*REPUBLIC OF BOTSWANA*

# EDUCATION & TRAINING SECTOR STRATEGIC PLAN (ETSSP 2015-2020)

**APRIL 2015**

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## APPENDIX

Appendix A: Results Matrix

# Abbreviations

| | |
|---|---|
| BA | Bachelor of Arts |
| BEC | Botswana Examination Council |
| BIUST | Botswana International University of Science & Technology |
| BOCODOL | Botswana College of open Distance learning |
| BGCSE | Botswana General Certificate of secondary Education |
| BOTA | Botswana Training Authority |
| CFS | Child Friendly Schools |
| DEPRES | Department of Education Planning, Research and Statistics |
| DPE | Diploma in Primary Education |
| DPS | Deputy Permanent Secretary |
| DPSM | Directorate of Public Service Management |
| DTSM | Department of Teacher Service Management |
| ECCE | Early Child hood Care and Education Policy |
| ECPPE | Early Child hood and Pre primary Education |
| EU | European Union |
| EFA | Education For All |
| EMIS | Education Management Information System |
| ETSSP | Education and Training Sector Strategic Plan |
| FMIS | Finance Management and Information system |
| GER | Gross Enrolment rate |
| GoB | Government of Botswana |
| GPI | Gender Parity Index |
| HE | Higher Education |
| HRD | Human Resource Development |
| HRDAC | Human Resource Development Advisory Council |
| ICT | Information & Communications Technology |
| IDM | Institute for Development Management |
| JASR | Joint Annual Sector Review |
| JCE | Junior Certificate Examination |
| JSS | Junior secondary school |
| KPIs | Key performance indicators |
| LLL | Life long learning |
| MDGs | Millennium Development Goals |
| M&E | Monitoring and Evaluation |
| MDRF | Macro Development Result Framework |
| MFDP | Ministry of Finance and Development Planning |
| MoESD | Ministry of Education and Skills Development |
| MoESD | Ministry of Education and Skills Development |
| MoFDP | Ministry of Finance and Development Planning |
| MoH | Ministry of Health |
| MoLG | Ministry of Local Government |
| MoLHA | Ministry of Labour and Home Affairs |
| MIS | Management Information System |
| MIST | Ministry of Science and Technology |
| MoPAPA | Ministry of Presidential Affairs and Public Administration |
| MPIC | Ministry Performance Improvement Committee |
| MTI | Ministry of Trade and Industry |
| MTR | Medium Term Review |
| MYSC | Ministry of Youth, Sports and Culture |

| | |
|---|---|
| NACA | National AIDS coordinating Agency |
| NDP | National Development Plan |
| NCF | National Strategic Frameworks |
| NER | Net Extollment Rate |
| NHRDS | National Human Resource Development Strategy |
| NQA | National Qualifications Authority |
| OPM | Office of the Prime Minister |
| OSET | Out-of-School Education and Training |
| PAF | Performance Assessment Framework |
| PE | Primary Education |
| PIU | Performance Improvement Unit |
| PFMR | Public Finance Management Reforms |
| PGDE | Post Graduate Diploma in Education |
| PS | Permanent Secretary |
| PSLE | Primary school Leaving Examination |
| PSR | Public sector reform |
| PTA | Parents Teacher Association |
| RFT | Reform Facilitation Team |
| RNPE | Revised National policy on Education |
| RWG | Reform Working Group |
| SE | Secondary Education |
| SEA | Senior Education Adviser |
| SEMIS | Sector Education Management information Management system |
| S-HLCC | Sub-High Level Consultative Committee |
| SLRA | System level reform agenda |
| SSS | Senior Secondary school |
| SST | Sub-Sector Teams |
| STEM | Science Technology Engineering and Mathematics |
| TA | Technical Advisory / Technical Assistance |
| TDD | Training and development Department |
| TEC | Tertiary Education Council |
| TEPD | Teacher Education & professional Development |
| TORs | Terms of Reference |
| TRT | Thematic Reform teams |
| TVET | Technical & Vocational and Education Training |
| TWG | Thematic Working Group |
| UCCSA | United Congregational church of southern Africa |
| UNESCO | United Nations Education Scientific and Cultural Organisation |

# FOREWORD

# BY THE MINISTER OF EDUCATION AND SKILLS DEVELOPMENT

The Botswana **Education and Training Sector Strategic Plan (ETSSP 2015-2020)** marks a significant milestone in our collective efforts as a nation to bring about a more diversified, knowledge-based economy. Through a planned and careful development of human capital, the ETSSP seeks to refocus our education and training towards fulfilment of social and economic aspirations identified in our Revised National Policy on Education (RNPE), the National Development Plan, Vision 2016 and as well as the Millennium Development Goals.

In particular, the ETSSP is intended to strengthen the match between qualifications and labour market requirements, thereby ensuring that education outputs are more closely aligned to future employment needs. It will also facilitate improved outcomes for all learners by addressing issues of quality, relevance, access, equity and accountability across the entire sector, from Pre-Primary school to Tertiary level.

Over the years, Botswana has made significant strides for increasing participation in Education and Training; however, pre-primary education and access to education for learners with disabilities still remain a challenge. At present, only 18% of eligible children (mainly in urban areas) are enrolled in pre-school programmers, resulting in a lack of school readiness for many new entrants to Standard 1. The ETSSP seeks to promote quality education for all by advocating in part, for the introduction of public pre- primary school to cater for this previously un-served young people.

One of the key challenges facing the nation is the growing number of unemployed and under-employed youth. It is clear that existing labour markets cannot provide jobs for all who need work and this is compounded by the fact that many of those applying for employment are inappropriately qualified for the jobs on offer. It is therefore, important to nurture the entrepreneurial spirit in our youths and prioritize training to create a deliberate bias to develop appropriate skills required by the market.

To this end, ETSSP therefore endeavours to create a balance between academic pursuits and technical and vocational education thus challenging perceptions that the TVET pathway is 'second best' and therefore less prestigious. The success of ETSSP requires valuable services of all stakeholders, teachers, the private sector and parents. I therefore appeal to your sense of patriotism so that we can pool our resources to build and secure the future of our greatest assets- our young people.

Lastly, I wish to express my sense of gratitude to all ministry officials, local and external experts, our development partners especially the European Union, for the sterling job they have done to ensure the development and publication of this valuable document.

**Minister of Education and Skills Development**

# EXECUTIVE SUMMARY

The government through the Ministry of Education and Skills Development (MoESD) has set out its priority to have improved sector wide planning leading to improved education sector performance over the next five years. The development of this five-year **Education and Training Strategic Sector Plan (ETSSP: 2015-2020)** will have far-reaching effects on the future education in Botswana. It gives clear guidance to decision makers and planners at all levels and aims to improve education sector performance over the next five years. The development of the five-year Sector Strategic Plan will have far-reaching effects on the future of education in Botswana. The plan sets out many of the challenges facing the education sector and the varied strategies, programmes and activities to meet the challenges.

Botswana has articulated long-term national goals and values in Vision 2016 and in the series of National Development Plans and the **Revised National Policy on Education (RNPE)**. These policies and plans set out the goals and strategies that Botswana will pursue to promote human, social, economic, and environmental development and illuminates pathways and choices that will define Botswana society over the next decades. The overarching aim is bold and ambitious: to transform Botswana into an advanced country able to sustain its development and provide high standards of living for all of its people. There is a strong alignment between priorities as set out in Botswana's Vision 2016, National Development Plans, the Revised National Policy on Education (RNPE) and the Education and Training Sector Strategic Plan (ETSSP) and MoESD and organizations or agencies.

The ETSSP is an extensive reform that sets out to transform education and at a strategic level addresses a number of key policy goals: **to improve access, quality, inclusion and equity, accountability and governance in the education system**. It identifies areas of strategic priority in order to focus resources in an efficient and effective manner on those areas in the education sector that will contribute most in enhancing the quality of learning at the different levels. Taking into account these factors and the challenges that education sector faces the goal of ETSSP is:

> **'To provide an overall policy and strategic sector framework for the education sector that will play a pivotal role in the development of a modern, sustainable, knowledge-based economy that supports inclusiveness and diversity'.**

The strategy is developed in conjunction with other major government reforms. The MoESD is working closely with the Ministry of Finance and Development Planning (MFDP) and the development of the MTEF and the Ministry of Local Government and Rural Development (MLGRD), Ministry of Health (MoH), the Ministry of Labour and Home Affairs (MoLHA). It is aligned with the government's public sector reform programmes (PSR) and the major goal to develop a lean public service through its human resource management and public service reforms. Thus, reforms will be put in place for a Ministry of Education and Skills Development that are much more orientated towards focusing on policy, strategic planning and resource allocation, decentralisation, coordination, standards setting, and monitoring and evaluation.

The ETSSP identifies eleven (11) **key strategic priorities** linked to the policy goals and is supported by eleven (11) **programmes** (goals, outcomes or targets and activities) that together provide a comprehensive, integrated strategy for the sector, emphasizing the alignment within all education interventions and skills and labour force and employment needs.

**More specifically, ETSSP sets out priority programmes and interventions that will strengthen students' acquisition of relevant knowledge and skills.** The ETSSP will make a key contribution to the achievement of overall education sector goals at different levels as follows:

- ✓ **At the individual level:** by helping learners maximise their potential through a commitment to excellent teaching that demonstrates up-to-date pedagogy and by providing all learners with the required skills and knowledge needed to succeed in Botswana society;
- ✓ **At the employer level:** by a commitment to meet the skills needed by employers through knowledge transfer and skills development relevant to an increasingly competitive labour market and by encouraging greater links with community and employer partnerships;
- ✓ **At the wider societal level:** by contributing to the national development goals of an equitable and inclusive society through a commitment to developing lifelong learning.

Thus, ETSSP pays great attention to inclusive and life-long learning goals and in doing so is aligned to international contexts and reflects long-standing commitments to **Education for All** (EFA) and the **Millennium Development Goals** (MDGs). Cross cutting issues for example, gender, ICT, HIV and AIDS are, wherever appropriate, mainstreamed across each sub-sector.

Indicative cost implications of ETSSP have been estimated on current prices at close to P18.7 billion to be managed over the 5 year planning period. An indicative costing summary and sub-sector programme level by short, medium and long-term time frame are included in Chapter 8.

The resulting document is a draft and should be seen as 'work in progress'. There are issues still outstanding, especially the alignment of pathways for student advancement in conjunction with the vocational and skills and finalising indicative costs of the plan. As a caution, making some of the strategic choices has been difficult without available quality data. Even though EMIS have recently been developing valid and reliable data from schools there are still gaps that will need to be rectified.

## Critical Sector Strategic Priorities

This strategy represents a broad consensus derived from principles agreed with key stakeholders prominent in the sector. The goals, policy objectives and activities are those derived through broad participation in discussions, workshops and through a process of interactive reviews of programmes and priorities. At the central level the MoESD led the development of the strategy with analytical work and advisory support from international and local consultants.[1] Key situation analysis and consultations were managed by consultants and MoESD led working groups to provide comprehensive and updated situational analysis of the main issues of sub-sectors and current progress. Importantly, the studies identified key challenges and cross-cutting issues relevant to each sub-sector.

[1] EU provided and continues to fund the development of ETSSP as well as supporting the development of BEC, HRDC and BQA under the 9th and 10th European Development Fund (EDF).

| | **Critical Sector Strategic Priorities in Education** |
|---|---|
| 1 | Improving the Quality & Relevance |
| 2 | Improving Equitable Access |
| 3 | Improving Learning Outcomes |
| 4 | Focus on Life-long Learning |
| 5 | Strengthening Skills Development |
| 6 | Developing New & Alternative Pathways for Education |
| 7 | Improve Management of Education |
| 8 | Developing a Responsive Tertiary Education System |
| 9 | Improving Planning & Budgeting of the Sector |
| 10 | Utilisation and Integration of ICT |
| 11 | Improving Monitoring and Evaluation of the Sector |

## Programmes Addressing Strategic Priorities

Each of the Strategic Priorities is addressed more specifically by a set of programmes.

**Six Sub-sector programmes**:

1. Early Childhood & Pre-Primary Education (ECE & PPE);
2. Primary Education (PE);
3. Secondary Education (SE);
4. Teacher Education and Professional Development (TEPD);
5. Tertiary Education (TE);
6. Technical Vocational and Education and Training (TVET):

**Five Thematic programmes:**

The thematic programmes focus on system level reforms deemed necessary to support the sub-sector programmes and implementation of the ETSSP set of policies and strategies.

7. Lifelong Learning (LLL):
8. Information and Communications Technology (ICT):
9. Curriculum Development:
10. Human Resource Development (HRD):
11. Education Management and Information System reform (EMIS):

Finance and Budget Reforms (F) (this is dealt with in a separate Chapter in ETSSP (Chapter 8).

## Education Sector Management and Implementation

Implementing the ETSSP will require transformation of the current management system for education. Central to any change is transforming the Ministry of Education and Skills Development (MoESD). Whilst the MoESD continues to manage programmes and managing its resources it has been under pressure to improve performance in nearly all areas. Current management and implementation of the education sector will be radically improved. The scope of the implementation will include:

- ✓ organisational restructuring and leadership development;
- ✓ comprehensive human capacity building and development;
- ✓ redefined administrative systems and business processes;

- ✓ planning and policy formulation;
- ✓ strengthened project management mechanisms;
- ✓ austere financial controls and extensive upgrading; and
- ✓ greater utilisation of ICT and data management systems.

Improving the ability to formulate policy as well as managing and analysing data to support the education sector management and decision making is imperative. This will require strengthening of planning, monitoring and evaluation capability in MoESD. Together with policy development, the MoESD will support the development of strategy and provide high-level coordination, oversight and accountability of the ETSSP. The key operational roles of the coordination of sub-sector planning; funding and quality assurance and regulation are delegated to the parastatals; leaving the MoESD structure lean and flat with high level expertise to focus on policy formulation, sector planning, monitoring and evaluation and supporting decentralised operations.

## Monitoring and Evaluation of the Education Sector

Strengthening of the **Monitoring and Evaluation (M&E)** structures will improve accountability in the sector. The M&E will assess progress made in the sector, reporting, timely publication and communication of results and initiatives, analysis and use in policy and decision-making. Reporting will be a coordinated activity and seen as essential for monitoring progress of the sector against set **Key Performance Indicators.** The following are key elements of the M&E are as follows:

- ✓ **National and Regional Education Forums** will be set up to improve education dialogue; it will report on progress towards achieving results and a basis for changing/adjusting programme strategy;
- ✓ A **Mid-term Review (MTR)** will be organised to review inputs and processes in order to make decisions on adjusting the implementation plans based upon the findings;
- ✓ The **Annual Sector Review (ASR)** will be conducted to evaluate annual progress of the entire education sector against the Key Performance Indicators, both at a national and regional level.

In addition, measures will be put in place for reporting on whether funds are released in the required amounts and on time and whether they are being utilized for the purpose identified. The Annual Report will serve as a base document for the Annual Sector Review (ASR).

# CHAPTER 1: BACKGROUND

## 1.1 Introduction

The ETSSP sets out many of the challenges facing the education sector and the varied strategies, programmes and activities to meet the challenges. The strategic plan identifies areas of priority in order to focus resources in an efficient and effective manner on those areas in the education sector that will contribute most in enhancing the quality of learning at the different levels in the education system. It also presents the indicative costs of the planned activities and indication of sub-sector priority actions. To manage this, **Annual Implementation Plans** will be developed by MoESD and the regional offices.

The sub-sector strategies have been derived from a series of situational analysis done for each of the sub-sectors and thematic working groups supported by international and local consultants. Each of the development teams were supported and advised by a consultative body of key stakeholders relevant to their area of review. In addition, the development of the sub-sectors was subject to review and feedback from the NDP-10/11 thematic working groups, including representatives from: the public sector, the unions, the private sector, civil society and the development partners.

Importantly, ETSSP is developed in conjunction with other major government reforms. The MoESD is working closely with the Ministry of Finance and Development Planning (MFDP) and the development of the MTEF and the Ministry of Local Government and Rural Development (MLGRD), Ministry of Health (MoH), the Ministry of Labour and Home Affairs (MoLHA). It is aligned with the government's public sector reform programme (PSR) and a major goal to develop a lean public service through its human resource management and public service reforms. Thus, reforms will be put in place for a Ministry of Education and Skills Development that are much more orientated towards focusing on policy, strategic planning and resource allocation, decentralisation, coordination, standards setting, and monitoring and evaluation.

## 1.2 Purpose of ETSSP

This Plan (ETSSP) is outcomes oriented and sets out Botswana's educational mission, goals and objectives. It presents the strategies for achieving them together with an indication of the enabling supportive structures and indicative costs. The sector plan is the key development plan for promoting equitable, effective, efficient and quality education and rationalized sector investment for the next five years. It presents the relationship between the vision, mission and the strategies for achieving the goals and objectives of the sector plan that are closely related to National Development Plans and also Vision 2016 together with an indication of the means to manage the plan. Importantly, the sector plan is outcomes oriented in terms of the strategic planning level and also at the programme and implementation level.

The ETSSP will address all of inter-linked programmes and also has a focus on improved education governance through a much strengthened and committed education administration, more rigorous monitoring and evaluation of implementation at MoESD and regions and through capacity building for enhanced education service delivery.

To be able to monitor progress much more closely than in the past, MoESD will put in place steps for regular reviews of sector performance including the impact of major investment decisions.

## 1.3 The Development of ETSSP

This strategy represents a broad consensus derived from principles agreed with key stakeholders in the sector. The goals, policy objectives and activities are those derived through broad participation in discussions, workshops and through a process of interactive reviews of programmes and priorities. At the central level the MoESD led the development of the strategy with analytical work and advisory support from international and local consultants.[2] Key situation analysis and consultations were managed by consultants and MoESD led working groups to provide comprehensive and updated situational analysis of the main issues of sub-sectors and current progress. Importantly, the studies identified key challenges and cross-cutting issues relevant to each sub-sector. The Education and Training Sector Strategic Plan is structured according to the key studies undertaken as follows:

- Early Childhood and Pre-Primary education[3]
- Primary Education
- Secondary Education
- TVET and Skills Development;
- Tertiary Education;
- Teacher Development;

A second set of policies, strategies and programmes were identified that concentrated on needed system level reforms (thematic sub-sectors) necessary in order to provide support to the sub-sector programmes and to implement the ETSSP set of policies, strategies. This formed the basis of the ETSSP System Level Reform Agenda (SLRA). The five Thematic Reform Teams (TRT) were as follows:

- Financial and Budget Management Reforms;
- Human Resource Management and Staffing Reforms;
- Life-long learning[4].
- Information, Monitoring and Evaluation Systems Reforms (EMIS); and
- Education Content (Curriculum and delivery) Reforms.

Key sub-sector and thematic working groups were set up to guide and support the activities of the Reform Working Groups which were made up of representatives from across the sector. In addition, the overall development of the ETSSP was guided by regular consultations and feedback from the sub-high level consultative committee (S-HLCC). The core features and programming of the strategy were tested in a number of consultative workshops with MoESD, development partners and key stakeholders. A number of small working groups (6/8/10 members in each group) were set-up based upon the identified sub-sectors to manage the situation analysis and develop the sub-sector programmes. Members of the working groups included MoESD members and invitees of organizations from those working in the education sector such as teachers, teacher union and other key stakeholders who all participated in the workshops.

[2]EU provided and continues to fund the development of ETSSP as well as supporting the development of BEC, HRDC and BQA under the 9th and 10th European Development Fund (EDF).

[3]The importance and educational significance of the need for enhanced early childhood education meant that this was included in a separate sub-sector group in addition to pre-primary sub-sector.

[4] A Life-long learning component was also added to the original identified thematic sub-sectors.

Each working group was supported by facilitators and consultants and full documentation to enable the groups to develop sub-sector plans. The focus of the working groups was to review the situation analysis and studies and develop sub-sector challenges and needs to inform proposals about prioritized future developments and their cost implications. The result of these workshops was an agreement on the broad outlines, challenges as well as on the objectives, milestones and outcomes and strategies of each sub-sector. The sub-groups also provided a preliminary costing of both development efforts and their recurrent implications, and a prioritization related to different resource levels/scenarios.

## 1.4 Organisation of the Strategy

The ETSSP is divided into eight chapters.

**Chapter 1** is an introductory chapter providing the context and background to developing the plan and an overview of the purpose.

**Chapter 2** in turn, presents the vision, goals and strategic objectives and structure of Botswana education within the overall national goals, economic and social context.

**Chapter 3** describes the education achievements and key challenges from which the strategic plan derives its critical priorities. Baseline data have been established (2012) and will be used to set targets for the programme milestones.

**Chapter 4** provides the **Priority Outcomes** of the education sector (from early childhood to higher education) and addresses the cross cutting issues of quality assurance and standards, curriculum, and assessment and inclusion and provides a summary of indicative costs.

**Chapter 5** sets out the **Strategic Sector Framework** that forms the core of the strategic plan. Here the sub-sector and cross-cutting programmes are developed. Within each sub-sector the critical challenges, main policy implications, strategic milestones or targets and planned activities over the 2014-2019 strategic plan period are set out. Sub-sections cover:

**Chapter 6** addresses educational management – the mechanisms and procedures through which ETSSP will be managed and the type of support needed for a decentralized system. The chapter reaffirms the need for improved management, accountability at all levels and a revised organizational structure that will coordinate improvements in the sector. This requires developing targeted capacity building programmes at all levels.

**Chapter 7** describes how the sector will be Monitored and Evaluated. The chapter sets out the need to have an efficient and effective sector SEMIS to make comprehensive and timely reports for the sector. This will require a strong Department of Planning where SEMIS will take on a crucial role in supporting the monitoring of the education sector. A number of monitoring reviews will be undertaken each year and regular meetings are proposed to keep all stakeholders informed of the progress made and any problems encountered during implementation.

The final **Chapter 8** addresses the indicative cost and finance implications for the strategic plan.

# CHAPTER 2 - OVERVIEW OF THE POLICY CONTEXT

## 2.1 Economic and Social Situation

Botswana has over the past 40 years been amongst the list of countries with the fastest growing economies in the world, characterised by an impressive record of prudent macroeconomic policies and good governance. This track record of achievement has moved Botswana from the list of least developed and poorest countries in the world, to an upper-middle income country. The country's current economic and social performance continues to be shaped by this remarkable record of appropriate macroeconomic policies and good governance. The economy grew faster than expected and reached a real rate of Gross Domestic Product (GDP) growth of about 5.9 percent in 2013. However, projections expect GDP growth to decline and is expected to decrease to 4.8% by 2017.[5]

The country continues to face development challenges such as high unemployment, poverty, income inequality and a relatively undiversified economy.[6]The country's heavy reliance on diamond exports coupled with drops in revenue from the non-mineral sector, are expected to adversely impact on the levels of real GDP. The expected levelling off in diamond production within the next 20 years may overshadow the long-term economic prospects. The mining sector, in addition, provides the country with the largest share of its export earnings (76 percent of total merchandise exports) and fiscal revenues (33.7percent of total central revenues).[7] Recognising this economic outlook, Botswana continues to carry through the requisite reforms which include introducing measures to strengthen the economy and even more importantly, diversifying it away from its dependence on diamonds.

The government continues to place great emphasis on the development of human resources for job readiness and preparing Botswana for a knowledge-based and globally competitive economy. In line with the Vision 2016 and the objective of 'prosperity for all, employment creation, the eradication of poverty and becoming an innovative nation Botswana aims at raising productivity through education and training as well as through acquiring entrepreneurial, managerial and technological capabilities.[8] The overall goal is to achieve sustainable economic growth and ensure improvement in global competitiveness. The NDP 10 Mid-term Review identified six strategic factors to drive economic growth:

- Economic diversification;
- Ease of doing business;
- Infrastructure development;
- Advances in communication and technology;
- Competitive and productive human resources;
- Enhancing employment;
- Information and Communications Technology (ICT)

The thrust of these strategies is to enhance employment creation by increasing the contribution of the private sector to the economy. In this regard, the country continues to carry through

[5] IMF (2014) Botswana Article IV Surveillance Report (July 2014) and 'Stats Brief - June 2014' Statistics Botswana.

[6] Ministry of Finance and Development Planning 'Draft Keynote Policy Paper for NDP11' July 2014.

[7] The World Bank (2013). Botswana Social Protection Assessment. December 2013.

[8] The thrust of Vision 2016 is 'prosperity for all' through a strategy of employment creation and this theme is carried through to the NDP10.

reforms and introduce measures to strengthen the economy and diversify it away from its dependence on diamonds and to absorb foreseeable global economic shocks[9].

Without accelerated economic growth, however, it will remain difficult for Botswana to create jobs, especially those that contribute to increased productivity, poverty reduction and the attainment of equitable social development. The government's policy and planning frameworks clearly consider economic diversification as a crucial step towards promoting employment and economic development. It is important to recognise, however, that diamond mining, although the main contributor to national wealth, accounts for only 3% of total employment in the formal sector. Manufacturing, on the other hand, accounts for approximately 4.2% of the GDP but employs about 10% of the labour force in the formal sector. Strategies for arresting the recent decline in the economic growth will be the primary focus of the National Development Plan 11.[10]

Several analysis points out that a major impediment to achieving national development goals is the shortage of skilled labour at all levels and across sectors. The employment needs are becoming more skills intensive in both the private and public sectors. Formal labour market opportunities are very limited, and a large share of adults work in low productivity-low wage jobs (e.g. in agriculture) or are unemployed. Overall unemployment rates remained at about 18 percent from 2009 to 2010.[11] Many of the unemployed are relatively young with low levels of education, work experience and have limited skills. The youth rate of unemployment in 2010 was about 40 percent for the 15-19 age cohort and 34 percent for the 20-24 age cohort compared with a national average of 17.8 percent.[12] A miss match between job opportunities and skills of graduates contribute significantly to these high rates of youth unemployment. Employers increasingly note the lack of skills of new employees to increase productivity and modernise.

Poverty eradication is addressed in the National Strategic Vision (2016) with the medium-term goal of reducing the incidence of absolute poverty by 2016. One of the pillars of the Vision calls for '*a more equitable income distribution and the eradication of absolute poverty in Botswana*'. According to Statistics Botswana (SB), the proportion of the population living below the Poverty Datum Line (PDL) declined from 30.6 percent in 2002/03 to 19.3 percent in 2009/10.[13] The government has responded to the economic and social challenges experienced by the country through committing approximately 9 percent of its GDP to targeted programmes that reduce vulnerability and enhance social protection amongst relevant groups. These consist of social insurance, poverty non-contributory payments, school feeding programmes, support to vulnerable groups and in addition, support in the form of sponsorships and scholarships for tertiary education students. But social inequality remains high despite the relatively high average income per capita. High inequality explains why in 2009/2010, 19.3 percent of the population is defined as poor. A large number of children suffer from malnutrition and 31.4 percent of children under the age of five exhibit stunted growth.[14]

The country's outstanding achievements and gains in socio-economic development have over the last close to three decades, however, suffered major setbacks due to the impacts of the HIV and AIDS pandemic. The enormous direct costs of the continuum of prevention, treatment, care and support are accompanied by indirect loss to the economy especially in terms of professional and skilled human resources as well as the devastating human and social impacts of the disease.

[9] Mid-term Review of NDP 10. Ministry of Finance and Development Planning June 2013.

[10] Keynote Policy Paper for the National Development Plan 11: Ministry of Finance and Development Planning July 2014.

[11] Unemployment rate was 17.8 per cent in 2010, Botswana Core Welfare Indicators Survey 2009/10.

[12] Statistics Botswana (2011).

[13] Statistics Botswana (2011).

[14] The World Bank (2013), Botswana Social Protection Assessment. December.

There were an estimated 300,000 adults living with HIV in 2011 out of an estimated population of 2.1 million or one quarter of the population aged 15 years and above.

Botswana has an estimated adult HIV prevalence rate among 15-49 year olds of 23 percent, and although a drop from the 2000 figure of 30 percent it remains the second highest after Swaziland. The President of Botswana in 1999 led the national response to the epidemic with the setting up of the National AIDS Coordinating Agency (NACA, 1999) and the implementation of National Strategic Frameworks (NSF) for HIV and AIDS. This development is seeing positive results with current extended life expectancies rising to 53 years from the figure of 49 years in 2000; annual HIV infections declining 71 percent between 2001 and 2011 whilst 95 percent gain access to free anti-retro viral treatment.[15] As a result of the pandemic, the country is expected to lose a lot of its skilled and experienced labour over the next two decades, which will significantly reduce productivity and the rate of economic growth.

## 2.2 National Development Goals & Policies and their Relation to the Strategy

Botswana is undergoing an ambitious national development transformation process, shaped by Vision 2016. The set target is that by 2016 the country should have joined the ranks of high income, knowledge-based economies. Thus, productive and competitive human resources and institutions are critical for Botswana in order to accelerate economic growth and compete effectively in global markets. These are likely to facilitate achievement of the broad strategic framework of transforming Botswana with a skilled and competitive workforce as a prerequisite to transform the country into a knowledge-based economy. Through education a skilled work force is to be developed to support and manage the various sectors in the economy, thereby contributing to wealth creation and distribution as the basis for modernisation and development.

National Development Planning and its integration with the annual budgetary process have been the foundation of Botswana's development strategy. Botswana relies on a six-year planning cycle, with mid-term reviews and annual budgets to update the plans in response to changes in its economic and political context. Through successive development plans the major priority focus has been on developing Botswana's human resource capacity through a broad range of perspectives ranging from expanding the labour market to developing education and skills training.

Considerable progress has been made since 1997 when a Presidential Task Group mapped out a long-term vision for Botswana. The year 2016 was used as a point of reference and is an important landmark for Botswana in that the country will have been independent for 50 years. The Presidential Task Group produced "**Vision 2016: Towards Prosperity for All**" (also known as Vision 2016) in which the education of its citizens features very prominently. According to the Vision, Botswana anticipates a future where citizens would have gone beyond basic education to be an educated and informed nation in the year 2016. The vision consists of several goals: an educated, informed nation; a prosperous, productive, and innovative nation; a compassionate and caring nation; a safe and secure nation; an open, democratic, and accountable nation; a moral and tolerant nation; and a united and proud nation. Reviews and assessments of the long-term Vision, however, recognise that a lot still has to be done towards the achievement of

[15] UNGASS(2012),Botswana 2012 Global AIDS Response Report: Progress report of the national 2011 declaration of commitments on HIV and AIDS 2010-2011; Republic of Botswana and NACA Botswana Country Progress Report (April 2010).

these long-term goals. Furthermore, there is a need for additional policy guidelines, capacity building, and strengthening of institutional capacity for this vision to be effectively realized.

The **National Development Plans (NDPs)** have been essential tools for public spending and human resource development. Successive plans have been geared towards improving economic growth and diversification with a strong focus on the need to develop human resources for an internationally competitive society. In line with Vision 2016 the objectives of prosperity for all, an educated and skilled workforce and employment creation and eradication of abject poverty were priority for NDP9 (2003/4-2008/9) and NDP10 (2009/10 – 2015/16). Currently NDP11 is being drafted.

The **National Policy on Education (1977)** and the **Revised National Policy on Education (RNPE 1994)** are consistent with the **Vision 2016** and **National Development Plans** and have provided the policy framework for the education system in Botswana. Both were outcomes of extensive deliberations of Presidential National Commissions in 1977 that identified four national principles that make the philosophy of *Kagisano* (harmony) on which the education system should base its goals, aims and objectives. The four principles were: **democracy, development, self-reliance and unity**.

The other important education policy being the **Revised National Policy on Education** (RNPE 1994) which puts great emphasis on the education and training of all children, youth and adults. The policy also calls for the provision of a relevant, equitable and quality education. The objectives of the RNPE are to:

- Effectively prepare students for life, citizenship and the world of work;
- Develop training that is responsive and relevant to the needs of the economy;
- Improve and maintain quality in education;
- Enhance the performance and status of the teaching profession;
- Effectively manage the education system;
- Improve cost-effectiveness and cost sharing in the financing of education.

More than twenty years after the formulation of the RNPE, the policy directions remain valid and relevant to the needs of the education and training sector[16]. Additionally, the government has reinforced the need to strengthen the relationship between education and employment as a national imperative. These policy documents when combined with the Children's Act, 2009 provide the broad legal framework for a system of education encompassing the protection and care of children.

Complementary national reforms such as **Public Finance Management Reforms** (PFMR); the establishment of the MTEF, the decentralisation agenda and the national **Human Resource Development** (HRD) policy also provide critical guidance on the key national outcomes to be achieved, and approaches to be developed. The foundation has been laid, but there is need to build on it to move towards a more competitive and productive human resource as envisaged in the **National Human Resource Development Strategy** (2009-2022).

The government has continued to develop and put in place relevant policies and the legal frameworks to guide the education sector. One of the steps was to eliminate fragmentation in managing human resources and has transformed former institutions into more relevant ones. The **Human Resource Development Council** (HRDC) has been established as the main institute to develop national human resource needs. In addition, the **Botswana Qualifications Authority**

[16] Government of Botswana (2007) Education Public Expenditure Review, June 2007.

(BQA) is responsible for the development and implementation of national credit and qualification frameworks.[17]

Other initiatives have seen the **Botswana Examinations Council** (BEC) established as the national assessment authority for basic education and TVET whilst the Botswana Teaching Council (BOTECO) will be set-up in 2015 to play the key role of setting standards and enhancing professionalism amongst teachers.

The redefinition of roles called for the dissolving of Technical Education Council (TEC) to become HRDC through the repealing of the Tertiary Education Act (1999); Botswana Training Authority (BOTA) to become BQA through the repealing of the Vocational Training Act (1998) and the broadening of BEC's mandate. The transformation of Botswana Open and Distance Learning (BOCODOL) into the Open and Distance Learning University will provide improved access to adult and tertiary education.[18]

The importance of early childhood care professional development and pedagogical renewal has been recognized and adequately stressed in policy documents. In 2001, the **Early Childhood Care and Education Policy** (ECCE) was developed and designed initially to operate as a three-tier system, comprising of baby-care; day-care/nursery and pre-primary. However, the new phase of the policy development envisages only two age groups: (i) 0 – 3 years and (ii) 3- 6 years. The overarching objectives of this policy are: to develop professionals in the field of ECCE, in order to provide care and education services to children, support the existing services that encompass quality programmes for children and to develop a national curriculum. The Pre-school Development Committee, in collaboration with associations and agencies that are involved with the ECCE, are developing 'Guidelines for Early Stimulation for use in baby-care centres.

The **Information Communication and Technology** (ICT) Policy (2004) states that successful integration and sustainability of ICT in the education system requires a supportive policy environment and framework at the national level. The policy furthermore lays emphasis on the importance of putting in place a coordinated plan that includes the introduction of national education-related policies to address infrastructure and connectivity, professional development of teachers, curriculum integration and the development and use of relevant content and software.

**T**he MoESD developed an **Inclusive Education Policy** (launched in February 2013) and provides significant direction that will achieve an inclusive education system which provides children, young people and adults with access to relevant, high quality education which enables them to learn effectively, whatever their gender, age, life circumstances, health, disability, stage of development, capacity to learn or socio-economic circumstances.

## 2.3 Vision, Mission and Strategic Goals of the Education Sector

Botswana is in its 10th National Development Plan (2009/10-2015/16).[19] There are ten key result areas and 16 national goals that are derived from Vision 2016 pillars and national level priorities. The vision for the education sector is:

[17] Parliament approved the bills for BQA and HRDC in October 2013.

[18] The Bills will be tabled in Parliament sessions during 2014.

[19] The government is developing a successor plan - NDP11 covering the period 2016/17 to 2021/22. At this stage a keynote paper has been prepared as the first input to developing NDP11. See Ministry of Finance and Development Planning 'Draft Keynote Policy paper for NDP11' July 2014.

> **'To produce qualified, productive and competitive human resources, for a skill and knowledge based society, for effective participation in both the local and global economic market'**.

Against this background, Botswana now gives the highest priority to improving the **quality of education** in line with its vision for becoming an educated and informed nation, as well as a moral and tolerant nation, with a modern knowledge-based economy.

The goals of the education sector are guided by the **Revised National Policy on Education** (RNPE) of 1994 and seek to build on the strengths of the national goals whilst acknowledging the challenges that exist in achieving the vision. The education sector seeks:

> **'To provide efficient, quality and relevant education and training that is accessible to all in order to facilitate economic growth and global competitiveness.'**

The goals of the Policy are improving (i) quality and relevance; (ii) access and equity and (iii) efficiency and effectiveness of the provision of education and training.

## 2.4 Goal and Objectives of ETSSP

This **Education and Training Sector Strategic Plan** (ETSSP), provides a strategic framework for the education sector. It addresses the key issues at the time of preparation, where the education system will respond to the real needs of helping to build capacities in key education sub-sectors. As such, the Strategy reaffirms the government's goal for an inclusive sector reform and adopts supportive measures for employment and participation in economic activities as outlined in the national policies. Taking into account these factors and the challenges that education sector faces the goal of ETSSP is:

> **'To provide an overall policy and strategic sector framework for the education sector that will play a pivotal role in the development of a modern, sustainable, knowledge-based economy that supports inclusiveness and diversity'.**

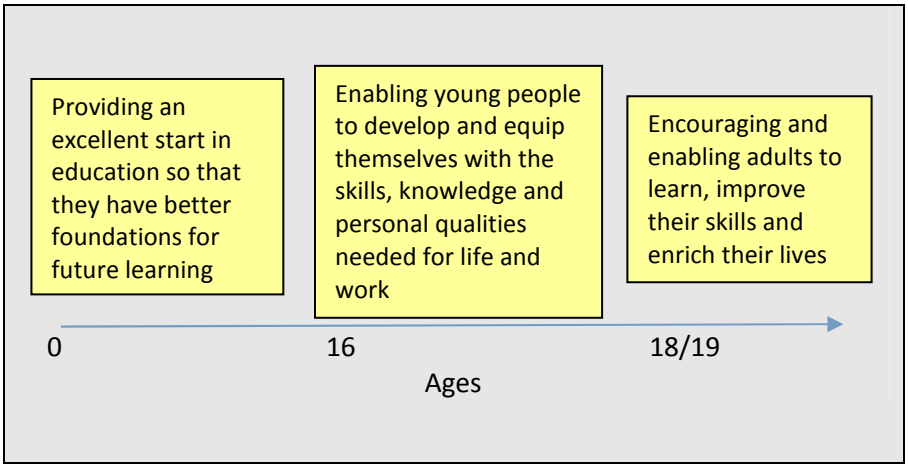
The objectives of ETSSP are to:

- Support the prioritisation, harmonisation and sequencing of the development and implementation of policies, strategies and programmes across the sector;
- Provide a rational and transparent basis for the prioritisation of human and financial resource allocation across the sector;
- Provide the basis for more effective sector performance monitoring, assessment and evaluation;
- Provide the basis for identifying, prioritising and implementing critical areas of organisational change and restructuring required within the sector in order to support improved service delivery.

Thus, ETSSP pays great attention to inclusive and life-long learning policies and in doing so is aligned to international contexts and reflects long-standing commitments to Education for All (EFA) and the Millennium Development Goals (MDGs). Cross-cutting issues for example, gender, ICT, HIV and AIDS are, wherever appropriate, mainstreamed across each sub-sector.

The sector plan has a strong leaning towards ensuring a continuum from Early Childhood Care and Education (ECCE) to Higher Education (HE), non-formal and continuing education.

**Figure 1**: **Continuum of the Education System**




The Figure above reflects a commitment to **inclusive, life-long learning, whilst paying due attention to issues of access, quality, equity, relevance, efficiency and delivery**. In doing so, the ETSSP also gives the required serious consideration to the management, decentralization and improved monitoring and evaluation of the sector.

## 2.5 The Current Structure of the Education Sector

Botswana has made significant progress in creating broad opportunities in education. The current education sector is characterized by extensive reform efforts in all sub-sectors, addressing key challenges of the RNPE and in part the NDP10 to provide efficient, quality and relevant education and training that is accessible to all in order to facilitate economic growth and global competitiveness.

**Basic education** consists of a total of 12 years: 7 years of primary school, 3 years of junior secondary school and 2 years of senior secondary school (in addition to tertiary education). While the official school starting age is 6 years of age, it is only by the age of 7 that almost all children are in school. Parents are charged a 'co-payment' for education, but the children of those in lower income groups receive free education. Free school meals are provided to all school pupils. Pre-primary education is mostly limited to private schools with a limited enrolment.

Progression is automatic from primary to junior secondary though now up to 12.5% of the members of each class can repeat the year. The first ten years of education ('basic education') are available to all children. Students sit for three nationwide examinations: the Primary School Leaving Examination (PSLE) at the end of primary schooling; and those who pass the Junior Certificate of Education (JCE) at the end of junior secondary school can progress to the senior secondary school level and sit for the Botswana General Certificate of Secondary Education (BGCSE).

**Tertiary Education** in Botswana is provided by both public and private institutions; (Universities and colleges). Tertiary education provides secondary school graduates with the opportunity to be enrolled and trained in a number of programmes so as to attain a global competitive human

capital. It is mostly government sponsored through the department of Tertiary Education Financing. Courses leading to certificates, diplomas and degrees are offered by the University of Botswana and its affiliated institutions, which include; the colleges of education, the nursing institutions and the College of Agriculture. The Botswana International University of Science and Technology (BIUST) has just been established in Palapye by a public-private partnership. It is a specialized institution established as a research-oriented University that focuses on Science, Engineering and Technology. Botswana Accountancy College offers courses and programmes leading to professional qualifications in finance, accountancy and information technology.

**Technical and Vocational Education and Training** (TVET) in Botswana is delivered at different levels from certificate to diploma in different types of institutions. These include 7 government-owned Technical Colleges and 35 Brigades'. Accredited private training institutions also offer vocational training to widen the skill base source. This is to enable trainees from various backgrounds to access training. The Department of Technical and Vocational Education and Training under the Ministry of Education and Skills Development has the overall responsibility for planning and implementing technical and vocational education in Botswana, to meet the country's manpower requirements.

Historically the brigades were established by communities to absorb children who would have failed to progress through secondary schools and were managed through a consultative process with Government. In 1996 the brigades were taken over by Government for improved coordination. In 2014 government approved partnerships with the private sector training institutions in the leasing and sharing brigade facilities.

**Figure 2: Structure of Education**

<table>
<tr><th colspan="4">BASIC EDUCATION</th><th colspan="2">LABOUR MARKET</th></tr>
<tr><th>Pre-primary Education</th><th>Primary Education</th><th colspan="2">Secondary Education</th><th>Vocational Educ.& Training</th><th>Tertiary Education</th></tr>
<tr><td>Private Kindergartens</td><td>Public Primary schools</td><td>Community Junior Secondary Schools</td><td>Senior Secondary Schools</td><td>Brigades</td><td>Public & private universities</td></tr>
<tr><td>Pre-primary classes provided by NGOs</td><td>Private English Medium Primary Schools</td><td colspan="2">Private English Medium Secondary Schools</td><td>Technical Colleges</td><td>Colleges of Education</td></tr>
<tr><td></td><td></td><td colspan="4">Botswana College of Distance and Open Learning</td></tr>
<tr><td rowspan="4">Pre-primary classes provided by community based organisations</td><td>ABET Department of Non-Formal Education</td><td></td><td></td><td>Construction Industry Trust Fund</td><td>Technical and Vocational Education Colleges</td></tr>
<tr><td>National Literacy Programme</td><td></td><td></td><td>Private VET providers</td><td>Botswana College of Agriculture</td></tr>
<tr><td></td><td></td><td></td><td>Madirelo Training and Testing Centre</td><td>Botswana Accountancy College</td></tr>
<tr><td></td><td></td><td></td><td>NGOs training providers</td><td>Institute of Health Sciences</td></tr>
</table>

(Source: Government of Botswana. (2007) Education Public Expenditure Review June 2007).

The department of **Out of School Education and Training** (OSET) was established in 1979. It is mandated to provide education and training that is accessible to out of school learners and create opportunities for lifelong learning. The aim is to enable individuals to attain their full potential and contribute to national socio-economic and technological advancement.

**Alternative pathways** exist for students. Junior school leavers may select to attend vocational programmes at brigades or undertake an upgrading programme with BOCODOL in order to progress to tertiary education. Students who complete junior secondary education can progress to senior secondary school or opt for vocational or commercial programmes. Students who complete senior secondary education may be admitted to tertiary education programmes at public or private universities and colleges of higher education or obtain government scholarships to study overseas for specialised programmes.

**Administration Structure**

There exists a three tier administrative system as follows:

- Headquarters - policy making and overall strategic coordination of the Education Sector
- Regional Directorates - policy implementation and coordination of education services;
- Schools and institutions - delivery of teaching and learning as well as coordination at institutional level;

At the **primary education** level dual responsibility is shared between MoESD and the Ministry of Local Government and Rural Development (MLG&RD) as follows:

- MoESD - curriculum development and delivery (teaching and learning), learner assessment, teacher education, recruitment and management;
- MLG&RD - infrastructure development, learning resources and feeding programmes.

At the **secondary level** dual responsibility is shared between MoESD and the Ministry of Infrastructure, Science and Technology (MIST) as follows:

- MoESD - full accountability for Junior Secondary education infrastructure development and maintenance;
- MIST - Senior Secondary schools infrastructure development and maintenance.
- MoESD - curriculum development and delivery (teaching and learning), learner assessment, teacher education, recruitment and management

# CHAPTER 3: CURRENT STATUS OF THE EDUCATION SECTOR

## 3.1 Overview of Achievements and Key Challenges

This section is guided by the National Development Plan 10 and the Revised National Policy on Education (RNPE) of 1994. The three goals of the RNPE are (i) access and equity (ii) quality and relevance and (iii) efficiency and effectiveness of the provision of education and training.

### Access and Equity

Closing the gross enrolment, completion and the gender gap particularly at the secondary and higher end of the education cycle will depend on improving educational quality, ensuring equitable resource distribution and ensuring that there are no reasons for parents in poverty to restrict their children from attending school. Overall gender trends such as the gender parity index, enrolment ratios and percentage of girls' enrolment figures suggest that there is gender parity at the lower levels at schools but significantly widens in favour of boys as students move up the educational ladder.

Strategies for securing access to early childhood education and out-of-school youth are being put in place and will need to be expanded over the coming years. At the early stages key aims include that schools promote a child-friendly environment for children and promote early childhood and pre-primary education as recognition to national building.

#### Early Childhood Care and Education (ECCE) and Pre-Primary Education

Attendance in pre-school education has been shown to give children substantial advantages in their later education but it is acknowledged that parents and family have an important role in educating their children. The early years of learning are critical for the development of the child. Given the importance of school readiness, it is critical to target 100 per cent early childcare and pre-primary enrolment and some urgency to enhance access to pre-school education especially in the rural areas.

There is a lack of access to Early Childhood Development programmes despite its importance on learner progression and pupil performance at schools as the early years prepare children for school readiness. Pre-primary education is largely provided by the private sector. The NDP 10 target for pre-primary schooling is set at 40%. Only 18.4% of children entered primary standard 1 in 2011 who had attended early childhood education at government run schools (Statistics Botswana, 2012). In contrast 48.1% of children entering standard 1 in a private school had participated in early childhood programmes in 2011[20].

In order to increase access to Pre-Primary Education, the Ministry introduced an orientation programme for prospective Standard One pupils in 2012 and reception classes in public schools in 2013. An Orientation programme is for a period of six weeks and introduced in all public primary schools. The programme is to partly prepare children for learning, with the provision of readiness activities and also to help children settle into schools. A one-year Reception Programme has been introduced in 115 schools out of a total of 756 public schools in January 2014 and is currently

[20] Statistics Brief. Statistics Botswana February 2013 & UNICEF Botswana (2013) Botswana Basic education System: Summary of data on access and quality.

reaching more than 4,000 children[21]. This is a major development that will have resource implications and will require support and further development.

## Primary School Education

Primary school in Botswana is for a 7-year period for children aged 6 to 12 (although children up to 10 are allowed to start Primary school, especially for marginalized communities), ending with the Primary School Leaving Examination certificate (PSLE). The total number of primary schools in the country was 817 in 2013, of which 754 (92.3%) were government owned and 62 (7.7%) were privately owned.[22] In 2012, the total number of Primary school students was 337, 206 (172, 347 boys, 164, 859 girls). This is an increase of 1.3 percent on enrolment between 2011 and 2012 from 332,971. (Statistics Botswana 2012 Stats Brief: Primary Education).

Overall, enrolment has significantly improved that during the last five years the net enrolment rate (NER) for 6-12 year age group increased from 85.8 percent in 2009 to 93.1 percent in 2012. The NDP 10 target was to increase NER at primary level to 97% for the 6-12 years cohort by 2013. For the unofficial 7-13 year age group the NER has been reducing from 91.8 percent in 2009 to 88.6 in 2012. The GER of the age group 6-12 was 114.6 in 2003 and increased to 119.8 in 2012 The general increasing pattern of GER at age group 6-12 shows a positive response, though slow, to the Revised National Policy on Education (RNPE) recommendation on school entry age of 6 years at primary school. In order to achieve Universal Primary Education (UPE) the number of under age and over-age pupils need to decline to free places for pupils in the official primary school age group.[23]The latest figure for Gender Parity Index (GPI) is slightly in favour of boys for the 6-12 years at 0.98 (140,815 females and 143,227 males in 2012). There is a small margin between male and female enrolments, 48.0 percent male pupils were enrolled compared to 45.9 percent females in government owned school and there has been a general increase in female enrolment since 2009 growing at a faster rate than boys' enrolment.

## Junior and Senior Secondary

The current secondary school register shows that there has been an increase of 2.5 percent on the number of secondary schools, from 276 in 2008 to 283 in 2012. Out of the 283 schools, Government schools constituted 84.0 percent of all secondary schools in the country. Secondary school enrolment has increased by 0.4 percent over three years from 171,986 in 2009 to 172,669 in 2012 with female enrolment at 51.7 percent and 48.3 percent for males. Government schools enrolled 92.3 percent of all students. The latest figure for Gender Parity Index (GPI) is in favour of females for the total secondary population in government schools at 1.06 (82,126 females and 77,242 males in 2012). Secondary school enrolment has increased by 0.4 percent over the last

[21]MOESD/Department of Basic Education (2013), Guidelines for Standard One Orientation Programme in Primary Schools Gaborone: MOESD.

[22]MoESD (2014) Ministerial Briefing Report (HE) February 2014. Gaborone: Botswana Government

[23]Net Enrolment Rate (NER) is the proportion of the official school going aged pupils enrolled in primary school against the total number of official school going age children. The Gross Enrolment Rate (GER) is the proportion of total pupils enrolled in primary against the total number of official school going age children. Gender Parity Index (GPI) is the ratio of female to male values of a given indicator. It measures progress towards gender parity in education participation and or learning opportunities available for women in relation to those available to men.

three years and there has been a general increase in female enrolment since 2009 growing at a faster rate than boys' enrolment.

The majority of students are aged 14-18 and the GER and NER for students aged 14 - 18 continued to be higher than that for the theoretical age for secondary school aged 13-17 (Form 1 to Form 5). The GER for age group 14-18 years increased from 83.7 percent in 2009 to 84.1 percent in 2012. The trend has been a general increase over 10 years (77.3 percent in 2002). The NER for students aged 13 - 17 years has dropped slightly over the last years with 65.6 percent in 2008 and 64.2 in 2012. A small number of secondary school students reach Form 1 before they turn 12 years, the age at which they are still expected to be at primary school, suggesting that some students either start school before the official age of 6 or are accelerated through the different grades. On the other hand, some students who are aged above 19 years, the age at which they are expected to have completed their secondary education, were reportedly still at secondary school.[24]

## Technical Vocational Education and Training

The Ministry has reported that enrolment in Technical Vocational Education and Training sub-sector has increased from 6,096 in 2009, to 9,262 in 2013 and to 10,622 in 2014 a current utilization rate of 61 percent. The aim is to improve the utilization rate to 70 percent by the end of 2014-2015 financial year, whilst the NDP 10 target is 80%. There are forty-five public institutions providing technical and vocational education and training. Eight (8) Technical colleges and Thirty-seven (37) brigade centres, offering certificate up to diploma level qualifications. This translates to 61% utilization of facilities.

Currently TVET institutions, (colleges and brigades) though not fully utilised, are not able to accommodate learners with special needs. Four institutions have however been ear marked special education "schools." There is no indication of a robust and deliberate plan to recruit the disabled, the disadvantaged and other vulnerable groups into TVET. To overcome these shortcomings, most of the existing facilities will need to be upgraded to accommodate the learners with special education needs. Furthermore there will be need to change policies to create "school of skills" with special dispensation for admission; to develop unique programmes and to adopt delivery methods to suit people with special needs.

Pathways from secondary to TVET also need to be developed. There is a situation of school leavers who are "in the streets" while technical institutions are underutilized. A seamless progression of learners from secondary school to TVET will be established through the NQF. The progression will be supported by effective career guidance and assessment system.

## Tertiary Education

The Tertiary Education sub-sector has been growing (in structure, size, and shape, type of institutions, programme diversity and quality) since the coming into being of the Tertiary Education Council (TEC) in 1999. The growth of private colleges and universities in particular has been phenomenal: they constituted 38.5% of all Tertiary Education institutions that were registered as of August 2013. The remaining 61.5% were public institutions. The number of degree-awarding public institutions has grown from one to five, which constitutes 12.8% of all

[24] Statistics Botswana (2013): Secondary Education Statistics Brief 2012. Gaborone: Statistics Botswana.

TEC-registered and accredited Tertiary Education institutions in the country. The 2013/14 intake shows that 34.9% students are absorbed in private tertiary institutions while 57.5% of those are in public institutions.

Equally, there has been an increase in student enrolment across the sector - a change of 57.1% in student enrolment. During 2011/12 academic year there were 46,614 students enrolled compared to 20,011 during the 2003/04 academic year. The rapid change is attributable to the University of Botswana's (UB) rapid increase in enrolment, the rise of private colleges & universities, and the Institute for Development Management (IDM)'s shift from offering short courses to long term pre-service programmes at both certificate and diploma levels. The establishment of Botswana International University of Science and Technology (BIUST) with a projected optimum enrolment of 6,000 students in both undergraduate and graduate will further enable opportunities for students to study Science and Technology.

Access though is still a challenge in Botswana's Tertiary Education sub-sector. In comparative terms, the overall participation rate, though it has been rising steadily over the past five years, is still lower than comparable countries of Mauritius, Namibia and South Africa who are above and between 18% (SA) and 25% (Mauritius) while Botswana is at 16.4% for the age group 18 -24 years. The policy issue here is that more effort should be made to improve access to degree and graduate studies where the participation rate is very low and jeopardizing any chance for improvement in the country's research and innovation capacity. Low graduation rates which average 30% in comparison to increasing levels of enrolments and costs of tertiary education are a major concern.

No performance indicators have been developed on equity. The definition of who the disadvantaged groups are also needs to be spelt out in the form of policy. Access for minority groups, such as those in remote areas, those with disability and associated challenges, deserve particular attention/focus by the sub-sector. Women's participation in the Sciences is very low and in need of immediate attention.

## Access for Students with Special Needs

The Ministry of Education and Skills Development through RNPE (1994) is committed to providing inclusive education and providing special education for those in need. This is important in attaining an inclusive education system. The government's move towards introducing child friendly approaches will enhance inclusion. There are 35 government Special Education Units, 11 NGOs providing Special Education and 1 private centre. These centres serve 1,183 children.[25] There were 32 hostels attached to Primary schools with a total population of 1,981 learners (1,119 boys, 862 girls) reported in 2013 (MoESD). The department of TVET has an equal opportunities policy that reserves a 15% quota for admission of students from disadvantaged backgrounds. The number with education special needs increased from 12 places in 2012 to 64 places in 2014.

To ensure implementation of RNPE (1994) recommendations on special education, the Government continues to build special education units in existing schools, support the NGOs that provide special education, integrate and mainstream children with special education needs and disability into the mainstream. Furthermore, schools are built such that they are user and learning friendly to learners with special needs and disability.

[25] Statistics Botswana (2013), Statistics Brief 2012, Gaborone: Statistics Botswana

Although Government is committed to increase access to children with special education needs to the education system, schools with special education units are few. This reflects limited resources to meet special education learners' needs. Currently there is one Government Junior Secondary School (JSS) and one Senior Secondary School (SSS) with visual impairment special education unit, two JSS and one SSS with hearing impairment special education unit.

# Quality and Relevance

In Botswana, the main challenge facing the education sector is to improve the quality of education at all levels. This is evidenced by falling performance in national examinations and also in international assessments that periodically are set and emerging evidence from studies.

## Early Childhood Care and Education (ECCE)

The Early Childhood Care and Education (ECCE) is managed through implementation of the 2001-ECCE policy, which is under-going review to address issues of standards, health and safety, teaching and learning among other themes. The MoESD is responsible for curriculum development and monitoring of its delivery to schools; teacher training and policy development; while the Ministry of Local Government and Rural Development is responsible for supplying infrastructure (building, furniture, food and teaching and learning materials) and for implementing operational set standards including Health and Safety requirements through ECCE policy. The quality of care and education in early childhood education is constrained by the low number of qualified teachers. In terms of early childhood care and development, there continues to be a shortage of trained pre-school teachers. Strategies for securing access to out-of-reach children and out-of-school youth are being explored in accordance with the principles of inclusion.

### Primary Education

Primary education is divided into Lower Primary (Standards 1 to 4) and Upper Primary (Standards 5 to 7). There is a national assessment developed by Botswana Examination Council (or BEC) for all students completing Standard 4.[26] Another national assessment is done at the end of standard 7, the PSLE, the results of which are published nationally. Educational quality in core primary subjects, such as, English, Mathematics, Science and Agriculture has been falling, and significant disparities in learner performance persist. UNESCO's review of Botswana's Basic Education system (2013) notes "the results show that students comparatively perform below par compared to international students of the same age group."[27] They also perform below the international benchmarks. Botswana participated in the PIRLS 2011 test on reading literacy and only 10 percent reached high levels and 56 percent of pupils failed to reach the low benchmark and ranked 46 out of 49 participating countries beating only Oman and Morocco.[28]

### Secondary Education

The government is committed to providing secondary education to prepare students for a

[26] Note that this assessment is taken and marked locally with no national results.

[27] UNESCO (2013) General Education System Quality Assessment: Country Report Botswana, Gaborone: UNESCO (p23).

[28] PIRLS 2011 Learners' Achievement (8 July 2014). Note: PIRLS 2011, reading literacy was defined as the ability to understand and use written language forms.

knowledge society. Secondary school ownership in Botswana is mainly in three forms; government, government aided and privately owned schools. Government secondary schools are solely managed by Ministry of Education and Skills Development, while the private schools are entities owned by individuals or companies and government aided schools are mission schools run by religious institutions (Roman Catholic Church and UCCSA) in partnership with Ministry of Education and Skills Development.

However, although accessible there is a concern about overcrowding, the quality and relevance of the education services provided. Standards continue to decline in terms of examination results and in the quality of teaching, learning and resources. In particular, the quality of Secondary Education has remained considerably below that of the high and middle-income countries with whom Botswana must compete, especially in the subject areas of Science and Mathematics that will be the basis for the 'selling of marketable skills' in the coming decades. For example, TIMSS (who test grade 8 (Form II) students' performance in mathematics and science) on average scale scores for Grade 8 (Form II) students for 2003, 2007 and 2011 put Botswana well below the international average. The TIMSS mathematics benchmark for 2011 was that students 'some knowledge of whole numbers and decimals, operations and basic graphs' whilst in science students would be able to 'recognise some basic facts from life and physical science'. Only 25% of the Form II students who sat the 2011 test were able to reach the set benchmark in mathematics. Students performed better in science where 66% were able to reach the set benchmark.[29] These figures are considerable lower than the TIMSS comparable figures in 2007 and 2003.

The following paragraphs summarise a recent study on declining standards at senior secondary schools commissioned by MoESD.[30] The study found that in the sampled schools the BGCSE curriculum is overloaded and the content of the various syllabi leaves very little room for the development of quality learning. Pedagogy used by teachers is severely outdated. There was a heavy focus on examinations, to the almost total exclusion of 'learning for life' and skills development. In addition, school-based assessment is not well developed. At present, schools merely provide tests that mimic the examinations; they do not provide additional types of assessment focusing on measuring the development of skills.

The requirement that all students do science at the secondary level in some form or other is unrealistic. The sciences learning area needs a fundamental re-think. Currently, most students register for the Science Double Award and more than 90% of those registering for this subject in Form 4 fail the subject. Those that pass are the ones that drop to Double Award from having originally registered for Triple Science. Streaming students according to JCE results into different science groupings is detrimental to students' self-confidence and results in a self-fulfilling prophecy of failure for the large majority of students. Students are often categorized by the science stream/subject they do. Most of those in Double Award fail. This results in students having a low level of confidence in their studying in general.

Actual BGCSE overall results show a steady decrease over the last years. Over the total period 2009-2013 the expectation was to have the BGCSE results showing an increase of 4%, whereas the results decreased by just about 7%. In 2009, the gap between the Target (51%) and the Actual Results (34.8%) was 16.2%. By 2013 this gap had widened to a dramatic 27.1%, not quite double that of 2009 but it appears to be heading there within the next year or two.

There has been a steady decline in results of the BGCSE subject English, which however was

[29] TIMSS Learners' Achievement 2011. (8 July 2014).

[30] MoESD (2014): Study on Declining Results – Investigating Senior Secondary Education.

largely remedied in the results for 2013. Further, the BGCSE Mathematics, the percentage of students with a grade at 'C' or better declined from 28.9% to 25.4%. The most dramatic decline is seen in the results for BGCSE Science (Double Award); these declined from 26% to 14%. The results at BGCSE Science (Double Award) indicate that it is becoming more and more likely that the large majority of students fail this subject, and thus not be able to enter any further study with a science-related interest.

## Teacher Education and Professional Development

Nearly all teachers in Botswana public schools are qualified yet the country has been unable to maintain acceptable levels of quality education. At the primary level about 98% of teachers in have the Diploma in Primary Education (DPE) in 2012. Most Senior Secondary School teachers are qualified for the subject they teach to BA/ BSc levels and also have the teaching certificate, the PGDE. Some Senior Secondary Teachers still have only the content qualification and not the teacher qualification but this is being remedied presently. About 75% of Junior Secondary School teachers have the PGDE and others are upgrading their qualifications. Completion, graduation and pass rates are high across all the Colleges of Education where an average of 90% of the teacher trainees obtain a merit and credit. However caveats must be made here as the PRESET assessment system is in need of review.

Botswana has shown significant achievement towards localization of teaching positions over the years. Secondary school teachers in Botswana are mainly citizens; accounting for 96.0 percent of the total teachers. The percentage of non-citizen teachers has been declining over the years. The decline over ten years is from 19.1 percent in 2002 to 4 percent in 2012.

In addition to teachers advancing their qualifications, some lecturers at Colleges of Education are receiving training to undertake PhDs at local universities supported by the MoESD through the Training and Development Department (TDD). Some College of Education and TVET principals have received capacity building in management and leadership through programmes run by Stellenbosch University and organised by the TDD of the MoESD.

New programmes are being implemented for pre-service training (PRESET). Essential new PRESET programmes have been developed and are being run by some PRESET providers, for example, the Diploma in Early Childhood Care and Education (ECCE) and part of this content is also linked to the Diploma in Primary Education and the provision of preparatory courses in ECCE for Pre-School teachers. Additionally school heads at Primary Schools and some Junior Secondary head teachers have received in-service training in UNICEF'S 'Child- Friendly Schools'.

The introduction of a semester-based system, as part of the rationalisation programme for Colleges of Education in Botswana, is an important part of the on-going development and improvement in the quality and the experience of teaching and learning. The introduction of a semester system is a pre-requisite to bringing in credit accumulation. Semester-based systems are generally acknowledged to improve the student learning experience and allow more flexibility in access routes to programmes and to their delivery. Building on semester systems will lay the foundations for further modernisation, such as internationalisation and the introduction of credit accumulation being developed by Botswana Qualifications Authority (BQA).

There has been a concerted effort by PRESET and in-service training (INSET) providers to work together in a collaborative and cooperative way. There are links between the key INSET provider, the TDD and the PRESET providers for Primary Schools, the Colleges of Education. In turn there

are links between the colleges and the Department of Education at the University of Botswana, responsible for PRESET of Secondary teachers. However these need to be strengthened and built upon so links go further and embrace schools and regional educators and offices too.

## Technical Vocational and Education and Training

The problems associated with the delivery of TVET in Botswana have been documented widely[31]. The system is quite separate from the formal School Education System and is often regarded as a deficit system without defined pathways. Indeed it is perceived negatively with poor articulation with labour market demands and contributing little towards socio- economic development needs. The TVET sub-sector needs to address both the formal and informal sector in relation to employment, and the professional capacity of TVET Teachers and Instructors.

Low Performance is a challenge across the TVET and skills development sub sector. Average pass rates are below 50%, so graduation and completion rates need to be improved. The sub sector is also bedeviled by management and resource challenges with dilapidated buildings and obsolete equipment and a poor work ethic amongst staff and students. This contributes to poor quality and inefficiency of the TVET system.

Excellence in teaching and learning is fundamental to producing skilled artisans and technicians with the attributes that employers are looking for. Research also shows that while training programmes are designed to address many of the areas that are important for employers, graduates do not exhibit the characteristics of people who have internalised learning in these areas. This suggests that there are weaknesses in quality and relevance in TVET pedagogy and practice.

Nearly 73% of BOTA registered trainers do not have a teaching qualification. The gap is widest in Brigades and private technical providers. There is also a shortage of qualified staff due to the high demand for technical skills in the economy. As a result some public quality, purpose- built facilities are not functioning because of staff shortages. Some of the facilities run at low capacity for the same reasons.[32]

The management of the TVET sub-sector is fragmented creating weaknesses in accountability. The main Government Ministries involved in TVET are the Ministry of Health (Institutes of Health Sciences), MOESD (Technical Colleges and Brigades), Ministry of Labour and Home Affairs (MTTC and CITF). In a recent study it was reported that many of these institutions were grossly under utilised.

Programmes offered in Technical Colleges and Brigades are overdue for review and evaluation. The brigades offer programmes that have been historically developed based on the needs of the communities then, but the programmes have not been reviewed in a long time (since 1997) posing challenges of the relevance of the content and the programme itself. Similarly most of the Apprenticeship curricula are out dated and have not been reviewed for years.

[31] See KRIVET-AFRICA TVET Experts Workshop: A Compilation of Country Reports, Mmantlo Botlhale Senwelo & Peter Mapiwa Choto Ministry of Education and Skills Development, KRIVET July 23 – July 27, 2012 Seoul, Korea.

[32] BOTA 2011: Report on forecasting and identifying a list of vocational skills and develop strategies to fast track priority skills development: Final Report.

Unlike other post high school institutions TVET institutions operate under the supervision of the Technical and Vocational Education Department and somewhat through a very weak link with the regional education office. This has denied the institutions the necessary independence in programming and resource management. The TVET sub-sector is in need of rationalisation that would give greater operational flexibility and responsibility.

## Tertiary Education

Botswana has accepted that in order to produce highly skilled human resource, relevant research and innovation products, technical expertise and advice, and produce mature and responsible personnel, the Tertiary Education sub-sector is one of the critical success factors in the country's drive to transform and diversify her economy and advance Botswana's development. Consequently, a number of policies, strategies and plans have been formulated to transform the Tertiary Education sector.

Notwithstanding the growth in the Tertiary Education sector, the MoESD still retains the operation of tertiary colleges through the MoESD's departments, such as, Teacher Training and Development (TT&D) and the Department of Technical and Vocational Education Training (DTVET). The system of de-concentrated administration has hindered the transformation of these colleges into autonomous tertiary education institutions as fully responsible for their budgets, strategy and plans.

Quality Assurance arrangements are weak at both system and institutional levels. The absence of a robust Quality Assurance system and its implementation has impacted the development of the sub-sector. This applies across all institutions but more so in the private tertiary institutions. There is, therefore, an urgent need for intervention to develop these systems to ensure high-quality provision of Tertiary Education. Higher education institutions will need to modernise their programmes to provide graduates with high-level, employable skills as well as transferable skills that equip graduates for a fast changing labour market. This will require higher levels of collaboration between institutions than in the past.

The tertiary education sector absorbs 45 percent of the total government assistance spending through the scholarships and sponsorship of tertiary students. Although the sponsorships aim at supporting skills development as a way of addressing Vision 2016 goals the distribution is not merit or needs based as all students are targeted, benefiting students from high-income families as well. There are moves to outsource the administration of the scheme and introduce means for cost recovery.

In many cases in public Colleges of Education and Institutes of Health Sciences the majority of academic staff carry very low workload and staff–student ratios are not compatible with set standards and norms. As a result the human resource is underutilised especially regarding the academic staff in these types of institutions. Thus, a rationalisation of these colleges to elicit greater quality of educational offerings, favourable utilisation of resources, and superior student experience should be undertaken.

High quality Tertiary Education provides the backbone to knowledge creation and its strategic application. However, there is a lack of research and research outputs in sufficient quantities and quality to generate new knowledge. Equally, the small number of candidates in graduate studies leads to lower research output. Again, research impact is dependent on publication and

dissemination. Botswana is well below optimal performance levels in terms of both research output and human capacity development in research.

## Management and Governance

Ineffective management of education service delivery has also been reported, in part due to the dual responsibility for primary education between the MoESD and the Ministry of Local Government and Rural Development (MLG&RD). Another factor is unclear responsibilities between the MoESD head office and regional offices within the framework of decentralization. The MoESD is responsible for teachers, their salaries and the implementation of education policies. The MLGRD provides infrastructure (buildings, furniture, feeding, teaching and learning materials) transport and equipment. It has been proposed that Primary Education should be the sole responsibility of MoESD, putting it in line with the delivery of secondary education.

The MoESD has committed itself to the implementation of Child Friendly Schools (CFS) by formulating education standards that incorporate child-friendly principles[33]. This will give the country a clear sense of what children should know and be able to do, besides improving test scores. Based on the CFS curriculum that is provided for the schools, teachers will have the ability, confidence and greater freedom to use a wide range of activities, techniques, and materials attuned to children´s needs. In addition the concept of assessment will need to be seen in a more formative and less summative way.

The MoESD encourages primary schools to establish Parent-Teacher Associations (PTAs).[34] The PTAs create a partnership that helps the school listen to and deal with parents' concerns and for parents to learn more about the school and how to improve their children´s education and how to support school development. Equally important is to listen to the voice of the young children, their expectations and hopes and to empower them to participate in matters that affect their lives including learning, health, HIV/AIDS prevention, ethic, school safety and general well-being.

The Children's Act 2009´s[35], stresses the rights of child to participate in decisions which have a significant impact on their lives. The challenge is to develop a participatory structure and processes that promote and ensure the child's right to be heard, to influence issues affecting their lives, to voice their opinions and to take action. A Students Council, as part of the school structure, facilitates students' issues that are on the agenda of the school management and PTA boards.

## Curriculum

A key priority for MoESD is to continue to review and finalise a curriculum framework that takes full account of global trends in education where learning is more focused on learning outcomes and developing skills. The Primary school curriculum is still subject-based and does not align with international educational developments. However there are initiatives underway to introduce different approaches, along the lines of an outcomes-based approach to learning. The secondary curriculum is overloaded with too many demanding subjects. Plans are under way to achieve a better balance between subjects, time, content, skills, national and school-based assessment through a curriculum review and the establishment of a national curriculum framework.

[33] MoESD (2011), Handbook for mainstreaming Child-Friendly School (CFS) Models and Approaches,
[34] MoESD (No Date), Parent Teacher Association and Mentors Training Manual, Gaborone.
[35] Government of Botswana (2009) Children´s Act, 2009. Gaborone: Government of Botswana.

The language policy for the learners in primary education and the related medium of instruction in the training of teachers has been under debate. Mother Tongue Instruction has not yet been adequately addressed and the MoESD recognises the need to revise the Language Policy (which states that English and Setswana are the official languages of instruction).

Given the growing need for advancing technology and knowledge, the transition from primary education to secondary education needs to be better reflected to facilitate larger transitions and alternative pathways into vocational training. This will have to include action to ensure a proficient level of the core subjects, mathematics, science and English in secondary education as sound preparation for the students. Mother tongue languages should be introduced into the curriculum at an early stage. All of this places high demands upon teachers and the system generally.

### Development of Information Communication Technology (ICT)

Effort to introduce ICTs into the education sector by the MoESD is through the implementation of the Thuto-net component as part of the national Maitlamo Policy on ICT. However, although there are many initiatives within Botswana dealing with ICT the education efforts have largely been geared towards the deployment of ICTs to institutions via the provision of computers. Access however is still below the standards and numbers demanded the concerns are serious for the lower levels of education.

## Efficiency and Effectiveness of the Provision of Education and Training

There are disparities between rural and urban primary schools in terms of access, quality education and learner performance. There remains a significant group of children for whom this is more challenging, in particular children from poorer and more remote rural areas, and children with special needs, including educational needs.

There has been an increase of 7.0 percent in primary school drop-outs recorded between 2011 and 2012 from 3,026 to 3,239. Again, this level is more pronounced in remote, rural primary schools, amongst learners from poorer social backgrounds (UNICEF, 2013). For this reason there are initiatives underway to support these children, for example, the Out of School Children (OSEC) programme.[36] The proportion of pupils that complete primary education has increased slightly from a baseline of 75.6 per cent to 77.1 per cent in 2010. Across nearly all regions, boys drop out at a higher rate than girls and the highest drop-out is in Standard One. In 2012, boys who re-entered the school system constituted 66.1 percent of total re-entrants and 24.7 percent were in Standard One. The Ministry of Education and Skills Development has introduced the Back to School Initiative which aims at giving all students who dropped out of school, second chance to be re- admitted into the school system and this initiative will also be monitored to measure its impact in increasing re-entrants. There are various reasons reported for the standard 1 pupil to drop out of school; such as distance from school, parents withdrawing children from school because they feel they are not yet ready for school[37].The other reasons why not all pupils in a particular cohort complete the primary cycle include:

[36] This initiative is currently managed through UNICEF in co-operation with MoESD. The number of OSEC members receiving non-formal education is 7,715 in 10 Regions (2014).

[37] Statistics Botswana (2012): Primary Education Statistics 2012. February 2013.

desertion, illness, death, pregnancy and school fees[38].

The Ministry of Education and Skills Development has introduced strategies to reduce school drop-out and these include: Standard One Induction, Mobile Schools and Hostel Management is an ongoing strategy. These strategies will be monitored in order to measure their impact in reducing school drop-outs. The highest percentage of Standard one drop-outs were observed in rural areas.

Transition rates from primary school (Standard 7) to lower secondary level (Form 1) have been between 96.0 and 100 percent over the last five years. This is an indication that nearly all students progress through to junior secondary irrespective of their performance in the PSLE. However although the education policy outlines that each eligible child should go through 10-year basic education (support to the EFA goals) there is still a small proportion (about 3 percent) of children who only go up to Standard 7 and never reach Form 1.

According to National Development Plan (NDP 10) the target transition rate from junior to senior secondary education was 70.0 percent. The transition rates from lower (Form 3) to upper secondary (Form 4) ranges from 52.8 percent in 2000 to 63.8 percent in 2012. The transition rates from junior secondary to senior secondary fluctuates, because admission to Form 4 among others depends on the student passing Junior Certificate Examination (JCE) and availability of space into Form 4.

In the recent assessment conducted by Permanent Secretaries, Ministers and a recent report on the Re-engineering of Procurement of Textbooks, Stationery and Food for Schools (June 2014) in schools across the country, teachers raised concerns about the issue of automatic transition from Primary Schools to Junior Secondary schools. They indicated that the system discourages competition by both students and teachers. They also observed that students with low grades face a challenge of comprehending the learning material at high levels of education.

Drop-out rates at secondary levels are high. The majority of students drop out of school in the earlier grades. In 2012 just over 25.0 percent students at Form 1 dropped out followed by those who were doing Form 2 and 3 at 25.0 percent and 24.2 percent respectively. In general more female students drop out as they progress through the school year. Females mainly drop out due to pregnancy and truancy whilst boys and girls stay away through truancy. The students who dropped out at Form 5 and in Special Education Units (SPEU) constitute only 0.5 and 0.1 percent respectively.

Transition rates from primary to junior secondary are high at 98.5%, and from Junior Secondary to Senior Secondary at 52%. This is line with the Education Policy (1994) of providing ten years basic education. Promotion rates within Junior Secondary are also high with Form 1 to Form 2 to Form 3 being 98% and 97.6% respectively with a gender balance of almost 50%. Of the cohort who started standard 1 in 2006, about 82 percent reached standard 7 in 2012 showing an increase 0.6 percentage points on the cohort who started standard 1 in 2005 and completed standard 7 in 2011.

In 2012, female students who repeated a grade/form were more than their male counterparts. The highest number of repeaters in 2012 was doing Form 5, followed by Form 3 and Form 4. Repetition at secondary school mainly happens at private secondary schools. Therefore, it is

[38] Statistics Botswana (2012): Primary Education Statistics 2012. February 2013 and Secondary Education Statistics Brief 2012 (No. 2014/01).

not surprising to find majority of repeaters doing Form 5, followed by those doing Form 3. These are normally the students who would have not performed well on their JCE and BGCSE the previous years.

Baseline data for education to work or labour market transitions do not yet exist, but a number of reports indicate that the current education system is not geared towards the labour market.[39] The study identified a huge demand for education and training, but also recognised the lack of institutions and qualified teachers to meet this demand. The report also indicated that the education they receive does not prepare them sufficiently for seeking employment, particularly in terms of communication skills and career guidance on how to look for a job, or where to find job postings.

External efficiency of the Vocational Education and Training system is low, and the same is valid for the Tertiary Sector. The main reason is the weak contacts between the training institutions and the private sector (now being addressed for VET). Also, the VET system has limited supply capacity (only five VTCs exist), and the tertiary institutions produce "few graduates from field that require a mathematics and science base such as: technical and engineering fields, natural scientists, medical doctors, and nurses".[40]

## Education Finance

The Medium-Term Expenditure Framework and sector programme budgeting requires MoESD to improve policy planning and budget formulation processes. Further, the strategic planning initiative of the Office of the Prime Minister (OPM) has seen MoESD move towards putting in place a performance accountability framework.

On average, it is estimated that over the past decade since 2000, Botswana has invested around 4.5% of the Gross Domestic Product (GDP) on Tertiary Education sub-sector development. This percentage is high when compared to other countries in the region and others of Botswana's income status. The three key issues when it comes to the state of Tertiary Education financing in Botswana are (a) high public sector investment in Tertiary Education, (b) inefficiencies in the governance and financial management at institutional levels and (c) marginal role of other stakeholders – parents, students and industry in the financing of sub-sector.

The World Bank among others has in the past few years calculated that Botswana's spending on tertiary is too high and inefficient.[41] Institutions and learners are almost totally dependent on government subventions, student sponsorship, scholarships and budgets for infrastructure development and research funding. As a result, there is little culture of generating alternative revenues for the sector. Student fees are paid for tuition and living allowances by the Government and costs the budget P1.674 billion (2012/13) or 1.4 percent of the GDP and absorbs 45 percent of total assistance spending in Botswana.[42]

[39] HRDC Report 2012.
[40] World Bank: PAD for DPL 1
[41] Education Expenditure Review (2007) & Public Expenditure Review (2010).
[42] Botswana Social Protection Assessment: December 2013.

## 3.2 Baseline Data

It is difficult to calculate some values for net enrolment rates (NER) and gross enrolment rates (GER) because of the absence of a reliable national census with population figures prior to 2011 but in the future these rates should form part of the indicator system. Means must be found to improve present sector performance in data collection, processing, storage, retrieval and analysis. ETSSP will use 2012 as a data base.

**Table 1**: **Baseline Data for Education Sector Performance**

| Indicators | Disag. | 2009 | 2010 | 2011 | 2012 | NDP 10 Targets |
|---|---|---|---|---|---|---|
| Early Childhood/Pre-Primary Education | | | | | | |
| Gross Enrolment Ratio (GER- 3-5 yrs.) % | Total | | | | 19.8 | |
| | Male | | | | 19.8 | |
| | Female | | | | 19.8 | |
| Net Enrolment Ratio (NER – 3-5 yrs.) % | Total | | | | 16.64 | |
| | Male | | | | 16.58 | |
| | Female | | | | 16.71 | |
| Participation Rate (%) | | | | | 19.8 | |
| Teacher Attrition Rate (TAR) % | | | | | 12.11 | |
| Ratio of trained teachers to total teaching force (%) | | | | | 54.6 | |
| Gender Parity Index (GPI) for GER (%) | | | | | 1.00 | |
| Gender Parity Index (GPI) for NER (%) | | | | | 1.01 | |
| | | | | | | |
| Primary School Education | | | | | | |
| Apparent Intake Rate (AIR) % | | | | | 110.5 | |
| Net Intake Rate (NIR) % 6 years | Total | | | | 54.9 | |
| NER 7 years | Total | | | | 35.7 | |
| Gross Enrolment Ratio (GER) % 6-12 years | Total | 108.4 | 109.5 | 98.6 | 88.6 | 100 |
| Gross Enrolment Ratio (GER) % 7-13 years | | 109.8 | 108.8 | 89.7 | 93.1 | 100 |
| Net Enrolment Ratio (NER) (%) 6-12 years | Total | 85.8 | 89.4 | 89.7 | 93.1 | 97 |
| NER 7-13y | Total | 91.8 | 90.8 | 88.5 | 103.9 | 97 |
| Gross Completion Rate (GCR) % | | | 98.5 | 97.9 | 97.8 | |
| Gross Graduation (Pass) Rate (GRR) % | Total | 68.2 | 69.2 | 64.0 | 65.0 | 95 |
| Dropout Rate (DR) (%) | Total | 0.9 | 1.0 | 0.8 | 1.0 | |
| Pupil-Class Ratio (PCR) | | | 26-35 | 26-35 | 26-35 | |
| Junior Secondary Education | | | | | | |
| Gross Enrolment Ratio (GER) % | Total | | | | 95.4 | |
| Net Enrolment Ratio (NER) 5 | Total | | | | 53.1 | |
| Gross Completion Rate (GCR) % | Total | 98.3 | 97.0 | 97.5 | 94.1 | |
| Gross Graduation (Pass) Rate (GRR) % | Total | 75.0 | 74.6 | 74.7 | 41.1 | 92.1 |
| Pupil-Class Ratio (PCR) | Total | …. | 40-45 | 40-45 | 40-45 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Senior Secondary Education | | | | | | |
| Gross Enrolment Ratio (GER) % 13 – 17 years | Total | 84.1 | | | 82.3 | |
| | Male | 80.1 | | | 78.8 | |
| | Female | 88.1 | | | 85.9 | |
| GER 14 – 18 years | Total | 83.7 | | | 83.3 | |
| | Male | 83.7 | | | 83.3 | |
| | Female | 83.7 | | | 83.3 | |
| Net Enrolment Ratio (NER) % 13 – 17 years | Total | | | | 65.0 | |
| | Male | | | | 61.1 | |
| | Female | | | | 68.9 | |
| NER 14 – 18 years | Total | | | | 73.6 | |
| | Male | | | | 72.6 | |
| | Female | | | | 75.6 | |
| Transition rate (TR) % | Total | 56 | 54 | 62 | 63.8 | 100 |
| Student Class Ratio (SCR) | | 35 - 40 | 35 - 40 | 35 - 40 | 35 - 40 | |
| Ratio of trained teachers to total teaching force | | | | | 99.8 | |
| Gender Parity Index (GPI) for GER (%) | | 1.08 | | | | |
| | | | | | | |
| Technical Vocational Education and Training | | | | | | |
| Gross Enrolment Ratio (GER) % | Total | | | | | |
| | Male | | | | | |
| | Female | | | | | |
| Net Enrolment Ratio (NER) 5 | | | | | | |
| Student Class Ratio (SCR) | | | | | | |
| Ratio of trained teachers to total teaching force | | | | | | |
| Gender Parity Index (GPI) for GER (%) | 0.55 | 0.61 | 0.54 | 0.72 | 0.70 | 0.55 |
| | | | | | | |
| Teacher Education (Data not Available) | | | | | | |
| | | | | | | |
| Tertiary Education (Data not Available | | | | | | |
| | | | | | | |

# CHAPTER 4: POLICY FRAMEWORK AND PRIORITIES IN THE EDUCATION SECTOR

## 4.1 Overview of the Strategic Plan

The Botswana Education and Training Sector Strategic Plan (ETSSP: 2015 - 2019) links life-long learning principles and the implications for an inclusive education and learning model that includes all children, youth and adults, both as learners and as educators. At the same time, all actors: the government and regions and districts; civil society; the private sector and development partners gain new roles and responsibilities in the new and more coherent framework set up by the sector strategy. The chapter, therefore presents **an overview of the strategic priorities and key programmes** when implemented will contribute to the national agenda highlighted in Chapter2.

The chapter also provides a summary budget for a five year period (2015-2019). To finance the developments suggested in this strategic plan as well as the emerging recurrent cost implications in full will require ways of mobilising resources from a number of sources. Chapter 8 provides the financial breakdown for all sub-sectors. The total resources needed are estimated at (to be determined) over the five-year period. A financing gap exists which will require robust planning efforts both by government and private sector partners to bridge if fully implemented.

## 4.2 Critical Sector Strategic Priorities

| | **Critical Sector Strategic Priorities** |
|---|---|
| 1 | Improving the Quality & Relevance of Education |
| 2 | Improving Equitable Access to Education |
| 3 | Improving Learning Outcomes |
| 4 | Focus on Life-long Learning |
| 5 | Strengthening Skills Development |
| 6 | Developing New & Alternative Pathways for Education |
| 7 | Improve Management of Education |
| 8 | Developing a Responsive Tertiary Education System |
| 9 | Improving Planning & Budgeting of the Sector |
| 10 | Utilisation and Integration of ICT in the Education system |
| 11 | Improving Monitoring and Evaluation of the Education Sector |

Importantly the Strategic Priorities should not be seen as mutually exclusive since many are interlinked and complementary in addressing the broader goals of the education sector.

### Strategic Priority 1: Improving the Quality & Relevance of Education

At the heart of ETSSP is the need to focus on improved quality throughout the sector as investment in improving learner outcomes. A key goal of the sector is thus towards ensuring high quality education and **providing a wide range and flexible learning opportunities** within a

lifelong learning framework. **Fostering innovation and generating new knowledge and skills** for the socio-economic and sustainable development of the nation is imperative. Learners will be equipped with the understanding, relevant knowledge and skills that will enable them to make informed choices about their lives within a rapidly changing global economy.

Action will be put in place to address the problems of low quality and especially low learning outcomes. In this regard, a number of key interventions are foreseen in the ETSSP: the professionalism of all teachers including teacher trainers is recognised through changing the way teachers are trained (from teacher-oriented to more learner-oriented) to achieve **a properly managed, better performing and more motivated teacher**s as key to attaining improved quality and learner outcomes; **developing professional standards for teachers and determine a set of teacher competences; reforming decentralization** through clear policies and implementation so that regional and school management can emphasize autonomy, accountability and teamwork at the school level **through adequately resourced planning**; making sure a**dequate learning materials are in the classroom**; using **information and communication technology (ICT)** with blended learning approaches to improve learning and meet the need for skills development and targeting disadvantaged and marginalized groups so that they can fully take part in education.

## Strategic Priority 2: Improving Equitable Access to Education

Improving learner outcomes is linked **to providing equitable access** in part, by ensuring that there are adequate places for new students in our institutions and for students with educational special needs and learners in remote areas. A **targeted school infrastructure programme** based upon population figures determining demand and supply of education will be managed. Developing an **infrastructure plan** to ensure there is sufficient capacity to absorb all. This will mean deciding on optimum additional classrooms and by making institutions safe environments to inspire students to learn and teachers to teach.

The MoESD will also seek to improve access for those, who due to family, economic, the physically challenged and those for personal reasons cannot attend schooling. The focus will be on strategies to meet the demand and **construction, expansion and rehabilitation of all institutions** aimed at widening access importunities for access to education.

Consideration will also be given to ensure that access to Senior Secondary Education is not regulated solely on results in science and mathematics at Junior Secondary Education. Moreover, attention will be given to offer pathways within Senior Secondary Education that do not include Science as an obligatory subject for all students.

### Inclusive Education

The goal is to increase the number of schools and institutions that effectively implement the inclusive education policy and have greater access to centres that offer specialist services. Guidelines will be developed to help make decisions on appropriate placing in mainstream schooling or alternative avenues. The ability of teachers in proving special needs support will be strengthened.

### Increasing awareness and participation in institutional activity

Increasing stakeholder awareness and participation in improving attendance of students will be a priority. Improving lifelong opportunities for youths and adults through expanded **Out of School** programmes including basic numeracy and literacy programmes and provide equivalence pathways (see Strategic Priority 6).

### Increasing Access to Early Childhood and Pre-Primary Education

This strategy focuses on further developments of early childhood and pre-primary development system to engage with and respond to the needs of young children and their families so that Botswana's young children have the best possible start in life. The strategy seeks to achieve **positive early childhood development outcomes** and address concerns about individual children's development and the need for early learning to reduce and minimise the impact of risk factors before problems become entrenched. ETSSP advocates:

- Rolling-out reception programmes in all public primary schools;
- Revitalising and increasing access day care centres/nursery schools through targeted support to private day care centres;
- Introducing community-based play groups where there are no school;
- Targeted awareness raising about the importance of early childhood;
- Improving and upgrading teachers and carers;
- Strengthening the important partnership role of communities, non-government organisations and government in participating in shaping children's early childhood development;
- Better support children with special education needs and to deliver culturally inclusive services.

### Improved Health and Safety

Specific outcomes for children relate to improved health, cognitive and social development leading to improved transition to primary school and improved educational, employment, health and well-being outcomes. To achieve these outcomes, the strategy details the areas where action is required to improve HIV/AIDS care; a review of a variety f current school safety systems will be undertaken and nutritional programmes will be expanded where needed.

### Improved Life-long Learning Opportunities

The government will strive to provide affordable access to a variety of learning opportunities, both formal and informal to enable people to work effectively in the knowledge economy by developing the required knowledge, competencies and skills and different pathways for education.

## Strategic Priority 3: Improving Learning Outcomes

It is widely recognised that the education system performs well below its potential and that improving education and particularly the quality is a necessary step to meet the national development goals. The ETSSP recognizes the need for t**he education system to be more responsive to national labour market demands**, aligned with key government priorities and

pressing economic development goals. Importantly, school-parent-community participation will be encouraged in school and institutional governance in part, through improving access to e-Education.

## Transforming and Modernising the Curriculum

The strategy identifies the need to transform the heavy content driven nature of the curriculum into a **competency based curriculum** that will encourage a greater focus on providing more varied and appropriate learning opportunities. These will be aligned with attainment of skills. Curriculum standards that address both academic and non-academic dimensions of learning will be established in cooperation with the Botswana Qualification Authority (BQA) to ensure the promotion of well-rounded citizens.

Without substantial improvements in learning outcomes at all levels, the future development of the country will be seriously compromised. The ETSSP addresses poor levels of performance across the sector, through quality changes to and **modernising and improving the curriculum**; **improving teaching and learning at all levels** and undertaking intensive teacher development; developing appropriate assessment patterns through setting up a **National Assessment Framework** to better organise **school-based assessment** and measuring skills and linking with national assessment. Activities will be focused on qualitative and substantive diagnosis and effective targeted support of **a new curriculum and assessment patterns** that will also assess skills development, leadership, management and planning, capacity building, school monitoring, and fostering partnerships.

## Transforming Teaching and Learning

This will also mean the need to **change teaching strategies to be more student-centred**, using **modern information and communication technology (ICT)** at all levels, and conducting relevant and high quality research. Importantly, the system needs to the skills development and encourage students in particular to improve their performance in languages, mathematics and sciences through taking part in more active learning opportunities inside and outside of the classroom. These are clear statements that the learner will be central in the Botswana education system linked to improving learning outcomes and making education more effective.

Many activities in ETSSP will work towards **supporting teaching practices in the classroom**. This will mean **improving professionalism, teaching skills, subject content knowledge and ICT skills of teacher though life-long learning opportunities**. A priority will be on **improving attendance and accountability for appropriate use of time in school by teachers** and other officials at school and district level, particularly in classrooms. School work and homework checking by teachers and school leaders are critical if learner performance is to be improved.

## Improved School Management and Leadership

This will require introducing **a national system of school leadership training** to follow-up on the work of the 'turnaround strategy' already taking place in poor performing schools. The MoESD will put in place strategies and action for low performing schools to bring them up to acceptable standards. This will ensure basic management skills applied to all institutions in a way that contributes towards making schools and institutions more efficient and functional. The quality, frequency of monitoring and support services provided through the **inspectorate** will be provided to school by the regional office, partly though the better use of e-Education.

## Strategic Priority 4: Focus on Life-long Learning

A major focus is the broadening of **life-long learning opportunities and enhancing quality education at all levels**, from early childhood, pre-primary through to youth and adults and higher education sub-sectors - this closely linked to improving education, training and employment pathways. This requires building a **Strategy for Lifelong Learning** and flexible systems, which is joined up and builds on all ETSSP programme initiatives and promoting a system-wide approach to establishing lifelong learning opportunities.

## Strategic Priority 5: Strengthening Skills Development

Improving the level of skills is a focus for ETSSP. The intention is to provide children with an excellent start in education so that they have better foundations for future learning. Skills development even at the early years and primary level is essential. The expected inter linked sector reforms will focus **on developing communication, cooperative and creativity skills**; **literacy numeracy and ICT skills**; ability t**o learn, problem solving and teamwork.**

At a later stage enabling all young people to develop and equip themselves with the skills, knowledge and personal qualities needed for life and work is imperative. The ETSSP advocates for integrated knowledge and skills approaches to curriculum development and linking with providing more choice for individual pathways better suited student interests and needs.

At the higher level, the focus will be on encouraging and enabling adults to learn, improve their skills and enrich their lives.

A major programme is to **develop a Skills Strategy** utilising different strategic approaches to skills development across the whole sector and in particular through: strengthening the secondary and TVET sub-sector and correctly positioning TVET in the education sector in part, by improving the image and prestige of technical education and training; fostering knowledge intensity through workplace training; developing competency based training and learning and implementing the **National Credit Qualifications Framework (NCQF);** crucial for certification and accreditation of skills for both students and trainers; revisiting the apprenticeship schemes; increasing private sector and employer participation and partnerships in skills training to ensure relevant training to the needs of the economy and developing occupational standards.

## Strategic Priority 6: Developing New & Alternative Pathways for Education

Recognising the need to broaden education encouraging life-long learning opportunities and enhancing quality education at all levels means developing new and alternative pathways from junior secondary upwards. In this regard, vocational subjects will be introduced at Junior Secondary school and vocational assessments will be developed by BEC; while the **National Credit Qualifications Framework** is being developed by the Botswana Qualifications Authority (BQA) that will allow students to **enter different and multiple pathways catering to students with diverse educational and training backgrounds**. This will be managed, in part through recognition of prior learning and ensuring that qualifications systems give them credit for the

experience and knowledge they have gained, whether in the classroom, in the workplace or elsewhere. This will mean **reorienting the curriculum** towards alternative pathways within the secondary sub-sector to highlight the alternative study patterns and assessment methods.

The education system will be aligned to enable learners to recognise early their different talents at junior certificate and learners will be given the opportunity to follow different streams of learning according to their preference and talents. This will mean revisiting the policy in respect to compulsory science learning at the secondary level and allowing choice of subjects. Creating alternative pathways for education will encourage easier transition through the system to higher education. Brigades and vocational training centres will be upgraded to encourage routes to higher education.

## Strategic Priority 7: Improve Management of Education

### Developing a Commitment to Decentralisation

The strategy takes account of the need **to promote decentralisation and to focus on the regional and district offices as key service delivery entities**. The plan sees the need for a greater effort for service delivery to be more strongly driven by local needs and priorities, but this raises real challenges for the management of education. Devolution of responsibilities has to be combined with **devolution of resources.** There is clearly space for targeted programmes that ensure resources are channeled to the regions with the worst education and social indicators. As the government reinforces the processes to decentralise and devolve functions the plan advocates the need to change management culture and introduce greater means of accountability and horizontal approaches which will need to be addressed creatively. The MoESD will introduce management accountability frameworks for all critical players in education.

#### Improving Management and Accountability

The emphasis of priority areas is not only concerned with education and students but also on improving accountability: **a more efficient and better functioning, responsive and accountable management system**. Improving learning outcomes requires leadership and ETSSP is putting in place a national leadership programme. Central to this is the need for a responsive central and regional level of support that can respond and react to the reforms and initiatives. Thus, in addition to education priorities the strategy also targets **capacity building** measures that will strengthen central and local level management ability to respond to the needs of the education system. The strategy strengthens performance management systems, and advocates developing a management culture that **embraces greater accountability**. Strengthening MoESD and regions through targeted short and long-term training for senior and middle-level managers in strategic sector planning; financial and resource management and specific sub-sector requirements (curriculum, school inspection and management etc.).

## Strategic Priority 8: Developing a Responsive Tertiary System

The tertiary education must be made more responsive to the needs of the economy. Improving stakeholder consultations between tertiary institutions and the employers and government on what are the **appropriate programmes required to meet the new demands of the economy** will be emphasised. The focus on tertiary education is on making the sub-sector more accessible and developing appropriate skills within a more cost efficient system and maximising

the potential for research. Increasing the opportunities for girls and women, children and students with special educational needs and those from minority and disadvantaged groups are also key sector priorities.

The strategy will (i) **raise the skills and knowledge** of current and future workforce to meet the labour and social needs (ii) to provide all Batswana with **opportunities to gain world class skills and knowledge** through raising participation rates (iii) **producing high-quality research** in response to the expected diversified economy and social challenges (iv) **develop a finance model** for a high performance and cost efficient system and (v) **enhancing quality assurance systems** and undertake system-level monitoring.

## Strategic Priority 9: Improving Planning & Budgeting of the Education Sector

Current management and implementation of the education sector needs to be radically improved. In this regard the MoESD will set up a strong **Department of Educational Planning** where SEMIS will take on a crucial role in supporting the monitoring the education sector. The scope of implementation will include: education annual sector planning & policy formulation; strengthened project management mechanisms; developing annual plans and budgets and performance measures and **extensive upgrading and greater utilisation of ICT and data management systems**. Improving the ability to formulate policy as well as managing and analysing data to support the education sector management and decision making is imperative. This will require strengthening of planning, monitoring and evaluation capability in MoESD.

## Strategic Priority 10: Utilisation and Integration of ICT and e-Education

The government is committed to the implementation of the **National ICT Policy** that will position Botswana for sustained growth in the digital age by serving as a key catalyst in achieving social, economic, political and cultural transformation within the country. **Greater access, utilisation and integration of ICT as a means to improve teaching and learning** and also a tool to **improve education management** is a key strategy linked to improving learning outcomes. Introducing ICT into the early years of schooling is imperative if the country is meet the NDP goals. The MoESD is working through the **Thutonet** initiative to support education and ICT through networking and e-learning platforms.

## Strategic Priority 11: Improving Monitoring and Evaluation of the Education Sector

Reliable and timely information is critical in the education sector to inform planning, and evidence-based policy and decision-making. The production of quality education statistics is imperative at all levels in the sector. The MoESD will **strengthen the role of monitoring and evaluation (M&E)** through building capacity for regular monitoring and evaluating the performance annually against a set of Key Performance Indicator's (KPI's). This will see strengthening the use, utility and systems associated with performance information and data through determining appropriate quantitative and qualitative sector indicators to be monitored at the centre and regions. Such a system will inform and support the different levels to make strategic decisions. **Targeted capacity building** will be put in place and the Inspectorate will be

strengthened in support of schools and institutions to provide essential information and feedback As a result, monitoring and evaluation of ETSSP performance will be systematically carried out during the life of the strategy and at all levels and used to provide feedback, encourage innovation, team building, and ownership.

Key aspects will be setting up a **National and Regional Education Forums** to improve education dialogue; it will report on progress towards achieving results and a basis for changing/adjusting programme strategy. The national sector EMIS (SEMIS) will be improved and realigned to the needs of curriculum and assessment systems to enable improved quality and relevance in the education management information system in terms of unit records and school level records.

## 4.3 How do ETSSP Strategic Programmes Address the Education Pillars?

The strategic framework outlines clear linkages with the key **Education Pillars** (access and equity, quality and relevance, accountability and governance) and the goals for each of the sub-sector strategies and activities. Key strategic programme priorities addressed in each of the sub-sector programmes are shown in the Table below where the priorities are linked to a key education pillar.

**Table 2: Linking Strategic Programme areas with the Education Pillars**

| Education Pillars | Correspondence with ETSSP sector strategic programmes |
|---|---|
| **Access & Equity** | Developing and supporting an inclusive system of education enabling equitable access to quality and diversified education |
| | Improved Out of School (OSEC) opportunities |
| | Building of vertical and horizontal pathways across the different education sectors and levels |
| | Closer alignment between education and employment including the development of tertiary vocational education and training in response to labour market demand |
| **Quality & Relevance** | Developing a teacher education Continuing Professional Development (CPD) system |
| | Develop quality and relevant TVET programmes; |
| | Developing and supporting a system of early childhood and pre-primary education that encourages improved access and networking of public and private initiatives |
| | Increased and improved research outputs to relate better to the needs of the economy and society |
| | Developing information technology (ICT) in all levels of education |
| | Declaring development of human resources a national priority |
| | Developing and creating a life-long learning culture |
| | Review and develop new curriculum for improved learner outcomes |
| | Improving the quality of teaching and learning with learning outcomes addressing revised curriculum |
| | Creating a culture of teacher professionalism |
| | Revitalising vocational education and training (TVET) to improve utilisation and relevance of programmes to economic needs |
| | Ensuring and implementing health and safety standards for all education institutions |

| | |
|---|---|
| **Accountability & Governance** | Strengthening public-private partnerships throughout the sector |
| | To reorganize management of education at MoESD and organisation development structures |
| | Develop a functioning SEMIS for the education sector |
| | Developing school and institutional leadership programmes |
| | Improving the quality of tertiary education by ensuring quality control, application of international standards and a review of finance models |

## 4.4 How do ETSSP Strategic Priorities translate to Programmes?

## Six Sub-sector programmes:

1. **Early Childhood & Pre-Primary Education (ECE & PPE);**
2. **Primary Education (PE);**
3. **Secondary Education (SE);**
4. **Teacher Education and Professional Development (TEPD);**
5. **Tertiary Education (TE);**
6. **Technical Vocational and Education and Training (TVET).**

## Five Thematic programmes:

The thematic programmes focus on system level reforms deemed necessary to support the sub-sector programmes and implementation of the ETSSP set of policies and strategies.

1. **Lifelong Learning (LLL);**
2. **Information and Communications Technology (ICT);**
3. **Curriculum**
4. **Human Resource Development (HRD);**
5. **Education Management and Information System reform (EMIS);**

**Finance and Budget reforms (F) (this is dealt with in Chapter 8).**

**Table 3: Sub Sector Programme Alignment to National Priorities**

| | CRITICAL SECTOR STRATGEIC PRIORITIES | CORRESPONDING SUB-SECTOR PROGRAMMES | Ref: |
|---|---|---|---|
| 1 | Improving the Quality & Relevance | Flexible learning opportunities (pathways) | |
| | | Fostering Innovation and new knowledge creation | |
| | | Professionalism of teaching (introduction of teaching standards & competencies) | |
| | | Provision of adequate up-to-date learning resources | |
| | | Broadening use of ICT in teaching & | |

| | | | |
|---|---|---|---|
| | | learning | |
| | | Reforming decentralised provision | |
| 2 | Improving Equitable Access | Targeted school infrastructure programme | |
| | | Expanding Early childhood and pre-primary | |
| | | Alternative pathways | |
| | | Implementation of Inclusive Education Policy | |
| | | Increased awareness and participation of community | |
| | | Out-of-school initiatives | |
| | | Improved health and safety | |
| | | Improved Life-long Learning opportunities | |
| 3 | Improving Learning Outcomes | | |
| | | **Transforming and Modernising the Curriculum -competence** | |
| | | Transforming teaching & learning at all levels - emphasis on learning | |
| | | Improved assessment - introduce greater school-based assessment | |
| | | Improve & modernise PRESET and INSET | |
| | | Greater reliance on ICT for teaching & learning | |
| | | Improved leadership and management | |
| 4 | Focus on Life-long Learning | Recognition of prior learning & flexible pathways | |
| | | Upskilling returning to education | |
| | | Improved career guidance and counselling | |
| 5 | Strengthening Skills Development | Develop Skills Strategy & Framework | |
| | | Introduce work-place training; competency based training | |
| | | NCQF implementation | |
| | | | |
| 6 | Developing New & Alternative Pathways for Education | Early introduction & opportunities for vocational programmes | |
| | | Develop framework for diversity | |
| | | Introduction of Vocational curriculum at lower levels | |
| 7 | Improve Management of Education | Commitment to decentralised education - focus on regional and institutional service delivery | |
| | | Improved management and accountability | |
| | | Capacity building programmes | |
| 8 | Developing a Responsive Tertiary System | Redesign courses toward for 21st century | |
| | | Raise skills and knowledge base | |
| | | Produce high quality research | |
| | | Develop equitable finance model | |
| | | Improved quality assurance systems | |
| 9 | Improving Planning & Budgeting of | Set up department of Planning & | |

| | | | |
|---|---|---|---|
| | the Sector | Budgeting | |
| | | Greater use of ICT in management | |
| | | Capacity upgrade of managers | |
| | | Improved data management system | |
| 10 | Greater Utilisation and Integration of ICT | Improve access, integration and utility of ICT in institutions | |
| | | Modernise teaching and learning through e-Education | |
| | | Provision of high speed internet to all schools | |
| | | | |
| 11 | Improving Monitoring and Evaluation of the Sector | Strengthen role of M&E | |
| | | Targeted capacity building | |
| | | Improved | |
| | | Set up National and Regional Education Forums | |

# Cross-cutting Issues

Cross-cutting issues are extremely important for the ETSSP. They represent key areas of concern and are to be found in the NDP10, specifically the provision of access and equity of education and training for all. The reform strategies and programmes put forward by the ETSSP address key cross-cutting issues which link directly to the priorities, described above, and the ETSSP four pillars of **access, equity, quality and accountability**.

These cross-cutting issues are embedded in the ETSSP sub- sector programmes and activities. They provide a clear indication of action to be taken across all sub-sectors with quality and accountability highlighted to make them effective. The cross–cutting issues addressed in the ETSSP are:

- **Inclusion in education** in relation to access, participation and outcomes at all levels and in all institutions and applies to all disadvantaged groups;
- **Gender equity** in relation to traditional gender role perspectives and promoting gender equality in the ETSSP;
- **HIV and AIDS** in relation to how it impacts on teachers and learners lives within the school and wider community;
- **Decentralisation** in relation to the interventions aimed at regions, districts and institutions and how responsibilities are allocated
- **Lifelong Learning** in relation to the coordination and institutionalisation of a lifelong learning system across the sector

Students and teachers in rural and remote areas, people with disabilities, and young people in urban settlements are some of the most challenged in terms of inclusion and equity in education. The strategic priorities of **inclusiveness and equity** are threads that run through all the ETSSP sub-sector programmes and activities. This ensures that inclusivity and equity are institutionalised and infused at all levels and will also be embedded in the ETSSP's planned comprehensive HR policy. The ETSSP considers existing relevant MoESD policies important, specifically the Inclusive Education Policy of 2011, in developing these reforms.

The ETSSP reforms include activities, such as, making all facilities more accessible for people with disabilities; improving and strengthening hostel management to make hostels more child/ student – the creation of friendly, safe schools as well as improving pastoral care; issues of exclusion because of language are also tackled through activities advocating the use of mother tongue for the language of instruction and the introduction of multi-culturalism and bi-lingual education at pre-service and in-service levels.

The critical issue of **HIV and AIDS** is addressed in relation to giving more support to teachers and learners through activities, such as, capacity building programmes for teachers at both pre-service and in-service stages of a teacher's career. HIV and AIDS is also addressed as a component within the planned comprehensive HR policy. These activities link directly with the, 'Strategic Framework for HIV and AIDS 2011-2016'.

The ETSSP focuses strongly on **decentralisation** through developing systems to improve and strengthen MoESD policy. Reforming the decentralisation policy runs through all the ETSSP sub-sector programmes. Key activities include building capacity at regional, district and school-base levels, specifically in building human resource competences through the development of a competency-based framework. Leadership and management, research and evidence-based decision-making capacity building at these levels will be key in building up critical masses of quality 'change agents' who are knowledgeable, skilful and able to support others.

**Lifelong Learning** is being addressed across the sub-sectors for example, through the development of a Continuing Professional Development Framework for teaching staff which would link to career pathways, both vertical and horizontal; similarly, students will be offered more support in choosing their career pathways through quality life-skills development and a strengthening in careers guidance and counselling at secondary, TVET and Tertiary levels.

There needs to be recognition that gender aspects need to be incorporated into the sector planning and furthermore, that such interventions are invariably critical, or even a pre-requisite, for achieving gains through gender targeted interventions. This will need to be addressed in the future design of the overall sector strategy where promoting a greater use of targeted funding formulas should become part of the overall annual strategic planning and budgeting process.

The strategic programme framework outlines clear linkages with the key focus areas, expected outcomes and goals for each of the sub-sector strategies and activities. Estimates of the costs of each of the strategies have been drafted. The next section provides an outline of the key sub-sector priority programmes and strategic objectives. More details of the challenges and programmes are provided in Chapter 5.

# CHAPTER 5 STRATEGIC PROGRAMME FRAMEWORK

## INTRODUCTION

The critical sector and sub-sector Strategic Priorities were set out in the earlier Chapter 4. Each of the Strategic Priorities is addressed more specifically through **programme development.** For each of the programmes the Overall Goal has been identified, followed by the critical challenges and the several Strategic Goals and expected Outcomes or results. A matrix has also been developed that identifies **short-term, medium and long-term milestones** or targets. The targets will be converted into relevant indicators by which it will be determined whether these targets have been met and the corresponding activities carried out.

# 5.1 Early Childhood Care and Education and Pre-Primary Education (ECE & PPE)

Early Childhood Education in Botswana is mainly provided by the private sector, by charging fees, and non-government organisations (NGOs) that receive grants from the government. The Ministry of Education and Skills Development (MoESD) has recently taken steps to introduce pre-school education into the mainstream by introducing reception classes in public primary schools which have surplus classrooms. The programme is geared towards children between 4 to 5 years and is implemented for a one-year school calendar. It is expected that the programme will be gradually rolled out to all public primary schools. For 0 to 4 years, it is envisaged that Community Play-Based Groups (CBPs) will be established in partnership with community and voluntary groups. Given the importance of school readiness for all, it is critical to target maximum Early Childhood Education enrolment and increasing pre-primary schooling for younger children.

This intervention advocates for building on the substantilal current initiatives (supported very much by Parents Teacher Associations (PTA)). It seeks to achieve positive early childhood development outcomes and address concerns about individual children's development early to reduce and minimise the impact of risk factors before problems become entrenched. The challenge is to ensure increased and continued government commitment to the programme with the understanding that it is a smart investment that not only will achieve better learning, but also better life outcomes and greater social inclusion.

However, there is an urgent need to enhance access to pre-school education especially in economically disadvantaged and educationally deprived areas. This will require dedicated committed financing, high quality delivery models with increased community participation for example; through establishing more community-based playgroups and build their capacity for effective participation; improved operational structures; ensuring that ECCE and pre-primary programmes are SNE friendly; ensuring that schools are safe and friendly places for children. Teacher education programmes for early childhood teachers and carers will be developed through both pre-service and in-service training and offer SNE training to all teachers.

## Critical Priorities

Some of the key challenges faced by the ECCE are:

1. Increasing access to ECCE - Access to pre-school services is very limited, especially in remote areas. According to the 2011-Census, access to the ECCE programme stood at 21%.

2. Providing funding for ECCE - At present, the financial and human resources allocated to this important sub-sector are comparatively low in relation to the overall resourcing of the sector. The programme does not have a dedicated budget, instead it is getting funded through the Primary Education sub-sector. A strong political and social commitment to investing in early childhood development is needed.
3. Revitalizing ECCE policy– in alignment with recent education reforms and policies including the Children´s Act (on issues of security, protection, health, etc.)
4. Rolling out 'Reception Programmes' to all public primary schools – The demand for additional space in primary schools shall pose a challenge in the roll out of the programme.
5. Establishing and strengthening 'Pre-school Development Committee' in all Regions – the operation, coordination and development of the programme will be managed more easily with all government structures and stakeholders involved from the district and regional levels.
6. Establishing Community Based Playgroups (CBPs) – to ensure access for all CBPs will be established as a non-formal approach to early years of education.
7. Professional development of pre-school educators – Teacher training and professional development needs to be outcomes-based or in line with national teacher training and curricula reforms. New PRESET and INSET modules for ECCE need to be developed.
8. Establishing outcomes-based curricula and assessment – the development of young children does not necessarily require subject based curricula because, at this stage, the focus should be on skills development to enable children to play and socialize with others.
9. Available relevant data – there is a need for systematic and up to date statistical data.
10. Relevant and up-to-date resources: Classrooms need ICT equipment, which offers teachers and children educational tools and resources, which extend their learning environment and experiences.

## Overall Goal/Objective/Outcomes

The overall goal is:

> **'To iprovide inclusive and equitable access for all children to quality ECE and pre-primary programmes, with dedicated committed financing, varied delivery models with community participation and improved operational structures'.**

It is foreseen that all children of age 5-6 be included in pre-primary education in the long-term and that all children of age 0-5 be included in various forms of pre-school education. Mainstreaming gender in the creation of opportunities in pre-school education will apply and where resources exist, we will achieve this by creating sufficient places in pre-school public and private institutions. At the same time, parents and communities will need to be made aware of the importance of education in early childhood, through continued campaigns, seminars, trainings, and other activities. The responsibility of MoESD and regions will be to establish solid grounds for managing this programme.

# Key Programmes

| **Programme 1: REVITALIZED POLICY ON EARLY CHILDHOOD CARE & EDUCATION (ECCE)**<br>**Overall Goal:** To review and develop a comprehensive policy framework on ECCE for increased access, equity and quality ECCE programme | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. A defined holistic and integrated ECCE policy and strategy framework in line with overall sector policy.<br>2. Increased access to ECCE programmes | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. ECCE Unit established to coordinate policy and programme delivery<br>2. Budget for ECCE programme in place<br>3. Review ECCE policy, develop implementation guidelines and develop capacity for implementation<br>4. Developed standards in the delivery of quality services<br>5. A database on ECCE established to support the early childhood development strategy at central and regional offices | 6. 50% implementation of ECCE programmes and action plans in all of Regions by the end of 2018<br>7. Monitoring and evaluation to inform progress on implementation of the policy and action plan | 8. High quality ECCE programmes established in all Regions in the country<br>9. Impact of ECCE programmes on quality of outputs at primary school established |
| **ACTIVITIES** | | |
| 1. Review and develop updated inclusive Early Childhood Care & Education (ECCE) policy<br>2. review a coordination unit established in the MoESD to review and integrate inclusive ECCE policy framework and standards<br>3. Strengthen capacity for national and regional operations for policy coordination and implementation.<br>4. Establish partnership and policy dialogue among different stakeholders to build synergies in support to provision and quality of ECCE programmes, technically and financially.<br>5. Develop capacity building of the national and regional structures and local partners to conduct assessment of children´s needs, community assets and stakeholders priorities that in turn inform policies, programmes, action plans and standards.<br>6. Develop programmes that allow stakeholders to participate in the provision of ECCE programmes for various types of socio-economic and geographical conditions of children.<br>7. Establish and aligns databases both central and regional offices and with MLGRD.<br>8. Develop a system for knowledge sharing on ECCE innovations.<br>9. Phase-out standard 1 orientation in public schools by 2018 | | |

| **Programme 2: AN INTER-SECTORIAL PARTNERSHIP FRAMEWORK FOR THE DELIVERY OF ECCE SERVICES**<br>**Overall Goal: To develop inter-sectoral framework for the development of ECCE** | | |
|---|---|---|
| **OUTCOMES** | | |
| **1.** Intergrated delivery of ECCE programme and services | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |

| | | |
|---|---|---|
| 1. National and regional coordination structures established<br>2. Capacity built for all national and regional ECCE coordinating structures with participation of all sectors, NGOs and other groups<br>3. Partnership established among different stakeholders in support to the provision and quality of ECCE programmes<br>**4.** National Consultative forum on ECCE established | 5. Inter-sectoral partnerships functional in all the regions<br>6. Quality improvement of inter-sectoral coordination set up.<br>7. National Consultative Forum on ECCE held | 8. National Consultative Forum on ECCE held |
| **ACTIVITIES** | | |
| 1. Develop guidelines and terms of references for the operation of pre-school coordination structures at the regional level, including a monitoring tool.<br>2. Establish regional pre-school development committees with representatives of all sectors, NGOs, other groups in the region dealing with issues of children development and learning.<br>3. Develop capacity building of regional committees.<br>4. Support initiatives at the regional level for increased access and quality in the delivery of ECCE.<br>5. Conduct National Consultative Forum | | |

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| **Programme 3: ROLLOUT OF PRE-PRIMARY EDUCATION PROGRAMME IN PUBLIC PRIMARY SCHOOLS**<br>**Overall Goal:** To expand ECCE opportunities for all eligible children for school readiness for holistic development | | |
| **OUTCOMES** | | |
| 1. Expanded pre-primary education in all public schools<br>2. Learners prepared for primary education<br>3. Attainment of irreversible literacy and numeracy, lifelong learning and increase retention and completion rates in all public primary school | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. A roll out programmes developed for Pre Primary classes in all public schools in Botswana<br>2. Buildings, learning materials, teaching and learning and feeding standards of the reception programme established<br>3. Develop and implement high quality teacher training programmes for teachers and carers<br>4. ECE teachers & Teacher Aides supplied for all participating schools<br>5. 50% national coverage of reception classes implemented across all Regions by the end of 2016<br>6. Alternative facilities for expanded access to reception classes through partnerships available in all regions<br>7. Finalized Monitoring and | 8. 100% national coverage in reception classes by the end of 2018<br>9. Monitoring and evaluation to inform programme progress in place<br>10. 100% ECCE Teachers trained<br>11. Model quality reception school for best practice set up<br>12. Regional and school administration structures strengthened. | 13. Pre-primary education institutionalised and an integral part of the education system<br>14. Monitoring and evaluation to inform programme progress in place<br>15. Std. 1orientation programme phased out |

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| Evaluation strategies and tools | | |

**ACTIVITIES**

1. Provide facilities for classrooms for the reception class
2. Build partnerships with other providers for increasing facilities for expanded access e.g. churches; underutilised day are structures and private sector and NGO preschool
3. Training and supply of ECCE teachers and teacher aides for all participating schools
4. Provision of structures for the pre-primary programme.
5. Provision of learning materials for expansion of the pre-primary programme
6. Provision of feeding programme for expansion of the pre-primary programme
7. Develop M&E strategies and tools.

**Programme 4: EXPANSION AND IMPROVEMENT OF NURSERY SCHOOLS AND COMMUNITY BASED PLAYGROUPS (CBP)**
**Overall Goal: To improve access to Early Childhood Care and Education (ECCE)**

**OUTCOMES**

1. Improved access to ECCE through CBP in partnership with private sector, community and voluntary groups
2. Improved life changes for children in remote and hard to reach areas for early learning.
3. Mobilized community and voluntary groups in support to CBP implementation

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. Developed community play group model and an age-appropriate learner framework<br>2. Developed guidelines for the operation and management of the expanded ECCE programme<br>3. An integrated framework for nursery programme implementation and management in partnership with stakeholders<br>4. Pilot for improved access to nursery day care centre programmes in 10% of far to reach communities | 5. Increased access to nursery day care centre programmes by 50% in all regions<br>6. A parenting training package developed<br>7. Partnership with community and voluntary groups established<br>8. Monitoring and Evaluation to inform programme progress | 9. Comprehensive ECCE programmes implemented in all regions by the end of 2020<br>10. High quality CBP programmes and plans established in all communities in the country<br>11. Monitoring and evaluation to inform programme progress in place on an on-going basis |

**ACTIVITIES**

1. Set up structures and systems for the organization, management and access to early childhood programmes.
2. Implement a pilot for roll out of day care centres in hard to reach communities
3. Develop guidelines and standards for implementation and management of the nursery programme and the community play groups.
4. Develop strategy/model of partnership for service programme delivery
5. Undertake capacity building in the implementation of the CBP
6. Develop a parenting training package
7. Develop Monitoring and Evaluation of CBP

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| 8. Roll out the CBP programme to districts and regions |

| **Programme 5: ALTERNATIVE MODES OF FINANCIAL SUPPORT TO EARLY CHILD EDUCATION**<br>**Overall Goal:** To ensure financial resources to support child development | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. Improved access to early childhood care and education through financial support<br>2. Improved partnerships in the delivery of ECCE services | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Develop a framework for financial support to ECCE and strategies for mobilization of resources (external and/or local)<br>2. Develop funding proposal for increasing access to ECCE services for vulnerable groups<br>3. Implement unit costing financial models in all ECCE programmes to support vulnerable groups | 4. Monitor access levels for target groups<br>5. Monitor partnership investment and support for ECCE | 6. Monitor implementation and evaluate impact |
| **ACTIVITIES** | | |
| 1. Carry out consultation of the framework and strategies<br>2. Pilot the selected financial model<br>3. build capacity of implementing<br>4. Implementation of the financial model | | |

| **Programme 6: STRENGTHEN COORDINATION NETWORK TO SUPPORT CHILD SECURITY, DEVELOPMENT AND EARLY LEARNING**<br>**Overall Goal:** To support child security, protection, development and early learning | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. Strengthened parent and community understanding of the importance of ECCE<br>2. Improved coordination between government and non-government agencies on issues related to child protection, security, development and early learning. | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Health and Safety policy and guidelines on child protection, security, development and early learning in place<br>2. Guidelines for registration and licensing of 10% ECCE facilities certified as practitioners in the care and teaching of young children developed | 3. Guidelines for registration and licensing of 50% ECCE facilities certified as practitioners in the care and teaching of young children developed | 4. Registration and licensing of 100% of ECCE facilities certified as practitioners in the care and teaching of young children, in place by 2020 |
| **ACTIVITIES** | | |
| 1. Strengthening the pre-school inter-sectoral committee on issues of security in facilities for children<br>2. Establish guidelines for registration and licensing of practitioners in the care and teaching of young | | |

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| children based on the ECCE revised policy and Children´s Act of 2009<br>3. Train the pre-school inter-sectoral committee on issues of security and safety of children in early learning and care facilities<br>4. Develop a communication strategy on the care and security of children in early learning and care facilities |

| **Programme 7: DEVELOPMENT OF E-LEARNING FOR ECCE**<br>**Overall Goal:** To improve teaching and learning through e-learning | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. A defined e-learning strategy for ECCE | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. E-learning established as a standard learning methodology<br>2. E-learning curriculum and assessment framework established<br>3. Capacity built for teachers and other education staff to promote e-learning<br>4. Partnership with different stakeholders established in support to e-learning programmes including provision of multimedia learning equipment to equip pre schools<br>5. E-learning programme implemented in least 100 schools | 6. E-learning programme implemented in all schools by 2018 | 7. High quality e-learning programmes and equipment set up in all schools<br>8. Monitoring and evaluate to inform progress and impact of the programme |
| **ACTIVITIES** | | |
| 1. Develop an e-learning policy for pre-primary schools<br>2. Implement e-learning as a standard learning methodology beginning in teacher training institutions.<br>3. Carry out training of teachers and other education staff to promote e-learning.<br>4. Strengthen public-private partnerships in the development and support to e-learning programmes,<br>5. Provide multi-media learning equipment to equip schools.<br>6. Develop and implement programme monitoring and evaluation. | | |

# Cross-cutting Issues and Linkages

There is a need to harmonize the implementation of curriculum and assessment competency based approach across all the sub-sectors of the educational system; in alignment with the standards established by the future Teaching Council of Botswana, Botswana Qualification Authorities (BQA) and by the Botswana Examination Council (BEC). Other key issues that have been identified in these ECCE programmes and which respond to ETSSP cross-cutting themes are:

**Gender:** Analysis and inclusion of gender in all capacity-building activities in the central and regional education directorates.

**Governance and Decentralization:** Analysis and inclusion of the governance and decentralization of education services themes in all capacity-building activities in the central and regional education directorates.
**Inclusive Education:** Analysis and inclusion of the Inclusive Education policy in capacity-building activities in the central and regional education directorates.

# 5.2 PRIMARY EDUCATION (PE)

Primary school in Botswana is for a 7 year period for children aged 6 to 12 (although children up to 10 are allowed to start Primary school, especially for marginalized communities), ending with the Primary School Leaving Examination certificate (PSLE). The total number of Primary schools in the country was 817 (2013), of which 754 (92.3%) were government owned and 62 (7.7%) were privately owned.[43] Primary school is divided into Lower Primary (Standards 1 to 4) and Upper Primary (Standards 5 to 7).

The sub-sector will ensure all children gain the basic knowledge and skills (literacy, numeracy, information and communication technology and life skills) and develop the attitudes and values for continuing lifelong learning. The strategic intent is to upgrade and expand the 'two teacher schools into multi-grade classes to enable them to cover the whole of lower primary education from pre-primary to standard 4 for remote children.

To increase access to remote areas mobile schools will be put in place to mitigate distance school as a barrier to education. A **Retention Strategy** to mitigate against drop-out at primary levels will be put in place, which will include **making schools safe places** to be and the essential upgrading of school hostels. Improving opportunities through **Out-of-School** approaches will be improved.

## Critical Challenges

Some of the key challenges faced by Primary Education are as follows:

1. Disparities between rural and urban schools in terms of quality education and learner performance, particularly children from poorer and more remote rural areas, and children with special needs;
2. Of those that do enter primary school level around 10% drop out before the completion of the Primary Education cycle. Again, this level is more pronounced in remote rural Primary schools, amongst learners from poorer social backgrounds, and in Primary schools enrolling ethnic minorities;
3. In urban areas and major villages, there is a shortage of classrooms leading to congestion and high teacher pupil ratios;
4. Maintenance of school facilities including hostels is very poor and non-existent in some institutions;
5. Young pupils walk long distances to school, arriving late, tired and hungry;
6. Out of the 754 Primary schools, 93 do not have electricity;
7. Poor teaching and curriculum delivery in remote areas;
8. Young pupils are not adjusting well to hostel environments hence the high dropout;
9. There are inadequate facilities and equipment for learners with special educational needs;
10. Delivery of IT based education is constrained by lack of ICT facilities (Botswana´s National ICT Policy, 2014);

[43] MoESD (2014) Ministerial Briefing Report (HE) February 2014. Gaborone: Botswana Government

11. Significant numbers (estimated 40,000) of OSEC need focused attention to re-enter school or gain basic education and skills through non-formal education. There is a gap in the Botswana Primary Education system to serve these children;
12. The quality of OSEC will be limited by the current structure for remunerating the OSEC educators, which is on a contract basis (i.e. non-pensionable, no access to training, no progression and no job security). Experience suggests this will lead to low quality educators and low retention rates. Reform of the OSEC educators' pay and conditions of services and ensuring they can access quality training, reward packages and career progression will be essential to promote the quality of the OSEC programme;
13. Educational quality in core subjects such as English, Mathematics, Science and Agriculture have been falling, and significant disparities in learner performance persist, again apparently correlated with the geographic and socio-economic background of the learners;
14. Mother tongue instruction has not yet been adequately addressed and the need to revise the language policy (which states that English and Setswana are the official languages of instruction).

## Overall Goal

The overall goals are:

> **'To provide an inclusive, equitable and accessible quality Primary Education for all children; to focus on promoting access, quality and equity for the marginalized and vulnerable groups, including children with special education needs and to ensure all children gain the basic knowledge and skills and develop the attitudes and values for continuing lifelong learning.'**

## Summary of Key Programmes

**Key Programmes**

| | |
|---|---|
| PE 1 | Increased equitable access to quality basic education for all |
| PE 2 | Provision of Compulsory Remediation Programme (CRP) for Standards 1 to 7 |
| PE 3 | Improved learner retention in the public primary school system |
| PE 4 | Improved Provision of School Facilities and Maintenance |
| PE 5 | Improved Out of School Education for Children (OSEC) |
| PE 6 | Improved teaching and learning for higher achievement in Reading, Mathematics and Science in Primary Education |
| PE 7 | Improved School Planning, Leadership and Management Development |
| PE 8 | Increased access to information and to improve teaching and learning through e-learning |
| | Build Partnership and Network for improved access to quality education and |

| **Programme 1: EQUITABLE ACCESS TO PRIMARY EDUCATION FOR ALL CHILDREN**<br>**Overall Goal:** Provide equitable access to primary education for ALL children | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. Alternative means of providing school access caused by geographical disparities have been identified and recommended for implementation"<br>2. Equitable access of the disabled; Disadvantaged-Vulnerable-Children (DVCs) and minorities to be integrated in the school system | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Map of all school sites identifying location, geographic disparities and school infrastructure | 5. 95% access attained nationally and 75% retention of vulnerable groups. | 9. 95% equitable education provision in all |

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|---|---|---|
| concluded at the Regional level.<br>2. Upgrade two teacher schools to cover lower primary for increased access of vulnerable groups<br>3. Established alternative means for increasing access and retention to primary schools (Mobiles schools etc.)<br>4. Completed base-line study on learners with special needs education, DVCs, and minorities to be integrated in the school system | 6. 50% access for access for leaners with special needs.<br>7. Child-Friendly School (CFSs) practices mainstreamed into the routines of the school (in relation to health, security, hygiene, safety, protection, other).<br>8. By 2017 'student tracer studies' established in all schools | schools.<br>10. 50% access for leaners with special needs and vulnerable groups attained. |
| **ACTIVITIES** | | |
| 1. Undertake a review of geographical disparities and other factors hindering access and retention, with recommendations<br>2. Develop an Action Plan on alternatives means in the provision of primary education caused by geographical disparities with particular interventions targeted to disadvantaged children and youth in remote areas and alleviate the disparities identified.<br>3. Mobilize the strengths and services of all NGOs and other stakeholders in order to supplement governmental organizations which may not reach all the target community<br>4. Carry out community campaigns on *Education for All*, urging people to ensure that all school-going age children are enrolled and retained in schools<br>5. Base-line study on learners with special needs education, Disadvantaged-Vulnerable-Children (DVCs) and minorities to be integrated in the school system<br>6. Develop guidelines on inclusive education policy that provides for the integration of learners with special needs, DVCs and minorities<br>7. Develop a strategy for global partnership to ensure access to education for all children.<br>8. Compulsory registration using birth certificates for ease of reference in tracer studies | | |

| **Programme 2: COMPULSORY REMEDIATION PROGRAMME (CRP) FOR STANDARDS 1 TO 7**<br>**Overall Goal*:*** To reduce under performance of learners at PSLE and increase the number of children who attain irreversible literacy and numeracy | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. Improved quality of education through addressing shortcomings in the attainment of irreversible literacy and numeracy as identified in the Standard 1 attainment test<br>2. Improved school attendance and retention | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. institutionalised remediation in line with revised strategy and guidelines<br>2. Establish coaching clinics and learning camps in all schools<br>3. Capacity built for public primary school teachers in remediation methods and techniques | 7. Monitor and evaluate the impact of remediation<br>8. Roll out special classes for learners with extreme learning difficulties in every region (40 | 9. Rollout special classes for leaners with learning difficulties to 25% of the schools nationally<br>10. Impact analysis on leaner achievement |

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| 4. A differentiated curriculum for learners with diverse needs defined<br>5. Compulsory remediation programme implemented in every region<br>6. Phased implementation of special classes for learners with extreme learning difficulties (at least 20 schools) | schools) | |

**ACTIVITIES**

1. Identify and redeploy one remediation programme officer per region. (HR)
2. Develop remediation guidelines.
3. Train public Primary school teachers in remediation methods and techniques.
4. Develop differentiated curriculum for learners with diverse needs.
5. Develop tools to identify children with special educational needs.
6. Develop teaching and learning materials for compulsory remediation programme.
7. Implement compulsory remediation programme in every region.
8. Carry out advocacy campaign for compulsory remediation programme.
9. Develop monitoring and evaluation system strategies and tools.
10. Develop inspection and supervision strategies and tools.
11. Review remediation program based on an analysis of the percentage of students meeting their remediation goals.
12. Develop training on action-research on the causes of declining performance.
13. Introduce action research for teachers.

**Programme 3: IMPROVE LEARNER RETENTION IN THE PUBLIC PRIMARY SCHOOL SYSTEM**
**Overall Goal: To improve learner attendance and retention in primary schools**

**OUTCOMES**

1. An improved retention of vulnerable children in school
2. Reduced the vulnerability of children including food insecurity and its impact on learning

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. Base-line study on factors hindering attendance and retention in remote areas developed and mapping of children in remote areas carried out<br>2. Develop strategies and incentives for retention of RAC children<br>3. Standards for mobile teaching developed in collaboration with BQA guidelines<br>4. Primary school Hostel Dropout prevention programme developed and implemented for all RAC | 7. Multi-grade schools to improve access introduced in remote areas<br>8. Primary school hostel dropout prevention programme implemented in all Regions<br>9. Implementation of the Hostel Dropout prevention programme in all Regions that address learners outside the system from remote areas | 10. Monitoring and evaluation for impact on RAC learner retention |

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|---|---|---|
| 5. Strategy for partnership between parents and caregivers and the schools in place<br>6. Effective coordination of the national school feeding programme in place | | |
| **ACTIVITIES** | | |
| 1. Base-line study on the extent of the factors hindering attendance and retention in remote and dispersed areas and mapping number of children in remote areas<br>2. Carry out a stakeholder forum for the RACs to present the results of several studies on hostel management and retention issues<br>3. Develop policy guidelines on retention including hostel and school feeding programme management.<br>4. Multi-grade schools introduced in remote areas to improve access<br>5. Establish a mechanism for parents, students and the care-givers engagement.<br>6. Needs assessment on the number of mobile schools and equipment required in remote places<br>7. Develop standards for mobile teaching in collaboration with TC and BQA guidelines<br>8. Develop curriculum and teaching/learning materials sensitive to cultural factors<br>9. Mobilize communities to support the programme | | |

| **Programme 4: IMPROVED PROVISION OF SCHOOL FACILITIES AND MAINTENANCE**<br>**Overall Goal: To strength coordination and collaboration between the Ministry of Local Government and Rural Development and MoESD for improve the quantity and quality of primary schools facilities** | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. Improved provision of school facilities and maintenance through effective inter-sectoral coordination and collaboration between the Ministry of Local Government and MoESD. | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Coordination mechanisms and procedures for maintenance between the MoLGRD and MoESD reviewed<br>2. National guidelines for school maintenance elaborated in accordance to established standards<br>3. Develop and implement plans for construction and renovation/replacement of school facilities in accordance to established standards in order to meet the teaching and learning needs. | 4. 75% school facilities upgraded to approved standards, including addressing inclusive education requirements<br>5. Regional offices coordination of maintenance of school infrastructure by regional office strengthened.<br>6. Communities participation in support to construction and renovation of facilities evident in all regions | 7. 100%School facilities upgraded to approved standards, including addressing inclusive education requirements |
| **ACTIVITIES** | | |
| 1. Review coordination mechanisms and procedures between the MoLGRD and MoESD<br>2. Regional offices are to undertake inventories of renovation or replacement of existing facilities<br>3. Regional offices are to elaborate plans for construction and renovation/replacement of school | | |

facilities and submit to MoLGRD and MoESD
4. Elaborate national guidelines for school maintenance in accordance to established standards
5. School to maintain all facilities in line with the plans
6. Develop operational manuals on maintenance and service standards for hostels
7. Monitoring the maintenance of school infrastructure
8. Mobilize communities and other stakeholders in support to construction and renovation of facilities

**Programme 5: OUT OF SCHOOL EDUCATION FOR CHILDREN (OSEC)**
**Overall Goal: To provide out of school educational services to ensure that educationally excluded children - in-school children who are at risk of dropping out and children not in school – can successfully complete basic education**

**OUTCOMES**

1. Increased access to quality basic education through OSEC to children with disabilities (including learning difficulties, health issues and HIV-AIDS etc.)
2. Improved life chances for marginalized communities through high quality basic education and high value certification as a result of OSEC programme
3. Community and stakeholders mobilized to support OSEC
4. Cultural and ethnic minorities represented in OSEC as a result of teaching and learning materials sensitive to cultural and contextual factors

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. A defined integrated OSEC policy, strategy, curriculum and framework on access in line with overall sector policy in consultation with stakeholders and communities<br>2. Curriculum and assessment reviewed to be aligned to cultural and contextual factors<br>3. Develop integrated and inclusive learning support model.<br>4. Develop teaching and learning materials<br>5. Teachers at Training colleges and supervisors trained to deliver training packages<br>6. Launched OSEC in a few selected regions<br>**7.** Mobilization of resources for scaling up. | 8. High quality OSEC programme implemented in all Regions by the end of 2018<br>9. Assessment and commissioning of additional technology to support OSEC (e.g. Mobile schools, portable ICT) carried out | 10. Multi-professional model to support OSEC in place |

**ACTIVITIES**

1. Undertake mapping of all stakeholder in support of OSEC (on-going)
2. Test OSEC strategy (Policy, Curriculum, learner support, program delivery, assessment) in 25 communities
3. Finalize and approve OSEC policy (learner support model and standards responsive to different children's group´s needs)
4. Finalize Curriculum Blueprint and teaching and learning materials sensitive. (CDE)
5. Finalize assessment framework and tools. (CDE)
6. Finalize M&E and inspection tools and strategies.
7. Draft, test and finalize training packages

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| 8. Capacitate training colleges to deliver OSEC training<br>9. Colleges train OSEC trainers and supervisors - on-going basis.(T&D)<br>10. Implement OSEC programmes in all Regions<br>11. Implement monitoring and evaluation to inform programme progress.(DEPRS)<br>**12.** Implement multi-professional model with partners (health, social worker, schools, etc.) to support OSEC |

| **Programme 6: IMPROVED ACHIEVEMENT LEVELS IN READING, MATHEMATICS AND SCIENCE IN PRIMARY EDUCATION**<br>**Overall Goal: To improve students' performance in Reading, Mathematics and Science in Primary Education** | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. Improved student performance in literacy, numeracy | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Teaching and learning standards for numeracy and literacy established<br>2. Improved In-Service teacher training (INSET) in Reading, Mathematics and Science instruction, coaching and assessments<br>3. 20% of schools introduce specialized reading, maths and science classes<br>4. Developed school-based management assessment and monitoring tools<br>5. Developed In-service school heads training/coaching model and supervision for school heads | 6. 60% of schools introduce specialized reading, maths and science classes,<br>7. 60% of all school heads and management trained on quality assessment and quality assurance | 8. All school heads and management trained on quality assessment and quality assurance,<br>9. All Schools have established specialized reading , maths and science classes |
| **ACTIVITIES** | | |
| 1. Develop and implement standards for school development and academic performance<br>2. Develop and implement continuous in-service teacher training and professional development in Reading, Mathematics and Science<br>3. Develop and implemented tools and procedures for assessment in the classroom<br>4. Develop and implement school-based management assessment and monitoring tools<br>5. Develop a coaching model for professional support to teachers and school heads and TOT of school director coaches<br>6. Train School Heads and Pedagogical staff in each school to serve as a coach for reading, mathematics, and science in line with the INSET policies, frameworks and guidelines<br>7. Develop guidelines for textbook procurement and management<br>8. Develop teaching and learning aids with local experts based on stakeholders inputs<br>9. Develop and implement instruments/procedures for controlling time on task (instructional time)<br>10. Carry out Regional visits for monitoring all schools and review practices in relation to established standards in line with the INSET policies, frameworks and guidelines<br>11. Organize a Regional Steering Committee (RSC) for coordination between different education structures for planning, implementation, management and monitoring of RMS activities. | | |

12. Develop a strategy for parents to support children academic performance
13. Carry out action-research

**Programme 7: IMPROVED SCHOOL PLANNING, LEADERSHIP AND MANAGEMENT**
**Overall Goal: To equip head teachers and other managers with knowledge, skills and attitude needed to improve performance management and positively impact quality of education**

**OUTCOMES**

1. Improved school planning, management and governance.
2. Schools are efficient and effective in improving school performance.
3. Improved participation of and communication with community.

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. School improvement planning and management introduced.<br>2. 50% school heads and managers trained to a professional level in leadership, planning and management (including maintenance of infrastructure).<br>3. Governance structures established for School Directors and Parent-Teacher Association (PTA) and Student councils.<br>4. Resources in support of school development (infrastructure, maintenance, etc.) available for 5year plan period.<br>5. Annual Forum on school leadership and management | 6. 100% capacity built of school heads and other managers to a professional level of leadership, planning and management<br>7. School Improvement Plans (SDP) monitored and evaluated to inform school performance improvement<br>8. Annual Forum on school leadership and management | 9. All school heads and managers trained to a professional level in leadership, planning and management.<br>10. All schools share best practices of school planning, leadership and management.<br>11. Annual Forum on school leadership and management |

**ACTIVITIES**

1. Develop guidelines for school improvement in school management.
2. Develop training of managers to a professional level of leadership, planning and management.
3. Develop training of managers on inclusive education policy and its application in the leadership and management of the school.
4. Develop a mechanism that encourages communication between the school managers and Parent-Teacher Association (PTA) the school managers and Student Council.
5. Mobilize resources in support to school development (infrastructure, maintenance and academic performance).
6. Develop best practices of leadership and management and share among schools.
7. Develop a coaching system for supporting continuing professional development of school heads and other managers.
8. Annual Forum on school leadership and management.

**Programme 8: INSTITUTIONALISED E-LEARNING**
**Overall Goal: To increase access to information and to improve teaching and learning**

| **through e-learning** | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. E-learning standards, strategy, curriculum and framework defined in line with overall sub-sector policy | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. E-learning established as a standard learning methodology<br>2. E-learning curriculum and assessment framework established<br>3. Capacity built of teachers and other education staff to promote e-learning<br>4. Partnership with different stakeholders established in support to e-learning programmes including provision of multimedia learning equipment to equip schools<br>5. E-learning programme implemented in least 25% schools | 6. E-learning programme implemented in all of schools by 2018 | 7. High quality e-learning programmes and equipment set up in all schools<br>9. All learners have 100% access to e-learning<br>10. Monitoring and evaluate impact to inform programme progress |
| **ACTIVITIES** | | |
| 1. A e-learning standards developed for primary schools (if not all education sub-sectors)<br>2. Implement e-learning as a standard learning methodology beginning in teacher training institutions.<br>3. Carry out curriculum and assessment framework development.<br>4. Carry out training of teachers and other education staff to promote e-learning.<br>5. Strengthen public-private partnerships in the development and support to e-learning programmes,<br>6. Provision of multi-media learning equipment to equip schools.<br>7. Implement monitoring and evaluation to inform programme progress. | | |

| **Programme 9: IMPROVED ACCESS THROUGH PARTNERSHIP AND NETWORKING**<br>**Overall Goal: Strengthened and expanded partnerships and network between the government and non-governmental organization to contribute to primary education access, school development and performance.** | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. Increased participation towards school development and performance.<br>2. Greater interface between organizations and public schools<br>3. Greater interface and participation of PTAs and public schools for development and performance | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |

| | | |
|---|---|---|
| 1. A framework and guidelines for partnership and participation to support school development developed<br>2. Stakeholders mobilized resources in support of school development (in terms of infrastructure, maintenance, etc.)<br>3. Annual Forum of PTAs established | 4. Rolling out a partnership and participation framework in all of schools to support access to quality primary education<br>5. PTAs actively participated in school development<br>6. Dissemination of adopt a school best practice in 70%l regions<br>7. Annual forum of PTAs carried out at regional and national levels. | 8. Dissemination of adopt a school best practice in all regions<br>9. Annual forum of PTAs on-going |
| **ACTIVITIES** | | |
| 1. Develop a framework and guidelines for Non-governmental organization´s participation, including the corporate sector, in school development<br>2. Train non-governmental organization on school planning, development, management and evaluation<br>3. Mobilize resources from the non-governmental organizations to equip schools with resources (equipment, instructional materials, infrastructure, others)<br>4. Promote participation of PTAs in school development and performance<br>5. Carry out campaigns and messages on “Adopt Schools” initiative<br>6. Expand the “Adopt School” initiative<br>7. Carry out annual forum on the “Adopt School” initiative | | |

| **Programme 10: STUDENT LEADERSHIP**<br>**Overall Goal: To strength student-based council structure and processes for student’s participation on their own development and well-being** | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. Developed structures and processes for children/youth participation in planning, implementation and decision-making on issues that affect their lives. | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Revised policy and guidelines on Student leadership and governance implemented in all schools<br>2. Capacity developed for the Student Council | 3. Developed best practices of Student Council governance and leadership shared with other schools | 4. High quality student council body set up in all primary schools<br>5. Shared best practices of student council on an on-going basis |
| **ACTIVITIES** | | |
| 1. Carry out consultation on School Council (SC) guidelines with students including issues on inclusive education policy and UNICEF´s Child-friendly school guidelines.<br>2. Develop SC guidelines.<br>3. Develop a training package for strengthening SC leadership. (T&D)<br>4. Carry out capacity building of SC (on-going). (T&D)<br>5. Strengthen links between Student Council and Parent-Teacher Association (PTA)<br>6. Develop best practices of Student Council governance and leadership and share with other schools.<br>7. Organize with Student Council “Annual Subject Fairs”. | | |

| **Programme 11: IMPROVED SECURITY AND SAFETY OF CHILDREN IN PRIMARY SCHOOLS**<br>**Overall Goal: To ensure child and youth security and safety** | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. A safe and secure learning environment | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. National policy and guidelines on school security and safety developed and approved<br>2. Developed a regional strategy and action plan on school security and safety<br>3. Developed school security and safety norms and plans at each primary school<br>4. Developed a communication strategy and campaign on the security of children and of care facilities.<br>5. Security installation and structures strengthened in 10% of schools<br>6. 50% School staff trained on issues of security and safety of children | 7. Security installations and structures strengthened in 50% of schools<br>8. 50% School staff trained on issues of security and safety of children | 9. Security installations and structures strengthened in all schools.<br>10. 100% School staff trained on issues of security and safety of children |
| **ACTIVITIES** | | |
| 1. Establish a school security and safety inter-sectoral community at each school with members of the community (police, social department, health, Bogosi, civic society, family etc.).<br>2. Develop and establish a national policy and guidelines on school security and safety.<br>3. Develop school security and safety norms and plans with the security inter-sectoral committee.<br>4. Train the school security inter-sectoral committee and of Regional staff on issues of prevention and intervention strategies that meet school safety needs.<br>5. Train school staff on issues of security and safety of children.<br>6. Conduct annual risks audits and assessment for school safety and security.<br>7. Develop a communication campaign on the security of children and of care facilities.<br>8. Carry out Annual Forum on School Security and Safety at the Regional level. | | |

## Cross-cutting Issues and Linkages

UNICEF and Basic Education Department of the MoESD are working together to develop a national outcomes-based curriculum and training programme, for OSEC. There is a need to harmonize the implementation of this pedagogical approach across all the sub-sectors of the educational system; and in relation to the standards established by the future Teaching Council of Botswana, the Botswana Qualification Authorities (BQA) and the outcome-based assessment by the Botswana Examination Council (BEC).

# 5.3 SECONDARY EDUCATION (SE)

Qualitative improvements in secondary Education are highly needed. The strategy identifies the need for increased effectiveness and relevance in the outcomes of learning, especially in

developing higher order skills in mathematics, science and languages. Increasingly, the importance of developing abilities and skills in addition to knowledge in secondary education are critical. This is both for the benefit of the learners themselves, as well as for the development of a vibrant society and a competitive economy. The plan will improve learning environments in general and also ensure that the security and health of students in schools is given due importance.

Secondary education will develop greater correspondence between the curriculum that is being taught and the assessment that measures the results of teaching this curriculum. An appropriate form of a competency curriculum will be developed in line with the new goals of education. Assessment must also be adapted to the requirements of the revised curriculum.

## Critical Challenges

A move towards alternative methods of assessment has to be explored to meet the need of a curriculum that aims at learning outcomes that represent knowledge, skills and attitudes. . There is a need to recognise pre-vocational education specifically and better align secondary education in general with Botswana societal, cultural, historic and economic needs. Some of the key challenges faced by Secondary Education are as follows:

1. A steady increase in numbers entering secondary schools has led to overcrowding in schools/classrooms, and poses a major challenge that impacts on all of the other areas;
2. Limited effectiveness and efficiency of the government- budgeting and expenditure system;
3. Poor efficiency and completion rates ;
4. Inadequate use of ICT to support the quality of teaching and learning;
5. Poor alignment between overall aims of the curriculum and school-based as well as national assessment
6. Overloaded curriculum;
7. There is no functional quality assurance system for secondary education;
8. There are no teacher professional standards to manage teacher professionalism;
9. Lack of empowerment of school managers to monitor standards and quality in their schools;
10. The change from normalised to standard-based results reporting for yearly examinations is misunderstood and mismanaged;
11. Science being compulsory for everyone at Senior Secondary School requires review. Science should also not be used to categorize all students in Senior Secondary Schools, as it leads to failure for the majority of students;
12. Theoretical (chalk and talk) teaching, , emphasizing recall and thus failing to develop practical skills and understanding;
13. Falling standards as reflected in BGCSE, TIMMS and SAQMEC results;
14. Under utilisation of teaching hours and teaching staff (workloads/staffing norms).

## Overall Goals and Objectives

The overall goals for secondary education reform:

> **'To ensure equitable access for all eligible learners to quality secondary education that will adequately prepare them for further education and/or the world of work and contribute to a knowledge-based economy for Botswana'.**

**BOTSWANA EDUCATION & TRAINING SECTOR STRATEGIC PLAN (ETSSP 2015-2020)**

**Strategic Objectives:**

1. Improved equitable access available to secondary education - for all;
2. Ensure quality secondary education to meet local and international standards;
3. Secondary schools have student friendly physical facilities, teacher supportive teaching facilities and student supportive learning facilities, to acceptable international standards;
4. Improved Secondary Education Literacy;
5. Strengthened Public-private Partnerships to Benefit Secondary Education Outcomes;
6. Graduating Quality Science and Maths Students from Secondary Schools;
7. Secondary Schools for Youth Development and developing pathways;
8. An implemented MoESD Inclusive Education Policy in every JSS and SSS;
9. Improved quality through E-Learning;
10. Safe schools.

## SUMMARY PROGRAMMES

| | |
|---|---|
| SEC 1 | Reformed policy-driven secondary education sector |
| SEC 2 | The provision of quality Secondary Education in line with international standards |
| SEC 3 | Improved quality Science, Mathematics and English language students from secondary schools |
| SEC 4 | Provide equitable access to secondary education for all eligible students |
| SEC 5 | Introducing Education Pathways for Learners in Secondary Schools |
| SEC 6 | Improved provision school facilities |
| SEC 7 | Improved health and safety to ensure child and youth security and safety in all secondary schools |
| SEC 8 | Improved School Planning, Leadership And Management Development In Secondary Schools |

Note: There are close links with the **teacher education reform programme** to provide qualified and trained teachers for the secondary sub-sector and undertaking an audit of existing teacher numbers, as well as projected needs in all subjects including training needs in terms of INSET provision. The need for a curriculum based on competency learning is being met through the development of OBL curricula in the Curriculum programme.

**BOTSWANA EDUCATION & TRAINING SECTOR STRATEGIC PLAN (ETSSP 2015-2020)**

| **Programme 1: POLICY-DRIVEN SECONDARY EDUCATION SECTOR**<br>**Overall Goal: Botswana has an evidenced-based, policy-driven secondary education sector** | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. A coordinated and well managed quality secondary sub sector | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. All existing secondary education policies, strategies and frameworks have been reviewed and a comprehensive policy is developed<br>2. Policy and Strategic framework developed | 3. The overall secondary education policy with strategies and frameworks operational in all schools | 4. A measureable improvement with regard to the established KPI for the performance of secondary<br>5. Monitor and report on the performance of secondary on a regular intervals based on the policy framework |
| **ACTIVITIES** | | |
| 1. Review all existing secondary education policies, strategies and frameworks and determine the tenure of each<br>2. Identify the needs for additional policies to reform secondary education<br>3. Design an overall framework for a comprehensive secondary education policy<br>4. Conclude and have mandated a comprehensive secondary education policy<br>5. Policy implementation funded<br>6. Provide a mechanism for monitoring and evaluating policy, strategy and framework implementation | | |

| **Programme 2: IMPROVED QUALITY SECONDARY EDUCATION FOR ALL**<br>**Overall Goal*:* The provision of quality Secondary Education in line with international standards** | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. Improved performance of secondary subsector achieving quality secondary education KPIs including pass rates | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. A strategy for low performing schools in place and implemented in 100% of the schools that have poor results (80)<br>2. Reductions in teacher -learner ratios and learner-classroom ratios in 50% of affected schools<br>3. Remediation and enrichment at secondary started in the low performing schools and 50% teachers have undertaken training for remedial teaching<br>4. All schools have secured adequate numbers of appropriate textbooks and learning resources, according to established norms | 8. Secondary education KPIs and targets including pass rates showing 50% improvement<br>9. Reductions in teacher -learner ratios and learner-classroom ratios in all schools<br>10. The policy on remediation is fully operational in the 2017 school year<br>11. 90% of all teachers have undertaken training for remedial teaching<br>12. All teachers trained in ICT in teaching and learning | 14. Secondary education KPIs and targets including pass rates showing 80% improvement |

| | | |
|---|---|---|
| 5. All schools have been provided with upgraded ICT facilities which are being utilized for teaching and learning<br>6. 50% of all trained in ICT in teaching and learning<br>7. Quality assurance for teaching and learning fully institutionalized | 13. By 2017, all secondary schools have adequate numbers of appropriate textbooks, teaching and learning materials to meet the needs of the OBL curriculum and the needs of learners | |

**ACTIVITIES**

1. Develop and implement a strategy for low performing schools
2. Develop teacher-learner ratios and learner-classroom ratios and propose improvement plans
3. Develop a rationale and policy for remediation and enrichment for vulnerable students
4. Develop a text book policy and review guidelines on usage of textbooks ensuring adequate supplies of appropriate textbooks and all necessary teaching and learning materials are available
5. Place qualified mathematics, science, language and ICT teachers in schools to improve teaching and learning
6. Develop leadership and management training within a teacher performance management system
7. Develop teaching and learning standards for secondary schools
8. Develop capacity for action research to improve performance gaps
9. Design a Quality Assurance system to regularly monitor, evaluate and report
10. Introduce ICT in teaching and learning (in conjunction with the national ICT programme) and supply all necessary infrastructure, materials and required support.
11. Develop and implement an effective monitoring and evaluation system for secondary education

**Programme 3: IMPROVED QUALITY THROUGH PROMOTING THE TEACHING AND LEARNING OF ENGLISH SCIENCE AND MATHEMATICS FOR A KNOWLEDGE SOCIETY**
**Overall Goal: Improving quality students from secondary schools especially in Science and Maths and English**

**OUTCOMES**

1. Significantly more student participation and graduate successfully in Maths, Science and English.
2. Improved literacy development use of English language in secondary schools

**MILESTONES**

| Short Term 2014-2016 | Medium Term 2016-2018 | Long Term 2018-2019 |
|---|---|---|
| 1. 25% increase in enrollment in science at senior secondary level<br>2. Improved national achievement in English, Maths and Science by at least 20% by 2016<br>3. 100% Maths and science teachers and students have adequate teaching and learning facilities and materials, including core textbooks/E-learning materials.<br>4. An increase of 30% remedial and enrichment assistance provided to all secondary students identified with limited English language capability<br>**5.** 30% of all schools have adequate Science learning facilities and support material<br>**6.** STEM and SMASSE approaches introduced in 50% secondary | 7. Improved national achievement in English, Maths and Science by at least 50% by 2018<br>**8.** 50% of all schools have adequate learning facilities and support material | 9. Improved national achievement in Maths and Science by at least 80% by 2020<br>10. 100% of all schools have adequate learning facilities and support material<br>11. Remedial and enrichment assistance provided to all secondary students identified with limited Science, Maths and English language capability |

| | | |
|---|---|---|
| schools | | |

**ACTIVITIES**

1. Introduce STEM and SMASSE approaches in secondary schooling
2. Develop curriculum delivery tools to ensure mastery of literacy skills in first 3 years of secondary education.
3. Develop remedial and enrichment teaching where needed for students with limited literacy
4. Undertake training teachers in remediation/enrichment methodology and practice.
5. Develop targeted/differentiated learner support interventions
6. Establish Schools of Excellence in Maths and Science
7. Provide incentives for teachers to teach and students to learn Maths and Science, including reviewing the Scarcity Allowance Scheme.
8. Equip schools with adequate teaching and learning facilities
9. Develop partnerships between universities, colleges and science institutions of higher learning

**Programme 4**: **ACCESSIBLE AND INCLUSIVE SECONDARY EDUCATION FOR ALL**
**Overall Goal: Provide equitable access to secondary education for all eligible students**

**OUTCOMES**

1. Increased access quotas achieved from JSS and SS in line with the MoESD policy
2. Expanded opportunities through dual pathways for secondary school learners

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. Geographical disparity have been defined, scoped and strategies to address them have been designed and costed<br>2. A 10% increase in transition rates from JSS to SSS<br>3. Alternative pathways for learners to progress to other education (e.g. TVET) or work introduced<br>4. Geographic disparities in access to secondary education reduced by 5% at end of 2016<br>5. All schools develop plans to minimise drop-out in secondary schools<br>6. A 10% increase in completion rates at JSS | 7. Annual 20% increase in transition rate from JSS to SSS taking into account youth progressing to other education (e.g. TVET) or work<br>8. Reduced geographic disparities in access to education by further 5% at end of 2018<br>9. A 20% increase in completion rates<br>10. The strategy has been implemented and geographic disparities preventing access to education reduced by 20% at end of 2018 | 11. A 30% increase in transition rates from JSS to SSS<br>12. Alternative pathways for learners to progress to other education (e.g. TVET) or work available in all schools<br>13. Geographic disparities preventing access to education reduced by a further 20% by end of 2019<br>14. Reduced geographic disparities in access to education by further 5% by the end of 2020<br>15. A 40% increase in completion rates |

**ACTIVITIES**

1. Develop a secondary education policy on access for learners with special needs and vulnerable learners incorporating overall GoB policy, including both in-school and out-of-school modes of delivery
2. Develop a secondary education strategy for the educational, personal and professional requirements of students and teachers
3. A report prepared defining the problem, determining its scope, devising strategies to address the problem and conducting trials to test the proposed strategies prepared
4. A map of school sites identifying location, geographic disparities and infrastructure developed
5. Determine access quotas to JSS and SSS
6. Implement dual pathway in secondary schools strategy to expand opportunities for secondary school leavers
7. Provide professional counselling for students and for career guidance

| |
|---|
| 8. Monitor and evaluate the strategies for informed decision making |

| **Programme 5: Introducing Education Pathways for Learners in Secondary Schools** | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. To establish multiple opportunities for learners in line with the present educational and economic imperatives of Botswana'.<br>2. A flexible education system which allows all learners to progress through basic education to other levels in line with their capabilities and interests | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Botswana model for educational pathways at basic education linked to TVET and Tertiary education frameworks in place<br>2. Guidelines produced for learners to support them to make choices<br>3. Takeover of some Brigades for educational pathways programme for roll out of phase 1 completed<br>4. Assessment systems to direct Student choices at CJSS level developed and trial tested<br>5. Career guidance reformed to support the education pathways for senior secondary schools<br>6. Phase 1 of the implementation of expanded learning pathways developed and implemented in senior schools<br>7. Capacity building for the support of newly introduced educational pathways at senior secondary school<br>8. Administrative support to reposition schools to offer the variety of educational pathways | 9. Capacity developed for implementation of assessment and readiness interventions for all junior secondary schools<br>10. Takeover of some Brigades for educational pathways for roll out to all SSS<br>11. Assessment systems to direct Student choices at CJSS and SSS level finalized<br>12. Targeted learning pathways model implemented in all senior schools<br>13. Monitoring and evaluation to inform progress on the implementation.<br>14. Capacity building for the support of educational pathways in all senior secondary schools | 15. A model of expanded educational pathways implemented in all senior secondary schools<br>16. Impact of educational pathways on the quality of education and service delivery established<br>17. Tracer studies to establish the impact of pathways on career choices and job opportunities/employment of school leavers concluded |

| ACTIVITIES |
|---|
| 1. Establish a technical operational and planning system to facilitate and coordinate implementation at the Ministry to manage the implementation of career pathways as a project<br>2. Develop the model for pathways taking cognizance of the BCQF for credit transfers, RPL and credit based system<br>3. Implement the model of learning pathways in line with the rollout plan<br>4. Create effective student career guidance systems as well as guidelines and other resources to support the implementation of pathways.<br>5. Strengthen capacity for national and regional operations for coordination and implementation. pathways<br>6. Develop a system for sharing knowledge and practice on career pathways across the sub sectors<br>7. Carry out monitoring and evaluation of the system including a tracer study and improve accordingly<br>8. Continuous assessment frameworks and tools developed and implemented in CJSS and SSS to direct students choices<br>9. Develop infrastructure capacity to accommodate educational pathways programme |

| **Programme 6: IMPROVED EFFICIENCY IN THE PROVISION AND MAINTENANCE OF SCHOOL FACILITIES**<br>**Overall Goal: To provide Secondary schools have safe and student friendly physical facilities, supportive teaching and learning facilities that are acceptable to international standards** | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. A conducive learning environment with all facilities upgraded and renovated, and new facilities built - in accordance with norms and standards<br>**2.** All secondary school learning facilities have modern standards, with adequate infrastructure and materials to meet the teaching needs of teachers, and the learning needs of all students | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Norms regarding the size and overall standards of high schools and their environments have been developed, approved and published<br>2. Regions have completed inventories of all school physical facilities prioritizing requirements for new facilities, and renovation or replacement of existing facilities | 3. 40% of all secondary schools' physical facilities upgraded to approved standards, including addressing inclusive education requirements<br>4. 50% of secondary schools' learning facilities aligned to modern standards with adequate infrastructure and materials to meet the teaching needs of teachers and the learning needs of all students | 5. 100% of all secondary schools' physical facilities upgraded to approved standards, including addressing inclusive education requirements<br>6. 70% secondary schools' learning facilities upgraded to modern standards with adequate infrastructure and materials to meet the teaching needs of teachers and the learning needs of all students |
| **ACTIVITIES** | | |
| 1. Undertake, by region, surveys of all secondary schools' physical facilities and teachers' accommodation, (based on norms and standards to be set by the MoESD for education facilities)<br>2. Undertake prioritised phased upgrading programme for renovating secondary facilities<br>3. Undertake, by region, surveys of secondary schools' teaching and learning facilities<br>4. Develop plans and prescribe responsibility for maintaining the quality of physical, and teaching and learning infrastructure at an acceptably sustainable level<br>**5.** Monitor implementation of the schools facilities improvement programme | | |

**Programme 7: IMPROVED SECURITY AND SAFETY OF CHILDREN IN SECONDARY SCHOOLS**
**Overall Goal: To ensure child and youth security and safety in all secondary schools**

**OUTCOMES**

1. Improved coordination and collaboration between government and non-government agencies on issues related to child and youth security
2. Established national policy, guidelines norms and standards on school security and safety
3. Established school security and safety inter-sectoral committee at each primary school integrated with members of the community and government agencies (police, social department, health, Bogosi, Civic Society etc.)

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 7. National policy and guidelines on school security and safety developed and approved<br>8. Developed a regional strategy and action plan on school security and safety<br>9. Developed school security and safety norms and plans at each primary school<br>10. Developed a communication strategy and campaign on the security of children and of care facilities.<br>11. 50% of schools have staff trained on issues of security and safety of children<br>12. security installations and structures in place in 50% of secondary schools | 13. School security and safety inter-sectorial programmes in place and functioning in 50% of the schools<br>14. 50% of schools compliance to Safety norms and standards<br>15. 100% of schools have staff trained on issues of security and safety of children | 16. School security and safety inter-sectorial programmes in place and functioning in all the schools<br>17. Security installations and structures in place in all secondary schools<br>18. Regional strategy and action plans operational in all schools |

**ACTIVITIES**

1. Establish a school security and safety inter-sectorial community at each school with members of the community (police, social department, health, Bogosi, civic society, family etc.).
2. Develop and establish a national policy and guidelines on school security and safety.
3. Develop school security and safety norms and plans with the security inter-sectorial committee.
4. Train the school security inter-sectorial committee and of Regional staff on issues of prevention and intervention strategies that meet school safety needs.
5. Train school staff on issues of security and safety of children.
6. Conduct annual risk audits and assessments for school safety and security
7. Develop a communication campaign on the security of children and of care facilities.
8. Carry out Annual Forum on School Security and Safety at the Regional level.

**Programme 8: IMPROVED SCHOOL PLANNING, LEADERSHIP AND MANAGEMENT DEVELOPMENT IN SECONDARY SCHOOLS**
**Overall Goal: To equip head teachers and other managers with knowledge, skills and attitude needed to improve performance management and positively impact quality of education**

**OUTCOMES**

1. Improved school planning, management and governance.
2. Developed Inclusion-oriented schools.
3. Trained school heads and managers on planning, management, leadership and governance.

| | | |
|---|---|---|
| 4. Schools are efficient and effective in improving school performance.<br>5. Improved participation of and communication with community. | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 19. 30% of all secondary managers will have undertaken leadership and management training aligned to a teacher performance management system<br>20. Guidelines for strategic school performance, improvement and monitoring in place<br>21. Managers trained to a professional level in leadership in inclusion, planning and management<br>22. Resources in support of school development (infrastructure, maintenance, etc.) available for the five (5) year plan period<br>23. Annual Forum on school leadership and management held and action plans developed<br>24. School improvement plans introduced in all Schools | 25. 50% capacity built of school heads and other managers to a professional level of leadership, planning and management<br>26. School Improvement Plans (SDP) implemented<br>27. and Monitored and evaluated to inform school performance improvement plans<br>28. Regional awards introduced for best managed schools.<br>29. Action plans and improvements from the annual forum on school leadership and management communicated and implemented | 30. All school heads and managers trained to a professional level in leadership, planning and management.<br>31. 100% of schools implement performance improvement plans.<br>32. All schools share best practices of school planning, leadership and management.<br>33. Action plans and improvements from the annual forum on school leadership and management communicated and implemented |
| **ACTIVITIES** | | |
| 1. Develop guidelines for school improvement in school management.<br>2. Develop training of managers to a professional level of leadership, planning and management.<br>3. Develop training of managers on inclusive education policy and its application in the leadership and management of the school.<br>4. Mobilize resources in support to school development (infrastructure, maintenance and academic performance).<br>5. Develop best practices of leadership and management and share among schools.<br>6. Develop a coaching system for supporting continuing professional development of school heads and other managers.<br>**7.** Annual Forum on school leadership and management. | | |

# 5.4 Teacher Education and Professional Development (TEPD)

The Ministry of Education and Skills Development (MoESD) in Botswana is committed to transforming teacher education, training and professional development so that it contributes and impacts positively on the quality of the education system. Most Senior Secondary School teachers are qualified for the subject they teach to BA/BSc levels. Completion, graduation and pass rates are high across all the Colleges of Education where an average of 90% of the teacher trainees obtains a merit and credit. However caveats must be made here as the PRESET assessment system is in need of review.

The **professionalism of all teachers** is a priority where we need to produce high quality teachers and teacher trainers who are up-to-date with concepts and methodologies. Thus, a priority is to develop a sustainable system of comprehensive teacher training with particular attention to training of teacher trainers and in-service teacher training with a view to assure teacher competence to implement the new curriculum. Both revamped PRESET and INSET strategies will ensure that there are close linkages between the two specifically during the

Induction period of a teacher's professional career.

The strategy will see improvement in the professionalization of teaching and teachers through a number of activities but specifically through the establishment of a 'Teaching Council for Botswana' which will set the standards and competency frameworks for teaching staff in the country. This will lead to putting in place a comprehensive Continuous Professional Development (CPD) system. Through setting standards and frameworks it is envisaged that a quality teaching workforce will be developed in the medium to long term that will raise the quality and learning outcomes.

All curriculum will be oriented toward engaging more with learners through competency learning. This will require major efforts in reviewing and revising the teacher education current curriculum which is largely content based to one that emphasizes student learning outcomes.

## Critical Challenges

While the sub sector has produced teachers for the primary and secondary schools, there are a number of critical challenges that have been identified through the Situational Analysis which need urgent attention.

1. **A Lack of a Comprehensive Teacher Education and Professional Development System**: one of the most glaring gaps in the Teacher Education system in Botswana is the lack of comprehensive teaching standards and competency-based frameworks across the sub-sector. There is an urgent need to establish standards and competencies so that teacher performance can be measured against quality baselines and standardized across the SADC region.
2. **Poor Management of Teacher Training and Professional Development:** The quality and impact of Teacher Education and Professional Development is not well monitored to ensure value for money.
3. **No Clear Career Pathways for Teachers:** The absence of a Continuing Professional Development (CPD) framework makes in-service training, including leadership training to be ad hoc and of little or no impact to the quality of teaching and learning. In addition there are no clear career pathways for teachers in the system. There is need for a comprehensive CPD system which would link teacher standards, their Professional Development Plans and teacher performance management assessments, enabling teachers to pursue both vertical and horizontal career pathways.
4. **Poor Quality of Trained Teachers:** the lack of a clear in-service strategy and policy means that practicing teachers do not get equitable treatment when it comes to teacher training and professional development. There is an urgent need for a clear policy on INSET and a review of the 2010 framework and adhered to through strong leadership at school base.
5. **Lack of Leadership and Management Competencies:** Notable issues with leadership development are that some leaders have not had training for more than 5 years; some new leaders have not been trained and orientated for the new responsibilities and there is no succession planning and leadership pipeline and/ or talent management strategy.
6. **Lack of Policy and Strategy for PRESET and INSET**: the quality of graduates from pre-service teacher training is less than satisfactory. A clear PRESET and INSET strategy and policy would provide assurance of quality programmes and delivery as well as ensuring links between PRESET, Induction and INSET.

7. **Lack of clear policy on postings, transfers and recruitment**: There are a number of instances where teaching staff are posted in 'an ad hoc fashion' and transfers are made in non-transparent ways. At the macro level, teacher administration and human resource management need to be urgently improved so that teaching staff become more than just 'a number on a sheet' and consideration is given to getting the 'right person for/ to the right job.' Additionally human resource management needs to overhaul the recruitment system so that selection processes and promotion are equitable and transparent and based on an individual's performance and skills.
8. **Lack of capacity at regional, district and school levels**: there is an urgent need to build capacity for competences at regional, district and school levels in order to support school based INSET and also to ensure quality assurance in schools. INSET practices and resources should be improved.

# Overall Goal, Objective and Outcome

The overall goals for teachereducation reform:

> **'To develop high quality teacher education system that includes the setting up of a professional system that attends to the values, skills and knowledge framework that will equip all teachers with competences that will enable them to respond to the responsibilities of the work place'.**

## SUMMARY PROGRAMMES

| | |
|---|---|
| TEPD 1 | Establishment of a national Comprehensive Teacher Education and Professional Development (TEPD) system |
| TEPD 2 | Development of a comprehensive and coherent operational framework and plans for a well-managed teacher education and professional development system in a decentralized environment |
| TEPD 3 | Design and development of a Continuing Professional Development Framework which would provide teachers with clear career pathways and professional development |
| TEPD 4 | Development of Strategy for In-service (INSET) system to improve the quality of teaching and learning |
| TEPD 5 | Development of a national policy and strategy for education leadership and management |
| TEPD 6 | Development of policy and framework pre-service training of teachers (PRESET) |
| TEPD 7 | Improved mechanisms to determine supply and demand of quality teachers |
| TEPD 8 | Development of appropriate teaching and learning environments and infrastructure for TEPD staff and students |

# Programmes

| **PROGRAMME 1: ESTABLISH A NATIONAL COMPREHENSIVE TEACHER EDUCATION[44] and PROFESSIONAL DEVELOPMENT (TEPD) SYSTEM**<br>**Overall Goal: to establish an effective and efficient Teaching Council for Botswana** |
|---|
| **OUTCOMES** |

[44]Teacher Education covers PRESET, INDUCTION, INSET and CONTINUING PROFESSIONAL DEVELOPMENT (CPD – is also referred to as Continuous Professional Development)

**BOTSWANA EDUCATION & TRAINING SECTOR STRATEGIC PLAN (ETSSP 2015-2020)**

1. A Teaching Council for Botswana established, functioning effectively and efficiently.
2. A comprehensive set of standards and competency frameworks for all teaching staff.
3. The institutionalization and professionalization of Teacher Education through INSET, PRESET and CPD policies

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. By 2015 The Botswana Teaching Council established<br>2. By 2016 Capacity built for key stakeholders in the implementation of the Teaching Council Act<br>3. By 2016 Monitoring and Evaluation system for TEPD developed and implemented<br>4. 2016 PRESET and INSET policy, guidelines, frameworks, programmes and assessment for all sub-sectors developed and understood in line with the Teaching Council Act<br>5. By the end of 2016 PRESET and INSET Standards and competency-based frameworks for all teaching staff and sub-sectors developed | 6. By the end of 2017 PRESET and INSET Standards and competency-based frameworks for all teaching staff and all sub-sectors operational<br>7. By 2017 Monitoring and Evaluation system for TEPD implemented<br>8. By 2017 Teaching Council policies, guidelines and systems fully implemented, reviewed and improved<br>9. By 2018 50% of the teachers will be licensed by the Council | 10. By 2019 Teacher Education and Professional Development fully aligned with the Act<br>11. Monitoring and Evaluation system for TEPD implemented<br>12. By 2020 all teachers will be licensed by the Council |

**ACTIVITIES**

1. **E**stablish a Teaching Council (TC) for Botswana through a Teaching Council Act.
2. Build capacity in institutional change and governance mechanisms for key stakeholders/ service providers to ensure compliance with the overall Teaching Council legislation.
3. Build capacity in the design and implementation of the Teaching Council policies, guidelines,
4. Frameworks, programmes and assessment for key TEPD providers.
5. Rationalize and review existing training programmes in line with the Teaching Council standards policies and guidelines.
6. Design and develop a monitoring and evaluation system to review the Teacher Education and Professional Development systems established by the Teaching Council.
7. Build capacity in implementing the Monitoring and Evaluation system for key teaching staff.

**PROGRAMME 2: ESTABLISH A FRAMEWORK FOR THE MANAGEMENT OF TEACHER EDUCATION AND PROFESSIONAL DEVELOPMENT**

**Overall Goal: To develop a comprehensive and coherent operational framework and plans for a well-managed teacher education and professional development system in a decentralized environment**

**OUTCOMES**

1. A branded teaching profession
2. A comprehensive policy and framework for the management of Teacher Education and Professional Development established and functioning effectively.
3. A Performance Management System linked to career pathways and continuing professional development established and functioning effectively.

**BOTSWANA EDUCATION & TRAINING SECTOR STRATEGIC PLAN (ETSSP 2015-2020)**

| MILESTONES | | |
|---|---|---|
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. By 2015 Teacher Education & Professional Development (TEPD) management framework established<br>2. By 2015 comprehensive needs-based Teacher Education & Professional Development master plans and budgets developed at all levels<br>3. By 2015 Monitoring & Evaluation/ Quality Assurance frameworks for TEPD developed together with a TIMS<br>4. By 2016 20% capacity built in Teacher Education and Professional Development for key staff<br>5. By 2016 an operational & inclusive framework for managing Teacher Education & Professional Development in a decentralized environment developed | 6. By 2017 50% of MoESD staff capacity built in Teacher Education and Professional Development to develop the policies, mandate & operational structures in line with Teaching Council & Inclusive policies<br>7. By 2017 a functional management framework for Teacher Education & Professional Development in place<br>8. By 2016 an assessment and accreditation system for Teacher Education & Professional Development developed in accordance with Teaching Council policies, BQA & BEC<br>9. By 2017 different service delivery options and approaches developed and implemented<br>10. By 2018 capacity built at school-base level in developing Teacher Management Information Systems (TMIS) | 11. By 2019 80% of MoESD staff capacity built in Teacher Education and Professional Development<br>12. Fully functional TEPD system in place<br>13. Monitoring and evaluation of the impact of the Teacher Education & Professional Development system<br>14. A well-developed Teacher Management Information System (TMIS) being used in a meaningful way and integrated into the Education and Management Information System (EMIS) |
| **ACTIVITIES** | | |
| 1. Develop a clear policy and mandate which defines roles and responsibilities, structures, processes, systems (including finance systems) and staffing for managing TEPD at both central and regional levels<br>2. Develop TEPD Capacity Building Programme for MoESD staff<br>3. Build capacity of MoESD staff in TEPD (in collaboration with relevant sub-sectors) to develop policies, plans and mandate in line with Teaching Council policies, guidelines and frameworks: ECCE policy; Inclusive Education policy; TVET policy; ICT policy; Monitoring & Evaluation<br>4. Set up a Teacher Management Information System (TMIS) which is sustainable and suitable to use at all levels and links with EMIS<br>5. Support the development of TEPD assessment and accreditation<br>**6.** Develop Monitoring and Evaluation/ Quality Assurance frameworks for TEPD in line with TC and BQA policies and guidelines | | |

| **PROGRAMME 3: ESTABLISH A CONTINUING PROFESSIONAL DEVELOPMENT (CPD) SYSTEM FOR A QUALITY TEACHING WORKFORCE**<br>**Overall Goal: To develop a comprehensive, coherent, inclusive and well-coordinated Continuing Professional Development system for a quality teaching workforce** |
|---|
| **OUTCOMES** |
| 1. A Continuing Professional Development (CPD) framework linked to teaching staffs' career pathways and performance management systems established and functioning effectively |

| 2. Clear career pathways for all teaching staff established and functioning | | |
|---|---|---|
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. By 2015 a comprehensive national policy for Continuing Professional Development (CPD) system developed<br>2. By the beginning of 2016 CPD programmes validated monitored and evaluated as part of the system<br>3. By the end of 2016 20% of College of Education principals & lecturers, TVET lecturers, inspectors, PEOs, PICs, SDCs[45], school heads and non-formal educators trained in the management and implementation of the CPD system<br>4. By 2016 a 'teacher relevant' Performance Management System linked to the CPD developed<br>5. By 2016 50% of core and optional accredited, programmes for CPD developed | 6. By 2017 60% of College of Education principals & lecturers, TVET lecturers, inspectors, PEOs, PICs, SDCs, school heads and non-formal educators trained in the management and implementation of the CPD system<br>7. By the beginning of 2017 quality accredited core and optional programmes linked to career pathways across institutions for all teaching staff developed<br>8. By 2018 clear teacher career pathways established and aligned to Teaching Council policies and guidelines<br>9. By 2018 all of core and optional accredited, programmes developed for CPD | 10. By 2020 100% of College of Education principals & lecturers, TVET lecturers, inspectors, PEOs, PICs, SDCs, school heads and non-formal educators trained in the management and implementation of the CPD system<br>11. Monitoring and evaluation of the impact of the CPD |
| **ACTIVITIES** | | |
| 1. Develop a comprehensive, inclusive national policy for a relevant and sustainable Continuing Professional Development (CPD) system for all teaching staff across the education sector46 in line with teacher standards and competencies and through the Teaching Council<br>2. Develop clear teacher career pathways using the CPD and through robust links with TC policies, relevant performance management systems and HRM processes<br>3. Review existing training programmes in line with the CPD<br>4. Build capacity to deliver CPD modular programmes using blended approaches (e-learning, face to face, networks etc.)<br>5. Build capacity for the design and implementation of the CPD system<br>6. Establish a performance management system linked to the CPD and in line with TC policies Deliver training in implementing the CPD to CoE principals and lecturers, PEOs, PICs, SDCs, school heads , inspectors and regional Principal Education Officers and Performance Improvement Coordinators<br>7. Implement the CPD system at school, regional and national levels<br>8. Develop and implement a Monitoring and Evaluating system for CPD programmes | | |

[45] COE = College of Education; PEO= Principal Education Officer; PIC = Performance Improvement Coordinator; SDC= School Development Coordinator

[46] This includes TVET and non-formal education programmes e.g. OSEC

**PROGRAMME 4: DEVELOP A STRATEGY FOR IN-SERVICE TRAINING (INSET) TO IMPROVE THE QUALITY OF TEACHING AND LEARNING**

**Overall Goal: To provide quality in-service structures and systems for improved teaching and learning performance**

**OUTCOMES**

1. A comprehensive INSET policy and strategy for INSET established and functioning effectively.
2. Quality INSET support systems at school-based level established and functioning effectively.
3. A professional support system for INSET staff.
4. A comprehensive funding strategy for INSET established and functioning effectively.

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. By 2015 a national INSET policy and strategy developed in line with the Teaching Council<br>2. By 2015 structures and systems for INSET reformed and strengthened and aligned to CPD.<br>3. By 2015 teaching staff Training Needs Assessment carried out at all levels<br>4. By 2015 20% of teaching staff at all sub-sectors and levels[47] received needs-based training<br>5. By 2015 Review completed of school clusters and regional education centres as potential support systems for INSET<br>6. By 2015 school based INSET programmes planned, improved and made more culturally and linguistically relevant<br>7. By 2016 an assessment system for school INSET aligned to Teaching Council policies. | 8. By 2017 65% of teaching staff at all sub-sectors and levels received needs-based training<br>9. By 2017 the quality of existing school heads, deputy heads, staff development coordinators and heads of departments at pre-primary, primary and secondary improved for delivery of school based INSET programme.<br>10. By 2017 the quality of existing 55 INSET educators improved for delivery of school based INSET programmes.<br>11. By 2017 the reviewed school clusters and regional education centres strengthened as INSET support hubs | 12. By 2020 100% of teaching staff at all sub-sectors and levels identified and prioritized received needs-based training.<br>13. By 2019 Regional Education Centres re-established and refurbished as centres for CPD and Research<br>14. By 2020 strengthening of school clusters and regional education centres as INSET support hubs of excellence<br>15. INSET programmes reviewed and upgraded regularly |

**ACTIVITIES**

1. Reform and strengthen INSET structures and systems
2. Strengthen schools, cluster schools and regional education centres in order to deliver INSET as part of a decentralized teaching staff support system
3. Review and improve INSET programmes and pedagogy at all sub-sectors and levels to develop competency-based modules and materials in areas where gaps have been identified:
4. Education (BE), Inspectorate and Department of Special Support Services (DSSS)
5. Strengthen old and build new partnerships to enhance the quality of education
6. Establish a monitoring and evaluation (M and E) system for INSET with requisite capacity
7. Develop school-based Teacher Management Information System (TMIS) to feed into regional level TMIS
9. Provide INSET for school heads and management on Whole School Assessment and TMIS

[47] This includes TVET staff and non-formal education teaching staff.

**PROGRAMME 5: DEVELOP A NATIONAL POLICY AND STRATEGY FOR EDUCATION SECTOR LEADERSHIP and MANAGEMENT**

**Overall Goal: To provide Quality Leadership and Management for improved school leadership, management, performance and quality teaching and learning**

**OUTCOMES**

1. A competent 21 century dynamic leaders and managers at all levels
2. A national policy and strategy for Educational leadership and Management established and functioning effectively.
3. Standards and competency-frameworks for Educational Leadership and Management developed and being implemented effectively.

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. By 2015 a National Policy and Strategy on Education Leadership and Management developed<br>2. By 2015 Quality leadership and management standards and competency-based framework for INSET developed in line with the Teaching Council policies<br>3. By 2016 an Educational Leadership and Management Centre developed for Botswana<br>4. By 2016 accredited leadership and management programmes for INSET developed for all levels including TVET and non-formal teaching staff<br>5. By 2016 capacity built for the delivery of the new accredited leadership and management programmes<br>6. By 2016 initial enrolment in Leadership and Management of 25% in line with the CPD | 7. By 2017 enrolment in Leadership and Management increased by 50%<br>8. By end of 2017 strong school Leadership and Management improved by 50% for managing school performance at all sub-sectors and levels[48]<br>9. By the end 2017 quality educational Leadership and Management capacity improved by 50% at all levels<br>10. By 2018 an effective and efficient assessment system for Leadership & Management in place<br>11. By 2018 a robust Quality Assurance system for Leadership & Management in place | 12. By 2019 enrolment in PRESET in Leadership and Management increased by 80%<br>13. By 2019 strong school Leadership & Management improved by 80% for managing school performance at all sub-sectors and levels<br>14. By 2020 quality educational Leadership and Management capacity improved by 80% at all levels |

**ACTIVITIES**

1. Develop a National Policy and Strategy on Educational Leadership and Management
2. Draft quality 'Leadership and Management ' standards and competency-based framework for INSET to be integrated with Teaching Council policies, guidelines and frameworks
3. Establish a 'Botswana Educational Leadership and Management Development Centre' as a concept and a facility for the formal and non-formal school heads, in line with Teaching Council policies, guidelines and frameworks, with representation at all levels
4. Design and develop accredited INSET programmes for 'Leadership and Management' at all levels to be integrated with Teaching Council policies, guidelines and frameworks.
5. Build capacity at all levels in the delivery of the accredited 'Leadership and Management' INSET modules
6. Increase enrolment at all sub-sectors and levels in leadership and management courses

[48] Including TVET and non-formal education teaching staff

7. Build capacity of Leadership and Management at all levels to improve school performance
8. Use management information systems and ongoing/ continuous assessment to identify Leadership and Management competency gaps against the competency framework, profiles and performance appraisals
9. Develop a quality assurance system for the Leadership and Management competency framework to include a 'training impact monitoring and evaluation system'

**PROGRAMME 6: IMPROVE PRESET DELIVERY**[49]

**Overall Goal: To develop confident, globally and locally competitive teachers through high quality PRESET provision**

**OUTCOMES**

1. A comprehensive PRESET policy, strategy and frameworks established and functioning effectively.
2. A streamlined, effective PRESET recruitment procedure in place.
3. Improved linkages between PRESET – Induction and INSET established and functioning effectively.
4. Inclusive Education established and instutionalised through PRESET and INSET systems.

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. By end 2015 a PRESET policy implementation framework developed<br>2. By 2016 clearly defined inclusive structures and systems for PRESET education developed through the Teaching Council and partners<br>3. By 2016 capacity built for PRESET educators for all levels and sub-sectors[50] through training needs assessment and new relevant INSET courses for them developed<br>4. By 2016 PRESET assessment, programmes reviewed, improved and linked to competency Education paradigm and BQA & TC standards | 5. By the beginning of 2017 60% PRESET educators received new, relevant INSET<br>6. By the beginning of 2017 100% PRESET programmes reviewed and improved<br>7. By 2017 new curricula delivered by quality PRESET educators<br>8. By 2017 strong links built between PRESET, Induction and INSET providers and schools<br>9. By 2018 50% teacher trainees enrolled on undergraduate degree courses | 10. By 2019 100% PRESET educators received new , relevant INSET<br>11. By 2019 80% of PRESET lecturers developed as globally, competitive educators<br>12. By 2019 80% enrolment rate increased in local and regional teacher trainees into PRESET<br>13. Monitoring and evaluation of the impact of PRESET reforms on quality of the teacher trainee |

**ACTIVITIES**

1. Develop a PRESET policy, strategy and frameworks
2. Review policy requirement and guidelines for the selection of teacher trainees by all PRESET providers so as to meet the standards requirement for inclusion, equity, quality and access.
3. Review and upgrade programmes for training of PRESET teacher trainees and educators in light of; new options for qualifications (degree courses); new and revised subject modules (CDE); new mechanisms (Fast Track) and new policies and guidelines (specifically those from the Teaching Council)
4. Review PRESET assessment systems with BQA in terms of competency-based frameworks in all sub-sectors to ensure that it is standardized across PRESET providers (Public and Private) and includes inclusive assessment

[49] PRESET – pre-service training

[50] PRESET Educators include those responsible for the PRESET of ECCE, Basic Education, Senior Secondary, OSEC, TVET

5. Strengthen Teaching Practice and Classroom-based Assessment & ensure it is linked to standards, competencies and CPD system for all sub-sectors as well as the Inspectorate system
6. Make 'Inclusive Education' a mandatory training module for all PRESET teacher trainees and all PRESET educators and for all PRESET providers (public/ private & parastatal) to ensure that the Children's Act of Botswana and the United Nations Rights of the Child are adhered to
7. Strengthen links between PRESET-Induction and INSET for lifelong learning

**PROGRAMME 7: A BALANCE IN DEMAND AND SUPPLY OF QUALITY EDUCATORS**

**Overall Goal: To have a balance in the demand and supply of quality educators across the sector including pre- primary, primary, secondary, out of school, TVET and colleges of education so as to link with Teaching Council policies and guidelines**

**OUTCOMES**

1. A comprehensive system developed, established and functioning for the demand and supply of teachers.
2. A teacher educator job readiness system in place

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. By 2015 a national labour market survey for teacher needs in terms of demand and supply conducted in line with HRDC<br>2. By 2015 A HRM workforce planning framework for the demand and supply of quality teachers for effective and efficient governance in the education system in place.<br>3. By 2016 A draft policy statement pertaining to recruitment, placement and transfer of teachers is in place<br>4. Recruitment, placement and transfer policies reviewed, improved and made more equitable and professional. | 5. By 2017 50% increase in quality of teacher trainees enrolled and retained in the prioritized areas<br>6. By 2017 HRM policies reviewed in view of teacher attraction and retention to balance demand and supply<br>7. By 2018 40% increased gross completion rates (GCR) in critical areas<br>8. By 2017 'teacher trainee tracer studies' established in all institutions' | 9. By 2017 70% increase in quality teacher trainees enrolled and retained in the prioritized areas for pre and primary, out of school, secondary and TVET.<br>10. By 2019 80% Increased gross completion rates (GCR) in critical areas |

**ACTIVITIES**

1. Conduct a national labour survey for teacher needs in terms of demand and supply in line with HRDC
2. Develop a consultative process so as to input into HRM policy and workforce planning framework for demand and supply of quality teachers for effective and efficient governance in the education system
3. Review policy requirement for Admission (selection process/ criteria) of teacher trainees by PRESET providers so as to meet requirement for equity, quality and access
4. Develop a system for integrated planning for the demand for teachers in the Botswana economy in both government and private schools
5. Review and comment on, in line with HRM policies, schemes of service and salary scales so that they align with the Teaching Council policies
6. Develop processes for encouraging the supply of teachers who meet the standards for specialized areas of teaching like, Inclusive Education, ECCE, Science, Maths, ICT, Languages and Remedial Teaching and Learning.

**PROGRAMME 8: APPROPRIATE LEARNING AND TEACHING ENVIRONMENTS & INFRASTRUCTURE FOR TEPD STAFF AND STUDENTS**[51]

**Overall Goal: To ensure the physical environment and infrastructure of all TEPD providers are safe, healthy and professional places for staff and students to teach and learn**

**OUTCOMES**

1. Clear and coherent standards for developing and maintaining TEPD infrastructure
2. Improved teaching and learning through healthier, safer and more professional working environments
3. TEPD infrastructure built, renovated and improved

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. By 2015 national facility policy, planning and guidelines TEPD infrastructures developed<br>2. By 2016 basic safety norms met in all institutions<br>**3.** By 2016 comprehensive funding streams for maintenance and replacement in all institutions in place | 4. By 2016 capacity building for MoESD staff in planning and monitoring infrastructure and maintenance completed<br>5. By 2017 capacity built in resource management<br>6. By 2017 ICT and multi-media facilities in all institutions upgraded<br>7. By 2017 a user-friendly Management Information System developed<br>**8.** By 2017 new infrastructure for TEPD institutions constructed and existing classrooms, libraries and labs refurbished and renovated | 9. By 2019 psychosocial support made available to all staff and students<br>10. By 2019 regional and international partnerships established<br>11. By 2019 mechanisms in place to join regional and international Tertiary Education ranking systems<br>12. All teacher training institutions made accessible to all |

**ACTIVITIES**

1. In line with Teaching Council policies, frameworks and guidelines, and in collaboration with Teachers' Unions, BE, Inspectorate and DSSS, create a task force to review and ensure that TEPD institutes are in line with regional and International policies on corporal punishment
2. Review and strengthen, in collaboration with the Department for Technical Services (DTS), the national policy, planning and guidelines for developing and maintaining TEPD infrastructures
3. Ensure that all TEPD institutions have funding streams for maintenance and replacement of infrastructure and other resources
4. New planning and monitoring rules and procedures for TEPD infrastructures and environment in collaboration with the DTS
5. Provide TEPD facilities & infrastructure that are inclusive i.e. user-friendly/ accessible to all in collaboration with the DTS.
6. Provide conducive TEPD teaching and learning environments that improve job satisfaction for TEPD staff and improve the learning conditions of students
7. Raise awareness of the new TEPD standards and initiatives through partnerships.

[51] TEPD staff refers to PRESET and INSET lecturers, trainers, teachers, INSET officers, PICs, inspectors. TEPD students refer to PRESET student teachers and INSET teachers undergoing training.

# 5.5 TERTIARY EDUCATION SUB-SECTOR

Botswana has accepted that in order to produce highly skilled human resource, relevant research and innovation products, technical expertise and advice, and produce mature and responsible personnel, the Tertiary Education sub-sector is one of the critical success factors in the country's drive to transform and diversify her economy and advance her development. Consequently, a number of policies, strategies and plans have been formulated to transform the Tertiary Education sector.

The Tertiary Education sub-sector has been growing (in structure, size, and shape, type of institutions, programme diversity and quality) since the coming into being of the Tertiary Education Council (TEC) in 1999. The growth of private colleges and universities in particular has been phenomenal: they constituted 38.5% of all Tertiary Education institutions that were registered as of August 2013. The remaining 61.5% were public institutions. The number of degree-awarding public institutions has grown from one to five, which constitutes 12.8% of all TEC-registered and accredited Tertiary Education institutions in the country.

On average, it is estimated that over the past decade since 2000, Botswana has invested around 4.5% of the Gross Domestic Product (GDP) on Tertiary Education sub-sector development. This percentage is high when compared to other countries in the region and others of Botswana's income status. The three key issues when it comes to the state of Tertiary Education financing in Botswana are (a) high public sector investment in Tertiary Education, (b) inefficiencies in the governance and financial management at institutional levels and (c) marginal role of other stakeholders – parents, students and industry in the financing of sub-sector.

A There is a dearth of research and research outputs in sufficient quantities and quality to generate new knowledge. Equally, the small number of candidates in graduate studies leads to lower research output. Again, research impact is dependent on publication and dissemination. Botswana is well below optimal performance levels in terms of both research output and human capacity development in research.

The tertiary sub-sector will be made more responsive to the needs of the economy. It is necessary to (i) raise the skills and knowledge of current and future workforce to meet the labour and social needs (ii) to provide citizens with opportunities to gain world class skills and knowledge through raising participation rates (iii) producing high-quality research in response to the expected diversified economy and social challenges (iv) develop a high performance cost efficient system and (v) enhancing quality assurance systems and undertake system-level monitoring.

### Enhancing Employability

As the demand for higher level skills and qualifications increases, there is an emerging need to enable students to enhance their employability. In recognition of this, the strategy promotes graduate employability and skills. ETSSP addresses the need to achieve an increase in: (i) the number of students attaining tertiary qualifications; and (ii) the number of people attaining graduate and postgraduate qualifications in science, technology, engineering and mathematics (STEM) subjects. This will include the rapid increase in the use of ICT to enable ICT literacy and proficiency. In particular, higher education institutions will be encouraged to develop

partnerships with employers to ensure skills progression is in line with the economic needs and to link with employment. The sub-sector strategy aims in providing personal development and work experience opportunities.

### Enhancing Equitable Access

Tertiary education must be accessible to all those who have the ability to benefit. Improving accessibility and an increased supply of high quality graduates is vital for our economic success. A sub-sector policy will be developed on this issue with particular emphasis on inclusion and for students with disabilities or from marginalized or disadvantaged backgrounds and to the provision of academic and pastoral support to all students. A goal is to create a seamless transition, one which allows a person to move easily from school to university to employment.

### Supporting Knowledge Transfer, Innovation and Research

An increasingly competitive global economy will require students to apply innovation. This is a key element of the NDP11, and ETSSP supports innovation through the pursuit of research and development excellence, overseas institutional research partnerships, knowledge transfer and university-business collaboration. The strategy encourages closer collaboration between the higher education and business sectors to exploit the commercial potential of new ideas.

### Building High Quality and Flexible Learning Experience

Tertiary education must deliver a learning experience of the highest quality, supported by a fit-for-purpose quality assurance framework; provide opportunities for students to improve their employability skills; provide flexible and modular learning opportunities and maintain a supportive learning environment. The setting up of the National Research Council will ensure standards and quality is maintained and regularly monitored. ETSSP has a strong emphasis on improving the quality of the student experience. Excellence in teaching will be a priority. A single quality assurance framework for all institutions will be developed alongside relevant and up-to-date curriculum.

### A More Efficient System

Tertiary education must be flexible in delivery and in funding. The sub-sector must become more efficient in terms of value for money. In the longer term, the flexibility of the new funding model should enable greater student numbers and support costs to be controlled. The Strategy proposes to enhance the funding model in order to support the lifelong learning ethos. Lifelong learning must be at the heart of the system and new pathways into, and through, tertiary education must be developed. A revised overall funding model and an appropriate governance structure will support these goals.

### Accountability

Higher Education needs to be regulated and the quality of private and government provision reviewed and developed and undertake reforms in line with regional and international models. The proposals will mean ensuring better and more efficient funding and financial reporting and improving links between higher education and research and the economy.

# Critical Challenges

The Tertiary Education sub-sector challenges can be summarized as follows:

- Coordination and coherence of governance, performance and data management
- Employability of graduates, relevance of course offerings, student retention and progression
- Quality of faculty and institutional offerings, flexibility of study patterns, under supply of degree offerings
- Access and equity of participation
- Reforming the funding of the Tertiary sector
- Capacity for delivery of graduate studies programmes
- Range of graduate studies programmes offerings,
- Industry collaboration and financing
- Inadequate national research framework, shortage of researchers, national relevance of research output

## Overall Objective for the Tertiary Education Sub-sector

The Tertiary Education sub-sector will provide high quality Tertiary Education that is to be the backbone to knowledge creation and its strategic application. Thus the main goal will be

**'To turn the Tertiary Education sub-sector into an enabler for Botswana's development agenda particularly the transformation of the country from a mineral based economy to a skill based knowledge-economy.'**

The expected outcome will be a mature, highly skilled and responsible human resource with relevant technical expertise.

## Summary Programmes

The Tertiary Education sub-sector has eight (8) strategic goals:

| | |
|---|---|
| TERT 1 | To create a national high quality comprehensive Tertiary Education system for knowledge creation and its strategic application |
| TERT 2 | To create an efficient and effective data management system for tertiary education |
| TERT 3 | To align Tertiary Education with the needs of the knowledge based economy |
| TERT 4 | To develop strategies aimed at providing quality framework for all tertiary education institutions |
| TERT 5 | To make all tertiary institutions to have greater equity of access and inclusion |
| TERT 6 | To develop a comprehensive and sustainable funding strategy for tertiary education |
| TERT 7 | To enhance knowledge creation through graduate studies and research to drive a knowledge based economy |
| TERT 8 | To improve the quality, quantity and relevance of research to transform the society to a knowledge base economy |

**PROGRAMME 1: A NATIONAL HIGH QUALITY COMPREHENSIVE WELL-COORDINATED, AND EFFICIENT TERTIARY EDUCATION SYSTEM THAT ADDRESSES LIFELONG LEARNING NEEDS.**
**Overall goal: To create a national high quality comprehensive Tertiary Education system for knowledge creation and its strategic application**

**BOTSWANA EDUCATION & TRAINING SECTOR STRATEGIC PLAN (ETSSP 2015-2020)**

| OUTCOMES | | |
|---|---|---|
| 1. A system wide governance, planning and monitoring structure for tertiary education to transform HEIs<br>2. A coordinated, articulated, performance driven student centred tertiary education system<br>3. Improved transition from secondary to tertiary education | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Establish the Tertiary Education Department within the MOESD to lead and coordinate the development of tertiary education and educational policies by end of 2015<br>2. By 2015 a rationalization strategy is created for the colleges of education and institutes of health sciences<br>3. Implement the rationalization plan for colleges of education by end of 2016<br>4. By 2015 a wide governance planning and monitoring framework for tertiary education is developed and implemented | 5. All legislation on tertiary education will be reviewed and implemented in line with governance and accountability needs by end of 2017<br>6. By end of 2018 Implement the rationalization plan for institutes of health sciences<br>7. The realignment of academic calendar, implemented to allow immediate progression from secondary to tertiary By end of 2017 | 8. By end of 2019 create a framework for health science and medicine education.<br>9. An enabling legislative framework in place by 2020<br>10. By the end of 2019 HRDC, BQA and BEC are fully operational.<br>11. By 2020 the wide governance and planning monitoring framework for tertiary education is reviewed. |
| **ACTIVITIES** | | |
| 1. Develop an accountable framework for Tertiary Education<br>2. Establish a system wide governance, planning and monitoring system within Tertiary Education<br>3. Establish a robust Tertiary Education and Educational policies coordination Centre within the MOESD<br>4. Continue the development and establishment of the HRDC, BQA and BEC<br>5. Create a coordinated well-articulated performance driven seamless continuous Tertiary Education<br>6. Transform teacher training institutions (**College of Education**) to produce a local and globally competitive teacher/lecturer<br>7. Transform institute of health sciences (IHS) to produce quality health human resource | | |

| **PROGRAMME 2: AN INTEGRATED, COMPREHENSIVE AND EFFICIENT TERTIARY MANAGEMENT INFORMATION SYSTEM**<br>**Overall Goal: To create an efficient and effective data management system for tertiary education** | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. A national tertiary education MIS that will include a central application system component and a student financing system component as well ability to link institutions to parastatals and the MoESD, to manage the entire data and statistical for reporting needs of tertiary education<br>2. A central on line repository of key institutional information to support students in making more informed and strategic choices in institution and programme selection<br>3. A comprehensive system monitoring and reporting sector that will enhance performance | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. By end of 2015 a framework for a national tertiary education MIS database system is | 4. By end of 2017 Develop Key | 5. By end of 2019 |

| | | |
|---|---|---|
| developed<br>2. By end of 2015 Develop a Student Finance System in line with the tertiary education policy to ensure effective and efficient administration of the student grant/loan funds is in place<br>3. A framework for centralized student admission to ensure efficiency and equitable student distribution into institutions | baseline data and indicators for reporting sector and institution performance | a reliable tertiary sub sector MIS system will be in place |

**ACTIVITIES**

1. Establish a national tertiary education MIS
2. Develop an on line central application system for all applicants for admission into tertiary education institutions.
3. Develop an on line student financing system
4. Publish pertinent institutional information of all registered tertiary education providers annually; such information will also include current registration and accreditation status of institutions and courses offered.

**PROGRAMME 3: INCREASE THE POOL OF HIGHLY SKILLED AND RELEVANT HUMAN RESOURCE FOR THE NATIONAL AND GLOBAL NEEDS.**

**Overall Goal: To align Tertiary Education with the needs of the knowledge based economy**

**OUTCOMES**

1. Programme that reflect relevant human resource needs in key areas of study and qualifications that ultimately benefit the economy and the needs of the country
2. Increased graduate employment
3. Provide opportunities for all students to develop a portfolio of skills, attributes and experiences to be confident and capable global citizens (milestone)
4. Balance in demand and supply graduates from STEM programmes
5. Well rounded, competent human resource that will lead Botswana's transformation agenda

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. By end of 2015 mechanisms and structures for researching and projecting future labour market needs are established<br>2. By end of 2015 a policy and strategy on provision of undergraduate research opportunities for students is created<br>3. By end of 2015 a set of national specifications for tertiary education student support services is developed<br>4. By end of 2015 a 10% increase of students undertaking a work placement or internship as part of their course of study is achieved.<br>5. By end of 2016 all degree awarding institutions will infuse entrepreneurism into each course of study offered. | 8. By mid-2017 bridging programmes in STEM developed in collaboration with secondary schools<br>9. By end of 2017 a 10% students increase in key areas such as science, technology, engineering, mathematics and foreign languages<br>10. By end of 2017 all HEIs developed standards and commence implementation of co-curricular and student support services that contribute to the skills development, career readiness, well-being, inclusion and academic success of the students<br>11. By end of 2017 10% of | 13. By mid-2019 all degree awarding institutions will offer opportunities to study a programme in a foreign language.<br>14. By end of 2019 all HEIs will have completed implementation of co-curricular and student support services<br>15. By end of 2019 all HEIs will integrate service learning in to their courses of study.<br>16. By end of 2019 achieve a 60% increase of students undertaking a work placement or internship as part of their course of study. |

| | | |
|---|---|---|
| 6. By end of 2016 all tertiary institutions will through curriculum enhancements develop learners skills in areas such as critical thinking, problem solving, IT literacy, global awareness, quantitative reasoning as part of their programmes of studies<br>7. By end of 2016 20% increase in students graduating from economically relevant STEM course is achieved at all levels | student participate in a service learning experience as part of their studies<br>12. By end of 2017 a 30% increase of students undertaking a work placement or internship as part of their course of study achieved. | |
| **ACTIVITIES** | | |
| 1. Develop strategies to promote study in key areas such as science, technology, engineering, mathematics and foreign languages to enriched student learning experience that fosters their personal and intellectual growth and development to be confident and capable global citizens<br>2. Expand STEM learning opportunities at secondary, pre-tertiary and tertiary<br>3. All Higher Education Institutions to create a policy and strategy on provision of undergraduate research opportunities for students as part of their 5 year improvement plan<br>4. Guide the development of co-curricular and comprehensive student support services that contribute to the skills development, career readiness, well-being, inclusion and academic success of the students<br>5. Create a set of national criteria for learning outcomes aimed at producing well rounded, competent human resource that will lead Botswana's transformation agenda.<br>6. Infuse entrepreneurship into the curriculum across all disciplines | | |

| **PROGRAMME 4: CULTIVATE AN INTERNATIONALLY COMPETITIVE, QUALITY FOCUSED TERTIARY EDUCATION SYSTEM.**<br>**Overall Goal: To develop strategies aimed at providing quality framework for all tertiary education institutions** | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. Uniform quality measurement framework (Quality Assurance framework)for all tertiary education developed<br>2. Higher quality, well trained faculty drawn from the global market in place<br>3. A system that allows for flexible study patterns within and between institutions developed<br>4. Increase number of degree qualified graduates | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |

| | | |
|---|---|---|
| 1. By end of 2015 a framework for quality audit of institutions is developed and implemented<br>2. By end of 2015 new quality standards and criteria for quality assurance in HEIs developed<br>3. By mid-2016 all HEIs will develop a 5 year strategic plan based on outcomes of quality audit and required adherence to new standards<br>4. By end of 2015 a national on line/distance education policy will be developed<br>5. By end of 2016 the national qualifications and credit framework is implemented | 6. By end of 2017 HEIs to develop strategic measures to recruit and retain superiorly qualified international faculty, staff and students.<br>7. By end of 2017 a support allowing HEIs to recruit and retain superiorly qualified international faculty, staff and students is in place<br>8. By end of 2017 all institutions offering sub degree programmes must have pathway to degree qualification | 9. By end of 2019 all HEIs will have undergone a full quality audit against the new standards and their 5 year strategic plan focusing on all aspects of institutional activities/functions.<br>10. By end of 2019 a continuous and gradual implementation of lifelong learning will be achieved |

**ACTIVITIES**

1. Establish a pool of multi-disciplinary national and international higher education leaders to execute quality audits of all institutions and create improvement plans where implementation is directly linked to future registration and funding
2. Support all registered institutions in drafting a 5 year plan that outlines their dedicated and intentional growth and improvement that will address education institution's mission and goals, governance, performance, community partnerships and resources.
3. Audit all institutions will have undergone at least one full institutional audit during the life of their inaugural 5 year plan.
4. Develop a national framework of qualifications and training for faculty to ensure consistency and parity with global norms
5. Create structures and opportunities to allow institutions to recruit, retain and develop internationally qualified and competitive faculty, staff and students
6. Development and implement a credit based modular system to allow flexible study patterns, credit transfer between programs and institutions
7. All institutions offering sub degree programmes must have pathway to degree qualification available within their institution or allow for articulation and transfer to another institution locally
8. Develop a national policy on line and distance education

**PROGRAMME 5: DEVELOP SYSTEMS, PROCESSES AND SERVICES THAT ENABLE GREATER EQUITY OF ACCESS AND INCLUSION OF MARGINALISED STUDENTS**

**Overall Goal: To make all tertiary institutions to have greater equity of access and inclusion**

**OUTCOMES**

1. A policy and research basis for equity of access and inclusion
2. A series of programmes, standards and targets and monitoring mechanisms that clearly articulate access and inclusion related obligations

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|

| | | |
|---|---|---|
| 1. By end of 2015 a national policy on access, inclusion and widening participation in tertiary education is developed<br>2. By end of 2015 a series of programmes, standards, targets and monitoring mechanisms that clearly articulate access and inclusion related obligations are set. | 3. By end of 2017 100% of all HEIs are monitored on access, inclusion and participation as part of their bi-annual institutional review process.<br>4. By end of 2017 30% of public HEIs are funded for improvement of accessibility of buildings and facilities initiatives | 5. By end of 2019 policy implementation on access, inclusion and participation annually monitored and evaluated<br>6. By end of 2019 All institutions facilities and buildings will be physically accessible<br>7. By end of 2019 all public HEIs are funded for improvement of accessibility of buildings and facilities initiatives |
| **ACTIVITIES** | | |
| 1. Establish devoted policy and research function within the Tertiary Education Department to focus on widening access and inclusion<br>2. Initiate base line research and benchmarking to inform future developments in widening participation<br>3. Develop a policy on access and inclusion for the tertiary education sector<br>4. Create strategic set aside funding for pilot initiatives that focus on increased access and inclusion<br>5. Develop access pathways, standards, policies and targets for institutions and closely monitor their effectiveness<br>6. All institutions shall carry out an accessibility audit of buildings and facilities and develop a remediation strategy as part of their 5 year improvement plan | | |

| **PROGRAMME 6: DESIGN AND IMPLEMENT A NEW TERTIARY EDUCATION FUNDING MODEL**<br>**Overall Goal: To develop a comprehensive and sustainable funding strategy for tertiary education** | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. A funding strategy that is reflective of the diverse range of institutions<br>2. A student funding strategy that promotes and encourages student choice<br>3. A system that rewards efficiency and innovation in resource utilisation | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. By end of 2015 Develop and implement an institutional funding policy (with associated regulations) and model that rewards efficiency in resource allocation[52]<br>2. By end of 2015 an undergraduate and graduate student funding policy and procedures will be developed and implementation commenced | 3. BY end of 2017 Full implementation of institutional funding policy and model will be achieved<br>4. By end of 2017 full Implementation of the undergraduate and graduate student funding policy and model will be achieved | 5. By end of 2019 HEIs will have strategies to diversify their funding in line with the policy.<br>6. By 2018 75% of graduate students will be sponsored in line with graduate studies plan and student funding policy. |
| **ACTIVITIES** | | |
| 1. Develop a funding policy for tertiary education to support the growth and development of tertiary education system that is outcome focused and reflective of the diverse range of higher education | | |

[52]The funding model for tertiary education will provide the sub-sector with improved financial security and sustainability and the flexibility to respond to changing needs and demographics.

institutions currently operating in Botswana
2. Identify KPIs in areas such as quality, access, inclusion, research & innovation, student support services and student academic success
3. Establish systems that reward greater efficiency in resource utilization
4. Establish funding strategies that create pathways to allow institutions to diversify sources of funding, such as cost sharing, research income and fund raising
5. Develop the policies, procedures and operational structures for the improved tertiary education student fund
6. Introduce graduate student sponsorship
7. Continue to implement the ministerial directive to outsource the management of the education support fund

**PROGRAMME 7: DEVELOP GRADUATE STUDY OPPORTUNITIES IN PRIORITY AREAS**

**Overall Goal:** To enhance knowledge creation through graduate studies and research to drive a knowledge based economy

**OUTCOMES**

1. Improved access and participation of students in graduate studies
2. A funding structure for supporting graduate studies in line with the student funding policy
3. An increased range of graduate studies programme offerings
4. Development of institutional support and promotion of exchange programmes including industry collaboration in graduate training

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. By end of 2015 a national plan and standards for graduate studies is developed<br>2. By end of 2015 Design and commence implementation of graduate student internship programme<br>3. By end of 2015 a national policy on internationalisation in higher education and research is developed<br>4. National plan on graduate studies in line the Human resource development strategy (HRDS) annually reviewed and updated | 1. By end of 2017 a comprehensive national and international graduate student recruitment and exchange programme is developed and implemented.<br>2. By end of 2017 a graduate student internship programme is developed and implemented in collaboration with industry.<br>3. By end of 2018 At least 5% of graduate faculty is international staff | 4. By end of 2019 10% of staff and graduate students each year participate in work/study exchange programmes<br>5. By end of 2019 Research capacities including physical facilities and human capital are increased in relation to students in academic departments<br>6. By end of 2019 At least 10% of graduate students are international<br>7. By end of 2019 At least 16% of all faculty be international staff with capacity to supervise research |

**ACTIVITIES**

1. Develop a national plan for graduate studies
2. Establish national graduate education standards
3. Develop and implement a marketing and promotion strategy to recruit students into graduate education
4. In partnership with industry, design and implement a graduate student internship programme

**PROGRAMME 8: INCREASE HIGH QUALITY RESEARCH, RESEARCH OUTPUT AND**

| **INNOVATION**<br><br>**Overall Goal: To improve the quality, quantity and relevance of research to transform the society to a knowledge base economy** | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. National research council established<br>2. Increased volume, visibility and relevance of research to national needs of research output<br>3. Improvement of quality and relevance in research<br>4. Increased relevance of research to national need | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. By end of 2015 National Research Council established through an Act of Parliament<br>2. By end of 2016 Research standards, ethics and research are developed<br>3. By end of 2016 A national plan with clearly defined capacity building priorities, research targets will be developed<br>4. By end of 2016 a national fund for research (including dissemination of research) operational<br>5. By end of 2016 a framework for monitoring and assessing research quality, output and relevance operational<br>6. By end of 2016 HEIs to increase draw down of funding by 10%<br>7. By end of 2016 20% of postgraduate students engaged in research | 8. By end of 2017 a fund for supporting the direct contribution of research output to the national needs is established.<br>9. By end of 2017 A fund to support development of HEIs based incubators for innovation and product development established<br>10. By end of 2018 Implement a programme for financing researchers for international exchange and collaborative research<br>11. By end of 2017 Increased draw down of funding by HE for research by 30%<br>12. By end of 2018 40% of postgraduate students engaged in research | 13. By end of 2019 Achieve a 5% annual increase in academic staff engaged in research<br>14. By end of 2019 Awards set for recognition of outstanding researchers and quality research work<br>15. By end of 2019 Increase draw down of HEIs research funding by 40%<br>16. By end of 2019 60% of postgraduate students engaged in research<br>17. By end of 2019 Increased number of research outcomes taking account of the national economy |
| **ACTIVITIES** | | |
| 1. Establish a National Research Council<br>2. Promote staff and graduate student involvement in research<br>3. Develop and promote recognition and rewards for research excellence<br>4. Formulate research output targets<br>5. Identify mutually beneficial research initiatives that support national and international research inquiry<br>6. Actively promote international research collaboration<br>7. Develop a plan for supporting the direct contribution of research output to the national need | | |

# 5.6 TVET and SKILLS SUB SECTOR

The TVET system in Botswana is separate from the formal School Education System and is perceived negatively as having a poor response to labour market demands, poor articulation with the labour market, and not contributing towards socio-economic development needs as much as is expected. It needs to address multiple social and economic development priorities - from poverty reduction, food security and social cohesion, to economic growth and competitiveness. The TVET system needs to take into account current and expected socio-economic conditions,

including labour market demands, the needs of both the formal and informal sector in relation to employment, and the professional capacity of TVET Teachers and Instructors.

The TVET system in Botswana is quite separate from the basic Education System and has limited pathways for growth. It is perceived as a second best choice by learners. TVET is seen as an underperforming sub-sector that does not contribute sufficiently towards socio-economic development needs as much as expected. There is poor articulation and mismatch of skills with the labour market demands; an outdated curriculum and low utilization rates.

The TVET sub- sector will need to transform to be fit for purpose. TVET will be made responsive to the needs of the socio-economic conditions, including labour market demands, the needs of both the formal and informal sector in relation to employment, and the professional capacity of TVET Teachers and Instructors. The TVET sub- sector's contribution will be the development of a skilled workforce for Botswana, and its remit therefore is taken as the transition of the country to a skills based knowledge-economy. The outcome of these efforts will be competent, innovative and internationally competitive individuals, who can contribute to the socio-economic and technological advancement of the country, including employment creation and poverty reduction. There is a robust plan to recruit disabled, disadvantaged or other vulnerable groups into TVET.

## Critical Challenges

The main challenges of the sub-sector are discussed below in line with the NDP 10 goals of quality, relevance, equitable and accountable education system.

### QUALITY AND RELEVANCE

- **Absence of prioritization**: Technical Education and Skills Development training is not very relevant to the needs of industry. Studies highlight that Vocational Education Training in Botswana does not provide readily employable persons, primarily because of limited practical work done at training institutions, which may also explain the high unemployment rate among TVET graduates.

- **Poor Quality Curriculum:** The programmes which are offered in Technical Colleges and Brigades are overdue for review and evaluation. The Brigades offer programmes that have not been reviewed since 1997. Similarly most of the Apprenticeship Curricula have not been reviewed or revised for years.

- **Low Performance:** A major challenge across the TVET and Skills Development sub-sector. The average pass rates are below 50%. The sub-sector is also bedeviled by management and resource challenges, with dilapidated buildings and obsolete equipment and a poor work ethic amongst staff and students. This contributes to poor quality and inefficiency of the TVET system.

- **Image of the TVET sub-sector:** The reputation of TVET is poor. In many cases, school-leavers decide to enroll in TVET institutions only if they do not qualify for senior secondary or higher education. Failure to offer quality programmes, poor quality staff and outdated curricula have made TVET unattractive, especially where it is rarely a first choice. The TVET Situation Analysis Report established all TVET colleges are operating well below their intended student capacity of a teacher- student ratio of 1:15 or above.[53]

[53] Situational Analysis, March 2013

### ACCESS AND EQUITY

- **Pathways f**rom secondary school to TVET needs to be developed. It is anticipated that through the introduction of the NQF a seamless progression of learners from secondary school to TVET will be established. The progression will be supported by effective career guidance and assessment systems.

- **Equity** Currently TVET institutions (Colleges and Brigades), are not able to accommodate learners with disability. Four institutions have, however, been earmarked as 'special education schools.' The TVET sector has no capacity to fully support the learning of students with disability. A programme of inclusive teaching and learning coupled with comprehensive audit of facilities, instruction and course offering needs to be undertaken.

### ACCOUNTABILITY

- **Multiple Accountability at the Ministerial Level:** The sector is dysfunctional partly because it is poorly coordinated and fragmented, with different Ministries responsible for various aspects of TVET. Thus there is need to strengthen the governance structures for greater accountability of the TVET sector.
- **Lack of clarification of purpose:** There is a need to conceptualize and contextualize TVET to ensure that institutions deliver to their mandate, and that the sector makes noticeable impact and contributions.

### Strategic Goals

The aim of Technical and Vocational Skills Development programmes is:

**'To meet the immediate, medium and long-term skills requirements and to provide an adequate supply of skilled graduates, who can also participate in the global labour markets."**

## Key Programmes

| | |
|---|---|
| TVET 1 | To attain sole accountability for a quality TVET sub-sector and to have effective governance of the sector |
| TVET 2 | Improve the quality and relevance of the TVET system so as to produce competent TVET graduates for the Botswana Economy |
| TVET 3 | To align TVET programmes and institutions with the demand for qualified, productive and competitive human resources |
| TVET 4 | To increase TVET pathways for growth for all learners (lifelong learning) by establishing mechanisms for the transferability of credits |
| TVET 5 | To produce job-ready TVET graduates through well-regulated work-based learning, including apprenticeships for both learners and trainers |
| TVET 6 | Strengthen professional competency of staff within the TVET system to enable a learning environment that makes TVET globally competitive |
| TVET 7 | Increased stakeholder contribution to the transformation of the TVET sector |
| TVET 8 | To attain optimum utilization of TVET Resources |
| TVET 9 | To establish a more positive image of TVET for improved perception of the TVET sector in order to increase enrolment and better prepare graduates for the labour market |

**PROGRAMME 3: RATIONALISE TVET INSTITUTIONS AND PROGRAMMES**
**OVERALL GOAL: To align TVET programmes and institutions to the demand for qualified, productive and competitive human resources at the district and national levels**

**OVERALL GOAL: Improve the quality and relevance of the TVET system so as to produce competent TVET graduates for the needs of the Botswana Economy**

**EXPECTED OUTCOME/TARGET OUTPUT:**

1. An increase in pass rates and graduation/completion rates across the sub sector
2. A high quality outcomes-based programmes, curriculum and assessment systems developed and implemented for Brigades and Technical colleges, in line with NCQF and BQA unit standards
3. TVET sub-sector will be aligned to the skills needs of the economy

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| **1** A national TVET competency based curriculum, delivery and assessment framework<br>**2** High quality competency-based TVET programmes (content) that meet the demands of the 21st century workplace in all TVET institutions<br>**3** An increase in TVET institutions that conduct research to inform quality, relevance and innovation<br>**4** 20% increase in TVET student graduates from the competency-based curriculum<br>**5** A strategy for student industry- attachment developed | 6 TVET students' professional practice is implemented<br>7 60% increase of TVET students graduate from the competency-based curriculum<br>8 A significant improvement with regard to the established KPIs for TVET institutions is measurable<br>9 All programmes are aligned with cross-cutting issues<br>. | 10 100% increase of TVET student graduates from the competency-based curriculum<br>11 All TVET institutions produce graduates who are locally, nationally and globally employable<br>12 TVET institutions meet global benchmark for quality KPI including completion rates, employability and learner satisfaction |

**ACTIVITIES**

1. Partner with industry to develop high quality outcomes-based TVET curriculum which will form programmes that are relevant to the needs of the Botswana economy and the labour market
2. Integrate life-skills, inclusion and HIV/AIDS and other cross-cutting issues into the TVET programmes
3. Rationalize and improve TVET assessment so that it is an outcomes-based assessment
4. Re-orientate public TVET institutions to prepare learners for entrepreneurship and the informal sector
5. Establish structures and systems for assessment, monitoring and reporting on programme quality compliance and performance
6. Improve TVET research capacity in Botswana in partnership with reputable institutions for projects that bring product and academic innovation in TVET
7. Upgrade targeted TVET facilities to support delivery of quality programmes
8. Develop a TVET management information system to collect data on all aspects of TVET programme including tracer studies for TVET graduates

**EXPECTED OUTCOME/TARGET OUTPUT:**

1. TVET Institutions are rationalised and respond to the regional and national skills needs
2. TVET streams aligned and the curriculum for the two streams (apprenticeships and institutions) has a unified starting point
3. Courses are rationalised for improved access, quality and relevance of the TVET programmes offering
4. Clear mandates, procedures and systems are in place to enable meaningful institutional performance assessment across the sub-sector

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Medium Term 2017-2018 |
|---|---|---|
| 1. TVET programme offerings are rationalized to improve quality, utilization, relevance and focus<br>2. TVET institutions are rationalized and structured to deliver the programmes in line with national need<br>3. TVET sub-sector is restructured to meet the skills needs for the locality/ region; the nation and beyond<br>4. DTVET is restructured and functions are appropriately placed at HRDC and BQA and BEC<br>5. The two main TVET streams "BTEP" and "Apprenticeship/Trade Test" are aligned and the curriculum for the two streams has a unified starting point for efficiency of the sub sector | 6. The BTEP and "Apprenticeship/ Trade Test" are aligned and operational<br>7. Regional TVET programmes are developed in line with the regional economic needs to support students attachment and industry skill requirements | 8. TVET institutions deliver programmes in line with the national human resource priorities<br>9. TVET programmes are revitalized<br>10. All TVET institutions operate within their full mandates in 2019 |

**ACTIVITIES**

1. Carry out an audit of TVET provision in Botswana and create a register of service providers
2. Restructure DTVET, MTTC and other TVET organizations in line with the BQA and HRDC Acts
3. Reposition and realign DTVET in line with the TVET revitalization strategy
4. Rationalize TVET programmes in line with socio economic needs and recommendations of various studies
5. Transform and rationalize TVET programmes for quality, relevance and effectiveness
6. Align and unify the curriculum for the two main TVET streams "BTEP" and "Apprenticeship/Trade Test"
7. Restructure TVET institutions to improve efficiency and effectiveness
8. Establish clusters of Technical colleges and Brigades within the regional/economic focal area/ programmes to avoid duplication and optimize utilization, Change the form and function of Brigades to affiliate and articulate to technical colleges
9. Develop Centres of Excellence (specialization) for selected technical and vocational training with clusters
10. Review student allowance model that does not disadvantage TVET students

**PROGRAMME 4: INCREASING EQUITABLE ACCESS TO TVET THROUGH IMPROVED PATHWAYS FOR GROWTH AND EMPLOYABILITY**
**OVERALL GOAL: To develop TVET pathways for growth (lifelong learning) for all learners**

**BOTSWANA EDUCATION & TRAINING SECTOR STRATEGIC PLAN (ETSSP 2015-2020)**

**EXPECTED OUTCOME/TARGET OUTPUT:**

1. A comprehensive framework for transition of learners across basic education, TVET and higher education (NQF) with clearly defined TVET lifelong learning and progression pathways
2. An expanded and inclusive TVET training capacity for increased number and diversity of learners entering the system
3. A functional national qualifications system and procedures for equivalence, accreditation and quality assurance will be in place
4. A competitive TVET qualifications with increased employability

**5. MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. A Framework for Lifelong learning and progression pathways is defined for the TVET sub sector<br>2. TVET pathways and transition points are clearly defined and communicated to beneficiaries<br>3. Accessible career, academic guidance and counselling services for TVET established.<br>4. The National Qualifications Framework implemented in relation to TVET | 5. A 30% increase in equitable access<br>6. All TVET institutions offer inclusive programmes that are well articulated and aligned to the NCQF<br>7. All TVET programmes are accredited<br>8. A 30% increase in TVET students who are able to make smooth transition across basic education, TVET and higher education | 9. A 50% increase in equitable access<br>10. There is flexibility and progression in the TVET sector<br>11. A functional TVET national qualifications system and procedures for establishing equivalence, is operational in Botswana<br>12. A 60% increase in TVET students able to make smooth transition across basic education, TVET and higher education and demonstrated inclusive policies |

**ACTIVITIES**

1. Establish mechanism for smooth transition/exit of learners from secondary schools into TVET
2. Develop and maintain TVET pathways for mobility within TVET system and across the system
3. Develop scholarships or financing mechanisms targeting inclusion e.g. gender budgeting etc.
4. Develop and brand pathways that will position TVET to project the Botswana education hub brand and to enable the programs to be transferable and marketed internationally
5. Introduce varied study patterns in TVET institutions to allow for different learning styles
6. Develop implementation strategies to operationalize the NCQF
7. Develop maintain policy guidelines for Recognition of Prior Learning (PRL) and Recognition of Current Competencies into the NCQF
8. Develop career guidance systems and tools to support the actualization of the pathways

**Programme 5: STRENGTHENING WORK-BASED LEARNING**
**OVERALL GOAL: To produce high quality TVET graduates through well-regulated work-based learning including apprenticeships for both learners and trainers**

**EXPECTED OUTCOME/TARGET OUTPUT:**

1. A well regulated and effective work-based learning system established for Botswana
2. A fully functioning apprenticeship schemes that are appropriate for skill development
3. A skilled technical and vocational workforce more able to effectively contribute to economic prosperity and labour market needs

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|

| | | |
|---|---|---|
| 1 Comprehensive TVET work- is developed in line with the comprehensive TVET policy<br><br>2 Coordinating Structures for work placement for TVET learners are in place<br><br>3 A system for linking apprenticeship with TVET established including provision for access to relevant programmes | 4 An effective regulated TVET work-based learning system aligned to the TVET based learning regulatory framework Policy and curriculum reforms<br><br>5 A 20% increase in industry participation in work-based learning<br><br>6 An apprentice support system in place and implemented | 7 Operationalized apprenticeship schemes in participating sectors<br><br>8 A 50% increase in industry participation in work-based learning<br><br>9 A workforce more able to effectively contribute to economic prosperity |
| **ACTIVITIES** | | |
| 1. Establish comprehensive legal and regulatory instruments/framework for "work-place learning", "work-based teaching" and "work-based learning programmes"<br>2. Review coordination of apprenticeship and establish governance and support structures with clearly defined responsibilities and mandates<br>3. Develop recognition and incentives for the private and the informal sector apprenticeship and other work-based / work-place learning<br>4. Develop a Strategy for facilitating effective participation of industry in work-based TVET delivery.<br>5. Propose that all companies, including those awarded Government tenders, provide work-placement or internship opportunities for TVET trainees and trainers.<br>6. Establish incubation centres, simulations for trainees to try out business ideas within institutions | | |

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| **PROGRAMME 6: Improved TVET Staff Competencies**<br>**OVERALL OBJECT/GOAL: Strengthen professional competency of staff within the TVET system** | | |
| **EXPECTED OUTCOME/TARGET OUTPUT:**<br><br>1. The TVET system and institutions professionally managed<br>2. TVET staff talent pool and career pathways established for attraction and retention of staff<br>3. TVET lecturing staff will meet minimum standards in a vocational area and will hold a teaching qualification | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |

| | | |
|---|---|---|
| 1 A Continuous Professional Development Policy for TVET is developed<br>2 A CPD Framework for TVET staff established<br>3 An INSET system for TVET developed<br>4 TVET teaching standards are designed and implemented in line with BQA and include social subjects that develop character and work ethic<br>5 Commence implementation of training programme to upgrade TVET staff<br>6 Accredited competency-based capacity development programmes are developed for TVET principals and lecturers in support of standards | 7 A leadership and management development framework and programmes developed<br>8 At least 50% of TVET principals and lectures have been trained through a comprehensive competency based TVET Teacher/staff development programme and meet standards<br>9 At least 30% of lectures in Brigades and 80% in Technical colleges have undergone high quality training and meet the requirements for accreditation | 10 All TVET institutions are well managed by competent staff (principals and management)<br>11 All TVET lecturers are well experienced and qualified with a minimum of a diploma in a Vocational area and a Teaching Qualification with industrial experience<br>12 TVET system and institutions are professionally managed<br>13 TVET staff talent pool and career pathways are established across the sub sector (from Brigade to technical colleges) |
| **ACTIVITES** | | |
| 1. Create a fast track pathway for highly-skilled technicians to gain TVET teacher qualifications<br>2. Define and implement competencies/teaching standards for different levels of TVET with the Botswana Teaching Council, including character building and work ethic (attitudes)<br>3. Develop appropriate training programmes for TVET staff<br>4. Deliver comprehensive leadership and management training for TVET institution management with a mentoring component<br>5. Develop and implement a strategic Continuing Professional Development policy framework for TVET staff which includes compulsory periodic industry experience<br>6. Develop career progression pathways for TVET staff in line with the NCQF and CPD<br>7. Develop a staff development fellowship programme to increase staffing for TVET institutions<br>8. Maintain an up-to-date skills database (MIS) for TVET<br>9. Implement a strategy for recruitment and retention of competent TVET staff<br>**10.** Monitor the impact of the training and professional development on beneficiaries | | |

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| **PROGRAMME 7: Development of TVET Resources Management**<br>**OVERALL GOAL: To attain optimum utilization of TVET resources** | | |
| **EXPECTED OUTCOME/TARGET OUTPUT:**<br>1. TVET resources will be efficiently managed with capacities (including facilities) fully utilised<br>2. A sustainable TVET funding strategy and system will be established<br>3. TVET institutions will have financial and operational autonomy<br>4. Holistic, accurate and reliable database on TVET resources will be available and accessible to all training institutions | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |

| | | |
|---|---|---|
| 1. Adequate equipping of technical areas in TVET institutions to meet curriculum requirements<br>2. Comprehensive occupational health and safety practices in place in TVET institutions<br>3. All TVET resources captured in an up-to-date database analyzed for rationalization, optimization<br>4. A sustainable TVET funding strategy established and operationalized<br>5. TVET M&E financial framework is in place | 6. All public TVET institutions are financially and operationally autonomous<br>7. Governance of Brigades improved in line with HRDC guidelines<br>8. A comprehensive common TVET database on training institutions that is accessible to all<br>9. A 75% increase in the utilization of TVET facilities and provide for needs of all vulnerable groups<br>10. Efficiency of the TVET in line with norms and trends evidenced by timely completion rates | 11. The optimized number of TVET institutions are financed based on priorities set for the TVET sub-sector<br>12. TVET institutions manage independently their finances and other key operations are sustainable<br>13. Full utilization of TVET facilities that provide for needs of all vulnerable groups<br>14. Governance of TVET institutions improved in line with HRDC guidelines |
| **ACTIVITIES** | | |
| 1. Establish minimum equipment requirements for programmes and maintain up-to-date asset registers<br>2. Maintain a single comprehensive TVET MIS as part of EMIS<br>3. Build capacity in data management and decision making<br>4. Develop and maintain institutional planning system for optimum resource utilization in line with HRDC framework for Colleges and Brigades<br>5. Establish frameworks for resource mobilization and partnership<br>6. Review and improve TVET facilities so they accommodate learners of different abilities and vulnerabilities<br>7. Develop appropriate resourcing and funding model for TVET<br>8. Develop and implement a model for operational and financial autonomy of TVET institutions<br>9. Strengthen and simplify financial management procedures for TVET institutions<br>10. Institutionalise facility management planning in all TVET institutions including short term and long term maintenance plans for equipment and facilities.<br>11. Develop and implement comprehensive occupational health and safety procedures for operating workshops and laboratories<br>12. Leverage on the training levy to support TVET for improved utilization of resources | | |

| **PROGRAMME 8: PRIVATE SECTOR AND INDUSTRY PARTICIPATION IN TVET**<br>**OVERALL GOAL: Increased stakeholder engagement, participation and contribution to the transformation of the TVET and skills development sub sector** | | |
|---|---|---|
| **EXPECTED OUTCOME/TARGET OUTPUT:**<br>1. A TVET professional practice is organized in close cooperation and support by industry and other stakeholders<br>2. A sustainable participation and contribution of the private sector and industry in the development of job ready TVET graduates across the sub sector<br>3. The engagement, participation and mutual expectations of private sector and industry with TVET and skills development sector are clearly identified and put into practice | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |

| | | |
|---|---|---|
| 1. Agreements are signed between VET institutions and 60% public and private enterprises (in priority sectors of economy) to arrange for learners professional practice and well-aligned placements<br>2. A framework for partnership with a poverty-eradication initiative to support a skills development component in place and implemented<br>3. Develop standards, structure and mutual expectations for partnership between industry/ the private sector with the TVET sub-sector<br>4. Rapid skills development initiatives at local level with private sector and informal sector involvement | 5. Increased private sector and industry participation and contribution in TVET at institution and regional level<br>6. At least 10 joint community development projects that enhance TVET skills, especially for the vulnerable groups and the poor<br>7. An increase in effective networks and partnership with industry with MOU to define the relationship between industry and institution | 8. All regions have joint community development projects that enhance TVET skills, especially for the vulnerable groups<br>9. A 20% increase in the level of private sector investment and participation at all levels of TVET provision<br>10. The private sector and industry participation and contribution in TVET at institutional and national level is monitored and reported as part of the sub-sector performance report to the district and the nation |
| **ACTIVITIES** | | |
| 1. Develop an engagement strategy founded on independent research to establish pathways for sustainable contribution of industry and private sector to TVET across a variety of areas<br>2. Establish agreements with industry to utilize experienced industry captains to teach programmes<br>3. Attract industry/stakeholder partnership in the provision of quality training in line with priorities (e.g. chamber of mines)<br>4. Develop criteria for attracting high quality investors (PPP) and partners in TVET<br>5. Provide community-based projects to enhance technical and vocational skills for poverty eradication in partnership with industry and the community (Rapid Skill Development approach)<br>6. Involve members of the community who have technical skills to share their skills through teaching; mentorship and coaching | | |

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| **PROGRAMME 9: RE-POSITIONING TVET FOR A POSITIVE IMAGE**<br><br>**OVERALL GOAL: To establish a more positive image of TVET, and an improved perception of the sector to increase enrolment, and better prepare graduates for the labour market** |
| **EXPECTED OUTCOME/TARGET OUTPUT:**<br><br>1. A positive perception of TVET as a career is evident amongst students and the nation at large<br>2. There will be parity between TVET and other tertiary education students. |
| **MILESTONES** |

**BOTSWANA EDUCATION & TRAINING SECTOR STRATEGIC PLAN (ETSSP 2015-2020)**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1 A TVET rebranding and communication strategy implemented<br>2 A 20% increase in student enrolments with a particular focus on equity | 3 TVET sector that has a strong brand at institution and sub-sector/national level<br>4 TVET will be recognized as a career of first choice.<br>5 Parity between technical and vocational and other careers<br>6 A 50% increase in student enrolment with a particular focus on equity | 7 A positive perception of the TVET sub-sector is evident<br>8 Increase in balanced enrolments across programmes and institutions<br>9 80% increase in student enrolments with a particular focus on equity |
| **ACTIVTIES** | | |
| 1. Develop TVET sub sector rebranding, publicity and marketing strategy to improve public image of TVET)<br>2. Develop action plan to increase Vocational training opportunities for learners with a disability<br>3. Implement targeted stakeholder engagement initiatives<br>4. Develop strategies to bring about parity between TVET and other tertiary institutions<br>5. Institutionalise strategy for inclusive TVET and HIV/AIDS awareness at all TVET institutions.<br>6. Strengthen TVET career awareness within basic education sector and TVET learners to influence TVET as a career of first choice at regional level<br>7. Establish mechanisms for monitoring and feedback on TVET image | | |

## Cross-cutting issues and linkages

**GENDER** The intent is to attain a gender balance in access to TVET so as to increase their chances of employment and subsequently to promote women economic empowerment. While the data that is available shows a gender balance in enrolments, there are disparities across trades, showing gender stereotypes.

**HIV/AIDS** The Botswana National Aids Partnership (BNAP), funded by National Aids Coordinating Agency (NACA), supports TVET institutions to have a HIV/AIDS Counsellor. However there is need to evaluate and extend the BNAP. It is also important to institutionalize a more holistic strategy for health awareness at institutional level with partnership with the district health management teams, the community health support group, as well as HRDC HIV/AIDS programmes for tertiary institutions. Such partnership should enable TVET institutions to share information and other common initiatives.

**PEOPLE WITH DISABILITIES** The review of the TVET programmes has taken account of the needs of potential trainees with disabilities or other difficulties. Action will continue to be taken to improve skills development and vocational training for young people and adults for whom the current system of vocational training is inappropriate. The TVET colleges are targeting to admit people with special needs in regard to intellectual disabilities, the visually and hearing impaired. Vocational training opportunities for people with physical and sensory impairments will focus primarily on the use of modern technology to enable them to enter employment or self-employment. The challenge is that the staff of the target institutions are not sufficiently skilled to work with people with disabilities**.** The facilities have the basic equipment to address such needs, but there is need for further investment in materials development and facilities to make the institutions inclusive. Special support staff and specialists are needed to support these institutions. Industry support and participation is critical to enable these institutions to offer the special education learners with the practical experience which is the bulk of their training.

**DISADVANTAGED** Government policy is to empower the disadvantaged with skills for livelihood, including agriculture and business management. The TVET and Skills Development sub-sector is positioned to support poverty eradication initiatives with skills. The TVET sub-sector should recognize the informal sector and indigenous skills as part of the support to the disadvantaged and the poor. Furthermore the TVET institutions should have joint community development projects that enhance skills for the vulnerable e.g. Ipelegeng and other poverty eradication programmes using the Rapid Skills Approach and short courses that can be offered at the network of Brigades and Technical Colleges.

**DECENTRALISATION** To increase efficiency in the TVET sub sector, there is a need to decentralize decision making to institutions so as to support service delivery. Financial and operational accountability needs to be decentralized. The need for strengthening TVET responsibility within the regional structures is also an imperative. However the intended rationalization of TVET will ensure that the regional structures are fully functional and optimized during this strategy period.

# 5.7 LIFE - LONG LEARNING (LLL)

In a competitive knowledge-based society and economy, there is an ever intensifying demand for institutional systems, which assist learning and the dissemination of knowledge, to be adjusted to individual and community expectations. The concept does not only consider the ideal of lifelong learning as a strategy for continuing to educate people beyond their school years but as a cradle-to-grave concept of which schooling is an early phase. Based on this premise, Life-long Learning will provide adequate foundations and opportunities for continuous development for all with a view to the dynamic development of their competencies. These in turn facilitate productive participation in the labour market and the improvement of national competitiveness.

The Lifelong Learning sub-sector focuses on strengthening opportunities for equal access to the institutions of public education as well as on providing a second chance for individuals. It encourages work-based learning and offers a smoother transition from school to adult life by combining education and employment, and thus bringing flexibility to pathways and choices. Moreover, it puts lifelong guidance and counselling to the forefront and emphasizes their importance in order to improve students' progress through complex learning pathways.

The interventions seek to improve the system on an institutional level. It encourages close partnership between all actors - central and local administration as well as social partners in Botswana - involved in the implementation process of the measures following from the strategy. Within this context, the life-long learning programmes encourage the involvement of school-based education institutions in order to make use of all their available capacities, both in terms of staff and infrastructure. It also promotes close cooperation among formal education institutions (incl. secondary schools and tertiary institutions, regional training centres, etc.) in the field of LLL.

The strategic priorities for LLL will focus on improving the quality of education and training; ii) the early socialization and awareness of LLL, basic education, particularly on the development of basic skills and key competencies, training and re-training, education (for older students in accordance with the labour-market demands as well as on the introduction of a new learning culture. The fields of intervention are structured along five objectives in order to introduce a comprehensive LLL system. These priorities will respond to individual demands throughout the life-cycle:

1. Establish a LLL culture to promote continuous learning and improve of access and equity to quality education;
2. Strengthen the governance and coordination of the LLL sector to develop a positive image of the sub-sector;
3. Strengthen career guidance and counselling for LLL
4. Strengthen LLL at basic skills and key competency levels to provide adequate foundations and a strong base for continuous development amongst all individuals;
5. Develop a robust recognition of prior learning system to recognize non-formal and informal learning (in conjunction with BQA - developing the national Qualification framework);
6. Supporting disadvantaged groups at risk of exclusion from the labour market.

## Key Programmes

| | |
|---|---|
| LLL 1 | Establish a LLL culture to promote continuous learning and improve access and equity to quality education |
| LLL 2 | Strengthen the governance and coordination of the LLL sector to promote a positive image of the LLL sub-sector |
| LLL 3 | Strengthen career guidance and counselling for LLL |
| LLL 4 | Develop a robust system of recognition of prior learning system to recognize non-formal and informal learning |
| LLL 5 | Supporting disadvantaged groups at risk of exclusion from the labour market |
| LLL 6 | Strengthen LLL at basic skills and key competency levels to provide adequate foundations and a strong base for continuous development amongst all individuals |

Within the five priorities the programmes activities focus on the improvement of the quality of education and training and early-socialisation, basic education, particularly on basic skills and key competencies, training and re-training, re-schooling and de-schooling (for older students) in accordance with the labour-market demands as well as on the introduction of a new learning culture.

<table>
<tr><td colspan="3">PROGRAMME 1: A LLL CULTURE ESTABLISHED TO PROMOTE CONTINUOUS LEARNING AT ALL LEVELS</td></tr>
<tr><td colspan="3">GOAL: To establish a lifelong learning culture and practice in Botswana and increase the level of awareness</td></tr>
<tr><td colspan="3">OUTCOMES</td></tr>
<tr><td colspan="3">1. A Lifelong Learning Culture established<br>2. Botswana lifelong learning well-structured and governed through well-defined policy, regulatory and coordination frameworks<br>3. Increased awareness, support and promotion of lifelong learning at national, regional and community</td></tr>
<tr><td colspan="3">MILESTONES</td></tr>
<tr><td>Short Term 2015-2016</td><td>Medium Term 2017-2018</td><td>Long Term 2019-2020</td></tr>
<tr><td>1. The status of LLL in Botswana established through a study/research on LLL<br>2. Policy on LLL developed<br>3. Review existing structures for the coordination of LLL in Botswana including the Specialist</td><td>6. Lifelong learning portal started<br>7. Advocacy and promotion of LLL implemented at community and regional and national level</td><td>8. Awareness of LLL increased as evidenced through studies (including family studies ) that analyse LLL practices</td></tr>
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|---|---|---|
| Committee on OSE<br>4. Structures for coordination of LLL in place and the "Lifelong Learning Consultation Forum/Committee" operational<br>5. Advocacy strategy for the promotion of LLL implemented at community and regional level | | |

**ACTIVITIES**

1. The regulations/coordination rules on Lifelong learning, and tasks and responsibilities of relevant parties shall be defined within the scope of LLL.
2. Support will be provided to be ensured that private and public agencies establish lifelong learning culture/policies, and that their implementations are evaluated and Supported
3. Development and implementation of Communication plan
4. Promotion of lifelong learning among all segments of the population as factor for personal development, sustainable employment and social inclusion
5. Organization of Lifelong learning week (annually)
6. Open Lifelong learning web portal

**PROGRAMME 2: STRENGTHEN THE GOVERNANCE AND COORDINATION OF THE LLL SECTOR TO PROMOTE A POSITIVE IMAGE OF THE SUB-SECTOR**

**GOAL: Establish institutional coordination and define roles and responsibilities through social consensus to ensure the quality of LLL.**

**OUTCOMES**

1. Improving the match between demand and supply of education and training services for LLL
2. Joint efforts of institutions and social partners to take measures to ensure the conditions for LLL
3. Strong partnerships between education and training institutions and businesses developed
4. Established conditions to apply effective methods and models in order to ensure quality of LLL services
5. Clearly articulated pathways for LLL.

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. PPP establishment<br>2. Study on demand and supply of education and training services for LLL<br>3. Identified conditions for the improvement of the quality of LLL<br>4. Framework for the systems of monitoring and control of LLL quality<br>5. Common system for evaluation of trainees, trainers and providers | 6. Integrated data base<br>7. Manual for self-assessment of institutions for LLL<br>8. Clear structure of the career pathways<br>9. Ensure quality of LLL<br>10. Facilitated establishment of learning regions. | 11. Quality array of LLL programmes operating in all regions |

**ACTIVITIES**

1. Clearly defining the responsibilities of social partners and participants in the process of learning and ensuring quality and effectiveness of LLL;
2. Establishing public-private partnerships for ensuring the quality of LLL ;;
3. Setting a regulatory framework for the systems of monitoring and control of LLL quality
4. Introducing the systematic approach to quality assurance, incl. setting up a common system for evaluation of trainees, trainers and providers.

5. Developing and piloting a mechanism for self-assessment of the level of LLL providers institutions for quality assurance in LLL
6. Establishment of networking between schools and universities, research organizations, businesses and local authorities, including creating learning regions

**PROGRAMME 3: CAREER GUIDANCE AND COUNSELLING FOR LLL**

**GOAL: Strengthening the career guidance services and improving the access and quality of guidance services for everyone – young people, adults and older people.**

**OUTCOMES**

1. Developed and introduced flexible pathways for expanded learning opportunities
2. Adaptation and standardization of psychological diagnostic tools and counselling
3. Increased access of the unemployed to quality professional guidance services
4. Access provided to quality and reliable diagnostic, educational and information resources on career guidance as well as information and consultation

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. Review and harmonization of national policies on lifelong learning<br>2. National Lifelong Guidance framework and guidelines developed<br>3. Established data base for the existing experts of career guidance and counselling. | 4. BQA developed data base for recognition and transparency of the national and international qualifications/certificates<br>5. Capacity building for experts of career guidance and counselling. | 6. Tracer studies on career path development of drop-outs<br>7. Building specialized units and strengthened the structure for career guidance at the national, regional and school level. |

**ACTIVITIES**

1. Founding a National Lifelong Guidance Forum to support the development of the national lifelong guidance system
2. Developing training and qualifications programmes for the personnel providing lifelong guidance services
3. Developing national and local vocational guidance programmes and activities
4. Organizing forums and promoting lifelong guidance good practices.
5. Setting regulatory framework of the opportunities for lifelong guidance
6. To launch an analysis at national, regional and local level of the conditions leading young people to leave school, taking account of the type of education.
7. To develop and implement comprehensive national strategy to support students' career choices and their transitions within education or from education to employment
8. Developing and introduce a flexible pathways in education and training, including the promotion of persons not covered by the traditional education system by expanding the range of learning opportunities

**PROGRAMME 4: RECOGNITION OF NON-FORMAL AND INFORMAL LEARNING/ RECOGNITION OF PRIOR LEARNING**

**GOAL: Provide official recognition and certification of the knowledge, professional experience and skills of individuals, regardless of where or how they were acquired.**

**OUTCOMES**

1. Established a system for validation of prior learning.
2. Implementation of changes to the normative documents in order to ensure correspondence

between the document issued by secondary, tertiary and vocational schools.

3. Exchanged information and experience, identified and transferred the policies and practices for recognition of non –formal learning.

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. System for the assessment of non-formal and informal learning<br>2. Institutionalization Recognition of prior learning mechanisms | 3. Validation system in place<br>4. Prior Learning Assessment managed | 5. Credit transfer system fully operational<br>6. Tracer study to track impact of the system |

**ACTIVITIES**

1. Recognition of key and professional competencies acquired in previous education degrees;
2. Improving/Updating the State Education Standards for acquiring qualifications in a vocation based on learning outcomes by ensuring flexibility and updating in terms of the changing demands of the labour market;
3. Developing models for validation and certification of competencies and outcomes of non-formal and informal learning, including training within the company;
4. Implementing and establishing an supplement to the certificate for acquiring vocational qualification as an instrument of qualifications transparency;
5. Adopting a national programme for creating an integrated credit transfer system for tertiary and vocational education for prior learning

**PROGRAMME 5: SUPPORTING DISADVANTAGED GROUPS AND THOSE AT RISK IN THE LABOUR MARKET**

**GOAL: Adapt and design LLL to respond to the specific situation and needs of people who experience particular risks of exclusion**

**OUTCOMES**

1. Divergent programmes available to cater for Individual need for special education
2. Increasing suitability for employment of trainees and disadvantaged individual supported for employment
3. Qualification status of unemployed individuals improved

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. Adult training programmes developed<br>2. Special education programmes developed<br>3. Educators and administrators programmes developed | 4. Internships strengthened<br>5. Programmes for improving qualifications implemented<br>6. Entrepreneurship competencies programmes<br>7. Expanded CITF model beyond Construction | 8. Advocacy for internet connectivity to household level<br>9. Extended programmes for disadvantage groups |

**ACTIVITIES**

1. Advocate and establish structures for support for disadvantaged adults' to participate in lifelong learning including gain skills in information technology, and to make such training available.
2. Strengthen training for educators and administrators, so that they are better qualified to deliver specialist services.
3. Strengthening support to the families of disabled learners that are necessary in order to make attendance at learning opportunities possible.
4. Ensure the access of the individuals in need of special education
5. Support the access for the disadvantaged groups

## CROSS CUTTING ISSUES

The Lifelong Learning sub-sector focuses on questions of equal access to the institutions of public education as well as on providing a second chance for individuals. It encourages work-based learning and offers a smoother transition from school to adult life by combining education and employment, and thus bringing flexibility to pathways and choices. Moreover, it puts lifelong guidance and counselling to the forefront and emphasizes their importance in order to improve students' progress through complex learning pathways. Lastly, deals with the evaluation of outcomes of formal and informal learning.

Lifelong learning also seeks the improvement of the system on an institutional level. It encourages close partnership between all actors – central and local administration as well as social partners – involved in the implementation process of the measures following from the strategy. Within this context, the strategy encourages the deep involvement of school-based education institutions in LLL in order efficiently to make use of all their available capacities, both in terms of staff and infrastructure. It also promotes close cooperation among formal education institutions (incl. secondary schools and universities) regional training centres, etc. in the field of LLL.

# 5.8 INFORMATION & COMUNICATION TECHNOLOGY (ICT) IN EDUCATION

It is acknowledged that for Botswana to make any appreciable progress in its socio-economic development efforts, substantial resources will need to be directed at improving educational delivery. In this regard, the Government of Botswana is committed to developing a National Information and Communications Technology (ICT) Policy that builds upon recent government initiatives and assist in achieving Vision 2016. In keeping with Vision 2016, it is envisioned that the National ICT Policy will position Botswana for sustained growth in the digital age by serving as a key catalyst in achieving social, economic, political and cultural transformation within the country.

The key role that Information and Communication Technologies (ICTs) can play in widening ease and opportunity of access to education to a wider section of the population and literacy education is recognised. ICT will support key priority areas within NDP10 for improved educational delivery and training and improve learner achievement at all levels.

International experience from both developed and developing countries have shown that ICT has an enormous potential for knowledge dissemination, knowledge acquisition, effective learning and the development of more efficient education services.

Efforts to introduce ICTs into the sector by the MoESD through the implementation of the **Thuto-net component** as part of the national **Maitlamo Policy on ICT**. However, although there are many initiatives within Botswana dealing with ICT and education efforts have largely been geared towards the deployment of ICTs to institutions via the provision of computers. Access however is still below the standards and numbers demanded. The concerns are serious for the lower levels of education.

The lessons learned from initiatives further highlight the need for a coordinated, focused and properly managed approach to the adoption and utilization of ICTs in education. Such an approach is contained in the Thuto-net component that seeks to improve the accessibility and delivery of quality education and better maximize the impact of ICTs in education. It emphasizes the integration of learning, teaching, capacity building, research and administrative practices with information and communication technologies (ICT) that will support the implementation and achievement of the national goals.

The need to implement the Thuto-net component is more urgent than ever before. With the increased thrust of the Government in using ICTs as a tool for economic growth and development. However, it is recognized that in the absence of a national policy and sector wide coordination, such initiatives will continue to happen haphazardly, with increased risks of duplication and wasting of scarce resources that do not adequately address the educational objectives and priorities with the sector. The emergence of the Education and Training Sector Strategic Plan (ETSSP) provides the opportunity to provide a clear purpose and rationale for how the Thuto-net component of the national policy will be effectively integrated into the sector, including identifying opportunities, issues, challenges and strategies that will be employed. The aim will be to manage the integration of ICT across all the sub-sectors in a strategic and coordinated way.

It is acknowledged that for Botswana to make any appreciable progress in its socio-economic development efforts, substantial resources will need to be directed at improving educational delivery. In this regard, the Government of Botswana is committed to developing a National

The key role that Information and Communication Technologies (ICTs) can play in widening ease and opportunity of access to education to a wider section of the population and literacy education is recognized. ICT will support key priority areas within NDP10 for improved educational delivery and training and improve quality learning through the integration of ICT to improve learner achievement at all levels.

The need is for a coordinated, focused and properly managed approach to the adoption and utilization of ICTs in education. Such an approach is contained in the **Thuto-net component** that seeks to improve the accessibility and delivery of quality education and better maximize the impact of ICTs in education. The programme emphasizes the integration of learning, teaching, capacity building, research and administrative practices with information and communication technologies (ICT) that will support the implementation and achievement of the national goals.

Towards this end ETSSP will support the implementation of the Thuto-net component of the national Maitlamo policy and include:

- ✓ Providing schools with high speed internet access (≥128kbm); (programme 1)
- ✓ Increasing computer to student ratio in schools; (programme 1)
- ✓ Designing and implementing an ICT content and curriculum development programme for primary, secondary, vocation and tertiary schools; (programme 2)
- ✓ Design and implement a professional development programmes to increase ICT capacity building for teachers; (programme 4)
- ✓ Utilising e-Learning to advance the use of communication technologies to design, deliver and extend learning; (programme 5)
- ✓ Developing adult ICT skills programmes for non-formal learners; (programme 5)
- ✓ Design and implement ICT initiatives - blended learning and e-books (programme 6)

- ✓ Implement a strong ICT proficiency measurement and skills monitoring programme (programme 7)
- ✓ Support the promotion and awareness of ICT within the communities (programme 5)
- ✓ Support e-Education Research & Development; (programme 8)
- ✓ Securing funding to sustain ICT in education. (programme 9)
- ✓ Developing ICT workforce skills in collaboration with industry needs; (programme 3)

**The Overall Aim is to:**

'Articulate the relevance, responsibility and effectiveness of utilizing ICT in the education sector, with a view to addressing current sector challenges and equipping Botswana learners, students, teachers and communities in meeting the national and global demands of a 21st century knowledge society'.

The fundamental objective of ICT in ETSSP will be to:

'Ensure that the Botswana education sector provides adequate opportunities for all to develop the necessary skills, regardless of the levels of education (formal and non-formal), to benefit fully from ICT and develop requisite skills and knowledge needed to be active participants in the global knowledge economy'.

Towards this end ETSSP will support the implementation of the Thuto-net component of the national Maitlamo policy.

## KEY Programmes

| | |
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| ICT 1 | Provide schools with high speed internet access (≥128kbm) |
| ICT 2 | Integrated e-Learning curriculum across all levels |
| ICT 3 | Integration of ICT in teaching and learning across all levels |
| ICT 4 | Capacity Development for the Implementation of Thuto Net |
| ICT 5 | E- Content for Primary, Secondary, Vocational, Tertiary levels and Open and Distance Learning (ODL) programmes |
| ICT 6 | Utilizing e-Learning to advance the use of communication technologies |
| ICT 7 | Supporting Education research and development |

## Programmes

| **Programme 1: PROVIDE SCHOOLS WITH HIGH SPEED INTERNET ACCESS (SCHOOLS CONNECTIVITY)**<br>**Overall Goal: Accessibility of e-Resources with ease** | | |
|---|---|---|
| **OUTCOMES** | | |
| 1) Attained Computer/Student ratio best suited for Botswana<br>2) All education organization's have access to a reliable, efficient and high speed internet connection<br>3) All schools interconnected efficiently via open-standards-based protocols | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Electrification of Primary schools.<br>2. A database for inventory of computer systems, situational analysis for ICTs completed. | 7. 2mbps EDN for all secondary schools.<br>8. Strategy for refurbishment of | 11. EDN for all the schools and public libraries<br>12. EDN for all the |

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| 3. LAN, WiFi and expansion for the remaining primary schools completed.<br>4. Confirmation of Computer/Student ratio best suited for Botswana.<br>5. Consensus reached with stakeholders and private partners to provide schools with reduced-rate internet access at a flat rate regardless of geographic location of the school.<br>6. Stakeholders and private partners commit to providing public libraries with ICT equipment. | Computers and ICT equipment to existing colleges, universities and senior secondary schools implemented<br>9. Develop a programme for ICT upgrades for the institutions.<br>10. 75% of public libraries with ICT equipment. | parastatals and private institutions.<br>13. An NREN, and dark fibre provided for private education network for reliable and fast connectivity to all schools. |
| **ACTIVITIES** | | |
| 1. Develop an inventory of computer systems and conduct situational analysis for ICTs.<br>2. Engage stakeholders and private partners to provide schools with reduced-rate internet access at a flat rate regardless of geographic location of the school.<br>3. Procurement of LAN, WiFi and equipment for 114 primary schools and equipment for 39 Brigades.<br>4. Build an NREN, and provide dark fibre for private education network<br>5. EDN for all the Educational institutions<br>6. Each primary school has qualified ICT support through ICT interns<br>7. Design and develop processes and protocols for more efficient administration<br>8. Refurbishment of computers decentralized to secondary schools, colleges and universities<br>9. Equip all educational institutions including MoESD parastatals and privates with reliable and fast connectivity through EDN and NREN, | | |

| **Programme2: INTEGRATED e LEARNING CURRICULUM ACROSS ALL LEVELS**<br>**Overall Goal: ICT integration throughout the curriculum with e-learning established as a standard learning methodology.** | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. ICT integrated into curriculum guidelines across all levels<br>2. Teachers and managers competent to integrate ICT into management and the curriculum<br>3. ICT facilities widely present in schools.<br>**4.** Impact and benefits of ICT facilities realized as all schools fully utilize them<br>**5.** All e- learning schools syllabi aligned to 21 century skills | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Develop a new curriculum to integrate 21st Century skills, for phase 1 priorities<br>2. Curriculum guidelines developed for ICT integration<br>3. e-Learning curriculum and assessment framework established<br>4. ICT blueprint subjects framework produced; approved and shared with | 5. Develop a new curriculum to integrate 21st Century skills, for phase 2 priorities<br>6. ICT syllabi developed and approved for all subjects and share draft syllabi with other stakeholders | 7. Develop a new curriculum to integrate 21st Century skills, for phase 3 priorities<br>8. All Teachers and integrate ICT into the curriculum.<br>9. ICT facilities widely present in schools.<br>10. Monitor impact of the use of ICT and the syllabi |

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| committees | | |

**ACTIVITIES**

1. Review existing ICT syllabuses to align to 21 century skills.
2. Development of appropriate assessment framework
3. Involvement of stakeholders and partners at all levels in ICT curriculum development
4. Develop ICT syllabus for all levels
5. Develop local content and localization of existing content.
6. Establish standards for content development

**Programme 3: INTEGRATION OF ICT IN TEACHING AND LEARNING ACROSS ALL LEVELS**
**Overall Goal: To establish e-learning as a standard delivery methodology**

**OUTCOMES**

1. Implemented Maitlamo's ThutoNet initiative at all levels
2. Standards in the delivery of ThutoNet initiative adhered to by a significant number of schools

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. Develop curriculum guidelines for ICT integration in teaching and learning<br>2. Develop guidelines for establishment and maintenance of school-based computer workshops | 3. Technicians for school-based ICT maintenance workshop identified<br>4. Educational content made available electronically through media centres.<br>5. Set up an educational software office in each region | 6. Establish school-based computer workshop<br>7. Local educational software developed in some regions |

**ACTIVITIES**

1. Develop content management system for use by institutions
2. Develop of a monitoring and evaluation framework for ICT teaching and learning
3. Integrate ICT across all subjects at all levels.
4. Procurement of equipment for content development, delivery, assessment and access
5. Adaptation of existing software to local context
6. Build capacity among educators across all levels

**Programme 4: CAPACITY DEVELOPMENT FOR THE IMPLEMENTION OF THUTO NET**
**Overall Goal:** Create a system-wide and institutional readiness to use ICT for teaching, learning and administration

**OUTCOMES**

1. An education and training system developed to support ICT integration in teaching and learning
2. All teachers and managers have enhanced confidence in the use of ICT
3. e-learning established as a standard learning methodology beginning in teacher training institutions
4. Optimal utilisation of the technology

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. Provide guidelines for | 6. Effective coordination | 12. All Teachers and |

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| expansion of School Net Africa (SNA) programme across all the institutions.<br>2. An integrated, inclusive policy framework for implementation of ICT in Education<br>3. Framework for competencies for teacher development in the integration of ICT into the curriculum developed<br>4. Training package for educators on computer usage, maintenance, and ICT in education developed and accredited<br>5. Framework for competencies for PREST teacher development in the integration of ICT into teaching and learning developed | of ICT implementation and e-learning at the Ministry and regional level<br>7. Capacity building of the national and regional structures in the application; governance and use of ICT across the education sector<br>8. Teachers trained in e learning in line with the curriculum and e content<br>9. Administration and management capacity in ICT developed<br>10. All schools with ICT facilities have a full-time teacher to manage the facility and to champion the use of ICT in the school.<br>11. Monitoring of the utilisation of all technology as well as audit for obsolescence of technology | managers integrate ICT into management and curriculum delivery<br>13. Adequate competent ICT human resources across the education sector<br>14. Sector wide use of ICT by different programmes and staff<br>15. Monitoring of the utilisation of all technology as well as audit for obsolescence of technology continued |
| **ACTIVITIES** | | |
| 1. Establish a coordination office at the Ministry with resources to review and advance an integrated, inclusive policy framework.<br>2. Strengthen capacity for national and regional operations for policy coordination and implementation.<br>3. Develop training package for educators covering computer usage, maintenance, use of internet, school network and basic ICT education.<br>4. Establish partnership and policy dialogue among different stakeholders to build synergies in support to provision and quality of programmes, technically and financially.<br>5. Develop capacity building of the national and regional structures and local partners to conduct assessment of learner´s needs, community assets and stakeholders priorities that in turn inform policies, programmes, action plans and standards.<br>6. Develop guidelines for ThutoNet implementation.<br>7. Stakeholder including industry, participate the development of ThutoNet programmes for various types of socio-economic and geographical conditions of learners.<br>8. Establish and align databases both central and regional offices and with MLGRD.<br>9. Develop a system for knowledge sharing on ThutoNet innovations<br>10. Assign trained ICT staff at all levels to provide support services | | |

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| **Programme 5: E-CONTENT FOR PRIMARY, SECONDARY, VOCATIONAL, TERTIARY LEVELS AND OPEN DISTANCE LEARNING (ODL) PROGRAMMES**<br>**Overall Goal:** Achieve greater effectiveness and efficiency in the design, development and use of e-content |
| **OUTCOMES** |

1. Increased access to digital content
2. Soft learning resources that are of high quality in all schools
3. Availability of electronic textbooks to all learners
4. Integration of e-books, interactive ICT resources, DVDs as well as learning resources for learners including learners with special educational needs such as Braille and other equipment
5. Appropriate and high quality E-learning resources and support systems (e-content) are available and accessible to teachers and learners

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. e-Learning curriculum support material needs established<br>2. e content development frameworks and guidelines in place<br>3. e-content development and roll out of e-content in 50% of subjects in senior secondary and TVET | 4. e-content developed and rolled out to 100% of subjects in senior secondary and TVET<br>5. startup of e-content development for basic education programmes | 6. ICT syllabi developed for primary education<br>7. e-content developed and rolled-out for 50% of subjects in basic education programmes |

**ACTIVITIES**

1. Benchmarking for best practices
2. Review existing ICT syllabuses to identify e-content requirements
3. Establishing platforms for harmonisation of content.
4. Develop of local content and localise of existing content.
5. Procurement of equipment for content development, delivery, assessment and access
6. Development of Botswana Open Source Software
7. Establishment of task forces for content development.
8. Stakeholder consultations on e-content

**Programme 6: UTILISING E-LEARNING TO ADVANCE THE USE OF COMMUNICATION TECHNOLOGIES**
**Overall Goal: To deliver and extend e-learning to the school and wider communities**

**OUTCOMES**

1. Increased community awareness
2. Increased utilisation of ICT in work environment and communities
3. Improved lifelong learning opportunities

**MILESTONES**

| Short Term 2014-2016 | Medium Term 2016-2018 | Long Term 2018-2019 |
|---|---|---|
| 1. Consult stakeholders about resources for Out of School learners to access digital content.<br>2. Identify existing resources (including public libraries and Kitsong Centres) for Out of School learners to access digital content. | 3. An increase in number of communities, OSET and the disabled accessing communications technologies<br>4. Increased community awareness | 5. ICTs accessible to Out of School learners to access digital content in schools, libraries and Kitsong Centres in all regions |

**ACTIVITIES**

1. Establish community ICT centres
2. Expand School Net Africa initiative across the country.
3. Procure equipment for content development, delivery, assessment and access
4. Adapt existing software to local context
5. Conduct research on open sources to identify reputable information and products
6. Adapt existing open source software
7. Develop Botswana Open Source Software (BOSS)
8. Develop programmes for increased access of Out of School learners and learners with disability to digital content in schools, libraries and Kitsong Centres.
9. Identification of collaborating partners in the ICT industry for content development.

**Programme 7: SUPPORTING e-EDUCATION RESEARCH & DEVELOPMENT**
**Overall Goal: Support e-Education Research & Development by providing a conducive environment**

**OUTCOMES**

1. Improved research on ICT impact on learning.
2. Increased visibility and awareness of the benefits and impacts of ICT enabled learning.
3. Research dissemination platforms provided for repositories and management from objective data and analyses that help institutions to benchmark their research activities for the purpose of strengthening the quality and impact of research.

**MILESTONES**

| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
|---|---|---|
| 1. Benchmarking on NREN<br>2. Provide the platform for e-Education and Research.<br>3. Consultation with key stakeholders on establishment of NREN.<br>4. Development of framework for NREN.<br>5. Guidelines for NREN developed. | 6. Develop National Research and Education Network (NREN) – (*community of practice)* for education institutions.<br>7. Education institutions capacitated on the NREN.<br>8. Roll out of the NREN to education institutions. | 9. Producing and demonstrating researched informed excellence in teaching, learning and management.<br>10. Effective monitoring and evaluation of the NREN. |

**ACTIVITIES**

1. Develop a national research strategy in education.
2. Develop models for embedding new technology tools in learning and teaching approaches, assessment and feedback.
3. Carry out research to establish baseline knowledge of e Learning in sample communities.
4. Strengthen Quality Assurance (QA) process in research and programme evaluation.
5. Develop and implement a high speed research electronic network
6. Improve availability of workplace and community-based ICT infrastructure that meets the diverse needs and setting of learners in urban and remote areas
7. Promote active learning through the effective use of Internet tools and digital resources.
8. Foster research in e-Education through provision of scholarships.
9. Formulate networks that support the building of partnerships and the networking of learning communities to exchanging ideas and experiences related to ICT enhanced learning.
10. Establish the most effective media to promote effective communication to various target audiences.

# 5.9 CURRICULUM DEVELOPMENT

The curriculum is currently developed by the Department of Curriculum Development and Evaluation (CD&E). The CD&E coordinates and undertakes design, develop and evaluate curricula for General Education Levels. Its approval structures include the MPIC, the MoESD Executive (PS&DPS) and finally the Minister (and through the Minister: the Parliamentary Education Portfolio Committee, Cabinet, House of Chiefs). Currently curricula exist for the following levels: Pre-Primary, Primary, Secondary as well as Out-of-School Education and Training (OSEC, ABEP & SDT). In Botswana, the Formal Basic Education programme includes the first ten years of education (Standards 1 to Form 3). Out-of-School Education Programmes provide access to the Formal Basic Education programme.

Relevance and quality of education will be improved through a curriculum transformation that will show a shift from content-based to outcome-based. The curriculum must support more effective teaching and learning and include more emphasis on technology, business and vocational skills that are essential for the national economy and appropriate to prepare Botswana for participating fully in the knowledge economy of the 21st century.

An effective process ensuring systematic feedback on the appropriateness, effectiveness and relevance of the curriculum from teachers and other relevant parties will be developed and implemented. There also will be provision for teacher training related to the new curriculum, so that teachers are in a good position to implement the curriculum properly.

There will be collaboration with the Botswana Examinations Council to ensure that the curriculum will be supported by an appropriate variety of diagnostic testing that will yield competency profiles of learners, rather than the current bias towards superficial “recall” test items. The move towards criterion-referenced assessment in Botswana will be complemented through a Curriculum Driven Test Development Model.

## KEY CHALLENGES

There are a number of factors that impact on the effectiveness and the efficiency of the CD&E. One of the concerns is its capacity. Although the mandate and functions of the CD&E have been spelt out there is still a concern that there is insufficient capacity to ensure it functions at its full potential. Some thought should be given to the most appropriate structure of the CD&E. There is a need to strengthen the staffing at CD&E in terms of expertise and experience, including extra training for existing staff and temporary use of experts from tertiary institutions as well as key external experts for limited periods and specific tasks.

There are also concerns about the content and relevance of the exiting syllabi. The curriculum is seen to be too content heavy, making it taxing for teachers to complete and with little time for more innovative professional work with learners.

There are also aspects of the curriculum that are well intentioned but are seen to be too complicated and ambitious for schools to implement without additional support. For example, the innovative “subject” of Creative and Performing Arts (CAPA) is seen as being well-meaning and even promising, but difficult to implement without intensive teacher training and resource provision.

There is a need to modernize the curriculum and include more emphasis on technology and business skills that are essential for the national economy and appropriate to prepare Botswana for participating fully in the knowledge economy of the 21st century.

There is not enough consideration of rural locations where schools do not have the same type of supportive learning environment. In particular there is a need for a curriculum that is inclusive of the culture and forms of understanding of Remote Area Dwellers and other population groups that may currently be marginalized by an "alien" curriculum.

CD&E does seek regular or systematic feedback from teachers implementing the curriculum. However, there is not sufficient consultation with and involvement of teachers (especially primary school teachers) in the process of developing the curriculum. This is compounded by inadequate provision for teacher training related to the new curriculum, so teachers are often not in a good position to implement the curriculum properly.

Finally there is a need to collaborate with the Botswana Examinations Council to ensure that the curriculum is supported by an appropriate variety of diagnostic testing that will yield competency profiles of learners, rather than the current bias towards "recall" test items. The move towards criterion-referenced assessment in Botswana should indeed be a Curriculum Driven Test Development Model and not a test driven curriculum model.

## SUMMARY PROGRAMMES

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|---|---|
| CURR 1 | Guide and drive the development of curricula aligned to the vision of a knowledge based economy in all sub-sectors |
| CURR 2 | Provision of quality education based on competences, across all levels of the education systems. |
| CURR 3 | Re-conceptualise inclusive education as an effective way to respond to increasing learner diversity and improve equity in the delivery of educational services. To support implementation of the Inclusive education policy to form a central focus in curricula. |
| CURR 4 | Reduce the gap between the intended curriculum and the received curriculum. |
| CURR 5 | Ensuring that the intended curriculum and the assessed curriculum are closely aligned. |
| CURR 6 | Ensuring appropriate and high quality learning resources and support systems are available and accessible to teachers and learners to deliver the curriculum |
| CURR 7 | Introducing Education Pathways for Learners in Secondary Schools |

| **PROGRAMME 1: THE DEVELOPMENT OF A 21ST CENTURY CURRICULUM FOR ALL PARTICIPANTS IN THE EDUCATION SYSTEM IN BOTSWANA** | | |
|---|---|---|
| **Overall Goal: MoESD T**o develop curricula aligned to the vision of a knowledge based economy in all sub-sectors. | | |
| **OUTCOMES** | | |
| 1. New Curriculum for Botswana Education System | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Developed strategies for broad consultation with stakeholders<br>2. Identification of the competencies (skills, knowledge, attitude and values) required to participate fully in a knowledge based society.<br>3. Developed guidelines for a competence and | 6. Strengthened strategies for consultation with all stakeholders.<br>7. Needs assessment tools for stakeholders' definitions implemented.<br>8. Developed Curriculum for a knowledge based economy in all sub-sectors<br>9. Established subject panels | 11. Consultation strategies with stakeholders and an integral part of on-going curriculum review<br>12. On-going application integration of stakeholders' views of a knowledge based economy.<br>13. Continued revision of existing curriculum plans and practices for all sub |

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| outcomes-based curriculum<br>4. Revised existing curriculum blueprints for all sub sectors in alignment with a competency based approach to learning<br>5. Aligned curricula for teachers' education and TVET and OSEC with new curriculum approaches. | to monitor and appraise aligned curricular for teacher education and TVET.<br>10. Ongoing evaluation evaluation and upgrading | sectors in alignment with parallel reforms.<br>14. Established National subject panels to monitor effective implementation of reorganised subject syllabi.<br>15. Organised on-going periodic evaluations of teacher education and TVET curriculum approaches. |
| **ACTIVITIES** | | |
| 1. Develop strategies for broad consultation with stakeholders:<br>2. Establish broad stakeholder group that will define what is meant by a knowledge based economy through a needs assessment.<br>3. Identify competencies<br>4. CD & E to examine its existing Curriculum Blueprints for Senior Secondary, Basic Education and Pre-Primary to determine to what extent these reflect the goals of a knowledge society<br>5. Identify changes needed in existing subject frameworks and syllabi;<br>6. Develop guidelines for a skills based rather than a content driven curriculum<br>7. Revise existing curriculum blueprints for all sub sectors in alignment with parallel reforms such as competency based approach to learning<br>8. Align curricula for teacher education and TVET with new curriculum blueprints<br>9. Finalisation of OSEC Curriculum and teaching and learning materials | | |

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| **PROGRAMME 2: DEVELOPMENT OF AN OUTCOMES -BASED APPROACH FOR IMPLEMENTING A 21ST CENTURY CURRICULUM FRAMEWORK** | | |
| ***GOAL:*** To provide quality education based on competences, across all levels of the education systems. | | |
| **OUTCOMES** | | |
| 1. A framework for an outcomes-based curriculum and assessment in line with national education policy<br>2. A systematic development of a network to ensure that subject officers, teachers, school principals and other education professionals have the necessary knowledge and confidence for meeting the demands for the implementation of an outcomes-based approach to learning.<br>3. A developed local curriculum with parents involvement | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Developed outcomes-based curriculum and assessment frameworks<br>2. Developed action research programmes on the implementation of outcomes-based approach to learning<br>3. Consultation on the implementation of outcomes-based | 7. Implemented curriculum and assessment framework for outcomes-based curricula<br>8. Implement Action research programmes on-going<br>9. Local competency curriculum implementation on an on-going basis<br>10. Establishment of functioning national panels and standing committees.<br>11. On-going review of | 14. Implementation of local curriculum on on-going basis.<br>15. Effective national panels and standing committees established<br>16. Monitoring and evaluation operational |

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| approach to learning.<br>4. Local competency curriculum developed with parents' participation.<br>5. Reviewed guidelines on composition and effectiveness of national panels and standing committees.<br>6. Reviewed procedures for monitoring and evaluating curricula | monitoring and evaluation procedures<br>12. High quality competency curricula and assessment framework.<br>13. New pedagogy informed by high quality action-research on the implementation of outcomes-based approach set up. | |
| **ACTIVITIES** | | |
| 1. Develop an outcomes-based curriculum and assessment framework based on competencies for Pre Primary, basic Education, Senior Secondary and for children in Out of School Education (OSEC).<br>2. Develop pilot programmes on the implementation of outcomes-based approach to learning in collaboration with teacher training institutions and universities to retool teachers.<br>3. Create a network system for knowledge sharing on the implementation of outcomes-based approach to learning.<br>4. Develop local curriculum that suits the aspirations of the parents<br>5. Review composition and effectiveness of national panels and standing committees and transform them into functional and effective entities.<br>6. Review, monitor and evaluate the procedures for monitoring and evaluating curricula | | |

| **PROGRAMME 3: INSTITUTIONALIZING INCLUSIVITY AND INFUSING IT INTO CURRICULA AT ALL LEVELS.** | | |
|---|---|---|
| **General Objective/Goal:**<br>To re-conceptualise inclusive education as an effective way to respond to increasing learner diversity and improve equity in the delivery of educational services. | | |
| **OUTCOMES** | | |
| 1. A differentiated curriculum that forms part of an inclusive education system that responds to the needs of children and young people, despite different learning, social, cultural and demographical backgrounds.<br>2. An inclusive basic education system in place in line with overall sector policy.<br>3. Defined and implemented regional action plans on inclusive education with particular attention to the needs of rural populations. | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |

| | | |
|---|---|---|
| 1. Inclusive Policy reviewed<br>2. Inclusive education as a principle established in all curricula frameworks.<br>3. Design mechanism for dissemination of best practices in the promotion of Inclusive education principles and integrate these into all teacher development programmes | 4. Implement Inclusive Education policy in all schools (public and private).<br>5. Inclusive Education principles in all curricula frameworks<br>6. Implement school improvement plans with activities that promote Inclusive education.<br>7. A mechanism for dissemination of best practices in the promotion of Inclusive education principles operational | 8. Periodic review of Inclusive Education policy<br>9. Monitor the effectiveness of Inclusive Education principles in all curricula frameworks.<br>10. A mechanism for dissemination of best practices in the promotion of Inclusive education practices in place. |
| **ACTIVITIES** | | |
| 1. Review Inclusive education policy for embedding in curricula<br>2. Develop tools for M&E of Inclusive education implementation plan.<br>3. On-going advocacy to inform all stakeholders for all sub-sectors about the centrality of inclusive education in relation to curriculum.<br>4. Develop a school-community supportive system with PTA in the implementation of the Inclusive practices in the curricula | | |

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| **PROGRAMME 4: SUPPORT TEACHERS TO USE AN competency CURRICULUM** | | |
| **General Objective/Goal:** To reduce the gap between the intended curriculum and the received curriculum. | | |
| **OUTCOMES** | | |
| 1. All teachers and leaders comprehensively trained in delivery of learner outcome-based curricula | | |
| **MILESTONES** | | |
| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
| 1. Needs assessment for teachers on issues arising from implementing the revised competency curriculum.<br>2. Developed educationally sound alternatives to the cascade model of INSET training in order that teachers are comprehensively trained.<br>3. Orientation programme delivered for all teachers on outcome-based curricula in alignment with PRESET and INSET initiative | 4. Implemented intervention strategies to address changes and challenges identified.<br>5. Implemented alternative models of INSET training in order that teachers are comprehensively trained.<br>6. Appropriate monitoring reports, and where necessary, include corrective actions on the implementation of the curriculum. | 7. Monitored teachers' implementation of the changes and challenges.<br>8. Reviewed and improved INSET curricula at all sub sectors to make them more culturally and linguistically relevant.<br>9. Evaluated orientation programmes for improvement whenever necessary |
| **ACTIVITIES** | | |
| 1. Identify the changes and challenges teachers are likely to face in implementing the revised curriculum<br>2. Develop educationally sound alternatives to the cascade model of INSET training e.g. blended learning, so that teachers are comprehensively trained.<br>3. Present orientation programme on new curriculum to teachers | | |

**PROGRAMME 5: IMPROVING THE LINKS BETWEEN CURRICULUM AND ASSESSMENT PRACTICES**

**Overall Goal**: To align and close the gap between the curriculum and assessment l

**OUTCOMES**

1. By the end of 2015 an integrated curriculum and assessment policy in place to strengthen teaching and learning
2. By the end of 2016 streamlined and unambiguous assessment system at all levels.

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. Reviewed and aligned roles and responsibilities of the CD & E and BEC in assessment , attainment and diagnostics tests<br>2. Developed regulations and strategies to prevent incoherence and conflict in the system.<br>3. Finalised assessment framework and Tools OSEC<br>4. Review of the coherence between the subject syllabi and the examination guidelines for teachers<br>5. A new assessment framework for 21st century kills, rather than focusing on content and routine questions.<br>6. Improved OSEC assessment framework and tools | 7. Developed framework for assessing 21st century skill<br>8. Aligned curriculum and assessment practices with the purpose of implementation of competency based approaches<br>9. Review of assessment framework<br>10. Improved OSEC assessment framework and tools | 11. Assessment mechanisms with a focus on 21st century skills in place.<br>12. Developed curriculum and assessment mechanism in place.<br>13. Review of assessment regulations to remedy loopholes.<br>14. Streamlined and unambiguous assessment system at all levels<br>15. Periodic review of harmonized curriculum and assessment mechanism.<br>16. Improved OSEC assessment framework and tools |

**ACTIVITIES**

1. Review and align the roles and responsibilities of the CD & E and BEC with respect to assessment, examinations, attainment and diagnostics tests
2. Investigate possible implications for curriculum and assessment that may emerge from the BQA
3. Develop regulations and strategies to prevent incoherence and conflict in the examination system.
4. Finalisation of Assessment framework and Tools OSEC
5. Review the coherence between the subject syllabi and the examination guidelines for teachers
6. Develop an assessment framework for assessing 21st century skills rather than focusing on content and routine questions.
7. Improve OSEC assessment framework and tools

**PROGRAMME 6: IMPROVED LEARNING RESOURCES AND SUPPORT SYSTEMS TO DELIVER THE CURRICULUM**

GOAL: By the end of 2016 appropriate and high quality learning resources and support systems are available and accessible to teachers and learners to deliver the curriculum

**OUTCOMES**

1. By the end of 2015 a system to select and procure learning resources that are of high quality
2. By the end of 2014 availability of quality textbooks to all learners
3. By the end of 2017 integration of e-books, interactive ICT resources, DVDs as well as learning resources for learners with special educational needs such as Braille and other equipment.

| MILESTONES | | |
|---|---|---|
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Revised evaluation criteria for selecting from approved list.<br>2. Reviewed composition, capacity and function of all evaluation for textbook evaluation.<br>3. Security procedures for textbook selection reviewed and improved<br>4. Audit carried out on textbooks in schools and the accessibility to learners and the condition of these books.<br>5. Appropriateness of learning resources for learners with special needs carried out.<br>6. Review of copyright regulations with respect to the Braille version of the prescribed textbooks<br>7. Developed implementation plan to improve textbook quality, procurement and availability<br>8. Use of ICT interactive materials and other forms of technology.<br>9. Appropriate monitoring reports with corrective actions | 10. New composition and functions of textbook evaluation committee in place.<br>11. Improved security of textbook selection process in place.<br>12. Reviews done on an on-going basis.<br>13. Updated knowledge on copyright regulations on Braille version.<br>14. Improved procurement of learning resources.<br>15. Ongoing review on use of ICT | 16. Unbiased and strong textbook evaluation team in place.<br>17. Periodic evaluation of existing selection process.<br>18. Shortage and accessibility deficiencies addressed promptly.<br>19. Quality textbook procurement and availability plans in place.<br>20. Evaluated monitoring tools and effect changes.<br>21. Ongoing review on use of ICT resources and updating<br>22. Ongoing monitoring reports with corrective actions<br>23. Ongoing improvement and upgrading of teaching and learning material |
| **ACTIVITIES** | | |
| 1. Revise evaluation criteria where necessary to ensure that poor quality books do not get on the approved list.<br>2. Review composition and function of all evaluation committees and develop criteria for appointment.<br>3. Review the capacity of CD & E staff composition responsible for textbook evaluation.<br>4. Investigate the security of the textbook selection process and develop improved security systems.<br>5. Investigate the availability of textbooks in schools and the accessibility to learners and the condition of these books.<br>6. Review the availability and appropriateness of learning resources for learners with special needs.<br>7. Review copyright regulations with respect to the Braille version of prescribed textbooks<br>8. Develop an implementation plan to improve textbook quality, procurement and availability<br>9. Review the use of ICT interactive materials and other forms of technology in schools and develop a mechanism for enhancement<br>10. Prepare appropriate monitoring reports, and where necessary, include corrective actions;<br>11. Improve OSEC teaching and learning material ongoing with consultant. | | |

## Cross-cutting issues and linkages

The Curriculum sector has identified the following cross-cutting issues:

a) **Inclusivity:** From the existing policy documents inclusivity and the provision of education are infused across all levels of the education system in order to fully develop the country's human capital as well as to accord every citizen an opportunity to participate and contribute in the national development process. The Curriculum Programmes address the challenge to embrace

the needs of learners with disabilities as well as learners located in rural areas and out-of-school learners

b) **Career development and life skills:** The ETSSP emphasises the need for high level skills as well as the problem of high youth employment. Career development and life skills are therefore a focus of the Curriculum Programmes to ensure sustainability and relevance of education provision in line with NDP10.

c) **Entrepreneurship education:** In an attempt to make learners more innovative, creative and capable of translating theory into practice and to enhance their participation in the world of work, entrepreneurship education is incorporated into the curriculum programmes at all levels.

d) **ICT**: the importance of ICT cannot be overemphasized in the effort to make the transition from resource based economy to knowledge-based economy and to deliver a 21st century curriculum. The Curriculum Programmes are premised on the assumption that learners at school will be assisted to acquire the requisite ICT skills.

# 5.10 HUMAN RESOURCES MANAGEMENT

The mandate of the Ministry of Education and Skills Development is to produce skilled human resources for the economy, through the provision of education and training opportunities to meet the stated vision. The MoESD will need to improve its management and performance through improved governance, accountability and achievement and coordinating structures. Improving leadership and decision-making, research and information technology it is imperative to be able to mention a sector programme.

Systematic processing of HR information will be improved with a repository to enable knowledge management to function, job profiles and objective-oriented job descriptions, personnel functions according to supervisory needs. Reorganising the MoESD is a priority together with developing a **Performance Management System.** To manage this there will be extensive capacity building following a training needs assessment and management training programme organised. Occupational Health and Safety programmes will be developed and audit or safety exercises for central, regional offices and most schools put in place.

## CRITICAL CHALLENGES

**Capacitating Corporate Services through HRM processes to support the core business function-** There is a lack of strategic thinking and strategic management to be able to establish a strategic direction i.e.; HRM strategies; HRM policies; Knowledge Management; and Competencies (Roles and Skills). A draft HR strategy with little or no strategic content and a series of legislative instruments that proxy for policy, are available but not widely practised. Systematic processing of HR information is missing; subsequently there is no repository to enable knowledge management to function. With the absence of job profiles and objective-oriented job descriptions, personnel functions are ad hoc according to supervisory needs.

**Resourcing/Staffing the Ministry appropriately and adequately-** teacher to non-teaching personnel ratio stands at 2.3 teachers to one non-teaching person the planning and placement of personnel is not strategic in nature. The Ministry currently exceeds its establishment figure by some 1,500 plus personnel, and recently has declared 490 vacancies for teachers. A teacher

database currently cannot provide the planning tool. There are no accurate ways of determining or knowing demand and supply requirement and to be able to forecast. Talent cannot be identified according to performance and ability to deliver the required competencies. The Ministry has no new employee orientation programme, nor is there an exit interview process.

**Instituting a Performance Management System-** A performance improvement unit is in place, as is Performance Development Programme documentation. The latter programme consists of a document that is subjective in nature and offers only a one-way assessment of performance. There are no performance mechanisms that are based on job roles, competencies and specification outputs with job performer inputs. Additionally there are no objectively designed job descriptions only very detailed Job Effective Descriptions (JED) without any prescribed feedback mechanism.

**Increasing skills and competencies development for non-teaching personnel-** The training and development for non-teaching personnel requires and pedagogical approach that is not evident.in the current system. There are no structured training needs assessments, nor are any training evaluations exercises conducted. There is no recognizable management training programme; organizational and workforce performance improvements are very subjective.

**Strengthening the efficiency and effectiveness for managing the Compensation & Benefits function-** A scheme of service exists, with standardized benefit packages. There is some resemblance of a reward system but structured detail was not evident nor was any policy as to how one can achieve or receive rewards. Rewards and recognition do not appear to be tied to any job performance, objectively verifiable evidence.

**Strengthening relations with employee bodies for strengthened education partnerships-** Poor management practices in the Ministry contribute significantly to the excessive quantities of conflict and dispute resolution files. With a total employee body of some 37,000 there is no effective employee voice mechanism, and no structured communication strategy or plan.

**Institutionalise structures for promoting good Health and Safety practice-** Occupational Health and Safety programmes are not visible; nor are there evidence that any form of audit or safety exercises take place in the central Ministry, regional offices and most schools.

## OVERALL GOALS

The overall goal for the Human Resource Management:

> **'To develop the MoESD into a functional and accountable public institution to manage its human and financial resources efficiently and effectively'.**

Strategic goals are to:

1. Strengthen human resources and capacity development to ensure an effective and efficient education sector;
2. Use ICT to transform education management;
3. Ensure quality assurance for education sector management;
4. Ensure effective and efficient Human Resource strategy in place.

**Summary Programmes**

| | |
|---|---|
| HR 1 | Develop a comprehensive framework of strategic human resource management services to all functions in the Ministry of Education and Skills Development |
| HR 2 | A well-coordinated and up to date HR database for all employees which can be used in the planning and decision making processes |
| HR 3 | Establish and sustain a Resourcing/Staffing system that enables the MoESD to place the right person in the right job at the right time |
| HR 4 | To have sustainable skilled and competent human resources in the Ministry |
| HR 5 | To have collaborative engagement between employer and employees in decision making processes for quality service delivery. |
| HR 6 | To have a workforce that can perform according to their job specification, job descriptions and meet the performance targets |
| HR 7 | Promote a healthy, safe and secure work environment to ensure continuous quality service delivery |
| HR 8 | To have a well-rationalized and well developed ministry with relevant functional and operational structures |
| HR 9 | To ensure employees embrace functions and operational changes with minimal resistance and lasting benefits |
| HR 10 | To ensure objective employee performance for operational efficiency and accountability: |

**PROGRAMME 1: ESTABLISH HUMAN RESOURCES MANAGEMENT (HRM) POLICY FRAMEWORK for the SECTOR**

**Overall Goal:** To provide a comprehensive framework of strategic human resource management services to all functions in the Ministry of Education and Skills Development

**OUTCOMES**

1. HRM activities strategically aligned with the strategic goals, objectives and mandate of the MoESD.
2. HR demonstrate best practice

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. Developed a strategic HRM policy framework;<br>2. Strategic HRM Operational Plan Developed;<br>3. Strategic HRM activities launched | 4. Validated HRM policy framework<br>5. Implemented strategic HRM policy framework<br>6. Compliance to HRM policy framework developed | 7. 100% of policy implemented and rolled out<br>8. Policy reviewed from time to time |

**ACTIVITIES**

1. Identify and select management and staff for a strategic HRM function;
2. Train selected management and staff in Strategic HRM competencies, processes, knowledge management and results-based management (RBM);
3. Prepare strategic HRM documentation in the context of the Ministry operations;
4. Design a linkage mechanism between Strategic HRM activities and knowledge management repository;
5. Monitor and evaluate HRM processes and their outputs

**PROGRAMME 2: ESTABLISH EFFECTIVE AND EFFICIENT HUMAN RESOURCES MANAGEMENT INFORMATION SYSTEM (HRMIS)**

**Overall Goal:** to have a well-coordinated and up to date HR database for all employees which can be used in the planning and decision making processes

**OUTCOMES**

1. Functioning quality data management systems for HRMIS

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 2 Developed a data management policy<br>3 Review relevance of the existing HRMIS<br>4 Developed relevant HR parameters for the database<br>5 Trained officers on the usage of HR database | 6 Populating of HR database with up to date data<br>7 Built compliance to the data management policy and usage<br>8 Pilot the system | 9 Implement the system |

**ACTIVITIES**

1. Select, orient and provide job specifications for a data management team;
2. Prepare data collection instruments and develop a plan of operations;
3. Collect personnel data on teachers;
4. Ascertain the full functionality of the INFINIUM database and define its limitations;
5. Prepare a data model for an HRMIS based on the data collected;
6. Input HRMIS on a ORACLE HR module platform;
7. Train and coach the data management team in the operation of a HRMIS;
8. Prepare a data management business process;
9. Monitor, assess and adjust, when necessary, the HRMIS data management process and outputs

**PROGRAMME 3: DEVELOP A RESOURCING/STAFFING PLAN STRATEGY**

**Overall Goal:** To establish and sustain a Resourcing/Staffing system that enables the MoESD to place the right person in the right job at the right time

**OUTCOMES**

1. Improved utilisation of human resources at all levels.

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. Staffing plans/norms established<br>2. Developed staffing projection system<br>3. Established skills demand and supply forecasting<br>4. Workforce plans for all schools, district offices, regional offices based on agreed norms developed;<br>5. Developed staffing norm strategy | 6. Validated the staffing strategy<br>7. Implement the staffing strategy<br>8. Develop compliance to staffing norms system | 9. Monitor compliance to staffing norms |

**ACTIVITIES**

1. Identify and select management and staff for a Resourcing/Staffing Planning function;
2. Train selected management and staff in Workforce Planning, Succession Planning and Competency-Based Recruitment, Selection and Placement competencies, processes and results-based management (RBM);
3. Training for Work Force Planning
4. Train for Demand Forecasting
5. Develop Staffing Norms & Ratio levels

**PROGRAMME 4: DEVELOP A TALENT MANAGEMENT STRATEGY**

**Overall Goal:** To have sustainable skilled and competent human resources in the Ministry

**OUTCOMES**

1. Improved skills demand and skills supply of the Ministry are strategically met for continuous productivity and quality customer service delivery

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. Competitive skills needs developed<br>2. Developed talent management policy framework<br>3. Developed talent management programmes<br>4. Developed assessment system for talent management | 5. Identified talent for growing their skills<br>6. Performance and productivity monitored | 7. Assess talent outcomes<br>8. Monitor performance and productivity |

**ACTIVITIES**

1. Review and develop holistic well-resourced Performance Management System function;
2. Train management and staff in Performance Management , Organizational Performance,
3. Prepare and implement a Performance Management system procedural manual with identified requirements and expected results.

**PROGRAMME 5: HARMONISED INDUSTRIAL RELATIONS ENVIRONMENT**

**Overall Goal:** To have collaborative engagement between employer and employees in decision making processes for quality service delivery.

**OUTCOMES**

1. Collaborative engagement between employees and the employer
2. Best practice in industrial relations in MoESD

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. Labour relations reviewed<br>2. Developed collaborative engagement strategy<br>3. Validated strategy<br>4. Implemented strategy<br>5. Based on 2014 figures, a 45% reduction in dispute and grievance files. | 6. Based on 2014 figures, a 75% reduction in dispute and grievance files<br>7. Monitored strategy | 8. Assess the impact of strategy<br>9. Based on 2014 figures, a 90% reduction in dispute and grievance files |

**ACTIVITIES**

1. Establish Labour/Employee/Industrial Relations system;
2. Train selected management and staff in Labour Law, Employment Policy and Practices, Labour Relations, Conflict Resolution, Collective Bargaining, Etc.,
3. Develop and implement policy, strategies, and an annual operational plan;
4. Develop an industrial/employee/labour relations practice that utilizes a preventative strategy towards its activities;
5. Develop and prepare an employee voice programme with a structured feedback mechanism

**PROGRAMME 6: DEVELOP HUMAN CAPITAL TO DRIVE BUSINESS STRATEGY**

**Overall Goal:** To develop a workforce that can perform according to their job specification, job descriptions and meet the performance targets

**OUTCOMES**

1. Competitive workforce
2. Improved MoESD performance

**MILESTONES**

**BOTSWANA EDUCATION & TRAINING SECTOR STRATEGIC PLAN (ETSSP 2015-2020)**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. Training and development policy framework reviewed<br>2. Developed a training and development policy framework<br>3. Workplace Training Interventions strategy developed | 4. Job readiness framework developed<br>5. Continuous capacity building | 6. Impact assessment for Training interventions |
| **ACTIVITIES** | | |
| 1. Identify and select management and staff for a Training & Development function for non-teaching personnel;<br>2. Train selected management and staff in And pedagogical Approaches<br>3. Prepare and implement a Training & Development Strategy and Policy for non-teaching personnel in collaboration with trade unions;<br>4. Establish an inventory of qualified Training & Development human resources (in-house and (BQA accredited) Training & Development providers (external);<br>5. Develop capacity building plan for sector implementation;<br>6. Prepare, disseminate and implement a training needs assessment design and delivery procedure;<br>**7.** Prepare, disseminate and implement a training audit procedure. | | |

| **PROGRAMME 7: OCCUPATIONAL HEALTH AND SAFETY POLICY FRAMEWORK**<br>**Overall goal:** To promote a healthy, safe and secure work environment to ensure continuous quality service delivery | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. A Healthy, safe and secure working environment<br>2. Health safety risks managed | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Organizational health and safety policy and strategy reviewed<br>2. Occupational Health and Safety policy framework and strategy developed | 3. Implemented OHS policy and strategy<br>4. Trained officers on OHS | 5. Measure the impact of OHS on productivity |
| **ACTIVITIES** | | |
| 1. Train selected management and staff in OHS ;<br>2. Prepare and implement a OHS Strategy and Policy;<br>**3.** Prepare, disseminate and implement a training audit procedure<br>**4.** Conduct OHS audit with recommendations. | | |

| **PROGRAMME 8: ESTABLISH A FUNCTIONAL AND OPERATIONAL ORGANISATION STRUCTURES FOR THE MINISTRY**<br>**Overall goal:** To have a well-rationalized and well developed ministry with relevant functional and operational structures | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. Effective and efficient functional and operational structures.<br>2. Clear roles and responsibilities for MoESD and regions<br>3. Improved accountability | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |

| | | |
|---|---|---|
| 1. Reviewed MoESD Organizational functional and operational structure<br>2. New MoESD Organizational functional and operational Structure approved by Cabinet;<br>3. New organizational structural framework staffed and operational<br>4. Developed implementation plan | 5. Monitoring and review reviewing implementation plan<br>6. 50% of primary business function have been reviewed, mapped and improved where necessary | 7. Monitor and review the implementation plan<br>8. 100% structural usage at all levels |
| **ACTIVITIES** | | |
| 1. Establish an Organizational Development function<br>2. Determine the roles and responsibilities of management and staff;<br>**3.** Operationalize Organizational Design; | | |

| **Programme 9: DEVELOP AN EFFECTIVE DECENTRALIZED EDUCATION SYSTEM**<br>**Overall Goal:** To promote efficiency in quality service delivery across all levels of the Education System. | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. A well-defined and Functional Decentralized Education System. | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Coordination Technical Team established in the MoESD to review the current decentralization system<br>2. A decentralization strategic policy framework developed and approved.<br>3. A decentralization model adopted for the ministry<br>4. The resource enablers for decentralization identified and mobilized. | 5. Capacity developed for implementation.<br>6. Decentralization implemented<br>7. Monitoring and evaluation to inform progress on the implementation. | 8. Impact of Decentralization on the quality of service delivery established. |
| **ACTIVITIES** | | |
| 1. Establish a technical coordination unit at the Ministry to manage the decentralization process.<br>2. Review the current decentralization system.<br>3. Develop a full-fledged decentralization policy framework.<br>4. Develop guidelines for Decentralization implementation.<br>5. Strengthen capacity for national and regional operations for decentralization coordination and implementation.<br>6. Develop a model decentralized system<br>7. Identify and Mobilize resource enablers for decentralization<br>8. Develop a decentralization monitoring and evaluation system<br>9. Develop a system for knowledge sharing on decentralization innovations. | | |

10. Develop a decentralization impact analysis

| **PROGRAMME 10: ESTABLISH A CHANGE MANAGEMENT STRATEGY**<br>**Overall Goal:** To ensure employees embrace functions and operational changes with minimal resistance and lasting benefits | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. Improved and productive organisational culture | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Change management strategic framework developed<br>2. Change management service agreement and operational plan developed;<br>3. Change management personnel identified and trained;<br>4. Change management services operationalized | 5. Change management implementation plan developed<br>6. Monitor and review change implementation plan<br>7. Develop change management maintenance strategy | 8. 100% implementation of ETSSP activities implemented |
| **ACTIVITIES** | | |
| 1. Determine the overall awareness amongst management and staff<br>2. Prepare a Road Map that identifies key area of change throughout the Ministry;<br>3. Train Ministry personnel, who are responsible for implementing activities that require change, in change management techniques;<br>4. Design a linkage mechanism between change management activities and a knowledge management repository and other related systems;<br>5. Monitor and evaluate the implementation of the Road Map | | |

| **PROGRAMME 11: DEVELOPMENT OF AN OBJECTIVE PERFORMANCE MANAGEMENT SYSTEM FOR THE EDUCATION SECTOR**<br>**Goal:** To ensure objective employee performance for operational efficiency and accountability: | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. High levels of employee and organizational efficiency and accountability<br>2. Fully operational Performance Management System | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 9. Situational analysis of the current PMS completed<br>10. PMS policy developed.<br>11. Customize PMS to the different cadres<br>12. Development of the PMS tools and instruments<br>13. Piloting of the PMS | 14. Development of the consolidated PMS document<br>15. Capacity building established<br>16. Computerized PMS<br>17. Implementation of the PMS | 18. Impact analysis of PMS |
| **ACTIVITIES** | | |
| 1. Conduct Situational Analysis of current PMS<br>2. Review policy and develop PMS guidelines and clarify legal parameters<br>3. Computerize system<br>4. Advocacy structures. | | |

| |
|---|
| 5. Training staff in monitoring. |

# 5. 11 SECTOR EDUCATION MANAGEMENT AND INFORMATION SYSTEM (SEMIS)

The Sector Education Management Information System (SEMIS) is established to deliver timely, reliable, relevant and accurate information to measure performance in the Education system and inform planning and decision making in the whole sector. EMIS data/information will be needed specifically to facilitate:

- programme implementation, monitoring and evaluation;
- policy formulation, implementation, monitoring and evaluation as well as review;
- sectoral planning and budgeting;
- identification of research needs;
- targeted interventions for the improvement of performance.

EMIS data/information will be used as the basis of planning and periodic reporting at school, regional and national levels. Means must be found to improve present sector performance in data collection, processing, storage, retrieval and analysis, not least through rationalising the process to avoid duplication of demand. For general education, dedicated data banks in each region linked to a national facility should provide all of the data that are necessary for planning, assessment and remediation.

The developing a customized, web-based data system is likely to provide a viable long-term solution to current information challenges, provided that the management issues linked to current under-performance are vigorously addressed. The analysis required for the development of the annual sector performance assessment report will be based on a set of core outputs and other indicators for each sub-sector.

A poorly developed EMIS system is hampering the sector. The lack of reliable data for informed planning and decision making is a real problem within the sector. Reliable and timely information is critical in the education sector to inform planning, and evidence-based policy and decision-making. The production of quality education statistics is imperative for all spheres in the sector. This will be managed by developing a sector-wide information system (SEMIS), that is based upon a series of sub-sector Management Information Systems (MIS) to collect, verify, analyse sub-sector data feeding into the national SEMIS.

Strengthening data and information for performance planning, monitoring and evaluation. Is a priority. As an organization, the MoESD will strengthen the use, utility and systems associated with performance information and data with assistance from the regions and Statistics Botswana. Strengthening the use of performance information management will be managed by the new Planning and Budgeting department in MoESD.

Proposals are made for a strengthened **Department of Planning, Research** and Statistics functioning as a key central agency assessing current performance and identifying future needs especially the enhancement of learning outcomes. The present structure and mandate should be reviewed, as should the job descriptions of all current personnel. Training needs must also be identified and appropriate provision made.

## Challenges

Main problems associated with SEMIS are:

- incomplete, unavailable comprehensive and up-to-date data sets for sub sectors:
- Serious shortage of manpower;
- Late and non-responses and poor quality data returns from institutions.

## Overall Goal/Objective

**'To restructure and strengthen SEMIS to ensure the delivery of timely, reliable, relevant and accurate information for the entire Education Sector for planning, implementation, monitoring, evaluation and decision making'.**

## Summary Programmes

| | |
|---|---|
| EMIS 1 | Progress of programmes monitored and subsequent achievement evaluated against reliable 2012 baseline data, indicators and targets. |
| EMIS 2 | Educational Sector held accountable for improved sectoral performance in respect to KPIs and sub sector indicators. |
| EMIS 3 | MoESD equipped with enhanced capacity to provide high quality and timely information (including gender, disability, poverty, location and ethnicity) for programme and project monitoring and evaluation, policy review and development, resource allocation and research. |
| EMIS 4 | MoESD provided with increased capacity to identify and meet research needs in support of policy analysis and development. |
| EMIS 5 | Relevant, accurate and timely education data (including gender, disability, poverty, location and ethnicity) used to inform: policy review, planning, resource allocation, research and assessment of institutional performance. |
| EMIS 6 | Quality and timeliness of the school data collection and initial processing |
| EMIS 7 | Community stakeholders fully informed of progress and challenges in local educational institutions |

| **PROGRAMME 1: Development of a monitoring framework for sector quality baseline data**<br>**OVERALL GOAL:** Progress of programmes monitored and subsequent achievement evaluated against reliable 2012 baseline data, indicators and targets | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. Sector key performance indicators and selected social indicators developed, using 2012 institutional data, projections from 2011 population census, and identified programme targets | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. A framework for monitoring and evaluation in place.<br>2. Capacity built in the use of ETSSP monitoring and evaluation frame at policy | 4. All sub sectors comply with the Monitoring and Evaluation framework<br>5. Up-to-date sub sector reports in place<br>6. Progress of ETSSP programmes | 8. Monitoring and evaluation reports used for informed planning and decision making<br>9. Capacity built in the use of ETSSP monitoring at all levels. |

| | | |
|---|---|---|
| level.<br>3. Implementation plan for sector monitoring and evaluation developed | evaluated<br>7. Capacity built in the use of sector monitoring and evaluation framework. | |

**ACTIVITIES**

1. Framework development for data collection in a decentralised sector paradigm and how it is reported.
2. Review and analysis the demands for information to meet the needs of the sector.
3. Review and analysis the needs of a sector EMIS and the priorities, role and reporting.
4. Complete and disseminate 2012 EMIS data sets (incl. tertiary education) as required.
5. Use 2011 single year population cohorts to project populations in succeeding years.

**PROGRAMME 2: An annual sector performance review (ASPR) with report & joint annual stakeholder review**

**OVERALL GOAL:** Education sector held accountable for improved sectoral performance in respect to KPIs and sub-sector indicators

**OUTCOMES**

1. Annual sector performance analysis, against key indicators, and report process established
2. Procedures developed and in place for joint stakeholder review and publication of report (ASPR)

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|
| 1. Sector performance analysis and reporting processes established.<br>2. Annual sector Performance report published.<br>3. Sector review process established. | 4. Joint sector appraisal conducted at national level.<br>5. Joint sector appraisal conducted at regional level. | 6. Improved sector performance through the use of sector reports.<br>7. Evidence of accountability for performance across the sector |

**ACTIVITIES**

1. Determine institutional responsibility for ASPR coordination.
2. Assign responsibility for sub-sector analysis and report drafting.
3. Determine time frame for annual ASPR activities.
4. Determine basic format for overall report and sub-sectoral reporting.
5. Prepare draft reports for internal review by MoESD and other service providers.
6. Develop procedures for stakeholder review and report publication.
7. Conduct joint appraisal of report by stakeholders.
8. Publish and disseminate report with annex containing results of joint appraisal.

**PROGRAMME 3: Provision of enhanced capacity for MoESD (including regions and districts) planning, managing research, information, monitoring and evaluation**

**OVERALL GOAL:** MoESD equipped with enhanced capacity to provide high quality and timely information (including gender, disability, poverty, location and ethnicity) for programme and project monitoring and evaluation, policy review and development, resource allocation and research

**OUTCOMES**

1. The Education sector planning, research, information, monitoring and evaluation structure fully operational.

**MILESTONES**

| Short Term 2015-2016 | Medium Term 2017-2018 | Long Term 2019-2020 |
|---|---|---|

| | | |
|---|---|---|
| 1. Planning department mandate and structure approved and functional with all posts filled.<br>2. Appropriate competencies and resources in place<br>**3.** Appropriate software and hardware in line with the framework availed | 4. Adequate capacity to deliver mandate at central and district level in place. | 5. All posts filled with adequate capacity to deliver mandate at all levels. |
| **ACTIVITIES** | | |
| 1. Determine functions and key outputs of DEPRS.<br>2. Design departmental structure necessary and sufficient to deliver key outputs.<br>3. Write/update job descriptions for all Department of Planning.<br>4. Recruit and train additional staff as necessary.<br>5. Identify hardware and software needs and procure as required | | |

| **PROGRAMME 4: Strengthening research capacity in MoESD**<br>**OVERALL GOAL:** MoESD provided with increased capacity to identify and meet research needs in support of policy analysis and development | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. A coordinated education sector research system | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Develop research and innovation framework<br>2. Capacity built for MoESD to identify Research needs for the Education sector<br>3. Capacity built for PRIME to manage Research Projects.<br>4. Commission relevant research projects | 5. Educational research competencies enhanced at various levels<br>6. Sub sectors able to conduct their action research for improved sub sector performance.<br>7. Research findings and recommendations used for informed planning and decision | Impact of research in informing policy decisions pronounced in the education sector |
| **ACTIVITIES** | | |
| 1. Train selected staff in research methods.<br>2. Train selected staff to draw up specifications for out-sourced research.<br>3. Identifying key issues to be addressed, time frames, and deliverables and payment schedules.<br>4. Train selected staff to evaluate tenders according to pre-determined criteria and to conduct any further negotiation as required. | | |

| **PROGRAMME 5: A strengthened EMIS at all the levels**<br>**OVERALL GOAL:** Relevant, accurate and timely education data (including gender, disability, poverty, location and ethnicity) used to inform: policy review, planning, resource allocation, research and assessment of institutional performance |
|---|
| **OUTCOMES** |

| 1. Comprehensive and quality data available for all sub sectors for decision making and sector improvement | | |
|---|---|---|
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Additional information needs identified and revised tools developed.<br>2. Revised data collection tools rolled out with training of institutional staff.<br>3. End-user report on annual census available by end of third quarter<br>4. Annual Statistical Report produced<br>**5.** Sub sector managers using EMIS for monitoring and decision support | 6. Annual Statistical Report produced<br>7. Joint dissemination of Annual Statistical Report.<br>8. Statistical instruments reviewed to meet emerging data needs. | 9. Achieved timely, accurate production of Annual Statistical Reports that comply with national, regional and international norms and standards.<br>10. Use of statistical reports to inform policy, planning and resource allocation at national and regional levels. |
| **ACTIVITIES** | | |
| 1. Determine periodic reporting requirements for enhancing efficiency of operations at regional and central levels.<br>2. Develop institutional databases for automatic generation of periodic reports (including annual institutional report cards)<br>3. Train selected personnel from all institutions to manage data at source and supply central management as required.<br>4. Train selected staff from all Regional Education Offices in use of databases to promote enhanced learning outcomes and identification of under-performing institutions.<br>5. Review current data collection, processing, storage and distribution systems and develop as necessary for monitoring requirements and additional identified needs and train selected MoESD managers to use data for monitoring, decision support and policy review. | | |

| **PROGRAMME 6: Strengthening of regional data collection and management**<br>**OVERALL GOAL:** Quality and timeliness of school data collection and initial processing improved. | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. Quality data for the education sector available at all times | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Defined and established roles and responsibilities for data managers and data collectors at regional level.<br>2. Training provided for all data managers and collectors.<br>3. Appropriate software and hardware for quality data collection and management at regional and institutional levels. | 4. Accurate and timely data availed at institutional and regional levels.<br>5. Authorities at regional and institutional level equipped to analyze and use data in decision making, planning and resource allocation. | 6. Use of statistical reports to inform policy, planning and resource allocation at national and regional levels.<br>7. Comprehensive and quality data available for all regions and institutions.<br>8. Improved coordination of data management at regional and institutional levels. |

| ACTIVITIES |
|---|
| 1. Ensure that roles of data managers and collectors are explicitly linked to operational mandate of regional educational offices.<br>2. Write job descriptions for regional data managers.<br>3. Obtain approval for establishment and recruitment of regional data managers.<br>4. Determine training needs of regional data managers.<br>5. Produce training materials.<br>6. Deliver training to regional data managers.<br>7. Write/update job descriptions for regional data collectors.<br>8. Determine training needs of regional data collectors.<br>9. Produce training materials.<br>10. Deliver training to regional data collectors |

| **PROGRAMME 7: EMIS-based accountability reports to the community**<br>**OVERALL GOAL:** Community stakeholders fully informed of progress and challenges in local educational institutions | | |
|---|---|---|
| **OUTCOMES** | | |
| 1. Stakeholders fully informed of progress and challenges in education institutions for appropriate actions | | |
| **MILESTONES** | | |
| **Short Term 2015-2016** | **Medium Term 2017-2018** | **Long Term 2019-2020** |
| 1. Scope of institutional record card determined.<br>**2.** First community level reports disseminated in 5 pilot regions<br>3. Stakeholders in the pilot regions are fully informed of progress and challenges in local education institutions and take appropriate actions | 4. By 2017community level reports disseminated in all regions<br>5. Stakeholders in all regions are fully informed of progress and challenges in local education institutions and take appropriate actions | 6. Monitor and Evaluate the impact of the information given to Stakeholders<br>7. Education sector community reporting is institutionalized in all regions |
| **ACTIVITIES** | | |
| 1. Determine periodic reporting requirements for increasing accountability to stakeholders at school level.<br>**2.** Design report card linked to school data storage system.<br>**3.** Train selected school staff in production of report cards.<br>4. Provide sufficient resources to facilitate production and dissemination of report cards to local stakeholders. | | |

# CHAPTER 6: SECTOR MANAGEMENT AND IMPLEMENTATION ARRANGEMENTS

## 6.1 Management and Implementation Overview

Providing flexible and diverse opportunities and pathways for all students will require supportive and efficient management of the sector. Essential in supporting the transformation of the Botswana education sector system will be developing the institutional policies and processes needed to manage education, and producing a cadre of education managers who have the necessary skills and knowledge to administer key policies and processes. Currently, the lack of well-qualified people to manage education leaves the education sector with complex challenges that will have a tremendous impact on the ability of the system to implement ETSSP plans and programmes in the short and medium term.

**Current management and implementation of the education sector needs to be radically improved.** Improving the ability to formulate policy as well as managing and analysing data to support the education sector management and decision making is imperative. This will require strengthening of planning, monitoring and evaluation capability in MoESD. The scope of the implementation will include:

- organisational restructuring and leadership development;
- comprehensive human capacity building and development;
- redefined administrative systems and business processes;
- planning and policy formulation;
- strengthened project management mechanisms;
- austere financial controls and
- extensive upgrading and greater utilisation of ICT and data management systems.

**Improving coordination between the MoESD and other line ministries in the government will make better use of the resources**. Given the large capacity deficits within the education system, and the enormous numbers of tasks and activities to be undertaken, managers will need to be trained and develop closer cooperation.

Implementation will require a high functioning senior level management team, action-oriented sub-sector and thematic group coordination teams and operational/implementation teams capable of achieving results, on time and within budget. This will necessitate an assessment of the capacity development requirements for implementation, both at the Ministry's management and staff levels. In addition, a consolidated implementation plan for each sector with annual reporting on predetermined **Key Performance Indicators (KPIs)** will be required prior to launch.

To this end, the following sections outline the need for systems management reform including the transformation of the MoESD to reflect the government's vision of streamlined governance of its line ministries, the sector organisation and approaches to implementing the ETSSP.

## 6.2 System Management Reform

The Government of Botswana, through the approval of a series of public policies and Cabinet Directives, has acknowledged the need to establish a new system level design to support the Ministry of Education and Skills Development. Parliament approved the Tertiary Education Policy

-*Towards a Knowledge Society*[54] and re-confirmed this decision through its approval of the National Human Resource Development Strategy (NHRDS) *Realising Our Potential* [55] and a series of subsequent directives around the implementation of the new system level design.

These system-wide enhancements put human resource development at the core of the National Human Resource Development Strategy (NHRDS) that will streamline the mandates and functions of the Ministry of Education and Skills Development (MoESD) and its agencies. These included the setting up of the Tertiary Education Council (TEC), Botswana Training Authority (BOTA) and Botswana Examinations Council. The Human Resource Development Council (HRDC) and Botswana Qualification Authority Acts were enacted in August 2013 and work started on the transition and start-up phase. These two organization's now exist. The BEC amendment bill is yet to be presented to Parliament.

It is expected that by April 1st 2016 all organizations (MoESD, HRDC, BQA and BEC) will be operating optimally, delivering on their mandates. This in turns requires better and strengthened strategic management and management capacity and governance in relation to human resource development and planning.

## 6.3 Transforming MoESD

Implementing the ETSSP will require transformation of the current management system for education. Central to any change is transforming the Ministry of Education and Skills Development (MoESD). Whilst the MoESD continues to manage programmes and managing its resources it has been under pressure to improve performance in nearly all areas. The mandate of the MoESD is to produce skilled human resources for the economy, through the provision of education and training opportunities to meet the stated national vision. Whilst the primary role of the MoESD at the Head Quarter's (HQ) level is to formulate policies, developing strategies as well as to ensure that the policies are interpreted and implemented correctly.

Together with policy development, the MoESD will support the development of strategy and provide high-level coordination, oversight and accountability of the ETSSP. The key operational roles of the coordination of sub-sector planning; funding and quality assurance and regulation are delegated to the parastatals; leaving the MoESD structure lean and flat with high level expertise to focus on policy formulation, sector planning, monitoring and evaluation.

The Ministry faces many future challenges in being able to manage a sector programme. The opportunity is now for the MoESD to overhaul its management and performance systems and improve its governance and accountability. The whole approach to human resources management of the Ministry will require revitalizing and strengthening the institutional, financial, human resource and increasing technical capacity for leadership, professional development and training to close skills gaps within the Ministry's already existing human resource.

**Making Decentralisation Work**

The functional structure allows for a more flat management system and a more strategic concentration of functions that are complimentary. It also shifts all the operational aspects of the central functions to the regions and subsequently, a selection of functions can be shifted to the school/community level when the appropriate capacity has been developed. The senior regional management will report directly to the Permanent Secretary and are represented on the three

[54] Government White Paper No. 37 April 2008.
[55] Presidential Directive CAB 1 (B)/2009.

tiers within the Ministry. The operational aspects of TVET and Higher Education will be transferred to the new parastatals, with the relevant TVET and Higher Education departments assuming a policy, strategy and oversight role.

**Improving Planning & Budgeting**

As part of the revision of MoESD the Ministry will reorganize the **Department of Education Sector Planning** to strengthen the links between policy development, planning and budgeting, reporting and improving the quality assurance aspects of the sector. The department needs to be equipped with appropriate staff and properly resourced to be able to carry out its core functions. The core functions of the Planning Department will be:

- Overall management of planning and budgeting;
- Overall policy development;
- Coordinating regional inputs;
- Monitoring, evaluation and research (including managing the Annual and mid-term reviews);
- Managing the Sector Education Management Information System (SEMIS);
- Coordinate education research

**OVERALL GOAL**

The overall strategic goal is to develop the MoESD into an efficiently functioning, effective and accountable public institution that is capable of managing the education sector at all levels in terms of management of its human, physical and financial resources.

**Strategic Goals**

1. Build an effective and efficient education sector in Botswana.
2. Strengthen human resources and capacity development in the management and provision of education.
3. Strengthen the links between policy analysis, planning and budgeting.
4. Greater and varied use of Information Communication and Technology and other technology to transform education management.
5. Improving the quality assurance measures for education and training programmes.
6. Improved monitoring and evaluation of the sector.
7. Ensure the wider public is kept informed of the sector developments.

## 6.4 Organisation Structure of the Sector

The highest priority for the MoESD is to develop an organizational and institutional structure that is relevant for managing a sector programme. It will need to support the education sector in achieving the short-term, medium and long-term targets that have been developed in this sector strategy.

The current organizational structure of the Ministry of Education and Skills Development poses many challenges to the implementation of ETSSP. A proposed structure is presented that demonstrates the need to provide more dedicated support to the Offices of the Ministers and Permanent Secretary by way of educational policy and planning function, financial control function, parastatals management function, compliance and external affairs function. These functions will deliver key information that will inform high-level strategy development and decision making.

The function of parastatals management reporting to the Permanent Secretary is required to ensure more intentional and structured oversight and support of the activities and performance of non-education providing parastatals, which includes HRDC, BQA, BEC, etc. It is recommended that the education providing parastatals (Universities and Colleges) report to the Permanent Secretary through the Tertiary Education Unit, thus supporting the Permanent Secretary in providing dedicated and responsive support and oversight to these parastatals

The primary role of the MoESD at the HQ level is to formulate policies, as well as ensure that the policies are interpreted and implemented correctly. In addition to policy development, the MoESD will support the development of strategy and provide high-level coordination, oversight and accountability for the education system. Performance measures will be put in place at all levels of the system and a system developed to monitor performance linked to a reward system.

## 6.5 Coordination Framework

The proposed management structure is built upon four (4) tiers, with each tier having clearly defined membership, mandate and expectations for accountability. The Ministry will be structured and managed around sub-sector and thematic areas where policy and management oversight remains with the Head Quarters.

The MoESD is committed to further decentralization and the emphasis will be on devolved responsibility and financial control through decentralized services. The MoESD will devolve responsibility through the regional offices and institutions where appropriate and work through strong partnerships with all stakeholders. This will ensure that resources are invested in programmes that will deliver equitable, quality education to all. Clear role definitions will enable reduced duplication of effort and thus create more efficiency in leadership, decision making and implementation practices. This approach will also mean great attention to capacity building at the regional levels.

The coordination structure will be developed to include:

- Government coordination through inter-ministerial steering committee;
- MoESD Planning and Coordination Management team;
- Regional and district coordination based implementation teams;
- Sector stakeholder consultation through a series of Forums.

The Government Coordination Management Team will ensure inter-ministerial oversight of the sector performance. The MoESD Planning and Coordination team will be led by the Minister and consist of the Permanent Secretaries, Deputy Permanent Secretaries, and Sub Sector and Directors of Enabling Functions (HR, Finance, ICT, Infrastructure, etc.) and Regional Directors. In addition there will be contracted Senior Implementation Management Advisers and a Senior Education Adviser.

The Planning and Coordination Teams will consist of relevant sector head/directors and regional representatives. These teams will formulate detailed implementation plans including resource allocation from enabling departments (HR, Finance, ICT, Infrastructure, etc.) with a monitoring and oversight role. It will issue directives that are communicated through appropriate sector heads to the relevant implementation teams, led by directors/sector heads. Each Planning and Coordination Team will report to the Management Team.

The Regional-based implementation teams will be responsible for basic education. The Implementation Teams are led by sub sector heads/directors and will be made of key sector leadership with support from appropriate enabling departments. They have sole responsibility for implementation and a key role in data collection to monitor and report quality and

performance matters. TVET and Higher Education will have implementation teams led by respective head of sub sector at Ministry level and will consist of appropriate parastatal and other experts as required, with essential support from enabler departments.

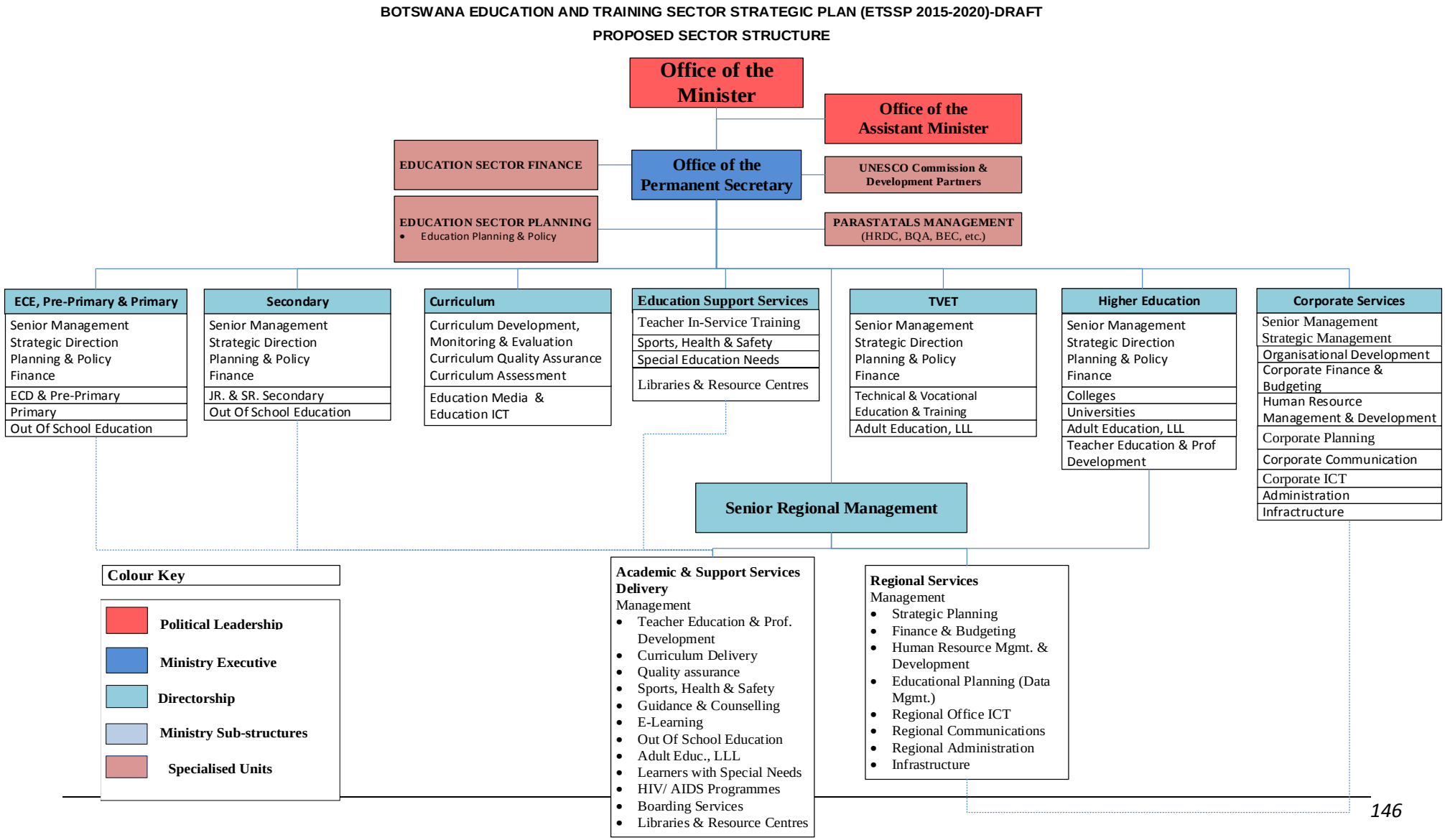
## 6.6 Establishing Education Forums

A number of Education Forums[56] will be established at different levels to be able to carry out on-going monitoring of implementation. It will provide a platform for the regions to share experiences and learn lessons from each other about selected topics of interest to the Regions and national level. It should help to set up an integrated approach, resulting in the Regions being able to manage their own affairs by learning from each other. There will be opportunities for the Forum members to discuss regional developments that take account of their specific regional needs and on national developments.

The National Regional Education Forum will be developed within the context of the National Education Forum aims and objectives. The National Regional Forum will create formal lines of communication between all Regional Forums and the National Education Forum. Drawing on inputs from the Regional Education Forums members will share information with colleagues and provide regular feedback to the regional Education Forums

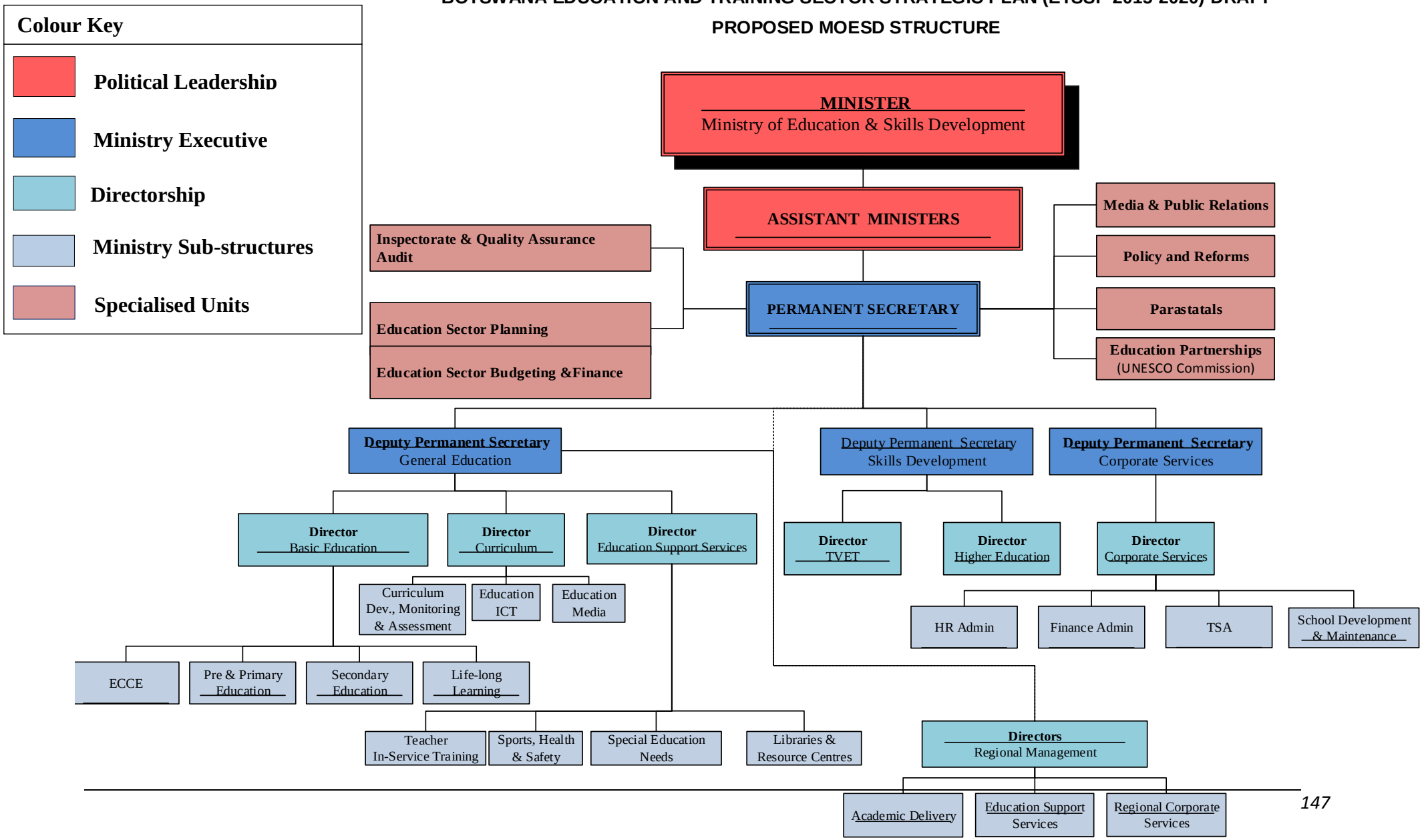
[56] The National and Regional **Education Sector Forum** are described in Chapter 4 and would ensure better linkages between institutions, the Regional Offices through **Regional Forums** that would meet quarterly and the **National Education Regional Forum** that would meet once a year. There already exists a TVET national Forum.

## Figure 3: MoESD STRUCTURE

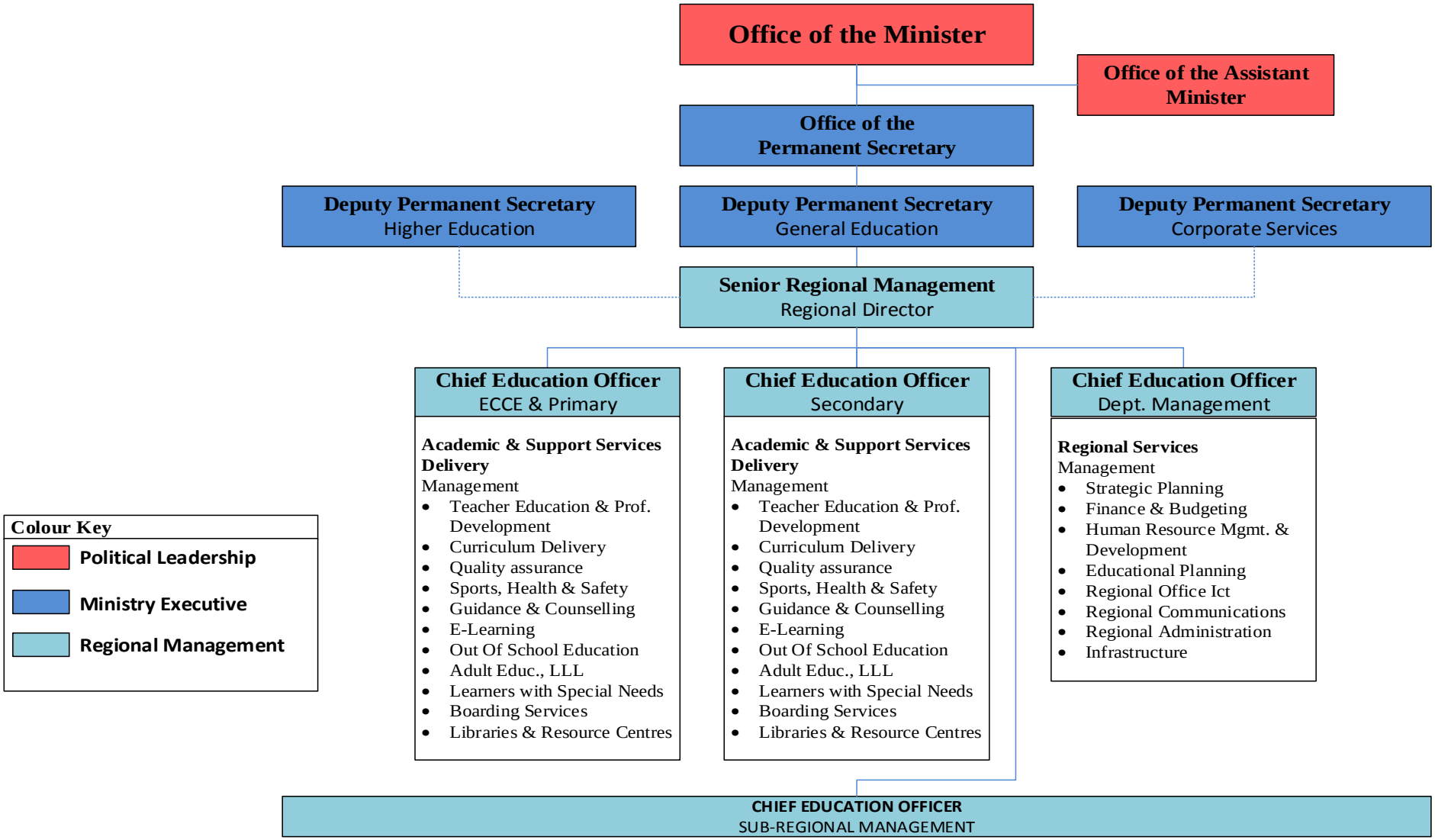


## BOTSWANA EDUCATION AND TRAINING SECTOR STRATEGIC PLAN (ETSSP 2015-2020)-DRAFT

## PROPOSED MOESD STRUCTURE



**PROPOSED REGIONAL MANAGEMENT STRUCTURE**



## 6.7 Human Resources and Capacity Building

In developing the sector the MoESD will establish improved institutional systems and procedures. In addition, the personal capacities of education managers at all levels will be strengthened to enable them to oversee an increasingly complex education system. This will necessitate an assessment of the capacity development requirements for implementation, both at the Ministry's management and regional levels. Internal systems and procedures, policies and guidelines will need to be developed and put in place for qualified managers to implement the sub-sector programmes and plans. The necessary policies and processes will be developed in coordination with other ministries as appropriate, alongside training to allow education managers at all levels to properly manage resources will be delivered.

One of the more pressing needs is to develop the senior and middle management layer in MoESD and at the regional and district levels. The MoESD will promote a system to ensure that qualified people are recruited to work with leaders in key management positions. This will provide an immediate increase in the capacity of the organizations in the sector, and will enable key managers to delegate daily tasks and focus on allocating current resources and planning the future development of the education system. It also requires training in broader skills related to delivery of quality education, including training on cross-cutting issues, such as inclusion, life-skills and human rights education, environmental education and sensitization on gender equality.

It is expected that the proposed management structure will be functioning to its optimum within two years. It is acknowledged that the capacity building process has limitations in providing the required expertise within the necessary time frames; therefore a programme of recruitment of high calibre professionals must take place to augment the management team in areas where capacity building of existing staff is not delivering required performance. A rigorous performance evaluation system will be developed and employed to measure the effectiveness of each management team member.

The training and development interventions need to be workplace oriented and include a coaching approach. This would be the case for developing management and planning competencies for the proposed implementation management and coordination teams. As a parallel activity, the new T&D function will need to support HQ and Regional personnel to prepare Capacity Building and Development Plans that focus on the tasks and activities set out in the Sub-Sector and Thematic group programmes.

It must be acknowledged that the human capacity of these departments requires substantial immediate improvement as well as their ICT infrastructure and utilisation. The Ministry will work to improve the productivity of its managers through the increased use of ICT tools. Training education managers at all administrative levels in the effective use of ICT, and improving connectivity at all levels will enable managers to rapidly respond to data collection needs, accountability issues and possibly staff development requirements through distance and open learning. Further to improving human capacity, the administrative and business functions of all enabling departments must be immediately improved at central, sector and regional level. Further to the above, the non-education providing parastatals (HRDC, BQA, BEC, etc) must invest in organisational and capacity development as they strive to deliver on their stated missions, as they are essential components in the delivery of the MoESD mission.

# CHAPTER 7: MONITORING, REPORTING AND EVALUATION

## Introduction

ETSSP has been developed to be results oriented. MoESD has identified the need to move to a more strategic sector policy dialogue system informed by a strengthened evidence/results based monitoring and reporting system and focused on critical areas where progress should be pushed. The establishment of a strong monitoring and evaluation system will be a results-based approach to education planning. In this regard, a series of ETSSP programme milestones have been established for planning with clearly defined targets and indicators developed for all the strategic programme goals. **Baseline data has been established (2012)** and will be used to set targets for programme milestones.

At the national level a comprehensive Macro Development Results Framework (MDRF) has been developed for monitoring and evaluation (M&E). The national MDRF links broad national goals (contained in Vision 2016) with the key national strategies of NDP 10 (and in anticipation of NDP 11) and is used to measure and report on the progress that the country is making in meeting national goals.

At the national level, the Vision 2016 Council and the Ministry of Finance and Development Planning (MFDP) are responsible for M&E. The Vision 2016 Council monitors and evaluates progress at the macro level, while the MFDP covers the financial management aspects. At the sector/ministry level, M&E is primarily the responsibility of the Government Implementation Coordination Office (GICO). The GICO was created in 2007 to improve the coordination and monitoring and evaluation of policy and programmes. The ETSSP has established a sector M&E system that will feed into MDRF.

To support the decentralised system it will require an improved and effective monitoring system that tracks inputs and outcomes at all levels. It will require a rethink of the ways of collecting data and its uses. With the decentralization of service delivery becoming increasingly important new monitoring and evaluation needs arise at regional levels. The need to strengthen analytical and qualitative capacities at decentralized levels has been identified.

## 7.1 Developing the Monitoring Framework

MoESD will build a **Results Matrix Framework (PAF)** for the sector programme in conjunction with an improved SEMIS system. It is a mutually agreed framework to measure progress on sector performance. The core of the matrix is defining the assessment criteria for **milestones or targets, strategy and programme level outcomes**. Thus, the matrix will assess and report on the sector at three levels - **implementation milestones, sub-sector strategy and activity**. Key **Performance indicators** will be used by MoESD, and stakeholders as the primary measure of impact and outcomes against inputs when assessing education performance.

The design of an appropriate monitoring framework is an essential and integral part of the development and implementation of ETSSP. The monitoring system will be based on the following main elements:

- **Monitoring Framework:** It will be necessary to define a more detailed Monitoring Framework for each of the priority programmes after an initial assessment of the start of the Implementation phase;
- **Annual Implementation Plans:** The priority programmes framework with milestones will provide guidance to prepare specific **Annual Implementation Plans;**
- **Establishing Baseline Data: SEMIS baseline data collected from 2012 will be used to provide the benchmarks** against which future progress can be measured and a data set to assist in monitoring education sector performance.

The measurement of the achievement of the education outcomes and sector performance requires the development of a number of **Key Performance Indicators** to periodically assess progress towards the achievement of **ETSSP targets (milestones)** and the strategic objectives of each sub-sector. Monitoring the sector is formed from several monitoring components that include:

1. Strategic Priority implementation achievements and issues;
2. Sector financing and issues;
3. Key sub-sector trends and issues;
4. Trends in learning and teaching standards and areas of concern.

The system will inform and support the different levels to make strategic decisions. As a result, monitoring and evaluation of ETSSP performance will be systematically carried out during the life of the strategy and at all levels and used to provide feedback, encourage innovation, team building, and ownership. Putting in place internal systems of policies, procedures monitoring and reporting the MoESD will:

- Develop reliable and valid data collection instruments for evidence-based decision making as part of the planning budgeting process;
- Establish functional Monitoring, Reporting and Evaluation systems at all levels;
- Establish an effective SEMIS system to analyse and routinely track the performance of the education system at every level against an agreed set of quantitative and qualitative indicators;
- Generate reports that contribute to transparency and accountability and allows for lessons to be shared more easily;
- Evaluate long term impact of the education sector, thus assess the impact of intervention (strategy) on education system performance, quality and outcomes;
- Regularly report against agreed indicators to all stakeholders (SADC, UNESCO etc), to reflect the impact or effect of the strategy and related policy changes on the incremental performance, quality and outcomes of the education system; and
- Ensure transparency, inclusiveness by first ensuring that data is segregated along lines of inclusiveness and also making reports available to all stakeholders and interested parties on a regular basis.

## 7.2 Improved Sector Education Management Information System (SEMIS)

Accurate data is a prerequisite for an effective Monitoring and Evaluation system as a basis for policy analysis, sector planning and performance monitoring. Thus, MoESD will develop

a **Sector Education Management Information System (SEMIS)** to support the activities of planning, monitoring and reviewing the sector with a much greater emphasis on analysis of data at the level of the sub-sectors. In this regard, SEMIS is central to MoESD and regional capacity to monitor, evaluate and report and MoESD will ensure that SEMIS be fully operational and staffed and resourced under the Director of Planning.

The main goal of the MoESD is to have an efficient and effective sector SEMIS to make comprehensive and timely reports for the sector. In this regard the MoESD will set up a strong **Department of Planning** where SEMIS will take on a crucial role in supporting the monitoring of the education sector. A strong SEMIS will assist sub-sectors to collect data and evaluate the performance annually against the set of **Key Performance Indicator's (KPI's)**. It will report on progress towards achieving results and a basis for changing/adjusting programme strategy.

The SEMIS is a systematic, coordinated and decentralised planning system based on creating a workable and practicable region and district database system linked to the MoESD database. The system will be scalable, web accessible, multi-purpose through having a spatial component giving the opportunity to analyse catchments and integrate with demographics, finance and HR and with infrastructure data.

The advantage of the SEMIS (that is made up of a number of sub-sector Management and Information Systems) is that planning becomes the domain of the Department of Planning and_all the Directorates and less focused centralized systems. Capacity building will be linked to the planning and management functions of each Directorate (with its own MIS) and in this way MoESD will be better prepared to manage and plan the sector. This will be achieved through the following:

- **Developing Key Performance Indicators** for the sector (relating to inputs, processes, outputs and impact). This will include the annual institutional data collection and periodic collection (special research);
- Identifying data needs for decision-makers at different levels of the system - from school level to Cabinet;
- Identifying training needs of SEMIS personnel and system users including planners and decision-makers;
- Developing Monitoring and Evaluation sector guidelines and tools;
- Developing and operating Management Information Systems (MIS) at sub-sector level; and
- Developing **SEMIS** linked with the Finance Management and Information System (FMIS) and the Human Resource Management and Information System (HRMIS) to provide key data to inform strategic planning at MoESD.

The Education and Training Sector Planning will be information oriented. Information provision will be the responsibility of all sub-sectors, with an integrated data system that include MIS, Finance (FMIS) and Human Resource information (HRMIS).

## 7.3 Education Sector Reporting

MoESD is introducing performance based management principles and procedures and together with the restructuring of the organizational set-up it is moving towards the

adoption of evidenced-based planning linked to the MTEF and thus, moving toward greater accountability in the system.

A key element of the strategic plan is the strengthening of the **Monitoring and Evaluation (M&E)** structures to assess progress made in the sector, including data collection, reporting, timely publication and communication of results and initiatives, analysis and use in policy and decision-making. Reporting will be a coordinated activity and seen as essential for monitoring progress of the sector against set indicators and how and if funds are released in the required amounts and on time and whether they are being utilized for the purpose identified.

Implementation progress at MoESD and the regions will be monitored on a regular basis and reported at regular sub-sector meetings reporting to the Directorate of Planning. As part of the support to decentralization, the sector will improve the frequency and quality of the monitoring and feedback services provided to schools and institutions, through best practice methods including e-Education. Monitoring and report templates, guidelines and tools will be developed that are user friendly and determined in the early stages of implementing ETSSP. The reports will be submitted to the regional directors and the Directorate of Planning and presented to the Steering Committee to review progress.

**Table 4: Monitoring and Reporting Levels**

| Reporting | National | Regional |
|---|---|---|
| Annual Implementation Plans and budgets | x | x |
| Annual Implementation Plans and budget consultations based on MTEF with MFDP | x | |
| Quarterly Financial Report | x | x |
| Quarterly Reports of Regional Education Forum | | x |
| Report of Mid-term Review (MTR) | x | x |
| MoESD Annual Report | x | x |
| Report of Annual Sector Review (JASR) | x | |
| Statistics Botswana Report | x | |

Overall responsibility for the monitoring and implementation of the sector plan will be the Sector Steering Committee chaired by the Permanent Secretary and made up of line directors responsible for implementing the sub-sector programmes, the finance and human resource directors and co-opted members when necessary.

Overall coordination of implementation and monitoring will be the responsibility of the Directorate of Planning. The directors of the sub-sectors and regions will be responsible for developing annual and forward plans for the sector and submitting them to the Director of Planning and contribute to the Annual Sector Implementation Plan.

## 7.4 Review and Evaluation

A **Mid-term Review (MTR)** will be organized to review inputs and processes in order to make decisions on adjusting the implementation plans based upon the findings. This will also form part of the consultation process with stakeholders and regions and institutions.

The MTR findings will be part basis for reviewing and if necessary, adjusting regional and Annual Implementation Plans.

The **Annual Sector Review (ASR)** will be conducted to evaluate annual progress of the entire education sector against the Key Performance Indicators, both at a national and regional level. It is the opportunity for the MoESD to present their progress for the past year and to outline plans for the following year. It is considered an integral part of the sector work and will feed into the education planning cycle. It also allows all stakeholders to engage in discussions on critical issues affecting the sector. The JASR will end with a set of agreed actions, which will help the MoESD to manage the education sector in the year ahead.

During the last quarter of the financial year the Directorate of Planning will develop an **Annual Report** on the basis of the quarterly reports and additional inputs (for example, the **National and Regional Education Forums**). The Annual Report will serve as a base document for an Annual Sector Review (JASR). A consolidated Annual Review document will be produced.

On the basis of the MTR and ASR the **Annual Implementation Plans** will be developed by each region and directorate and submitted to the Directorate of Planning to form a consolidated Annual Sector Implementation Plan.

A final evaluation of the sector will be conducted at the end of the ETSSP planned period in 2019. This evaluation will be summative in nature and will involve conducting a number of key evaluative studies on the priority programme areas to draw out the lessons from the implementation of the sector at both regional and national levels. The final report from this evaluation will present the overall performance of the implementation of the sector in terms of outputs, outcomes, cost-effectiveness and sustainability of the interventions proposed in the ETSSP.

## 7.6 Utilising a Results Matrix & Developing Key Results Indicators

The **Results Matrix** provides a framework for measuring performance against a set of indicators. The MoESD will monitor and evaluate the impact of the strategy using results while progress will be measured through performance indicators targets (**see Appendix A)**.

A set of limited number of draft **Key Performance Indicators** is derived from the eleven **ETSSP Sector Strategic Priorities** and the **programme milestones.** Taken together, they will indicate whether and to what extent the ETSSP is on target. Tracking progress in the ETSSP monitoring will be done through the following indicative set of key indicators (disaggregated by gender at all levels including input, output, outcome and impact and process indicators as highlighted below and in the **Results Matrix in the Appendix** that are in line with the set objectives, expected outcomes and outputs.

- ✓ Net Enrolment Rate (NER) at key levels (to include early childhood education)
- ✓ Completion Rates
- ✓ Dropout Rates
- ✓ Transition rates at selected points

- ✓ Gross Completion Rates (GCR)
- ✓ Gender Parity Index (GPI)
- ✓ Book pupil ratio
- ✓ Pupil teacher ratio

The sector strategy will be monitored in line with the guidelines for performance measurement, monitoring, reporting and evaluation policy and standards that have been developed by the National Strategy Office (NSO). The NSO is an oversight and quality control structure for all of Monitoring and Evaluation performance measurement and reporting in Government.

The **Results Matrix** describes the components of assessing progress of the ETSSP. Sector progress will be measured against indicators of performance that will be used for monitoring and reporting. The reports from the performance assessment processes under the Results Matrix may also generate the content of MoESD sector reports to stakeholders. The APPENDIX shows the indicative **Results Matrix**.

# CHAPTER 8: FINANCE

## INTRODUCTION

This chapter provides an overview of the financing of Botswana's education sector, the allocation of budget within MoESD and across levels of education as well as the utilization of the budget with a view to aligning the Ministry's resource allocation with the ETSSP strategic objectives. The financing framework of ETSSP is based on an analysis of recurrent and development costs derived from each of the sub-sector programmes. Cost estimates are based on unit prices and target levels agreed to in planning ETSSP.

## 8.1 KEY ISSUES FROM THE SITUTATION ANALYSIS

The situation analyses undertaken to inform the process revealed a number of deficiencies in education management and financing that together point to an inefficient system needing urgent correction. These include:-

- ✓ High cost of education both as a share of public spending and as a percentage of gross domestic product;
- ✓ Disparities in allocations between ministry departments and across levels of education such as primary, secondary and tertiary sub-sectors;
- ✓ Under-spending of education budget in some rural districts which are also under performing;
- ✓ Capacity underutilization in colleges of education and some tertiary level institutions;
- ✓ Lack of timely enrolment data to guide planning and budgeting;
- ✓ Poor planning, budgeting and financial management;
- ✓ Inadequate use of ICT in education management and delivery;
- ✓ Low capacity for internal audit;
- ✓ Poor alignment between the budget and sector priorities and lack of linkages between budget allocation and performance indicators to enhance accountability; and
- ✓ Poor procurement planning.

## 8.2 OVERVIEW OF BUDGET ALLOCATIONS TO EDUCATION SECTOR

### a) Education Share in National Budget

Since independence, Botswana has consistently devoted a large share of the annual expenditure to education since it was one of the least developed sectors that could carry the economy forward. The bulk of the education expenditure goes through the Ministry of Education and Skills Development (MoESD) although there are other players such as the Ministries of; Health, Agriculture, Environment, Wildlife, Tourism and Local Authorities etc. Moreover, as a percentage of gross domestic product (GDP), Botswana's expenditure on education is high when compared to other High Middle Income countries.

World Bank statistics indicate that in 2009 on the measure of total government spending on Education as a percentage of government spending, Botswana recorded 18.7% against an

average of 16% for HMICs. On the measure of public expenditure on Education as a percentage of GDP, Botswana was 9.5% against the HMICS average of 6%. On the measure of public expenditure per student at Primary and Secondary levels as a percentage of GDP per capita, Botswana recorded 10% against the HMIC average of 18% and 33% of the HMIC average of 19.7% respectively.

### b) Distribution of Education Expenditure by Departments

A review of the distribution of expenditure within the MoESD was undertaken to see the share of each department. It revealed that the largest share goes to the Department of Teaching Service Management (DTSM) which accounted for an average of 36% of the Ministry expenditure over the five years from 2009/10 to 2012/13. These include salaries for all teachers (Primary, Junior Secondary, Senior Secondary and Colleges of Education). The second largest share for the same period (29%) is for the Department of Tertiary Education Financing (DTEF), while the third largest is for Headquarters at 15% followed by Department of Secondary Education at 11%.

The Headquarters provision includes Grants, Subventions and Others (GSO) to education institutions; especially public tertiary institutions. Out of the total 2012/13 GSO expenditure of P943, 497,764 for example, P422, 277,482 (44.7%) was subventions.

### c) Factors which Influence the Level of Expenditure in Education

An analysis of the 2012/13 expenditure indicates that; Core Educational Services (Teacher salaries, student feeding, textbooks and stationery, instructional materials and teaching aids, furniture and equipment) account for 59% of total expenditure per student at primary level; 84% at Junior Secondary level, 63% at Senior Secondary level, 59% at College of Education level and 72% at Vocational level. Teacher Salaries accounted for 75% of the expenditure on Core Educational Services at Primary level; 78% at Junior Secondary level, 58% at Senior Secondary level; 35% at College of Education level and 46% at Technical and Vocational level. The share of Textbooks and Instructional Materials ranged from 10% at Primary level to 0.6% at Colleges of Education level while the share of Food ranged from 13% at Technical College level to 3% at Primary level.

Expenditure per primary school pupil was P3, 930; for Junior Secondary School student it was P17, 342; for Senior Secondary School student it was P17, 278 and expenditure per College of Education student was P244, 940 while expenditure per Technical and Vocational Training College student was P45, 478. The study also found evidence of low enrolment and capacity underutilization at Colleges of Education which results in high unit cost.

The Human Resources Development Council exercise on unit cost for tertiary institutions revealed that many institutions such as Institutes of Health Sciences, Technical Colleges and others such as Botswana Wildlife Training Institute, IDM and some Technical Colleges operate below capacity which contributes to high unit cost, low student/teacher ratio and low teaching loads/hours. At Institutes of Health Sciences, Bamalete Lutheran IHS had the lowest total enrolment of 62 students and the highest unit cost of P126, 365 in 2010. Gaborone IHS had the highest enrolment of 529 students and the lowest unit cost of P62, 233. However, the rest of the IHS had less than 50% of the minimum enrolment of 500 students recommended by TEC (HRDC). Student/Teacher ratios averaged 1:6-8 for IHSs and 1:5-4 for Colleges of Education. The mean unit costs are; P64,694 for Colleges of Education,

P73,549 for Institutes of Health Sciences and P60,592 for the New Institutions (HRDC Internal Reports on Institutional Unit Costs). As indicated above, studies undertaken in 2014 recorded unit cost of P244, 000 in the Colleges of Education. (Ruele 2014).

The high cost and poor performance of the education sector in Botswana is, therefore attributable to a complex mixture including; poor budgeting and financial management, poor allocation of resources, over-design of institutions, inefficiencies in public investment and poor project management (resulting in cost-overruns), under-investment in primary level education, underutilization of capacity in some institutions, poor maintenance, over-crowding and poor human resources management which altogether culminate in poor total factor productivity. A comprehensive study on unit costs needs to be undertaken for all levels of education to accurately inform prudent budgeting and equitable resource allocation.

## 8.3. LESSONS IN EDUCATION REFORM

Many countries facing similar challenges in their education sectors have adopted rationalization measures that include; Re-organization, Management Training, Cost- Sharing and infusion of Technology in education delivery and management.

Re-organization may involve merging or splitting the Ministry of Education and Skills Development or its departments. Merging some of its departments or merging some of the existing institutions to achieve internal efficiency it's another option.

Cost-sharing, which involves contribution and participation of students, parents, private sector and civil society in programme development, financing and delivery enhances relevance, partnership, commitment and reduces the financial burden on governments. It also promotes a "culture of paying for services enjoyed", which is fundamental in a private sector-led economy and for private sector growth.

Infusion of technology in delivering education such as through e-learning, e-books, etc. on the other hand, addresses the issue of quality. By providing pre-packaged learning materials, it can reduce costs and ensuring that learners receive the same quality of learning materials in time; regardless of where they are located. The teacher plays more of a facilitative role and is able to identify and support learners who need further assistance, thus enhancing quality learning and improving results.

MoESD will need to undertake studies to inform further rationalization of institutions as a way to ensure efficiency and sustainability of Botswana's education sector.

## 8.4 DONOR SUPPORT TO EDUCATION

Through sound macroeconomic policies, good governance and respect for the rule of law, Botswana achieved middle income country status. As a result, many donors have pulled out their financial support. UNESCO's position on this issue is that it affects other Middle Income Countries as well. UNESCO's flagged that:-

> "Just when a big push is needed to reach Education for All by 2015, there are worrying signs that donor commitment to education is stagnating". (E*ducation for All Global Monitoring Report 2012*).

Most of the remaining support to Botswana's education sector comes from the European Union which provided a total of Euro 71.359 million between 2009/10 and 2013/14. Out of this amount, Euro 68.665 million was for budget support. For 2014/15 to 2016/17, it is expected that a total of Euro 47.207 million will be disbursed for education; of which Euro 45.360 million will be budget support. (EU September 2014). Other partners whose support could not be quantified include; Australia, the Commonwealth, China, Japan, Germany (GIZ), UNICEF, India, which provided training opportunities, technical support and some infrastructure. Leveraging on these relationships is critical for the transformation of the education sector envisaged in the ETSSP. Enhanced donor coordination through alignment of donor objectives to government and the educational sector strategic objectives will be essential.

## 8.5 THE VULNERABILITY OF BOTSWANA`S ECONOMY TO EXTERNAL SHOCKS

The sharp increase in borrowing during the financial and economic crisis of 2008-2010 highlights the vulnerability of the Botswana Economy to external shocks and the implications on sustainable education financing. It further reaffirms the need to broaden the revenue base; continued prudence in managing the economy, efficient use of resources availed to education while at the same time emphasizing the need to broaden the sources of financing for education.

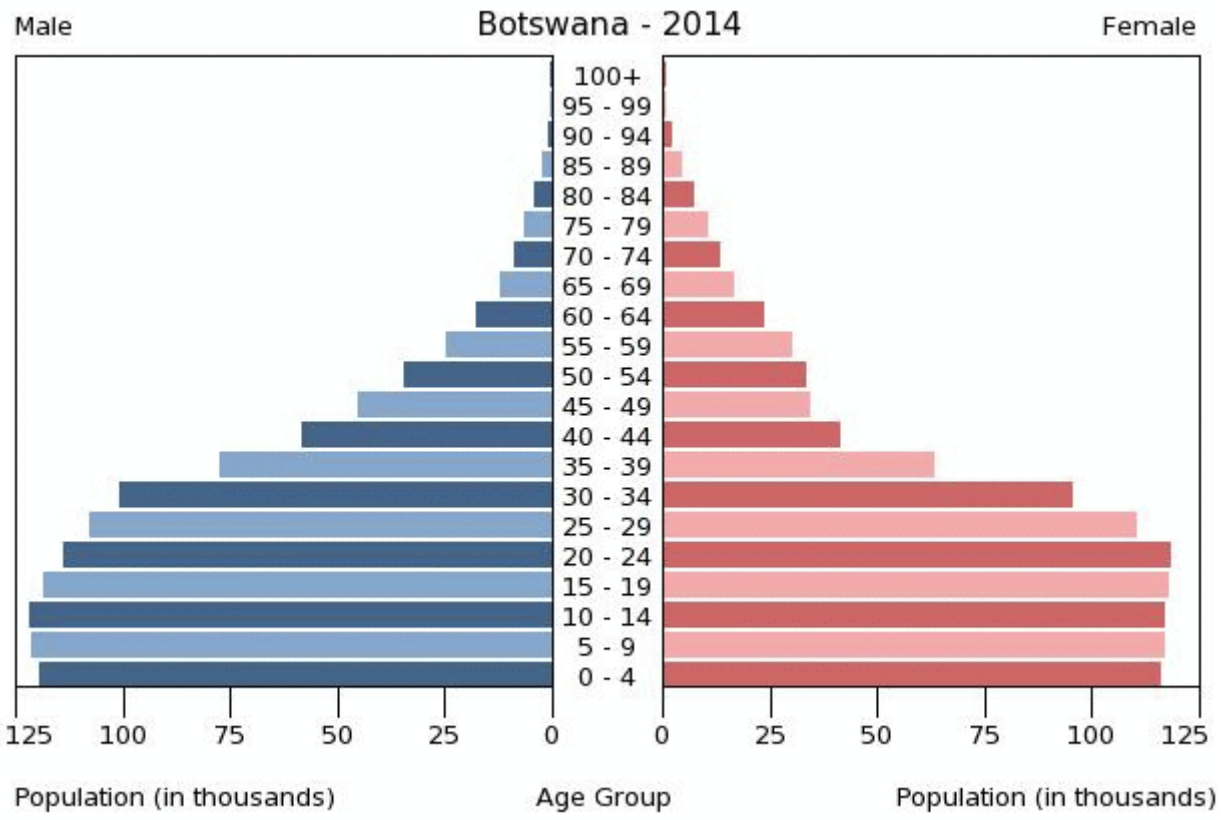
## 8.6 HOUSEHOLD CONTRIBUTION TO EDUCATION

Reducing the burden for education on government should also include households' contribution. There are indications that some parents can manage to shoulder some of the expenditure. Parents are already paying at private pre-primary, private primary and private secondary schools. This suggests existence of both ability and willingness to pay for education. It will be necessary to undertake a study to determine how much of the cost of education households can afford to shoulder, especially at tertiary level. However, a delicate balance is called for, given that Botswana has a relatively young population (with a 53% dependency ratio). Moreover, unemployment level is high at 17.8% while 18.4% of the population lives below the poverty datum line.

## 8.7 DEMAND FOR EDUCATION

World Bank data on Population Projections, Age-composition and Dependency Ratios, 2013 to 2025 shows Botswana's dependency ratio at 53%). (World Indicators: Population Dynamics 2014 People - World Bank.org). This has implications on the demand for education going forward as well as the burden on households. The population pyramid below also confirms this.

FIGURE 4: BOTSWAN POPULATION PYRAMID 2014




Source: www.worldbank.org. Accessed 8th April 2015

**Table 5: International comparison of Dependency Ratio**

**Source: World Bank Data**

| | POPULATION (Millions) | | GROWTH RATE | AGE COMPOSITION | | | DEPENDENCY RATIO | |
|---|---|---|---|---|---|---|---|---|
| **COUNTRY** | **2013** | **2025** | **2013–25** | **0– 14** | **15–64** | **+ 65** | **Young as % of Working Population** | **Old as % of Working Population** |
| Botswana | 2.0 | 2.2 | 1% | 34% | 63% | 4% | 53% | 6% |
| Finland | 5.4 | 5.6 | 0% | 16% | 65% | 19% | 25% | 30% |
| Lesotho | 2.1 | 2.3 | 1% | 36% | 59% | 4% | 61% | 7% |
| Mauritius | 1.3 | 1.3 | 0% | 20% | 72% | 9% | 28% | 12% |
| New Zealand | 4.5 | 5.0 | 1% | 20% | 66% | 14% | 31% | 21% |
| Singapore | 5.4 | 6.3 | 1% | 16% | 74% | 10% | 22% | 14% |
| South Africa | 53.0 | 56.0 | 0% | 29% | 65% | 6% | 45% | 9% |
| UK | 64.1 | 67.5 | 0% | 18% | 65% | 6% | 45% | 9% |
| USA | 316.1 | 345.9 | 1% | 20% | 66% | 14% | 29% | 21% |
| Source: World Bank - World Indicators: Population Dynamics 2014 People | | | | | | | | |

Following the 2011 Population Census, Statistics Botswana has produced single-age population projections to 2018. The population projections indicate that the total school-age population will increase from 680, 229 or 31.23% of the total population in 2012 to 747,159 or 33.8% in 2017 before declining to 32.99% in 2018. The increase in school-age population, together with government plans to increase enrolment rates, increase transition rates (from current 65% to 70% (Jnr Secondary to Senior Secondary), introduce parallel pathways (30% of Jnr Secondary completers transiting to Vocational education) and increasing transition rates to tertiary level education (from 18% to 25%) all point to a need for additional resources. It will call for an increase in infrastructure, equipment and teachers/lecturers, etc.

**Table 6: School-Age Population Derived from CSO Single-Age Population Projections (2012 -2018)**

| LEVEL OF EDUCATION | 2012 /13 Actual Enrolment | 2020 Projected Enrolment | Increase | % Increase |
|---|---|---|---|---|
| Pre-Primary | 9,995 | 55,374 | 45,379 | 454% |
| Primary | 337,206 | 378,493 | 41,287 | 12% |
| Junior Secondary | 111,305 | 138,444 | 27,139 | 24% |
| Senior Secondary | 48,900 | 65,941 | 17,041 | 35% |
| Technical & Vocational (Secondary School Equivalent) | 5,899 | 30,434 | 24,535 | 416% |
| Tertiary (Academic & Tertiary level Tech & Vocational) | 65,702 | 100,130 | 34,428 | 52% |

## 8.8 SUMMARY OF KEY INTERVENTIONS

The interventions that must be put in place to improve the budget efficiency, sustainability and make Education expenditure comparable to that of other High Middle income countries must include;

- ✓ Rationalizing the existing budget allocation to align with Education priorities;
- ✓ Rationalizing the Ministry of Education and Skills Development for agility and efficiency,
- ✓ Decentralization with financial accountability
- ✓ Improving education planning, budgeting and financial management;
- ✓ Rationalization of institutions for optimum operation and reduced unit cost;
- ✓ Enlisting the support of private sector, NGOs and communities in; planning, financing and delivering education;
- ✓ Leveraging ICT for education data management, teaching and learning;
- ✓ Supporting government/institution/private sector collaboration in research and commercialization of research findings.

## 8.9 APPROACHES AND ASSUMPTIONS IN COSTING THE ETSSP

In costing the ETSSP, the single-age population projections was used (2012 to 2018) provided by Statistics Botswana to estimate student populations at each level of education. A comparison of actual enrolment at primary school (6 to 12 years) revealed that in 2012, there were 13% more pupils than the total cohort estimated to be at that level. This could be attributed to late start, especially problems of distance travelled to school. It could also be the positive result of the government "back-to-school" initiative. It was assumed that the trend would continue during the 6 years with a 1% reduction each year as more and more students start school at the right age of 6.

At junior secondary level, it was observed that despite the 100% transition from primary to junior secondary schools, there appeared to be a leakage in that, the total number of students enrolled in junior secondary schools was 11% lower than the total junior secondary cohort population (13 to 15 years). This could however, be linked to the delay in starting primary education and Part of the age group could still be at primary schools. A 1% improvement was assumed, as retention strategies plug the leakage.

The recommended class-size of 30 was used to determine the number of classrooms and teachers quarters at pre-primary and primary, while 35 was used at secondary and higher levels. After ten-year basic education, we introduced parallel pathways whereby 70% of senior secondary cohort (16 to 17 years) was earmarked for general education while 30% was for technical and vocational education. This is in line with improving access by providing education opportunities that allow each learner to attain their full potential. Providing parallel pathways allows more students to proceed in the line of education consistent with their passion and aptitude, hence reducing leakages through failure and drop-out.

Technical and Vocational education is approximately 30% more expensive than general education because of machinery and equipment used in practical learning. While countries with well-developed industries benefit from the practical experience that such industry provides to students, Botswana may need to provide technical industry- ready classroom environment because of limited industrial base. Where possible, simulation was chosen as it was the cheaper option.

Tertiary education was estimated at 30% of the tertiary level cohort (internationally defined as 18 to 24 years). Students would have a choice into tertiary level academic education or tertiary level technical and vocational education.

Costing also used unit cost for the different levels of education with adjustments to address the short-comings identified in the current cost structure; such as under-provision for primary education, over-provision for tertiary, and high unit cost due to capacity underutilization. Estimating infrastructure cost used information received from the various levels of education. The price range was wide given that development of schools often includes a high component of other infrastructure such as roads, power and water where school are located in the periphery of villages.

**Table 7: Enrolment levels and Unit Cost at different levels of Education 2012/13**

| LEVEL | Number of Institutions | Total Enrolment | Average | Average Unit cost | As % of GDP per Capita (IBRD) | High Middle Income country Average |
|---|---|---|---|---|---|---|
| Primary | 754 | 337,206 | 447 | 3,970 | 10% | 15.1% |
| Junior Secondary | 207 | 125,261 | 605 | 17,342 | 33% | 16% |
| Senior Secondary | 32 | 48,900 | 1,528 | 17,278 | 33% | 16% |
| Teacher Training Col | 5 | 1,327 | 265 | 244,478 | N/A | N/A |
| Technical and Vocational | 45 | 10,274 | 228 | 45,478 | N/A | N/A |
| Tertiary | 44 | 65,702 | 1,493 | 100,000 | 250% | 25% |

Clearly, Institutions such as colleges of Education and Technical Colleges are too many for a country with only 2 million people. Enrolment numbers bear testimony.

**Table 8: The adjusted Unit Cost used to cost ETSSP:**

| Level of Education | Unit Cost – (per Student) | Cost per Classroom & Furniture | Cost per Teachers Quarter & Fittings |
|---|---|---|---|
| Pre-Primary | P6,000 | P450,000 | P600,000 |
| Primary | P6,000 | P450,000 | P600,000 |
| Secondary | P17,300 | P550,000 | P600,000 |
| Technical & Vocational | P30,000 | P700,000 | P600,000 |
| Tertiary | P70,000 | P600,000 | P600,000 |

## 8.10 COST OF ETSSP

The total cost of implementing the ETSSP is P18, 748,183 billion over six years. It provides for increase in enrolments, the reduced class size of 30, the increased unit costs at Pre- Primary and Primary Levels, the increased transition rates at senior secondary level to provide for flexible education pathways at 100% transition rates and increased enrolments in Technical Colleges at Tertiary Level. The cost breakdown indicates that an amount of P8, 557 billion is for Infrastructure, P4, 430 billion for Core Educational expenditure while P5, 761 billion is for Educational Programmes. The distribution by sub-sector is indicated in Table 5 below.

**Table 9: Breakdown of ETSSP Cost by Sub-Sector and Type 2015/16 to 2020/21**

| BREAKDOWN OF ETSSP COST BY SUB-SECTOR AND TYPE 2015/16 TO 2020/21 | | | | |
|---|---|---|---|---|
| ITEM OF EXPENDTURE | INFRASTRUCTURE | CORE EDUCATIONAL EXPENDITURE | ETSSP PROGRAMMES | TOTAL |
| **PRE-PRIMARY** | 1,384,350 | 272,274 | 365,599 | 2,022,223 |
| **PRIMARY** | 2,928,959 | 247,722 | 159,958 | 3,336,639 |
| **JUNIOR SECONDARY** | 1,709,683 | 469,505 | | 2,390,329 |
| **SENIOR SECONDARY** | 1,053,275 | 294,809 | 211,141 | 1,348,084 |
| **TECHNICAL& VOCATIONAL** | 447,803 | 736,053 | 1,377,249 | 2,561,105 |
| **TERTIARY** | 1,032,833 | 2,409,943 | 110,470 | 3,553,246 |
| **ICT** | | | 1,519,895 | 1,519,895 |
| **CURRICULUM** | | | 39,708 | 39,708 |
| **TEACHER EDUC& PROF. DEV** | | | 1,788,101 | 1,788,101 |
| **HUMAN RESOURCES MGT** | | | 9,204 | 9,204 |
| **FINANCE** | | | 3,366 | 3,366 |
| **EDUCATIONAL MGT INFO SYSTEMS** | | | 23,828 | 23,828 |
| LIFE-LONG LEARNING | | | 152,455 | 152,455 |
| **TOTALS** | **8,556,903** | **4,430,306** | **5,760,974** | **18,748,183** |

**Impact on the Overall MOESD Budget up to 2020/21**

While Table 9 above indicates how much each of the sub-sectors will require over the six years in addition to the existing allocation, Table 10 below shows how the sub-sector shares in the total ministry budget are affected by ETSSP prioritization.

**Table 10: 2015/16 Education Budget including ETSSP and Sub-Sector Shares**

| Sub Sector | 2015/16 BUDGET ALLOCATION | % | TOTAL ETSSP BUDET (6YRS) | % IN ETSSP | 2015/16 ETSSP REQUIREMENT | MOESD 2015/16 BUDGET REQUIREMENT | % |
|---|---|---|---|---|---|---|---|
| PRE PRIMARY | 0 | | 2,022,223 | 11% | 335,173 | 335,173 | **2.4%** |
| PRIMARY | 1,937,708 | **17.4%** | 3,336,638 | 17.80% | 635,336 | 2,573,044 | **18.2%** |
| SECONDARY | 3,757,456 | **33.7%** | 3,738,417 | 20% | 725,424 | 4,482,880 | **31.6%** |
| TVET | 541,572 | **4.9%** | 2,561,107 | 14% | 383,081 | 924,653 | **6.5%** |
| TERTIARY | 3,233,274 | **29.0%** | 3,553,246 | 19% | 697,065 | 3,930,339 | **27.7%** |
| CURRICULUM | 42,997 | **0.4%** | 39,708 | 0% | 1,532 | 44,529 | **0.3%** |
| TEPD | 310,496 | **2.8%** | 1,788,101 | 10% | 56,326 | 366,822 | **2.6%** |
| | | | | | | | |
| HRM/TSA | 24,822 | **0.2%** | 9,204 | 0% | 2,994 | 27,816 | **0.2%** |
| FINANCE | 0 | | 3,366 | 0% | 1,682 | 1,682 | **0.0%** |
| EMIS / PLANNING STATISTICS AND RESEARCH | 9,538 | **0.1%** | 23,828 | 0% | 1,824 | 11,362 | **0.1%** |
| LIFELONG / OSET | 113,933 | **1.0%** | 152,455 | 1% | 20,000 | 133,933 | **0.9%** |
| ICT | 84,121 | **0.8%** | 1,519,895 | 8% | 158,095 | 242,216 | **1.7%** |
| Technical Services | 23,577 | **0.2%** | 0 | 0% | - | 23,577 | **0.2%** |
| MOE HQ | 1,073,467 | **9.6%** | 0 | 0% | - | 1,073,467 | **7.6%** |
| GRAND TOTAL | **11,152,961** | **100%** | **18,748,188** | **100%** | **3,018,532** | **14,171,493** | **100%** |

Table 11 below gives the total estimated requirements for the Ministry of Education and Skills Development for the six years to 2020/21. It is important to note that while the budget requirement increases from P14, 171 billion in 2015/16 to reach a peak of P15, 962 billion in 2017/18, it declines to P12, 059 billion in 2020/21. Implemented carefully and consistently, ETSSP can help Botswana turn around her education sector to be cost-effective and sustainable.

**Table 11: EDUCATION BUDGET BY SUB-SECTOR AND YEAR (2015/16 to 2020/21)**

| SUB-SECTOR | 2015/16 ALLOCATED BUDGET (P'000) | 2015/16 (P'000) | 2016/17 (P'000) | 2017/18 (P'000) | 2018/19 (P'000) | 2019/20 (P'000) | 2020/21 (P'000) |
|---|---|---|---|---|---|---|---|
| PRE-PRIMARY | - | 335,173 | 512,237 | 490,642 | 491,281 | 96,445 | 96,445 |
| PRIMARY | 1,937,708 | 2,573,044 | 2,726,148 | 2,722,941 | 2,722,897 | 2,108,928 | 2,108,928 |
| SECONDARY | 3,757,456 | 4,482,880 | 4,511,680 | 4,649,133 | 4,648,259 | 4,019,165 | 3,972,036 |
| TVET | 541,572 | 924,653 | 1,048,218 | 1,153,925 | 1,168,887 | 854,898 | 659,958 |
| TERTIARY | 3,233,274 | 3,930,339 | 3,975,489 | 4,004,671 | 3,987,471 | 3,528,010 | 3,526,910 |
| CURRICULUM | 42,997 | 44,529 | 51,083 | 53,425 | 53,849 | 51,807 | 42,997 |
| TEPD | 310,496 | 366,822 | 712,038 | 1,277,802 | 497,890 | 486,029 | 310,496 |
| HRM/TSA | 24,822 | 27,816 | 26,430 | 24,822 | 27,816 | 26,430 | 24,822 |
| FINANCE | 0 | 1,682 | 707 | 707 | 270 | 0 | 0 |
| EMIS / PLANNING STATISTICS AND RESEARCH | 9,538 | 11,362 | 19,538 | 20,838 | 10,242 | 9,538 | 9,538 |
| LIFELONG / OSET | 113,933 | 133,933 | 138,433 | 146,388 | 146,933 | 143,933 | 126,433 |
| ICT | 84,121 | 242,216 | 292,431 | 320,466 | 528,216 | 557,171 | 84,121 |
| Technical Services | 23,577 | 23,577 | 23,577 | 23,577 | 23,577 | 23,577 | 23,577 |
| MOE HQ | 1,073,467 | 1,073,467 | 1,073,467 | 1,073,467 | 1,073,467 | 1,073,467 | 1,073,467 |
| **GRAND TOTAL** | **11,152,961** | **14,171,493** | **15,111,476** | **15,962,804** | **15,381,055** | **12,979,398** | **12,059,728** |

## 8.11 RESOURCE MOBILISATION FOR ETSSP IMPLMENTATION

Mobilizing resources of the magnitude implied by the ETSSP requires careful preparation and planning. A resource mobilization strategy that enlists support from students, parents, private sector, cooperating partners and civil society should be developed. The resource mobilization drive should provide space for all stakeholders to play a meaningful part and make a difference by carefully packaging the programmes to appeal to different interest groups. The ETSSP will be packaged in a manner that optimizes stakeholder participation. Partial donor funding will be explored; substantial donor support will be needed to cover both recurrent and development programmes, especially during the five years of ETSSP implementation. Private sector and NGO participation will also be promoted.

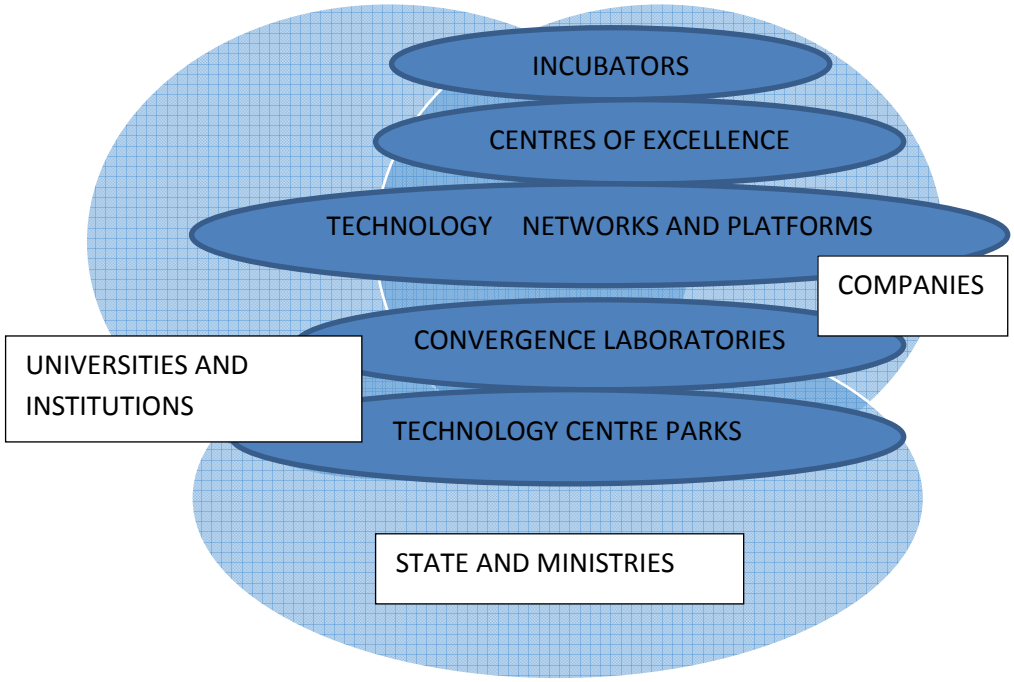
**FINANCING OF STRATEGIC PROGRAMMES**

Botswana has a long history of wide stakeholder involvement in education delivery and financing. Achieving the ETSSP objectives hinges on leveraging on this experience not only in curriculum design and delivery but also in infrastructure development and financing. It would also be necessary to rationalize and consolidate institutions to number and programme diversity that would cater for Botswana's strategic human resource development. The measures to enhance participation will include, among others:

I. Leasing out excess capacity in public institutions to private sector for complementary services, (bookshops, Internet Café Cafeteria, etc.);
II. Causing review of Building Control Regulations to facilitate participation of small education providers in education; especially Early Childhood Education;

III. Facilitating private sector investment in education infrastructure (Staff Housing, classrooms, etc.);
IV. Motivating private sector to sponsor students for programmes they need most so as to influence career choices;
V. Cultivating a Triple Helix Approach to enhance education relevance and self-sustenance as illustrated below:

Figure 5: Below is a Pictorial illustration of the Triple Helix Model.




Botswana should draw lessons from international best practice where tertiary institutions are moving from the traditional role of being sources of human resources and knowledge to being sources of technology generation and transfer. Rather than just serving as sources of new ideas for existing firms, universities are now combining their research and teaching strengths and becoming sources of firm formation; especially in areas of science and technology. Their research and innovation feeds industrialization and the economic growth of knowledge- economies and creates further knowledge. They achieve self-sustenance by participating in profitable off-shoots of their research and innovation.
(Stanford University: The Triple Helix Group).

## SUMMARY

This chapter has outlined how education financing will be improved to enhance sector performance. Re-allocation of the already available resources, improved donor coordination, improved cost-sharing/cost-recovery, optimum use of institutional capacity, improved financial management and accountability, private sector and other stakeholder participation and use of ICT to manage resources and deliver education are among the fundamental reforms to be instituted through the ETSSP. The Budget estimates for 2015/16 to 2020/21 suggest that if the ETSSP is implemented prudently and consistently, Botswana could achieve the objectives of; increased access, improved equity, and quality at a lesser and more sustainable education expenditure level.

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# APPENDIX A: Results Matrix

| Results | Indicative Key Performance Indicators / Measures |
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| **Strategic Priority 1: Improving Quality and Relevance** | |
| Adequate number of approved quality textbooks delivered | 1. Percentage of learners who have access to the minimum set of relevant text books<br>2. Percentage of schools with a library and multi-media facilities meeting national standards. |
| Teacher education Continuing Professional Development (CPD) system developed | 1. Percentage of qualified teachers who signed for the Continuing Professional Development<br>2. Average hours per year spent by teachers on professional development activities<br>3. Percentage of qualified teachers who attained minimum standards of professionalism as set by the Teaching Council |
| Quality and relevance of all education programmes developed. | 1. Graduation rates at all levels of education<br>2. Employability of graduates from all levels of education<br>3. The percentage of education programmes that meet BQA standards<br>4. Percentage of graduates satisfying minimum academic/skill requirements of the labour market<br>5. Improved linkages between the curriculum and assessment patterns |
| An effective inclusive curriculum developed | 1. Implementation of the national curriculum<br>2. All schools receive professional support for effective implementation of the curriculum<br>3. All schools have access to adequate reference material for implementing the curriculum<br>4. National evaluation of learner performance in 75% of schools |
| Closer alignment between education and employment | 5. The rate at which the education system is producing the required human resource for the economy<br>6. Percentage of graduates from all levels of education meeting minimum academic/skill standards set by industry.<br>7. Percentage of graduates of all levels of education employed or self-employed in the relevant industry |
| Effective professional leadership at all education levels | 1. National professional leadership programme developed and implemented<br>2. Number of teachers and administrators signed up for professional leadership programme<br>3. Number of professional leadership programmes evaluated |
| **Strategic Priority 2: Improving Access and Equity** | |
| Expand the system of early childhood and pre-primary education that encourages improved access and networking of public and private initiatives developed and supported especially for poor communities | 1. Intake Rates for ECCE and pre-primary education for all population groups<br>2. Number of practitioner trained in ECCE at designated levels.<br>3. Completion Rates for ECCE and pre-primary education for all population groups<br>4. Percentage increase of ECCE and pre-primary education initiatives undertaken through public-private partnerships/collaborations including inter-sectoral collaborations<br>5. Participation rate of community-based and voluntary groups in |

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| | ECCE and pre-primary education initiatives |
| An inclusive system of education enabling equitable access to quality for learners who experience barriers to learning and diversified education developed and supported | 1. A strategy for an inclusive education system developed<br>2. A framework for the provision of quality education programmes for vulnerable children operating<br>3. Participation rates of the private sector and non-governmental/community organizations (including PTAs) in educational initiatives/activities at all levels of education<br>4. Intake, enrolment and completion ratios/ rates for all population groups at all levels<br>5. Parity Indicators for intake, completion and enrolment ratios/rates for all population groups |
| Improved out of school opportunities | 1. A strategy to improve out-of- school opportunities<br>2. Participation rate of learners in out-of-school programmes<br>3. Graduation rates of learners from out-of-school programmes<br>4. Transition rates of out-of-school learners to mainstream education programmes |
| Improved learner attendance and retention at all levels | 1. Rates of absenteeism by pupils/students at all levels<br>2. Enrolment ratios, completion and graduation rates<br>3. Parity indices for enrolment, completion and graduation rates |
| Enhanced alternative modes of funding to increase equitable access at all levels of education | 1. Participation rates of the private sector and non-governmental organizations in funding of educational initiatives/activities at all levels of education<br>2. Percentage of educational initiatives at all levels funded by private sector and non-governmental organizations |
| **Strategic Priority 3: Improving Learning Outcomes** | |
| Transformed and modernized curriculum | 1 Percentage of programme/subject curricula transformed to be outcome-based<br>2 Percentage of these programme/subject outcome-based curricula meeting set international quality standards |
| Transformed teaching and learning | 1. Gross graduation rates (rates of achievement) of learners at all levels of education<br>2. Percentage of teachers equipped with competencies/skills to deliver an outcome-based curricula |
| Improved school/institutional leadership | 3. Percentage of school/institutional leaders trained in leadership and management<br>4. Percentage of schools/institutions led by trained (leadership and management) leaders performing satisfactorily |
| Improved attendance and accountability for use of time in schools by teachers and non-teachers in schools at all levels | 1. Percentage of teachers and non-teachers performing satisfactorily at all levels of education.<br>2. Rate of absenteeism by teachers and non-teachers at all levels of education<br>3. Percentage of education institutions implementing a performance management system at all levels of education |
| Health and safety standards for all education institutions implemented | 1. Health and safety Strategy developed<br>2. Percentage of education institutions successfully implementing the defined health and safety standards.<br>3. Percentage of education institutions with implementation plans for all health and safety standards |
| **Strategic Priority 4: Focusing on Life Long Learning** | |
| A life-long learning culture | 1. Life-long learning policy, regulatory and coordinating frameworks<br>2. Participation rates of the population in life-long learning |

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| created | programmes<br>3. Transition rates of life-long learners to the mainstream education system<br>4. Percentage share of the life-long education budget in the total education sector budget |
| Revitalized vocational education and training (TVET) to improve utilization and relevance of programmes to economic needs | 1. Intake rates by TVET programmes<br>2. Graduation rates by TVET programmes<br>3. Transition rates from various levels of education into TVET programmes<br>4. Percentage of graduates from TVET employed and/or self-employed |
| Strengthened public-private partnerships throughout the sector | 1. Proportion of projects/initiatives undertaken through public-private partnerships<br>2. Ratio of new public-private partnerships to existing partnerships<br>3. Survival rates of the existing public-private partnerships |
| **Strategic Priority 5: Strengthening Skills Development** | |
| Development of human resource capital | 1. A human resource development strategy and plan<br>2. Reduction rate of the human resource/skill gap in the economy<br>3. Ratio of the human resource development budget to the total education sector budget<br>4. Ratio of the human resource development budget to the Gross Domestic Product (GDP) |
| Development of a HR Management System incorporating talent/skill management strategy | 1. A talent/skill management strategy and plan operational<br>2. Percentage of the human resources with requisite skills for the economy<br>3. Participation rate of the skilled labour force in the domestic economy<br>4. Participation rate of the skilled labour force in external economies |
| **Strategic Priority 6: Developing New and Alternative Pathways for Education** | |
| Vertical and horizontal pathways across the different education sub-sectors and levels developed | 1. Percentage increase of new vertical and horizontal pathways established<br>2. Transition rates through these pathways between defined levels of education<br>3. Enrolment ratios within defined levels of education resulting from these pathways |
| Alternative modes of providing education services to improve access, quality and equity at all levels of education | 1. Alternative modes of providing education services in place and monitored<br>2. Rates of increase in intake rates, completion rates and enrolment ratios resulting from these alternative modes<br>3. Rates of increase in graduation rates<br>4. Parity indices for intake, completion, enrolment and graduation rates |
| **Strategic Priority 7: Improve Management of Education** | |
| Improved management and accountability | 1. Percentage of educational institutions meeting the minimum of the set standards of management.<br>2. Percentage of educational institutions that monitor and report their performance regularly and on time.<br>3. Percentage of educational institutions that have functional parent-teachers associations |
| Development of a Performance Management | 1. Finalisation of training on the PDMS<br>2. The PDMS is implemented, monitored and report produced. |

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| and Development System (PDMS) for education services | |
| A committed decentralization plan | 1. A decentralization plan with implementation guidelines implemented<br>2. Rate of successful implementation of the decentralization plan. |
| **Strategic Priority 8: Developing a Responsive Tertiary Education System** | |
| Improved quality of tertiary education by ensuring quality control, application of international standards and a review of finance models | 1. Increased proportion of academic programmes meeting international standards<br>2. Increased proportion of tertiary academic programmes responding to priority needs of labour market<br>3. Increased proportion of tertiary academic programmes responding to priority needs of learners<br>4. Increased participation rate of selected sources of finance in resourcing of tertiary education system |
| A comprehensive well-coordinated, coherent and efficient tertiary system that addresses life-long learning needs developed | 1. Rates of increase in transition rates from secondary education, from TVET and other pathways to tertiary education for all populations groups<br>2. Rates of increase in intake, enrolments, completion and graduation rates at various certification levels for all populations groups<br>3. Rates of increase in progression rates within and between different programmes and certification levels for all populations groups<br>4. Participation rates of tertiary education graduates in the economy and society for all populations groups |
| A new comprehensive and sustainable funding strategy for tertiary education developed | 1. A new tertiary education funding model in place and functioning<br>2. Participation rates of the public sector, private sector and non-governmental organizations in the funding of tertiary education<br>3. Rate of disbursement and recovery of student loans<br>4. Percentage of academic and non-academic tertiary programmes adequately funded |
| Increased and improved research outputs to relate better to the needs of the economy and society | 1. Percentage of key policy decisions informed by the research outputs<br>2. The proportion of research outputs that address defined needs of the economy and society.<br>3. Ratio of research and development budget to the total education sector budget |
| Appropriate regulation of private higher education institutions developed | 1. Regulations for registration of private HE institutions in place<br>2. Improved MIS for higher education operating to support registration system<br>3. Number of private institutions registering |
| **Strategic Priority 9: Improving Planning & Budgeting of the Sector** | |
| An effective planning and monitoring system developed | 1. A planning system implemented based upon norms and standards<br>2. Guidelines utilised for coordination of optimal budgeting<br>3. Participation rates of stakeholders in the planning of education programme<br>4. Rate of implementation of planned projects/activities.<br>5. The number of monitoring and support activities of norms and standards |

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| | 6. A system in place to monitor and manage the supply and demand of teachers |
| An effective budgeting system developed in support of education policies | 1. A system operating for equitable distribution of education funding in support of education policies<br>2. Reports on the assessment of economic credibility and policy compliance<br>3. Rate of spending of the annual budget (recurrent and development)<br>4. The percentage of planned projects/activities implemented on time and within budget |
| **Strategic Priority 10: Utilization and Integration of ICT** | |
| Information technology (ICT) at all levels of education developed to support curriculum, teaching and learning | 1. Percentage of all educational institutions equipped with ICT technology (including adequate instructional materials).<br>2. Percentage of teachers at all levels equipped with the requisite ICT skills<br>3. Percentage of learners at all levels equipped with appropriate ICT skills to adapt to needs of independent learning |
| Extended utilization of e-learning | 1. Utilization rate of e-learning in work environment<br>2. Utilization rate of e-learning in communities<br>3. Access rate by members of the public to digital facilities and portal functionalities<br>4. Institutional plans for e-readiness operating |
| **Strategic Priority 11: Improving Information, Monitoring and Evaluation of the sector** | |
| A functioning Sector Education Management Information System (SEMIS) for the education sector developed | 1. The percentage of educational institutions implementing the Sector Education Management Information System (SEMIS)<br>2. Timeliness of data/information generated by SEMIS<br>3. The level of quality and completeness of data/information generated by EMIS<br>4. The SEMIS systems and software and infrastructure maintained and enhanced for improved performance |
| An effective Monitoring and Evaluation system developed | 1. An M&E Framework developed and implemented at all levels<br>2. Rate of monitoring and evaluation of projects/activities of the education sector<br>3. Rate of implementation of projects/activities<br>4. Success rate (for relevance, quality, equity and efficiency) of implemented projects/activities |
| 5. Research capacity of the education sector strengthened | 6. Percentage of institutions undertaking relevant and quality research according to national and international standards<br>7. Report on review of education published and disseminated<br>8. Timeliness of research undertaken according to national planning and decision making needs<br>9. Percentage of implemented-research guided by national policy and programmatic needs |