

REPUBLIC OF KENYA

KENYA VISION 2030

MEDIUM TERM PLAN II

EDUCATION AND TRAINING

2013-2018

Towards a Globally Competitive and Prosperous Kenya

Foreword

The development of Education and Training second Medium Term Plan is part of the road map towards the actualization of the social transformation hinged onto the social pillar of Kenya Vision 2030 which is implemented over five year medium-term rolling plans. The Second Medium Term Plan will guide the Sector prioritization, resource allocation and consensus building among stakeholders to ensure the achievement of the Vision 2030 targets.

The promulgation of the Constitution of Kenya 2010 opened up the arena for delivery of education and training in Kenya. This includes making education a social economic right. In order to realize the right to education for every citizen, the Constitution vests the responsibility for provision of education to the state. Due to the past challenges posed by centralized management of education and opportunities provided by devolution, the Education Act, TVET Act, the University Act and ST&I Act provide for the sharing of managerial responsibility between the cabinet secretary, national education board, county education board, boards of management, PTAs and student councils.

The second Medium Term Plan 2013-17 will continue addressing the challenges enumerated in the vision as well as implementation of the constitution 2030. The biggest responsibility for the sector is to be able to meet the human resource requirements for a rapidly changing and more diverse economy. The sector must therefore create an adaptable human resource base that will be constantly subjected to both re-training and technological learning that are relevant to the dynamic labour market. The other challenge is to ensure that the education provided meets high quality standards, and that its contents are relevant to the needs of the economy and society. meet international development commitments, including the Millennium Development Goals (MDGs) and Education for All (EFA).development of skills and competencies necessary for effective participation in knowledge based economy.

Funding for ST&I and related activities in Kenya has been inadequate and without effective coordination mechanisms in the face of competing demands for the national budget. The Kenya government is a signatory to the Abuja declaration, in which African Countries are committed to allocate at least 1% of their GDP to ST&I. the taskforce thus recommended at least the equivalent of 1% of GDP be mobilized every year for the entire ST&I value chain (from pre-R&D to commercialization) from the Government and other sources.

The journey to Vision 2030 still remains long and calls for utmost dedication, team work and determination. I wish to call on all stakeholders to offer their support. I am confident

that our Sector will successfully implement this plan in order to make our country globally competitive and prosperous, where every person will enjoy a high quality of life.

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Ministry of Education Science and Technology

Preface

Education and training is fundamental to the social transformation envisaged under the social pillar of the Vision 2030. In order to stay on course in the attainment of this desire, the sector has planned to improve equitable access quality education at all levels; continuously bridge the gender gap in access to education at all levels; promote science and technical education at all levels; integrate ICT into education and training; strengthen the linkage between tertiary education and industry; and deliver quality and reliable education management information to facilitate objective planning. The education and training sector will collaborate with the public and private actors to ensure that an environment of quality and desirable education and training is created to facilitate maximum exploitation of the country's potential.

As a nation, we rely on the education and training system to create a sustainable pool of highly trained human resource capital that underpins our national ambitions of being a knowledge-based economy. It is on this account that the sector must be focused on an efficient system that is able to create accessible, relevant and quality knowledge and skills that are in line with the labour markets demands. It has been demonstrated worldwide that when exposed to ICT a very young age learners begin to acquire digital skills which they increasingly use to explore and exploit the world of information and to craft that into knowledge. The sector acknowledges that ICT presents an opportunity for more student centered teaching, more self-learning and more peer teaching. The sector must therefore ensure adaptability of education and training that meets the evolving needs and times of the society. This will be a huge step towards creating a knowledge economy that is internationally competitive.

Good governance is integral to the successful implementation of the medium term plan. The sector will sustain cooperation between itself and civil society organizations; development partners the Private Sector with the wider objective of upholding the provisions of the Constitution and implementation of good governance principles in private and public domains. The restructuring of the sector management presents a favorable platform for sector wide approach to delivery of quality education and training. This sector plan thus provides a renewed commitment to social transformation and the improvement of quality education and training.

Dr. Bellio R. Kipsang
Principal Secretary
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Executive Summary

The Social Pillar in Kenya Vision 2030 aims at creating a comprehensive, equitable and just society based on democratic ideals. Under this pillar, education and training is expected to be the principle catalyst towards realization of Vision 2030. The Constitution of Kenya 2010 makes education a basic right under the Bill of Rights where basic education is guaranteed for all children and the state is obliged to make its provision possible progressively. In light of Vision 2030, other levels of education and training such as technical and vocational education will play a crucial role in transforming the country to a middle income economy.

Various strategic issues emerged during the implementation of the KESSP and the first Medium Term Plan as well as the need to align the education sector to the Constitution of Kenya 2010. These factors have necessitated the sector to review its policies, legal framework and carry out institutional reforms and draw a sector plan within which programmes and activities to enhance the quality and relevance of education have been proposed.

Chapter 1 presents an overview of the sector giving background information and setting the context in which the sector planning is being undertaken. The chapter discusses the achievements of the first medium term, challenges confronted in implementing the sector plan as well as lessons learned.

Chapter 2 discusses the legal and policy frameworks upon which education and training is anchored. The Constitution of Kenya 2010 having been promulgated in the first medium term gave the sector the task of reviewing its policies. The chapter presents an overview of the Task Force Reports and the recommendations therein. It also discusses the pieces of legislations already enacted as well as those that the sector is keen on enacting towards achieving its maximum potential.

Chapter 3 introduces the priority areas the sector will address in the second medium term. The priorities, the sector is confident will go a long way in contributing to the transformation of education and training in the country. The priority areas identified include: actualizing the right to free and compulsory basic education; enhancing quality and relevance of education; integrating ICT into teaching and learning; enhancing governance of education sector; improving quality and relevance of post basic Education; and financing Education and Training.

Chapter four presents the activities and projects that sector will implement in addressing the priority areas identified in chapter three. Some of the projects and activities include massive

infrastructural improvement across the education and training institution; Teacher recruitment to arrest the high teacher shortage in the country; procurement of laptops for primary schools; establishing and operationalizing bodies created by various Acts of Parliament; strengthening the human capacities in universities to be able to deliver quality research and training. In addition the chapter isolates the flagship projects that will be key to demonstrating the success of the plan at the end of the implementation period. The flagship projects identified include: ECDE Mainstreaming; establishment of EMIS centres in each of the 47 counties; Curriculum Review and Reform; ICT integration in education; Basic Education infrastructure which include constructing/rehabilitating 46,000 classrooms and 92,000 toilets in ECDE centres; constructing extra classes in secondary schools to ensure each school is at least three streamed; and constructing 600 new secondary schools. The infrastructure programme will also span tertiary institutions and universities where the sector will: establish 11 TVET centres of specialization in different disciplines, fully equipped with state of the art training facilities and well trained staff; establish Open TVET; upgrade 10 TTIs into National Polytechnics; and establish National Open University of Kenya.

Chapter 5 presents the implementation matrix for operationalizing the activities in the sector plan. The matrix gives the goal of each programme as well as the specific objectives under the goal. It indicates the expected outputs, performance indicators, implementing agencies, timeframe and the resource requirement for each activity/project.

Acronyms

ABET	Adult Basic Education and Training
ACE	Adult and Continuing Education
ASAL	Arid and Semi-arid Land
BOG	Board of governors
CBE	Curriculum Based Establishment
CBO	Community Based Organizations
CDF	Constituency Development Fund
CEMASTEA	Centre for Mathematics, Science and Technology Education in Africa
CHE	Commission for Higher Education
CPD	Continuous Professional development
CUE	Commission University Education
DEO	District Education Officer
EARS	Early Assessment Research System
ECD	Early Childhood Education
ECDE	Early Childhood Development Education
EFA	Education For All
EMCA	Environmental Management Coordination Act
EMIS	Education Management Information System
ERC	Education Resource Centre
ERS	Economic Recovery Strategy
FBO	Faith Based Organizations
FDSE	Free Day Secondary Education
FPE	Free Primary Education
GDP	Gross Domestic Product
ICT	Information Communication Technology
IEP	Inclusive Education Policy
IFMIS	Integrated Financial Management System
IMS	Information Management System
INSET	In-Service Education Training
KBE	Knowledge-Based Economy
KCPE	Kenya Certificate of primary Education
KCSE	Kenya Certificate of Secondary Education
KICD	Kenya Institute for Curriculum Development
KIE	Kenya Institute of Education
KISE	Kenya Education staff Institute

LATF	Local Authority Transfer Fund
MDGs	Millennium Development Goals
MEAs	Multilateral Environmental Agreements
MEO	Municipal Education Officer
MOEST	Ministry of Education Science and Technology
NACECE	National Centre for early Childhood Education
NESSP	National Education Sector Support Programme
NGOs	Non-Governmental Organizations
NQF	National Qualifications Framework
OVCs	Orphans and Vulnerable Children
PPPs	Public Private Partnerships
PTR	Pupil Teacher Ratio
QSM	Quality Standards Management
SACMEQ	Southern African Consortium for Monitoring Education Quality
SAGA	Semi-Autonomous Government Agency
STI	Science, Technology and Innovation
SWAP	Sector-Wide Approach to Planning
TIVET	Technical, Vocational Education and Training
TIVET	Technical, Industrial, Vocational and Entrepreneurship Training
TPC	Teacher Proficiency Course
TSC	Teachers Service Commission

Contents

Foreword.....	ii
Preface.....	iv
Executive Summary.....	v
Acronyms.....	1
CHAPTER ONE: REVIEW OF EDUCATION AND TRAINING	5
1.0 Introduction.....	5
1.1 Progress in Implementing the First Medium Term Plan: 2008-2012	5
1.2 Other Key Achievement During the First Medium Term Plan	17
1.3 Emerging Issues	20
1.4 Lessons Learnt and the Way Forward	28
1.5 Core Priorities for the 2 nd Medium Term Plan	29
CHAPTER TWO: POLICY LEGAL AND INSTITUTIONAL FRAMEWORK	33
2.0 Introduction.....	33
2.1 Policy Reforms	34
2.1.1 The Taskforce on Alignment of Education to the Constitution	34
2.1.2 Policy Framework for Education and Training	44
2.1.3 TVET Policy.....	47
2.1.4 University Policy.....	48
2.1.5 ST&I Policy.....	49
2.2 Legal Reforms	52
2.3 Institutional Framework.....	56
CHAPTER THREE: PROGRAMME PRIORITIES.....	59
3.0 Introduction.....	59
3.1 Priority Areas	60

3.1.1 Actualizing the right to Free and Compulsory Basic Education.....	60
3.1.2 Quality and relevance of education and Training.....	67
3.1.3 Integrating ICT into teaching and learning.....	72
3.1.4 Education Sector Governance	74
3.1.5 Post Basic Education.....	75
3.1.6 Financing Education and Training	77
CHAPTER FOUR: PROGRAMME PRIORITIES AND ACTIVITIES	80
4.0 Introduction.....	80
4.1 Actualizing the Right to Free and Compulsory Basic Education.....	80
4.1.1 ECDE Mainstreaming.....	80
4.1.2 School Health and Nutrition.....	81
4.1.3 Provision of Instructional Materials and Infrastructure.....	81
4.1.4 Affirmative Action.....	82
4.2 Enhancing Quality and Relevance of Education.....	83
4.2.1 Human Resource Development	83
4.2.2 Curriculum Review and Reform.....	83
4.2.3 Teacher Education, Recruitment and Management.....	84
4.3 Information and Communication Technology.....	85
4.4 Education Sector Governance.....	87
4.5 Post Basic Education	89
4.5.1 Technical, Vocational Education and Training.....	89
4.5.2 University Education	90
4.6 Education and Training Financing.....	91
4.7 Flagship Projects.....	92
CHAPTER FIVE: IMPLEMENTATION MATRIX.....	93

CHAPTER ONE: REVIEW OF EDUCATION AND TRAINING

1.0 Introduction

The Social Pillar in Kenya Vision 2030 aims at creating a comprehensive, equitable and just society based on democratic ideals. Under this pillar, education and training is expected to be the principle catalyst towards realization of Vision 2030. The Constitution of Kenya 2010 makes education a basic right under the Bill of Rights where basic education is guaranteed for all children and the state is obliged to make its provision possible progressively. However in light of Vision 2030, other levels of education and training such as technical and vocational education will play a crucial role in transforming the country.

Education and training is expected to take leadership in development of skills and knowledge to all Kenyans geared towards the achievement of the aspirations of Vision 2030. In order to deepen its gains, the sector under the Medium Term plan (MTP) 1:2008-2012 has been pursuing: provision of the Free Primary Education (FPE); provision of Free Day Secondary Education (FDSE) and implementation of policies outlined in the Sessional Paper No.1 of 2005 on Policy Framework for Education, Training and Research and Kenya Education Sector Support Programme (KESSP).

Certain pertinent issues emerged during the implementation of the KESSP, and the need to align the education sector to the new constitution. These necessitated the sector to review its policies, legal framework and institutional reforms. This has been done and KNEC Bill 2012, TSC Bill 2012 and Education Bill 2012 are in Parliament at various stages of the tabling process.

1.1 Progress in Implementing the First Medium Term Plan: 2008-2012

Early Childhood Development and Education (ECDE)

The first MTP aimed to integrate ECDE into basic education so as to improve quality of ECDE in all public schools, increase access, and improve sanitation and health status. This goal was informed by the fact that ECDE has always been left to community (churches,

councils etc) with little input from the government apart from policy guidelines. The learning environment at this level of education was characterised by inconducive conditions for proper learning. To help make ECDE a core business of the government in the education system, certain strategies were proposed; to increase access at this level all public schools were to start an ECDE centre or integrate the existing ones in primary schools. As at 2012, the process of providing capitation grants totalling Ksh 1.6 billion to about 19,000 public ECDE centres enrolled with 1.4 million children to support the expected changes had commenced. A scheme of service for ECDE teachers has been finalized so as to provide a framework of recruitment. Other measures undertaken before commencement of MTP 1 are development of a policy guideline on ECDE and service delivery guidelines. The mainstreaming of ECDE into basic education did not fully take place during the period due to inadequate funds. The few interventions have however led to the following situation at ECDE level of education.

The enrolment in ECDE increased from 1.72 million children (885,320 boys and 834,925 girls) in 2008 to 1.914 million children (967,544 boys and 946,678 girls) in 2009 then to 2.37 million (1,175,530 boys and 1,194,518 girls) in 2011 and a further 2.405 million (1,199,041 boys and 1,206,464 girls) in 2012. The Gross Enrolment Rate (GER) marginally increased from 59.8 percent in 2008 to 60.6 percent in 2009 then leaped to 65.6 percent in 2011 and further 66.3 percent in 2012. The NER increased from 43 percent in 2008 to 49 percent in 2009 then to 52.4 percent in 2011 and a further 53.3 percent in 2012 against the MTP target of 76.6 per cent. Overall, the MTP target for the period was not achieved. The low levels of NER are attributed to low participation level across the country, and in some of the regions children directly join primary schools without the relevant background and this tends to increase repetition and drop-out levels as a result of poor academic performance.

Primary Education

The drive in primary education during MTP 1 has been to improve access, quality, equity and reduce regional disparities. In addition, efforts to improve health and nutrition of marginalized children in primary schools. During the MTP 1, three of the five flagship projects were targeting this level of education.

a) Access to Education

Under access there has been construction and rehabilitation of existing facilities. One of the flagship projects was to support construction of additional schools in every constituency in addition to rehabilitating existing ones. For pastoralist areas where schools are missing provision of boarding schools for pastoralist children have been built. The Voucher System project which was meant to help cushion most vulnerable children especially orphans from the harsh social economic environment at the household level was never implemented. These interventions during MTP 1 have expanded access across the country as key access indicators below reflect.

The primary enrolment increased from 8.56 million (4.36 million boys and 4.2 million girls) in 2008 to 8.83 million (4.51 million boys and 4.32 million girls) in 2009 then to 9.85 million (4.75 boys and 4.62 girls) in 2011 and further to 9.97 million (5.01 boys and 4.96 girls) in 2012. The gross Enrolment Rate increased from 109.8% in 2008 to 110.0% in 2009 then to 115.0% in 2011 and further marginally to 115.8% in 2012. The Net Enrolment Rate improved from 92.5% in 2008 to 92.9% in 2009 then leaped to 95.7% in 2011 before marginally falling to 95.3% in 2012. Despite the significant national tally the country still faces regional disparities with very low enrolments in the North Eastern region.

The gender disparity has been improving in favour of girls. The Primary Gender Parity Index stood at 0.96 in 2008; 0.98 in 2009; 1.01 in 2011 and 0.99 in 2012. These figures are against the national target of 1.0.

b) Equity and Participation

To make schools cater for all children with equity, programmes targetting marginalized children have been implemented through several initiatives including the School Feeding

and Gender in Education Programmes. The School Feeding Programme promotes health and hygiene education and improves access to basic education by reducing morbidity among school children. During the period under review, the programme provided mid-day meals to approximately 1.2 million pre-primary and primary school children in 64 ASAL Districts and slums of Nairobi. The MTP target of feeding and netting 1.2 million children was therefore met.

As an affirmative action, there exists a gender in education policy which allows girls to join higher institutions with lower grades than boys. Girls are also provided with sanitary towels to enable them to participate in the learning process effectively during their menstrual cycle.

A comparison between the NER national average and regional achievements indicates that the country still faces regional disparities with very low enrolments in some regions. The NER for North Eastern Province was 40.3 per cent (41.5 per cent male, 38.9 per cent female) against an MTP NER target of 38.6 per cent for 2010. This shows that the target was achieved and this was attributed to continued implementation of FPE as well as sensitization of parents/communities.

c) Quality and Relevance

During the MTP 1 period, the government planned to recruit an additional 28,000 teachers in order to cope with the surge in enrolment at public schools. A total of 29,060 teachers were employed during the period thereby surpassing the MTP target. Additionally, the government continued to equip teachers with new skills and methodologies of teaching through INSETs. Schools have also been provided with teaching and learning materials through capitation sent directly to schools.

On average, the pupils to teacher ratio moved from 45:1 in 2008, 46:1 in 2009 then stayed at 45:1 in 2011 and 2012. The MTP target of 42.1 is a minimum average implying that with Staffing Norms implementation, the Ministry aimed at optimal teacher utilization by raising this ratio. Achievement of 45:1 in the year 2010/2011 therefore implied a better performance as the optimal target set was achieved.

The Textbook-Pupils Ratio for lower primary improved from one textbook for more than 10 pupils before 2003 to 1:2 in 2008. The ratio remained at 1:2 in 2009 and 1:1 in 2010. In upper primary TPR improved from 1:2 in 2007 to 1:1 in 2008 and 1:1 in 2009 and 2010 against the MTP target of 1:1 for both lower primary and upper primary. This shows that the MTP target for the review period was met. However, there are challenges in book storage and maintenance facing the primary schools.

Secondary Education

Secondary education is recognized as part of basic education with the aim of enhancing the citizens' access to quality and equitable education so as to achieve the Vision 2030 goals. During MTP 1, two flagship projects in the form of 560 secondary schools constructed or rehabilitated, bursaries and recruitment of additional teacher. The situation in terms of access, quality, relevance and equity is as follows.

a) Access

The FDSE provided financing of tuition and make secondary school affordable to most students. The CDF also facilitated construction of many district schools which have increased access in the rural areas.

In line with the above objective the number of secondary schools increased from a total of 6,566 secondary schools in 2008 to 6,971 in 2009 then 7,297 in 2011 and further to 8,197 in 2012. Secondary Enrolment grew from 1.34 million students (720,500 boys and 615,407 girls) in 2008 to 1.47 million students (787,944 boys and 684,690 girls) in 2009 then to 1.77 million (948,706 boys and 819,014 girls) in 2011 and further to 1.91 million (1,019,031 boys and 895,792 girls) in 2012.

The secondary GER increased from 42.5% in 2008 to 45.3% in 2009 then to 48.8% in 2011 and further marginally to 49.3% in 2012. The NER improved from 28.9% in 2008 to 35.8% in 2009 before dropping to 32.7% in 2011. In 2012 there was a slight increment of 0.4% to settle at 33%. The gender parity index improved from 0.85 in 2008 to 0.87 in 2009 before dropping to 0.86 in 2011 and then climbed again to 0.88 in 2012.

b) Quality and Relevance

During the period under review secondary teachers were employed alongside primary teachers and science teachers in-serviced at CEMASTEPA. Science equipment was provided to schools and laboratories constructed and some rehabilitated. Computers to promote E-learning were supplied to 1,950 secondary schools. The secondary education curriculum was reviewed to embrace new demands. However, it needs to be aligned to the demands of a future economy as envisaged by the constitution and Vision 2030.

c) Equity and Participation

Secondary School Bursaries

The secondary bursary scheme supports vulnerable groups including orphans, girls and children from poor families in slum areas; poverty-stricken families in high potential areas; and families in ASAL districts. During the period under review funds from the secondary bursary scheme helped selected secondary school students meet other education expenses not catered for by FDSE. During the period under review a total of Ksh. 2.7 Billion was awarded to 357,276 students in 210 constituencies.

ASAL and Pockets of Poverty Grants

These funds are tailored to augment the school projects and other needy areas in school expenditure. These grants are aimed at reducing the regional disparities in the long term. The students who would not have accessed and completed secondary education find an opportunity to participate in learning. This helps to break the cycle of poverty that afflicts the marginalized areas.

Curriculum Review and Quality

During the period under review, the teacher training curricula at both primary and secondary level were reviewed to reflect changing technological and delivery methods especially in the integration of ICT in education. The private sector and higher education institutions actively participated in curriculum review and implementation to ensure its relevance to the labour market needs.

Examination and Certification

During the period under review, KNEC continued to implement an online registration system for candidates to enhance efficiency and timeliness in its service delivery. It also established a national assessment system for monitoring learner achievements at standard 3, 5, and form II.

The KCPE examination candidates increased from 695,710 pupils (367,356 boys and 328,354 girls) in 2008 to 727,100 (381,600 boys and 345,500 girls) in 2009 then to 776,214 (400,814 boys and 375,400 girls) in 2011 and further increased to 811,930 (415,620 boys and 396,310 girls) in 2012. During the same period the national mean score increased from 51.1% in 2008 to 53.84% in 2009. The NMS marginally declined to 53.02% in 2011 before improving to 55.95% in 2012.

The KCSE candidature increased from 301,400 students (163,369 boys and 138,031 girls) in 2008 to 333,816 (182,475 boys and 151,341 girls) in 2009 then to 410,586 (226,497 boys and 182,089 girls) in 2011 and further to 432,443 students (238,819 boys and 193,624 girls) in 2012.

Adult Basic Education

The Medium Term Plan for Kenya's Vision 2030 recognizes the need to have literate citizens and sets a target of increasing the adult literacy rate from the 61.5 per cent in 20-- to 80 per cent by 2012.

a) Access to the illiterate Adults Grants provided for renovation and equipping of 382 Adult Basic Education centres to enable them create and sustain a literate environment. The enrolment increased from approximately 215,862 adult learners in 2008 to 241,685 in 2009 then to 300,000 in 2011 and further to 320,000 adult learners in 2012.

b) Quality and Relevance of Education: During the period under review, 880 teachers were recruited to support Adult Basic education, however the literacy levels for the period under review could not be established due to lack of data.

Non Formal Education Programme

The majority of non-formal schools are in urban slums. By giving them capitation grants like public schools, the government has ensured they find access and participation in the learning process.

Access: The government has been giving capitation grants to 474 non formal, however this was below the MTP target of 700 NFSs.

Quality and Relevance: Over the MTP period, provision of grants to NFSS for teaching and learning materials continued.

Equity: There are still more NFSs not receiving grants because they have not registered, which is a pre-requisite for qualification for the grant. The validation and verification of new NFE schools is on-going.

Technical/Vocational Education and Training

The TVET currently includes two (2) National Polytechnics, one (1) Technical Teachers College, twenty-six (26) Technical Training Institutes (TTIs) and seventeen (17) Institutes of Technology (ITs). In addition there are 706 private TVET institutions. The number of registered institutions increased from 346 in 2007, to 813 institutions of which 493 were fully registered by 2012. This increase in the number of institutions improved access and equity in the provision of TVET training. Under the economic stimulus package a total of KShs 2.1 billion was utilized for the construction of new laboratories and workshops in 48 institutions.

a) Access to TVETs

In the FY 2010/2011, 7,579 students benefited from the bursary scheme which was meant to drive access and retention in TVET programmes. During the year, student enrolment stood at 79,114 up from 59,835 in the previous year an increment of 32.22 percent. Since inception (FY 2008/2009) 20,000 students have benefitted from the bursary award. The management of the TVET bursary has been moved to Higher Education Loans Board (HELB).

The sector initiated the construction of thirteen (13) new public Technical and Vocational Education and Training (TVET) institutions across the country to expand access to TVET. In addition, in order to provide quality and relevant skilled human resources in the middle level cadre, the Ministry established a Centre of Excellence Programme where Technical Training Institutions were provided with modern equipment as well as the upgrading of the teaching staff with a view to producing the best graduates for the market.

b) Quality and Relevance

A National Technology Exhibition was organized following Regional Technology Exhibitions organized at four different regional venues for the purpose of spurring interest in Science, Engineering and Technology courses in TVET institutions. The Exhibitions involved robotics contests and TVET fairs and were held for the purposes of promoting science and technology by attracting more students to TVET programmes. In addition, Community outreach programme aimed at engaging TVET institutions with the communities around them to inculcate Science, Technology and Innovation culture was implemented in eight institutions one from each province.

A draft ICT lecturer competency framework and e-resource centre were developed with the aim of expanding open and distance learning programmes, develop a digital evaluation framework and integrate element of digital literacy in all curricula for TVET. A total of 8 TVET institutions started offering Cisco Networking Academy Programmes meant to provide trainees with industry certification in skills to repair and maintain computers. As a way of enhancing greater application of ICTs in TVET, the ministry is developing a strategy for integration of ICT in TVET and is connecting all TVET institutions to the internet. The ministry also plans to start a student laptop programme.

The Directorate of Technical Accreditation and Quality Assurance (DTAQA) was established in May, 2008 to discharge the quality assurance and standards functions. These functions have enabled the Ministry coordinate and develop technical training through facilitation and supervision of Technical Vocational and Entrepreneurship Training (TVET) institutions,

their registration and approval of programmes. The TVET Accreditation Handbook for assessment of TVET institutions was reviewed during the MPT 1 period.

In the financial Year 2010/2011 The Ministry developed a TVET Curriculum Development Standard that provides standards for any curricula developed to make it relevant to the market and graduating students will smoothly be absorbed in the world of work immediately after graduation.

University and Higher Education

a) Access to University Education

The enactment of the University Education Act, 2012 streamlined governance in the University sector and fast-tracked the establishment of Universities. During the first MTP the sector embarked on the expansion of University facilities to ensure Kenyans access university education and provide the much needed skilled manpower for the country. Kenya now has 21 public universities, 9 Public Constituent Universities, 14 Chartered Private Universities, 4 Private University Constituent Colleges, and 12 Private Universities with Letters of Interim Authority. This led to the steady rise in Gross Enrolment in university education in both public and private universities to stand at 341,558 in 2012 from only 147,991 in 2008.

The increase of enrolment in higher learning institutions has been accelerated by the introduction of Free Day Secondary Education (FDSE) programmes in 2008. This has impacted on the enrolment in the university sector.

To support the growth in the university sector in 2012/2013, the Higher Education Loans Board disbursed a total of Kshs. 5.1 billion to 106,136 Kenyan students pursuing undergraduate and post graduate university education in Kenya and in universities within the East African Community. HELB is seeking increase the funding to KShs 15 Billion per year due to the increased number of Universities established under the Universities Act 2012.

Another key achievement in the University sector is the establishment of the Pan African University of Science and Technology hosted at the Jomo Kenyatta University of Agriculture and Technology.

The Open University of Kenya: The University is expected to admit the first batch of 10,000 students by 2014. For a start, it intends to offer programmes leading to award of certificates, Diplomas and Degrees in the School of Business, School of Pure and Applied Sciences, School of Education, School of Humanities and Social Sciences and School of Law. The programmes will be delivered through e-learning and print media mode. The university will have its headquarters in Nairobi. Space will be rented at Multimedia University College. It shall have ten (10) regional centers at first and each centre will serve a cluster of counties and later roll out to all the 47 counties.

Other achievements under University Education:

- (i) Reviewed the enrolment of female students into every university academic programme to ensure 30% female student enrolment. This is in tandem with the requirements of the COK2010 on gender equity.
- (ii) Introduced a Quota Admission System (QAS) which guarantees equitable distribution of places on the basis of regional and/or socio-economical aspects. The QAS also gives affirmative action to female, at least thirty percent of who should be female.
- (iii) Increased the postgraduate student enrolment to at least two per cent (10%) at the undergraduate enrolment through government grants and incentives to universities.
- (iv) Accelerated university intake thereby clearing the backlog that has been seeing students admitted to the university two years after sitting for their KCSE examinations.
- (v) Delinked admissions from accommodation capacity thus expanding university intakes. Some universities have partnered with private developers to develop and manage accommodation in the vicinity of universities.
- (vi) Extended public universities accessibility by opening other campuses and centres closer to their customers and have entered into agreements with both public and private institutions to offer university education. Their presence is now felt in all major urban areas and even some rural areas though distribution is still a challenge.
- (vii) Opened up of university constituent colleges with strong bias on science, technology and innovation.

Progress in Implementing the Flagship Projects

The education sector had five flagship projects whose progress has been impressive. The individual progress is illustrated in this section.

Construction and fully equipping 560 secondary schools and expansion and rehabilitation of existing ones

During the period under review, the target was to build/rehabilitate/expand facilities equivalent to 560 new schools. Under the economic stimulus initiative, the Ministry of Education disbursed a total of Kshs.6 billion to 200 secondary schools (Ksh.30million for each). Construction/Rehabilitation works aimed at transforming the 200 schools into centres of excellence is still ongoing. Additionally, under the infrastructure programme, funds were also disbursed to 371 schools for rehabilitation/expansion and work is ongoing. The MTP target of 560 schools was met and surpassed.

Recruitment of 28,000 Additional Teachers

The MTP target for the sector was to recruit 28,000 additional teachers during the period 2008 to 2012, out of which 21,400 are for primary schools and 6,600 for post primary institutions. The MTP target for 2010/2011 was to recruit 6,000 teachers. Overall, the Ministry recruited 18,020 teachers who are permanent and pensionable.

Establishment of a Computer Supply Programme

In order to achieve the Vision 2030 goal of “establishing a computer supply programme that will equip students with modern ICT skills”, the sector continued pursuing a programme targeting 20, 229 public primary schools, 4,000 public secondary schools, 20 PTTCs, 21 diploma colleges, 10 Model e-learning centres for Adult and Continuing Education (ACE) and the 7 public universities.

In 2010/2011, the coordination office was strengthened to help coordinate and harmonize ICT in education issues particularly integration of ICT in teaching and learning was successfully undertaken. In regard to ICT champions, a total of 150 ICT champions were trained against an MTP target of 30 champions.

To improve ICT and data usage under education, the UNESCO Institute of Statistics provided StatEduc2 software which was customized towards strengthening data management at the headquarters and districts.

Under the ESP initiative, a total of 1,500 secondary schools received computers against a target of 1,050 secondary schools. MTP target of equipping 360 secondary schools with a computer laboratory each was achieved. In addition, under the Multimedia project (Televic) establishment of the National ICT Innovation and Integration Centre (NIC) was undertaken during the period under review)

i) Construction and Rehabilitation of At Least One Boarding Primary Schools in Each Constituency in ASAL Districts

During the period under review, there was continued implementation and monitoring of the construction/rehabilitation of Low Cost Boarding (LCB) primary schools in each constituency in the ASAL districts. This was undertaken through the normal primary school infrastructure programme where primary schools in ASAL areas are given grants on an annual basis to rehabilitate existing infrastructure. A total of Ksh.544,122,000 was disbursed to 37 ASAL districts for construction/rehabilitation of primary schools. Under the economic stimulus initiative, construction/rehabilitation works continued in the 420 primary schools two in each Constituency.

ii) Establishment of a Voucher System Programme in Five Poorest Districts

In order to ensure equity in access to education, the Government is enhancing financial assistance targeting vulnerable groups to supplement the already existing initiatives including the school feeding and nutrition programme, bursary, free primary education and free secondary education. This will be done by rolling out the voucher system for the learners from poor households and children rescued from early marriages and child abuse, consistent with the voucher systems being implemented by the Ministry of Health and Home Affairs. During the period under review, the MTP target was to pilot the programme in Turkana Central district. This has not achieved due to lack of funds. However, preparatory work has been carried out including the preparation of a concept paper and a tool to be used for identification of beneficiaries.

1.2 Other Key Achievement During the First Medium Term Plan

i) Policy and Institutional Reforms

The policy which currently guides operations of the Government of Kenya in the education sector is the Sessional Paper No. 1 of 2005 on Education, Training and Research. The implementation has been successful as is measured by the provision of quality and equitable education to all Kenyans. The finalization of the University, TVET and ST&I policies are among some of the achievements realized in the policy and institutional reforms in the sector:

- a) The finalization of the Sessional Paper in Education titled *Aligning Education and Training to the Constitution of Kenya (2010)* and *Kenya Vision 2030 (May, 2012)* has presented guidance on the areas of reforms and institutional strengthening. The draft policy proposes reforms that cut across the entire education sector and include policies and strategies for addressing the Institutional reforms, Management and Financing of Education, the Curriculum, Teacher Education, Teacher Development and Management, and strategies for bringing digital technology within the reach of every Kenyan child.
- b) The formulation of the sessional paper on Science, Technology and Innovation that aims at providing the national policy framework to acquire, develop and promote science, technology and innovation for national transformation to a knowledge economy. It aims to mainstream application of science, technology and innovation in all sectors and processes of the economy to ensure that Kenyans benefit from acquisition and utilization of available capacities and capabilities to achieve the objectives of Vision 2030.

ii) Education and Training Legal Framework

The Constitution of Kenya, (2010) provides for a number of education related provisions embodied in the Bill of Rights. More particularly, the constitution makes the following key provisions as regards education: It guarantees the Right to Education for everyone under Article 43; every child has a right to Free and Compulsory Basic Education under Article 53 (b). Children are to be protected from abuse, inhumane treatment and violence under Article 53(1) (d). Youth are entitled to government measures which include affirmative

action to ensure that they have access to relevant education and training, access to employ and protection from harmful cultural practices and exploitation under Article 55.

The two ministries and TSC have completed legal reforms in the basic and higher education, Science and technology sector. These include the basic education Act, TSC Act, KNEC Act and KICD Bill.

a) **The Basic Education Act**

The draft Basic Education Act proposes to reform the education sector so as to make it compliant with the constitution. It proposes to reform management of education and make it functionally relevant to the provisions of the constitution.

b) **Teachers Service Commission Act 2012**

The Teachers Service Commission is mandated by the constitution to carry out teacher management functions. Through the existing staffing norms, the TSC ensures equitable distribution and optimal utilization of teachers in the country. The new constitution under article 53(1)(b) provides that education is a basic human right. This implies that the Government has obligation to provide the necessary infrastructure and policy framework for the citizens to enjoy this right. The implementation of programmes to ensure that the citizens enjoy this right is likely to increase enrolments and hence the teacher requirements at all levels.

c) **The Science, Technology and Innovation Act (insert memorandum of objects and reasons)**

d) **The University, TVET and Kenya Qualifications Framework Bill:**

Three Bills to support the implementation of the provisions of the Sessional Paper were drafted are due to be passed by parliament. The Bills provide a legal framework which when enacted will entrench the policy provisions into law. These are the University Bill 2012, the TVET bill 2012 and the Science Technology and Innovation bill 2012.

iii) Other Programmes

- a) Free Day Secondary Education
- b) Economic Stimulus Programme

- c) The creation of additional national schools to accommodate learners from all parts of the country has ensured that there is better interaction by children across regional and ethnic backgrounds

1.3 Emerging Issues

Constitutional Reforms

The Constitution of Kenya (2010) has provisions for children's right to free and compulsory basic (ECDE, primary and secondary) education, including quality services, and to access educational institutions and facilities for all persons including those with disabilities. According to the Constitution, there should be adequate participation and representation of minorities and marginalized groups in all spheres of life. This marks a distinct shift to a Rights Based agenda from the hitherto supply side policy and, as such, has fundamental importance to the way in which education services are provided and to the structure of the education system. The aim of the Government, therefore, will be to create an education and training environment that provides free and compulsory basic (ECDE, primary and secondary) education, equips learners with values, knowledge, skills and competencies, whilst enabling all citizens to develop to their full capacity, live and work in dignity, enhance the quality of their lives, and make informed personal, social and political decisions as citizens of the Republic.

Policy and legal framework

Curriculum Review and evaluation: Due to dynamism of the world of work, it is important to continuously review the curriculum to retain its relevance. However, the current primary and secondary school curriculum was reviewed in 2002, followed in 2004 by a review of the primary teacher education curriculum and the diploma teacher education curriculum in 2007. More recently in 2008, Kenya Vision 2030 established clear priorities for the curriculum. The Constitution of Kenya (2010) and on-going changes in the broader economic environment following the signing of the East African protocol impact directly on the shape and priorities of the curriculum. Youth polytechnic curriculum was developed in 2007.

Teachers Development and Recruitment

Implementation of the Constitution: The constitution has imposed responsibility to the commission which requires realignment of its programmes to the demands of the constitution.

Devolution/decentralization of functions: The constitution and the TSC Act requires that TSC Devolves its functions of sector activities to the counties this has increased both recurrent and capital expenditures.

Increased Agitation by trade unions for higher wages: The expanded democratic space and increased awareness has led to Agitation by trade unions on salary increases which have led to budget cuts affecting implementation of other priority projects/programmes.

Acute teacher shortage: The expansion of schools and implementation of the FPE and FSE and CDF programmes have contributed to increase in enrolments hence raised the demand for teachers. The new constitution requires that TSC handle all the issues of teacher management.

Institutional framework

- **Governance and Accountability in the sector and at learning institutions**

Governance is the process of providing policy leadership, oversight and strategic guidance on the management of resources and the delivery of services as well as the formulation and implementation of sound policies and regulations. The Constitution of Kenya (2010) has given the issue of governance in the provision of public services considerable significance. A major challenge of the present structures is inefficiency in the management of resources and utilization. Funds disbursed directly to institutions and those managed by MoE offices are at times not properly utilized for intended purposes. Other challenges include weak accountability, inefficient monitoring and tracking systems coupled with an over-centralized, hierarchical and bureaucratic decision-making system which encourages mismanagement.

- **Data Management and Planning:**

As observed in the Sessional Paper No. 1 of 2005, Education Planning and Management would be more effective were an efficient Education Management Information System (EMIS) available; one which provides a smooth flow of information to policy makers, planners, managers and other stakeholders at all levels of education and training. Currently, information and communication to and from headquarters to the Counties, district and school levels is largely through letters and circulars sent by post or by faxes thus causing delays in decision making and follow-up actions. The education ministries lack an effective EMIS while electronic networking is very limited.

Effective education management and planning using e-systems will need to be enhanced so that county and national headquarters are linked electronically. This shall be accompanied by a programme of capacity building for officers in relevant data management systems.

- **ICT:** The Government recognizes that an ICT literate workforce is the foundation on which Kenya can acquire the status of a knowledge economy by the year 2030. Against this background, the Government shall make education the natural platform for equipping the nation with ICT skills in order to create dynamic and sustainable economic growth.

The education sector faces the challenge of inadequate ICT facilities, high cost of development of interactive e-learning content, ICT not embraced as medium of instruction and management tool, inadequate capacity for teachers, absence of ICT Curriculum at ECD and primary levels, dynamic nature of ICT technology, inadequate capacity for maintaining ICT equipment, inadequate use of ICT by the Ministry of Education, and inadequate capacity to monitor utilization of ICT in schools. A key issue affecting ICT provision especially in rural areas is the limited access to electricity and where this exists, frequent power disruptions. Further, it is very expensive and high costs of Internet provision and

other costs associated with ICT; equipment, infrastructure and support costs, present severe obstacles to rolling out a national ICT programme in the short to medium term. Resourcing and funding a national ICT programme is going to require considerable financial resources if it is to be prioritized.

Global and Regional Obligations

The main issues facing the education sector have been challenges of access, equity, quality, relevance and efficiency in the management of educational resources. Since 2003, the Ministry of Education has embarked on a series of reforms geared towards attaining the education related Millennium Development Goals (MDGs) and Education for All (EFA). However, although the country is on track towards attaining the access targets at national level, there are regional inequalities which will constrain the country from attaining the EFA, MDGs and the Kenya Vision 2030 goals. In general, education attainment levels are particularly low in disadvantaged areas, in Arid and Semi-Arid Lands (ASALs) and urban slums. There are specific challenges related to specific levels of the education system.

Public Private Partnerships

In implementing MTP 2 strong partnerships need to be promoted with all stakeholders even though the responsibility of providing accessible basic education remains a government obligation. Partnerships will help increase commitment in resourcing the sector, ownership and sustainability of the anticipated changes/results of the plan. Key stakeholders may include but not limited to the following groups

- Development partners
- CSOs
- Trade Unions
- Faith based Organizations
- Parents and Guardians

System or Paths of Education

- **National Qualification framework: Assessment and Examinations**

The current summative assessment at the end of primary cycle does not adequately measure learners' abilities while school based assessment is not standardized. In addition, there has been widespread malpractice in examinations. Assessment is mainly used as a means of determining who can move to higher education. In essence, the current system of summative assessment at the end of the various cycles together with the limited availability of student places at secondary and higher education level dictates the teaching/learning process towards examinations as opposed to learning. Assessment must inform teaching and learning processes that are in tandem with Vision 2030 and to enhance learner achievement, skills and competences.

- **Non Formal Education**

Non Formal Education (NFE) plays a critical role in increasing access to basic education especially in informal settlements and marginalized areas. These regions have low participation rates in formal primary education schools. In most instances Non Formal Education Centres (NFECs) follow a formal curriculum, although greater flexibility exists with regards standards of learning facilities and the wearing of uniforms. Currently there are 355 registered Non- Formal Education Institutions in the country with the majority in the Nairobi region.

- **Adult, Continuing and Non-Formal Education:**

The Government recognizes the important role played by Adult and Continuing Education (ACE) as a vehicle for transformation and empowerment of individuals. ACE and NFE offer opportunities for those outside the formal school system to benefit from education. For this reason, ACE and NFE programmes are consciously designed to meet specific learning needs.

Challenges that have affected Adult and Continuing Education programmes over the years include inadequately trained literacy and adult education teachers, a high turnover of

staff and volunteer teachers, limited resource allocations and inappropriate infrastructure, lack of capitation grants for instructional materials, school going children attending adult classes, gender imbalance, negative attitudes and perceptions towards adult learning, inadequate teachers and learning centres, poor definition of literacy . Although the Government established the Directorate of Adult and Continuing Education to coordinate the relevant programmes, it has not been adequately resourced. As a result access to ACE and NFE programmes are low whilst gender disparities are high. ACE and NFE is affected by a negative image. The lack of teaching and learning materials, the application of appropriate quality assurance mechanisms, and without co-ordinated service delivery, leaves the sub-sector in need of major reform and resourcing. A further issue concerns the transition of adult learners from primary to secondary education and the appropriateness of the curriculum.

- **Special Needs Education**

The emphasis on academic performance and examinations creates an unfavorable learning environment for children with special needs and disabilities and even moderate learning difficulties. This poses a challenge to the integration and inclusion of children with such disabilities in regular schools.

The absence of reliable data on children with special needs across all levels of education, constrains effective special education service delivery and planning. Special needs education requires appropriate adaptations to curricula, teaching methods, educational resources, medium of communication and the learning environment in order to cater for individual differences in learning.

Provision of educational services has often been skewed towards four traditional categories - hearing impairment, visual impairment, mental retardation and physical handicap leaving out all other areas. Areas left out include learners with Autism, Gifted and Talented, Emotional and Behavioral Difficulties and specific learning disabilities. More recently provision has been extended to such children in regular schools through the policy of inclusivity.

The main challenges relating to access and equity in the provision of education and training to children with special needs include; cultural prejudice and attitude, the reluctance to implement guidelines on the implementation of the SNE policy and inclusive education, inadequate data on the number of children with special needs, and inadequate tools and skills for assessing and identifying learners with special needs, inadequate funding, inadequate facilities and teachers.

- **Curriculum Review**

Due to dynamism of the world of work, it is important to continuously review the curriculum to retain its relevance. However, the current primary and secondary school curriculum was reviewed in 2002, followed later in 2004 by a review of the primary teacher education curriculum and the diploma teacher education curriculum in 2007. More recently in 2008, Kenya Vision 2030 established clear priorities for the curriculum, whilst the Constitution of Kenya (2010) and on-going changes in the broader economic environment following the signing of the East African protocol impact directly on the shape and priorities of the curriculum.

1.6 Challenges in the Implementation of the First Medium Term Plan

- i) Inadequate funding of research remains a big challenge. Funding for health research remains donor-driven, fragmented, and uncoordinated, and priority setting at both the national and international level remains bleak
- ii) Inadequate alignment of the planning of human resource to development needs mainly due to lack of reliable and timely data on the demands of the labour market. This is aggravated by the absence of a skills inventory that would indicate the distribution of skills and industry trends necessary for planning the country's future training programmes
- iii) Limited linkages and collaboration between education and training institutions, on one hand, and industry, on the other hand. This is worsened by the lack of a framework for industrial attachment and apprenticeship system
- iv) Mismatch between the skills possessed by the job seekers and those required by industry, which leads to under-utilization of the existing human resources capacity

- v) Uncoordinated and fragmented Innovation System where synergies and networking among Government, Research and Training Institutions, Industry, Financial Sector and Professional Groups is nonexistent
- vi) Poor state of infrastructure and equipment for research and higher education and training
- vii) There has been no national research agenda to guide the researchers. Each research institute and university has developed their own research programmes without regard to what the others were doing
- viii) The structure and mix of products from the local industry has not stimulated innovation. Most industries are engaged in retailing of other companies products hence the demand for RDI has been minimal
- ix) Inadequate scientific expertise in the country
- x) Lack of advocacy for ST&I at high political and policy levels
- xi) Low science culture among the population
- xii) Over reliance on the use of foreign expertise to the neglect of the use and development of local expertise
- xiii) Weak mechanisms for implementation, evaluation and review
- xiv) Low survival rate at secondary level
- xv) High and rising numbers of out of school primary school children
- xvi) Falling learning outcomes
- xvii) Inadequate infrastructure
- xviii) Disconnect between the MOE and schools
- xix) Failed quality assurance services
- xx) Crippling organizational culture at MOE and schools Communities withdrawal from school growth activities
- xxi) Absence of Education Planning
- xxii) Cancerous Corruption and lack of accountability
- xxiii) Limited financial resources
- xxiv) High cost of education to parents

xxv) Teacher absenteeism

1.4 Lessons Learnt and the Way Forward

Basic Education

- Governance and accountability plays a crucial role in programme success
- The partnerships with development partners may not last throughout the plan period
- Not all needs of children can be funded through official receipts from treasury
- The subsidizing secondary education on tuition may not necessary reduce the user charges at secondary schools and cost of schooling
- Private sector will play a crucial role in ensuring access to education for all children

TVET and Higher Education

- The quality offered in TVET needs to be regulated and supervised
- There is the danger of losing all TVET institutions to universities
- There are large capacity gaps in TVET

Science Technology

- There is need to re-structure and rationalize and equip the existing ST&I and R&D institutions to make them more effective in addressing national priority
- Adequate funding and sufficient capacities should be provided to facilitate full implementation of the proposed policies and legal framework in the HEST sector
- There is need to inbuilt a coordination and implementation framework and clear work plans to avoid duplication and overlaps in the 2nd MTP. This includes institutional and legal framework, and clear M&E framework, database and dissemination policy and intellectual properties.
- There is need to be selective and focused on projects and specify the costing of these projects. These were identified as some of challenges in the first MTP. It was also noted that there was need to synchronize the MTEF budget process with the MTP

- Commercialization of research findings was an important element of ST&I that should be given critical attention
- There is need to strengthen the role of PPPs in provision of University and Technical Education and Training and research activities.
- There is need for provision of the required capacities – human, financial and infrastructural – to facilitate carrying out of the planned policies, strategies and programmes within the sector.
- The necessity of multi-sectoral and multi-institutional collaboration and of systematic and formal structures to coordinate information flows.
- There is urgent need to re-align the research agenda with national development goals as a strategy for attracting more funding for ST&I
- Entrench product oriented multi-disciplinary approach to R&D
- Establish institutions dedicated to developing key industries that will see the country attain NIC status
- Strengthen governance and management of the ST&I sector and institutions to make them more efficient and effective

1.5 Core Priorities for the 2nd Medium Term Plan

Curriculum Reform:

The National Goals of Education embodied in Vision 2030 focus on enlarging learners' knowledge, experiences and imaginative understanding as well as developing an awareness of moral values and capacity for life-long learning. At the heart of this vision is a curriculum which will provide knowledge, skills, competencies and values to enable learners to move seamlessly from the education system into the world of work, with further academic, technical and vocational education adding value to what has been acquired through the education system.

Data Management:

As observed in the Sessional Paper No. 1 of 2005, Education Planning and Management would be more effective were an efficient Education Management Information System (EMIS) available; one which provides a smooth flow of information to policy makers, planners, managers and other stakeholders at all levels of education and training. Currently, information and communication to and from headquarters to the Counties, district and school levels is largely through letters and circulars sent by post or by faxes thus causing delays in decision making and follow-up actions. The education ministries lack an effective EMIS while electronic networking is very limited.

Effective education management and planning using e-systems will need to be enhanced so that county and national headquarters are linked electronically. This shall be accompanied by a programme of capacity building for officers in relevant data management systems.

Information and Communication Technology (ICT) Integration:

The Government recognizes that an ICT literate workforce is the foundation on which Kenya can acquire the status of a knowledge economy by the year 2030. Against this background, the Government shall make education the natural platform for equipping the nation with ICT skills in order to create dynamic and sustainable economic growth. To this end, the Ministry has continued to supply ICT equipment, content and training of teachers on ICT.

ICT in the education sector can broadly be categorized in two ways:

- (a) **E-Government** which aims at mainstreaming ICT in all government operations and service delivery such as Education Management Information Systems (EMIS) and Educational Financial Management and Information Systems (EFMIS). These aim at facilitating education managers and administrators with accurate and timely data for better and informed decision-making and financial management.
- (b) Interactive e-learning which aims at mainstreaming ICT as a tool for teaching and learning.

The Sector shall collaborate with relevant ministries to ensure that all learning institutions, especially primary and secondary schools have access to electricity, are connected to the worldwide web and provided with ICT equipment by 2020.

The sector shall also integrate ICT into its own financial and information management systems across the education sector.

Institutional Reorganization:

Governance is the process of providing policy leadership, oversight and strategic guidance on the management of resources and the delivery of services as well as the formulation and implementation of sound policies and regulations. The Constitution of Kenya (2010) has given the issue of governance in the provision of public services considerable significance.

To implement the above policies the Government shall:

- (i) Develop an education sector strategy with short, medium and long-term objectives to direct the development of education.
- (ii) Rationalize Headquarters and county level staffing.
- (iii) Establish the position of Director General of Education (DGE) responsible for the implementation of education across the sector.
- (iv) Rationalize and refocus the Semi-Autonomous Governments Agencies (SAGAs) responsible for the development and management of Education and Training.
- (v) Establish County Education Boards (CEB).
- (vi) Define the roles and responsibilities, functions and membership of County Education Board (CEB).
- (vii) Establish the post of County Directors of Education (CDEs).
- (viii) Recognize and strengthen the role of Parents' Teachers' Associations (PTA), teacher professional bodies such as the Kenya Heads Association in the Education Act.
- (ix) Establish and strengthen the Education Office at the county and sub – county levels.
- (x) Establish a Board of Management (BoM) and Parents' Teachers' Association (PTA) at institutional level.
- (xi) Establish Governing Councils for TTCs institutions.

- (xii) Establish and strengthen Student Councils (SCs) for educational institutions with effective representation.
- (xiii) Develop codes of conduct and regulations for BoMs, PTAs, CEBs and SCs and Sponsors and establish clear roles and responsibilities.
- (xiv) Institutionalize financial tracking and auditing in all learning institutions at county level including management of instructional materials.
- (xv) Develop regulations which hold management bodies individually and collectively liable for any loss, misuse or embezzlement of funds under their dockets.
- (xvi) Hold all officers in the Department of Education personally liable for any loss, misuse or embezzlement of funds. Create guidelines, sanctions and penalties for officers who give false information or fail to participate in the accounting process.
- (xvii) Strengthen both the finance and internal audit unit and systems.
- (xviii) Require Counties to employ relevant non- teaching and support staff for basic education institutions.
- (xix) Create schemes of service for non- teaching and support staff.
- (xx) Institutionalize the Education Management Information Systems within the MoE and County Offices.

CHAPTER TWO: POLICY LEGAL AND INSTITUTIONAL FRAMEWORK

2.0 Introduction

Kenya has made great strides in education and training policy development since 1963 when it gained independence. Education and Training sector is governed by policies contained in the sessional paper no 1 of 2005 on education training and research. Kenya implements vision 2030 through five year medium term plans. The first medium term plan 2008-12 provided for the promulgation of the constitution in 2010.

The second medium term plan 2013-17 will continue addressing the challenges enumerated in the vision as well as implementation of the constitution 2030. The vision identifies education as the vehicle to transform Kenya into a globally competitive economy. The vision identifies five challenges facing education. The first immediate challenge facing the sector in Kenya's transformation to 2030 is how to meet the human resource requirements for a rapidly changing and more diverse economy. The next challenge is to ensure that the education provided meets high quality standards, and that its contents are relevant to the needs of the economy and society.

The third challenge is to move rapidly in raising the standards of the regions that lag behind in enrolment to bring them to par with other areas. This is another way of reinstating the goal of universal school enrolment to which Kenya is committed. A fourth challenge lies in improving the overall transition rates, particularly from secondary to tertiary levels. The fifth, and perhaps the most daunting challenge, is to create a cohesive society imbued with a culture of hard work and efficiency and one that values transparency and accountability, respects the rule of law, and is concerned about the environment.

The promulgation of the new constitution 2010 has serious implication to education and training delivery in Kenya. This includes making education a social economic right. In order to realize the right to education for every citizen, the constitution vests the responsibility for provision of education to the state. Due to the past challenges posed by centralized management of education and opportunities provided by devolution, the Education Act 2012, TVET bill and the University bill and ST&I bill provides for the sharing of managerial

responsibility between the cabinet secretary, national education board, county education board, board of management PTAs and student councils.

The management and delivery of education in Kenya is implemented through various government ministries, departments and agencies as well FBOs, NGOs and private sector agencies. Policy recommendation has been made to radically reform the institutional arrangements for delivery. The reforms include a department responsible on education The Teachers Service commission Act was enacted in May 2012 while the Kenya National Examinations Council Act was enacted in October 2012 . The following five bills are at different stages of approval by parliament towards enactment: the basic education bill; the TVET bill, the University bill; the ST&I bill and the KICD bill.

In order to assure quality and good governance, the new legal framework has proposed several institutions. These institutions include, The National Education Board, the Education Sector Quality Assurance Commission (ESQAC), TVETA, Commission on University Education, the County Education Boards, Boards of Management, Parent Teachers Associations and Student Councils entrenched in the Acts.

2.1 Policy Reforms

Following the promulgation of the constitution in 2010 two Task Forces were formed in 2011 to realign the Education science, technology innovation and Training with the Constitution of Kenya and the Vision 2030.

2.1.1 The Taskforce on Alignment of Education to the Constitution

The Prof. Odhiambo led Task Force prepared a report entitled “Towards a Globally Competitive Quality Education for Sustainable Development” The report contained the following sets of policy recommendations discussed below.

1) Structure of Education

The Task Force noted that the current system of education, curriculum and assessment does not include Early Childhood Development and Education. In addition, the quality of education is not clearly spelt out so that the curriculum delivery can focus on development of specific expected competences to be assessed. In view of this, the Task Force

recommended a more flexible and comprehensive structure for Kenya's Education System – 2,6,6,3 The system provided for identification and nurturing of students with special needs and talents.

2) Curriculum and Assessment

Aligning the curriculum to address the aspirations of the Constitution, Vision 2030 and the East African Community treaty is a priority. The content for basic education should therefore be designed with a view of equipping the learners with relevant knowledge that emphasizes on technology, innovation and entrepreneurship (Vision 2030), the development of their full capacities, living and working in dignity, enhancing the quality of their lives, making informed decisions and continuing with learning as a lifelong engagement. The Task Force recommended a major reform of the curriculum.

The Task Force also recommended that KNEC is renamed the Kenya Educational Assessment Council (KEAC) and strengthened to address all matters related to management and administration of assessments in the country.

3) Access, Relevance, Equity and Quality Education

Access, equity, quality and relevance are fundamental characteristics that define and drive systems of education and training. In the design and implementation of education and training systems, governments worldwide pay special attention to the four characteristics. Although the Kenya Government has vigorously expanded access to quality and relevant system of education and training which also offers equal opportunity to all, there are still many challenges. The Task Force recommended the following:

- (a) Expand access to education at all levels.
- (b) Undertake major curriculum reviews.
- (c) Abolish all school levies which discriminate against poor households.
- (d) Review capitation grants to be in line with inflationary trends.
- (e) Establish a National Council for Nomadic Education in Kenya (NACONEK).

4) Standards and Quality Assurance

Whilst enrolment rates at primary and secondary levels have increased, learning achievements are unsatisfactory. The application of standards and quality assurance measures are not comprehensive enough. Minimum quality standards are not achieved as schools are not regularly inspected and quality assured and therefore teachers and school management in general are not held to account for the declining educational achievements in the country.

The Task Force recommended that:

- (a) A semi-autonomous Education Standards and Quality Assurance Commission (ESQAC) be established and reporting to the Cabinet Secretary
- (b) The Commission for Higher Education (CHE) assumes responsibility for Standards and Quality Assurance across all universities and other institutions of higher learning.

5) National Accreditation and Assessment System

The Task Force recommended that:

- (a) The National Assessment Centre be adequately funded to facilitate effective administration of necessary studies and learning achievement tracking
- (b) The National Assessment Centre needs to be institutionalized, aligned with the new structure of education and capacitated to manage and administer National Summative Assessment for each cycle.
- (c) A review of the KNEC Act and other related Acts to address current and future challenges in examination administration and other issues regarding governance of examinations including the marking exercise.
- (d) Assessments that are diagnostic in nature should be enhanced to effectively evaluate learner achievements at all levels of education.
- (e) The Universities to focus on degree and postgraduate courses and avoid certificate courses.

6) National Qualification Framework (NQF)

The Task Force proposed the setting up of a National Qualification Framework for determining and assessing the level of achievement and competences of learners who have

gone through different learning systems or different education structures. In order to achieve this, a National Qualification Authority (NQA) should be established by law.

7) Institutional Management and Governance of Education and Training

Strengthen managers and planners through education and training.

The Task Force identified challenges at three levels, namely: national, county and institutional management. The Task Force thus recommended:

- (a) Improved coordination, accountability and increased community/stakeholder participation in planning, implementation, management and governance of education at all levels.
- (b) The Education Sector be headed by the Cabinet Secretary who will be supported by the Principal Secretary (PS) who is the Accounting Officer.
- (c) There be a Director General of Education who will be the chief technical advisor to the Ministry and answerable to the PS.
- (d) Introduction of an Education Planning cadre in education.

2.1.2 TAHEST Report

The TAHEST report proposes the integration of ST&I into all sectors by ensuring that the sector players have access to the necessary technologies that will be relevant to the improvement of a diverse range of product, process and services. Recognizing the need to alter the structure of the Kenyan economy to take advantage of global opportunities as well as meet the needs of the Kenya's growing population, the areas of significant potential have been identified under Vision 2030 and ST&I will play a fundamental role in achieving the targeted benefits of the long term plan.

Recommendations on TVET education

The taskforce considered TVET reforms from six broad categories: institutional structures, curricula (relevance), funding, governance, access and equity, qualifications framework, standards and quality assurance, and human resource. Training in particular is expected to

nurture creativity, critical thinking, and produce innovative and adaptive human resources with appropriate skills, attitudes and values for wealth creation, employment and prosperity.

Based on existing documents, best practices and wider stakeholder consultations, the taskforce proposes the following reforms in the TVET sector.

(i) Access and Equity

- (a) Pursue TVET expansion programmes at national, county and constituency level to sustain a Gross Enrolment Ratio (GER) of 20% in TVET by 2020.
- (b) TVET delivery to be flexible and modular by 2015 to allow a large number of young people to access TVET through the use of ICT.
- (c) Vocational training at primary and secondary level to be introduced with greater focus on entrepreneurship education and training
- (d) Deliberate provision of TVET with respect to gender, persons with disability, minority and marginalized groups.

(ii) Relevance of Skills for Industrial Development

- (a) Establish Technical and Vocational Education and Training Curriculum development, Assessment and Certification Council with a mandate of developing training curriculum and administering assessment.
- (b) Industrial attachment should be mandatory for all technical students and TVET trainers.
- (c) Establish TVET centres of specialization that are fully equipped with state of the art training facilities and well trained staff to offer training programmes that are of national importance.
- (d) Reform apprenticeship system to allow TVET graduates to work and study.
- (e) Encourage entrepreneurship in all TVET programmes for self-reliance.

- (f) All TVET institutions will establish student tracer mechanisms and strengthen institutional alumni

(iii) Quality Assurance

- (a) Establish a TVET authority to regulate institutions and programmes and assure quality.
- (b) Establish a central admission service for TVET government sponsored students .
- (c) Review and enforce minimum TVET trainers' qualification including compulsory industrial attachment for TVET trainers at least every three years of service.

(iv) Organization and Management of TVET Institutions

- (a) Streamline the TVET Institution into the following categories:
 - i. VTCs to train artisan and award Artisan Certificate ,
 - ii. TCs to train craft and technician and award Craft Certificate and Technician Diploma,
 - iii. TTTC to offer Diploma,
 - iv. NPs to train technician and technologists and award Technical Diploma and Technologist Degree (in collaboration with universities) and Technical - University to train technologists and award Technologists and Post Graduate Degree.
- (b) Streamline governance of TVET institutions to conform with the following:
 - i. Vocational Training Centres and Technical Colleges shall be managed under Boards of Governors
 - ii. Technical Teachers' Training Colleges and National Polytechnics shall be managed by Councils.
 - iii. Technical Universities shall be established and managed in accordance with the provisions of the Universities Act 2012.
 - iv. TVET Institutions and other staff at the VTC and TC will be managed by BoG. . Staff at the TTC, NPs and TU will be managed by the respective Councils

(v) Funding

Establishing the TVET Fund and strengthen partnerships between TVET Institution and the private sector. The fund so established shall be managed by a Funding Board and will manage student loans provided by HELB, and ensures increased bursaries and scholarships for TVET.

(vi) Re-branding TVET

(a) A rebranding strategy be developed and aggressively implemented within a five year plan review. The outcome of the rebranding process will be but not limited to the following:

- i. Increased training specialization in TVET
- ii. Increased employability of TVET graduates
- iii. Increased student enrolment
- iv. Expanded scope on innovation within TVET institutions
- v. Improved partnership between TVET institutions and industry

(b) Develop and implement TVET Advocacy and publicity plan

(c) Refurbish infrastructure, improve environment and change image

(d) Develop new products and engage TVET students in programmes and projects of national importance.

(vii) Research and Innovation in TIVET

Rolling out a research and innovation's strategy within the next three years that will include:

(a) Implementing sustained collaboration among industry, government and TIVET institutions in research development.

(b) Promoting the use of TVET research outputs in national development through adaptation and diffusion of technology in production systems and processes.

(c) Promotion of excellence and creativity in fields of science, technology and innovation

(d) Establishing incubation centres within selected TVET institutions

(viii) Partnership and linkages

(a) Develop industry-institution collaboration guidelines to support the development of competencies standard, modular training and curriculum review.

(b) Promote the use of industry practitioners in training for quality delivery of the curriculum.

(c) Link student projects with industry with clear performance indicators

Recommendations on university education

The other area of focus by the Taskforce was quality and relevance of university education. In order to promote quality in all universities, the Taskforce recommended the creation of the new Commission for University Education (CUE) which will accredit all universities. The Taskforce revised the University Bill 2009 to allow the establishment of all universities and awarding charters. Entities establishing universities could be the National government, County Governments or private individuals and foundations. The bill also provides for the establishment of specialized research universities in strategic areas to support socio-economic goals.

Related to quality of University education is the need for adequate institutional funding of public universities. The taskforce recommended the creation of a new independent Funding Board that will manage and regulate all disbursements of Government or donor funds to universities. All the funding will be based on transparent criteria and an agreed discipline differentiated Unit Cost. The Taskforce found that this was a best practice in England and South Africa where the Government uses the limited funding to universities as a lever to achieve policy goals in access, equity, quality and strategic focus. The funding board will be created by the proposed Universities Bill 2012. The taskforce also recommended the establishment of a joint admissions service for admission of government sponsored students in both private and public universities.

In order to achieve all of the reforms required, the Taskforce recommended an efficient and effective governance structure for all Universities Education sector institutions, including the public universities. The membership of the Councils has been reduced from average 33 to 11 members with diverse expertise in university education and industry. The Council will be fully empowered as the employers of all academic staff and could fix salaries, including Discipline Remunerations and negotiate with the staff unions.

Recommendations on ST&I

Although a lot of emphasis has been laid on the importance of science, technology and innovation in Kenya's development, the ST&I sector has not yielded the expected improvements in economic growth. This can be attributed to a number of issues that cut across this sector. These include issues of:

1. Prioritized National Intervention Areas

The Taskforce identified the following key priority intervention areas are as follows:

- (a) Telecommunication, Electronics and Computers (TEC) manufacturing technologies..
- (b) Software development technologies.
- (c) Automobile manufacturing technologies. Satellite and space infrastructure manufacturing technologies.
- (d) Renewable and green energy infrastructure manufacturing technologies.
- (e) Nuclear energy technologies
- (f) Food and nutritional security technologies.
- (g) Natural resource management technologies.
- (h) Infrastructure technologies
- (i) Health technologies.
- (j) New and emerging technologies.

2. Human Resources

The task force recommended policies that will attract, develop and retain a critical mass of world class human resource capacities and capabilities, focusing on identified national priority areas in order to harness and effectively participate in the development and application of *ST&I* for value addition and creation of new products and services. It also recommended the promotion of **creativity** and learning by discovery through a participatory approach in education and training system. This will include Establishing centres of excellence that promote innovation and creativity, develop mechanisms (e.g. competitions, exhibitions, sciences congresses) for recognizing, tapping and nurturing *ST&I* talent in all sectors and Ensure that appropriate content of *SET* and entrepreneurship skills are integrated at the various levels of education and training. It also recommended the development, renewal and maintenance of supportive physical infrastructure and technologies required by the key centres of excellence in *ST&I*.

3. Commercialization and extension

A large portion of the economy is dominated by micro, small and medium enterprises (*MSMEs*). They also dominate innovations in Kenya, as evidenced by the number of patents by this sector. *MSMEs* are not adequately supported and linked to the education and research system. The weak intellectual property regime and associated processes in Kenya is a hindrance to commercialization, and hence to economic competitiveness. The taskforce thus recommended the review and judiciously enforce the existing Intellectual Property Rights (*IPR*) regime to provide impetus and maximize incentives for the generation, protection and utilization of intellectual property by all categories of inventors in the business system of *KNIS* in order to foster achievement of Kenya's national development objectives.

4. Development, Transfer and Diffusion

The Government recognizes that realization of full potential of *ST&I* in Kenya will depend on appropriate identification, acquisition, transfer, diffusion and application of emerging

and relevant technology from collaborating partners and development of locally initiated technology. Development of technologies that add value to Kenya's indigenous resources and which provide holistic and optimal solutions that are suited to Kenyan social-cultural-economic values are necessary for sustainable development. The taskforce therefore recommended the Support to the acquisition, development and application of modern, emerging and indigenous knowledge and the utilization of the ensuing technologies in the priority formal and informal sectors of the economy for enhanced livelihood of Kenyan communities and national development.

5 Funding

Funding for ST&I and related activities in Kenya has been inadequate and without effective coordination mechanisms in the face of competing demands for the national budget. The Kenya government is a signatory to the Abuja declaration, in which African Countries are committed to allocate at least 1% of their GDP to ST&I. the taskforce thus recommended at least the equivalent of 1% of GDP be mobilized every year for the entire ST&I value chain (from pre-R&D to commercialization) from the Government and other sources.

Linkages, partnerships and collaborations

The Taskforce recommended encouraging, strengthening and streamlining viable linkages that are aligned with the national priority areas among national and county governments, academia and industry for improved multi-disciplinary knowledge generation and commercialization of innovations.

2.1.2 Policy Framework for Education and Training

The Policy Framework for Education and Training has presented the recommendations and elaborated the micro-policies and strategies to guide implementation.

Pre-primary: At the pre-primary level, the Government will implement the following policy:

Implement free and compulsory Pre-Primary Education for all 4 to 5 year olds in Kenya.

Primary Education: At the Primary level, the Government shall adopt the following policies:

- (i) All primary schools shall be Child-Friendly.
- (ii) Implement automatic transition and transfer between grades and levels of education.

Secondary Education: At the secondary level, the Government shall implement the following policies:

- (i) Implement free and compulsory secondary education and integrate secondary education as part of basic education;
- (ii) Ensure access to secondary education for all children;
- (iii) Introduce automatic progression between grades and automatic transfer between levels of Basic Education;
- (iv) Ensure inclusive education for learners with special needs and disabilities;
- (v) Adopt and implement the national gender policy.
- (vi) Provide school-feeding in distressed areas;

Special needs Education: In order to address these issues, the government shall adopt and implement the following policies:

- (i) Adopt and implement inclusive education.
- (ii) Integrate special education programmes in all learning and training institutions and ensure that the institutions are responsive to the education of learners with special needs and disability.

Adult and Continuing Education: In order to address the challenges in adult and continuing education, the Government shall adopt the following policy:

The provision of quality ACE and NFE services and programmes

Marginalized groups: The government will make provision for equitable, quality education to Marginalized Groups

To achieve the above policy, the government shall adopt the following strategies:

- (i) Adopt a holistic approach to pastoralist education;
- (ii) Develop learning resource materials to support NFE schools
- (iii) Establish National Council for Nomadic Education in Kenya (NACONEK).

- (iv) Introduce Open Distance Learning [ODL] using local radio stations and mobile telephony to enhance access.
- (v) Operationalize the Nomadic Education Policy framework.

Relevance of the Curriculum: To address the challenges the Government will Reform the curriculum in line with relevant provisions of the Constitution 2010 and aspirations of Kenya Vision 2030.

Assessment and Examinations: To address the above shortcomings in assessment and examinations, the Government will introduce standardised assessment of core learning outcomes, transferable skills and subject related knowledge. In order to implement this policy the Government shall adopt the following strategies:

National Qualifications Framework (NQF) and National Assessment System (NAS): The Government will introduce a National Qualifications Framework for Kenya

Mentoring, Moulding and Nurturing of National Values: The Government will introduce guidance, counselling, moulding and mentoring policy for all Kenyan schools.

Information and Communication Technology: To harvest the fortunes of ICT, the government shall implement the following policy:

ICT in education in all respects shall be a national development priority, and fully and effectively resourced.

Open and Distance Learning (ODL): The Government will adopt distance and open learning approaches including home learning across all levels of education in Kenya.

Governance: To address these challenges of governance in education, the Government will implement the following policies:

- (i) Delegate the delivery of basic education to County level with the MoE headquarters concerning itself with national education policy and sector performance; education sector planning and financing, coordination and regulation; curriculum oversight and assessment; and partnerships.
- (ii) Establish a National Education Board (NEB) whose role will be to advise the Cabinet Secretary on all matters concerning education in the country.

Teacher Education and Development: The government will professionalise teaching and teacher education.

Planning of Education and Training: To address the planning issues, the Government will rationalise education and training management systems and structures at national and county levels, and establish a National Education Board

Monitoring and Evaluation: To institutionalize monitoring and evaluation, the Government will establish an independent Education Standards Quality Assurance Commission.

Education Financing: The Government will adopt innovative policies in financing education. Specifically, the government will strengthen private partnership through adoption of public-private partnership (PPP) framework for the Education Sector in Kenya.

2.1.3 TVET Policy

The TVET policy seeks to address the challenges facing the sector through a raft of strategies that will be guided by the following policies:

- (i) Pursue TVET expansion programmes at national, county and constituency level to accelerate attaining and sustaining a Gross Enrolment Ratio (GER) of 20% in TVET by 2023.
- (ii) Provide adequate training opportunities for accessible competency based training
- (iii) Assure quality in TVET on all aspects of competency based education and training, skills instruction design, development and delivery;
- (iv) Establish a TVET authority to regulate institutions and programmes and assure quality
- (v) Reform curricula in line with relevant provisions of the Constitution 2010, aspirations of Kenya Vision 2030, the East African Community Treaty, international standards and the needs of the society;
- (vi) Ensure that all courses in TVET are competency based, market-driven and address the needs of the workplace as well as promote employability, soft, generic and life skills in partnership with private sector and professional bodies
- (vii) Establish state-of-the-art TVET centres of national importance that can compete at the international level with priority focus in supporting flagship projects in the areas of energy, ICT, infrastructure and automobile sectors in collaboration with the private sector.
- (viii) Develop and implement a standard for identification and recognition of regional centres of excellence in line with local needs, demands and dominant resources available.
- (ix) Establish incubation centres within selected TVET institutions
- (x) Promote the role of industry in both the design and delivery of TVET programs to be more relevant and demand-driven, rather than supply-driven and a stand-alone activity.

- (xi) Institutionalize industry inputs into training through the establishment of Industry Advisory Groups (IAG).
- (xii) Re-brand TVET to reposition the sector in society and attract the best students into the sector and ensure the utmost contribution to the economy
- (xiii) Empower TVETA to coordinate the management and development of trainers, while the TSC manages teachers in the TVET sector;
- (xiv) Establish a trainer education and development standard, based on accepted principles that will ensure optimal delivery of competency based education and training for the benefit of the trainees
- (xv) Develop TVET trainers through pre-service training and in-service exposure to continuous professional development.
- (xvi) Develop creative and innovative ways of mobilizing resources and generating revenue for TVET;
- (xvii) Establish secure and sustainable funding mechanisms for development of TVET infrastructure and improving equipment.
- (xviii) Streamline governance and management structures to ensure coordination and synchronization in TVET sector

2.1.4 University Policy

The objectives of the university policy are to:

- (i) Promote socio-economic development in line with the country's development agenda;
- (ii) Achieve manpower development and skills acquisition;
- (iii) Promote the discovery, storage and dissemination of knowledge;
- (iv) Encourage research, innovation and application of innovation to development and;
- (v) Contribute to community service

To realize these objectives; the government has set out the following policies

- (i) Promote expansion to satisfy the demand for university places of the growing population.
- (ii) Provide incentives and create an enabling environment for an increase in the number of private universities;
- (iii) Expand Government student sponsorship to private universities and;
- (iv) Ensure that universities enrol and graduate sufficient PhDs.
- (v) Restructure and expand the mandate of the Commission for Higher Education to include both public and private universities.
- (vi) Increase capital support to the universities to enhance institutionalization of excellence.
- (vii) Improve collaboration between industry, professional bodies and universities in determining competences of the graduates.
- (viii) Provide incentives to the private sector to invest in university education.

- (ix) Increase the number of graduate researchers capable of fulfilling industrial, commercial, national needs and increase the opportunities for businesses to expand on their capability for high technology innovation and growth.
- (x) Institute mechanisms to enhance implementation of national values, cohesion and integration.
- (xi) Increase the level of research funding available to universities.
- (xii) Establish lean and efficient management systems and efficient utilization of resources allocated to universities.
- (xiii) Provide budgetary support to public universities in direct proportion to the total number of Full-Time Student Equivalent (FTSE) in each institution;
- (xiv) Determine the amount of budgetary support per programme based on the strategic importance of the programme to national development goals and the programmes Differentiated Unit Cost;
- (xv) Extend Government sponsorship to students in private universities;
- (xvi) Diversify sources of funding university education through participation of businesses, industry and donations or endowments from individuals or philanthropic foundations;
- (xvii) Encourage higher education institutions to be more 'entrepreneurial' in providing their services and seeking contracts for research and consultancy;
- (xviii) Encourage university faculty to incorporate students in consultancies, giving the students exposure and experience that will prove invaluable after graduation and;
- (xix) Seek consulting teams for major projects through competition among universities and government institutions as a first step, before considering other avenues of undertaking the same
- (xx) Introduce Discipline Differentiated Remuneration (DDR) for academic members of staff.
- (xxi) Empower public university councils to determine their own individual terms and conditions of service for their staff.

2.1.5 ST&I Policy

It is globally recognized that science, technology and innovation is essential for the economic growth and competitiveness of all nations. Science, technology and innovation is also a key component of social integration, sustainable development and poverty eradication based on equity, freedom, justice, governance, peace and prosperity. At the international level, Science, technology and innovation acts as a tool of international co-operation and solidarity. It is useful for knowledge and information and facilitating globalization with human development while concomitantly strengthening national governance and acting as a vector of common heritage and international cooperation and

solidarity.

In the context of the overall national planning horizon, there is a very strong relationship between the social, economic and political pillars of the Kenya Vision 2030. As the foundation upon which the pillars spring, the implementation of relevant ST&I and higher education and training initiatives, must be successfully delivered in order to achieve the goals of the Vision. Universities are critical drivers of innovation systems and the resultant developments in ST&I and application of knowledge, especially in biotechnology, value – addition, manufacturing, Information and Communication Technologies (ICT) will result in industrial and entrepreneurial development with new products and services, and areas of economic growth.

In terms of human welfare that underpins the social pillar, increased ST&I and knowledge generation capabilities will help in addressing the challenges associated with poverty reduction and hunger by raising agricultural productivity and contribution to economic development. They will determine the ability to provide clean water, good health, adequate infrastructure, and safe food and also support the creation of high quality and better paying jobs, produce generics and help to dramatically cut the cost of healthcare to the poor. Generally ST&I will help achieve the Millennium Development Goals (MDGs). These capabilities will also be critical in ensuring sustainable development associated with natural resource management and disasters. The capabilities will also promote sustainable development, especially:

- Social integration by stopping exclusion and marginalization, through equality of scientific, educational and cultural opportunities
- Development, conservation and sustainable management of biodiversity
- Sharing the opportunities and benefits of the knowledge society and economy
- Development and strengthening of local and indigenous knowledge and culture
- Empowerment of women

The following policies were developed from the analysis of the National Sectoral Priorities. The Policies highlight areas meant to create an enabling environment for the growth of ST&I. The policies fall within the four strategic thrusts;

- Strengthening the ST&I institutions
- Developing Highly Skilled Human Resources
- Intensification of Innovation in Priority Sectors
- Ring fenced funding for ST&I

The thrusts will address challenges in the ST&I sector which include; lack of an integrative policy framework to facilitate effective integration of ST&I into the economy; lack of a coordinated national research agenda; the existence of a linear and fragmented innovation system; “Silo Mentality” of researchers; weak linkages and ineffective coordination between government, private sector and researchers; non-alignment of academic curricula and graduate SET skills to industry needs; low commercialization rate of innovations; a complex IP process with low awareness among innovators; lack of data to measure innovations; inadequate funding and support for innovations.

The following criteria addresses the challenges enumerated in the immediate paragraph above on thrusts;

1. Be bold, multi-disciplinary, transformative and creative in nature and have potential to spur economic growth, sustainable job creation and improve the quality of life.
2. Advance the generating and creation of new knowledge with value to Kenya, while securing it through intellectual property rights and capacity building.
3. continue to pursue excellence in Kenyan research by strengthening the research capacity of universities, research institutions, individuals and private sector ;
4. Accelerate Kenya’s ability to commercialize research innovations, by maximizing delivery, uptake, acceptability, sustainability and impact of new or value added products, processes and services.
5. pursue a global strategy for STI supported by collaborative national and international research at the frontiers of knowledge;

6. Be resource efficient, environmentally sensitive and can be monitored and evaluated with potential of application to many sectors

The following policies have been formulated to address the challenges in the ST&I sector:

1. The government will establish an institutional and regulatory framework to promote, coordinate, mobilize resources and manage ST&I.
2. The government through relevant institutions will leverage ST&I to transform the economy through identified national priority areas including space science.
3. The government will allocate 2% of GDP annually for the R&D sub-sector and motivate other stakeholders to participate in funding ST&I.
4. The government in collaboration with relevant stakeholders will identify, nurture, recognize and protect intellectual property rights of scientists, researchers and innovators.
5. The government will establish and promote ST&I knowledge sharing and awareness creation systems.
6. The government will develop a high cadre trained professionals in ST&I discipline.

2.2 Legal Reforms

The education and training sector legal framework is under review to facilitate the anchorage of the reforms that have been taking place over the past five years and to eliminate contradictions in the legal framework. The new Constitution has many implications for Kenyan people's education, for their rights to education and for their education services. In particular:

- (i) **Article 10(1)** of the Constitution states that the national values and principles of governance are binding on all State organs, State officers, public officers and all persons whenever any of them (a) applies or interprets the Constitution; (b) enacts, applies or interprets any law; or (c) makes or implements public policy decisions.

- (ii) **Article 10(2)** of the Constitution sets out the national values and principles of governance. These include *inter alia*, the sharing and devolution of power, the rule of law, and the participation of the people, equity, inclusiveness, equality, human rights, non-discrimination and the protection of the marginalised, good governance, integrity, transparency and accountability, and sustainable development.
- (iii) **Article 11(2) (b) and (c)** of the Constitution recognizes the role of science and indigenous technologies in the development of the nation, and the promotion of the intellectual property rights of the people of Kenya.
- (iv) **Article 12, Chapter 13** and its articles on the Public Service provides for the values and principles of public service.
- (v) **Articles 20, 35, 42 and 43** of the Constitution state clearly that every person has the right to education. If the State claims that it does not have the resources to implement the right, a court, tribunal, or other authority shall be guided by the principle that it is the responsibility of the State to show that the resources are not available to meet that constitutional right. The State will give priority to factoring in access to vulnerable groups or individuals (women, older members of society, persons with disabilities, children, youth, members of minority or marginalised communities, and members of particular ethnic, religious or cultural communities). Every citizen has the right of access to information held by the State and information held by another person and required for the exercise or protection of any right or fundamental freedom. The State shall publish and publicise any important information affecting the nation.
- (vi) **Articles 53, 54, 55, 56, 57 and 59** of the Constitution have provisions on children's right to free and compulsory Basic Education, including quality services, and to access educational institutions and facilities for persons with disabilities that are integrated into society, to the extent compatible with the interests of the person. This includes the use of sign language, Braille or other appropriate means of communication, and access to materials and devices to overcome constraints arising from the person's disability. There are also provisions on access for youth to relevant education and training; access to employment; participation and representation of minorities and marginalised groups in

governance and other spheres of life, special opportunities in educational and economic fields, and special opportunities for access to employment. The rights of minorities and marginalized groups to reasonable access to water, health services and infrastructure are also enshrined, as it is incumbent upon government to develop a culture of human rights, promote gender equality and equity and facilitate gender mainstreaming in national development.

(vii) Articles 62, 63 and 66 refer to public land, which will be vested in and held by both the national/and county governments in trust for the people resident in the country, and shall be administered on their behalf by the National Land Commission; unregistered community land to be held in trust by county governments on behalf of the communities for which it is held; enactment by Parliament of appropriate legislation ensuring that investments in property benefit local communities and their economies. The articles are relevant since educational infrastructure is constructed on public or community land.

(viii) Articles 174, 175, 176, 189 and Schedule 4 of the Constitution have provisions on the devolution of services to county governments, ensuring equity, access, quality and special attention to minorities and marginalised groups.

(ix) Articles 201(a), (d), and (e); 226 and 227 on Public Finance relating to transparency, accountability, and appropriate governance of public monies.

(x) Article 237 on the Teachers Service Commission accords special status to the TSC.

(xi) Article 7 stipulates English and Kiswahili official language and national language.

(xii) Fourth Schedule, Part 1 and Part 2. National Government—Paragraphs 5, 12, 15, 16 and 17. County Governments—Paragraphs 4 (f) (h), and 9.

A number of legal instruments have been prepared to respond to the requirements of the new constitution and modernise education in Kenya.

The Education Act meant to repeal the Education Act 211 of 1968 has gone through passing by parliament. The new Kenya National Examination Council Act is in operation while the new TSC Act is also in operation.

The Education Act

The education Act provides for the legislation of free and compulsory basic education, creation of institutions for enhanced efficiency in delivery of education, devolution of education management and delivery, creation of structures to ensure public participation in the management of public institutions and such structures include PTAs and student councils.

TSC Act

The TSC Act converted the TSC, previously a semi- autonomous agency into a constitutional commission. The Act operationalized article 237 of the constitution of Kenya. Article 237 provides for registration, recruitment, employment, promotion, and management of teachers.

Kenya National Examination Council Act

The act has provisions meant to address serious examination malpractices that have almost compromised the integrity of examination administered by the Kenya national examination council. The malpractices have now been criminalized by the introduction of fines and long term jail sentences.

TVET bill

The bill provides for the establishment of a technical and vocational education and training system; to provide for governance and management of institutions offering technical and vocational education and training; to provide for coordinated assessment, examination and certification; to institute a mechanism for promoting access and equity in training; to assure standards, quality and relevance.

University Act

The Act provides for the development of university education, the establishment, accreditation and governance of universities, the establishment of the Commission for University Education, University Funding Board and the Kenya University Admissions Board. Universities Act will harmonize various Acts of parliament governing the sub-sector into one coherent Act that will create a unified legal environment for better governance and management of the institutions and the sub-sector in general.

The Science Technology and Innovation bill

The bill provides for the promotion, coordination and regulation of the progress of science, technology and innovation in the country; to assign priority to the development of science, technology and innovation; to entrench science, technology and innovation into national production system for connected purposes.

2.3 Institutional Framework

a) National Level Institutional Structure

Education delivery in Kenya will be under a department responsible for education matters. It is anticipated that the ministries responsible for basic education, higher education science and technology, Ministry of youth affairs and sports, Ministry of gender children, and social development will be collapsed into the department of education.

- (i) The department of Education will be headed by a Cabinet Secretary, supported by a Principal Secretary (PS), who will be the Accounting Officer in charge of administration and finances. The Education act proposes the position of Director General (DG), who will be the professional head of the department responsible to the principal secretary. The department of education will be divided into 5 rationalized directorates.
- (ii) The Basic Education Act establishes the National Education Board (NEB) whose role will be to advise the Cabinet Secretary on all matters concerning education in the Country. The 9 members of the NEB will be drawn competitively from Kenyans who satisfy the provisions of chapter 6 of the constitution on leadership and integrity and other criterion as prescribed by the education act.

b) County Education Boards

A County Education Board (CEB) will be responsible for education management and delivery at the county level. The 10 member CEB will be constituted from selected key stakeholder as outlined by the education act.

c) Institutional Level

At the institutional level, there would be one management organ in charge of the day-to-day management or running of the institution known as Board of Management (BoM).

d) TVET Curriculum Development, Assessment and Certification Council (CDACC)

The TIVET Act provides for the establishment of the Certification council that will develop the curriculum, conduct assessment and make rules in respect to TIVET examinations. The council will comprise of a chairman appointed by the cabinet secretary, the principal secretary, the Director general of TIVETA and six other members representing technical universities, technical colleges, national polytechnics and industry. There will also be a secretary to the council

e) The Technical and Vocational Education and Training Authority (TVETA)

The Technical and Vocational Education and Training Authority (TVETA) will oversee the regulation and coordination of institutions offering Technical and Vocational Education and Training in Kenya. This includes the registration and licensing of TVET institutions, promotion of quality and relevance in TVET, coordinated assessment, examination and certification, the institution of a mechanism for promoting access and equity in training.

TVETA will be governed by a board of not less than 7 and not more than 9 members who shall be appointed by the cabinet secretary on the advice of a selection panel.

TVETA will have a secretary who will be the head of the secretariat.

f) Kenya Qualifications Authority (KQA)

The establishment of the Kenya Qualification Authority (KQA) is based on the provisions of part II section 4 of the Kenya Qualification Framework Bill, 2012, which provides for the establishment of the KQA and the development of the Kenya Qualifications Framework (KQF). The department of education will establish the KQA which will have a board and an executive secretariat headed by the secretary. The establishment of the authority will be in

line with the requirements of the EAC Common Market on Mutual Recognition of Academic and Professional Qualifications.

g) The Kenya Universities and Colleges Central Placement Service

A central placement service for university and Technical colleges will be established by Article 54 of the universities act as corporate body to be governed by 11-member Placement Service Board served by a secretariat. The placement service will determine government requirements for university graduates and advice on their placement in both public and private universities

h) University Funding Board

The Universities act provides for the establishment of the University funding Board that will finance universities for capital development. It will be supported by a lean secretariat overseeing the running of the secretariat and support the 9 member board

CHAPTER THREE: PROGRAMME PRIORITIES

3.0 Introduction

Human capital investment in the form of education is a major tool for sustainable development. It is a recognized fundamental and universal human right and a prerequisite for economic growth, human development and poverty reduction. It enables the population to make informed decisions about its economic, social and political well-being. The overall goal of the Education and Training Sector in MTP 2 is to: *Engage in the creation of a National Human Resource that the Development plan will place significant emphasis on developing requisite values, character, talents, knowledge, skills and competencies for moving the country towards the achievement of Vision 2030.* Thus, the development of human resources for national development is critical to the choice of MTP 2 priorities. Consequently the need to organize the education and training sector for purposes of enlarging knowledge, improving and empowering human life cannot be emphasized enough for Kenya cannot escape the impact of technology and change on the lives of its citizens, hence the need to provide opportunities for training and continuous development for all citizens according to their aptitude and the needs of the economy.

The education and training sector is therefore cognizant of the potential threats to the local economy, present and future labour market and other resource requirements, and the likely changes in the demand for labour as well as the type of labour required in the post global recession period. The sector will therefore collaborate with the public and private sectors to ensure that sufficient and desirable post –basic avenues of education and training are created to facilitate maximum employment opportunities for school leavers.

The key areas of focus in the education and training sector during the MTP2 period will include; improving equitable access to and participation in quality education at all levels, improving quality of teaching and learning, bridging the gender gap in access to education, Improving access to quality education for people with disability, promoting science, and technical education at all levels, strengthening the linkage between tertiary education and industry, delivering up to date education management information, integrating ICT into

education, mainstreaming issues of population, family life education, gender, health, HIV/AIDS/STI, conflicts, fire safety, road safety, civic responsibility, human rights and environment in school curricular at all levels, and improving management and governance of education service delivery in a devolved context. Ensuring a coherent institutional framework for youth development, and promoting sports, talents etc will be part and parcel of the focus in MTP 2.

3.1 Priority Areas

The education and training sector has undertaken a process of reflection and selectivity to zero in on a set of strategic pillars for focused attention in its MTP2. The choices have been arrived at through the analysis of the challenges and constraints in the sector, identification of gaps in the implementation of MTP1 and the drive to reform and align the sector in accordance with the provisions of the new policy and legal frameworks. Consequently, the sector will seek to achieve results in six priority areas namely:

- i) Actualizing the right to free and compulsory basic education
- ii) Enhancing quality and relevance of education
- iii) Integrating ICT into teaching and learning.
- iv) Governance of education sector
- v) Post basic Education
- vi) Financing Education and Training

3.1.1 Actualizing the right to Free and Compulsory Basic Education

Basic education refers to the whole range of educational activities taking place in formal, non-formal and informal settings. It comprises pre-primary, primary and secondary levels. The main objectives of the provision of Basic education are: to increase access and participation; to reduce the high cost of basic education to households; to improve the quality of basic education; and to improve management capacities and accountability in institutions of learning.

During the 2nd MTP period, concerted effort will be put in place to ensure actualization of the right to education by addressing: teacher recruitment and management; Improvement

of physical infrastructure; and Provision of teaching/Instructional materials. The following areas/levels of education will be addressed:

- **ECDE Mainstreaming**

ECDE mainstreaming is one of the components of Provision of Basic Education priority area . The goal for the ECDE mainstreaming is to expand access to and enhance the quality of ECDE services for children aged 4-5 years, especially those living in difficult circumstances such as ASAL areas, urban slums and pockets of poverty in Kenya. This is based on the realization that children who access holistic and quality ECDE services have a better start in life and are better prepared for entry and retention in primary school. Under this component, the Government will ensure that ECDE education is free and compulsory for all children aged 4-5 years.

- **School Health and Nutrition**

School health and nutrition is the second component under provision of Basic education priority area. The objective of school health and nutrition is to promote universal basic education of socio-economically disadvantaged and nutritionally vulnerable children, especially girls in pre-primary and primary schools in targeted ASALs districts and slums in Nairobi.

Ensuring that children are well fed, healthy and able to learn are essential to the effectiveness of education system. Good health and nutrition increase enrolment and stabilize attendance of the most disadvantaged children, especially girls. At the same time, children are effective change agents and what they learn in school will also positively impact on the health behaviour in their homes and their behaviors as adults. Programmes aimed at promoting good health, hygiene and nutrition among school-age children are therefore an essential component of an education programme. Hence, addressing health through a comprehensive School Health Program (SHP) will enable the Government of Kenya to enhance the health and education of students, teachers and their families alike.

A significant proportion of Kenyan school-going children suffer from mild, moderate, and severe malnutrition, while a significantly larger number of children experience mild to moderate growth retardation according to the World Health Organization (WHO) international reference. Morbidity and specific common health conditions are highly prevalent among Kenyan school children, especially in rural areas and urban informal settlements. The high rates of morbidity are associated with multiple intestinal parasitic infections and malaria due to a lack of safe water and inadequate standards of hygiene and environmental health in and around majority of the affected schools. This morbidity and poor nutritional status is associated with children starting school late, retarding at grade one, dropping out, and generally under-achieving in education. Many of these problems may also be associated with a lack of adequate information on proper sanitation and hygiene practices.

Some of the on-going programmes include: provision of mid-day meal to 1.1 million pre-primary and primary school children in ASAL districts and Nairobi slums; supporting sustainability activities for the school-feeding programme and deworming of school children.

The school health and feeding will:

- (i) Develop skills-based health, hygiene and nutrition education to support the development of knowledge, attitudes, values and life skills for establishing enduring health practices, promoting healthy and hygienic behaviors, food nutrition and reducing vulnerability to HIV/AIDS;
- (ii) Provide school based health services that are simple, safe and address problems that are prevalent and recognized as important within the community, such as worm infestation, micro-nutrients deficiency, malaria and water borne diseases;
- (iii) Reinforce provision of safe water and sanitation with health and hygiene promoting education materials;
- (iv) Provision of mid-day meal to socio-economically disadvantaged and nutritionally vulnerable children;
- (v) Develop inter-sectoral partnerships between health, education, the community and other stakeholders including children.

- **Free Primary Education**

The continued implementation of Free Primary Education (FPE) since 2003 has led to tremendous progress in access to primary education. The primary enrolment increased from 8.56 million (4.36 million boys and 4.2 million girls) in 2008 to 8.83 million (4.51 million boys and 4.32 million girls) in 2009 then to 9.85 million (4.75 boys and 4.62 girls) in 2011 and further to 9.97 million (5.01 boys and 4.96 girls) in 2012. The gross Enrolment Rate increased from 109.8% in 2008 to 110.0% in 2009 then to 115.0% in 2011 and further marginally to 115.8% in 2012. The Net Enrolment Rate improved from 92.5% in 2008 to 92.9% in 2009 then leaped to 95.7% in 2011 before marginally falling to 95.3% in 2012. Based on Net Enrolment Rate, the gender disparity in enrolment scenario has been improving but now in favour of girls. The gender parity index at primary level was 0.97 in 2007, then 0.98 in 2009 while in 2010 it is 1.02 and 1.01 in 2011 against a target of 1.0.

The Textbook-Pupil ratio for lower primary has improved from one textbook for more than 10 pupils before 2003 to 1:3 in 2007, 1:2 in 2008 and remaining at 1:2 in 2009. For upper primary TPR has improved from 1:2 in 2007 to 1:1 in 2008 and 1:1 in 2009, 2010 and 2011 against a target of 1:1. However, there are challenges in book storage and maintenance facing the primary schools.

The pupil completion rate is the proportion of standard 8 graduates as a proportion of the 13 year olds. The pupil completion rate stood at 81.0 percent (86.5 and 75.7 percent for boys and girls respectively) in 2007 dropped to 79.8 percent in 2008 and then registered an increased to 83.2 percent in 2009. In 2010, the pupil completion rate dropped to 76.8 percent (79.2 percent and 74.4 percent for boys and girls respectively) and further declined to 74.6 in 2011. The decline could be attributed to dropouts and repetitions¹

However, learning outcomes in literacy, numeracy and essential life skills remain poor. The primary sub-sector continues to experience many challenges, including; high pupil-teacher

ratios, overcrowded classrooms, occasional teacher and pupil absenteeism, high drop-out rates, high repetition rates, increased number of orphans due to HIV and AIDS, inadequate infrastructural development, weak governance and financial management, inequitable deployment and weak management of teachers, and gender and regional disparities

In order to sustain the gains realized under FPE, there is need for increased capitation to adequately cater for primary school related expenses.

- **Secondary education:**

The Ministry recognizes secondary education as part of basic education with aim of enhancing the citizens' access to quality and equitable education so as to achieve the Vision 2030 goals. To achieve this, the Ministry is implementing the secondary education strategy, which ensures expansion of secondary education by construction of new schools of at least three streams and increasing class size from 40 to 45 students. This strategy was further enforced through introduction of Free Day Secondary Education with grants sent to schools at Ksh 10,645 per student since January 2008. The outcome has been considerable increase in enrolment and also increased availability of teaching and learning materials in secondary schools across the country. FDSE initiative aims at reducing the cost of secondary education to the households and hence increased access, retention, equity and quality of education.

The GER for secondary increased from 38.0 percent (41.4 percent for boys and 34.6 percent for girls) in 2007 to 45.3 percent (49.0 for boys and 41.8 for girls) in 2009. In 2010, the GER increased to 47.8 percent (50.9 percent for boys and 46.3 percent for girls) and further to 48.8 per cent (51.0 percent for boys and 46.8 percent for girls). The NER recorded an increase from 28.9 percent (29.8 percent for male and 27.9 percent for female) in 2007 to 35.8 percent (36.5 percent for boys and 35.1 percent for girls) in 2009. In 2010, the NER dropped to 32.0 percent (32.4 percent for boys and 32.9 percent for girls) but in 2011 it improved to 32.7 percent (32.6 percent for boys and 33.1 percent for girls). The gender parity index improved from 0.94 in 2008 to 0.96 in 2009 and in favour of girls at 1.02 in 2010 and 1.01 in 2011

Transition rate from primary to secondary has been increasing over the years, from 59.6 percent (56.5 percent for male and 63.2 percent for female) in 2007 to 66.9 percent (64.1 percent for male and 69.1 percent for female) in 2009, further increasing to 72.5 percent (68.9 percent for male and 75.3 percent for female) in 2010 and further to 73.3 (68.9 percent for male and 75.3 percent for female) in 2011 against a target of 89.4. This implies that as at 2011, the primary to secondary transition rate target was not achieved.

There is need to consolidate the gains realized under this level by sustaining FDSE and increasing capitation grants to be in line with the actual cost of secondary education

- **School Safety**

School Safety is an integral and indispensable component of the teaching and learning process. Indeed, no meaningful teaching and learning can take place in an environment that is unsafe and insecure to both learners and staff. It is, therefore, imperative that educational stakeholders foster safe and secure school environments to facilitate increased learner enrolment, retention and completion and hence attainment and quality education.

School Safety are the measures undertaken by the learners, staff, parents and other stakeholders to either minimize or eliminate risky conditions or threats that may cause accidents, bodily injury as well as emotional and psychological distress. Accidents can lead to disability or death while emotional and psychological trauma can result in lack of self-esteem and ultimately lead to poor performance of tasks and responsibilities. Creating a School Safe Zones does not only mean ensuring an accident free school environment. Rather, it is the responsibility taken by learners, staff, parents and stakeholders to foster all-round safe living.

- **Adult Basic and Continuing Education**

A third component of Provision of Basic Education priority area is the Adult Basic and Continuing Education. Under this component, it is noted that despite the importance of adult education, the Kenya National Adult Literacy Survey (KNALS, 2007) revealed that only 61.5% of the adult population and out of school youth above the age of 15 years had

attained minimum literacy level, leaving 38.5% (7.8 million) adults illiterate. Additionally, only 29.6% of the Kenyan adult population had attained desired mastery literacy competency. About 29.9% of the youth aged 15 to 19 years and 49% of adults aged 45 to 49 years were illiterate. The survey further revealed high regional and gender disparities in literacy achievements with Nairobi recording the highest at 87.1% and North Eastern province recording the lowest at 8%.The Medium Term Plan for Kenya's Vision 2030 recognizes the need to have literate citizens and sets a target of increasing the adult literacy rate from the current 61.5% to 90% by 2017. However there is lack of current data to show the recent achievements.

- **Infrastructure development**

Although there have been considerable investments in improving the physical infrastructure in the schools, the quality of the facilities in most of the learning institutions still requires improvement. The growing enrolment in both primary and secondary schools due to FPE and FDSE respectively, has meant that the existing facilities are overstretched. This has negatively impacted on the sector's effort to achieve high transition rates to secondary education. In ASAL areas, ECD facilities are inadequate forcing children to enter the schooling process at Std 1. This lowers their performance levels as compared to other children in the same standard. Availability of adequate sanitation facilities is lacking in most of the centres as they are located on rented premises in urban slums raising the health risk of the learners. There is lack of adequate and quality infrastructure particularly in ASAL districts, urban slums and pockets of poverty as depicted by low participation rates in North Eastern Province

Implementation of this component through strengthening the institutional framework for infrastructure development; raising the efficiency and quality of infrastructure and increasing the pace of implementation of infrastructure projects will be pursued.

- **Affirmative action**

The Constitution provides for the right to education for all. Government has endeavored to promote access, equity and transition in education and training through the introduction of Free Primary Education (2003) and Free Day Secondary in (2008). The education and training sector together with other stakeholders has implemented various programmes with varying degrees of success to support the Most Vulnerable Children (MVC), girls, and women in the Arid and Semi-Arid lands, and urban slums. Despite the gains in access and equity since the launch of FPE and FDSE there still remain pockets within Kenyan communities which have remained unreached for a host of reasons; economic, cultural, social, geographical, environmental, and political. These groups are diversified and have different educational needs. As a result, different strategies are required to address issues affecting them.

In order to address the challenges, the government will ensure provision for equitable, quality education to all by ensuring an inclusive education for learners with special needs and disabilities, the Marginalized, hard-to-reach, the gifted and talented and vulnerable Groups.

3.1.2 Quality and relevance of education and Training

Quality and relevance is another priority area for education and training sector. The objective of this priority is to improve student performance/learning outcomes and functionality of the knowledge, skills and competencies acquired. Under this priority area, the following components will be implemented:

- **Curriculum Development and Review**

Reforming education curriculum with emphasis on character formation, imparting values, talent identification and development, and development of knowledge, competences and skills, that are required for economic growth and societal transformation will be

undertaken. However, the country lacks a labour market survey which is important to inform curriculum reform.

The proposed curriculum reforms seeks to create acceptability of education based on relevant content, non discriminatory and culturally appropriate outcomes. Professionalism and safety of the schools are also critical in curriculum reform

Vision 2030 calls for a curriculum, which accommodates individual and corporate social responsibility, and moral and ethical values. It also calls for the development of technical and entrepreneurial skills, competencies, skills and talents. The content of basic education, therefore, shall need to be designed to equip all learners with relevant knowledge, skills, competencies and values, enabling learners to develop to their full capacity, enhance the quality of their lives, able to make informed decisions and predisposed to engage in life-long learning. Aligning the curriculum to address the aspirations of Vision 2030, the Constitution and the East African Community protocol is a national priority.

The summative evaluation of primary and secondary school curricula identified gaps in the current curricula. While the content of the curriculum addresses patriotism and national unity, it is argued that inculcating these values has been less successful because carrier subjects like history and government and religious studies are optional subjects at the secondary level. Further, much of the primary and secondary school curriculum content relegates practical skills necessary for economic development to non-examinable subjects. The acquisition of requisite practical, technological and entrepreneurial skills is not addressed and has created a situation where the study of practical and vocationally orientated subjects is regarded as the least desirable option to learners. The current curriculum has been objective but not competence based, does not give weight to values, attitudes and patriotism. Cognitive domain has been over emphasised at the expense of affective and psychomotor domains. Some aspects of curriculum are not being implemented especially if not examined e.g. Physical Education and life skills, inadequate ICT skills in teaching and learning, traditional method of teaching-only teachers being source of knowledge instead of involving learners, inadequate teaching and learning materials,

curriculum support materials poorly distributed and not readily available in school, poor planning of human resource resulting to teacher shortages in some subjects.

In addressing the need to construct a balanced education curriculum aligned to delivering the aspirations of Vision 2030 and the development of teachers with a different mind-set, the Government shall focus on core educational outcomes, based on content of the subject being taught, and on developing a repertoire of skills and competences required by all learners and teachers. In order to make the curriculum specifically relevant to Vision 2030; emphasis shall be focused on technology, innovation and entrepreneurship, talent development, and the need for schooling to be more closely related to the world of work

Under this component, ensuring adaptability of education to ensure that it meets the evolving needs and times of the society will be pursued

- **Assessment and Examination**

The current summative assessment at the end of primary cycle and secondary cycle does not adequately measure learners' abilities while school based assessment is not standardized. In addition, there has been widespread malpractice in examinations. Assessment is mainly used as a means of determining who can move to higher education. In essence, the current system of summative assessment at the end of the various cycles together with the limited availability of student places at secondary and higher education level dictates the teaching/learning process towards examinations as opposed to learning.

In order to improve the education and training, the Government will adopt an approach where there are no mandatory examination and create a situation where teachers make their own assessment tests and not quoting numeric grades but using descriptive feedback and no longer comparing students with one another

This will help teachers and students focus on learning in a fear free environment in which creativity and risk taking is encouraged. And teachers have no real freedom in time planning when they have to focus on tests and exam planning

Assessment must inform teaching and learning processes that are in tandem with Vision 2030 and to enhance learner achievement, skills and competences.

The emphasis on academic performance and examinations creates an unfavorable learning environment for children with special needs and disabilities and even moderate learning difficulties. This poses a challenge to the integration and inclusion of children with such disabilities in regular schools.

- **Teacher Education, Recruitment and Management**

The main goal of teacher education is to develop the basic theoretical and practical knowledge about the teaching profession, so that teachers' attitude and abilities can be turned towards professional commitment and competence

Teacher education in Kenya is provided to meet the demands of the following levels of schooling: pre-primary, primary, secondary and tertiary. The institutions offering training include: ECDE centres, primary teacher education colleges, diploma teacher education colleges and universities. Pre-primary and primary teacher training courses focus on pedagogy and subject knowledge content. Secondary teacher training courses is provided in two models i.e. consecutive and concurrent models. In the consecutive model, the trainees undertake the subject area first and graduate with either Bachelor of Arts or Bachelor of Science degree and later undertake a nine month postgraduate diploma to make them trained teachers. In the concurrent model, the trainees study both the subject area and pedagogy at the same time and graduate with a Bachelor of Education. Both pre-primary and primary certificate and the diploma awards are examined by the Kenya National Examinations Council, while the degrees are awarded by the respective universities

The hardest element to change and the major challenge facing the profession concerns the changing instructional practices towards greater collaborative relationships between teachers and learners. Teaching and learning are what ultimately make a difference in the mind of the learner, and thus affect knowledge, skills, attitudes and the capacity of young people to contribute to contemporary issues. Therefore, action needs to be taken to

improve teaching and learning processes in Kenyan schools so as to develop an appropriately skilled human resource for the country.

The general consensus is that Teacher Education in Kenya has not kept pace with developments that have occurred throughout most developed countries. The policy framework for teacher education needs strengthening. In the face of resource constraints, there are neither policies for the recruitment and career development of teacher educators as a specialized cadre within the teaching profession, nor is there a clear career and professional route to becoming a teacher educator.

The Government will apply innovative methods of teacher management and curriculum delivery in order to optimize utilization of the existing teaching force and assess the existing gaps.

Teacher recruitment and management falls under the mandate of TSC that ensures equity in teacher distribution and optimal utilization of teachers. To ensure effective teacher management, TSC will continue implementation of the staffing norms. This will allow TSC to distribute primary teachers across regions based on recommended PTR of 45:1 for high potential areas and 25: 1 at rural and ASAL regions. At post primary level teacher distribution is based on Curriculum Based Establishment (CBE).

The hiring of teachers on contract and part time basis to relieve those on study leave, maternity leave as well as those out of duty on discipline cases and due to long illness should be considered among other strategies of improved curriculum delivery. Furthermore, teachers performing non-teaching duties should be absorbed in their current stations or be deployed to perform teaching duties. Teachers trained in subjects which are no longer being offered will be retrained in relevant subjects at the secondary level or deployed to the primary schools to reduce the existing shortages.

- **Science Technology & Innovation in education**

Science, technology and innovation are key elements in enhancing social and economic growth and are also critical inputs to the improvement of national development process. As the country

recasts and develops the various social systems, education and training, the society will embrace Science, Technology and Innovation (ST&I), conserve, sustain and exploit our environment for sustainable development and above all, a society that exploits opportunities and takes responsibility.

ST&I in education is crucial in ensuring efficiency and productivity. Education and training is important as a vehicle to apply science and technology to deliver.

There is need for the education system to produce scientists who will participate in propelling the economy. However, there is a poor attitude towards mathematics at all levels of education and training. This call for an intervention/incentive to change the mind set and attracts learners towards mathematics.

There exist disconnect between training and labour market. In order to address this disconnect, there is need to develop a Human Resource Development Plan.

Intellectual property regime will be reviewed so that innovations are protected and innovations nurtured.

- **Improving Planning, Management and Implementation capacity**

Deepening decentralization of the management of education and training services requires that the scope of authority at each level of management be well defined and that the requisite data and information management system is established for effective education planning. Currently, most aspects of education and training planning are performed at the national level with district and local level offices responsible for implementation. Under a decentralized system, the role of the County Education Boards in education and planning will be enhanced with Education Planning being institutionalized through the introduction of planning functions at the county level and an Education Planning card. Requisite Human Resource Capacity building as well as financial resources will support this process

3.1.3 Integrating ICT into teaching and learning.

The Government recognizes that an ICT literate workforce is the foundation on which Kenya can acquire the status of a knowledge economy by the 2030. Against this background, the Government shall make education the natural platform for equipping the

nation with ICT skills in order to create dynamic and sustainable economic growth. The objective of this priority area is to make teaching and learning more child centered and self directed.

ICT is a major vehicle for teaching and learning from the earliest years. It is at a very young age that learners begin to acquire digital skills which they increasingly use to explore and exploit the world of information and to craft that into knowledge. ICT facilitates the opportunity for more student centered teaching, more self-learning and more peer teaching. It also provides greater opportunity for teacher-to-teacher, and student-to-student communication and collaboration and access to the worldwide web and the learning resources contained thereon.

The challenges facing ICT in education sector include access, funding, inadequate ICT facilities, high cost of development of interactive e-learning content, ICT not embraced as medium of instruction and management tool, inadequate capacity for teachers, absence of ICT Curriculum at ECD and primary levels, dynamic nature of ICT , inadequate capacity for maintaining ICT equipment, inadequate use of ICT by the Ministry of Education, and inadequate capacity to monitor utilization of ICT in schools

A key issue affecting ICT provision especially in rural areas is the limited access to electricity and where this exists, frequent power disruptions. Further, high costs of Internet provision and other costs associated with ICT; equipment, infrastructure and support costs are obstacles to rolling out a national ICT programme in the medium term.

In order to consolidate the gains realized under ICT, the Government needs to integrate ICT into curriculum at all levels (preparing the teacher and learner).

The Government needs to promote self directed learning through ICT which will empower learners to choose what and how to learn. The Government to partner with private sector to promote ICT on the job learning for teachers

3.1.4 Education Sector Governance

Good governance is integral to the successful implementation of the MTP. Cooperation among civil society organizations, development partners the Private Sector and the Government will be essential to ensure that there are strong institutions and effective service delivery. The objective will be to uphold the provisions of the Constitution and implementation of good governance principles across all sectors: private and public.

Governance is the process of providing policy leadership, oversight and strategic guidance on the management of resources and the delivery of services as well as the formulation and implementation of sound policies and regulations.

A challenge of the present governance structures is inefficiency in the management of resources and utilization. Funds disbursed directly to institutions and those managed by MoE offices are at times not properly utilized for intended purposes. Other challenges include weak accountability, inefficient monitoring and tracking systems coupled with an over-centralized, hierarchical and bureaucratic decision-making system, which encourages mismanagement.

Lack of harmonization of institutional and identification codes between the MoE and its SAGAs cause a challenge in terms of accountability and reliability of data. Unreliable data has rendered the Educational Management Information System (EMIS) functionally ineffective. In the absence of legal provisions guarding against misinformation or non-cooperation in submission of required data, heads of units and institutions provide inaccurate data to suit their unique circumstances.

Institutional governance organs such as the BoGs, PTAs and School management committees have insufficient authority to enable the efficient management of institutions. Although Parents' Teachers' Associations (PTAs) contribute to the management of schools, they are not provided for in the legislation.

Under the Constitution of Kenya (2010), 47 Counties have been created together with 290 constituencies. Reconfiguring governance at the national, county, constituency and institutional level is now mandatory. Whereas the Constitution requires devolution in the management of education, policy-making will remain a Ministry headquarters responsibility. Implementation of education services will be separated, with local management bodies being given the powers to act within the Constitution.

- Delivering consistent, real-time, quality and relevant education data for the whole education sector in a coordinated way

Communication

The Country is experiencing dramatic social, cultural, political and economic changes owing to the revolution in information communication technologies. These innovations present real opportunities and challenges that require judicious management both at national and global levels. The ministry embarked on the realignment of its education system to be in line with these obligations and also Vision 2030. It is important that the citizens of Kenya and the international community see the concrete achievements and successes of the ministry of education since they provide various kinds of support to the sector.

Now more than ever before, the Ministry is under pressure to proactively provide timely and accurate information to its customers and other stakeholders. Therefore, to keep up with the changes, the Ministry will develop a communication strategy in recognition of the fast growing number of information and social networking choices.

3.1.5 Post Basic Education

Meeting the country's human resource needs through post basic education is a priority area that needs to be pursued. There is need for linkage between labour market and institutions of post graduate learning. The objective of the priority area is to produce a highly skilled and innovative workforce adapted to current and projected needs of the economy in particular and society in general. The major challenges under this priority area are; human resource

development and lack of a skills inventory. Under this priority area, the following components will be considered:

- **TVET**

The objective of TVET is skills development programs for youths and adults in relevant technical, commercial and scientific fields to satisfy the needs of the national economy. Although training in Kenya has experienced moderate growth over the last 40 years, TVET is yet to produce adequate and skilled middle level human resource required to meet the demands for national development. The Vision 2030 has however placed special demands on TVET as the leading engine that the economy must essentially rely upon to produce adequate levels of middle level professionals needed to drive the economy towards the attainment of the vision.

TVET has been regarded as a place for failures. In order to place TVET at the level and importance it deserves, there is need for re branding TVET as an important level of training. Regulation of TVET institutions is a priority. There is need to integrate electronic curriculum in TVET. The conversion of TVET institutions to universities has left a major gap in developing highly skilled manpower needed to catalyze transformation of the economy.

- **University**

Kenya's future as a prosperous and internationally competitive nation will depend on her university education system. As a nation, Kenyans will rely on this system to create a sustainable pool of highly trained human resource capital that underpins our national ambitions of being a knowledge-based economy. To realize the country's ultimate goal of a prosperous, just, cohesive and democratic nation, the Government will enable and support citizens to develop skills and apply the skills, their knowledge and creativity to their best in their daily endeavors. Kenya's university education system must be focused, efficient and able to create knowledge and deliver accessible, equitable, relevant and quality training to sustain a knowledge economy that is internationally competitive.

The competition to attain university degrees some of which are not relevant to the economy has led to low productivity and wastage. The notion that everyone needs a

degree has led to increased demand for university education at the expense of technical training.

The rapid expansion of university education has led to numerous challenges with most of them not focusing on the core mandate as well as offering courses for income generation.

Technologists are not trained at university level leading to poor quality products in the market

- **Research**

Although the country has world renowned researchers and research institutes, the country lacks National Research policy which is an impediment to new discoveries in the country. A lot of research by scientists has failed to be documented and put to meaningful use. There is need to identify the country's research priorities and mark them for funding.

The Link between industry, professional bodies and academia is weak with Industries not taking on board the new discoveries. This calls for need to create linkage between academia and industry.

3.1.6 Financing Education and Training

Education Financing in Kenya is based on a cost sharing policy, which requires that most of the costs in education be met through partnerships between the public sector and Non-Governmental organizations (NGOs), religious organizations, development partners, communities/individuals and the private sector. The overall Government role include the professional development of teacher, remuneration in public learning institutions, provision of infrastructure, administration and management and provision of bursaries and scholarships for needy students.

The increased public demand for education and training has stretched the Government budget, and in response, partnerships have been intensified with individual investors, civil society and development partners. Major policy implementation on access is the introduction of Free Primary Education (FPE) in 2003 and Free Day Secondary Education (FDSE) in 2008 that resulted in immense increase in enrolment.

The Kenyan Constitution under economic and social rights under article 43(1) guarantees every person a right to education. In order for the government to facilitate the realization of this bill of rights, the Constitution under article 21(2) provides that the state shall take legislative, policy and other measures, including the setting of standards, to achieve the progressive realization of the rights guaranteed under article 43. A look at the fourth schedule shows the assignment of functions between the national and the County governments. In the area of education and training, the national Government is responsible of education policy, standards, curricula, examinations, and the granting of university charters, universities, tertiary educational institutes, and other institutions of research and higher learning and primary schools, special education, secondary schools, and special education institutions as well as sports education. On the other hand the County governments are responsible for pre-primary education, village polytechnics, home craft centres and Homecare facilities. Education will be provided through the well established institutional infrastructure to the school level by the national government.

The new constitution under article 43(1f) and 53(1b) stipulates that every person has a right to education and every child has a right to free and compulsory basic education. Therefore besides parental obligation, it will also be the requirement that Governments avails affordable access to quality education and training. Both the Central and County Governments have a critical role to ensure provision of basic education and promote skills development for a sustainable economy.

In order to meet MDG and EFA goals, and the Constitution, then even pre-primary education has to be integrated into the basic education system. This then requires that the Government puts in place mechanism to ensure access, equity and quality education in place from ECD to secondary education. Also, to attain Vision 2030, requires holistic human capital development. This implies enhancing training opportunities in Youth polytechnics (Village), middle level colleges and university education.

There is need for strategic financing options through internal and external resource mobilization. There is pressure in access to basic and higher education and hence to maintain the FPE, FDSE and subsidized higher education will require increases in education budget on annual basis.

CHAPTER FOUR: PROGRAMME PRIORITIES AND ACTIVITIES

4.0 Introduction

This chapter presents education and training priority programmes and activities aimed at achievement of Basic Education; enhancing quality and relevance of education; and meeting human resource needs for a middle income economy.

4.1 Actualizing the Right to Free and Compulsory Basic Education

The Constitution of Kenya 2010 mandates the Government to provide basic education to all citizens. This is in line with Vision 2030 and other international conventions including MDGs and EFA. To achieve this objective the sector will pursue the following strategies:

4.1.1 ECDE Mainstreaming

The Government of Kenya recognizes that Early Childhood Development and Education significantly contributes to quality education of the country. Mainstreaming of ECDE into basic education will therefore focus on 4-5 year-old children with a view to providing a holistic and integrated programme so as to increase access and ensure that pupils transit to primary school having been well prepared. To operationalize this strategy the sector will pursue the following activities:

(a) Review ECDE Policy Framework

The sector will review the National Early Childhood Development Policy Framework (2006) to align with the provisions of the Constitution as well as the Education Act (2012) and Policy Framework for Education Training and Research.

(b) Establish ECDE Resource Centres

In order to take care of changes in modes of curriculum delivery, the sector will invest in model centres where ECDE teachers will get their skills upgraded; capacities developed; and where new and upcoming technologies will be piloted before complete roll out to schools. The sector will establish a resource centre in each of the 47 counties to enhance regional balance in resource sharing.

(c) Provide Capitation Grants

The sector will provide capitation grants of Ksh. 1,020 per child to all pupils enrolled in public ECD centres to facilitate procurement teaching and learning materials.

(d) Recruit ECDE Teachers

In order to enhance the quality of education at this level and ensure smooth transition of ECDE children into primary education, the sector will employ 48,000 trained ECDE teachers (24,000 in the first MTP year and 6,000 in each of the 4 subsequent years).

4.1.2 School Health and Nutrition

The success of child survival programmes and the expansion of education coverage have resulted in a greater number of children reaching school-age and a higher number of these children attending a primary school. However, disease and malnutrition is still a major barrier to access quality education. The sector will enhance school feeding to all ECDE children as well as increasing coverage of vulnerable children in primary schools. The sector will undertake the following activities:

(a) Provide School Based Health and Hygiene Education

The sector will deliver a school health programme across the country in partnership with health sector. This activity will focus on the development of knowledge, attitudes, values and life skills for establishing enduring health practices; promoting healthy and hygienic behaviors; food nutrition; and reducing vulnerability to HIV/AIDS and other communicable diseases.

(b) Provide School Based Health Services

This service will provide comprehensive health care that is simple, safe and will seek to address health, hygiene and nutrition problems that are common among the community. The sector will liaise with relevant Government agencies to provide safe drinking water and sanitation as well as health and hygiene promoting education materials.

(c) Provide Midday Meals to the Disadvantaged Children (Move to affirmative Action)

The sector will continue to provide mid-day meals to pre-primary and primary school children in ASAL districts and slum areas. The sector will strengthen the home grown school meals to help build long term sustainability of the programme. This strategy will contribute to improved national food security and poverty reduction while enhancing access and participation to education.

4.1.3 Provision of Instructional Materials and Infrastructure

The sector will continue to provide capitation to all pupils and students enrolled in public institutions offering basic education to facilitate procurement of instructional materials. This will promote access, retention, and quality education in line with the provisions of the Constitution. Inasmuch as the government has made progress in improving school infrastructure, some existing infrastructures are in poor condition due to lack of investment

capital, poor construction standards and inadequate maintenance. To alleviate these infrastructural challenges the sector will implement the following projects:

(a) ECDE

Construct/rehabilitate 46,000 classrooms and 92,000 toilets.

(b) Primary schools

- Rehabilitate 3,000 classrooms in 1,500 schools
- Construct 60 new classrooms in Special Needs Schools
- Construct 10 new classrooms in existing rescue centers
- Construct 50 low cost boarding primary schools in ASAL areas.

(c) Adult Basic Education (ABE)

- Construct and equip 4,400 ABE classes
- Construct and equipping of 300 CLRC
- Construct a Multipurpose Development Training Institute (MDTI)
- Repair and Rehabilitate 5 MDTIs
- Construct 300 ABE/NFE secondary centres

(d) Secondary schools

- Construct extra classes in secondary schools to ensure each school is at least three streamed
- Construct 600 new secondary schools
- Rehabilitate 470 secondary schools
- Rehabilitate 20 special secondary schools
- Complete 312 stalled ESP projects

(e) Training colleges

- Rehabilitate Kagumo Diploma TTC and complete construction of Kibabii Diploma TTC
- Construct 5 new diploma TTCs
- Rehabilitate 18 TTCs
- Establish pedagogy/internship institute/INSET Centre.

(f) The sector will ensure that all schools infrastructure have requisite energy networks/sources installed.

4.1.4 Affirmative Action

Affirmative action is an important intervention in correcting cultural and historical gender imbalance; physical segregation; and regional disparities. It also promotes equity in access to education. During the second MTP period the sector will:

(a) Undertake a National Survey on Special Needs and Disabilities

The sector will undertake a National Survey on Special Needs Education to establish the extent of participation; facilities; and other interventions designed for learners and teachers

with special needs as well as Special Needs Education teachers. The survey will be instrumental in the review of the SNE policy.

(b) Identify and Nurture Talents

The sector will establish and operationalize a talent grant fund for pupils identified as having special gifts and talents. The grant fund will help in nurturing the so identified talents to spur the nation to middle income economy.

(c) Revive Most Vulnerable Children Support Grant Programme

To sustain gains made in access to and participation in education; the sector will revive financial assistance targeting most vulnerable children (MVC) to supplement already existing social security initiatives across government.

(d) Lab Equipment Grants

(e) Bursary and Scholarships

The sector will rationalize award of bursaries to pupils and students to study at the various levels of education. This will spur transition from primary to secondary as well as boost retention in secondary schools. Given the likelihood of increased enrolment due to the free and compulsory basic education programme, the sector will scale up the bursary award to cater for the increased demand.

4.2 Enhancing Quality and Relevance of Education

4.2.1 Human Resource Development

- Carry out skills and competencies mapping
- Develop a National Human Resource Development Plan

4.2.2 Curriculum Review and Reform

The sector will carry out a comprehensive review and reform of education curricula at all levels in response to the Constitution, other enabling Acts and:

- a) Labour market demands
- b) ICT Integration
- c) National values (mentoring and molding)
- d) Special Needs Education Mainstreaming
- e) Talents nurturing
- f) Life skills
- g) ECDE Mainstreaming

h) Any other emerging issues in education.

4.2.3 Teacher Education, Recruitment and Management

The sector will develop basic theoretical and practical knowledge in the teaching profession and ensure that teachers' attitude and capacities are in tandem with professional commitment and competence. The sector will carry out the following activities:

(a) Modernize Teacher Training

The sector in its reform agenda proposed to phase out PI training and upgrade the primary teacher training colleges to offer diploma in Primary teacher education. In line with its mandate of reviewing the standards of education and training of persons entering the teaching profession, the sector will:

- Upgrade teacher training colleges to diploma college status to offer Diploma in Primary Teacher Education.
- Provide opportunities for graduates choosing to become teachers to take an additional 9 months training in pedagogy.
- Incorporate Special Needs Education into teacher training to address need for inclusiveness at all levels of education.
- Train teachers to enable them integrate ICT in teaching and learning process.
- Develop and periodically review an all-inclusive curriculum to in-service teachers on emerging issues e.g. environment, ICT, life skills, National values
- Restructure TVET teacher training to address current and future market demands including new and emerging technologies.
- Review teacher training curriculum to include national values, guidance and counseling in line with the Constitution.
- Undertake professional teacher development to teachers to be deployed as teacher trainers.

(b) Recruit Teachers

In order to address teacher shortages in the country, the sector will employ 48,000 ECDE teachers; 20,000 primary and secondary teachers annually; and 25,000 Adult Basic Education teachers during the five year period. In addition, the sector will implement e-Learning; mobile schools; zoning of schools based on elective subjects; and sharing of teachers across schools.

(c) Quality Assurance

The sector will establish the Education Standards and Quality Assessment Council to oversee quality assurance and standards functions.

(d) Automate Teacher Management

The use of ICT is important as it enhances efficiency and effectiveness. The sector will automate all the teacher management functions and processes by:

- Linking the TSC Headquarters to counties.
- Implementing teacher online portal and upgrading Teacher Management Information System to enable data capture at source
- Establishing Teacher Human Resource Management System in line with the wider public service program.
- Digitizing teacher records for ease of retrieval and online operations by establishing linkages with development partners and other relevant stakeholders.

4.3 Information and Communication Technology

It is envisaged that ICT will be a universal tool for education training and management. To achieve this vision the sector will equip all educational institution, teacher, learner and the respective community with appropriate ICT infrastructure, competencies and policies for usage and progress. ICT provides capabilities and skills needed for a knowledge-based economy. This calls for transforming teaching and learning to incorporate new pedagogies that are appropriate for the 21st century. The sector's mission is to facilitate effective use of ICT to improve access, learning and administration in delivery education programmes and services. The principal objective will be to integrate ICT in the delivery of education and training curricula.

The sector will:

(a) Review the Policy and Institutional Framework for ICT Integration in Education

Vision 2030 and the Education Bill (2012) acknowledge ICT integration as a flag ship project. The strategy on ICT in education and training of June 2006 will be reviewed to ensure that the potential of ICT to contribute to quality, access and equity is fully harnessed.

This will include the use of ICT for improved decision making/management and the integration of ICT in teaching and learning. In the short to medium term each school should be equipped with basic ICT infrastructure to enable a school level data management system which will feed into the web-based national integrated education information management system. For integration in teaching and learning different modalities will be considered and teachers will be empowered to shift their way of teaching to be learner centred

(b) Procure ICT Infrastructure for Schools

The sector in the first MTP facilitated about two thousand secondary schools with computers under the computer supply programme for schools. To solidify the gains achieved, the sector will supply ICT infrastructure to 5,000 secondary schools; 20,000 primary schools; and 22,000 ECDE centres.

(c) Carry Out Capacity Development for ICT Integration in Education

The sector will target to retrain one teacher per school out of the schools that have not received training. The capacity development will be a catalyst for effective integration of ICT in education at all levels of the sector. The capacity building will also develop service providers' capacity to improve delivery of services and accountability and to make information flow and data processing more efficient.

(d) Facilitate Integration of ICT in SNE

In the last few decades, policy initiatives around the world have been aimed at a human rights approach and an environmental approach to persons with disabilities. The focus is on persons with disabilities rights and on the need to change society, including education systems, information and communication systems, health and social support services, transport systems, and to create new environment, working, housing, and leisure industries. The sector will facilitate special needs learners and teachers with equipment necessary for effective learning at SNE schools.

4.4 Education Sector Governance

The sector will develop/review policies necessary to ensure that National Government and County Governments cooperate in management of the education sector in harmony. This will involve definition of roles and responsibilities of each stakeholder involved in education. In this regard the sector will implement the following activities and projects.

(a) Establish the Education Governing Bodies

The sector will establish the National Education Board (NEB) to advise the Cabinet Secretary of the Department of Education and related departments on policy matters in line with the Constitution and the Education Act 2012.

The sector will also establish and operationalize County Education Boards (CEBs) in each of the 47 counties to oversee management education matters in respective counties.

(b) Develop and Review Education Policies

In reforming the sector, key policy areas will be reviewed and where no policy exists, the sector will develop policies to guide the reform process. New policies which will be formulated include:

- Emergencies and disaster response in education
- Free and Compulsory Basic Education
- Mentoring, molding and nurturing of national values
- Teacher development policy
- Free and Compulsory Basic Education capitation guidelines
- Basic Education management manual.
- Guidance and counseling policy

The sector will also review the following policies:

- The Policy Framework for Nomadic Education in Kenya 2009
- The National Adult and Continuing Education Policy 2010
- The National Special Needs Education Policy Framework 2009
- The Policy for Alternative Provision of Basic Education and Training (APBET) 2009
- The School Health and Nutrition Policy
- The Gender Policy in Education 2007
- The Education Sector Policy on HIV and AIDs 2004

- National ICT Strategy for Education and Training 2006
- Teacher Proficiency Course (TPC) Policy 2007
- National Early Childhood Policy Framework 2006
- ECD Service Standard Guidelines 2006
- Schools Safety Manual
- Code of Regulations for Teachers
- Code of Conduct for TSC Secretariat Staff
- Head Teachers Manual.

(c) Establish County Education Data Centres

In order to provide in depth analysis of the education sector and make sound and effective decisions; the sector has to ride on a rich data and information platform. The sector will in the second MTP period establish and equip data centres in all the forty seven (47) counties to facilitate seamless data and information processing and management. The sector will also pursue a comprehensive capacity development programme on data management targeting users of the decentralized data management system.

(d) Training and Capacity Building for Education Sector Leadership and Management

The sector will train and build capacity for education management at national, county and institutional levels. The focus will be on policy makers, education managers and education institution heads.

(e) Establish a Ministerial Monitoring and Evaluation System

To enhance accountability of the resources allocated to education programmes under education, the sector will establish and operationalize an effective Monitoring and Evaluation System. The system will make it possible for education managers to assess the impact of projects/programmes implemented by the sector.

Successful implementation of the Education Sectors policies programmes and initiatives hich are designed to help realize Vision 2030 squarely depend on the commitment of the Ministerial Leadership, collective responsibility and strategic communication. The objective of this is to enhance the ministry's Communication, Streamline dissemination of information to all its stakeholders, and provide a feedback mechanism or platform for stakeholders. It will also enhance accuracy in reporting on ministry priorities and activities simplify complex

technical issues for the public to understand while at the same time anticipating and mitigate risk and crisis communication. In order to achieve this, the sector will: -

- (i) Develop a comprehensive government communication strategy and tools, building on best practices. This will enable Cabinet secretaries, Principal Secretary, Heads of Departments, Communication Officers and the Ministry at large to speak with” **One Voice**” on education sector issues using effective, consistent and positive messaging.
- (ii) Carry out dissemination/Awareness creation: Dissemination/awareness creation will target all stakeholders. The ministry will proactively provide timely and accurate information to its customers and other stakeholders.
- (iii) Carry out Capacity building for all education stakeholders: This will enable all players in the education sector to know their roles and responsibilities in the provision of education.

4.5 Post Basic Education

4.5.1 Technical, Vocational Education and Training

(a) Increase Access and Equity to TVET

A large proportion of KCSE candidates who miss University places seek admission into TVET institutions every year. However, the capacity in the TVET institutions is limited. The sector will increase the capacity of TVET institutions to absorb these numbers using the following strategies:

- (i) Establish a Central Admission Service for TVET government sponsored students ;
- (ii) Establishment of Vocational Training Centre(VTC) at constituency level and at least one Technical College (TC) at county level to increase equity;
- (iii) Make training delivery flexible through modular delivery process and, incorporate electronic technologies in TVET provision

(b) Enhance Quality and Relevance of Skills for Industrial Development

The TVET training is expected to nurture creativity, critical thinking, and produce innovative and adaptive human resources with appropriate skills, attitudes and values for wealth creation, employment and prosperity. For TVET to play its role, the concept of

specialization should be fully integrated and institutionalized. To address challenges in TVET the sector will pursue the following:

- (i) Establish Technical and Vocational Education and Training Authority;
- (ii) Streamline the management and assessment of industrial attachment process;
- (iii) Review and enforce minimum TVET trainers' qualifications including compulsory industrial attachment for TVET trainers at least every three years of service;
- (iv) Institutionalize quality assurance and accreditation system and monitoring, evaluation, reporting, and inspection in TVET;
- (v) Establish a Labour Market Information System (LMIS) and other survey instruments for data on the actual employability of TVET graduates in partnership with industry,;
- (vi) Develop standards to guarantee a minimum quality for TVET and develop policies, plans and guidelines for the rebranded TVET;

4.5.2 University Education

Kenya's university education system must be focused, efficient and able to create knowledge and deliver accessible, equitable, relevant and quality training to sustain knowledge based economy that is internationally competitive as envisaged in Kenya Vision 2030. To achieve this, the sector will:

(a) Expand Access and Equity

In order to expand access and equity in university education, the sector will:

- (i) Establish the Kenya Universities and Colleges Admission Service
- (ii) Establish new public universities and expand the enrollment capacity of public University constituent colleges.
- (iii) Encourage private universities to expand degree programs offered
- (iv) Strengthen and expand e-learning degree programs in all public universities.

(b) Improve Quality and Relevance

To improve the quality and relevance of university education, the sector will:

- Upgrade the Commission of Higher Education to Commission of University Education
- Establish the Pan African University of Science Technology and Innovation
- Establish at least one publicly funded specialized university in the area of ICT and engineering
- Develop the capacity of academic staff in the use of modern e-learning teaching

methods and evaluation techniques

- Increase the number of graduate researchers in areas of technology, innovation and entrepreneurship

(c) Human Resource in Support of University Education

During the 2nd MTP the a 1,000 Government-funded teaching assistantships will be introduced annually in both public and private universities for post-graduate students who would be transitioned straight from their undergraduate studies, allowing these students to attain their PhDs, and serve as teaching assistants to support the increased enrolment of undergraduates, while gaining valuable training and hands on experience in teaching and learning

4.6 Education and Training Financing

The current education financing arrangement has over reliance on exchequer supported resources and parents. To actualize the Constitutional right to free and compulsory education as well as the right to education, the sector will:

(a) Develop an education and training financing model that will allow and guide the participation of:

- The National Government
- County Governments
- Development Partners
- Non State Actors (NGOs/Civil Societies/CBOs....)
- Private Sector
- Parents...

This, the sector envisages will clarify roles and responsibilities of each duty bearer in a quest to deliver the right to free and compulsory basic education as well as the right to education.

(b) Review and operationalize/enforce fee guidelines to protect parents from exploitation.

(c) Develop allocation criteria for sharing resources among education programmes in the devolved governance system.

(d) Develop a Public Private Partnership Policy on financing and delivering education.

4.7 Flagship Projects

Based on the six priority areas identified, the education and training sector has identified 6 flagship projects to be pursued during the 2nd MTP period. The flagship projects include:

1. ECDE Mainstreaming
2. Establish EMIS centres in each county
3. Curriculum Review and Reform
4. ICT integration in education
5. Basic Education infrastructure
 - Construct/rehabilitate 46,000 classrooms and 92,000 toilets.
 - Construct extra classes in secondary schools to ensure each school is at least three streamed
 - Construct 600 new secondary schools
6. Tertiary and university education infrastructure
 - Establish 11 TVET centres of specialization in different disciplines, fully equipped with state of the art training facilities and well trained staff
 - Establish Open TVET by 2017.
 - Upgrade 10 TTIs into National Polytechnics
 - Establish National Open University of Kenya

CHAPTER FIVE: IMPLEMENTATION MATRIX

Goals	Actualizing The Right to Free and Compulsory Basic Education									
Strategic Thrust	ECDE Mainstreaming									
Proorammes/Projects	Objectives	Expected Outcomes	Implementing Agency	Time Frame	Sources of Funds	Indicative Budget (in Kshs million)				
						2013/14	2014/15	2015/16	2016/17	2017/18
Review ECD Policy Framework	The current policy framework on ECDE (2006) should be reviewed to align it with the Constitution 2010 and Vision 2030	Access to ECD Education by all 4 year old children	MOE and Stakeholders	2013	National Government, UNICEF and other Development Partners	20	0	0	0	0
Recruitment of 48,000 ECDE Teachers	To provide adequate number of teachers	Enhanced quality and smooth transition of ECD children into primary	TSC	2013-2017	National Government	6,624	1,656	1,656	1,656	1,656
Establish 47 County ECDE Resource Centres	These centres will offer opportunity for teachers' skills upgrading and serve as model centres	Improved quality of ECD education	MOE, TSC, County Governments	2013-2016	MOE, TSC, County Governments and Development Partners	2	140	140	0	0
Provide Capitation to ECDE pupils	To procure teaching and learning materials in ECDE centres	Increased access and quality of ECDE	National/Cou nty Governments	2013-2017	National Government	2,500	3,000	3,500	4,000	4,500
Strategic Thrust	School Health and Nutrition									
Proorammes/Projects	Objectives	Expected Outcomes	Implementing Agency	Time Frame	Sources of Funds	Indicative Budget (in Kshs million)				
						2013/14	2014/15	2015/16	2016/17	2017/18

Provide School Based Health and Hygiene Education	To promote nutrition and hygienic practices in schools	Regular school attendance by healthy learners	MOE, MOH, Teachers/Parents, NGOs/CBOs and Development Partners	2013-17	National Government	5	10	10	10	10
Provide School Based health Services	To promote preventive healthcare practices	Regular school attendance by healthy learners	MOE, MOH, Learning Institutions, Development Partners and implementing NGOs	2013-17	National Government, Development Patners,	800	1,900	2,400	1,700	1,000
Provide Midday Meals to ECDE children	To realize holistic development of children ready to learn	Regular school attendance by well fed ECDE children	County Governments, NGOs/CBOs/ FBOs, Parents	2013-17	County Governments, NGOs/CBOs/FBOs/ Development Partners	2,500	3,000	3,500	4,000	4,500
Strategic Thrust	Schools Infrastructure									
Prorammes/Projects	Objectives	Expected Outcomes	Implementing Agency	Time Frame	Sources of Funds	Indicative Budget (in Kshs million)				
						2013/14	2014/15	2015/16	2016/17	2017/18
Construct/Rehabilitate 46,000 ECD classrooms and 92,000 toilets	To provide standard infrastructure for all ECD learners	Increased access to ECD Education and provide child friendly learning environment	County Governments	2013-17	National and County Governments, Private Sector, Community, Development Partners	5000	8500	15000	11000	8500
Rehabilitate 3,000 classrooms in 1,500 primary schools	To modernize primary school classrooms	Improved teaching and learning environment	MOE, National/County Governments,	2013-15	National Government	500	1,000	0	0	0
Construct 60 new classrooms in Special Needs Schools	To create an SNE friendly learning environment	Increased access for Special Needs Learners	MOE, Public Works,	2013-15	National Government	10	80	0	0	0

Construct 10 New Classrooms in existing rescue centres	To provide more classrooms in existing rescue centres	More vulnerable learners accessing primary education	MOE	2016	National Government	0	0	15	0	0
Construct 50 Low Cost Boarding Primary Schools in ASALs	To provide adequate learning centres in the ASALs	Improved access to education in ASALs	MOE	2013-17	National Government, Development Partners	280	300	300	300	220
Construct and equip 4,400 ABE classes	To provide infrastructure for adult learners	Improved literacy levels	MOE	2013-17	National Government	600	1,500	1,500	1,500	1,500
Construct and equip 300 CLRCs	To provide a forum for adult empowerment	Literate and empowered citizenry	MOE	2013-17	National and County Governments	300	300	300	300	300
Construct a Multipurpose Development Training Institute (MDTI)	To provide an institute for community education	Community skills upgraded	MOE	2013-17	National Government	10	40	30	10	10
Repair/Rehabilitate 5 MDTIs	To modernize the existing MDTIs and spur community empowerment	Community skills upgraded and citizens empowered	MOE	2014	National Government	5	40	35	35	35
Construct 300 ABE/NFE Secondary Centres	To provide secondary education opportunities for adult learners	Improved access to secondary education for adult learners	MOE	2013-17	National Government	10	110	110	110	110
Construct additional streams in 159 single and 541 double streamed County Schools to make them three streamed	To expand secondary education opportunities	100% transition from primary to secondary schools	MOE	2013-17	National and County Governments; Development Partners;	800	2,500	2,500	2,500	2,500

Construct 600 new three-streamed day secondary schools	To expand secondary education opportunities	100% transition from primary to secondary schools	MOE	2013-17	National and County Governments, Community and Development Partners	2,000	7,000	7,000	7,000	7,000
Rehabilitate 470 secondary schools	To upgrade secondary infrastructure	Expanded access and improved teaching and learning environment	MOE	2013-17	National/County Governments, Community and Development Partners	470	2,500	3,430	2,000	1,000
Rehabilitate and equip 20 special secondary schools	To upgrade and make the special schools SNE learner-friendly	Expanded access and participation in SNE	MOE	2013-17	National/County Governments, Development Partners	100	200	300	300	100
Complete 312 stalled ESP projects	To complete stalled centres of excellence	Expanded access and improved teaching and learning environment	MOE	2014-16	National/County Governments; Development Partners	0	1,300	1,300	0	0
Rehabilitate Kagumo Dip TTC and complete construction of Kibabii Dip TTC	To upgrade infrastructure in the diploma TTCs	Expanded access and quality training in teacher education	MOE	2013-16	National Government	40	40	40	0	0
Rehabilitate 18 Primary TTCs	To upgrade the TTCs infrastructure to offer Diplomas in Primary Teacher Training	Higher level skills and competencies training	MOE	2013-17	National Government, development Partners	180	180	180	180	180
Establish Pedagogy/Internship Institute/INSET Centre	To offer opportunities for training teacher educators and teachers' professional development	Improved skills of teacher educators and practicing teachers	MOE, TSC	2013-17	National Government, Development Partners	0	0	400	300	300
Strategic Thrust	Affirmative Action									
Prorammes/Projects	Objectives	Expected Outcomes	Implementing Agency	Time Frame	Sources of Funds	Indicative Budget (in Kshs million)				

						2013/14	2014/15	2015/16	2016/17	2017/18
Undertake a National Survey on Special Needs and Challenges	To establish the prevalence of persons with special needs and various challenges in the country	Improved planning and placement of SNE	MOE	2013-14	National Government, UNESCO and other Development Partners	20	30	0	0	0
Introduce talent grants for primary schools pupils	To identify and develop talented and gifted children in primary schools early in life	Increased exploitation of talents and gifts for achieving Vision 2030 and self fulfillment	MOE, UNICEF	2013-17	National and County Governments; UNICEF	1,000	1,000	1,000	1,000	1,000
Revive and expand Most Vulnerable Children Support Grant Programme	To increase access to education for the marginalized	Expanded access to education by children from disadvantaged groups	MOE, NGOs	2013-17	National Government, Development Partners and NGOs	10	1,000	1,000	1,000	1,000
Continue Bursary and Scholarships	To increase access to education for the marginalized	Expanded access to education by children from disadvantaged groups	MOE	2013-17	National Government	1,500	2,000	2,500	3,000	3,500
Goals	Enhancing Quality and Relevance of Education									
Strategic Thrust	Human Resource Development									
Prorammes/Projects	Objectives	Expected Outcomes	Implementing Agency	Time Frame	Sources of Funds	Indicative Budget (in Kshs million)				
						2013/14	2014/15	2015/16	2016/17	2017/18
Carry out skills inventories and mapping	To establish the skills gap in the economy and develop a Human Resource Development Plan	Education and training matched with labour market demands	MOE	2013-16	National Government; CIDA-Canada	100	100	2,400	2,400	0
Strategic Thrust	Curriculum Review and Reform									
Prorammes/Projects	Objectives	Expected Outcomes	Implementing Agency	Time Frame	Sources of Funds	Indicative Budget (in Kshs million)				
						2013/14	2014/15	2015/16	2016/17	2017/18

Carry out a major curriculum review and reform	To align education curriculum with the Constitution and Vision 2030	Productive citizenry	KIE and other education stakeholders	2013-17	National Government; Development Partners	1,000	1,000	7,000	6,000	4,000
Strategic Thrust	Teacher Recruitment and Management									
Prorammes/Projects	Objectives	Expected Outcomes	Implementing Agency	Time Frame	Sources of Funds	Indicative Budget (in Kshs million)				
						2013/14	2014/15	2015/16	2016/17	2017/18
Recruit Teachers • 25,000 Adult teachers • 100,000 Primary and Secondary teachers	To reduce teacher shortages	Improved quality of education	TSC	2013-17	National Government					
Establish and operationalize Education Standards and Quality Assurance Commission (ESQAC)	To improve quality assurance services in education	Improved quality assurance and standards services	MOE	2013-17	National Government	1,500	1,500	1,500	1,500	1,500
Internal quality assurance and performance appraisal	To utilize teachers effectively	Improved quality of teaching and learning outcomes	TSC	2013-17	National Government	24	24	24	24	24
Automate Teacher Management	To migrate teacher management to electronic platforms	Improved teachers services	TSC	2013-17	National Government	800	800	800	800	800
Goals	Integrating ICT in Education									
Strategic Thrust	Information and Communication Technology									
Prorammes/Projects	Objectives	Expected Outcomes	Implementing Agency	Time Frame	Sources of Funds	Indicative Budget (in Kshs million)				
						2013/14	2014/15	2015/16	2016/17	2017/18

Review the Policy and Institutional Framework for ICT Integration in Education	To align the policy framework with the Constitution and Vision 2030	Increased integration of ICT in education	MOE, MOIC, Development Partners	2013-14	National Government	50	0	0	0	0
Procurement of ICT equipment for Schools and extending infrastructure	To improve access of schools to e-Teaching, learning and online facilities	Optimum usage of human and physical resources enhanced	MOE, Development partners	2013-17	National Government, TSC, County Governments, Private Sector	3,000	8,000	8,000	8,000	3,000
Facilitate Integration of ICT in SNE	To improve access of persons with special needs to e-Teaching, learning and online facilities	Optimum usage of human and physical resources enhanced in learning institutions	MOE	2013-17	National Government; Development Partners	300	800	800	800	300
Goals	Education Sector Transformation									
Strategic Thrust	Education Sector Governance									
Prorammes/Projects	Objectives	Expected Outcomes	Implementing Agency	Time Frame	Sources of Funds	Indicative Budget (in Kshs million)				
						2013/14	2014/15	2015/16	2016/17	2017/18
Establish Education Governing Bodies (NEB, CEBs, BOMs)	To enhance efficiency and effectiveness of education services; transparency and accountability	An efficient and effective education system	MOE	2013	National and County Governments,	431	0	0	0	0
Develop and Review Education Policies	To align education policies to the provisions of various acts governing education sector; the Constitution; and Vision 2030	Improved education service delivery	MOE, TSC, KNEC, KICD	2013-17	National and County Governments, MDIs, SAGAs, Development Partners,	50	50	50	50	50
Establish County EMIS/EFMIS Centres	To strengthen and harmonize EMIS/EFMIS	Transparent and accountable education system	MOE, TSC, KNEC,	2013-17	National and County Governments, Development Partners	150	1,500	1,500	1,500	1,500

Training and Capacity Building for Education Sector Leadership and Management	To increase efficiency and effectiveness in education service delivery	A highly performing education human resource	MOE, TSC, KSG, KEMI...	2013-17	National and County Governments; Development Partners	150	200	150	150	150
Establish and operationalize a Ministerial Monitoring and Evaluation System	To assess effectiveness, efficiency and integrity of the education delivery system	An accountable education system	MOE, TSC, County Governments, MOPNDV2030,	2013-17	National and County Governments;	50	200	200	200	200
Goals										
Prorammes/Projects	Objectives	Expected Outcomes	Implementing Agency	Time Frame	Sources of Funds	Indicative Budget (in Kshs million)				
						2013/14	2014/15	2015/16	2016/17	2017/18
Develop an <i>education and training</i> financing model	To allow effective sharing of responsibilities by duty bearers in financing education	Right to Education Actualized Enhanced participation and commitment of duty bearers in education delivery	MOE,	2013-14	National Government	20	10	0	0	0
Review and operationalize/enforce fee guidelines	To rationalize fees and levies	Affordable education	MOE,	2013-17	National and County Governments	5	5	5	5	5
Develop allocation criteria for sharing resources among education programmes in the devolved governance system	To rationalize county education funding	Equitable education system	MOE	2013	National Government	10	0	0	0	0
Develop a Public Private Partnership Policy on financing and delivering education	To mobilize financial resources for education	A sustainable education system	MOE	2013	National Government, Private sector	10	40	0	0	0

Total						29,136	47,055	59,075	54,830	43,950
Goals										
Strategic Thrust	Post Basic Education									
Prorammes/Projects	Objectives	Expected Outcomes	Implementing Agency	Time Frame	Sources of Funds	Indicative Budget (in Kshs million)				
						2013/14	2014/15	2015/16	2016/17	2017/18
Expand Open and Distance Learning	Establish National Open University of Kenya	100,000 students by 2015	MoHEST CHE	2013-2014	National Government	931	931	931		
Increase Access and Equity to TVET	Establish 9 TTIs institutions in counties without public TVET institutions	Attain 20% gross enrollment in TVET	MOHEST MOL	2013-2014	National Government Development partners	5000	5000	5000	5000	5000
Establish Skills inventory	Develop national master plan for skills training	A skills inventory	MOHEST MoL Mol KNBS	2013-14	National Government	500	500			
Enhance Quality and Relevance of Skills for Industrial Development	-Provision of identified Engineering and Science Equipment to the target TVET institutions -rehabilitation and construction of laboratories	Engineering and Science Equipment to TVET institutions -rehabilitation and construction of laboratories	MOHEST	2013-2014	GOK Development partners	2000	2000	2000	2000	
Expand Access and Equity to University Education				2013-2014						

Improving Quality and Relevance of STI education programs.	-Provision of identified Engineering and Science Equipment to the target universities -Provision of Video conferencing facilities to target institutions	Engineering and Science Equipment to the target institutions	MOHEST	2013-2014	GOK Development partners	1900	1900	1900	1900	1900
Strengthening Human Capital Development for STI Programs	Human Resource in Support of University Education		MOHEST	2013-2014		1100	1100	1100	1100	1100
Enhanced Student Loans and Bursaries	Provide equitable access to University and TVET education	Access to education loans for 380,000 university students and 146,000 TVET students by 2018	HELB MOEST	2013-2017	GoK Loan recoveries PPPS	16,340	28,129	45,850	66,042	85,125
SECTOR TOTAL						19,340	31,129	48,850	69,042	88,125