPESP and Textbook Monitoring Unit, MOES&T

4.3 Challenges Facing Free Primary Education Initiative

Despite this performance, primary education continues to experience a number of challenges, such as, overstretched facilities, overcrowding in schools, especially those in urban slums, high Pupil Teacher Ratios (PTRs) in densely populated areas and high pupil to textbook ratios. Others include; high cost of special equipment for children with special needs, diminished support by communities following the misconstrued understanding of their role vis-à-vis that of the Government under FPE initiative, gender and regional disparities, increased number of orphans in and out of school as a result of HIV/AIDS, poor management and internal inefficiency that negatively impacts on access, equity and quality.

The introduction of FPE has also put pressure on teachers as some class sizes have increased to over 100 pupils and in urban slums is higher, with 120 pupils to a teacher. The national PTR is 43:1, indicating that there must also be very small class sizes. Teachers need to be properly deployed to redress the imbalances because large class sizes and the lack of space and teaching facilities impact negatively on quality of education. Teachers are key to improving learning in schools and therefore it is important to implement a more rigorous system of pre- and in-service teacher development in order to strengthen teacher quality.

The role of parents and communities in primary education is central and needs to be clarified. Prior to the introduction of FPE, it was the responsibility of parents to contribute to school building and maintenance, but most parents are currently under the impression that it is the Government's exclusive responsibility to provide all the necessary resources to support the primary education sub-sector. This misunderstanding needs to be addressed by undertaking certain actions, for example, media campaign that highlights continuing household obligations.

There is need for a sustained support to FPE programme - the sector will continue to require strong support if it is to meet the present challenges and reflect the impact of a wide range of externalities such as drought, pervasive poverty and the increasing number of orphans due to the impact of the HIV/AIDS pandemic. To improve access and retention, there will be need for appropriate teaching and learning environments, suitable furniture, water, sanitation and improved deployment of teachers and reasonable class sizes. Increasing access has to be directed towards the ASALs (GER around 20 percent) and in pockets of poverty like urban

slums. School feeding programmes have been shown to have a positive influence on enrolment and retention.

The implementation of the FPE has pushed the education recurrent budget to about 40% of total Government spending. Given the extremely high public spending on the education sector, improvements through efficiency measures will be key for the overall sector strategy. There is need, therefore, to prioritize the main objectives and related spending programmes within the sector and to have detailed and rationalized costing of these programmes in line with the resource envelop.

In order to address the above challenges, there is need for additional support to low-cost boarding schools in ASALs; enhancement of special capitation grants for special needs education; support to NFS institutions offering the primary school curriculum in slum areas; mobilizing resources from development partners in support of the FPE initiative and improve school health and nutrition in collaboration with the Ministry of Health. In addition, there is need to determine the school locations in order to improve access and equity; build the capacity of school managers; increase the scope of the school-feeding programmes; mainstream HIV/AIDS in education; take affirmative action to support the girl child; provide funds in support of water and sanitation needs in school; enhance the mobility of the education supervisors and inspectors and address the management of the teaching staff with a view to balancing and equitably distributing teachers for efficient utilization and cost effectiveness.

5 INEQUALITIES IN EDUCATION

5.1 Introduction

Equity or inequity can be defined in terms of two basic principles. The first is unequal opportunities; that a person's life achievements should be determined primarily by his or her talents and efforts, rather than by pre-determined circumstances such as race, gender, social or family background. The second principle is the avoidance of deprivation in outcomes, particularly in education, health, and consumption levels. For most people, equity is of intrinsic importance as a development goal in its own right. Moreover, a broad sharing of economic and political opportunities enhances economic growth and development because greater equity implies more efficient utilization of a nation's resources. Few, if any, of today's developed nations have developed by excluding the majority of their people from economic and political opportunities. At the same time, empowerment reinforces both economic and political dimensions of development. It is important, therefore, for governments to provide and expand opportunities to those who are vulnerable, marginalized, discriminated and are poor. There should exist neither extreme poverty nor again excessive wealth among the citizens because both are consequences of inequality.

When evaluating inequalities of opportunities, education plays a significant role. Education is an important determinant of individuals' income, health (and that of their children) as well as the capacity to interact and communicate with others. Thus, inequalities in education account for inequalities in other important aspects of an individual. Despite this view that education is key in the well-being of an individual, there is considerable evidence of inequalities of opportunity in education in most developing countries. For example, differences abound with respect to sex of

the head of the household, geographical location of the household head, provision of instructional materials and examination results across population groups defined by parental education, region of residence and wealth. In most countries, the possibility that the household head is uneducated is higher than average when she is a woman. In general, household heads are more likely to have no education when they are in rural areas than in urban areas. In higher income areas, there are lower teacher absentee rates than poorer areas and teacher attendance in rural areas is typically lower than in urban areas. In addition, the quality of infrastructure within a school and the frequency of monitoring appear to contribute to lower absenteeism. On examination performance, achievements by children vary considerably depending on the wealth of their household, their place of residence, the education of their mother and that of their father.

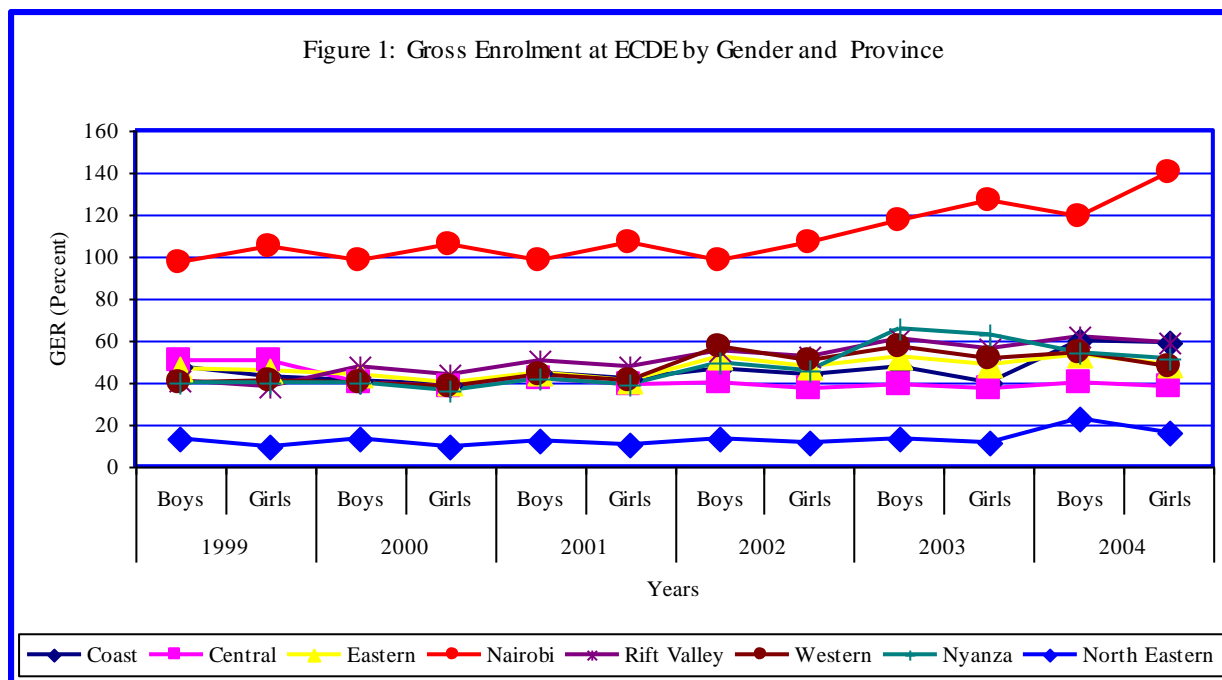
5.2 Disparities in Education and Training in Kenya

There has been a marked growth in the enrollment rates since the 1960's in all the sub-sectors, and especially at the primary school level due to the introduction of FPE. The goal of primary education is to provide access to quality education to all children of primary school-going age on an equitable basis thus ensuring EFA and the right to education for all children. But, both regional and gender disparities at Early Childhood Development Education (ECDE), primary and secondary school levels are evident especially in the ASALs, areas of pockets of poverty and urban slums. At the same time, the increasing poverty and the HIV/AIDS pandemic has also resulted in high dropout and low completion rates. Although the introduction of FPE has contributed to increased numbers of children joining primary schools, children of communities in urban slums, pockets of poverty and other disadvantaged areas have not benefited as much from FPE as factors such as levies have kept them out of school.

While the primary level participation rates are close to gender parity, there are wide gaps between participation rates at the secondary, technical, industrial, vocational and entrepreneurship training (TIVET) and university levels. As such, challenges still remain in closing the gap between females and males as well as significant differences between females and males in drop out, repetition, completion and transition rates. In order to address these challenges, there is need to redress existing inequalities through targeted support programs for girls, fighting against cultural practices and paying special attention to gender. Also, there is need to embrace an affirmative action as a strategy to address existing inequalities in order to promote social equity through provision of basic education to all including females, disadvantaged communities and the disabled.

5.3 Early Childhood Development Education (ECDE)

Although there are no significant differences with respect to equity at the ECDE level, regional differences exist in relation to access. As Figure 1 shows, there are marked differences in enrolment between North Eastern Province and the other provinces. Except for Nairobi and North Eastern Province, the GER in the other provinces is approximately the same. Over the last six years, the North Eastern Province has the lowest GER among all the provinces while Nairobi Province has the highest GER over the same period. Whereas the GER in Nairobi Province has varied between 96.9% in 1999 to 140% in 2004, the GER in North Eastern Province has fluctuated between 36.5% in 2000 to 65.6% in 2003 over the last six years.



Source: Education Statistics Section, MOES&T

The national NER at ECDE level has improved slightly from 31% in 2003 to 32.9% in 2004 as shown in Table 4 below. Rift Valley Province recorded the highest NER of 40.5% followed by Coast Province at 36%, whereas North Eastern registered the lowest NER of 9.6 percent in 2004. This indicates a gross regional disparity of 30.9 percentage points. Although the Gender Parity Index (GPI) illustrates near parity at ECDE at 0.99 in 2004, North Eastern Province had a wider gender gap with a GPI of 0.66 and in 2004 as shown in Table 4.

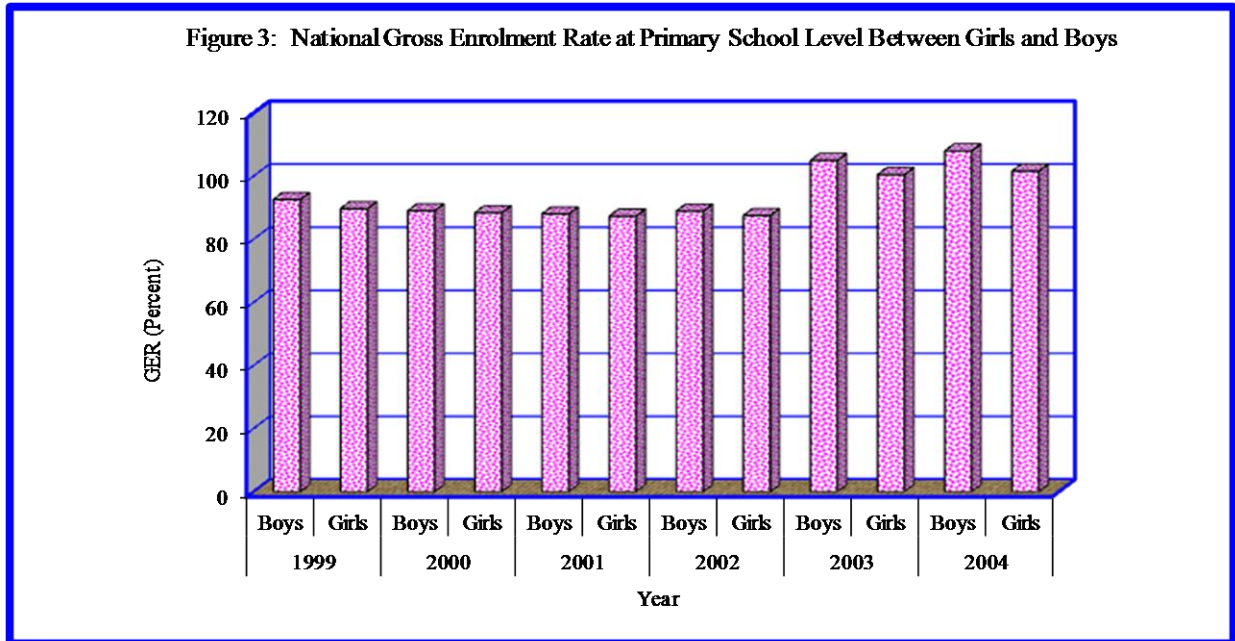
Table 4 Early Childhood Development Education Net Enrolment Rates and Gender Parity Index by Gender and Province, 2003 - 2004

Province	Net Enrolment Rate (Percent)				Gender Parity Index	
	2003		2004		2003	2004
	Boys	Girls	Boys	Girls		
Coast	26.7	26.0	36.2	35.7	0.97	0.99
Central	28.3	27.0	31.6	30.6	0.99	1.01
Eastern	28.8	28.1	29.9	28.1	1.04	1.00
Nairobi	26.2	29.8	28.8	31.5	0.99	0.96
Rift Valley	38.1	36.8	40.8	40.2	0.97	0.98
Western	30.8	29.2	32.7	29.7	1.03	0.99
Nyanza	33.7	32.9	33.2	32.1	1.06	1.06
North Eastern	20.9	23.1	11.5	7.6	0.98	0.66
Total	31.3	30.7	33.4	32.4	1.01	0.99
Total	31.0		32.9			

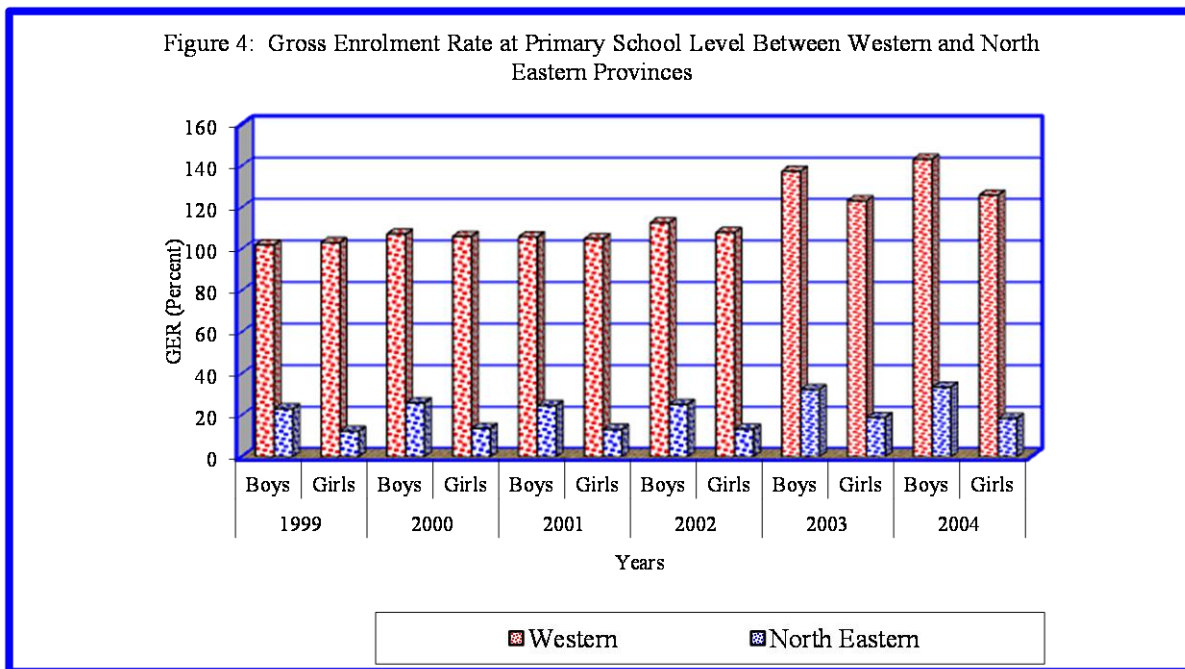
Source: ECDE Section and Education Statistics Section, MOES&T

5.4 Primary Education

At the primary school level, the national GER is high (over 100 percent) and also the gender parity has been realized as shown in Figure 3 below. However, as Figure 4 shows, regional differences exist between the provinces since 1999. Figure 4 shows that there is a marked difference between North Eastern Province (with lowest GER) and Western Province (with highest GER) over the last six years.

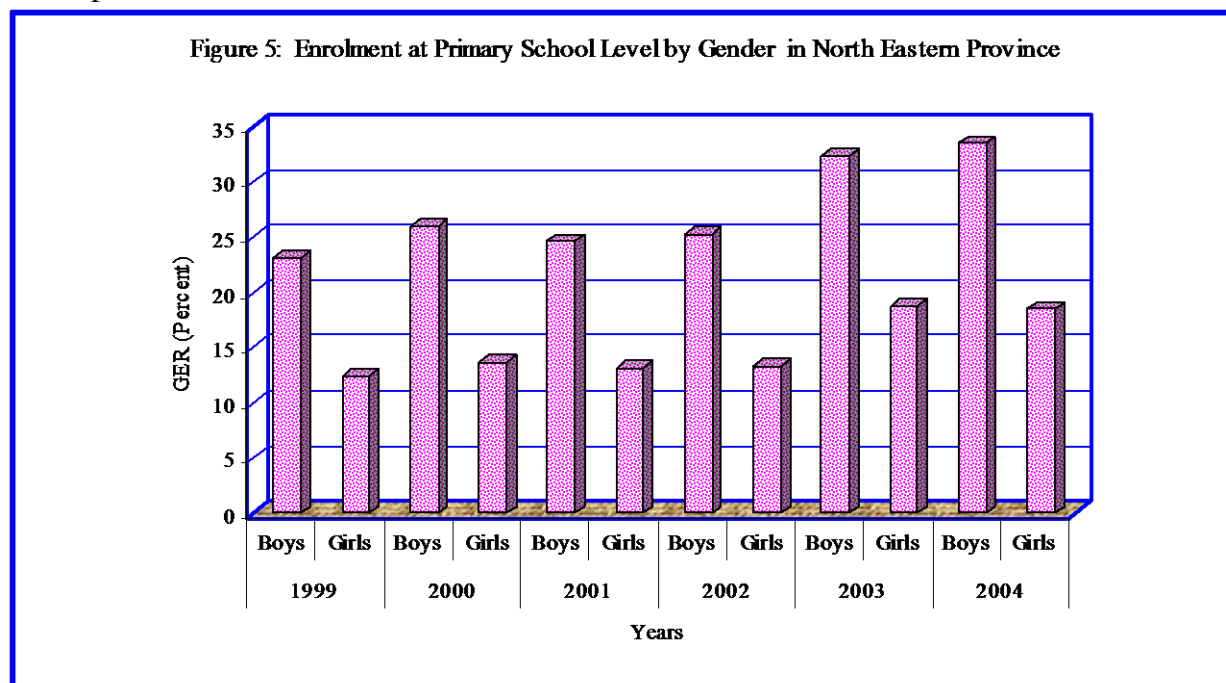


Source: Education Statistics Section, MOES&T



Source: Education Statistics Section, MOES&T

Despite the gender parity being realized at the national level, regional differences subsist especially in the disadvantaged provinces such as North Eastern. As Figure 5 shows, the enrolment of boys from 1999 to 2004 has been higher than that of girls even after the introduction of FPE in 2003. Also, the GPI depicts gender parity over the period under review, but there exist regional gender disparities across the provinces. As indicated in Table 5 below, North Eastern Province recorded the widest disparity ranging from 0.57 in 2000 to 0.72 in 2002 as compared to Nairobi Province with 1.16 in 2000 and 1.17 in 2001.



Source: Education Statistics Section, MOES&T

Table 5 Gender Parity Index at Primary School Level by Province, 1999 - 2004

Province	1999	2000	2001	2002	2003	2004
Coast	0.88	0.88	0.87	0.91	0.90	0.93
Central	1.02	1.03	1.03	1.05	1.01	1.00
Eastern	1.04	1.04	1.03	1.04	1.00	1.00
Nairobi	0.94	1.16	1.17	1.16	1.14	1.14
Rift Valley	0.99	0.98	0.99	1.00	0.98	0.97
Western	1.04	0.96	0.95	0.96	0.96	0.98
Nyanza	0.99	1.00	0.98	1.01	0.99	0.99
North Eastern	0.59	0.57	0.60	0.72	0.62	0.63
Total	1.00	1.00	1.00	1.02	0.99	1.00

Source: Education Statistics Section, MOES&T

Despite the GER being over 100%, the NER has remained below this level but has increased from 68.8% in 1999 to 82.1% in 2004 as shown in Table 6 below. The highest NER was recorded in Western Province with boys and girls registering 99.3% and 97.2%, respectively

followed by Nyanza Province at 96.9 for boys and 96.2 percent for girls. However, North Eastern Province registered the lowest NER of 23.6 percent boys and 14.9 percent girls.

Table 6 Primary Net Enrolment Rates (Percent) by Gender and Province, 1999-2004

Province	1999		2000		2001		2002		2003		2004	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Coast	58.9	52.1	52.6	46.1	60.1	52.4	58.2	53.2	66.9	60.1	72.8	67.7
Central	82.6	84.5	77.4	80.1	80.5	83.0	83.5	87.8	83.6	84.2	81.4	81.8
Eastern	74.2	76.8	77.9	80.8	83.5	86.2	87.7	91.6	90.4	90.3	91.4	91.5
Nairobi	46.4	43.5	24.2	28.1	37.8	44.3	25.4	29.5	35.5	40.3	35.9	41.1
Rift Valley	67.8	67.3	70.2	68.8	75.0	74.3	81.1	81.5	84.1	82.0	87.8	85.4
Western	74.2	77.2	78.4	75.3	91.8	87.2	95.4	91.7	97.5	93.2	99.3	97.2
Nyanza	74.4	73.7	80.2	79.8	90.9	89.2	88.9	89.6	96.2	95.4	96.9	96.2
North Eastern	17.9	10.6	19.3	11.0	18.8	11.3	19.6	14.1	26.1	16.2	23.6	14.9
Total	68.8	68.8	67.7	67.8	75.0	75.0	76.5	76.3	80.8	80.0	82.2	82.0
Grand total	68.8		67.8		75.0		76.4		80.4		82.1	

Source: Education Statistics Section, MOES&T

National survival rate at primary school level for boys and girls was 88.0 percent and 81.8 percent, respectively in 2004. However, survival rate analysis by provinces shows a disparity with Nairobi Province recording over 100% for both girls and boys and North Eastern Province registering an average of below 75% between 2002 and 2004 as shown in Table 7 below.

Table 7 Primary School Level Survival Rates (Percent) to Grade 5 by Gender and Province: 2000 - 2004

Province	2000		2001		2002		2003		2004	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Coast	77.9	81.5	71.9	84.6	77.5	84.5	86.4	86.7	88.0	76.8
Central	74.0	76.4	78.4	84.3	80.2	87.1	95.6	100.1	91.0	87.4
Eastern	65.9	65.9	75.4	77.2	71.4	76.7	81.4	86.6	78.2	75.4
Nairobi	97.4	95.2	98.5	96.5	103.7	109.3	143.2	148.7	138.4	130.4
Rift Valley	87.0	88.9	70.6	76.1	73.9	79.8	82.0	86.3	78.5	74.6
Western	60.5	57.3	71.8	72.3	63.4	64.4	88.4	86.7	98.5	86.5
Nyanza	71.6	69.2	80.9	82.6	80.2	79.7	107.0	105.2	100.1	89.4
North Eastern	69.2	85.1	65.2	63.1	75.0	55.3	79.4	72.0	72.2	51.6
Total	72.8	73.6	76.3	82.3	74.5	78.0	88.9	91.3	88.0	81.8
Grand total	73.2		79.2		76.2		90.1		85.0	

Source: Education Statistics Section, MOES&T

As shown in Table 8 below, Primary Completion Rate (PCR) increased from 57.6 percent in 1999 to 62.8 percent in 2002. Due to the introduction of FPE in 2003, PCR increased to 68.2 percent to 76.2 percent in 2004. Regional analysis by provinces indicates that PCR increased between 1999 and 2004 in most provinces. Despite the introduction of FPE in 2003, North Eastern Province had the lowest PCR at 26.9% as compared to Central Province that had the highest PCR of 91.8% in 2004.

Table 8 Primary Completion Rates by Gender and Province: 1999 – 2004

Province	1999		2000		2001		2002		2003		2004	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Coast	47.5	37.5	48.3	33.6	52.6	36.2	54.0	36.6	59.5	40.2	69.2	47.3
Central	76.5	82.7	75.9	77.7	74.8	77.3	78.7	80.0	82.5	84.4	91.5	92.1
Eastern	58.1	63.1	59.8	58.8	62.8	61.4	65.8	65.2	73.2	71.3	83.5	79.1
Nairobi	63.0	56.0	35.4	37.4	35.0	37.3	37.4	40.1	39.3	42.5	43.3	46.6
Rift Valley	59.1	53.0	60.8	54.4	65.0	57.5	69.1	64.0	75.1	69.8	84.1	76.6
Western	49.0	50.1	59.6	56.7	63.7	60.5	65.3	60.3	72.2	66.9	84.5	75.5
Nyanza	67.5	54.3	70.8	57.8	69.2	55.7	73.6	59.3	80.2	63.7	88.0	69.8
North Eastern	16.0	6.6	20.2	7.2	24.6	9.0	28.5	11.3	32.7	14.2	39.0	14.8
Total	59.1	56.2	60.2	55.3	62.2	56.8	65.5	60.1	71.3	65.2	80.3	72.1
Grand total	57.6		57.7		59.5		62.8		68.2		76.2	

Source: Education Statistics Section, MOES&T

Although the national primary to secondary transition rates was 50.5% in 2004, the girl's transition rate has, over time, been below that of the boys as indicated in Table 9 below. Analysis of Table 9 shows that the transition rate increased to 50.5% in 2004 with boys constituting 52.4% and girls 48.6%, which indicates that there are more boys joining secondary schools than girls.

Table 9 Primary to Secondary Transition Rates: 1999 - 2004

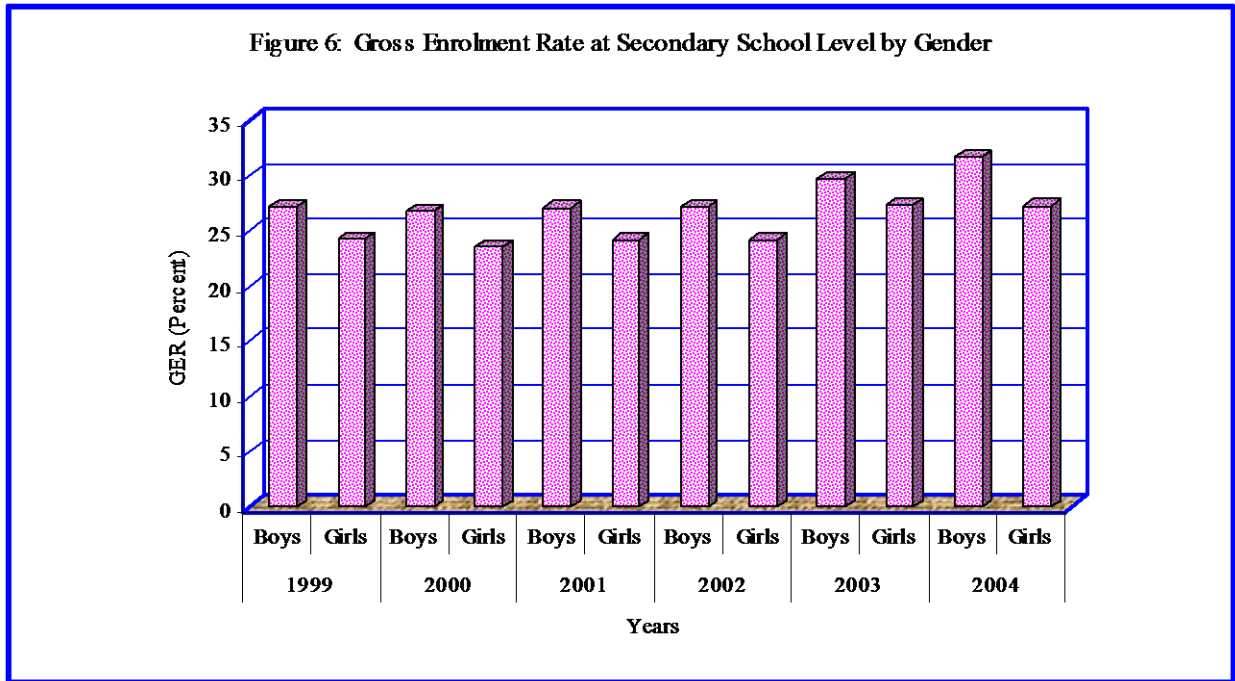
Year in STD 8	Year in Form 1	Enrolment in STD 8 ('000)			Enrolment in Form 1 ('000)			Transiting to Form 1 (Percent)		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1998	1999	221.0	215.3	436.3	105.2	95.8	201.0	47.6	44.5	46.1
1999	2000	246.6	228.0	474.6	108.1	97.2	205.3	43.8	42.6	43.3
2000	2001	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	147.1	130.0	277.1	52.4	48.6	50.5

Source: Education Statistics Section, MOES&T

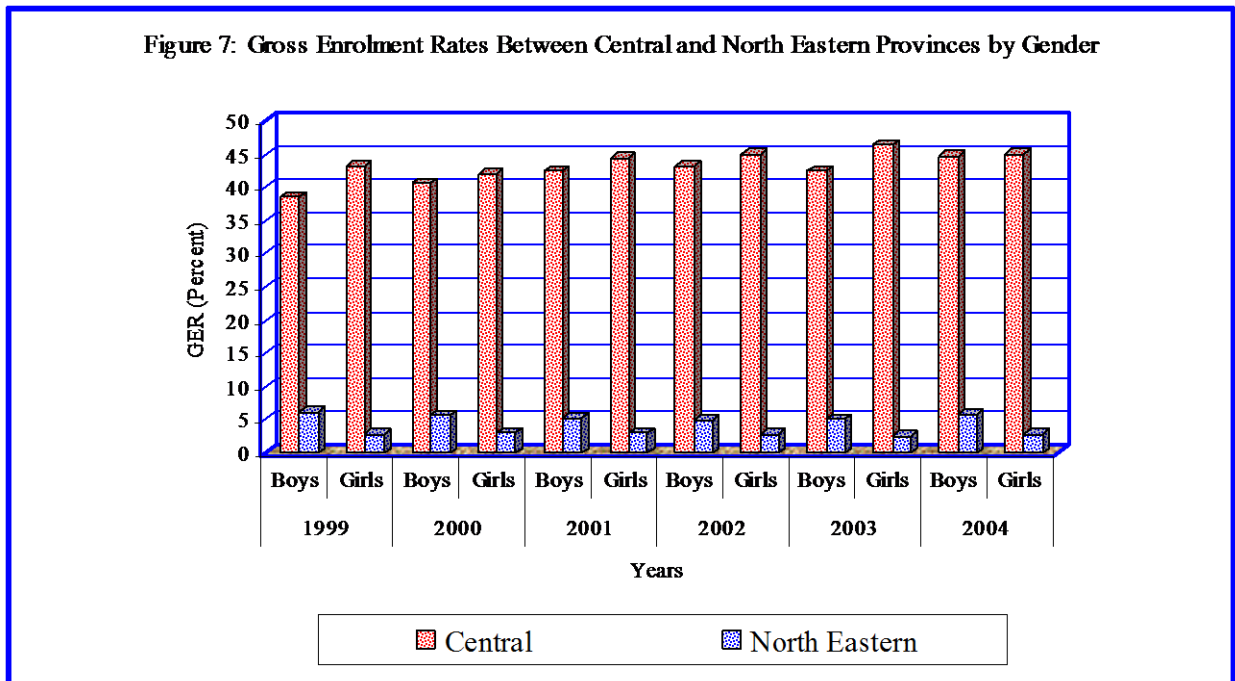
5.5 Secondary Education

Even though there is no significant difference in national GER at secondary school level as shown in Figure 6, regional differences still exist. National GER for girls varies from 2.9% in North Eastern Province in 1999, 2002 and 2004 and 46.4% in Central Province in 2003. On the hand, GER for boys varied from 4.9% (2002) to 38.5% (1999) in North Eastern and Central Provinces, respectively as shown in Figure 7 below. These are low GERs for North Eastern

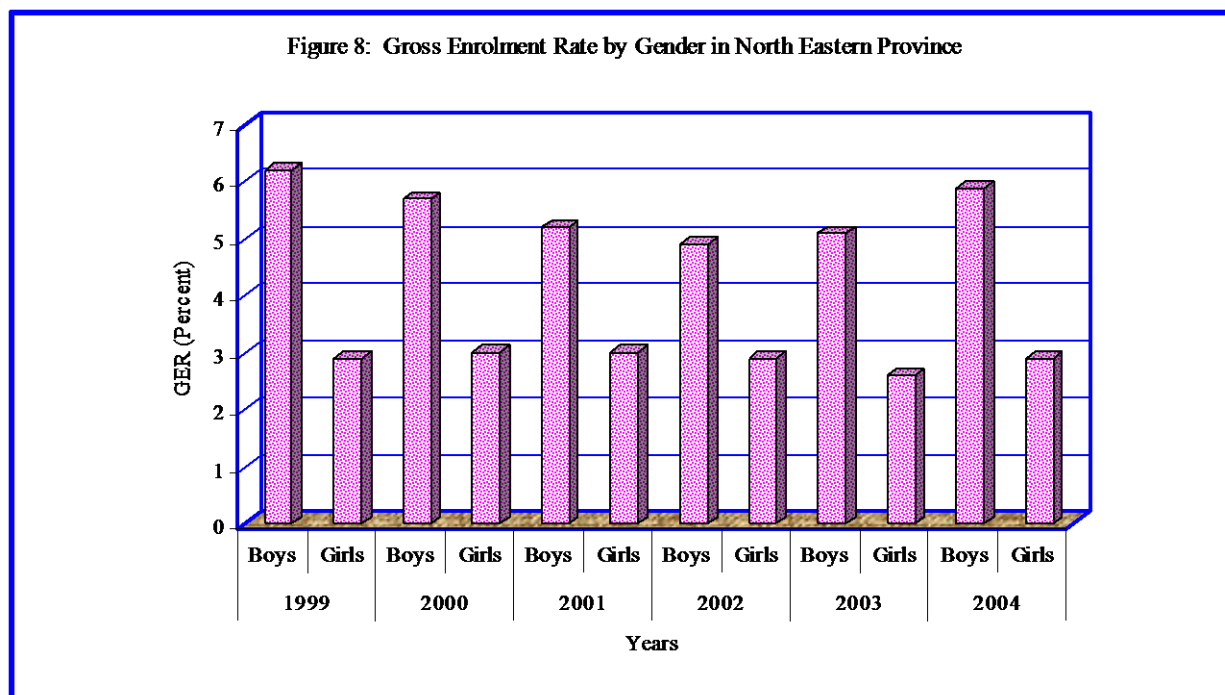
Province and also indicates the gender disparity in this province as shown in Figure 8 below.



Source: Education Statistics Section, MOES&T



Source: Education Statistics Section, MOES&T



Source: Education Statistics Section, MOES&T

Although the NER increased from 13.7% in 1999 to 19.4 percent in 2004 as shown in Table 10 below, the NER for boys was higher than that for girls at 19.7 percent and 19.1 percent respectively. Since 1999, the NER in North Eastern Province has been below 3.3 percent whereas it has been between 18.1 percent and 30.7 percent in Central Province. At the same time, the NER for girls in North Eastern Province has been significantly below that of the boys with largest differences recorded in 1999 and 2004; Nairobi Province also has a large NER for boys than for girls since 1999.

Table 10 Secondary Net Enrolment Rates (Percent) by Gender and Province: 1999 - 2004

Province	1999		2000		2001		2002		2003		2004	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Coast	7.5	7.8	7.3	7.8	8.2	8.4	9.6	9.4	12.2	11.4	14.3	12.2
Central	18.1	23.6	20.1	24.6	22.9	26.9	27.4	30.7	25.2	30.3	27.0	29.5
Eastern	13.4	15.0	13.1	14.4	14.9	15.7	17.8	17.9	19.9	21.8	20.9	21.4
Nairobi	15.1	8.2	10.5	7.1	11.7	7.5	13.6	8.3	11.6	6.4	22.1	16.2
Rift Valley	11.9	11.6	11.7	11.5	13.1	12.3	15.4	13.8	17.0	17.1	17.7	17.3
Western	13.6	14.9	15.3	16.4	17.3	17.7	20.4	20.0	16.9	20.7	19.2	20.3
Nyanza	17.3	14.9	18.8	15.6	21.4	16.9	25.4	19.2	23.3	21.4	22.3	17.6
North Eastern	3.3	1.8	3.2	2.0	3.4	2.0	3.7	2.1	2.9	2.0	3.1	1.8
Total	13.5	13.9	13.9	14.0	15.7	15.2	18.5	17.1	18.2	18.9	19.7	19.1
Grand total	13.7		14.0		15.5		17.8		18.6		19.4	

Source: Education Statistics Section, MOES&T

During the period 1999 to 2004, the overall GPI depicts a near parity as shown in Table 11 below. However, regional gender disparities across the provinces still exist. For example, North

Eastern and Nairobi Provinces point towards the widest gender disparity with the former having a GPI ranging from 0.55 in 1999 to 0.58 in 2004 and the latter having a GPI of 0.54 and 0.73 in 1999 and 2004, respectively. On the contrary, Central Province has registered a slightly higher enrolment of girls than boys over the same period; with a GPI of 1.30 in 1999 and 1.09 in 2004.

Table 11 Secondary Gender Parity Index by Province, 1999-2004

Province	1999	2000	2001	2002	2003	2004
Coast	1.04	1.07	1.02	0.98	0.93	0.85
Central	1.30	1.22	1.17	1.12	1.20	1.09
Eastern	1.12	1.10	1.05	1.01	1.10	1.02
Nairobi	0.54	0.68	0.64	0.61	0.55	0.73
Rift Valley	0.97	0.98	0.94	0.90	1.01	0.98
Western	1.10	1.07	1.02	0.98	1.22	1.06
Nyanza	0.86	0.83	0.79	0.76	0.92	0.79
North Eastern	0.55	0.63	0.59	0.57	0.69	0.58
Total	1.03	1.01	0.97	0.92	1.04	0.97

Source: Education Statistics Section, MOES&T

Table 12 shows that the completion rates increased from 86.7 percent in 1999 to 89.6 in 2004 with the highest rate of 95.2 percent in 1998. In addition, Table 12 shows that the completion rate for boys has been slightly higher than that of girls over the last six years ranging from 1.6 percent in 2003 to 4.7 percent in 2000 and 2002.

Table 12 Secondary Completion Rates by Gender: 1999 - 2004

Year in		Completing Form 4 (Percent)		
Form 1	Form 4	Boys	Girls	Total
1996	1999	87.5	85.8	86.7
1997	2000	93.1	88.4	90.9
1998	2001	96.6	93.7	95.2
1999	2002	94.4	89.7	92.1
2000	2003	90.2	88.6	89.5
2001	2004	91.5	87.5	89.6

Source: Education Statistics Section, MOES&T

A total of 30,243 students attained university entry grade in 1999/00, constituting 17.9 percent of the total Kenya Certificate of Secondary Education (KCSE) candidates. As Table 13 shows, the proportion of qualifying students increased from 17.9 percent in 1999/2000 to 21.6 percent in 2002/03 and the admission rate to public universities increased from 4.8 percent in 1999 to 6.2 percent in 2002 but declined to 5.7 percent in 2003. However, the number of male students admitted compared to female has remained higher but the proportion has declined from 64.6 percent in 1999/00 to 62.1 percent in 2002/03 whereas the number of girls admitted has increased from 35.4 percent to 37.9 percent.

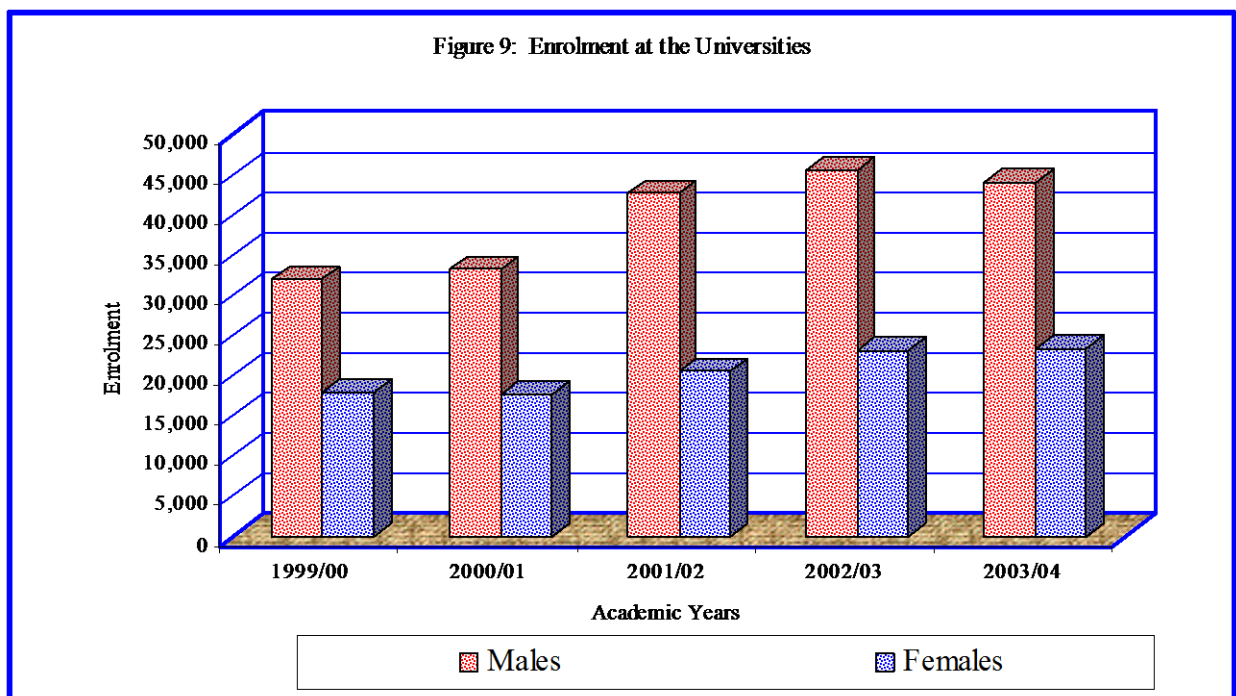
Table 13 Secondary to University Transition Rates (Percent): 1999/00 - 2002/03

Category	1999/00	2000/01	2001/02	2002/03
Candidates registered	100	100	100	100
Qualified for admission (C+ and above)	17.9	17.6	22.7	21.6
Candidates admitted	4.8	5.1	6.2	5.7
Males	64.6	65.0	64.6	62.1
Females	35.4	35.0	35.4	37.9

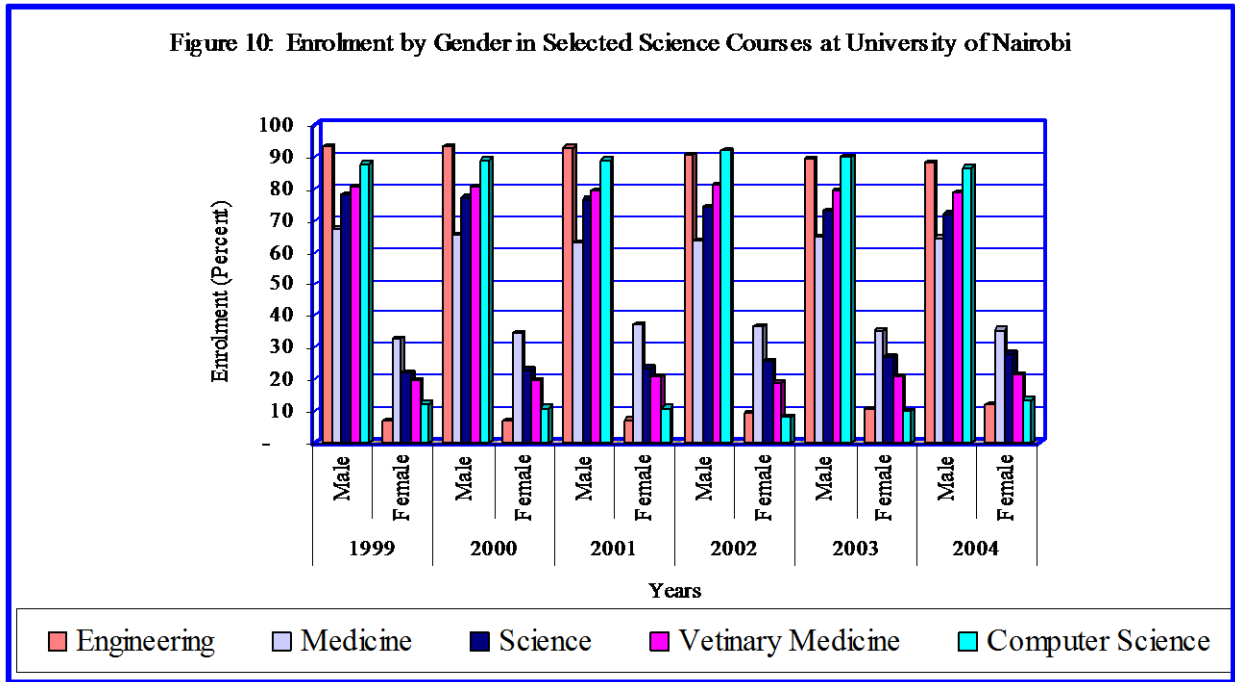
Source: Commission for Higher Education

5.6 University Education

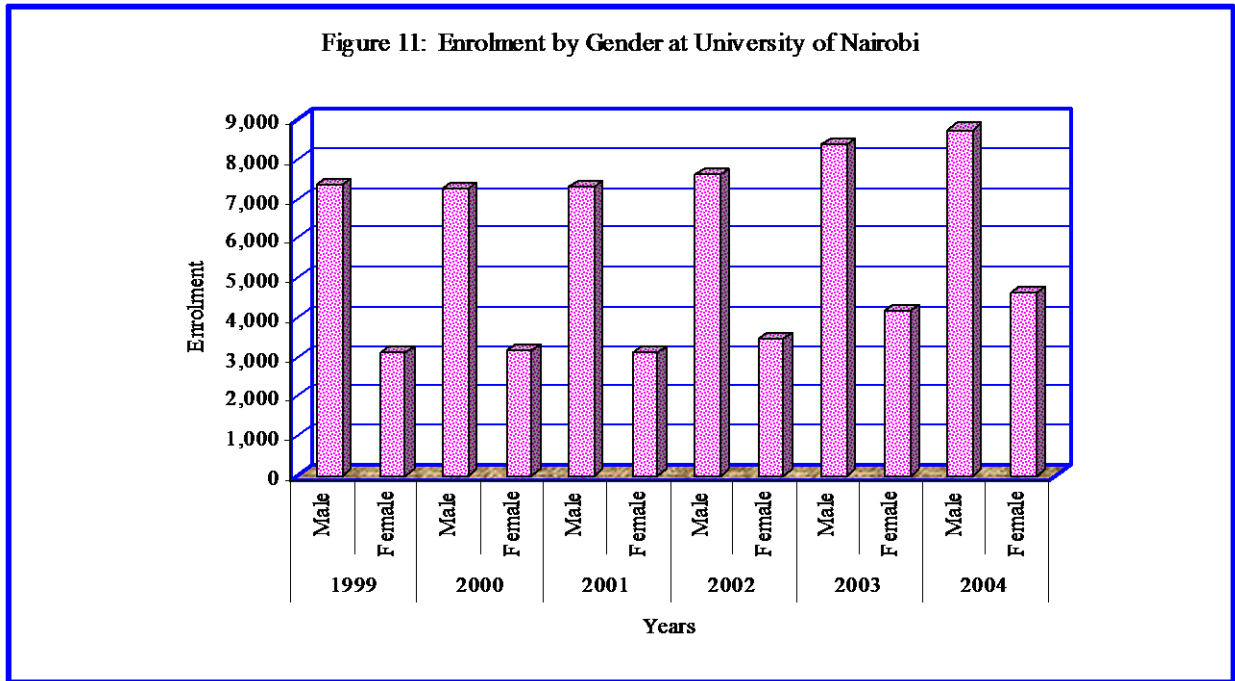
Enrolment and growth in universities have been increasing since the establishment of the first Kenyan university, the University of Nairobi, in 1970. The total enrolment in public universities has increased from 3,443 students in 1970 to 58,017 students (18,317 females and 39,700 males) in 2003/04. In private universities the total enrolment for 2003/04 was 9,541 students (5,128 females and 4,413 males). In the 2003/04 academic year, the total number of those enrolled in public and private universities rose to 67,558 as shown in Figure 9 below. However, despite the rise in enrolments, the transition rate from secondary level to university still remains low, which is below 10 percent. Regarding gender parity, female students constitute 32 per cent of the total enrolment in public universities and 54 percent in private universities. Gender parity is more pronounced in public universities. For example, University of Nairobi has over time enrolled more males in science-based courses than females as shown in Figure 10. At the time, female enrolment at the University of Nairobi has been below that of males (see Figure 11) and the female enrolment in engineering degrees at the same university has been below 10 percent over a period of 6 years as shown in Figure 10.



Source: Education Statistics Section, MOES&T



Source: University of Nairobi



Source: University of Nairobi

5.7 Technical, Industrial, Vocational and Entrepreneurship Training Education

The enrolment in public TIVET institutions increased by 64.3 percent from 40,622 in 1999 to 66,737 in 2004 as shown in Table 14. The highest increase in enrolment over the last six years

has been in the technical training institutes and institutes of technology, which increased from 16,656 in 1999 to 26,473 in 2004; an increase of 58.9 percent with the highest enrolment coming from the youth polytechnics. The female enrolment constituted 49.2 percent of the total enrolment in TIVET institutions with the biggest gap in both national polytechnics and technical training institutes. The difference in enrolment between males and females has remained fairly the same since 1999 to 2004 in youth polytechnics (see Table 14 below).

Table 14 Student Enrolment by Gender in TIVET Institutions: 1999 – 2004

Institution	1999		2000		2001		2002		2003		2004	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
National Polytechnics												
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
Mombasa Polytechnic	1,784	1,141	1,943	801	3,567	1,092	3,149	1,401	2,647	1,390	2,778	2436
Kisumu Polytechnic	689	441	646	266	785	240	947	410	937	421	937	433
Eldoret Polytechnic	664	425	833	343	647	515	1,527	660	1,523	684	1,610	707
Total	5,857	3,746	6,401	2,638	9,522	3,232	10,209	4,455	9,595	4,511	10,944	6,798
Percent	60.99	39.01	70.82	29.18	74.66	25.34	69.62	30.38	68.02	31.98	61.68	38.32
Technical Training Institutes												
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
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
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
Percent	64.94	35.06	60.20	39.80	56.00	44.00	55.00	45.00	56.10	43.90	54.27	45.73
Vocational Institutes												
Youth Polytechnics	3,458	10,905	4,150	11,450	4,980	12,023	5,975	12,624	7,171	13,255	8,605	13,918
Percent	24.08	75.92	26.60	73.40	29.29	70.71	32.13	67.87	35.11	64.89	38.21	61.79
Total	20,132	20,490	19,891	20,263	24,471	23,087	26,629	25,625	29,001	27,341	33,916	32,821
Percent	49.56	50.44	49.54	50.46	51.46	48.55	50.96	49.04	51.47	48.53	50.82	49.18
Grand total	40,622		40,154		47,557		52,254		56,342		66,737	

Source: Directorate of Technical Education and Education Statistics Section, MOES&T

5.8 Special Needs Education

The enrolment in special education institutions increased significantly from 13,683 in 1999 to 161,825 in 2003 (an increase of over 1,000 percent) as shown in Table 15 below. In 2003, primary schools with special/integrated units recorded the highest enrolment of 128,940 as compared to special primary schools with 23,459 while special technical/vocational schools recorded the lowest with 2,400. This significant increase in primary schools with special/integrated units can be attributed to the FPE initiative. Table 15 also shows that more girls were enrolled than boys in 2003 (54.12 percent to 45.88 percent) than was the case in 1999 when more boys were enrolled.

Table 15 Enrolment in Special Needs Education Institutions by Category: 1999 and 2003

Category	1999			2003		
	Boys	Girls	Total	Boys	Girls	Total
Special primary	3,716	2,796	6,512	13,353	10,106	23,459
Special secondary	492	388	880	6,490	536	7,026
Special technical/vocational	305	246	551	1,286	1,114	2,400
Primary units/integrated	3,323	2,417	5,740	53,112	75,828	128,940
Total	7,836	5,847	13,683	74,241	87,584	161,825
Percent	57.27	42.73	100.00	45.88	54.12	100.00

Source: Special Education Section and Education Statistics Section, MOES&T

Table 16 shows the number of boys and girls enrolled in special primary schools/units by type of handicap in 1999 and 2003. In 2003, more students were recorded with mental handicaps than any other handicap. With respect to handicap between boys and girls, Table 16 below shows that there were more girls with handicaps than boys in 2003 (54.12 percent versus 45.88 percent), which indicates a reversal from 1999 when 57.27 percent and 42.73 percent of the total handicaps were boys and girls, respectively.

Table 16 Enrolment in Special Schools/Units by Type of Handicap: 1999 and 2003

Handicap	1999			2003		
	Boys	Girls	Total	Boys	Girls	Total
Visual	683	452	1,135	8,781	14,508	23,289
Hearing impaired	1,230	1,171	2,401	9,286	15,817	25,103
Physical	736	539	1,275	8,220	10,508	18,728
Mental	1,067	634	1,701	13,995	18,968	32,963
Others	4,120	3,051	7,171	33,959	27,783	61,742
Total	7,836	5,847	13,683	74,241	87,584	161,825
Percent	57.27	42.73	100.00	45.88	54.12	100.00

Source: Special Education Section and Education Statistics Section, MOES&T

5.9 Non-Formal Education

The Non-Formal Education (NFE) institutions offer education for the various levels in Kenya including primary, secondary, adult education, basic literacy and technical. From 2003 survey, a total of 103,628 persons were attending Non-Formal Schools (NFSs) and Non-Formal Education Centres (NFECs). The male enrolment was 54,564 constituting 52.65 percent of the total enrolment as compared to 49,064 females or 47.35 percent in 2003. About 80.37 percent of the total number of learners in NFE institutions was enrolled in schools offering primary education.

Table 17 Non-Formal Education Enrolments by Level of Education: 2003

Province	Primary		Secondary		Adult		Basic Literacy		Technical	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Coast	2,240	1,813	370	369	376	752	929	1,120	659	242
Central	247	159	166	18	103	207	146	245	23	-
Eastern	71	84	2	12	160	321	182	151	188	150
Nairobi	36,45	35,959	3,645	437	126	251	278	289	139	105
Rift Valley	504	470	-	-	167	334	782	610	329	600
Western	602	532	673	-	-	-	22	11	11	4
Nyanza	1,050	945	209	71	151	303	707	780	229	90
North Eastern	1,413	738	545	189	133	265	427	400	104	38
Total	42,58	40,700	5,610	1,096	1,216	2,433	3,473	3,606	1,682	1,229

Source: Non-Formal Education Directory and Education Statistics Section, MOES&T

Table 18 shows that there were 986 NFE institutions in November 2003 countrywide. Nairobi Province had the highest number institutions constituting 45.84 percent of the total whereas Western Province had the lowest number of institutions (about 1.32 percent). There were a total of 1,941 classrooms in both NFS and NFECs. The national average class size of the NFE institutions was 53 learners per class with the most crowded classes being in Nairobi (68 pupils per class).

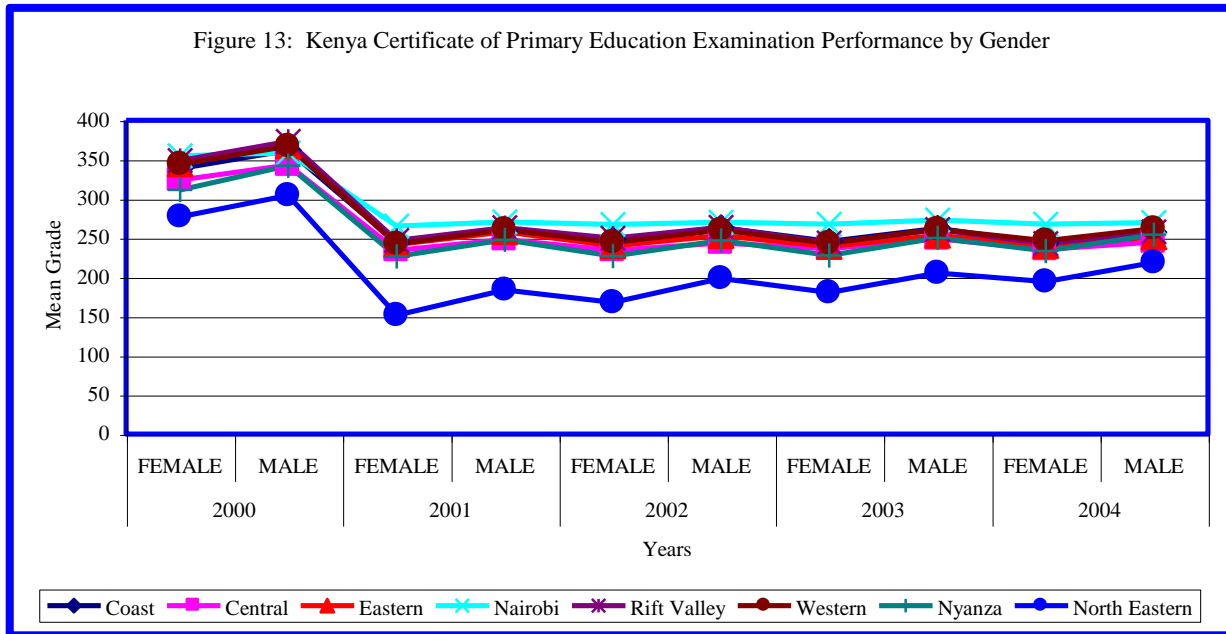
Table 18 Number of Institutions, Classrooms and Class Size: 2003

Province	Institutions	Enrolment	Classrooms	Class Size
Coast	177	8,870	259	34
Central	59	1,314	57	23
Eastern	71	1,321	71	19
Nairobi	452	77,685	1,146	68
Rift Valley	56	3,796	97	39
Western	13	1,855	53	35
Nyanza	94	4,535	156	29
North Eastern	64	4,252	102	42
Total	986	103,628	1,941	53

Source: Non-Formal Education Directory and Education Statistics Section, MOES&T

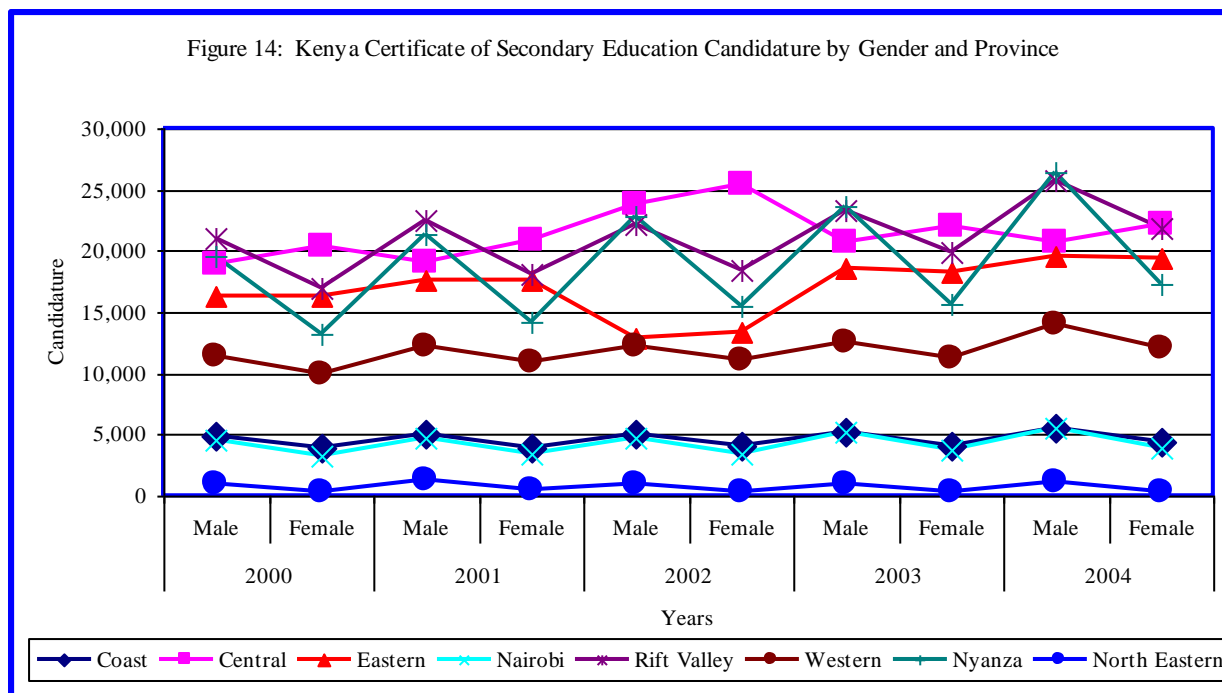
5.10 Performance in Primary and Secondary National Examinations

Another concern within the primary and secondary sub-sectors has been the disparity in performance of national examinations over the years. As in the case of access and equity, disparity in examination performance is manifest on the basis of region and gender. The performance by students in national examinations within the North Eastern Province is far below the performance in the other provinces, as shown in Figure 13. For example, in 2004 the pupil from North Eastern Province with the highest score in Kenya Certificate of Primary Education was equivalent to the 100th pupil in Nairobi Province in the same examination. At the same time, boys have been performing better in the North Eastern Province than girls.



Source: Kenya National Examinations Council

Candidature by gender at the KCSE for the last five years has increased with the highest increase of 7.2 percent recorded during the year 2004 KCSE examination. The ratio of male to female candidates remained constant at approximately 53:46 over the five-year period. The KCSE candidature by gender and province for the last five years indicate that there were more males than females candidates who sat for the KCSE examination as shown in Table 19 below. Central Province was the only province, which had more female than male candidates who sat for the examination in the five-year period. North Eastern Province has had the lowest candidature when compared with the other provinces since the year 2000 as shown in Figure 14.



Source: Kenya National Examinations Council

Table 19 Kenya Certificate of Secondary Education Candidature by Gender and Province

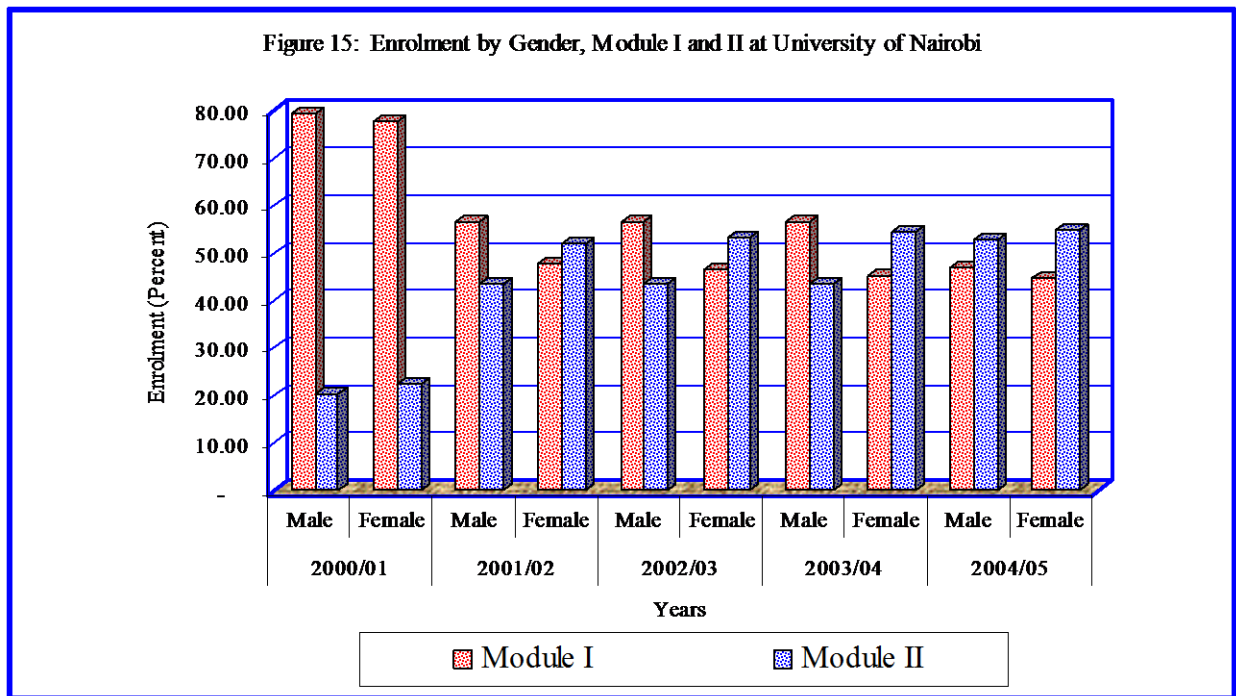
Province	2000		2001		2002		2003		2004	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Coast	4,829	3,856	5,103	3,951	5,120	4,086	5,276	4,087	5,601	4,447
Central	18,919	20,340	19,070	20,812	23,877	25,401	20,637	22,044	20,788	22,246
Eastern	16,371	16,306	17,647	17,575	12,901	13,302	18,647	18,262	19,577	19,433
Nairobi	4,637	3,204	4,733	3,361	4,784	3,498	5,202	3,819	5,572	3,980
R. Valley	21,102	16,921	22,470	18,089	22,228	18,376	23,360	19,925	25,688	21,890
Western	11,365	9,946	12,157	10,917	12,240	11,149	12,626	11,250	13,960	12,145
Nyanza	19,533	13,232	21,408	14,196	22,849	15,470	23,569	15,658	26,377	17,211
NE	931	288	1,358	484	1,002	367	960	341	1,071	341
Private	695	329	973	484	1,163	543	1,312	755	1,433	916
Total	98,382	84,422	104,919	89,869	106,164	92,192	111,589	96,141	120,067	102,609

Source: Kenya National Examinations Council

The KCSE candidature and performance by gender in the KCSE examination subjects and grades trends in some selected subjects show that the mean of male and female candidates in English, Kiswahili, Mathematics, Biology, Physics, Chemistry, Biological Sciences, Geography, French and Commerce has been below 50 percent from 2000 to 2004. Overall, boys performed better than girls in most of the subjects for the last five years. A higher percentage of male candidates got grades A to D+ in English, Mathematics, Biology, Physics and Chemistry than their female counterparts in the years 2000 to 2004.

5.11 Examination Performance Between Public and Private Schools

Another recent disparity within the Kenyan education system is the difference in examination performance between public and private schools. Children who enroll in private pre-schools and then high cost private primary schools (academies) have a higher probability of being admitted to national secondary schools and then to university education than children who enroll in public schools. These academies constitute only 10 percent of all the primary schools in the country but about 60 percent of the students from these academies are admitted to national secondary schools and approximately 70 percent of them access university education. At the same time, more module II students who can afford university education are enrolling in public universities. For example, in 2004/05, University of Nairobi enrolled 45.9 percent module I students compared to 54.1 percent module II students (see Figure 15 below). With the high levels of poverty, these academies are out of reach for most of the households and communities particularly the vulnerable and the marginalized. Therefore, there is urgent need to investment more resources in these disadvantaged areas in order to address the quality of education and training provided in these in public schools.



Source: Education Statistics Section, MOES&T

5.12 Management of Educational Institutions

Other area that needs to be addressed in relation to disparities in education in Kenya is the gender disparity in the number of educational managers involved in the management of education institutions. Currently, decision-making in education and training is highly biased towards males and centralized at the ministry headquarters among a few officers at the expense of the districts where actual education and training and management services are delivered. For example, there is only one woman vice chancellor in the six public universities unlike in private universities; there are only two females out of the eight provincial directors of education; there

are less than 10 females out of the 74 district directors officers and most institutions have males as heads.

As the MOES&T moves towards the decentralization of management of education and training services, it should at the same time address the gender disparity in the management of the educational institutions and establish the requisite legal framework. Under a decentralized system, the role of women at the District Education Boards (DEBs) and SMCs in education and training management should be reviewed accordingly in light of the fact that women play a key role in education and training management functions at the district and institutional levels. It is at these levels where appropriate administrative, financial and decision-making authorities are placed.

6 EDUCATION EXPENDITURE

6.1 Introduction

The financing of education and training in Kenya is a combined effort of the central and local Government, the private sector, non-governmental organizations (NGOs), households, communities, religious organizations and development partners. The introduction of FPE in 2003 lessened the cost burden at the primary school level for the households. However, households continue to bear more responsibilities in the financing of education and training in public ECDE, secondary and TIVET levels. There is also significant support by the households at the university level after the recent introduction of module II programmes in the public universities. In private institutions, the financing of education and training in is wholly borne by the households.

The average Government spending on education and training, excluding the share by households has ranged between 5 and 7 percent of the Gross Domestic Product (GDP) for the last five years. At the national level, the recurrent Government spending on education has been higher than any other social sector spending 73 percent out of the social sector total expenditure. In addition, education recurrent budget has risen from 33 percent of public sector recurrent budget in 2000 to about 35 percent in 2005, with about 79 percent going towards administration and planning. Out of the 79 percent, 86 percent goes towards salaries and wages, especially for primary and secondary school teachers. Furthermore, out of the total allocation to the MOES&T, 56 percent of the resources go to primary education (this figure is above the Fast Track Initiative (FTI) benchmark of 50 percent), with about 86 percent of the fiscal resources to primary schools being used to pay teacher's salaries. Also, development expenditure has increased from 3.41 percent in 2001/02 to 8.02 percent in 2005/06 and more so since 2003 as a result of the implementation of the FPE leaving little allocation to other sub-sectors.

6.2 Analysis of Education Expenditure

Public spending on basic education is one of the investments that will enable the Government move towards achievement of EFA. However, the cost of educating an individual increases with level of education. The ratio of public spending on tertiary education is disproportionate to the share of tertiary students. As Table 20 below shows, in 2003/04 secondary education received 4.1 times per student the public unit cost of primary education. The MOES&T TIVET institutions received per student 6.6 times what was paid for a primary pupil, and universities

25.2 times. The unit cost per student at university is the highest at KShs 138,882, followed by TIVET, KShs 35,932 and secondary KShs 22,381. The tertiary sub-sectors have shown results of greater returns to individuals hence need for Government to assign significant responsibility of financing education at this level to the households.

Table 20 Unit Costs of Actual Spending per Sub-Sector: 2003/04

Sub-Sector	Average Cost per Student (KShs)	Ratio to Primary
Primary	5,438	1.0
Secondary	22,381	4.1
TIVET (MOES&T institutions only)	35,932	6.6
University	136,882	25.2

Source: Education Statistics Section, MOES&T

The average Government spending on education and training, excluding the share by households has grown over the last five years. Considering the MOES&T budget, far more is spent on recurrent expenditure in relation to development expenditure. In 2001/02, the recurrent budget within the MOES&T, as a percentage of total MOES&T expenditure was 98.46 percent leaving only 1.54 percent for development as shown in Table 21. Over the five-year period, the average total recurrent expenditure as a percentage of total MOES&T expenditure has been 94.89 percent with the highest proportion going towards paying wages and salaries particularly for teachers at both primary and secondary school levels. The average development allocation as a percentage of MOES&T total expenditure over the same period has been around 5.11 percent.

Table 21 Total Gross Expenditure Analysis: 2001/02–2005/06 (Million KShs)

Category	2001/02	2002/03	2003/04	2004/05	2005/06*
MOEST Recurrent	52,608.1	60,891.5	68,215.5	77,299.8	88,631.7
MOEST Development	825.0	2,547.6	4,076.5	3,741.9	8,358.8
Total MOEST	53,433.1	63,439.1	72,292.0	81,041.7	96,990.5
Gross Domestic Product	878,730.0	962,686.0	1,091,640.3	1,124,389.5	1,172,738.2
Total GOK Recurrent	157,445.2	182,248.6	203,861.0	227,082.5	257,023.2
Total GOK Development	24,209.6	32,027.1	59,670.6	71,982.9	104,220.5
Total GOK	181,654.8	214,275.7	263,531.6	299,065.3	361,243.7
Total MOEST as % of GDP	6.08	6.59	6.62	7.2%	8.27
Total MOEST as % of GOK total expenditure	29.41	29.61	27.43	27.1	26.85
Total MOEST recurrent as % of GOK total recurrent	33.41	33.41	33.46	34.0	34.48
MOEST development as % of GOK development	3.41	7.95	6.83	5.2	8.02
MOEST recurrent as % of MOES&T expenditure	98.46	95.98	94.36	95.4	91.38
MOEST development as % of MOES&T expenditure	1.54	4.02	5.64	4.6	8.62

* Printed Estimates

Source: Appropriation Accounts 2001/02 to 2004/05, Printed Estimates 2005/06

Analysis of expenditure by economic classification shows that primary school teacher's salary has been taking an average of 55.8 percent of the total MOES&T recurrent expenditure over the last five years as shown in Table 22 below. Considering all the salaries and wages together indicates an average of 86 percent of the total MOES&T recurrent budget. This implies that most of the recurrent expenditure goes towards paying salaries and wages leaving a small allocation to operations, maintenance and development. This expenditure trend implies that households have to meet most of the operations, maintenance and development costs and this has impacted negatively within the poor communities and has thus contributed towards inequality in access to education.

Table 22 Analysis of Recurrent Budget Expenditure by Economic Classification: 2001/02–2005/06 (Million KShs)

Economic Classification	2001/02	2002/03	2003/04	2004/05	2005/06*
Primary teachers salary	26,861.7	28,159.3	33,617.1	36,564.8	36,801.4
Secondary teachers salary	14,300.9	15,324.3	15,280.5	16,667.6	20,061.5
Special institutions salary	1,300.7	1,430.4	2,037.4	2,191.6	1,880.2
Salary for TSC secretariat	426.6	719.9	777.6	1,038.1	767.5
TIVET teachers salaries	773.2	770.4	875.5	1,211.1	1,491.7
Other salaries and wages	1,228.6	1,328.6	1,379.5	2,409.2	
Total salaries	49,305.8	52,477.5	59,081.0	66,985.4	72,668.0
Capitation grants to universities	5,769	6,186	6,652.1	9,735.2	9,735.2
Operations and maintenance	1,589.2		2,052.4	3,795.5	
Core poverty Programmes	1,650.3	4,957.1	6,985.7	7,806.1	8,504.8
Appropriation in Aid	62.9	39.8	66.7	80.8	83.7
Total MOES&T recurrent	52,545.3	61,270	68,311.7	78,640.5	88,278.0
Primary teachers salaries percent of salaries	54.5	53.7	56.9	54.7	59.4
Secondary teachers salaries percent of salaries	29.0	29.2	25.9	24.9	27.0
Universities salaries as percent of salaries	8.95	9.0	8.7	10.2	10.4
Total salaries percent of MOES&T recurrent	93.8	80.0	86.7	85.0	82.2

Source: Appropriation Accounts 2001/02 to 2004/05, Printed Estimates 2005/06 and Teachers Service Commission salary data

*Estimates

7 POLICY ISSUES AND CONCLUSION

The *Geographic Dimensions of Well-Being in Kenya: Who and Where Are The Poor* that was published by the Ministry of Development and National Planning and Central Bureau of Statistics in November 2005 identified education as a crucial factor in the quality of life in different constituencies within Kenya. Education was identified as the most single important

factor in determining the overall living conditions for the family - the more educated the head of households, the better the living conditions of the family. The results of the report indicate that households headed by individuals with educational attainment at the secondary level or above are better off than those headed by individuals with primary level of education. Most families headed by people with little or no education are poor, as do households headed by women generally. Therefore, poverty is mainly associated with lack of education, lack of infrastructure and an overall development strategy that favors the already relatively well-endowed areas at the expense of marginalized areas. North Eastern Province was, for example, identified as the poorest province in this report and this is clearly reflected in inequalities of educational opportunities within the province as discussed in this paper.

In order to address inequalities in education and training, the Government has, over the years, demonstrated its commitment to the development of education and training through sustained allocation of resources to the sector. However, despite the substantial allocation of resources and notable achievements attained, the sector still faces major challenges. Some of these challenges relate to access, equity, quality, relevance, efficiency in the management of educational resources, cost and financing of education, gender and regional disparities, and teacher quality and teacher utilization. In an effort to address these challenges, the MOES&T has developed the *Sessional Paper No. 1 of 2005 on a Policy Framework for Education, Training and Research* and consequently provided a policy framework for the education sector in order to meet the challenges of education and training development in the 21st Century. In order to support policies and implement the strategies as spelt in the Sessional Paper No. 1 of 2005, the MOES&T in partnership with all stakeholders developed an investment programme, KESSP that was launched in July 2005.

The Sessional Paper No. 1 of 2005 has articulated a variety of strategies to be implemented within each sub-sector and in the management of education and training services in order to address the inequalities in education and training. However, the inequalities in education as discussed in this paper will require some urgent strategies in order to reverse the current trend of inequality in education. In particular, there is need for MOES&T in partnership with other stakeholders in education to address the following issues:

- In some parts of the country, children with special needs and those from poor households are not enrolled in ECDE. There is need therefore to develop and implement appropriate ECDE programmes for children with special needs, including the vulnerable and disadvantaged groups in order to enhance access;
- In order to attract and retain children in school within the famine prone areas, there is need to expand the current school-feeding programme. This initiative will improve both the access and retention and therefore lead to better performance in examinations especially among the socio-economically disadvantaged and nutritionally vulnerable children. Girls in pre-primary and primary schools in targeted ASALs districts and slums in Nairobi can greatly benefit from this. Through this programme, there has been substantial increase in enrolment by 184 percent in the districts covered (from 357,464 children in 1999 to 1,017,317 children in 2004). In addition, there has been reduced hunger, improved attention and cognitive ability of the children and enhanced enrolment of the girl child and orphans. In most schools, the pupil attendance has improved with a reduction in school dropouts.

- In some disadvantaged and marginalized areas, such as, ASALs day schools are inappropriate because children have to travel long distances. Under such circumstances, it is important to improve and provide targeted boarding schools in ASALs, and other deserving areas especially for girls in order to retain children in schools;
- Parents play an important role in ensuring children attend school. At the same time, the school environment will encourage or discourage children from attending school. In order to address these concerns, there is need to sensitize parents and communities to discard socio-cultural practices that prohibit effective participation of girls and boys in education, enforce legislation against the violation of the Children's Rights and make school environment gender sensitive;
- Often nomadic communities have to move from one place to another in search of pasture. In order to ensure children get education within these communities, it is important to develop and enhance use of alternative modes of provision of education, such as mobile schools among nomadic communities, whenever appropriate;
- Good health of children plays a critical role in their performance in school and therefore there is need to provide support to school health that includes, improved child health, sanitation, HIV/AIDs education and enhance the current school nutrition programme;
- In order to achieve EFA in the primary sub-sector and also address the challenges within the secondary sub-sector, there is need to increase the enrollment of girls at all levels of the education system by improving retention and completion rates for girls, performance of girls in national examinations especially in mathematics and sciences awareness and providing gender sensitive teaching and learning materials;
- Within the management of education and training in Kenya today, there are few women managers as compared to men. In order to address this imbalance, there is need to enhance gender parity and balance at the management level;
- Today, about 57 percent of Kenyans live below the poverty level and as a result most households cannot send their children to school especially at the secondary school level. Therefore, there need to enhance and provide support to poor and disadvantaged students through bursaries. In addition, there is need to regularly review and rationalize fees and levies in secondary schools in order to reduce the cost burden on the households;
- In order to address the expected increased demand for secondary education due to FPE and thus increase the current transition rate from primary level to secondary level from 57 percent to 70 percent in 2008, there is need to provide targeted support for the development of infrastructure in areas where parents are not able, develop more day schools especially in high population density areas and construct schools and provide equipment to deserving areas and in particular ASALs and urban slums;
- In a number of instances, girls who get pregnant and are forced into early marriages drop out of school and are not provided with an opportunity for re-entry. To address this issue, there is need to develop and adopt mechanisms that allow the re-entry of girls who drop out of school due to pregnancy and early or forced marriage;
- Educational and training programmes for persons with disabilities have not been fully integrated within most institutions in relation to such aspects as infrastructure and financing. There is need therefore to establish financing mechanisms through bursaries, and scholarships for persons with disabilities and also develop appropriate physical infrastructure for students with special needs. In addition, there is need to promote access to secondary,

tertiary and university education by learners with special needs through affirmative action as well as implement a flexible curriculum that is appropriate to them.

- TIVET and university education play a key role in development of any country. In order to address the concerns of workforce skills development and enhancement, there is need to develop TIVET institutions especially in underserved areas of the country and provide loans to TIVET trainees. At the same time, there is need to increase and improve the existing university loans system to ensure availability of financial support to poor students;
- At present, males dominate management of higher education and in particular public universities. In order to address this issue, there is need to support an affirmative action that will guarantee equitable access to and management of university education, and ensuring that more women are admitted to pursue science based than is the case today;
- In order to enhance learning and training opportunities to all adults, children, out-of-school youth, and other vulnerable groups and expand the post literacy programme to cover all districts, there is need to promote open and distance learning opportunities;

In conclusion, education and training can therefore reduce social and economic disparities. Today, Kenya is characterized by large inequalities with respect to income distribution and this has constrained economic growth. Investment in education and training will be an important strategy to address such differences, which in turn, result in faster economic growth. The involvement in education and training is justified on the basis that human capital investments have large social returns. For the country to achieve the desired economic growth and social development, due attention needs to be placed on the development of the human resource capital through education and training. Not only will the growth of the education and training sector contribute to economic growth and social returns but also increase demand for more equitable education and training attainments. This is an important human welfare indicator by itself. Investment in education and training will therefore ensure wealth creation, achievement of the desired economic growth, more employment creation and the guarantee of sustainable development for the Kenyan people now and in the future. Education must be given a chance and the space in wealth creation through investing in people by expanding access to schooling, targeting the most needy and providing safety nets for the working poor, those unable to work and special vulnerable and marginalized groups.

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