
REPUBLIC OF KENYA

MINISTRY OF



**EDUCATION, SCIENCE AND
TECHNOLOGY**

STRATEGIC PLAN

2013-2017

KENYA



Towards a Globally Competitive and Prosperous Kenya

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Executive Summary

This Strategic Plan has been developed in line with the new mandate of the Ministry given upon its creation in March, 2013, covering: basic education; tertiary education; university education; technical education; continuing education and learning; and science, technology and innovation. The plan has also considered the recently accomplished policy developments such as the Sessional Paper No. 14 of 2012, the various acts of parliament and the Second Medium Term Plan for Vision 2030.

This plan is organized into eight chapters, namely: Introduction; Role of the Ministry; Situational Analysis; Strategic Model; Coordination Framework; and Ministerial Capacity Requirements; Resource Flows and Monitoring and Evaluation. The overall objective of this Strategic Plan is to incorporate and update the changes in the Ministry while streamlining the Ministry's activities and linking the Plan to the Vision 2030. The implementation and its allied results matrix are annexed to this Strategic Plan under Annex 1 and Annex 2 respectively.

Chapter one gives an overview of the background against which the Strategic Plan for the ministry is developed in light of the new structure of the ministry, the development of the Second Medium Term Plan and the lapse of the second generation Strategic Plans that covered the period 2008- 2012. The chapter also looks at the national, regional and global development challenges that the country faces in laying her development goals. Lastly the chapter gives a snapshot of Kenya's development agenda as laid out in the country's Development Plan, the vision 2030, the Second Medium Term Plan and the manifesto of the jubilee government.

Chapter two introduces the role of the Ministry and that of its core institutions in addressing the global and national challenges. The chapter specifically affirms the combined role of, spearheading the realization of quality universal basic education, human resource development by TIVET and higher education institutions. The chapter also explains the basis of the policy priorities and programmes, including the integration of ST&I, in national production processes, which is expected to intensify and lead to widespread use of applicable ST&Is for the realization of vision 2030. The chapter also details the role of the ministry as given by the Executive Order No 2/2013. The mandates of the ministry's departments are focused on rapid economic growth towards the realization of vision 2030. Towards realization of this goal, the ministry is mandated to harmonize, implement, guide and coordinate matters of education, training and science and technology through its established institutions. The specific functions and the current organizational structure of the Ministry are also outlined in this chapter. The chapter also points out the Vision, Mission and core values of the Ministry.

Chapter Three gives the Ministry's performance record in the recent past and analyzes its internal strengths and weaknesses following the analysis of both the internal and external factors using the SWOT and PESTEL analysis models. This analysis leads to identification of strategic issues to be addressed by the ministry.

Chapter four addresses the strategic model that will be adopted during the Strategic Plan period. The chapter identifies strategic issues based on the SWOT and PESTEL analysis from the previous chapter. It also gives the strategic objectives and the attendant strategies that will be employed to achieve those objectives.

Chapter five presents a detailed matrix for implementation of each Strategic Objective. The matrix summarizes the following: Activities, Expected Outputs, Performance Indicators, Lead Implementing Agency and Collaborator/s, Target, Timeframe and the Expected Impact. The budgetary estimates required to undertake each of the activities have also been indicated. The Chapter also outlines the implementation approach, management structure and reporting relationships in which performance measurement will be the basis for appraisal. Actual measured parameters will be contrasted against pre-set targets in order to rate performance.

Chapter six presents the ministry's capacity requirements, highlighting the current versus the proposed positions with regard to the provision of the human, infrastructural and financial resources required to implement the revised strategic plan.

Chapter Seven reviews the ministry's financial resource flows in relation to the set programmes, It also looks at performance and risks with respect to capacity building, collaboration and linkages.

Chapter eight has provided for the designing of an effective and efficient Monitoring and Evaluation (M&E) mechanism for implemented programmes. The M&E will serve two purposes; namely: (i) to enquire into the efficacy of each planned programme and (ii) to assess the progress and overall impact of implemented programmes. Alternative M&E methodologies are suggested; including regular reviews, spot inspections and observation, and special and rapid assessment surveys. It is also suggested that the management of M&E programmes be done through (i) establishment of M&E Steering Committee and; (ii) formation of Departmental M&E implementing units.

Acronyms

ABET	Adult Basic Education and Training
APBET	Alternative Provision of Basic Education and Training
ASAL	Arid and Semi-arid Land
BE	Basic Education
BOG	Board of governors
BOM	Board of Management
CBE	Curriculum Based Establishment
CBO	Community Based Organizations
CDF	Constituency Development Fund
CEB	County Education Board
CEMASTE	Centre for Mathematics and Science Teaching Education in Africa
CEO	Chief Executive Officer
CHE	Commission for Higher Education
CPD	Continuous Professional Development
CPPMU	Central Planning and Project Monitoring Unit
CUE	Commission for University Education
DEO	District Education Officer
DITAQA	Directorate of Technical Accreditation and Quality Assurance
DQAS	Directorate of Quality Assurance and Standards
DRMD	Directorate of Research Management and Development
DTE	Directorate of Technical Education
DYT	Directorate of Youth Training
EAC	East African Community
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
ESQAC	Education Sector Quality Assurance Commission
ET	Education and Training
FBO	Faith Based Organization
FDSE	Free Day Secondary Education
FPE	Free Primary Education
GDP	Gross Domestic Product
GER	Gross Enrolment Rate

HE	Higher Education
HELB	Higher Education Loans Board
ICDTA	Institute for Capacity Development of Teachers in Africa
ICT	Information, Communication Technology
ICT4E	ICT for Education
IEP	Inclusive Education Policy
IFMIS	Integrated Financial Management System
IGAD	Inter Governmental Authority on Development
IMS	Information Management System
INSET	In-Service Education Training
JKF	Jomo Kenyatta Foundation
KAIST	Kenya Advanced Institute for Science and Technology
KBE	Knowledge-Based Economy
KCPE	Kenya Certificate of Primary Education
KCSE	Kenya Certificate of Secondary Education
KDHS	Kenya Demographic and Health Survey
KENIA	Kenya National Innovation Agency
KEPHIS	Kenya Plant Health Inspectorate Service
KES	Kenya Shillings
KICD	Kenya Institute for Curriculum Development
KIE	Kenya Institute of Education
KIPI	Kenya Industrial Property Institute
KISE	Kenya Education staff Institute
KMIS	Knowledge Management Information Service
KNATCOM	Kenya National Commission
KNBS	Kenya National Bureau of Statistics
KNEC	Kenya National Examination Council
KUCCPS	Kenya Universities and Colleges Central Placement Service
LATF	Local Authority Transfer Fund
M&E	Monitoring and Evaluation
MDGs	Millennium Development Goals
MEAs	Multilateral Environmental Agreements
MEO	Municipal Education Officer
MMEC	Ministerial Monitoring and Evaluation Committee
MOEST	Ministry of Education Science and Technology
MSMES	Micro Small and Medium Enterprises
MTEF	Medium Term Expenditure Framework
MTP	Medium Term Plan
NACECE	National Centre for Early Childhood Education
NACONEK	National Council for Nomadic Education in Kenya

NACOSTI	National Commission for Science Technology and Innovation
NEB	National Education Board
NEPAD	New Partnership for African Development
NER	Net Enrolment Rate
NESC	National Economic and Social Council
NESSP	National Education Sector Support Programme
NGOs	Non-Governmental Organizations
NQF	National Qualifications Framework
NRF	National Research Fund
NVCET	Nation Vocational Certificate Education and Training
OD	Open Distance
OVC	Orphans and Vulnerable Children
PESTEL	Political, Economic, Social Cultural, Technological, Environmental and Legal
PPPs	Public Private Partnerships
PTA	Parent Teachers Association
PTR	Pupil Teacher Ratio
QSM	Quality Standards Management
R&D	Research and Development
SACMEQ	Southern African Consortium for Monitoring Education Quality
SAGA	Semi-Autonomous Government Agency
SE	Secondary Education
SET	Science Engineering and Technology
SMASE	Strengthening of Teaching in Mathematics and Science Education
SMCs	School Management Committees
ST&I	Science, Technology and Innovation
SWAP	Sector-Wide Approach to Planning
SWOT	Strengths, Weaknesses, Opportunitites and Threats
TE	Technical Education
TIVET	Technical, Industrial, Vocational and Entrepreneurship Training
TVET	Technical, Vocational Education and Training
TPC	Teacher Proficiency Course
TSC	Teachers Service Commission
UN	United Nations
UNESCO	United Nations Education, Scientific and Cultural Organization
YT	Youth Polytechnic

Chapter One: Introduction

1.1 Background

Vision 2030 is the country's economic blueprint and has guided Kenya's development plan since its inception in 2008. This vision will be implemented through 5 years Medium Term Plans (MTP). The first MTP covered the period 2008-2012 and was succeeded by the current second MTP which runs from 2013-2018. These plans will be implemented by government Ministries and agencies through 5 year strategic plans.

In the 2008-2012 MTP period, Education, Training Science & Technology sector was comprised of two Ministries; Ministry of Education and Ministry of Higher Education, Science & Technology. Each of these Ministries had respective Strategic Plans implementing the MTPs for the social sector and the Science, Technology & Innovation sector. Since 2008, the education sector has undergone major reforms that will have great influence in the planning for the sector. These reforms include the promulgation of the constitution of Kenya 2010, Sessional paper no. 14 of 2012, Science, Technology & Innovation (ST&I) policy and 8 Acts of parliament enacted to implement the policies.

As part of strategy implementation, the Ministry of Education, Science and Technology adopted a Sector Wide Approach to Programme Planning (SWAP) over the period 2005-2010. This was actualized in the development of the Kenya Education Sector Support Programme (KESSP), which presented a multi-sector driven Investment Programme. Over the second MTP period the NESP is expected to operationalize the development strategies in the sector.

Following the re-structuring of government through Executive Order No. 1/2013 and 2/2013, the two ministries were merged to form the Ministry of Education, Science and Technology. In addition the Youth Training function which previously fell under the Ministry of Youth Affairs and Sports, was also placed under the new Ministry.

The current process of re-structuring the Ministry of Education, Science and Technology and the need to respond to the demands of the Constitution of Kenya 2010; the Kenya Vision 2030 and the Jubilee Manifesto contributes to the realization of the aspirations for affordable and equitable access to quality education, training, science & technology. These therefore necessitate the development of the Ministry of Education, Science & Technology Strategic Plan for the period 2013-2018.

1.2 Kenya Development Challenges: Global, Regional and National

Kenya recognizes that education, training, science and technology is fundamental to the success of the Vision 2030. Education, training, science and technology sector is charged with the responsibility of creating a knowledge-based society that upholds justice, democracy, accountability and encourages issue-based and results-oriented political engagements.

Globally, the attainment of the six goals of the EFA remains the biggest challenge in the provision of education. According to the global monitoring report 2014, none of the six goals of EFA will be met by the 2015 deadline. Most countries have continued to struggle to allocate more resources to education as a share of their budget. The recent global economic recession and political crises are other challenges that have constrained the global development agenda in the education sector.

Attaining growth through the creation and deployment of STI capacity by triggering innovation driven growth in developing countries is also a major challenge towards ensuring equitable and inclusive globalization. Developing countries will have to catch up so as to bridge the technological divide. However, slow investments in innovation and ST&I infrastructure have limited the absorption capacity and the ability to adapt and apply existing technologies.

Nationally, some of the challenges facing the sector in the context of Kenya's transformation to Vision 2030 include meeting the human resource requirements for a rapidly changing and more diverse economy; ensuring that the education system meets high quality standards and that its contents are relevant to the needs of the economy and society; raising the standards of the regions that lag behind in school enrolment to bring them at par with other leading areas. The sector envisions maximum transition rates, particularly from secondary to tertiary levels. Considering the massive infrastructural needs in achievement of this target the challenge remains glaring. 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.

Other challenges include 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.

There is a 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 and poor state of infrastructure and equipment for research and higher education and training.

Although the Constitution has emphasized the importance of science, technology and innovation in Kenya's development, the sector continues to operate in a fragmented manner losing on the benefits of synergy and networking. The investments that Kenya has made in science and technology infrastructure have not yielded the expected improvements in economic growth.

The weak linkages between researchers, innovators and industry which are expected to use the research outcomes, has resulted to lack of commercialization of research findings. There is low funding for research leading to non-alignment of the research agenda with national development goals and market needs. As a result funding on research is below the 2% of GDP as envisaged in the ST&I Act.

The inadequate scientific expertise in the country, lack of advocacy for ST&I at high political and policy levels, low science culture among the population and weak mechanisms for implementation, evaluation and review of ST&I initiatives are among the other challenges.

Overall, the sector grapples with the lack of a unit cost of educating an individual from the point of entry into the education system to any stipulated drop off point. The capitations to pupils and students have also not been reviewed upwards to keep up with inflation and there is an urgent need to review them if education delivery is to remain sustainable.

1.3 Kenya Development Agenda

The country adopted the Kenya Vision 2030 to guide its development in the long-term. The Vision is implemented through three pillars namely economic, social and political. The economic pillar seeks to achieve an average economic growth rate of 10% per annum and sustaining the same until 2030 in order to generate resources sufficient for meeting MDGs and the Vision goals. The social pillar aims to create a just, cohesive and equitable social development in a clean and secure environment. The political pillar seeks to realize an issue-based, people-centered, results-oriented and accountable democratic system.

The link between education and the world of work, the economy and national development is indelible. The sector seeks to strengthen that link through the integration of ICT into education to ensure that all learners are exposed to science and technology and appreciate the new trends in education. The sector also seeks to give special attention to development of TVET and to expose the trainees to opportunities to apply the acquired knowledge practically.

To this end, the sector has identified a number of flagship projects to be implemented over the second five years of the Vision 2030 period and calls upon the public and private sectors effective and efficient participation. The successful implementation of these projects and programmes will contribute to the country moving towards becoming “globally competitive and prosperous nation, where every person will enjoy a high quality life”.

The Kenya Vision 2030 and the Millennium Development Goals (MDGs) are the twin strategies adopted by the Government of Kenya to reduce poverty and enhance access to basic needs for majority Kenyans. Education, Training, Science and Technology Innovations are recognized nationally and globally as essential for the economic transformation; growth and competitiveness of Kenya; and are also key components of social integration, sustainable development and poverty eradication. Implementation of relevant strategies in the sector must be successfully delivered in order to achieve the goals set under the Kenya Vision 2030.

Chapter Two: Role of Ministry

2.1 Introduction

This chapter focuses on the mandate of the Ministry that will facilitate contribution to Vision 2030. The vision, mission, core values and agencies that will guide the implementation of the plan are also addressed.

2.2 Vision

A globally competitive education, training, research and innovation system for sustainable development

2.3 Mission

To provide, promote and coordinate the delivery of quality education, training and research and enhance integration of Science, Technology and Innovation into national production systems for sustainable development.

2.4 Mandate of the Ministry

The Government has outlined the mandate of the Ministry of Education, Science and Technology through the Executive Order No 2 of May 2013 as;

- Education Policy Management;
- Management of Alternative provision of Basic Education and Training (APBET);
- Administration of Early Childhood Education, Standards and Norms;
- Management of Education Standards;
- Management of National Examinations and Certification;
- Curriculum Development;
- Quality Assurance in Education;
- Primary and Secondary Education Institutions Management;
- Teacher Education and Management;
- School Administration and Programmes of Training Institutions;
- Special Needs Education Management;
- Representation of Kenya in UNESCO;
- Adult Education Management;
- University Education Policy Management;
- University Education;
- Public Universities and Tertiary Institutions;
- Science Technology and Innovation Policy;
- Management of Technical Training Institutes including Youth Polytechnics;
- Management of Institutes of Science and Technology;
- Management of National Polytechnics;
- National Commission for Science, Technology and Innovation (NACOSTI);

In order to carry out its functions, the Ministry is divided into the State Department of Education and the State Department of Science and Technology. The two state Departments are subdivided into eleven (11) directorates.

2.5 Directorates of the Ministry and their functions

1. **Administration and Planning:** The function of this directorate is to provide support services to technical directorates in delivering their mandate. The units include: Administration, Human Resource Management and Development, Accounts, Finance, Central Planning and Project Monitoring Unit (CPPMU), Information and Communication Technology; Procurement; HIV/AIDS Unit; Gender; and Guidance and Counseling.
2. **Directorate of Basic Education:** The Directorate is responsible for the formulation of pre-primary education policies; implementing primary education, Alternative Provision of Basic Education and Training (APBET) and primary school teacher training. The directorate is also responsible for Special Needs Education.
3. **Directorate of Secondary and Tertiary Education:** This Directorate is mandated with the co-ordination of secondary education. It also coordinates the pre-service training for diploma secondary school teachers.
4. **Directorate of Quality Assurance and Standards:** The Directorate is responsible for quality assurance and standards assessment in education and training institutions. The Directorate works closely with KICD in the review and the development of curricula, and KNEC on curriculum evaluation.
5. **Directorate of Policy, Partnerships and East Africa Community Affairs;** The Directorate is mandated with the coordination of the overall policy formulation and nurturing partnerships.
6. **Directorate of Alternative Provision of Basic Education and Training:** The directorate coordinates Adult and Continuing Education programmes; provides basic education and training opportunities to adults and out of school youth aged 15 years and above who either missed to join the formal education system in their childhood or dropped out of school before attaining sustainable levels of education.
7. **Directorate of Technical Education:** The directorate is mandated to coordinate and implement technical education and training in the country. The mandate spans: Enhancing access, equity, quality and relevance in technical education and training; provision of support for development activities in the technical and vocational training; management of Technical Education programmes; providing career guidance and counseling and Promotion of linkages and collaborations between industry and TVET institutions; and Promotion of innovativeness and research in TVET Institutions.

8. **Directorate of Technical Accreditation and Quality Assurance:** The Directorate is responsible for the formulation and implementation of credit transfer policy; promoting standards for technical training and industrial attachment; initiation of TVET curriculum development; monitoring standards and quality of curriculum implementation; monitoring the administration of technical and business examinations in technical institutions; setting standards for in-servicing of TVET teachers/instructors and members of management panel; inspection of institutional facilities and capacity for TVET; and facilitating registration of TVET institutions.
9. **Directorate of Higher Education:** The Directorate of Higher Education functions include formulation and review of policies on Higher Education in collaboration with relevant bodies and agencies; expanding access and improving quality and relevance in university education; coordination of admission of students to public universities in liaison with Kenya Universities and Colleges Central Placement Services Board (KUCCPS) and coordination of students exchange programmes.
10. **The Directorate of Research Management and Development:** The mandate of the directorate includes: formulation of policy for research, science, Technology and Innovation; knowledge management; facilitating and guiding the national research system through policies that rationalize the integration of research and development into overall national economic development; and integrating research into national development.
11. **Directorate of Youth Training:** The Directorate is mandated to revitalize and rehabilitate Youth Polytechnics countrywide. This addresses the constitutional requirement as articulated in Article 53 1(b) regarding provision of free and compulsory basic education and Article 55 (a-c) regarding access to relevant education and training, employment and participation in national development by the youth.

2.6 Semi-Autonomous Government Agencies in the Ministry

Autonomous and Semi-Autonomous Government Agencies

1. **Kenya Institute of Curriculum Development (KICD):** The Kenya institute of curriculum development (formerly KIE) was established by The KICD Act 2013. KICD conducts educational research in the context of curriculum development and develops, reviews, vets and approves local and foreign curricula and curricula support materials for use in all levels of education and training in Kenya except the University. The KICD develops and ensures equitable dissemination of curriculum and curriculum support materials through radio, TV and e-learning.
2. **Kenya National Examinations Council:** The KNEC performs the administration of primary, secondary and tertiary examination on behalf of the Government. Together with DQAS, KNEC coordinates curriculum development and National Assessment of learning achievements. It also test runs draft curricula and carries out equivalence procedures of certificates and diplomas issued by other examining bodies. The

Council currently administers eighteen local examinations and 16 foreign examinations on behalf of Foreign Examination Boards.

3. **Kenya Education Management Institute:** Established under a legal notice no.19 of 2010 cap 211. Its functions include capacity building for Ministry staff; offering management training to heads of learning institutions, providing research and consultancy services in the education sector; and producing and disseminating documentation and information services relating to administrative management, technical and educational reforms.
4. **Kenya Institute of Special Education (KISE):** KISE is a Government agency mandated to conducting training courses at diploma and certificate levels for teachers involved in the provision of education for children with special needs. KISE also functions as a resource center for the production, collection and dissemination of information on Special Needs Education to the general public. The Institute produces and sells learning materials and assistive devices for use by persons with special needs.
5. **Jomo Kenyatta Foundation:** The Foundation is charged with publishing educational books for all levels of education. In the recent years, JKF has been commercialized with operational and financial autonomy to help the foundation to be more competitive and respond more appropriately to the market demands.
6. **Kenya Literature Bureau:** The Bureau is charged with publishing learning and teaching materials for educational institutions at all levels. It also enjoys operational and financial autonomy to enable it to respond to market demands. The institution does not benefit from exchequer financing.
7. **Institute for Capacity Development of Teachers in Africa (ICDTA):** The Centre is charged with the responsibility of building teachers' capacities to enable them cope with the pedagogy-related challenges they face in the process of curriculum delivery in the area of mathematics, science and technology education. ICDTA co-ordinates in-service education and training (INSET) activities for teachers geared towards Strengthening of teaching in Mathematics and Science Education (SMASE) in Primary, Secondary, Teacher Training Colleges, and TIVET institutions.
8. **Kenya National Commission (KNATCOM) for UNESCO:** Kenya established the Kenya National Commission for UNESCO through a Cabinet Decision number 170 of March 1964 in fulfilment of Article VII of UNESCO Constitution. In 2013 (KNATCOM) became a State Corporation through an Act of Parliament, the Kenya National Commission for UNESCO Act 2013. The Commission's mandate is to ensure that Kenya contributes to the international agenda in the five areas of UNESCO's competence i.e. Education, Natural Sciences; Social and Human Sciences; Culture; and Information and Communication.
9. **Higher Education Loans Board (HELB):** HELB was established by the Higher Education Loans Board Act, of 1995. The Board's functions include sourcing for funds to finance education of Kenyans enrolled in recognized institutions of higher learning.

With the enactment of the TVET Act 2013, HELB mandate was expanded to award loans and bursaries to Kenyan students' in public TVET institutions.

10. **Commission for University Education (CUE):** The Commission for University Education was established under the Universities Act 2012. The core mandate of the CUE is accreditation and quality assurance of university education in both public and private universities. The Commission mainstreams quality assurance practices in higher education and encourages continuous improvement in the management of quality university education. Both public and private universities remain autonomous, self-governing institutions responsible for the standards and quality of their academic awards and programmes.
11. **National Commission for Science, Technology and Innovation (NACOSTI):** Following the enactment of Science Technology and Innovation Act in February 2013, NACOSTI was mandated to advice, promote, coordinate and regulate issues of science, technology and innovation. The specific function of the Commission was to collaborate with all government ministries and departments, as well as Non-Governmental Organizations (NGOs) on matters relating to scientific and technological advice and policy.
12. **Institutions of Education and Training:** These include public universities; public institutes of technology and technical training institutes; public teacher training colleges; public secondary schools; and public primary schools. The institutions are responsible for education and training and serve as breeding grounds for innovation.

2.7 Core Values

The operational environment is governed by a desired set of core values, which constitute the desired organizational culture. The core values of the Ministry include:

1. **Integrity** – Committed to acting in an honest, accountable and transparent manner in all our undertakings.
2. **Professionalism** – Committed to the highest levels of achievement obtainable through competencies and critical skills.
3. **Teamwork** - Embrace teamwork and collaboration both within the Ministry and with all partners in the provision of education services.
4. **Excellence** - Committed to world class benchmarking of standards
5. **Efficiency** - Strive to achieve the highest value of benefit from the deployment of resources, particularly to the learner.
6. **Innovativeness and creativity** – Committed to setting and maintaining high standards of education and training through continuous improvement of service delivery.
7. **Upholding cultural diversity** - Education seeks to create a cohesive society where all people live together harmoniously regardless of race, tribe, creed, or geographic area of origin.

Chapter Three: Situational Analysis

3.1 Review of Achievements of the Previous Strategic Plan

ECDE enrolment increased from 1.7 million in 2008 to 2.4 million in 2012. Gross Enrolment Rate increased from 60.2 percent to 66.3 percent, whereas Net Enrolment Rate increased from 43.0 percent to **52.4** percent in 2011 and 2012.

Primary Enrolment increased from 8.7 million in 2008 to 10.0 million in 2012 with 4.9 million and 5.0 million girls and boys respectively. The GER increased from 109.8 percent in 2008 to 115.3 per cent in 2012. Completion rate increased marginally from 79.8 percent in 2008 to 80.3 percent in 2012, whereas transition rate from primary to secondary increased from 64.1 percent in 2008 to 76.6 percent in 2012. Alternative Provision to Basic Education and Training (APBET) formerly known as Non Formal Education plays a critical role in increasing access to basic education especially in informal settlements and marginalized areas. In 2010, there were 392 registered APBET institutions in the country with the majority in Nairobi region. Government has been giving capitation grants to 474 APBET Institutions.

The number of secondary schools increased from 6,566 in 2008 to 8197 in 2012 which has helped increase transition rates from primary to secondary education. During the previous strategic planning period the ministry introduced the Free Day Secondary Education Programme to cater for secondary tuition towards making secondary education affordable to Kenyans. The student enrolment grew from 1,335,907 students in 2008 to 2,023,334 in 2013. The GER increased from 42.5 percent in 2008 to 49.3 percent in 2012, whereas NER increased from 28.9 percent in 2008 to 33.1 percent in 2012.

To promote equality, gender equity was enforced in all education programmes. Re-entry policy was enforced to address dropout cases of the young mothers who conceived while in school. In addition, sanitary towels programme was introduced during the previous strategic planning period to enhance girls' participation in the learning process. A total of KES 1.03 billion was awarded to students in 210 constituencies in 2013 up from KES 500m in 2011-2012 financial years. A total of KES 50m has been sent to 156 schools in 210 constituencies in 2013 as Pockets of Poverty Grants. The bursary schemes are meant for the vulnerable groups including girls and children from poor families.

In Special Needs Education, the country hosts 3,464 special needs institutions with 2,713 operating as integrated institutions and 751 as purely special schools. Among these, are 10 public secondary schools for learners with hearing impairments, 3 for learners with physical handicaps and 4 for learners with visual impairments. These figures are quite daunting as they indicate that access to special education remains low and there is need to focus more investment in this area.

Enrolment in Adult and Continuing Education increased from 215,862 in 2008 to about 300,000 in 2013. Several household surveys have indicated steady improvement in

literacy rates for 15 - 24 years old youth. An ICT Survey carried out in 2010 indicates that literacy levels for 15 - 24 youth group stand at 94.4% an improvement from 91.3% according to the Kenya Demographic and Health Survey (KDHS) of 2009. Although there is a plausible achievement among the youth about 49 percent of adults aged 45 to 49 years still remain illiterate with high regional and gender disparities in literacy achievement recorded across the country. Sixty One point Five (61.5) percent of adult population has attained minimum literacy level. Meeting the goal of adult education requires structural and curriculum reform in order to raise levels of literacy.

Under Teacher Education, the number of teacher training colleges increased from 132 in 2008 to 246 in 2012. ECDE teachers are trained mainly through an in service programs at certificates and diploma levels. On an annual basis, 10,000 teachers are trained at certificate level while 12,000 are trained at diploma level. The primary teacher training colleges graduate an average of 11,500 primary 1 teachers yearly within a two year program. The diploma teacher training colleges train 1,340 per year within a three year programme. Despite the fact that the services of these teachers are required, Teachers Service Commission (TSC) is not able to absorb all trained teachers due to budgetary constraints.

The number of registered Technical, Vocational Education and Training institutions increased from 627 in 2008 to 813 in (get data for 2012) 2013. Enrolment in TVET increased from 71,167 in 2008 to 82,843 in 2012. The sector initiated construction of 13 new public TVET Institutions across the country and establishment of Centres of Excellence through provisions of equipment to Technical Training Institutions. During the previous strategic planning period a total of KShs 2.1 billion was spent for the construction of new laboratories and workshops in 48 institutions under the Economic Stimulus programme.

The number of public universities increased from 7 in 2008 to 22 in 2013, while the number of public university colleges increased to 9 in 2012. The Ministry introduced accelerated intake which saw the student enrolment increase from 159,752 students in 2009/10 to 341,558 in 2012/13. On gender parity, female students constituted 36.3 percent of the total enrolled in public universities and 41.1 percent of the total enrolled in private universities.

During the period under review, the Ministry registered substantive achievements under Science Technology & Innovation. The achievements include the enactment of ST&I Act 2012; initiation of Pilot Surveys under the African Science, Technology and Innovation Indicators Initiative; and development of the Atomic Energy Policy.; establishment of an Award Scheme for recognition of outstanding scientists in Kenya; and capacity building in International Property Rights (IPR) and opening of IPR offices/desks in institutions of higher learning and research institutions in order to support commercialization of innovations.

3.2 Issues Impinging On The Youth In Education

Unemployment and underemployment: The economic growth rate has not been sufficient to create enough employment opportunities to absorb the increasing labour force of graduating youth of about 1,000,000 annually. Most of these are unskilled, and only about 25% of whom are absorbed, leaving 75% to bear the burden of unemployment. Furthermore, some of those absorbed in the labour market have jobs that do not match their qualifications and specialization.

Health related problems: The youth face a myriad of health related problems, including widespread malaria, malnutrition, HIV/AIDS and Sexually Transmitted Infections (STIs), drug and substance abuse as well as poor access to health services. The HIV/AIDS pandemic is more prevalent among the youth under 30 years of age. Available statistics show that the youth make up 33% of Kenyans infected with Aids. Female genital mutilation and teenage pregnancy are unique to the female youth. Some of the consequences of these are dropping out of school and risks to life through unsafe abortions.

Increasing school and college drop-out rates: Many youth drop out of school and college due to the high cost of education and increase in overall poverty levels, poor returns on investment in education and lack of a re-admission policy for teenage mothers, among other reasons.

Crime and deviant behavior: Due to idleness, especially immediately after formal education, the youth become restless and try anything. Some end up in crime or with deviant behaviour.

Limited sports and recreation facilities: Sports and recreation facilities provide the youth with an opportunity to socialize and spend their time productively, strengthening and developing their character and talents. However, such facilities are scarce and, where they exist, they are sometimes not accessible to the youth.

Abuse and exploitation: Owing to their vulnerability, the youth are exposed to sexual abuse, child labour and other forms of economic exploitation under the guise of employment and other forms of abuse. There is currently little protection from the authorities.

Limited participation and lack of opportunities: Despite their numerical superiority, youth are least represented in political and economic spheres due to societal attitudes, socio-cultural and economic barriers, and lack of proper organization.

3.3 Lessons Learnt

A review of the implementation of the Second Generation Strategic Plan provides useful lessons. The main lessons learnt include:

1. Governance and accountability plays a crucial role in programme success

2. The partnerships with development partners may not last to throughout the plan period.
3. Not all needs of children can be funded through official receipts from the national treasury.
4. The subsidizing secondary education on tuition may not necessary reduce the user charges at secondary schools and cost of schooling.
5. Private sector will play a crucial role in ensuring access to education for all children
6. The need to establish sector specific institutions of advanced training and research dedicated to developing key industries that will see the country attain NIC status.;
7. The critical role of a multi-sectoral approach to funding and facilitating full implementation of the proposed policies and legal framework by strengthening the role of PPPs in provision of University and Technical Education and Training and research activities.
8. The need for harmonization in the development of work plans, institutional and legal framework in order to avoid duplication and overlaps in the 2nd MTP. This will be achieved by establishing clear M&E framework, database and dissemination policy.
9. The need for an objective criteria to guide the selection and prioritization of projects.
10. The necessity of a highly skilled human capital to facilitate carrying out of the planned policies, strategies and programmes within the sector from a multi-sectoral and multi-institutional collaboration.
11. The role of entrenching product oriented multi-disciplinary approach to Research and Development (R&D)
12. Careful attention needs to be paid to ensuring that the preparation of the MTP is aligned to the preparation of the Medium Term Expenditure Framework (MTEF) for synergy and harmony in the prioritization and funding of programmes.
13. Enhancing staffing level can be a slow process; The exercise started in July 2006 and remains uncompleted.
14. Service delivery improves with a clearly outlined Service charter
15. Improved communication infrastructure supports the STI promotion
16. Budget priorities must conform with national development agenda
17. Adequate time for Consultation in matters related to legal reforms is necessary.

3.4 Human Resource Capacity

Human resource management in the education sector has faced a number of challenges as a result of large numbers of staff involved at every level; the variety of staff and grade levels, recruitment of temporary and auxiliary staff. There has also been a problem of slow upward mobility, with some officers remaining in one job group for a long time. Deployment of staff has not always matched the individual's skills and competences. Staffs are not motivated and their staff development needs are not being fully met. Deployment of staff is not systematic, and some critical activities are not fully accomplished. This leads to lower outcomes in service delivery. In some cases, outcome levels have fallen. Low capacity to impart new key competencies that are needed in a

rapidly changing and dynamic world, make graduates not fit for function in the labour market. There are a limited range of capacity building opportunities made available to staff. Appraisal is viewed by many as a bureaucratic process which has little relevance to improving performance and accountability. Appraisal forms are filled as a matter of routine, and not used as a means for enhancing staff development objectives.

The non-alignment of the human resource to development needs mainly due to lack of reliable and timely data on the demands of the labour market compromises productivity in the economy. 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. Inadequate scientific expertise in the country, low science culture among the population and over reliance on the use of foreign expertise leads to limited use and development of local expertise.

3.5 Financial Resources

The Financial Resources Analysis presents the Ministry's financial allocation over the years thereby preparing a base for resource predictability during the envisaged strategic plan period. The Budgetary allocation for the Ministry remained on a steady increase during the previous plan period. Public spending on education and training increased from Ksh.92.6 billion in 2005/6 to Ksh.160 billion in 2009/10; accounting for 28 percent of the aggregate public expenditure in 2005/6 and 26 percent in 2009/10. The country's education expenditure as a percentage of GDP remained fairly constant, ranging from 6.1% in 2005/6 to 6.4 % in 2009/10. Recurrent spending, predominantly administration and teachers' salaries, accounted for 91% of education sector public spending in 2009/10.

The unit public spending at secondary education was 3.8 times higher than that of primary education in 2010 and constituted 58 percent of the Gross Domestic Product (GDP) per capita. Technical and university education unit public spending were 8 times and 14 times higher than that of primary education; respectively. Public spending per capita at Technical and university education were 124 and 214 percent of the GDP per capita which was about Ksh.56,267 in 2010 at market prices. These costs exclude the off-budget expenditures such as household spending on education and off-budget financing by development partners and Non-Government Organisations. These disparities shall be addressed during the plan period.

Although low income groups benefit more from primary education expenditures, their benefits are lower at secondary and tertiary education compared to high and medium income groups. The gains for poorest quintile at primary level are estimated at 24.7 percent; 9.5 percent for secondary and 1.9 percent for tertiary education. Gains for

richest quintile are 27.2 percent and 70 percent, at secondary and tertiary education respectively. This points to the need to increase access to post primary education among low income groups in order for education and training to play a more significant role in poverty reduction and to address income inequalities, and ensure sustainable development and in developing high technology skills identified in Kenya Vision 2030.

Despite the introduction of Free Primary Education (FPE) and Free Day Secondary School Education (FDSE), 1.9 million primary school age children and 2.7 million secondary school age children were out of school in 2009 (2009 Census). This was mainly because school managers in both public primary and secondary school levels introduced numerous school levies. These levies comprise of Parents Teachers Association (PTA) charges, extra tuition charges, examination fees, sports fees and boarding fees, among others. All these off-budget expenditures add to the high cost of schooling in Kenya. Fees in private education institutions are high when compared to public education institutions, yet increasing numbers of parents are sending their children to private schools; arguing that quality is better and teacher absenteeism lower.

Co-ordinating the mobilization of resources in the sector is a challenge. Physical infrastructure development especially those funded through decentralized funds such as the Constituency Development Fund (CDF) and Local Authority Transfer Fund (LATEF) is not clearly linked to central government spending and recurrent sector spending. This has resulted in the emergence of small and unenviable schools in some localities, many without qualified teachers or with limited numbers of teachers.

In view of the above, financing and resource mobilisation of education and training will be guided by the principles of affordability; needs-based resource allocation including capitation grants; efficiency in resource utilisation; partnerships; strong decentralised financing and accountability systems and effective coordination. Overall, education and training financing sources will include financial outlays by central and county governments, private sector providers of educational services, Faith Based Organizations (FBOs), foundations, and Non-Governmental Organisations (NGOs); households, communities and other stakeholders.

The envisaged expansion of the education sector also assumes an increased participation by the private sector in the provision and financing of education particularly at the primary and secondary levels. The government shall develop and implement a policy framework that promotes private investment across all levels of education. It shall also improve and facilitate private school registration as well as learn from the private sector on how to inculcate the culture and practice of quality assurance and supervision. The aim will be to remove constraints and to facilitate on private participation in education

while maintaining quality standards, and to make private education more attractive to private investors.

The government shall uphold the overall policy for quality improvement but will aim to reduce the cost of education to households through the provision of teachers, teaching and learning materials and grants to schools to cover operational and maintenance expenses under FPE and FDSE policy. Needs-based capitation grants shall be allocated to learners in ECDE, primary, secondary, special needs education, adult education and not-for-profit APBET institutions that meet the set criteria.

The building of new schools/classrooms and the rehabilitation and maintenance of existing facilities will continue to be the responsibility of the (central and county) government, communities and households. Community and household support will be based on agreed guidelines and aimed at reducing the cost burden of education on communities and households.

3.6 Strength, Weakness, Opportunities and Threats (SWOT) Analysis

SWOT analysis provides insights into the Ministry's operational environment. Analysis of the internal environment focuses on issues relating to the management of the Ministry in terms of its organization structure and human resource establishment as well as other support services. This reveals the strengths and weaknesses. On the other hand, the analysis of the external environment focuses on issues that impact on the Ministry's operations relating to current priority policies of the Government. This identifies the opportunities and threats.

Strengths	Weaknesses
<ul style="list-style-type: none"> • Approved policy frameworks for the provision of education and training;- Nomadic Education, APBET and Special Needs Education • Well established institutional structures for the management of education services from national to county levels and below; • An existing legal framework for the delivery of education, training, science, technology and innovation as articulated in the constitution of Kenya 2010 and various Acts of parliament. • Goodwill from Government, private sector and Development Partners; • A well spread of learning institutions across all the counties 	<ul style="list-style-type: none"> • High budgetary expenditure on personal emoluments vis-à-vis operations maintenance and of infrastructure development. • Lack of up to date statistics due to a weak Education Management Information System; • Weaknesses in co-ordination between the MOEST headquarters, field offices and the SAGAs; • Slow integration of ICT in operations and programmes; • Inadequate human and financial resources in some key service areas to meet the rapidly growing work-related demands • Non harmonised legal framework that inhibits the performance of the Ministry. • A number of policy frameworks are yet to be operationalized thus hampering delivery of services • Understaffing experienced in the ASAL institutions as well as untrained staff in APBET institutions. • Weak co-ordination between a number of directorates at the Headquarters with the field offices as well as with SAGAs and Teachers Service Commission. • Weak financial management strategies for management and accountability of public funds in most education and training institutions. • Lack of appropriate learning facilities/infrastructure in

	<p>some education and training institutions</p> <ul style="list-style-type: none"> • Inadequate number of trainers in modern technology coupled with a mismatch of skills learnt and demands of the labour market
Opportunities	Threats
<ul style="list-style-type: none"> • The implementation of Government Vision 2030 development blueprint to which all education and training sub-sectors would draw from in terms of contribution to socio-economic growth • Political and development partner goodwill and support to education, training, science, technology and innovation • The high premium and demand attached to education services by Kenyans; • Increased budgetary support to education by the Government; • Increased support for the ministry by development partners; • Increased stakeholder participation in the provision of education services, including parents and communities; • Increased private sector participation in the provision of education services; • Increasing demand for accountability by stakeholders in terms of service delivery and resource utilisation; • Government obligation to International commitment on literacy including the attainment of Millennium Development Goals • A youthful population with the potential of adopting a STI culture coupled with high demand for vocational skills • Improved and expanded ICT network through the fibre optic cable 	<ul style="list-style-type: none"> • Prolonged freeze on employment in the public sector, which has led to shortage of experienced senior staff, including teachers; • Inhibitive cultural practices and beliefs. • Migration of some staff to private sectors due to non-competitive terms and conditions of service within the education and training sector • High cost of STI and Technical Education (TE) activities including equipment, training materials and text books • Inadequate awareness and appreciation of the importance of Higher Education (HE), S&T and TIVET in national development. • ASAL regions are vast and are characterised by insecurity, high levels of illiteracy and poverty • Inadequate funding especially in some programmes as well as Regional disparities in distribution of resources • Occasional high operational costs brought about by corruption • The predetermined mass exit of personnel from 2014 of the Staff attaining mandatory 60 years retirement age. • HIV and AIDS and drug abuse that mostly affect the youth • Majority of youth polytechnics without adequate infrastructure may affect quality of training

3.7 Political, Economic, Socio Cultural, Technological, Environmental and Legal (PESTEL) Analysis

Realization of the plan's objectives will, to a large extent depend on the Ministry strengths, the opportunities available to it and how well it manages its weaknesses. There must also be awareness and effective response to the factors that present threats likely to hamper the successful implementation of the Plan. The PESTEL analysis explains the situation under which the Plan has been prepared. Subsequently, it is from this analysis and the internal review that the SWOT is derived.

Political

The political factors favoring education, training, science and technology include the following;

- a) The Government's policy papers and strategies such as the Medium Term Plan (2013-2017), Sessional paper No. 12 of 2012 on Education Training and Research, and

Science, Technology and Innovation give high priority to the application of STI into the national development process for growth and international competitiveness.

- b) Kenya is a member of a number of regional organizations such as the African Union (AU). The country is also a signatory to the Lagos Plan of Action and the Lome Convention. This is well demonstrated by the increasing number of STI and TE and Higher education activities in the East African Community (EAC), Inter Governmental Authority Development (IGAD), New Partnership on African Development (NEPAD) and the United Nations (UN) system. These organizations provide opportunities for growth of STI and TE sector in Kenya.
- c) As a result of political reorganization the Ministry has been strengthened by the additional component of Youth training.
- d) The creation of devolved governments comes with decentralization of certain aspects of education like ECD and Youth polytechnics. This will also enhance participation of local communities in the management and development of education and training.

Economic

The following economic factors favour the application of education, training, science and technology in national development;

- e) The Kenya Vision 2030 is based on the realization that in an increasingly knowledge-based and globalized world, Science, Technology and Innovation (ST&I) are essential, both for social and economic progress and for global competitiveness of our nation. In this regard, ST&I will be central in productivity and the socio-economic transformation of the country. In view of this, education, training, science and technology have a special role in human resource development, research and knowledge generation.
- f) The Medium Term Plan of 2013-2017 of the Vision 2030 provides for attainment of high economic growth and the provision of quality services for Kenyans. In addition it focuses on improving and modernizing the country's infrastructure and achieving the long overdue structural transformation from a factor based economy to a knowledge based economy.
- g) The following economic aspects hinder the adoption of education, training, science and technology initiatives;
 - (i) Limited financial resources
 - (ii) Low investment by private sector in secondary education and ST&I.
 - (iii) Weak inter-linkages currently exist among research, extension and production systems.
 - (iv) Lack of mechanisms to capture the contribution of education, training, STI and Technical Education in the national production system.

Socio - Cultural

The socio-cultural factors that favour the development of education and adoption of ST&I and Technical Education and Higher Education in national development include;

- a) The National Economic and Social Council (NESC) has emphasized the social development of the country. The Social pillar provides an opportunity for using Education, STI and Technical Education to realize faster and more efficient growth in the sector. The pillar aims to “*achieve a just and cohesive society enjoying equitable social development in a clean and secure environment*”.
- b) International media influences have created greater awareness and helped improve governance and democratization process within the public. The globalization process has led to the adoption of technological advancements as they are developed. This has influenced reduction of cultural barriers associated with the resistance to technology adoption. Media growth has a direct impact on public awareness and development programmes.
- c) A growing young population that is available for the exploitation of higher education, science and technology.
- d) The Inclusive Education Policy that caters for equity.

Technological

The technological factors that suit the adoption of STI and Technical Education in national development include:

- a) The government views a strong HE, STI and TE capacity as an absolute necessity for the nation to participate as a full partner in the world's fast forming, knowledge-based economy. The use of HE, STI and TE as a tool for national development and international competitiveness requires an effective system for innovation, technology adoption, diffusion and transfer.
- b) HE, STI and TE, supported to a large extent by ICT, has become a major driving force of economic change in many nations. ICT has also improved the rate of communication and information exchange. The ICT sector is rapidly developing in Kenya.
- c) The government is committed to expanding communication network through the fiber optic network which will facilitate telecommunication, and open distance (OD) and e-learning
- d) The government has established major national facilities for Higher Education, STI and Technical Education (e.g., facilities in research institutes and universities). These are important for innovation.

Technological related factors that affect higher education, STI and technical education include:

- a) Currently there is a wide disparity in higher education, STI and technical education capacity between Kenya and the industrialized nations. This is envisaged as a

technological factor that is likely to inhibit the adoption of higher education, STI and technical education initiatives.

- b) Low investment in technology.
- c) Inadequate assessment of the potential effects and impacts of use of some of the technologies on the physical environment, people, biodiversity and their associated goods and services, have not been properly assessed, understood and documented.

Environmental Factors

Environmental factors that favour the adoption and application of ST&I include:

- a) Kenya recognizes the value of her environmental resources. It also recognizes that the degradation of the environment can adversely affect productivity and increase levels of poverty in the country.
- b) The Environmental Management and Coordination Act 1999 provides that all in Kenya are entitled to a healthy environment that they are required to safeguard and enhance.
- c) The conservation and sustainable use of land, water, forests, biological and mineral resources are key to the country's objectives of Economic Recovery Strategy for Wealth and Employment Creation.

Environmental factors that face the adoption and application of STI include:

- a) A number of human related activities have led to environmental harm. The rate of exploitation of the country's land and biological resources is considered unsustainable. Natural ecosystems, important for a number of natural services and products are being converted to other uses or face the threat of degradation due to pollution.
- b) Enhanced emission of greenhouse gases into the atmosphere has led to global warming and climatic change, and the changes to the earth surface through various human activities, including waste disposal, has contributed to global environmental change, the local magnitude and potential impact of which is yet to be established. To Kenya, these changes pose both potential risks and opportunities for food production, human health and energy availability, among many others.
- c) High Electricity make Kenyans to seek alternative energy supply from wood fuel thereby destroying the environment.

Legal Environment

There exists a variety of policies and policy instruments that positively or negatively impact upon the effectiveness of the sector. These policies have been aligned to the Vision 2030 and the constitution of Kenya 2010.

Chapter Four: Strategic Model

4.1 Introduction

This chapter presents an analysis of the overall goal and objectives of the Strategic Plan. The Strategic Plan provides for accelerated implementation of the Medium Term Plan II and the reorganization of the institutional framework for effective service delivery. The chapter presents the strategies whose implementation will contribute to the achievement of the national development agenda highlighted in chapter one.

4.2 Overall Goal of the Ministry

The Ministry is committed to the provision of quality education, training, science and technology to all Kenyans, in an effort to contribute to the building of a just and cohesive society that enjoys equitable social development. This way the country will have a “Globally Competitive Quality Education, Training, Research and Innovation for Sustainable Development”. This will be realized through the implementation of the following strategies for the overall goal of improving access to quality education and training as well as revitalizing and harnessing Science, Technology and Innovation in Kenya.

4.3 Strategic Issues, Objectives and Strategies

From the review of the situation in the ministry, the following issues have been identified as the critical areas of focus for the strategic planning period.

1. Access and equity
2. Quality and relevance
3. ICT integration into education, training, research and innovation
4. Science, Technology and Innovation development capacities
5. Dissemination and commercialization of research findings
6. Financial and Human resources
7. Governance and management
8. Data Management
9. Cross cutting issues/Emergency Issues

Strategic Issue One: Access and Equity

ECDE: Access to and equity of pre-primary education are faced by a number of challenges including: inadequate number of trained teachers and care givers; inadequate number of pre-primary and day care centres; limited availability of teaching; learning and play materials; limited community participation; morale of teaching staff due to unattractive remuneration; poor standards in pre-primary education; and inadequate nutrition and health support services. The Constitution of Kenya 2010 in the fourth schedule assigned provision of ECDE education as a County Government function,

whereas the National Government will be in charge of policy and standards of education and training.

Primary: In 2003, the Government introduced Free Primary Education which has enhanced access to education for both boys and girls. Primary education has continued to experience many challenges chief among them high pupil-teacher ratio; overcrowded classrooms; high drop-out rates; inadequate infrastructure; limited availability of teaching and learning materials; and gender and regional disparities.

Secondary: The Free Day Secondary Education Programme was introduced in 2008 with the objective to increase access and enhance equity at that level. The programme has over the years attracted increased resource requirement necessitated by increased enrolment and demand for secondary education. Despite the achievements, secondary education currently faces major challenges including limited infrastructural facilities; imposition of levies and other fees by schools making education unnecessarily expensive; and low transition to higher levels of education and training.

Adult and Continuing Education: Adult and Continuing Education offers an opportunity for those outside the formal school system to benefit from education. The challenges that continue to afflict Adult and Continuing Education include inadequate trained literacy and adult education teachers; a high turnover of staff and volunteer teachers; limited resource allocations and inappropriate infrastructure; lack of teaching and learning materials; school going children attending adult classes; gender imbalance; and negative attitudes and perceptions towards adult learning.

TIVET: There exists socio-cultural, socio-economic and geographical inequalities in access to TVET services which is worsened by the high poverty levels. The other issues include: inadequate number of trainers with pedagogical competency; inadequate number of TVET centres; limited customized teaching and learning materials; limited industry participation and inadequate research support services; poor geographical distribution of TVET institutions; negative perception of TVET; low enrolment for females in Science Engineering and Technology (SET) courses; and uncoordinated admission of students to TVET institutions.

University Education: Some of the challenges university education is confronted with include increasing regional, gender and socio-economic differences in the country; inadequate capacity to cater for the growing demand for more places in the universities; mismatch between skills acquired by university graduates and the demands of the industry; an imbalance between the number of students studying science and arts based courses; gender and regional disparities in terms of admissions and in subjects and courses undertaken and inadequate household income as a barrier to students who have qualified and admitted to university.

Strategic Objective One: To increase access and enhance equity in education and training

Strategies:

- (i) Review and disseminate the National ECD Policy Framework and the National Service Standard Guidelines.
- (ii) Review and implement the policy framework for APBET
- (iii) Improve and expand infrastructure in education and training institutions including universities through involvement of County Governments
- (iv) Review FPE and FDSE with a view to targeting children from poor backgrounds
- (v) Strengthen the culture of friendly primary and secondary schools
- (vi) Rationalize and reform the administration of school bursaries
- (vii) Control escalating fees and other levies
- (viii) Provide Open and Distance Learning in TVET and Universities
- (ix) Establish an open university of Kenya
- (x) Increase provision of student loans, bursaries and scholarships
- (xi) Rebrand TVET
- (xii) Enhance participation in Arid and Semi-Arid Lands and informal settlements
- (xiii) Strengthen public private partnership towards offering affordable education and training

Strategic issue two: Special Needs Education

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. The challenges faced in the provision of education and training to children and students with special needs include: cultural prejudice and negative attitude, inadequate facilities and teachers, inadequate tools and skills for assessing and identifying learners with special needs as well as inadequate funding.

Strategic Objective Two: To increase access to Education and Training by persons with Special needs in all institutions.

Strategies:

- (i) Integrate Special Needs Education in all education and training institutions

Strategic Issue three: Quality and Relevance

The Government recognizes that education, training, science and technology is fundamental for the achievement of the goals of Vision 2030. Education equips citizens with knowledge and skills that enable them to make informed choices about their social and economic growth. There is overwhelming evidence to demonstrate that Education

and Training play an essential role in promoting economic growth and the socio-economic development of the nation. TVET and skills development have been identified as major and growing priority within the country. University education plays a key role in the development of human resource which is an important determinant to sustainable growth of the nation.

Currently, education and training is confronted with challenges of quality and relevance. Learning outcomes at basic education level have remained low as pupils do not attain the desired reading and numeracy competencies. In addition, quality assessment in basic education institutions has not been effective over the years due to elaborate quality assurance mechanisms and shortage of staff both at the national level and institutions. In higher education, the limited link between the University and TVET curriculum and Kenya's Vision 2030 needs renders most programmes inappropriate for immediate national development needs. The rate of generation of skilled human resource is slow with little focus put in developing and upgrading innovation competencies within employment. Most research programmes provided by universities do not meet the full demands for innovative and market relevant skills to enhance productivity and employment. There is also a weak link among Universities, Research Institutions and Industry leading to underutilization of skills.

Strategic Objective Three: To improve quality and relevance of Education and Training

Strategies:

- (i) Reform/Review Education Curriculum
- (ii) Strengthen the capacity of the Ministry to assess and assure quality of Education and Training.
- (iii) Institutionalize demands driven human resource development
- (iv) Align education and training curricula to the demands of the changing labour markets
- (v) Formulate a development research agenda for Kenya

Strategic Issue Three: 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 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 knowledge based economy.

ICT in the education, training and research sector can broadly be categorized in two ways: E-Government which aims at mainstreaming ICT in all government operations and service delivery and Interactive e-learning which aims at mainstreaming ICT as a tool for teaching and learning. The Ministry will therefore provide quality education that

prepares learners to competitively function within a highly integrated, technologically-oriented and information-based global economy.

Despite the endeavours to integrate ICTs in education, training and research, a number of issues have remained as barriers to full attainment of the desired goals. These 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 technology, inadequate capacity for maintaining ICT equipment, minimal use of ICT by the Ministry of Education, Science and Technology; inadequate limited monitoring of the utilization of ICT in schools and limited skills by the users on disposal of the e-waste.

Another 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.

Strategic Objective Four: To integrate ICTs in education, training and research for management, teaching and learning at all levels.

To implement this objective, the Ministry will adopt the following strategies:-

- (i) Develop digital content for education
- (ii) Develop and implement comprehensive legal, policy and institutional framework/e for ICT integration in education at all levels;
- (iii) Develop an enabling and robust ICT infrastructure for all education, training and research institutions.
- (iv) Facilitate provision of connectivity to enhance collaboration and information sharing in the sector.
- (v) Promote Public Private Sector Partnerships for ICT in education resource mobilization including cost sharing.
- (vi) Provision of laptops in Primary Schools

Strategic Issue Five: Science, Technology and Innovation Development Capacities

The Government is committed to focus on the creation of better production processes, placing strong emphasis on technological learning. The focus is on technologies and processes that enhance national competitiveness and facilitate the creation of quality jobs. In addition, the capacities of ST&I institutions will be enhanced through advanced training of personnel, improved infrastructure, equipment, and by strengthening linkages with actors in the productive sectors.

Development of quality human resources for ST&I is another critical capacity development issue facing the sector. The sector is faced with absence of a skills inventory and 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; Mismatch between the skills possessed by the job seekers and those required by industry, which leads to underutilization of the existing human resources capacity and poor state of infrastructure and equipment for research and higher education and training.

Strategic Objective 5: To enhance development capacities for ST&I

The following strategies will be deployed to address this objective:-

- (i) Develop globally benchmarked ST&I infrastructure to support intervention in national strategic priority areas
- (ii) Establish the Research and provide seed capital
- (iii) Increase budget allocation in ST&I towards the attaining 2% of GDP to fund the National ST&I priority areas.
- (iv) Develop capacity of human resource for ST&I at all levels.
- (v) Encourage innovativeness and creativity in the sector
- (vi) Re engineer institutional and governance framework in ST&I

Strategic Issue Five: Disseminate and commercialise research findings

There is a growing need to enhance public awareness on the importance of science, technology and innovation and its implication to everyday life, covering ethical, moral, legal, social and economic aspects. The ministry will develop mechanisms for effective communication and profiling of ST&I among the scientific community, policy makers, consumers of ST&I products and services and other ST&I actors. Systems to appraise and assess innovations are not institutionalized and this has hampered the sharing of research resources across the education and research system.

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. However, 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.

Strategic Objective six: To enhance mechanisms for dissemination and commercialization of research findings

The following strategies will be put in place:-

- (i) Develop programmes in collaboration with Kenya Industrial Property Institute (KIPI), Kenya Plant Health Inspection Service (KEPHIS), Kenya Agricultural Research Institute (KARI) and Kenya Medical Research Institute (KEMRI) for the rapid commercialization of intellectually protected products and services locally and internationally
- (ii) Develop and implement a dynamic ST&I communication policy
- (iii) Promote the generation, documentation and dissemination of ST&I information.
- (iv) Establish a knowledge management information system for disseminating and sharing research findings.

Strategic Issue Six: Financial and Human Resources

The Constitution of Kenya 2010 underscores the importance of education and training in sustainable development. The Constitution provides that every child has a right to free and compulsory basic education; and access to affordable tertiary education, training and skills development. Before the promulgation of the Constitution, the Kenya Government had begun implementing Free Primary Education; Free Day Secondary education; accelerated intake into universities and expanded TVET. As a result of these interventions, the Government has realized rapid expansion of institutions of learning and other facilities that support education, training and research. This has seen Kenya's public spending on education and training continue to rise over the years.

Despite these achievements in financing education and training, the Ministry faces several challenges in the education sector. These include: low transition rates from primary to secondary schools; inadequate physical infrastructure in education and training institutions, low learning achievements. Others include: inadequate teaching and learning materials; inadequate teaching staff; high teacher pupil ratio; inadequacy in both quality assurance and standards and education officers in the field.

In addition, human resource utilization is limited at all levels to manage decentralized functions and other related reforms; there is inefficient utilization of teachers; limited support by stakeholders in the implementation of reforms; the effects of the HIV and AIDS scourge; unplanned establishment of new schools especially, through the Constituency Development Fund, that further strains the existing supply of teachers, as well as the need to upgrade teachers skills especially for those trained before the current reforms began.

To address these challenges, it is critical that feasible mechanisms are identified for sustainable financing of education and training in the country for the country to realize the goals of Vision 2030.

Strategic Objective Seven: To enhance the ministry’s financial and human resources

- (i) Strengthening the ministry’s financial mobilization capacity
- (ii) Strengthen public private partnership toward offering affordable education and training
- (iii) Rationalize the Ministry’s staff and develop a Ministerial Human Resource Development Strategy
- (iv) Design an education sector financing model

Strategic Issue Seven: Governance and Management

The phenomena of globalization, knowledge economy, the constitutional regime and the Vision 2030 ostensibly necessitate an urgent transformation into knowledge economy culminating in middle –income economy by 2030. For Kenya to optimally apply knowledge to the national development process, the governance and institutional framework should be robust and effective. The sector needs an effective governance framework that effectively defines national knowledge creation and application priorities, well-coordinated, staffed and funded and is futuristic in its outlook. For the Ministry, one may not effectively contribute to this transformation without deliberate institutional transformation, new policy objectives and re-prioritization of the national development goals. This necessitates an institutional reconfiguration. The challenge of the present governance structures is sub optimal utilization and management of resources. Unreliable data has rendered the Educational Management Information System (EMIS) and the Knowledge Management Information System (KMIS) functionally ineffective. Various gaps presently exist in the area of institutional management.

Strategic Objective Eight: To re-engineer the governance and management system to improve efficiency, accountability and quality education and training service delivery

Strategies

- (i) Enhancing accountability by empowering communities through mass media
- (ii) Establish education, science and training governing bodies created by the Acts of Parliament
- (iii) Establish a system of tracking learners from pre-primary level through to tertiary and university levels of education and on to industry.

Strategic Issue nine: Data Management

There is a weak data collection, data analysis, data storage, information security and data management policy in the Ministry. Data sourcing and management in the Education, Science and Technology sector has been a challenge to the Ministry and its agencies for a long time. As a result, effective policy formulation, policy implementation and programming have faced difficulties in targeting appropriate interventions. The current situation is characterized by existence of different sets of data bases serving specific initiatives and agencies. EMIS has data which are not comprehensive because of poor response rates from schools particularly private ones and as such cannot support the Ministry demand for data as and when required. KMIS is yet to be fully established and operationalized. ICT has not been fully utilized to improve the data flows as there is lack of continuous connectivity between the Institutions, Field Offices and the Ministry to facilitate data capture at the lower levels and real time transfer of the same.

Strategic Objective Nine: To improve education and training data quality and sharing

Strategies

- (i) Institutionalize the Education and Knowledge Management Information Systems within the headquarters and establish EMIS units in 47 County Offices.
- (ii) Establish an interactive database for all levels of education, science and technology
- (iii) Institutionalize data collection, analysis, and evidence based decision making at all levels in the Ministry

Strategic Issue Ten: Gender, HIV/AIDS and Emergencies

Among the cross cutting issues that affect education, science and technology include HIV & AIDS; poverty; hunger; conflict and emergencies; guidance & counselling; integration of national social values, gender and youth.

Strategic Objective: To deepen the mainstreaming of gender, HIV/AIDS and emergencies

Strategies:

To achieve this objective, the Ministry will employ the following strategies:

- (i) Deepen HIV and AIDS prevention activities in the sector;
- (ii) Operationalization of the gender policy
- (iii) Establish a disaster management unit in education

Chapter Five: Coordination Framework (Implementation Matrix)

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
STRATEGIC ISSUE 1: ACCESS AND EQUITY								
STRATEGIC OBJECTIVE 1: TO INCREASE ACCESS TO AND ENHANCE EQUITY IN EDUCATION AND TRAINING								
Strategy 1: Review and disseminate the National ECD policy Framework and the National Service Standard Guidelines								
Review and publish National ECDE policy	National ECD policy reviewed and published	100% policy development	Director Basic HODs County government	2006 Policy	2015 Policy	2015	Improved efficient reforms in ECDE	20 million
Strategy 2: Review and implement the policy framework for ABACE								
						2015	Improved efficient reforms in ABACE	
Strategy 3: Improve and Expand infrastructure in education and training Institutions								
Construct/Rehabilitate classrooms in Primary Schools	Classrooms rehabilitated and constructed	No. of Schools	Director, BE; Collaborators:	0	1500	2013 to 2017	Increased enrolment in basic education Institutions	1.5 billion
.Construct /Rehabilitate existing classrooms in secondary schools	4500 new classrooms constructed /rehabilitated / equipped in secondary schools	Number of completed classrooms constructed/rehabilitated; % completion status	Director SE; Collaborators	2000 classrooms	4500classrooms in secondary schools in 47 counties	2013 to 2017	Increased enrolment transition rate	54Billion
.Construct /Rehabilitate existing classrooms in secondary schools	4500 new classrooms constructed /rehabilitated / equipped in secondary schools	Number of completed classrooms constructed/rehabilitated; % completion status	Director SE; Collaborators	2000 classrooms	4500classrooms in secondary schools in 47 counties	2013 to 2017	Increased enrolment transition rate	54Billion
.Construct /Rehabilitate existing classrooms in secondary schools	4500 new classrooms constructed /rehabilitated / equipped in secondary schools	Number of completed classrooms constructed/rehabilitated; % completion status	Director SE; Collaborators	2000 classrooms	4500classrooms in secondary schools in 47 counties	2013 to 2017	Increased enrolment transition rate	54Billion
Provide ICT facilities and services to new secondary schools with no ICT facilities	5,000 secondary schools Provided with ICT infrastructure package and services; 5000	Number of schools provided with of ICT infrastructure package; capacity built on ICT skills	Director SE; ICT4E Collaborators	2200 secondary schools	6,000 secondary schools in 47 counties	2013 to 2017	Improved student Performance in ICT Skills acquired	3,45Billion

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
	teacher capacity built on ICT skills							
Establishment of secondary schools attached to public primary schools	3,000 New secondary schools established	Number of new completed Secondary schools established; % completion rate % increase in students enrolment and transition rate	Director, SE: Collaborators	0	3000 secondary schools attached in 3000 primary schools	2013 to 2017	Increased Student enrolment; transition rate	90Billion
Construct new /Rehabilitate and equip infrastructure Teacher training Colleges	1 new Diploma, 2 old diploma Teacher Training Colleges (DTTC) rehabilitated/ equipped	Number of completed new DTTC and existing ones with rehabilitated and equipped infrastructure; % completion rate	Directors SE, BE Collaborators	2 (DTTC) and 1 new DTTC	2 existing DTTC, 1 new DTTC;.....PTTC	2013-2017	Increased enrolment	920Million
Equip 50 Youth Polytechnics with modern training facilities	50 YPs equipped	No. of YPs equipped	Director, YT	400	50	2013 to 2017	Improved student Performance Skills acquired	10 Million
Construct 50 workshops in Youth Polytechnics	50 workshops constructed	No. of workshops constructed	Director, YT	220	50	2013 to 2017	Increased trainee enrolment	600 Million
Rehabilitate 30 workshops in YPs	30 workshops rehabilitated	No. of workshops rehabilitated	Director, YT	50	30	2013 to 2017	Increased trainee enrolment	180 Million
Equip TVET Institutions and Universities with state of the art training facilities	TVET Institutions and Universities equipped with state of the art training facilities	Number of TVET Institutions and Universities equipped	Director, TE ; Director, YT: Director, HE	50	40	2013 to 2017	Improved student Performance Skills acquired	90 million
Construct TVET Institution all counties	TVET Institutions constructed	Number of TVET Institutions constructed	Director, TE	14	135	2013 to 2017	Increased Student enrolment	13 billion
Construct and Equip 4,400 ABE Classes	Classes constructed and equipped	4,400 ABE Classes constructed and equipped	Director, DACE			2013 to 2017	Increased enrolment	
Equip universities with ultra modern laboratory and engineering equipment	Laboratories and engineering workshops equipped	Number of universities equipped	Director ,DHE	0	8	2013 to 2017	Improved student performance and skill acquisition.	2.3Billion

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
Establish public private partnership NODES in all public universities	Public private partnership NODES in Public Universities	Number of Public Universities with PPP Nodes	Director,DHE PPP unit CEOs- Public universities	3	31	2013-2014	Increased infrastructural development under PPP financing agreements	5 Million
Strategy 4: Provide Open Distance Education in TVET and University								
Support ICT- based distance and open learning in TVET and Universities	ICT- based distance and open learning supported		Director, TE ; Director, YT: Director, HE			2013 to 2017	Increased enrolment	0
Establish National Open University of Kenya with 47 satellite centers in all the counties	An National Open university with satellite centers across the country	Number of open university centers established	Director, DHE	0	48	2013 to 2017	Increased enrolment in university	150Billion
Establishment of E-Learning platforms and facilities	E-Learning platforms and facilities established	Percentage level of establishing of E-Learning platforms and facilities	Director, TE ; Director, YT: Director, HE)			2013 to 2017	Increased enrolment	0
Support ICT integration in YPs	250 YPs integrating ICT	No. of YPs integrating ICT	Director, YT	300	250	2013 to 2017	Increased trainee enrolment	15 Million
Strategy 5: Increase provision of students loans , bursaries and scholarships in education and training Institutions								
Increase Loans, Bursaries and Scholarships at all levels of education	Loans, Bursaries and Scholarships increased	Number of students awarded	Director, BE: Director, SE: Director, TE ; Director, YT: Director, HE	300,000	526,000	2013 to 2017	Increased enrolment	85 billion
Review and harmonize the current capitation grants based on unit cost for FDSE	FDSE capitation based on unit cost established	2014 Task Force report on affordable secondary unit cost of education	Director, SE: Stakeholders	2008 Task Force report	6000 public secondary schools	2013 to 2015	Reduced cost of education	150 billion
Increase Bursaries and Scholarships in secondary schools and	Bursaries and Scholarships grants increased	Amount of bursary grants disbursed to 290 constituencies; Number of students awarded: % increase in Bursaries and Scholarship grants;	Director, SE: Collaborators	1.170Billion for 290 constituencies	1.147 Billion disbursed to 290 constituencies % increase in bursaries and scholarship awards	2013 to 2017	Increased Student enrolment; transition rate	5.5Billion
Review and harmonize the current capitation grants per student	FDSE capitation based on unit cost established	2014 Task Force report on affordable secondary unit cost of education implemented	Director, SE:; County Education Board (CEB);	2008 Task Force report at Kshs. 10,265.00 per	Capitation of Ksh.20,530 per child for 2.7million students in	2013 to 2015	Reduced cost of education	100 Million

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
based on unit cost for FDSE			Stakeholders	child	public secondary schools			
Rationalize school fees and levies in secondary schools in order to reduce the cost burden on parents and communities.	School fees and levies in secondary schools rationalized	2014 Task Force report on affordable secondary unit cost of education; Copy of Ministry circular/ guideline on rationalized fees structure and levies in schools; Copy of rationalized fees structure and levies charged in public secondary schools	Director, SE: CEB; Stakeholders	2005, 2008 and 2014 Circulars/ guidelines	All fees structure and levies charged in public secondary schools	2013-2015	Reduced cost of education.	Done Concurrently with above
Increase bursaries to YP trainees	333,330 of trainees benefited	No. of trainees benefited	Director, YT	282,286	333,330	2013 to 2017	Increased trainee enrolment	4,230 Million
Establish University Funding Board	An operational University Funding Board	Amount of Government capitation disbursed	Director, DHE	0	All public and private chartered universities	2013-2017	improved financing for universities	100Billion
Strategy 6: Rebranding TVET								
Develop and implement Advocacy and publicity strategies in TVET	Advocacy and publicity strategies	copy of advocacy and publicity strategy document	DTAQA DTE DYT	0	2 Rebranding strategies	2013 to 2017	Improved enrollment in TVET Image of TVET improved	8 Million
Develop new products in TVET projects of national importance	New products developed in identified areas	Number of products developed number of	DTAQA DTE DYT	0	10 exhibitions	2013 to 2017	Increased awareness on TVET Training	40 Million
Engage TVET students in programmes and projects of national importance	TVET students engaged in projects and programmes of national importance	Number of programmes and projects that involve TVET students	DTAQA DTE DYT	0	5 Projects at national level	2013 to 2017	Learner engagement in industry increased	30 Million
Accredit/License TVET institutions and trainers	Accreditation certificates and assessment reports Certify Trainers	Copy of assessment reports Accreditation certificates Trainers certificates	Director, DTAQA	0		2013-17	Improved qualityQuality	75 Million
Develop a system for online application for accreditation and monitoring	Accelerated registration process	Number of increased on-line applications	Director, TAQA	Provided registration documents and procedure	Functional on-line application system	2013 to 2017	Less paper-based application TVET database established	8 Million

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
apping of TVET institutions in the country	Created database of all operating institutions in the country by location	Reports Mapped TVET institutions	Director, DTAQA	0	All registered institutions in Kenya	2013-17	Ease of locating registered TVET institutions	80 Million
Strategic 8: Enhance participation in education in Arid and Semi- Arid and informal settlements								
Establish and operationalize NACONEK	NACONEK implementation (governing) Structures established	NACONEK implementation (governing) Structures and operationalization		Concept paper on the Establishment of NACONEK and implementation (governing) structures to be presented to CS as a CABINET MEMO	The target is access, quality & equity in education to nomadic communities (fishing nomads, pastoral nomads, hunters & gatherers).	2013-2017	Improved management of Nomadic Education	Khs.375million
Construct / rehabilitate low-cost boarding schools in 14 arid & pastoral counties	Low-cost boarding schools constructed / rehabilitated	Number of low-cost boarding schools constructed / rehabilitated	Director, BE	21	14	2013 to 2017	Increased enrolment	140 million
Construct/rehabilitate existing infrastructures in secondary schools in ASAL and pockets of poverty regions	Infrastructure constructed/rehabilitated in secondary schools within ASAL and pockets of poverty regions	Amount of funds disbursed; Number of infrastructure constructed/rehabilitated; % completion rate ;Number of beneficiary schools	DSTE, Collaborators	All ASAL and pockets of poverty counties	infrastructure constructed /rehabilitated /equipped in all ASAL and pockets of poverty counties	2013-2017	Increased enrolment, transition rate	300Million
Provide scholarships for girls in arid and pastoral counties	Scholarships for girls in arid and pastoral counties, administered	Money given	Director, BE Director, SE	0	30 million	2013-2017	Increased enrolment.	30 million
Provide and administer scholarships for girls in arid and pastoral counties	Scholarships for girls in arid and pastoral counties provided/administered	Number of girls awarded scholarships and admitted in secondary schools	Director, SE collaborators	428 girls	2140 girls	2013-2017	Increased enrolment. Transition rate ; reduced gender parity	167.2Million
STRATEGIC OBJECTIVE 1.2: TO INCREASE ACCESS TO EDUCATION AND TRAINING BY PERSONS WITH SPECIAL NEEDS IN ALL INSTITUTIONS								
Strategic issue 1: Integrate special needs education in all education and training institutions								
Integrate SNE in all basic educations	SNE integrated in all basic education institutions	Number of basic education at each level with integrated SNE	All directors, Collaborators	0	3 Diploma Teacher training Colleges ----- Primary Teacher Training	2013-2017	increased enrolment of SNE children and	

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
					Colleges, ----ECDE Centres,primary schools,secondary schools		transition rate in basic education institutions	
Integrate SNE in basic educations institutions and construct/rehabilitate/equip infrastructure	SNE integrated in basic education institutions	Number of basic education at each level with integrated SNE	All directors, Collaborators	68 secondary schools	3 DTTC, 100 integrated secondary schools	2013-2017	increased enrolment; transition rate;	1.5 Billion
Construct new /Rehabilitate/ and equip infrastructure in existing national special needs secondary schools (SNE)	25 SNE national secondary schools constructed/rehabilitated and equipped	Number SNE secondary schools constructed/rehabilitated/equipped; % increase in enrolment of SNE students	DSTE	25 SNE secondary schools	25 national SNE secondary school constructed/rehabilitated/equipped	2013-2017	Increased enrolment, transition rate	800Million
Construct new/Rehabilitate/equip new classrooms in SNE secondary schools	New SNE classrooms constructed, rehabilitated and equipped in NE secondary schools	Number of new SNE classroom constructed/rehabilitated/equipped; % increase in enrolment of SNE students	DSTE collaborators	68	100 integrated secondary schools	2013-2017	Increased enrolment, transition rate	500 Million
Restructure Kenya Institute of Special Education (KISE) to enhance its capacity in training special needs and disabilities teachers.	KISE) restructured	Kenya Institute of Special Needs Education (KISNE)	MOEST	KISE	KISNE	2015-2018	KISNE	50 Million
Mobilize funding for Special Needs Education infrastructure and research	funding for Special Needs Education infrastructure and research mobilized	Available funding	MOEST	2 billion	30 billion			30 billion
Integrate SNE in 250 YPs	SNE in 250 YPs integrated	No. of YPs integrating SNE	Director, YT	50 YPs	250 YPs	2013 to 2017	Increased trainee enrolment	10 Million
Develop and standardize diagnostic assessment tools to facilitate the early identification, assessment and placement of learners with special	standardized diagnostic assessment tools developed	Copy of standardized diagnostic assessment tool for identification, assessment and placement of learners with SNE	DBE, DSTE, LA, KISE, ABACE	0	125 SNE secondary schools, 3 DTTC	2013-2017	Improved identification, assessment	400Million

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
needs in basic education institutions								
STRATEGIC ISSUE 2 : QUALITY AND RELEVANCE								
STRATEGIC OBJECTIVE 2: TO IMPROVE QUALITY AND RELEVANCE EDUCATION AND TRAINING								
Strategy 1: Strengthen the capacity of the Ministry to assess and assure quality of Education and Training								
Establish and operationalize TVET Authority and TVET CDACC, TVET Fund	TVETA established and operationalized	Functional TVETA, CDACC TVET Fund	Director, TAQA	TVETA Board established	TVETA, CDACC, TVET Fund fully established	2013 to 2017	Improved and quality TVET training	350 Million
Monitor the Quality Index in TVET	Improved Performance index	Quality index reports and compiled data	Director, TAQA	1 quality survey index	3 quality survey index	2013-2017	Improved absorption of TVET graduates in the job markets	25 Million
Carry out Quality assurance/ Standards and accreditation assessment in TVET institutions	Regulation in TVET training	Assessment reports Accreditation Certificates	Director, TAQA	502 institutions assessed for standards 1212 institutions assessed for accreditation	2000 institutions	2013 to 2017	Compliance with legislation/regulations	75 Million
Strategy 2: Institutionalize Carry out a national skills survey and develop a national human resource development plan								
Carry out a National Skills Survey	Skills survey carried out	National Skills Inventory	Central Planning and Project Monitoring Unit	Nil	Survey report on skills	2015		50 Million
Develop a National Human Resource Development Plan	Human Resource Development Plan developed	National Human Resource Development Plan	Central Planning and Project Monitoring Unit,	NIL	Human Resource Development Plan	2015		10 Million
Strategy 3: Align education and training curricula to the demands of the changing labour markets								
Develop Demand Driven Competence Based Education and Training programs for TVET	CBET training programmes/ Curriculum Developed	Number of programmes developed	Director, TAQA KICD Director, TE	Nil	45 Training programmes	2013 to 2017	Improved relevant TVET training	100 Million
Develop policy, regulations and standards for quality TVET	Policy on TVET training standards Standards on TVET training	Copy of Policy on TVET training standards Standards on TVET training	Director, TAQA	TVET curriculum development standard	Course accreditation standards Institutional accreditation standards	2013 to 2017	Improved relevant TVET training	25 Million

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
training	Gazetted TVET regulations Course and institutional accreditation			Review the TVET accreditation handbook reviewed				
Develop and implement benchmarking programmes for TVET	Learn global best practice from countries doing well in TVET training	Benchmarking reports and implementation programmes	Director, TAQA	1 Tanzania TVET System bench marked	9 TVET systems bench marks	2013 to 2017	Improved relevant TVET training	50 Million
Mainstream competence based training in collaboration with industry;	Developed and implemented framework on mainstreaming competency-based training	Policy document	Director, TAQA	Nil	CBET mainstreamed	2013 to 2017	Improved relevant TVET training	12 Million
Carry out a survey on skills inventory in the industry	Skills inventory report	Copy of skills inventory report	Director, TAQA	Nil	1 skills inventory system	2013 to 2017	Train only in areas with skills gap as per market demands	20 Million
Review of curriculum in universities	University programmes reviewed	Number of courses reviewed	Director, DHE, CUE, Universities	0	All courses	2013-2017	Graduates with skills aligned to the demand of the labour market	700 Million
Track the implementation of NVCET Curriculum Option I	200 YPs implementing NVCET Curriculum	No. of YPs implementing NVCET Curriculum	Director, YT	88	200	2013 to 2017	Increased quality of training in YPs	12.5 Million
Conduct quality assessment in 500 YPs	500 YPs assessed for quality	No. of YPs assessed for quality	Director, YT	500 YPs	500 YPs	2013 to 2017	Increased quality of training in YPs	12 Million
Build capacity of 300 YP staff on QAS	300 YP staff sensitised on QAS	No. of YP staff sensitised on QAS	Director, YT	250	300	2013 to 2017	Increased quality of training in YPs	4 Million
Strategy 4: Strengthen the Capacity for Quality Assurance in Education and Training in university								
Enhance the capacity of CUE to undertake quality assurance in all the universities	More staff of CUE trained on quality assurance	Number of universities and programmes assessed and accredited	Director, DHE CEO, CUE	65 institutions 150 programmes	All institutions All Programmes	2013-2017	High quality education and training in Kenyan universities	5 million
Establish and enhance internal quality Assurance	Directorate of Quality Assurance in all the universities	Number of universities with directorate of Quality Assurance	Director, DHE CEO, CUE CEOs- All	8	All univrsties	2013 -2017	High quality education and training in Kenyan	3 million

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
mechanisms in all the universities			universities				universities	
STRATEGIC ISSUE 3: ICT INTEGRATION								
STRATEGIC OBJECTIVE 3: TO INTEGRATE ICTs IN EDUCATION, TRAINING AND RESEARCH FOR MANAGEMENT, TEACHING AND LEARNING AT ALL LEVELS.								
Strategy 1: Develop and implement comprehensive legal, policy and institutional framework for ICT integration in education at all levels;								
Develop and implement policy and strategy for ICT integration in ICT4E	Policy and strategy for ICT integration in ICT4E	Percentage completion of ICT4E policy.	ICT4E	Chapter 7 of the sessional paper No. 14 of 2012	100%	2014-2017	A strategy on education and training	10 million
Directorate (division) established to coordinate ICT4E & STI functions in education	ICT4E/ STI Directorate /division established	Structure & functions of the directorate Deployment of human resource with relevant skills	ICT4E	Proposed ICT4E structure	100%	2014-2017	A fully established directorate/unit	11 million
Strategy 2: Develop an enabling and robust ICT infrastructure for all education, training and research institutions.								
Provide ICT infrastructure and equipment to schools, ECDE centres, ACE centers and TTCs strengthened	ICT equipment and infrastructure provided to ET&STI institutions	No of ET&STI institutions with ICT equipment	ICT4E	Zero primary schools ECDE centres, ACE 1,850 secondary schools	3.6 million devices for primary 1250 secondary	2014-2017	21,000 primary schools equipped with ICT infrastructure 1,250 secondary schools equipped 22 TTCs fully equipped	72 billion 1.75 billion
Develop Quality digital content for all levels of education.	Digital content for all levels of education developed	100% Percentage of Digital developed	ICT4E KICD	Zero for ECDE Std 1 & 2 content developed Form 1 – 4 content developed for 12 subjects Zero for TTCs	100%	2014-2017	Digital content for all levels of education developed	200 million 900 million 500 million 400 million
Strategy 3: Facilitate provision of connectivity to enhance collaboration and information sharing in the sector.								
Provide Internet connectivity/access to Institutions	ET&STI institutions connected to internet/broadband	No of ET&STI institutions connected to internet/broadband	ICT4E	Piloting	100 schools per county 22 TTCs	2014-2017	5000 learning institutions connected to internet	2 billion
Provide 100%	100% Connectivity to	No of regional offices with	ICT4E	No existing	340 field offices	2014-	100% Connectivity	200 million

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
Connectivity to Department of Education Headquarters, Agencies, Counties and District Education offices	Department of Education Headquarters, Agencies, Counties and District Education offices	internet connectivity		structured cabling for connectivity	connected to internet	2017	to Department of Education Headquarters, Agencies, Counties and District Education offices	
Strategy 4: Capacity Building of Teachers and Education Managers on ICT Integration on Education								
Train 100% of teachers and education managers on ICT integration in education	100%	No. of teachers education managers and with ICT integration skills	ICT4E TSC	61,000teachers trained in primary 20,000teacher s trained in secondary Zero education managers Zero BOMs	Train 200,000 teachers 1,250 education officials 1,255 TAC Tutors 21,000 BOMs	2014-2017	100% of teachers and education officials acquire ICT integration skills 21,000 sensitized	3 billion
Strategy 5: Promote Public Private Sector Partnerships for ICT in education resource mobilization.								
Develop Public Private Partnership strategy /initiatives for ICT in education , science and technology	Public Private Partnership strategy/initiatives for ICT in education , science and technology	PPP initiative	MOEST	No strategy	PPP Strategy	2014-2017	Public Private Partnership strategy/initiatives for ICT in education , science and technology	50 million
STRATEGIC ISSUE 4: SCIENCE TECHNOLOGY AND INNOVATION DEVELOPMENT CAPACITIES								
STRATEGIC OBJECTIVE 4: TO ENHANCE DEVELOPMENT CAPACITIES FOR ST&I								
Strategy 1: Develop globally benchmarked ST&I infrastructure to support intervention in national strategic priority areas								
Establish collaborative linkages with national, regional and international institutions in ST&I	To establish collaborative linkages with national, regional and international institutions inST&I	National ST&I data platform linked with regional and international depositories	MOEST, NACOSTI, Research Institutions, ICT Board, KNBS, Universities	nil	MoUs and aof agreements, Generated reports	2014-2017	Enhanced collaborative linkages with national, regional and international institutions inST&I	25
Establishment of a national ST&I data collection and survey unit	To establish and equip a national ST&I data collection and survey unit so as to have a basis from which to: i)Develop globally benchmarked data	Questionnaires Reports A functional unit to support R&D and innovation	MOEST, NACOSTI, Research Institutions, ICT Board, KNBS, Universities	nil	surveys national ST&I data collection and survey unit	2014-2017	Avail data and information to policy makers Equipment and office facilities for the ST&I data collection and	200

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
	collection instruments ii) Undertake regular surveys for R&D and innovation						survey unit	
Strategy 2: Increase budget allocation in ST&I towards the attaining 2% of GDP to fund the national ST&I priority areas.								
Establishment of County Technology and Innovations (CTI) Advisory and Prospecting Centers	To scout and nurture innovative ideas from individuals, training institutions, the private sector and globally for transfer to the counties	CTI) Advisory and Prospecting Centers established	MOEST, NACOSTI, Research Institutions, ICT Board, KNBS, Universities	NIL	No of CTI) Advisory and Prospecting Centers established	2014-2017	Increased investment and participation in ST&I at county level	500
Strategy 3: Develop capacity of human resource in ST&I								
Establish the Knowledge Information Management System	To provide the right knowledge related information to the key ST&I Institutions	Knowledge management system	MOEST, NACOSTI, Research Institutions, ICT Board, KNBS, Universities	NIL	KMIS	2014-2017	availability of Quality information on ST&I	100
Establish the National Physical Science Research Laboratory	National Physical Science Research Laboratory	% completion of the NPSRL	DRMD, NACOSTI, MOEST	NIL	National Physical Science Research Laboratory	2014-2017	Enhanced capacity for STEM and Research	1000
Construction of Kenya Advanced Institute of Science & Technology(KAIST)	KAIST	% completion of KAIST	MOEST, NT, Research Institutions KENIA, DHE	0	Fully functional Kenya Advanced Institute of Science & Technology(KAIST)	2014-2017	Skilled ST&I manpower	5000
3. Establishment of primary space technology infrastructure	A satellite control station and hardware & software manufacturing factory	An operating Satellite control station No. of branded software and hardware	MoHEST, Universities, Development Partners	NIL	A satellite control station and hardware & software manufacturing factory	2014-2017	upgrade Existing infrastructure to ensure sustainable high-level space research and technology development	4000
Strategy 4: Re engineer institutional and governance framework in ST&I								
Conduct a National Survey on manpower needs for ST&I	Manpower needs determined	Report	MOEST,	NIL	Report	2014-2015	To assess the manpower requirements for the country	100
Develop a	National Critical	Strategy	MOEST, NCST,	NIL	Strategy	2014-	To obtain a guideline	100

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
National Critical Skills Development Strategy	Strategy Developed		KENIA, Research Institutions, KNBS, Universities			2015	on how to close the gap between training and job market needs	
Construction of Kenya Advanced Institute of Science & Technology(KAIST)	KAIST	% completion of KAIST	MOEST, NT, Research Institutions KENIA			2014-2017		
Establishment of primary space technology infrastructure	A satellite control station and hardware & software manufacturing factory	An operating Satellite control station No. of branded software and hardware	MoHEST, Universities, Development Partners			2014-2017		
STRATEGIC ISSUE 5: DISSEMINATE AND COMMERCIALISE RESEARCH FINDINGS								
STRATEGIC OBJECTIVE 5: TO ENHANCE MECHANISMS FOR DISSEMINATION AND COMMERCIALIZATION OF RESEARCH FINDINGS								
Strategy 1: Develop programmes for the rapid commercialization of intellectually protected products and services locally and internationally								
Establish collaborative linkages with national, regional and international institutions in ST&I	Strong local, bilateral and multilateral linkages in ST&I	MoUs, agreements on collaborations	MOEST, NACOSTI, Research Institutions, ICT Board, KNBS, Universities		National ST&I data platform linked with regional and international depositories	2014-2017		100
Document and profile all relevant players in the sub-sector involved in innovation and R&D; technology transfer; patenting; product registration	A database of all relevant actors including researchers, innovators, investors, venture capitalists, indigenous knowledge-holders, technology-holders and policy-makers ii) Instruments of engagement iii) Well-defined joint	i) MoUs; collaborative and technology transfer agreements ii) Product patents and licenses iv) Membership to professional bodies in the natural products sector	MOEST, NACOSTI, Research Institutions, ICT Board, KNBS, Universities	NIL	ALL players documented	2014-2017	Harmonization of ST&I activities in the sector	50

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
	programmes							
Strategy 2: Promote the generation, documentation and dissemination of ST&I information.								
Establish a national ST&I data collection and survey unit	a national ST&I data collection and survey unit established	Survey reports, STI databases	MOEST, NACOSTI, Research Institutions, ICT Board, KNBS, Universities	-	1	2014-2017	Improved data collection in TVET	100
Capacity development in in ST&I statistics, surveys a	Staff equipped with skills for ST&I surveys, statistical analysis and policy briefing	No of staff trained	MOEST, NACOSTI, Research Institutions, ICT Board, KNBS, Universities	10	100	2014-2017	Effective data management in TVET	200
Establishment of County Technology and Innovations (CTI) Advisory and Prospecting Centers	CTI) Advisory and Prospecting Centers established	Number of CTI) Advisory and Prospecting Centers established	MOEST, NACOSTI, Research Institutions, ICT Board, KNBS, Universities	0	47	2014-2017	Effective coordination of ST&I in the county	Establishment of County Technology and Innovations (CTI) Advisory and Prospecting Centers
STRATEGIC ISSUE 6: FINANCIAL AND HUMAN RESOURCE MANAGEMENT								
STRATEGIC OBJECTIVE 6: TO ENHANCE THE MINISTRY'S FINANCIAL AND HUMAN RESOURCES								
Strategy 1: Strengthening the ministry's financial mobilization capacity								
Establish the Education Fund	Established and operationalized Education Fund	Appointed Board	Education Secretary					
Establish and operationalize University and TVET Fund	University and TVET Fund established and operationalized	Appointed Board	Directorate of Higher Education, Technical Education	Legal framework	Establish and operationalize University and TVET Fund	2017	Effective Mobilization of resources	100
Increase budget allocation in ST&I to fund the national ST&I priority areas.	ST&I financing increased	% of ST&I allocation on National Budget	Finance, Central Planning and Project Monitoring Unit	0.4	2	2017	Marketable research findings	1000

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
Strategy 2: Strengthen public private partnership toward offering affordable education and training								
Develop a Public Private Partnership on Financing and Delivering Education and Training	Public Private Partnerships developed	Number of PPPs	Director Basic, Secondary, TVET, Higher Education, Planning, Finance	No Strategy	Strategy	2015	PPP Transactions	30 million
Strategy 4: Rationalize the Ministry's staff and develop a Ministerial Human Resource Development Strategy								
Carry out Training Needs Assessment	Develop an internal training policy	% adherence to the training policy	Director HRD					
STRATEGIC ISSUE 7: GOVERNANCE AND MANAGEMENT								
STRATEGIC OBJECTIVE 7: TO RE-ENGINEER THE GOVERNANCE AND MANAGEMENT SYSTEM TO IMPROVE EFFICIENCY, ACCOUNTABILITY AND QUALITY EDUCATION AND TRAINING SERVICE DELIVERY								
Strategy 1: Enhancing accountability by empowering communities through mass media								
Carry out participatory Public Expenditure Tracking (PETS)	Bi-annual Participatory Public Expenditure Tracking (PETS) carried out	% completion of the PETS	CPPMU	0	100%	2014/15 and 2016/17	Improved efficiency and accountability	50 million
Carry out participatory Monitoring and Evaluation for all projects	Bi-annual Participatory Monitoring and Evaluation for all projects carried out	Number of participatory M&E carried out	CPPMU	0	5	2013 - 2017	Updated project information for decision making	75 million
Strategy 2: Establish Education, science and training Governing bodies created by the Acts of Parliament								
Establish and operationalize National Education Board (NEB); Special Adult Education Board NACONEK, ESQAC, ACEB, TVETA, NACDAC, UCCPS, the NRF, the KENIA . County Education Board (CEB), Boards of Management (BOM), School Management Committees (SMCs)	Governing bodies for the new Institutions established	Number of Governing bodies established	Director, BE; Director, QAS; Director, ACE; Director, TE; Director, HE; Director, RMD	0	All governing bodies articulated in legal framework Education Sector	2013 - 2016	Improved governance and accountability in the sector	300 million
Allocate a budget for operations of the bodies	Funding for the governing bodies allocated	Amount of money allocated	Director, BE; Director, QAS; Director, ACE;	0	Integration of funding in treasury annual budget	2013 - 2016	Governing bodies fully operationalized	5 billion

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
			Director, TE; Director, HE; Director, RMD CFO				financially	
Develop regulations to be in tandem with Kenya Constitution 2010	Regulations for the governing bodies developed	Number of regulations developed; Number of circulars/guidelines to operationalize regulations	Director, BE; SE Director, QAS; Director, ACE; Director, TE; Director, HE; Director, RMD LA, SDS	Repealed legal framework and regulations	Regulations for Basic Education Act NO. 14 of 2013 and relevant guidelines and circulars	2013 - 2017	Efficient and focused management of the governing bodies	10Million
Strategy 3: Establish a system of tracking learners from pre-primary level through to tertiary and university levels of education and on to industry.								
Conduct tracer studies at every level of education and training	Tracer studies conducted	Number of tracer studies conducted	Director, BE; Director, QAS; Director, ACE; Director, TE; Director, HE; Director, RMD	0	5	2013 - 2014	Efficiency in tracking transition rates and market absorption of graduates at all levels	
Develop a coding system for all entrants to the education system	A coding system for all entrants to the education system developed	% completion of the coding system	CPPMU All Directors	0	All new entrants in education system	2014/16	All entrants identified and tracked by unique code	6 billion
Conduct tracer studies for YP trainees in the industry	1 tracer study conducted in YPs	No. of tracer studies conducted in YPs	Director, YT	NIL	1	2013 to 2017	Efficient tracking of absorption of YP trainees in the job market	12.5 M
Strategy 4: Establish Boards of Management (BoM) and Parents' Teachers' Association (PTA) at Tertiary Institutions level.								
Develop a framework for the operations of BoM in TVET	The framework for the operations of BoM in TVET	% completion	Director, TVET	Nil	Guidelines	By 2015/16	Accelerated TVET reforms	1 million
Establish the BoM for TVET	BoM for TVET	Number of BOM established	Director, TVET	0	50	By 2015/16	Improved governance and management in TVET	5 million
Build capacity of BoM members on management of YPs	Train 300 BoM members on management of YPs	No. of BoM members trained in YPs	Director, YT	NIL	300	2014 to 2017	Improved governance and management in YPs	5 M
Strategy 5: Establish Bodies created by the ST&I Act to regulate and promote research and innovation								
Establish and operationalize KIN, NAPSRL, CNRPA, KIOG, KETCRI,	Boards of Management to establish the Institutions	Number of Boards of Management established	Director, RMD	0	6	2013 - 2014	Improved governance of ST&I sector	1 million

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
KAIST	established							
Allocate funds for operationalization of the Institutes	Funds allocated	Amount of money allocated	Director, DRMD CFO	0	500 million	2013 - 2017	Operations of the Institutes facilitated	500 million
Develop policy a framework for each Institution	Policy framework for each Institution	Number of policy frameworks developed	Director, DRMD	0	1	2013 - 2016	Improved of ST&I sector	10 million
STRATEGIC ISSUE 8: DATA MANAGEMENT								
STRATEGIC OBJECTIVE 8: Improve education and training data quality and sharing								
Strategy 1: Institutionalize the Education and Knowledge Management Information Systems within the Ministry								
Install the EMIS and KMIS in all departments and field offices	The EMIS and KMIS installed in all departments and field offices	The number of departments and field offices installed with EMIS and KMIS	CPPMU Director, ICT ICT4E	287 Centres	334 centres	2013-2017	Improved information sharing	560 million
Train a pool of officers from each department and Field Offices on EMIS and KMIS	A pool of officers from each department and Field Offices trained on EMIS and KMIS	Number of Officers trained	CPPMU Director, ICT ICT4E	6,000	20,000	2013-2017	A pool of trainers on the use of EMIS and KMIS	130 million
Conduct critical baseline surveys in YPs (enrolment, transition, completion, quality)	4 critical baseline surveys conducted in YPs	No. of baseline surveys conducted in YPs	Director, YT	NIL	4	2013 to 2017	Objective baseline data in YPs	10 Million
Collect and analyse data and update database regularly	Data collected and databases updated regularly	No. of data collection and analysis activities; No. of times databases were updated	Director, YT	NIL	5	2013 to 2017	Objective baseline data in YPs	10 Million
Strategy 2: Establish an interactive database for all levels of education, science and technology								
Develop the education, science and technology database	The education, science and technology Database developed	% completion of the database	CPPMU Director, ICT ICT4E	0	1	2016	A central and networked data reference point for the education, science and technology sector	1 billion
Interlink the database with key stakeholder databases	Database linked with key stakeholder databases	The number of key stakeholder databases linked to the Ministry database	CPPMU Director, ICT ICT4E	0	1	2016	Improved sharing of information with stakeholders	10,000
Strategy 3: Institutionalize data collection, analysis, and evidence based decision making at all levels in the Ministry								
Carry out critical baseline surveys at all levels	Critical baseline surveys carried out	Number of baseline surveys carried out at each level	CPPMU Director, BE Director, STE	0	All new entrants in education system	2016	Improved planning and projection capacity	50 million

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
(enrolment, transition, completion, quality)			Director, TVET Director, HE Director, RMD					
Collect and analyze data and update database regularly periodically	Data collected and analyzed and database updated regularly	Number of data collection and analysis events and number of updated done to the database	CPPMU Director, ICT ICT4E Director, BE Director, STE Director, TVET Director, HE Director, RMD	0	All new entrants in education system	2016	Improved planning and projection capacity	675 million
Integrate the science, technology and innovation information into the Government Financial Statistics (GFS)	Science, technology and innovation information integrated into the Government Financial Statistics (GFS)	% completion of the integration	CPPMU Director, RMD	No link	linked	2016	Science, Technology and Innovation contribution to GDP reflected in Government Policy documents	0
STRATEGIC ISSUE 8: CROSS CUTTING ISSUES/EMERGENCY ISSUES								
STRATEGIC OBJECTIVE 8: TO DEEPEN THE MAINSTREAMING OF CROSS-CUTTING ISSUES IN EDUCATION								
Strategy 2: Deepen HIV and AIDS prevention activities in the sector;								
Create awareness through mass media on prevention HIV and AIDS	Awareness created on prevention of HIV and AIDS	Number of people educated on prevention of HIV and AIDS	MOEST	300,000	1 million	2013 to 2017	Reduced infection	50 million
Implement the gender policy	Gender policy implemented	Percentage level of gender implementation	MOEST	Policy	Policy Implementation	2013 to 2017	Improved efficient reforms in gender	40 million
Development of a Guidance and Counseling policy for the education sector	Guidance and Counseling policy development	Policy Document	MOEST	No Policy	Policy	2015	Policy document	5 million
Development and implementation of training programmes in emerging issues for teachers, learners and other stakeholders	Training programmes in emerging issues development and implemented	Trained Teachers	MOEST	10,000	50,000	2015-2017	Awareness of emerging issues	10 million

Activities	Expected Output	Performance indicator	Lead Agency and collaborators	Baseline	Target	Time frame	Expected Outcome	Budgetary requirement in KSh.
Development of youth exchange programme between industry and learning institutions	Programme design and a running exchange programme	No of youth /trainers /mentors participating	MOEST PCK KEPSHA	0 programmes	3 programmes	1014 - 1017	Employable skills	100 million

Chapter Six: Capacity Requirement, Accountability and Risks

6.1 Capacity Assessment

This section outlines the Ministry's required capacities for the implementation of this Strategic Plan. It further assesses the capacity needs and related capacity development strategies, including their implementation, costs, responsibilities and timeframes.

Following the re-organization of government vide Executive Order No 2/2013, the Ministries of Education; and Higher Education, Science and Technology were merged to form the Ministry of Education, Science and Technology. The Ministry has two State Departments namely: State Department of Education and State Department of Science and Technology. In addition, the Ministry has been assigned the function of Youth Polytechnics which previously was under the former Ministry of Youth Affairs and Sports. It is within this mandate the capacity assessment has been done in relation to the implementation of this Strategic Plan.

6.2 Organization structure

The former Ministry of Higher Education, Science and Technology's organizational structure consisted of five departments, namely: Directorate of Technical Education (DTE); Directorate of Technical Accreditation and Quality Assurance (DTAQA); Directorate of Higher Education (DHE); Directorate of Research Management and Development (DRMD); and the Administrative Support Services Department.

To deliver on the mandates, vision and mission, the former Ministry of Education was organized in the following technical and administrative support service departments: Office of the Education Secretary; Directorate of Policy, Partnerships and East African Affairs; Directorate of Basic Education; Directorate of Secondary & Tertiary; Directorate of Quality Assurance & Standards; Directorate of Adult & Continuing Education; School Audit Department; Directorate of Field & Other Services; and Administrative Support Services;

Proposed Organization Structure of the Ministry

An effective organization structure forms an effective framework by which an organization delineates groups and coordinates its tasks. Organization structures allow for different functions and processes to be clearly allocated to different departments and employees. A wrongly designed structure may therefore hinder the success of an organization. An appropriate structure should therefore aim to maximize the efficiency and effectiveness of an organization and retain order and command whilst promoting flexibility and creativity.

In addition, such factors as the size, services provided and skills of the workforce influence the organization structure. The proposed organization structure for the

Ministry is therefore based on the principles of a good organization structure, the mandate of the Ministry, its vision, core values, strategic objectives and policy priorities.

The proposed organization structure is modeled on the basis of the two State Departments; State Department of Education and State Department of Science and Technology that comprise this Ministry. The two former structures have also been reviewed and the following shortcomings noted:

- Overlaps in mandates at policy making, strategy and implementation levels;
- Top heavy Head Quarters and lean downstream structures;
- Misplaced skills and competencies.

The following guiding principles were also put into consideration:

- Compliance with the letter and spirit of the Constitution, of Kenya, 2010 in the provision of services at the grass-root level through devolution and decentralization;
- Empowerment of the County units in respect to Human Capacity, Physical Facilities and Delegated Authority;
- Addressing the desire by the Jubilee Government to have a lean and efficient National Executive for policy formulation, strategy and oversight;
- Ensuring a smooth and harmonious functioning of the Ministry as a single unit in service delivery;
- Commitments of the Jubilee Government towards the attainment of Kenya Vision 2030;

Office of the Cabinet Secretary

The office of the Cabinet Secretary is a constitutional office that provides Policy and Strategy leadership to the Ministry. The office will be staffed with Administrative support staff as presented on Table 3.1.

Table 3.1: Staffing – Office of the Cabinet Secretary

Designation/Title	Job Group	A/E	In-Post	Proposed Numbers
Cabinet Secretary	-	1	1	1
Personal Assistant	P	1	1	1
Technical Assistant/Education	P	-	-	1
Technical Assistant/Science and Technology	P	-	-	1
Personal Secretary I/II/Executive Secretary	L/M/N	-	-	3
Support Staff I/II/ Senior	D/E/F	-	-	2
Principal Driver	F/H/J	-	-	2
Total		2	2	11

The Principal Secretary is responsible for the overall supervision and direction of the State Department of Education which will be organized into the office of the Director General, and five (5) directorates as follows:

1. Office of the Principal Secretary, Education;
2. Office of Director General;
3. Directorate of ECD and Primary Education;
4. Directorate of Secondary and Tertiary Education;
5. Directorate of Alternative Basic Adult and Continuing Education;
6. Directorate of University Education;
7. Directorate of Schools Audit;

The Department will be supported by the Directorate of Administration and Planning with its support service units.

Office of the Principal Secretary, Education

The Principal Secretary is the Authorized/Accounting Officer for the Ministry. The office will be staffed with administrative support staff as presented in Table 3.2.

Table 3.2: Staffing – Office of the Principal Secretary, Education

Designation/Title	Job Group	A/E	In-Post	Proposed Numbers
Principal Secretary	-	1	1	1
Personal Assistant	P	1	1	1
Personal Secretary I/II/Executive Secretary	L/M/N	-	-	3
Support Staff I/II/ Senior	D/E/F	-	-	2
Principal Driver	F/H/J	-	-	2
Total		2	2	9

Office of the Director General, Education

The Office of the Director General is established through the Basic Education Act, 2013 and will be graded at job group ‘U’. The office will be responsible for advising the Principal Secretary on all matters pertaining to technical aspects of the State department of Education. In addition, the Director General will be responsible for: coordination of projects, partnerships and international commitments; Schools Audit function; overseeing the implementation of ICT4E project; as well as the Field Administration Services Unit. To effectively perform these functions, the Office will be staffed as presented:

Table 3.3: Staffing - Office of the Director General, Education

Designation/Title	Proposed Job Group	In-Post	Proposed Job Group	Proposed Numbers
Director General	U	-	-	1
Deputy Director Education	R	-	-	3
Senior Assistant Director Education/Deputy Director Education	P/Q	-	-	3
Education officers I/II/III	L/M/N		-	6
Sub total				13

Directorate of Primary Education

The Directorate will be headed by a Secretary of Primary Education at Job Group T and will be responsible for the overall management of Primary, Special Needs Education (SNE) and Primary Teacher Education.

The Directorate will be organized into three (3) departments namely: Research, Policy and Strategy; Primary Education Development; and Projects, Programmes and Grants.

Table 3.4: Staffing - Directorate of Primary Education

Designation	Proposed Job Group	AE	In Post	Proposed Numbers
Secretary, Primary Education	T	1	-	1
Director, Primary Education	S	-	1	3
Deputy Director, Primary Education	R	-	4	4
Senior Assistant Director Primary Education	Q	-	5	8
Senior/Chief /Principal Education Officer	L/M/N/P	-	5	14
Total		1	15	30

Directorate of Secondary and Tertiary Education

This directorate will be headed by a Secretary of Secondary Education at Job Group 'T'. The Directorate will manage matters related to secondary and Tertiary education. The directorate will further be organized into two (2) Departments namely; Research Policy and Strategy; and Secondary and Tertiary Education Development.

Table 3.5: Staffing - Directorate of Secondary and Tertiary Education Development

Designation	Proposed Job Group	A/E	In-Post	Proposed Numbers
Secretary, Secondary Education	T	-	-	1
Director, Secondary Education	S	1	1	2
Senior Assistant Director, Secondary Education	R	2	2	4
Asst. Director, Secondary Education	Q	6	6	6
Principal Education Officer	P	3	3	8
Education Officer II/I/Senior/Chief	J/K/L/M/N	-	-	10
Sub -Total		12	12	31

Directorate of Alternative Basic Education and Continuing Education

This Directorate will be headed by a Secretary at Job group “T”. The Directorate will be responsible for formulation and review of policies for Alternative Provision of Basic Education and Training; overseeing the development, management and Governance of institutions offering Alternative Adult Education; strategic partnerships and collaborations, promote life –long learning for out of school children, youth and adults. The directorate will comprise two departments namely; Research, Policy and Strategy and Alternative Basic and Adult Education Development.

Table 3.6: Staffing - Directorate of Alternative Basic Education and Continuing Education

Designation	Proposed Job Group	A/E	In-Post	Proposed Numbers
Secretary, Adult Education	T	-	-	1
Director, Adult Education	S	1	1	2
Senior Assistant Director, Adult Education	R	2	2	4
Asst. Director, Adult Education	Q	6	6	6
Principal Adult Education Officer	P	3	3	8
Adult Education Officer II/I/Senior/Chief	J/K/L/M/N	-	-	10
Sub -Total		12	12	31
LECTURERS/TEACHERS				
Principal Lecturer	P	-	-	47
Deputy Principal Lecturer	N	2	2	47
Lecturer III/II/I/Senior	J/K/L/M	-	-	47
Assistant Lecturer	H	-	-	94
Adult Education Teacher III/II/I/Asst/Senior	E/F/G/H	2357	-	3000
Grand Total		2,369	14	3,235

Directorate of University Education

This Directorate will be headed by a Secretary at Job group “T”. The Directorate will be responsible for formulation, implementation and review of policies for the university

education; overseeing the management and governance of institutions established by the University Education Act, 2012. Further, the directorate will be responsible for the coordination of strategic partnerships, collaborations and linkages to foreign university education. The directorate comprises of two (2) Departments namely; Research, Policy and Strategy; and University Education Development.

3.7: Staff Establishment of the Directorate of University Education

Designation	Current Job Group	In - post	Proposed Job Group	Proposed Numbers
Secretary, University Education	S	0	T	1
Director, University Education	R	3	S	2
Senior Assistant Director, University Education	Q	1	R	4
Assistant Director, University Education	P	4	Q	6
Principal University Education Officer	N	7	P	8
Chief University Education Officer	M	5	N	10
Total				31

Directorate of Schools Audit

This directorate will be headed by a Director at job group ‘S’ and will be responsible to the Director General of Education for planning, organizing, directing, coordinating and controlling Audit Services in public Primary, Secondary and Tertiary institutions.

Table 3.8: Proposed staffing levels for the Schools Audit Services

Designation	Job Group	A/E	In-Post	Proposed Establishment
Director, Schools Audit	S	-	-	1
Deputy Director, Schools Audit	R	-	-	2
Senior Assistant Director, Schools Audit	Q	-	1	5
Assistant Director, Schools Audit	P	-	-	54
Principal Internal Audit	N	1	1	79
Chief Auditor	M	-	1	98
Senior Internal Auditor	L	17	19	122
Auditor I	K	28	40	159
Auditor II	J	53	46	175
Auditor Examiners I	H	163	112	-
TOTAL		262	220	695

State Department of Science and Technology

The Executive Order No 2/2013 has assigned the following functions to the State Department of Science and Technology: Science technology and innovation policy, management of technical training institutes including youth polytechnics, management of institutions of science and technology, management of National polytechnics. In addition, the State Department has been assigned the National Council for Science and

Technology (NCST: now NACOSTI) and three Technical Universities namely: Technical University of Kenya, Technical University of Mombasa and **Dedan Kimathi University of Technology**.

The State Department will be responsible for the implementation of Technical, Vocational, Education and Training (TVET) Act, 2012 and the Science, Technology and Innovation (ST&I) Act, 2012.

The Principal Secretary will be responsible for the overall supervision and direction of the State Department of Science and Technology which will be organized into the Office of the Director General, Science and Technology, three (3) directorates as follows:

1. Office of the Principal Secretary
2. Office of the Director General Science and Technology;
3. Directorate of Knowledge Management and Commercialization;
4. Directorate of Science Technology and Innovations;
5. Directorate of Technical, Vocational Education and Training (TVET);
6. Support Service Units.

The Department of Science, Technology and Innovation will be supported by the Directorate of Administration and Planning and its support service units.

Office of the Principal Secretary, Science and Technology

The office of the Principal Secretary is a constitutional office to provide general administrative oversight of the functions of the State Department. The Principal Secretary will be the Authorized and Accounting Officer for the Department. The office will be staffed with administrative support staff as presented in Table 3.9

Table 3.9: Staffing – Office of the Principal Secretary, Science and Technology

Designation/Title	Job Group	A/E	In-Post	Proposed Numbers
Principal Secretary	-	1	1	1
Personal Assistant	P	1	1	1
Personal Secretary I/II/Executive Secretary	L/M/N	-	-	3
Support Staff I/II/ Senior	D/E/F	-	-	2
Principal Driver	F/H/J	-	-	2
Total		2	2	10

Office of the Director General, Science and Technology

This office will be headed by a Director General, Science and Technology who will be graded at job group 'U'. This position was previously designated as Secretary. However, to ensure uniformity in nomenclature and avoid conflict with other positions designated as Secretary, it is proposed that the position is designated as Director General. The Director General will be responsible for advising the Principal Secretary on all matters relating to TVET, Science, Technology and Innovation. The office will also coordinate the

technical functions of the state department. In addition, this office will be responsible for coordination of projects, partnerships and international commitments.

Table 3.10: Staffing - Office of the Director General, Science and Technology

Designation/Title	Proposed Job Group	A/E	In-Post	Proposed Numbers
Director General	U	-	-	1
Deputy Director	R	-	-	1
Senior Assistant Director	Q	-	-	1
Assistant Director	P	-	-	1
Personal Secretary I/II/Executive Secretary	L/M/N	-	-	3
Support Staff I/II/ Senior	D/E/F	-	-	2
Principal Driver	F/H/J	-	-	2
Total			1	10

Directorate of Knowledge Management and Commercialization

This Directorate will be headed by a Secretary at the level of Job Group “T”. The directorate will be responsible for the formulation and implementation of policies, strategies and programmes for the production, preservation and utilization of knowledge including indigenous knowledge, for socio-economic development; establishment and maintenance of a Knowledge Management Information System and generate National Science, Technology and Innovation statistics to feed into the system and facilitate the effective linkages between government, research, academia, industry and the society; initiation and implementation of strategic international, national and institutional collaborations and partnerships for knowledge management and commercialization.

The directorate will comprise of two departments namely; Policy, Planning and Strategy; and Knowledge Information Management.

Table 3.11: Staffing - Directorate of Knowledge Information Management and Commercialization

Designation/Title	Current Job Group	In Post	Proposed Job Group	Proposed Numbers
Secretary, Knowledge Management	S	-	T	1
Director, Knowledge Management	R	-	S	2
Senior Assistant Director, Knowledge Management	Q	-	R	4
Assistant Director, Knowledge Management	P	-	Q	6
Principal Knowledge Management Officer	N	-	P	8
Chief Knowledge Management Officer	M	-	N	10
Sub-Total				31

Directorate of Science, Technology and Innovation

This Directorate will be headed by a Secretary who will be graded at Job Group “T”. The Directorate will be responsible for the formulation and implementation of policies, strategies and programmes for the development, promotion, dissemination and effective communication of Science, Technology and Innovation (ST&I); facilitation of the integration of Science and Technology, including new and emerging areas of ST&I (such as Information Communication Technology, Business Process Outsourcing, Nanotechnology, Biotechnology, Space Science, Nuclear science etc) into the national production systems for sustainable development; initiation and implementation of strategic collaborations and partnerships for science, technology and innovation.

The directorate will be organized into two departments namely, Policy, Planning and Strategy; and Science and Technology Development.

3.12: Staffing - Directorate of Science, Technology and Innovations

Designation/Title	Proposed Job Group	AE	In-Post	Proposed Numbers
Secretary, Science and Technology	‘T’	-		1
Director, Science and Technology	‘S’	-		2
Deputy Director, Science and Technology	‘R’	-		4
Senior Assistant Director, Science & Technology	‘Q’	-		6
Assistant Director, Science & Technology	‘P’	-		8
Principal Science & Technology Officer	‘N’	-		10
Sub-total				31

Directorate of Technical, Vocational Education and Training

This Directorate will be headed by a Secretary who will be graded at Job group “T”. The Directorate will be responsible for policy formulation, and supervision of TVET institutions including Youth Polytechnics and Technical Universities; ensuring equitable access, retention and achievement of appropriate knowledge, skills and attitudes; and overseeing the management of institutions established by the TVET Act, 2013.

The directorate comprises of three (3) departments namely; Research, Policy and Strategy; Technical Vocational Education and Training Development; and Youth Training.

Table 3.13: Staffing - Directorate of Technical, Vocational Education and Training (TVET)

Designation	Proposed Job Group	AE	In post	Proposed Numbers
Secretary, Technical Education	T	-	-	1
Director, Technical Education	S	1	1	2
Senior Assistant Director, Technical Education	R	1	1	4
Assistant Director, Technical Education	Q	3	3	8
Principal Technical Education Officer	P	-	-	14
Chief Technical Education Officer	N	-	-	16
Total				45

Directorate of Youth Training

This Department will be headed by a Director who will be graded at Job group “S”. The Department will be responsible for formulation and review of policies on youth training; development and review of curriculum; overseeing the implementation of the curriculum and co-curricular activities; facilitating provision of adequate tools, equipment and infrastructure in youth polytechnics.

Table 3.14: Staffing - Department of Youth Training

Designation	Proposed Job Group	AE	In Post	Proposed Nos.
Director of Training	S	1	-	1
Deputy Director of Training	R	1	1	2
Senior Assistant Director of Training	Q	-	1	4
Assistant Director of Training	P	8	8	8
Principal Training Officer	N	17	17	17
Chief Training Officer	M	-	-	18
Sub-Total				50
YOUTH POLYTECHNIC INSTRUCTORS				
Principal Instructor	N	-	-	1,450
Chief Instructor	M	7	7	1,450
Instructor I/II/III/Senior Instructor	H/J/K/L	641	641	4,075
TOTAL		648		6,975

County Directorate of Education, Science and Technology

The Kenya Constitution 2010 presents a complete paradigm shift from a central government system to a hybrid of centralized national government and a devolved government structure where certain services have been devolved to the County Government. However, under the Fourth Schedule of the Constitution, most of education remains a function of the National Government.

The devolved system of government as provided for by the Constitution calls for an effective coordination of the functions of the National Government at the County level in close consultation with the County Governments. The Ministry of Education, Science and Technology therefore needs to deepen its decentralization not only to comply with the Constitution but also to take Education, Science and Technology services close to the consumers at the grass root level.

Currently the Ministry of Education Science and Technology function at the county level is managed at county, sub-county, ward and institution levels. At the county headquarters the function is managed by County Director of Education, County Director of Youth Training, County Quality Assurance Officer and County Adult Education Officer. At the sub-county level the function is managed by Sub-county Education Officers and Youth Training Officers in the former District Units. At the ward level the education function is managed by Area Education Officers (AEO) and Teacher Advisory Center (TAC) Tutors.

To ensure harmony and a coordinated approach to the education, science and technology service delivery at the grass root level, there is need to enhance the profile of existing county and sub-county units in terms of human, infrastructure capacity and delegated authority. In this regard, the county units will be assigned functions, structures and staffed as follows:

Staffing at the County

The county directorate of education, science and technology will be headed by a county director at job group 'R', assisted by two county deputy directors at job group 'Q' each in charge of education and science and technology. The County Director will report to the DG, education and DG, Science and Technology on technical matters touching on education and science and technology respectively. He/she will be supervised by the Director General of the State Department responsible for their Scheme of Service.

Table 3.15: Staffing - County Directorate of Education, Science and Technology

Designation	Proposed Job Group	A/E	In-post	Proposed Numbers
Deputy Director Education, Science and Technology	R	-	-	47
Senior Assistant Director Education	Q	-	-	47
Senior Assistant Director Science and Technology	Q	-		47
Education Officers	L/M/N	-		235
Principal Guidance and Counseling Officer	N/P	-		47
Finance/Administration Officer	M/N	-		47
Human Resource Officer	M/N	-		47
Procurement Officer	M/N	-		47
Assistant Accountant	M/N	-		47
Executive Secretary	M	-		47
Personal Secretary III/II/I/Senior	H/J/K/L	-		47

Clerical Officer II/I/Senior/Chief	F/G/H/J	-		141
Driver III/II/I/Senior/Chief/Principal	D/E/F/G/H/J	-		94
Support Staff III/II/I/Senior/SS Sup./Cleaning Sup.IIA/I	A-G	-		47
Total				987
Principal/Chief Education Officer	M/N	-		286
Principal/Science and Technology/Youth Training/TVET Officer	M/N	-		286
Principal/Chief Adult Education Officer	M/N	-		286
School Auditors	N	-		286
Guidance and Counseling Officers	M/N			286
Education Officers	L/M	-	-	1500
Secretarial Assistant II/I/Senior	G/H/J	-		286
Clerical Officer II/I/Senior/Chief	F/G/H/J	-		572
Driver III/II/I/Senior/Chief/Principal	D/E/F/G/H/J	-		286
Support Staff III/II/I/Senior/SS Sup./Cleaning Sup.IIA/I	A-G	-		286
				2930
Grand Total				5860

Directorate of Administration and Planning

This Directorate will be headed by an Administration Secretary who will be responsible to the Principal Secretary for coordination of support services. The Directorate will be responsible for:

1. Coordination and general administration of the Ministry:
2. Coordination of parliamentary business and statutory reports
3. Facilitate the development of Cabinet Memos
4. Handling complaints and petitions on Ministry programmes

The functions for specific units will be as follows:

There shall be two Administration Units responsible for each of the two (2) State Departments to avoid dual reportage and reflect the shared responsibilities of the two Principal Secretaries.

Table 3.16: Staffing – Administration Unit

Administration/State Department of Education				
Designation	Job Group	A/E	In-Post	Proposed Numbers
Administration Secretary	T	-	-	1
Director of Administration	S	1	0	1
Senior Deputy Secretary	R	1	1	1
Deputy Secretary	Q	2	1	2
Under Secretary	P	2	1	2
Senior Assistant Secretary	N	6	1	6
Assistant Secretary, Cadet III/II/I	J/K/L/M	15	4	10
Total		27	8	23
Administration/State Department of Science and Technology				
Administration Secretary	T	-	-	1
Director of Administration	S	1	0	1
Senior Deputy Secretary	R	1	1	0
Deputy Secretary	Q	1	1	1
Under Secretary	P	1	0	1
Senior Assistant Secretary	N	4	3	4

Accounts Unit

The Unit will be headed by a Senior Assistant Accountant General who will report to the Permanent Secretary. The functions of the unit will entail application of sound principles, systems and techniques in accounting for Government finances, Government assets, revenue, expenditure, costs and management of accounting information.

Table 3.17: Staffing - Accounts Unit/State

Accounts Section/State Department of Education				
Designation	Job Group	A/E	In-Post	Proposed Numbers
Senior Assistant Accountant General	Q	1	-	1
Assistant Accountant General	P	1	-	1
Principal Accountant	N	1	2	2
Accountant II/I/Senior/Chief	J/K/L/M	74	38	38
Total		77	40	42
Accounts Section/State Department of Science and Technology				
	Job Group	A/E	In-Post	Proposed
Senior Assistant Accountant General	Q	1	-	1
Principal Accountant I/ Asst Accountant General	P	1	1	0
Principal Accountant II	N	1	0	1
Chief Accountant	M	1	0	1
Accountant II/I/Snr.	J/K/L	13	20	20
Total		17	21	23

Supply Chain Management Unit

The section will be headed by a Deputy Director, Supply Chain Management who will report to the Permanent Secretary. The division will be responsible for advising the Ministry on the application of sound principles, techniques and procedures pertaining to stock control, procurement, custody, verification and disposal of obsolete, redundant and unserviceable stores, with the sole objective of advising the Accounting Officer achieve maximum economy through proper stores accounting, prevention and detection of losses and wastage or misuse and procuring of stores professionally and in most advantageous manner to the Government. The staffing levels are as follows:

Table 3.18: Staffing - Supply Chain Management Unit

Supply Chain Management Unit/State Department of Education				
Designation	Job Group	A/E	In-post	Proposed
Deputy Director Supply Chain Management	R	1	0	1
Senior Assistant Director Supply Chain Management	Q	1	1	1
Assistant Director Supply Chain Management	P	3	0	2
Principal Supply Chain Management Officer	N	1	0	2
Supply Chain Management Officer II/I/Senior/Chief	J/K/L/M	12	0	12
Chief Supply Chain Management Assistant	M	1	0	1
Senior Supply Chain Management Assistant	L	1	2	1
Supply Chain Management Assistant IV/III/II/I	G/H/J/K	53	35	35
Total		73	38	55
Supply Chain Management Unit/State Department of Science and Technology				
Senior Deputy Director Supply Chain Management	S	0	1	1
Senior Assistant Director - Supply Chain Management	Q	1	0	1
Principal Supply Chain Management Officer	N	0	1	1
Chief Supply Chain Management Officer	M	1	0	1
Senior Supply Chain Management Officer	L	1	1	0
Supply Chain Management Officer I	K	1	2	2
Supply Chain Management Assistant III/II/I	H/J/K	3	4	4
Supply Chain Management Assistant IV	G	3	1	3
Supply Chain Management Officer I	K	1	2	2
Total		11	12	15

Human Resource Management

This Division will be headed by a Deputy Director, Job Group 'R' who will be responsible to the Director of Administration for the management of human resource matters in the State Department of Education.

Table 3.19: Staffing Human Resource Management Division,

Human Resource Management Division/State Department of Education				
Designation	Job Group	A/E	In-Post	Proposed Numbers
Director Human Resource Management	S	1	-	1
Deputy Director/Senior Assistant Director Human Resource Management	R/Q	2	-	1
Assistant Director Human Resource Management	P	2	1	2
Principal Human Resource Management Officer	N	2	1	2
Human Resource Management Officer II/I/Senior/Chief	J/K/L/M	15	6	6
Chief Human Resource Management Assistant.	M	1	0	1
Human Resource Management Assistant III/II/I/Senior	H/J/K/L	17	12	12
Total		40	20	25
Human Resource Management Division, State Department of Science and Technology				
DESIGNATION	Job Group	A/E	IN-POST	PROPOSED
Deputy Director, HRM	R	-	-	1
Senior Assistant Director/HRM	Q	1	1	1
Assistant Director/HRM	P	1	0	1
Principal Human Resources Mgt Officer	N	1	0	1
Chief Human Resource Mgt Officer	M	1	3	3
Senior Human Resource Mgt Officer	L	1	1	1
Human Resource Management Officer II/I	J/K	3	1	3
Human Resource Management Assistant III/II/I/Snr.	H/J/K/L	3	2	3
Total		11	8	13

Human Resource Development Division

This Division will be headed by a Deputy Director, Job Group 'R' who will be responsible for:

- Identifying the strategic and operational training and development needs;
- Developing a training development plan for the ministry;
- Identifying and/or design plan and implement training programmes to meet identified needs;
- Overseeing the development and delivery of individual and /or group training programmes;
- Collecting, Collating and maintaining a skills inventory;
- Coordinating staff induction programmes;
- Undertaking evaluation of ministry's training activities; and
- Preparing and or maintaining training reports and records and collect statistical data

Table 3.19: Staffing - Human Resource Development Division

Human Resource Development Division/State Department of Education				
Designation	Job Group	A/E	In-Post	Proposed Numbers
Deputy Director, Human Resource Development	R	1	-	1
Senior Assistant Director, Human Resource Development	Q	1	-	1
Assistant Director, HRD	P	1	1	1
Principal Human Resource Development Officer	N	1	-	1
Human Resource Development Officer II/I/Senior/Chief	J/K/L/M	1	-	1
TOTAL		5	1	5
Human Resource Management Division/State Department of Science and Technology				
Designation	Job Group	A/E	In-Post	Proposed
Deputy Director, Human Resource Development	R	-	-	1
Senior Assistant Director/HRD	Q/P	1	1	1
Human Resource Development Officer II/I/Senior/Chief	J/K/L/M	2	-	2
TOTAL		3	1	4

Public Communications Unit

The public Communications Unit will be responsible for coordination of all public communication/information related matters and will keep the Cabinet Secretary abreast; prepare Ministerial communication strategy; prepare speeches in consultation with the relevant Departments; devise long term publicity programmes for the Ministry; handle public queries through media and Ministry's website and manage it; Produce Ministry's magazine and other related information and educational materials; and produce documentaries on Ministry programmes.

Table 3. 20: Staffing - Public Communication Unit, State Department of Education

Public Communication Unit/State Department of Education				
Designation	Job Group	A/E	In-Post	Proposed Numbers
Senior Assistant Director of Public Communication	Q	1	-	1
Assistant Director of Public Communication	P	1	1	1
Principal Public Communications Officer	N	1	-	1
Public Communications Officer II/I/Senior/Chief	J/K/L/M	2	-	2
Technical Officer III/II Cameraman/Photographer	H/J/K	-	-	2
TOTAL		5	1	7
Public Communication Unit/ State Department of Science and Technology				
Designation	Job Group	A/E	In-Post	Proposed
Senior Assistant Director, Public Communication	Q	1	0	1
Assistant Director, Public Communication	P	0	1	1
Chief Public Communication Officer/Principal	M/N	1	1	1
Public Communications Officer III/II/I	H/J/K	1	0	1

Technical Officer/Cameraman/Photographer III/II/I	H/J/K	1	0	1
Technical Officer Electrical/Electronic III/II/I	H/J/K	1	0	1
Total		5	2	6

Information Communication Technology (ICT) Unit

The ICT Unit will be responsible for system analysis; system design; programming; updating and maintenance of existing systems, development and implementation of computerized information systems in the ministry; providing advisory services to departments on all matters related to information technology; training on the use of computers; relevant software packages and developing customized applications; provision of hardware maintenance support services; and liaison with hardware vendors for administration of guarantees and warranties.

Table 3.21: Staffing - ICT Unit, State Department of Education

ICT Unit/State Department of Education					
Designation	Job Group	A/E	In-Post	Proposed Numbers	Deployment
Senior Assistant Director ICT	Q	1	-	1	
Assistant Director ICT	P	1	1	1	
Principal Information Communications Technology Officer	N	1	-	1	
Chief ICT Officer	M	5	2	2	
ICT Officer III/II/I/Senior	H/J/K/L	4	2	5	1 per Directorate
TOTAL		12	5	10	
Ict Unit/State Department of Education Science, Technology and Innovation					
Designation	Job Group	A/E	In-Post	Proposed Numbers	Deployment
Senior Assistant Director ICT	Q	1	-	1	
Assistant Director - ICT	P	0	1	1	
Chief ICT Officer	M	1	0	5	
Information and Communications Technology Officer III/II/I/Senior	H/J/K/L	6	5	5	
TOTAL		8	6	12	

Legal Unit

The functions of the Legal Unit will be as follows:

- Follow up action on litigation matters;
- Ensure urgent action on court decrees or orders;
- Ensure quick action on pleadings and court summons;
- Initiate legal/court action where the ministry is aggrieved by other parties;
- Document and maintain records on finalized and ongoing court cases;
- Provide documentary evidence required in court proceedings and ensure that government witnesses are identified and properly briefed; and provide general legal advice/guidance to the Ministry.

Table 3.22: Staffing - Legal Unit, State Department of Education

Legal Unit/State Department of Education				
Designation	Job Group	A/E	In-Post	Proposed Numbers
Director - Legal Services	S	1	-	1
Deputy Director - Legal Services	R	1	1	1
Principal Legal Officer	N	1	-	1
Senior Legal Officer	M	1	-	1
TOTAL		3	1	4
Legal Unit/State Department of Science and Technology				
Designation	Job Group	A/E	In-Post	Proposed Numbers
Assistant Director- Legal services	P	-	-	1
Senior Legal Officer / Principal Legal Officer	M/N	1	1	1
TOTAL		1	1	2

Internal Audit Unit

The internal audit function will entail independent reviews of internal control systems and verification of operations and activities with a view to assisting economy, efficiency and effectiveness with which Government resources are utilized. It will also deal with evaluation and assessment of risk management control.

It is noted that the internal audit staff are deployed from the National Treasury and their numbers and levels are determined by the same Ministry.

Finance

The division will be headed by a Chief Finance Officer and will be charged with budgetary supply matters; processing of annual forward and revised estimates; issuance of Authority to Incur Expenditure (AIE); expenditure forecasts and monitoring; prioritization of projects and activities for the purpose of financial allocations in the budget; oversight of commitment of funds and expenditure trends, budget monitoring and reporting, reallocation within budget and the overall financial management and control of voted funds.

Table 3.23: Staffing - Finance Division - State Department of Education

Finance Division/State Department of Education				
Designation	Job Group	A/E	In-Post	Proposed Numbers
Senior Chief Finance Officer	S	1	-	1
Chief Finance Officer	R	1	1	1
Deputy Chief Finance Officer/ Senior Principal Finance Officer	Q /P	1	-	1
Principal Finance Officer	N	1	-	1
Finance Officer III/II/I/Senior/Chief	J/K/L/M	6	3	3
Total		11	4	7

Finance Division/State Department of Science and Technology				
Designation	Job Group	A/E	In-Post	Proposed Numbers
Senior Chief Finance Officer	S	-	-	1
Chief Finance Officer	R	1	1	1
Deputy Chief Finance Officer/ Senior Principal Finance Officer	Q /P	1	-	1
Principal/Chief Finance Officer	N/M	1	-	1
Finance Officer/II/I/Senior	J/K/L	6	2	3
Total		11	4	7

Central Planning and Project Monitoring Division

The Central Planning and Project Monitoring Division will be headed by a director at Job Group 'S'. The Division will be responsible for policy and planning; monitoring and evaluation of the Ministry's projects and programmes; coordination of the education, Science and Technology Sectors' Medium Term Plan and statistics; and coordination and preparation of Ministry's performance contracts.

Table 3.24: Staffing CPPMU Division

Staffing CPPMU Division/State Department of Education				
Designation	Job Group	A/E	In-Post	Proposed
Director of Planning	S	-	-	1
Chief Economist	R	1	1	1
Deputy Chief Economist	Q	1	2	1
Principal Economist	P	2	2	2
Economist II/I/Senior Economist II/ Senior Economist I	K/L/M/N	6	2	4
Statistician I	L	1	1	1
Total		11	8	10
Staffing CPPMU Division/State Department of Education				
Designation	Job Group	A/E	In-Post	Proposed
Director of Planning	S	-	-	1
Chief Economist	R	1	1	1
Deputy Chief Economist	Q	1	0	1
Principal Economist	P	1	0	1
Economist II/I/Senior Economist II	K/L/M	2	4	4
Total		5	5	8

Guidance and Counseling Services Unit

The Guidance and Counseling services unit plays an important role in offering psycho-socio support to members of the Ministry's staff and providing technical support to the

wider Education, Science and Technology sector. The unit will be instrumental in offering support to effort directed towards addressing distress situations in learning and training institutions. The unit will be headed by a deputy director at Job Group 'R'. Guidance and Counseling officers will also be posted to the Counties.

3.24: Staffing - Counselling Services Unit

Designation	Job Group	A/E	In-Post	Proposed
Deputy Director of Counseling	R	-	-	1
Senior Assistant Director, Counseling	Q			2
Assistant Director, Counseling	P		-	4
Chief Guidance and Counseling Officer	N		1	8
TOTAL			1	15

Chapter Seven: Financial Resource Flows

This chapter details the resource requirements for implementing the strategic plan and strategies for mobilizing these resources. The plan follows human resource development and ST&I foundations as outlined in the Kenya Vision 2030 and human capital requirements

7.1 Projected Resource Requirements

The financing and provision of education in Kenya is a partnership between the government (national and county governments), households, communities, development partners, private sector, civil society organizations and individual institutions through internally generated finances.

The strategic objectives outlined in this plan will be attained through the strategies laid there in and the specific activities given. A total of 1,033.275 billion is required to implement the strategic plan over the plan period.

Table 8.1: Summary of Resource Requirements for the Period 2013/14 – 2017/18

STRATEGIC ISSUE	AMOUNT (Ksh)
1. Access and equity	797.709 billion
2. Quality and relevance	1.454 billion
3. ICT integration into education, training, research and innovation	81.021 billion
4. Science, Technology and Innovation development capacities	11.025 billion
5. Disseminate and commercialise research findings	0.45billion
6. Financial and Human resource Management	1.130 billion
7. Governance and management	136.845 billion
8. Data Management	2.436 billion
9. Cross cutting issues/Emergency Issues	0.205 billion
TOTAL COST	1,033.275 billion

Table 8.2: Summary of projected Resource Requirements for 2013/14 to 2017/18 under the MTEF (in Million Kshs)

		Projected Resource requirement			
		2013/14	2014/15	2015/16	2016/17
1.00	Policy, Planning & Administration	6,929.87	9,262.38	10,919.28	12,869.06
2.00	Basic Education Programme	29,433.74	49,366.92	50,821.78	52,319.06
2.1	Free Primary Education	12,049.24	13,094.94	13,713.21	14,365.98
2.2	ECDE	26.30	30.25	34.78	40.00
2.3	Alternative provision of Basic Education and training		150.00	225.00	337.50
2.04	Special Needs Education	-	1,456.35	1,517.56	1,582.55
2.05	School Feeding, Nutrition and Health	2,829.72	1,415.67	1,698.80	2,038.56
2.06	Expanding Education Opportunities in ASALs	-	890.00	1,190.00	1,640.00
2.07	Primary Teachers Training and In-Servicing	369.08	896.05	928.41	714.19
2.07	ICT Integration	14,085.40	30,000.00	30,000.00	30,000.00
2.08	Adult & Continuing Education	-	1,433.67	1,514.01	1,600.27
3.00	Secondary & Tertiary Education Programme	23,177.98	26,049.48	27,208.19	28,367.31
3.01	Secondary Bursaries Management Service	1,180.00	1,274.40	1,401.84	1,542.02
3.02	Free Secondary Education	21,364.14	23,415.34	24,333.79	25,282.12
3.03	Secondary Teacher Education Services	241.40	507.00	593.35	634.93
3.04	Secondary Teachers In-Servicing	392.43	608.74	635.21	664.23
3.05	Special Needs Education	-	244.00	244.00	244.00
4.00	Quality Assurance & Standards Programme	4,499.70	7,971.90	8,071.90	7,871.90
4.02	Examination and Certification (KNEC)	3,362.00	4,000.00	4,200.00	4,200.00
5	University/Tertiary Education	62,693.93	81,907.15	93,007.49	105,961.57
5.1	University Education	49,944.93	61,999.27	72,505.87	84,825.45
5.2	Higher education Support Services	5,908.17	12,629.70	12,750.58	12,873.49
5.2	Quality Assurance & Standards	93.79	100.17	107.04	114.48
5.3	Technical, Industrial, Vocational and Entrepreneurship Training(TIVET)	5,619.80	7,178.01	7,644.00	8,148.14
6.1	promotion and regulation of Science, Technology and Innovations (ST&I)	894.36	1,036.10	1,134.14	1,244.33
7	Youth training	-	4,251.40	4,529.94	4,856.54
		133,016.68	341,168.89	370,930.17	404,337.68

Strategies for Resource Mobilization

Over the years, the Ministry has had very limited resources to support its core functions. Given these resource constraints, the Ministry will vigorously pursue additional funding and technical support from the Exchequer and development partners. At the Ministry level, activity based costing method will be adopted both as a tool for activity planning and financial control. This will ensure that the Ministry will allocate costs of inputs based on each planned and prioritized activity. This means that costs of activities will be traced

to the product or service for which the Ministry's activities over the planned period are performed.

The approach will be relevant to performance budgeting in that it will lead to much improved program costing, hence provide a systematic way of determining how to apply limited resources to the right activities to produce the right results.

Due to its cross cutting nature, the implementation of the Strategic Plan will be done on a sector wide approach, whereby Development Partners , Autonomous and Semi-Autonomous Bodies will be involved. The Ministry will lobby and mobilize financial resources for Education, Training, Science, Technology and Innovation from the following sources;

Government Funding

With regard to Government funding, the Ministry will prepare, present and justify proposals as a basis for resource bidding within the Government's MPER and MTEF budgetary processes. In this regard, stakeholders in Education, Science and Technology Sector will be involved in the budget process to ensure that the respective annual Sector Reports accommodate their respective needs.

Appropriation in Aid

The Ministry will broaden and diversify its A-in-A sources from the current sources through Research Authorization, registration of Institutions, sale of tender documents and disposable assets and commercialization of research and survey findings. The Ministry collects an average of Kenya shillings 20.8 billion from these sources.

Development Partners

Development partners are already supporting and are involved in Education & Training, science, technology and innovation endeavours. The Ministry as part of its national and international collaborations and linkages will engage the support of the Public and Private Partnerships to fill in the resource gap between the resources allocated by the Government and the Ministry's Strategic Plan.

Venture Capital

The private sector will be targeted to provide capital to bridge the gaps in STI programmes financing. The programme will also focus on public – private STI funding.

The Kenyan National ST&I Foundation, University Funding Board, TVET Fund

An STI Foundation, the TVET FUND and the University Funding Board will be

established within reforms that the Ministry is spearheading to mobilize and disburse resources. The objective is securing adequate local and international funding in support of Education, Training and ST&I activities. Other mechanisms that will be explored include tax concessions and STI levies.

7.2 Accountability and Risks

The education, science and technology sector is vulnerable to a broad range of risks that can threaten development effectiveness. These risks can spring from several factors:

1. Substantial share of education in total government expenditure
2. Opportunities for discretionary decision making
3. Political interference and patronage networks
4. Weak sector institutions
5. Non transparent and inefficient systems.
6. Resistance to the implementation of proposed programmes /activities by some stakeholders.
7. Staff turnover, redeployment or shortages of highly trained technical staff is likely to affect delivery of services.
8. Changes in the ministerial mandate arising from, for example, restructuring or re-organization of the Government may cause disorientation in implementation.
9. Resistance by stakeholders to adapt to new technological changes.

Vulnerabilities may exist at any stage and among any group of actors from policy makers to education providers and to education beneficiaries. Weak accountability increases the likelihood of misaligned priorities, resource leakages and poor service delivery. This guidance note aims to explain key features of the education sector and identify entry points for mapping governance risks.

In order to limit the effects of the above mentioned risks, it will be necessary to ensure the optimal utilization of the resources available to the Ministry and also maintain close consultation with its stakeholders during the implementation of the Plan. Proper and constant monitoring and evaluation of progress of activities would forestall failure in implementation. For effective implementation of the Strategic Plan, it is envisaged that the capacities of the various structures in the MoEST institutional framework will be strengthened. Successful implementation of the 2nd MTP programmes is predicated upon the increased role of parents and communities in resource mobilization, decision-making and resource utilization and demand accountability. This will require that their roles and

responsibilities are aligned and specified. Parents are also expected to contribute towards the education of their children, Government participation notwithstanding.

The Implementation Approach

The strategic model and the coordination framework form the basis upon which the Logical Framework is developed. The implementation of the plan will, however, employ the approaches described below.

Phasing and Sequencing

This strategic plan will be implemented in phases. Due to the large number of activities, both human resources and funding may not be available to facilitate implementation of all activities at the same time. As a result, it will only be possible to implement the strategic activities in phases between 2013/14 and 2017/2018.

Rapid Results Initiative (Quick Wins)

To ensure that momentum is maintained, the plan will also focus on programs/activities with quick wins. The quick wins approach is prudent as it produces rapid results which motivate people and keep them enthusiastic to support the rest of the activities. The Ministry will adopt the Rapid Results Initiative to implement activities isolated for quick, cost effective and of quick impact in the short run.

Performance Contract Management

The implementation of the plan will also embrace performance management concept which entails the setting up of standards and targets, measuring actual performance against set targets and reporting on the results. This approach aligns this plan with the Kenya Vision 2030 that requires that the public sector improves its provision of services to attain competitiveness.

Assumptions, Risks and Uncertainties

It is assumed that during the period of the implementation of this strategic plan, a reasonably stable and conducive political environment will exist. It is also assumed that development partners will continue to offer supplementary funding as well as technical assistance as has been anticipated in the Strategic Plan. In addition, it is hoped that there will be no significant calamities such as civil unrests, droughts, floods and epidemics that will constrain the implementation of the plan. The Ministry is however, determined to stay focused and deter any unforeseen obstacles through its committed staff and the support of the Government.

Chapter Eight: Monitoring and Evaluation

Monitoring is an important management tool that helps management to, among others; make decisions aimed at improving performance, allowing managers to determine whether the programme is on course and if it is likely to achieve the intended objectives, ensuring accountability to all parties involved in the programme, to assess the use and delivery of the resources in accordance with the implementation plan and to monitor the achievement of the intended outputs on a timely manner. The main purpose is to enable managers to verify progress based on evidence-based decisions about any corrections needed in implementation. In this regard, MoEST will monitor and evaluate the inputs, activities and outputs to ensure that the strategic plan objectives are delivered in accordance with the implementation plan. An effective M&E mechanism will be designed and applied.

Evaluation of the plan will serve two main purposes; first, to enquire into the feasibility of the plan and secondly, to assess the overall impact. Evaluation of the strategic plan will be useful in several ways; first, to avoid the possibility of wasting money by aiding the selection of the most effective options. Secondly, it will help the Ministry to continue with a plan that is likely to produce the intended results and lastly, it will detect and correct some of the factors that may reduce the positive impact of the strategic plan.

The Ministry will work in liaison with Counties to track projects that are implemented at the county levels and where counties control the funding structures. Sector reports from the counties will be aggregated to form the reports from ministry to the Ministry of Planning. Central Planning and Project Monitoring Units (CPPMUs) at the line ministries will remain the Secretariat to the Ministerial Monitoring and Evaluation Committees (MMEC), and will coordinate the development of Ministerial Monitoring and Evaluation activities.

8.1 Monitoring Methodologies

Monitoring will involve routine data collection and analysis on the success of the implementation of this strategic plan. The results from the analysis will then be used to inform decision making at all levels. The objectives of the strategic plan will be reinforced through corrective measures when and if necessary. This will be achieved by:

1. Developing of monitoring and evaluation indicators at all levels of implementation
2. Establishing the Ministerial Monitoring and Evaluation Committees (MMEC convened by the Head of the Planning Division
3. Carrying out continuous data collection, analysis and reporting on a monthly basis to the Ministerial Management Steering Committee
4. Carrying out random inspections and making objective observations
5. Conducting specially designed surveys and rapid assessments to assess progress
6. Carrying out participatory M&E (Stakeholders fora)

7. Establishing of Work Improvement Teams in the respective departments
8. Linking the Ministerial M&E framework to the National M&E System
9. Facilitating independent assessment and reviews of the programmes under implementation in the Directorates, SAGAs and other institutions.

Periodic Surveys and Censuses

The Ministry will conduct Periodic surveys and censuses to establish baselines/ trends against to monitor trends and update data on selected indicators in the sector. The ministry will work with the Kenya National Bureau of Statistics (KNBS) to meet this objective. The ministry will also pursue the development of the National Accounts system for Education and ST&I.

Electronic Monitoring and Evaluation

To enhance efficiency and cost effectiveness of monitoring and evaluation, the Ministry and all its institutions will fully adopt the use of electronic systems to capture data on implementation in the ministry. The existing electronic platform is Electronic project Monitoring system (E-promis), performance contracting system and EMIS.

8.2 Evaluation Mechanism

The strategic plan will be evaluated during and after implementation to ensure that it produces the intended results. The plan will inherently be subjected to independent evaluation to remove any element of bias. The evaluation will be carried out using relevance, efficiency, effectiveness, sustainability and impact measures.

A logical framework will be designed for each strategic objective to help track and monitor progress in the implementation of the plan.

8.3 Monitoring and Evaluation Framework

The M&E function will be spread across all Directorates, Departments and SAGAs. Each will create a framework, with similar features of the Logical Framework for the Strategic Plan, within which to collect, analyze data, prepare and disseminate reports.

The M&E plan outlines the outputs and key activities to be undertaken under each of the strategies. The logical frame work extends this information by specifying indicators of the achievements of the various outcomes and activities, the means of verifying the various outcomes and activities, the means of verifying the assumptions achievements and a time table for doing so, and the facilitating and risk factors assumptions expected to affect the achievement.

Capacity building for Monitoring and Evaluation

The ministry will put in place efforts to strengthen the capacity and competencies of carrying out M&E. The following competencies are considered key:

No.	Monitoring of projects and program performance	Evaluation
a)	Development planning and project administration	Development planning and project management
b)	Statistic skills at least at basic level covering data collection and retrieval, data compilation, sampling, graphics and presentation	Advanced statistic skills including data analysis, design of surveys, data presentation, database design
c)	Public administration covering legal set-up, planning and budgeting, incentive systems, ethics, result-based concepts	Public administration covering legal set-up, planning and budgeting, accounting, incentive systems, ethics, result-based concepts and some HR
d)	Communication skills – presentation, language, intra personal interaction	Communication skills – presentation, language, intra personal interaction
e)	ICT skills – use of spreadsheet, word-processing and database programmes.	ICT skills – use of spreadsheet, word-processing and database programmes as well as programmes for statistical analysis.
f)		Technical skills in the area of evaluation, such as Water engineering, finance, social work etc.

Resource requirement for M&E

At least 1% of the programme/projects budget will be set aside for M&E at both Ministry and Agency levels to ensure that all implementing agencies have M&E funding for the programme/projects. The ministry will enhance budget line item for M&E to this level.